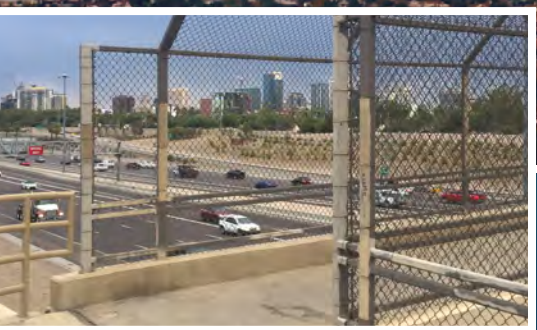
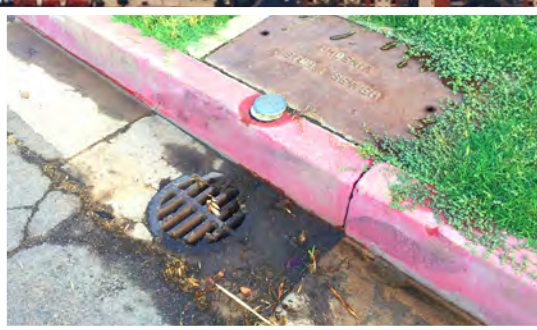
City of Phoenix

PREPARED BY:
AECOM

2021
ANNUAL REPORT
Municipal Separate Storm Sewer System





PHX WATER SMART

SEPTEMBER 27, 2021

City of Phoenix
WATER SERVICES DEPARTMENT
ENVIRONMENTAL SERVICES DIVISION
Quality Reliability Value

September 28, 2021

Mr. Christopher Montague-Breakwell
Manager
Stormwater and General Permits Unit, Surface Water Section
Arizona Department of Environmental Quality
Mail Code: 5415A-1
1110 West Washington Street
Phoenix, Arizona 85007

Re: ANNUAL REPORT FOR AZPDES PERMIT NO. AZS000003, MUNICIPAL SEPARATE STORM SEWER SYSTEM

Dear Mr. Montague-Breakwell:

We are pleased to submit the 2020-2021 Annual Report for the City's Municipal Separate Storm Sewer System (MS4) Permit No. AZS000003, issued on February 3, 2009. This report covers the reporting period beginning July 1, 2020 and ending on June 30, 2021. This document includes the information specified in Section 8.1.1 for All Annual Reports.

We appreciate this opportunity to provide you with information about our stormwater management program. Please direct any questions you may have regarding this report to Linda Palumbo at 602-534-2916.

Sincerely,

Jennifer Calles
Water Services Deputy Director

Enclosure

cc: Alexis Strauss, Region IX, Environmental Protection Agency (with attachment)
Nancy Allen (Office of Environmental Programs)
Kini Knudsen (Street Transportation Department)
Alan Stephenson (Planning and Development Services Department)
Ray Dovalina (Public Works Department)
Stephen Wetherell (Law Department)

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ANNUAL REPORT FORM

For Phase I MS4s – Due September 30th each year

PART 1: GENERAL INFORMATION

A. Name of Permittee: City of Phoenix, Arizona

B. Permit Number: AZS000003

C. Reporting Period: July 1, 2020 – June 30, 2021

D. Name of Stormwater Mgt. Program Contact: Linda Palumbo

Title: Environmental Programs Coordinator

Mailing Address: 2474 South 22nd Avenue, Building 31

City: Phoenix Zip: 85009 Phone: (602) 534-2916

Fax Number: (602) 534-7151 Email Address: linda.palumbo@phoenix.gov

E. Name of Certifying Official: Jennifer Calles
(Sections 9.2 and 9.12 of the permit)

Title: Water Services Deputy Director

Mailing Address: 2474 South 22nd Avenue; Building 31

City: Phoenix Zip: 85009 Phone: (602) 256-5658

Fax Number: (602) 534-7151 Email Address: jennifer.calles@phoenix.gov

PART 2: ANNUAL REPORT CERTIFICATION

The Annual Report Form must be signed and certified by either a principal executive officer or ranking elected official; or by a "duly authorized representative" of that person in accordance with Sections 9.2 and 9.12 of the permit.

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Jennifer Calles 9/9/2021

Signature of Certifying Official Date

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PART 3: NARRATIVE SUMMARY OF STORMWATER MANAGEMENT PROGRAM ACTIVITIES

Attach a status summary addressing each of the following in the approximate order referenced below. Briefly describe implementation, progress, and challenges in each area during the reporting year. Also, explain any significant developments or changes to the number or type of activities, frequency or schedule of activities, or the priorities or procedures for specific management practices.

A. Summarize public awareness activities including outreach

- **Report outreach events, topics, number of people reached, number and type of materials distributed and the Target groups.**

  Stormwater Outreach

  The City of Phoenix conducted a variety of stormwater-related public awareness activities throughout the 2020/21 reporting year, including informing the general public about proper management and disposal of used oil, and outreach to auto repair and salvage yards about the proper management and disposal of used oil. The City did not participate in any in-person public outreach events this reporting year due to the coronavirus pandemic.

  Major accomplishments include the following:

  - Organized second Stormwater Awareness Week from January 25-31, 2021. Outreach included issuing a press release, updating of the website, playing 15- and 30-second radio spots on five Valley radio stations, advertising on billboards in eight locations, and coordinating with other area organizations.
  - Held a virtual workshop (January 28, 2021) on the Stormwater Management Program during Stormwater Awareness Week.
  - Published an activity book for grade school children starring Hopper, the Phoenix stormwater mascot.
  - Distributed 900 construction stormwater guidance brochures through the Planning and Development Department (PDD).
  - Distributed 750 Pollution Awareness Markers (PAMs) to Street Transportation (STR) for new construction, and Public Transit for the Light Rail Transit Project.

  A summary of the stormwater outreach activities for Fiscal Year (FY) 2020/21 is included in Table 3-1.

Table 3-1 Stormwater Outreach Activities

Date(s)	Event / Activity	Audience	Message	Handouts
7/20/20	Construction Brochures to PDD	Construction Industry	Construction Best Management Practices (BMPs) Reporting Illegal Discharges	900 Brochures
7/29/20	PAMs to STR	General Public	General Stormwater Awareness	400 PAMs

Date(s)	Event / Activity	Audience	Message	Handouts
8/18/20	Information on draining pool legally	Residential	General Stormwater Awareness	10 pool flyers, 5 jar openers, 5 dog poop bags, 10 bookmarks
9/24/20	Phoenix Food Day and Healthfest	General Public	General Stormwater Awareness	150 FOG Can Toppers
12/1/20	Phoenix PAYS Water Bill Insert	General Public	General Stormwater Awareness	None
12/1/20	Two Billboards on 19th Avenue and Broadway Road	General Public & Scrap Yards	General Stormwater Awareness & Proper Disposal of Used Oil	None
1/25/21	Stormwater Awareness Week • Billboards (8 locations) • Radio ads (5 stations) • Social media campaign	General Public	General Stormwater Awareness	None
1/28/21	Stormwater Awareness Virtual Workshop	General Public	General Stormwater Awareness	None
5/6/21	Biltmore School Academy	General Public - Children	General Stormwater Awareness	Hopper Activity Books
5/6/21	PAMs to Transit Department (for Light Rail new construction)	General Public	General Stormwater Awareness	350 PAMs

Stormwater Awareness Week Billboard

Internet and social media returned:

- 2,491 (1,917 unique views) visits to the stormwater program webpage, with a marked increase in the weeks leading up to Stormwater Awareness Week.
- 58 Twitter posts (65,636 impressions with 1,061 engagements)

- 58 Facebook posts (13,017 impressions with 341 engagements).

Social media posts regarding FOG and rags are included, as these are a cause of sanitary sewer overflows (SSO's) which have the ability to affect surface water quality.

Social Media Post Example

The City continues to participate in Stormwater Outreach for Regional Municipalities (STORM), which coordinates stormwater outreach throughout the Phoenix metropolitan area. STORM conducted an extensive social media campaign and ABC15 media campaign. Due to COVID-19, STORM only attended two outreach events. The STORM Annual Report is included as an attachment.

B. Summarize public involvement activities including outreach

- **Identify activities, number of people involved, number and type of materials distributed if applicable.**

  <u>Household Hazardous Waste Collection</u>
  The Public Works Department (PWD) did not provide Household Hazardous Waste (HHW) collection events in FY 2020/21 due to the pandemic. In January of 2021, PWD implemented a six-month at-home collection pilot program, in addition to offering a direct to vendor drop-off

option. The curbside collection program has been granted an extension through the end of June 2022. A total of 2,826 customers dropped off HHW and a total of 3,845 customers completed HHW home collections through June 2021.

The following materials were collected, and recycled or reused, where feasible:

- Approximately 37,451 pounds of oil-based paint and related materials
- 14,503 pounds of flammable liquids
- Over 15,398 gallons of used oil
- 10,799 pounds of lead acid and 1,946 pieces of rechargeable batteries
- Approximately 28,673 gallons of latex paint.

Other items collected and properly disposed of included: antifreeze, pesticides, herbicides and other hazardous and toxic materials. Non-hazardous materials collected were sorted out and disposed of as municipal solid waste.

- **Describe MS4 system for public reporting of spills, dumping, discharges, and related stormwater issues.**
- The City continues to offer a Stormwater Hotline (602-256-3190) in English and Spanish, as well as an email address (ask.water@phoenix.gov) for anyone who wishes to report a complaint concerning illicit discharges or releases to the storm drain system. The contact information is distributed with outreach materials and is available on the stormwater website (www.phoenix.gov/stormwater). The City received 333 complaints and other stormwater related requests during the year.

C. Summarize Illicit Discharge, Detection and Elimination (IDDE) program activities. Include:

- **Illicit discharge prevention activities.**

  The City discourages discharges to the storm drain system through the placement of PAMs on existing catch basins. This year 225 PAMs were added to existing catch basins and more than 22,800 PAMs have been installed since the program started.

  The City standard for managing hazardous waste and hazardous materials at municipal facilities is the Hazardous Materials Management Program (HMMP) Manual. The manual is available to City employees online through the City's intranet. HMMP procedures apply to all City departments unless stated otherwise and were developed to verify that City operations are in compliance with federal, state, and local environmental and safety regulations. The HMMP Manual directs personnel to locate storage areas as far away as possible from washes, drains, and drywells and requires that they be protected from weather. Requirements are provided for secondary containment, air quality permitting, safety and spill response equipment, proper signs, and labeling. Container storage requirements such as aisle spacing, limitations on drum stacking, segregation of incompatible materials, and types and condition of containers are also provided.

  The HMMP Manual contains a comprehensive stormwater management procedure, which also serves as the facility stormwater management plan required by Phoenix City Code Chapter 32C. The procedure applies to all city facilities with the potential to impact stormwater and addresses permit applicability including the Multi-Sector General Permit (MSGP) and De Minimis General Permit (DMGP), training and inspection requirements, and BMPs for solid waste/litter control, parking lots and building washing, scrap metal and equipment, bulk material piles, vehicle and equipment washing and fueling, and maintenance of stormwater management devices.

The HMMP Manual is maintained by the Office of Environmental Programs (OEP). Each HMMP procedure is reviewed at least once every two years and revised as necessary. Revisions may be made more frequently if regulatory requirements change.

During reporting year 2020/21, five of the ten HMMP procedures were reviewed by OEP. The HMMP Universal Waste Lamps, Mercury-Containing Equipment, Lamp Ballasts and Aerosols was updated based on input from 14 operating departments and staff with stormwater expertise. Four HMMPs for Disposal and Recycling of Hazardous Waste and Materials, Storage and Handling of Hazardous Materials, Used Batteries - Recycling and Disposal, and Used Oil and Petroleum Contaminated Absorbent Material had only minor or required regulatory updates. The HMMP for Stormwater Management was reviewed and revised by OEP and the 14 operating departments during reporting year 2019/20, but final update of this HMMP was delayed to reporting year 2020/21 due to recent stormwater permit and regulatory updates, including the revised federal definition of Waters of the U.S. The review of HMMP Spill Prevention, Response and Reporting was begun by OEP in reporting year 2019/20. The HMMP was reissued in reporting year 2020/21 with no changes but will be reviewed again under the City's new Municipal Separate Storm Sewer System (MS4) permit.

- **Training dates and topics:**

  Stormwater training covering IDDE is accomplished through training offered by various departments, including Water Services Department (WSD), PWD, and OEP. Municipal employee stormwater training is coordinated by the OEP Pollution Prevention (P2) Program.

  The Phoenix MS4 permit requires IDDE training for two major groups of employees: (1) field staff without direct stormwater program responsibilities; and (2) employees with direct stormwater program responsibilities (Stormwater Field Staff). In addition, the training is divided into three (3) frequencies:

  - Annual (for select field staff with "no direct stormwater responsibility" only)
  - New Employee Training (for Stormwater Field Staff – offered twice a year)
  - Refresher Training (for Stormwater Field Staff – offered every two years).

  Other specific training requirements include municipal, industrial, and construction site inspections, hazardous materials handling, spill management, street maintenance and repair and water/sewer maintenance and is limited to employees working in functions with the potential to impact stormwater. Affected employees are identified in the stormwater training plan in the City's Stormwater Management Plan (SWMP). The training is offered by various departments and is divided into two frequencies:

  - New Employee Training (conducted twice per year)
  - Refresher Training (conducted once every two years).

  For all training summarized below, the rosters showing the actual training are available upon request.

- **Annual Training**

  - *Stormwater Awareness Training.* Awareness training covering IDDE is provided to select field staff with no direct stormwater responsibilities. Topics taken from the City MS4 stormwater permit requirements include identification of harmful/prohibited practices (illegal dumping or spills) into the City's stormwater system and proper management procedures (reporting to the Stormwater

Management Section). Training for the PWD was delivered through a training brief developed by OEP and PWD. The PWD recorded in the City eCHRIS system that 352 employees reviewed the training brief starting on the date of 1/2/21, including 11 employees new to the City. Training for the WSD was delivered through training briefs and included four employees new to the City. The WSD recorded in the City eCHRIS system on the dates 3/31/21, 4/30/21, 5/31/221 and 6/30/21 that 555 employees reviewed the training briefs. *Note that some WSD employees that received the Basic Awareness training also received the Spill Prevention and Management Practices training, and Hazardous Materials Handling training due to their job classification and duties.

Date	Number Attended
1/2/21*	352
3/31/21	398
4/30/21	93
5/31/21	2
6/30/21	62

*Training was conducted in reporting year 20/21 over several dates but was recorded in eCHRIS under the same date.

- **New Employee Training and Biennial Refreshers**
  - *IDDE for Stormwater Inspection Staff.* Topics covered include MS4 permit requirements, Phoenix City Code, detecting and identifying illicit discharges, de minimis and other sources of non-stormwater discharges, outfall inspections, sampling, and field screening. Biennial refresher training was not due this reporting year. Training was provided for new employees; a video option was also provided due to COVID-19. Six employees were trained, including three WSD employees new to the City.

Date	Number Attended
12/30/20	3
6/15/21	3

Street Repair and Road Improvement for Street Maintenance Staff. Training is provided to all field staff in the Street Maintenance Division of the STR. Training covers IDDE awareness, pollution prevention, and BMPs to minimize discharges to storm drains. Specific topics include BMPs for hazardous material use and storage, street sweeping, painting and striping, sediment pile management, paving, vehicle maintenance and washing, handling spills, solid waste, and concrete washout areas. Biennial refresher training was required this reporting year. Due to training course limitations because of COVID-19, STR provided an on-line training video for employees. There were 225 STR employees trained, including seven new STR employees.

Date	Number Attended
7/1/20	3
7/6/20	2
6/25/21 (recorded in STR Training Learning Management System [LMS])*	220

*Training was conducted in reporting year 20/21 over several dates but was recorded in the STR training LMS under the same date.

Spill Prevention and Management Practices – non-Fire Department. Training covers site-specific spill prevention and response procedures/responsibilities and spill management practices to prevent or minimize discharges to the storm sewer system and drywells. Training for the PWD was delivered through a training brief developed by OEP and PWD. The PWD recorded in the City eCHRIS system on the date of January 4, 2021 that 136 employees reviewed the training brief, including one employee new to the City. PRD biennial training was due this reporting year. Because of cancellation of PRD Safety Meetings due to COVID-19, training for PRD employees was delivered through training slides developed by OEP and PRD and presented by PRD supervisors to their immediate staff. PRD recorded that 367 employees were trained, including five employees new to the City. The WSD held 15 sessions and 99 people were trained.

Date	Number Attended
PWD	
1/4/21	136
WSD	
9/10/20	7
9/25/20	7
10/7/20	4
10/14/20	4
12/2/20	7
12/18/20	7
1/6/21	4
2/3/21	7
2/17/21	6
3/3/21	5
3/17/21	9
4/7/21	9
4/21/21	10
5/5/21	7
5/19/21	6
PRD	
7/6/20	4
2/17/21	16
2/24/21	16
2/24/21	17
2/24/21	23
3/1/21	9
3/3/21	14
3/4/21	21
3/11/21	10
3/11/21	9
3/11/21	10
3/11/21	11

Date	Number Attended
3/11/21	14
3/24/21	16
3/24/21	11
3/30/21	4
4/1/21	6
4/7/21	16
4/8/21	8
4/13/21	8
4/21/21	24
4/25-4/30	22
4/30/21	18
4/30/21	2
5/1/21	1
6/30/21	15
6/30/21	25
6/30/21	15

Spill Prevention and Management Practices – Fire Department. Training is typically delivered through an online video and training module, which was created specifically for the Phoenix Fire Department. The training covers stormwater awareness, specific spill prevention and response procedures/responsibilities for use during emergency responses, including protection of storm drains and drywells, and BMPs for Fire Department facilities. Biennial refresher training was due this reporting year, and 328 employees were trained between the dates of March 24, 2021 and May 28, 2021. There were no employees new to the City required to complete this training, but the Phoenix Fire Department required promoted employees to review the video.

Hazardous Material Handling. Training covers responsibilities for spill prevention and reporting, compliance with regulatory and City hazardous materials management procedures (proper handling, storage, transportation, and disposal) to prevent contamination of stormwater runoff. Training for the PWD was delivered through a training brief developed by OEP and PWD. The PWD recorded in the City eCHRIS system on the date of January 4, 2021 that 136 employees reviewed the training brief, including one employee new to the City. PRD biennial training was due this reporting year. Because of cancellation of PRD Safety Meetings due to COVID-19, training for PRD employees was delivered through training slides developed by OEP and PRD and presented by PRD supervisors to their immediate staff. PRD recorded that 367 employees were trained, including five employees new to the City. The WSD held 15 sessions and 99 people were trained. OEP held two city-wide stormwater training classes, which include the Hazardous Materials Handling requirements. On-line training courses were held on September 30, 2020 and March 17, 2021 and 26 total City employees attended.

Date	Number Attended
PWD	
1/4/21	136
WSD	
9/10/20	7
9/25/20	7

Date	Number Attended
10/7/20	4
10/14/20	4
12/2/20	7
12/18/20	7
1/6/21	4
2/3/21	7
2/17/21	6
3/3/21	5
3/17/21	9
4/7/21	9
4/21/21	10
5/5/21	7
5/19/21	6
PRD	
7/6/20	4
2/17/21	16
2/24/21	16
2/24/21	17
2/24/21	23
3/1/21	9
3/3/21	14
3/4/21	21
3/11/21	10
3/11/21	9
3/11/21	10
3/11/21	11
3/11/21	14
3/24/21	16
3/24/21	11
3/30/21	4
4/1/21	6
4/7/21	16
4/8/21	8
4/13/21	8
4/21/21	24
4/25-4/30/21	22
4/30/21	18
4/30/21	2
5/1/21	1
6/30/21	15
6/30/21	25
6/30/21	15

Date	Number Attended
OEP	
9/30/20	4
3/17/21	22

Water/Sewer Maintenance. Training is provided to field staff in Water Distribution and Wastewater Collection and includes protocols to minimize discharges including those found in the WSD Stormwater Pollution Prevention Plan, Emergency Response Plan and Field Incident Response Plan. The WSD held 24 sessions and 189 people were trained, including two employees new to the City.

Date	Number Attended
9/10/20	7
9/16/20	8
9/25/20	8
10/7/20	9
10/14/20	5
10/16/20	5
11/4/20	5
11/18/20	9
12/2/20	11
12/18/20	6
1/6/21	7
1/29/21	6
2/3/21	9
2/7/21	5
2/26/21	7
3/3/21	14
3/17/21	7
3/26/21	14
4/7/21	9
4/21/21	6
4/30/21	8
5/5/21	7
5/12/21	8
5/19/21	9

Municipal Stormwater Inspections. Training topics include federal and local regulatory requirements, applicable permits and codes, stormwater BMPs, municipal facility inspection procedures, illicit discharges and de minimis discharges. Biennial inspector refresher training was completed this reporting period. Four employees were trained between the dates of December 24, 2020 and February 3, 2021. There were no new OEP employees requiring this training.

Industrial Stormwater Inspections. Training is provided to all inspectors in the WSD Environmental Services Division. Topics include applicable permits and codes, stormwater pollution prevention policies, structural and non-structural BMPs, and inspection and enforcement procedures.

Biennial refresher training was not conducted this reporting year. Training was provided for new employees; a video option was also provided due to COVID-19. Seven employees were trained, including three WSD employees new to the City.

Date	Number Attended
12/30/20	4
6/15/21	3

Construction Sites Plan Review and Inspection Training. PDD provided on-the-job training (OJT) for stormwater plan review and inspections. Five new civil inspectors and three new civil plan reviewers required and received the OJT. Refresher training was also conducted this reporting period during PDD staff meetings as noted in the table below. OEP provides biennial training for City inspectors that conduct inspections of municipal stormwater projects. Training includes municipal ordinances related to stormwater and construction, erosion and sediment controls, and structural and non-structural BMPs. OEP biennial inspector training was required this reporting period; there were no new City employees requiring this training. Six employees were trained between the dates of December 8, 2020 and February 3, 2021, including one STR and one WSD Environmental Quality Specialist (EQS). A WSD training brief was also distributed and reviewed by 69 WSD construction project managers and engineering staff.

Date	Number Attended
PDD Refresher Training	
10/22/20	19
11/19/20	19
1/21/21	23
2/11/21	23
PDD OJT*	
6/30/21	8
WSD	
3/31/21	41
5/31/21	27
6/30/21	1
OEP	
21/8/20-2/3/21	6

*PDD OJT was conducted in reporting year 20/21 over an extended period of time.

Other training not included or counted in Part 4 of this Annual Report includes:

- One OEP EQS attended the American Stormwater Institute LLC, Qualified MS4 Low Impact Development (LID)/Green Infrastructure Inspector On-line Training on March 11, 2021.

- Four Inspectors attended the Annual Arizona Water Conference from April 14th to April 16th, 2021.

- **IDDE screening program and investigations – including an overview of industrial facility inspections, identified sources, and any significant corrective or enforcement actions.**

  The IDDE program continues to track non-stormwater flows discovered in the storm drain system to identify their sources. Dry-weather flows are investigated by opening manholes and following the flow upstream. Flow changes (typically volume) are observed by the IDDE crew when the manholes are opened. Once the suspected illicit tap is determined to be nearby, the video system is then inserted in the storm drain pipe to track the flow directly to its source. By using the video system the City can then determine where the illicit connection or tap is located and then conduct the appropriate inspection. Occasionally, dye testing or a similar procedure is used to verify the source of the connection.

  WSD contracted with a third party consultant to inspect connections to the Arizona Department of Transportation (ADOT) Central Avenue Tunnel, from Camelback Road to Interstate 10 (I-10). The investigation identified several non-stormwater discharges that were further investigated by IDDE staff. The sources included irrigation water and water leaks.

IDDE investigations are also initiated as a result of complaints, reported spills, SSOs, or emergency response activities. During the report period, the following are some of the non-stormwater discharges that were investigated:

- July 25, 2020: 15221 South Ray Road – An SSO was caused by construction debris in a manhole. Approximately 2,500 gallons of wastewater flowed to a dry wash. The SSO was cleaned by WSD Collection staff. The spill was reported to the Arizona Department of Environmental Quality (ADEQ) and a follow up 5- day letter was sent.

- July 30, 2020: 4750 North Central Avenue – A condominium was discharging groundwater and swamp cooler water into the street on a regular basis. A field Notice of Violation (NOV) was issued and the facility was required to cease the discharge. The plumbing system was modified to discharge to the sanitary sewer system.

- October 6, 2020: 3310 East Angela Drive – Received a complaint from ADEQ Staff about a resident dumping oil out to the street. The area appeared to be clean, however a sweeper had recently gone by the area. Spoke with a resident and left stormwater outreach material.

- October 30, 2020: – 824 East Glendale Avenue – A nursery was discharging water onto the street at 10th Place and Glenn Drive. The facility was installing a well and the drilling contractor hit rock. There was a lot of sediment in the water traveling south from Glenn Drive, down an irrigation ditch along the fence line, which is piped underground to the Phoenix MS4. Staff issued a field NOV to cease and desist from further discharge and to clean the drainage.

- November 30, 2021: 201 South 4th Avenue – An SSO from the Maricopa County Jail Complex resulted in the release of approximately 850 gallons of wastewater which traveled to a storm drain. There was no evidence of the SSO at the outfall. The spill was reported to ADEQ and a follow up 5-day letter was submitted.

- January 9, 2021: Sky Harbor Terminal 4 -- An SSO occurred at Terminal 4. No signs of the SSO were observed at the outfall. The spill was reported to ADEQ and a follow up 5-day letter was submitted.

- January 28, 2021: 1722 East Buckeye Road – Diesel fuel was spilled due to a collision at the northeast corner of 16th Street and Buckeye Road. The spill was cleaned-up. The incident was reported to ADEQ and a follow up 5-day letter was submitted.

- March 11, 2021: 51st Avenue and Hendrix Way – ADEQ referred a complaint to the City regarding semi-trucks parked along West Hendrix Way that were discharging a black, sewage smelling substance. Upon investigation, standing water was observed along the street east of 51st Avenue and Hendrix Way. It was discovered that the owner of Greenfuel Technologies had given permission to MPD LLC to park semi-trucks on the north side or their property (Hendrix Way). A field NOV was issued and the discharge ceased.

- March 11, 2021: 620 North 47th Avenue – A private SSO at a U.S. Postal Service (USPS) facility resulted in an unknown amount of wastewater flowing into a City catch basin. The SSO was the result of chiller coolers dumping water into a blocked sewer. No evidence of the SSO was observed at the outfall. The spill was reported to ADEQ and a follow up 5-day letter was submitted.

- March 15, 2021: 24th Street and Roosevelt – A vehicle accident took out three utility poles containing about 40 gallons of non-polychlorinated biphenyl (PCB) transformer oil, according to an Arizona Public Service (APS) representative. The utility poles fell onto the street and the oil possibly discharged into the storm drain. A contractor was called to clean the affected area. The spill may have reached the Salt River and absorbent booms were place at the outfall to capture the oil. There were signs of oil sheen at outfall SR020. The spill was reported to ADEQ and a follow up 5-day letter was submitted.

- June 7, 2021: 3640 West Lincoln Street – A large fire occurred at the Friedman Recycling facility on June 5. Staff inspected storm drain features in the area to evaluate the impact to the MS4. Two catch basins in the area were affected by the firefighting materials and fire debris coming from the facility. Both catch basins connect to Salt River Project (SRP) irrigation line, which discharges to the Salt River. Some firefighting water also may have discharged from the MS4. The release was reported to ADEQ and a follow up 5-day letter was submitted.

- June 23, 2021: Phoenix Sky Harbor – During a post-rain event inspection, excess foam was discovered at an outfall shared by the airport and the MS4. A large foamy puddle was discovered on the northern border of the airport. Aviation and Water Services staff investigated the source of the foam, which may have been related to a recent airport paving project. The spill was reported to ADEQ and a follow up 5-day letter was submitted.

- June 28, 2021: 150 West Catalina Drive -- Received a complaint from ADEQ that cement was being discharged into a catch basin. This facility has catch basins on site that flow into a drywell. Because this is an active construction project, the complaint was referred to PDD.

In addition to the above referenced investigations, inspectors responded to numerous other complaints. Residential examples include residue leftover from homeowner activities, over 20 water leaks (allowable non-stormwater discharge and reported to Water Distribution for repair), over 140 swimming pool discharges (provided information on proper way to drain pool), and excessive irrigation. Commercial/industrial examples include washing of paint in the street at commercial properties, washing of mats at restaurants or dirty tallow bin areas, carpet cleaners dumping in street/drains, and general lack of BMP's at commercial/industrial facilities.

D. Municipal Facilities

- **Status of identification and inventory of these facilities.**

The Municipal Facility Inventory (MFI) is maintained in a facility assessment database that tracks inspection activities, compliance findings and pollution prevention recommendations. The inventory includes facilities owned and operated by City staff that store or use hazardous chemicals in containers greater than five (5) gallons, or which otherwise have the potential to pollute stormwater. Chemicals stored onsite at each facility are tracked through an online citywide Safety Data Sheet Management System. There were 289 municipal facilities on the inventory as of June 30, 2021. OEP's inspection facility assessment schedule targets 97 facilities each year. In reporting year 2020/21, 126 inspections were conducted.

Information maintained in the inventory includes address, latitude and longitude, chemicals stored or used and their safety data sheets, operational status (operational or closed), Standard Industrial Classification (SIC) codes, date of last assessment, brief description of operations, facility contact, as well as other compliance-related information. The number of facilities may change based on new facilities becoming operational or existing facilities undergoing a change/cessation of operations. Such changes to the MFI are tracked through the facility assessment database.

High-Risk Facilities Identification and Prioritization:

The high-risk facility identification and prioritization was completed on June 30, 2011. The high risk identification process considered each of the following: (1) quantity of chemicals stored onsite (based on Tier II Reports), (2) potential for exposure of such chemicals to stormwater based on storage location, (3) likelihood of a spill or release to occur and discharge offsite based on structural BMPs and site drainage characteristics, (4) potential severity of impact on surface waters for a worst-case scenario release, and (5) MSGP coverage. Storage of and potential for release of other pollutants at the site were also considered as an additional risk factor.

Numeric ranking criteria are used to evaluate all city facilities that had submitted Tier II Reports. The criteria indicate which facilities are "higher risk" and also the overall risk of facilities relative to one another. Whenever these sites are physically assessed, the risk factors are reviewed and adjusted, if necessary. As of June 30, 2021, there were 43 facilities on the high-risk municipal facility inventory.

Of the 43 facilities categorized as high-risk, five facilities (service centers) were determined to be highest risk and were required to develop and implement facility-specific stormwater pollution prevention plans (SWPPP) and to conduct routine quarterly inspections by site staff and annual comprehensive stormwater inspections by OEP. For the 38 others currently classified as high-risk facilities—mainly unstaffed, remote locations associated with sanitary sewer system lift stations and odor control stations, or fire stations with double-walled aboveground storage tanks (ASTs) containing diesel fuel—an increase in inspection frequency was not deemed necessary, but a comprehensive stormwater facility assessment is targeted at least once every three years.

- **Overview of inspection findings (i.e., number inspected, number with follow-up actions needed, significant findings).**

The OEP conducts Environmental Facility Assessments (EFAs) of City owned and operated facilities to acquire baseline information, verify compliance with select environmental compliance requirements, including spill preparedness and response procedures, hazardous materials storage, and identification of opportunities to reduce hazardous material use and hazardous

waste generation. The EFA inspection checklist includes a section on stormwater BMPs, the facility's SWMP, and a targeted review of high-risk facilities; this checklist is used to meet the Facility Assessment Measurable Goal at Appendix A Section III.B.(1) and the Municipal Facility Inspection Measurable Goal at Appendix A Section IV.C.(2).

OEP's target schedule is to conduct EFA's at 97 (of 289) facilities each year. In reporting year 2020/21, 126 inspections were conducted. The highest-risk facility service centers (5), which have facility specific SWPPPs, are scheduled for inspection by site staff quarterly and receive a comprehensive stormwater inspection by OEP at least annually. Thirty-eight other high-risk facilities are targeted to receive a comprehensive facility stormwater inspection at least once every three years.

In 2020/21, EFAs were completed at 126 of the facilities on the MFI. There were 78 facilities with zero corrective action findings as a result of the assessment. Forty-eight facilities had a total of 109 findings; recommended corrective action items are summarized in the next section. The annual service center SWPPP inspections are not included in this finding count for this reporting year but are summarized below under high-risk. Beginning in reporting year 2016/17, "Safety Data Sheet (SDS)" database update findings are referred to Department and Human Resources Safety Division and are no longer specified as EFA findings.

In 2020/21, 24 of the 43 high-risk facilities were assessed, including annual SWPPP inspections at all five of the high-risk service centers with SWPPPs. These service centers are also scheduled for inspection quarterly by site staff. Eight facilities and the five service centers had findings. Three facilities and the five service centers had some corrective actions related to stormwater. These are summarized in the following section.

- **Activities needed and performed in response to inspections (EFAs)**

The OEP records and tracks all activities needed as a result of an EFA until resolution. As applicable, facility status updates identifying any uncorrected findings are regularly provided to department contacts, and an annual memo is sent to Department Directors. The text below summarizes the primary stormwater-related corrective action activities performed and verified during 2020/21.

<u>2020/21 Corrective Actions Implemented (EFAs)</u>

- Spill response BMPs
  - Installed or updated emergency contact poster in areas where hazardous materials are used or stored, including pesticide storage sign requirements.
  - Verified departments have updated and distributed Facility Spill Response Plans.
  - Inspected and verified that spill kits are available.

- Structural BMPs (to minimize exposure to stormwater and prevent spills)
  - Verified facilities only store containers of hazardous materials under weather-protective cover or inside; this includes repair of the roof above the bulk acid tank at one PRD facility.
  - Verified secondary containment for hazardous material containers, pesticides, lead acid batteries, used oil, etc., are adequate and in good repair with minimal standing free liquids (maintained clean and dry).
  - Verified cleaning of existing secondary containment structures, including repair of pool chemical secondary containment structures at PRD pool facilities.

  - Verified facilities clean and remove sediments in parking lots, near oil-water separators and near on-site catch basins.
  - Verified clean-up of concrete and rebar stored on the ground outside at one PRD facility.
  - Verified facilities do not store scrap metals, oily leaking equipment and waste materials, and other materials that may migrate into the MS4 or block stormwater drainage directly on the ground.
  - Verified original chemical storage containers are in good repair and kept closed with proper lids, and any spilled materials are cleaned and disposed of properly.
  - Verified servicing of filter inserts for drywells and catch basins at two facilities.

- Non-structural BMPs (practices and procedures)
  - Verified container closure and labeling standards are followed for chemical containers, pesticides, used oil and universal wastes.
  - Verified that logging, storage and signage requirements are followed for universal wastes.
  - Verified housekeeping and general site, parking lot and drainage areas clean-up/condition, and outdoor equipment and material storage practices.
  - Verified that storage amounts are kept to a minimum.
  - Verified that all hazardous waste and materials are handled properly, and waste determinations/profiles have been completed for materials.
  - Verified hazardous waste logs and recordkeeping were completed, on-site and accurate.

<u>2020/21 High-Risk Facilities – Improved Stormwater Controls and Practices Implemented</u>

- Inspected and verified that spill kits are available in needed areas.
- Verified all containers are labeled and with proper secondary containment.
- Verified compliance with HMMP storage practices for hazardous materials (including batteries)—store indoors, or under other weather protections, in properly closed containers in good repair, with appropriate secondary containment; verified prompt clean-up of small spills.
- Verified secondary containment structures are maintained clean and dry with minimal standing free liquids.
- Verified proper storage practices for scrap metal as required by HMMP.
- Verified vehicle repair parts with greasy/oily fluid residue (e.g., engines, cylinders) are stored under tarps or other overhead protection with secondary containment if applicable.
- Monitored maintenance of retention basins to verify they are maintained free of trash and debris.
- Required clean-up and testing of stained soil at one facility.
- Verified proper housekeeping/litter collection and general site, parking lot, and outdoor equipment and material storage practices, including refuse storage, solid waste bin collection areas, and monitoring/verifying parking lot sweeping frequency.
- Monitored use of bulk bin storage areas at service centers to verify that materials remain within bins and areas outside bins are swept regularly.
- Verified cleanup of small fluid releases from equipment and vehicle drips, verified that drip pans or other methods are used to control small fluid releases; and verified that

absorbent used for spills is cleaned-up and disposed of properly to prevent material from migrating in parking lot.

- Verified that vehicle washing areas are well maintained and properly used, including clean-up of sediments and maintenance of sewer interceptors.
- Verified servicing of filter inserts for catch basins at two facilities, and maintenance of stormwater slot drains at one facility.

2020/21 Other Stormwater-Related Municipal Facility Activities

- Okemah Service Center – As noted in the 2018/19 annual report, in May of 2019 City staff observed a dumpster containing leaking vehicle repair parts staining the surrounding asphalt and leaking into a small area of a nearby detention basin and other areas of staining in the parking lot and at additional onsite basins. In June and July of 2019, the affected asphalt areas were surface cleaned and soil samples were collected verifying that no ADEQ Soil Remediation Level regulatory clean-up levels were exceeded. Site staff moved the dumpster to a concrete pad and stated they will provide secondary containment. OEP followed up on the bin during the annual 2019 SWPPP inspection. Per site staff during the inspection, hydraulic cylinders are drained and capped prior to placing in the bins. On December 19, 2019, site staff created a secondary containment metal plate under the downslope side of the bin. After a pilot period, it was determined that the downslope secondary containment was insufficient to address the issue. In July 2020, a process was begun to tarp the bins. In reporting year 2020/21, PWD is also working to implement a tilt to the bins with absorbent at the hinged door end to capture any leakage. Note that a similar finding was observed at the Union Hills Service Center during the annual SWPPP inspection with leakage stains noted under the bins. In February 2021, the PWD was approved for mechanical lid covers to address this leaking container finding at the Okemah and Union Hills service centers using Stormwater Capital Improvement Project (CIP) Funds as discussed below.

2020/21 Other Stormwater-Related Improvement Projects

The following project was identified in response to WSD outfall inspection findings in 2017/18. OEP also noted minor erosion during annual SWPPP inspections:

- Okemah Service Center Erosion/Drainage Study – The Okemah Service Center is a 13.5-acre City service center property managed by the PWD Facilities Management Division, and includes operations by PWD Solid Waste Division, PWD Fleet Services Division, and STR Maintenance. Erosion was noted on the east, west, and north fence lines, including the three north outfalls. Funding was encumbered in reporting year 2017/18 to conduct a drainage and grading study/hydraulic analysis report of the property. The study was completed in January 2019 and provided suggested resolution for the erosion and drainage issues. The PWD received approval to use stormwater funds to obtain final design plans to address the erosion, improve drainage around the bulk storage area, and regrade basins to retain first flush stormwater treatment as outlined in the study. Design was completed in reporting year 2020/21, and funds were encumbered for construction. Construction began in July 2020 and was completed in September 2020. With some of the surplus funding, the PWD procured wind fencing at the northwest corner of the site and stormwater signage.

The following CIPs were identified and approved in response to OEP environmental facility assessments:

- Service Center Scrap Metal Bin Lids - This project purchased mechanical lids to cover scrap metal bins used by the PWD Fleet Services Division at two City service centers (Okemah and Union Hills). The lids will assist with preventing leaks from the bins, particularly during rain events.

- Glenrosa Service Center Parts Canopy - This project consists of design, purchase and installation of a covered canopy behind the Glenrosa Service Center PWD Fleet Services Division Parts Storage/Pick-up area. The canopy will cover materials with the potential to contaminate stormwater.

The following two CIPs were identified by WSD:

- WSD Monitoring Station Improvements – This project consists of various safety upgrades to the stormwater wet weather monitoring stations. Upgrades include safer rain gauge setup, improved site access and fall protection.

- WSD Trash BMP Study - This project is to study trash and floatables collection/capture in stormwater systems. The study includes installation of devices, pre- and post-monitoring, assessment, and recommendations, including cost estimate summaries for the type of device investigated.

In addition to improvements made in response to inspection findings and complaints, the following CIPs which included stormwater improvements also had activity in 2020/21:

<u>Aviation Department:</u>

- The Sky Harbor Airport Terminal 4 North Apron Reconstruction project includes a complete redesign. Trench drains are being installed in place of the current manholes, which are limited in number. This project is scheduled to be completed in September 2021.

- The Sky Harbor Airport Sky Train Stage 2 project that includes a large on-site retention basin with catch basins to drain on-site flows was completed in March 2021; however, full completion of this project is pending paving of the south parking lot currently scheduled for November 2021. The project will have a 60% improvement in on-site stormwater storage capacity, including the installation of multiple (eight) basins and drainage swales to minimize pollutants before discharge to the Salt River.
- The Sky Harbor Terminal 4 S1 Apron project is expected to be complete in December 2022. This project is a complete redesign of the existing dirt Terminal 4 South Concourse 1 location. The project is adding concrete paving, a stormwater interceptor, and multiple trench drains and inlets to more effectively collect stormwater drainage.
- Sky Harbor Rental Car Center was part of the Sky Train improvements. The on-site detention basins were completed in approximately January 2021.
- The Sky Harbor Infield Paving and Utility Vault Adjustment project was completed in March 2021. This project improved stormwater drainage and collection on the airfields by a complete redesign and adding paved surfaces to the south airfield infields, which were previously native soil. Grading and drainage were adjusted to provide proper and improved sheet flow to the existing storm drain system, while updating the inlets for aircraft ratings and improved opening capacity.
- Sky Harbor Terminal 2 Concourse Demolition and Apron Reconstruction Project was substantially complete in February 2021. This project improved stormwater drainage and collection by a complete redesign and adding trench drains to alleviate sheet flow, adding stormwater interceptors and improved drainage to existing systems.
- The Deer Valley Taxiway D redesign project was completed in November 2020. Drainage inlets and better sheet flow in grading were implemented in the project to better collect into the existing stormwater system. The project installed 4,000 linear feet of new concrete stormwater drainage piping, 21 new stormwater inlets, and 14 storm drainage manholes along the taxiway for stormwater collection.

<u>Street Transportation Department/Public Works Department:</u>

- The Shaw Butte tower access road improvements built a containment wall/berm along the existing tower access road at the base of Shaw Butte. This improvement will also assist with preventing sedimentation to nearby properties.

- **Identification and tracking of municipal owned and operated facilities subject to permitting under the MSGP.**
  - Table 3-2 contains a listing of the eleven (11) City-owned and operated facilities subject to permitting under the MSGP, based on their industry sector and/or SIC code.

Table 3-2 City Owned/Operated Facilities Subject to MSGP

Department	Facility	Address	POC	Authorization #	Comments
Public Works	Skunk Creek Landfill	3165 West Happy Valley Road Phoenix, AZ 85027	Engineering Supervisor Doug Sawyer 602-534-1157	AZMS-81051	
	27th Avenue Solid Waste Management Facility	3060 South 27th Avenue Phoenix, AZ 85009		AZMS-81050	
	SR 85	28361 West Patterson Road Buckeye, AZ 85326		AZMS-81065	
	North Gateway Transfer Station	30205 North Black Canyon Highway, Phoenix, AZ 85085		AZMS-81064	
Aviation	Sky Harbor International Airport	3400 East Sky Harbor Boulevard, Ste 3300 Phoenix, AZ 85034	Project Manager Lisa Farinas 602-273-2787	AZMS-80274	
	Deer Valley Airport	702 West Deer Valley Road Phoenix, AZ 85027		AZMS-80278	
	Phoenix/Goodyear Airport	1658 South Litchfield Road Goodyear, AZ 85338		AZMS-80276	
Water Services	91st Avenue Wastewater Treatment Plant	5616 South 91st Avenue Tolleson, AZ 85353	Environmental Quality Specialist Doug Taylor 602-534-5081	AZMS-80181	
	23rd Avenue Waste-water Treatment Plant	2470 South 22nd Avenue Phoenix, AZ 85009		AZMS-80180	
	Cave Creek Water Reclamation Plant	22841 North Cave Creek Road Phoenix, AZ 85024		AZMS-80179	
City Clerk	Customer Service Center (Print Shop)	2640 South 22nd Avenue Phoenix, AZ	Environmental Quality Specialist Hilary Hartline 602-534-1778	AZNC-85446	No Exposure Certification September 2020

Note: The City previously submitted Sector L Closure Certifications for 15 city properties located on closed landfill sites (three of which were previously owned/operated by the City), which are not covered under the MSGP.

- **Status of all inventories, maps, and map studies required by the permit to be developed including completion dates.**

  The stormwater Geographic Information Systems (GIS) database conversion project has been completed. The Stormwater GIS team is reviewing the data in each quarter section and adding new infrastructure. The data is being shared as a web service that is hosted on the Enterprise ArcGIS Server and shared for all city staff to access.

  The City considers the storm drains to be protected critical infrastructure. As such, the City has not provided a copy of the GIS maps as an attachment. However, the maps are available for review by ADEQ upon request.

- **For the Outfall inspection program, describe the status of:**
  - Staff training
    Outfall inspection training is described in Section H.
  - Outfall inventory
    The outfall inventory is described in Section H.
  - Inspection tracking system
    The outfall inspection tracking system is described in Section H.
  - Overview of Inspection and screening procedures, and any significant findings
    Inspection and screening procedures and findings are discussed in Section H.

E. Industrial Facilities

Status of identification and inventory of these facilities.

The City currently manages an inventory of almost 3,000 active stormwater facilities, which includes almost 1,500 industrial (potential MSGP) facilities. Inspectors also focus on facilities that submit federal Toxic Release Inventory reports, facilities that generate Resource Conservation and Recovery Act (RCRA) hazardous waste, treatment storage and disposal facilities (TSDFs), and non-municipal solid waste facilities throughout the City. WSD is putting all active stormwater facilities on a three to seven year inspection cycle, depending on assessed potential to pollute stormwater.

In addition to the industrial inspections, the City has incorporated a stormwater assessment into many of the inspections conducted by the Commercial Section. Stormwater assessments are conducted at commercial businesses, including restaurants, car washes, and service stations. When significant stormwater issues are noted, the Commercial Inspector forwards the information to the Stormwater Section for follow-up. Stormwater assessments are also conducted by Industrial Pretreatment Program (IPP) inspectors when they do their annual inspection for permit compliance. Facilities are referred to the Stormwater Management Section for follow-up when necessary.

- **An overview of inspection findings and note significant findings.**

  In reporting year 2020/21, the City conducted 642 industrial stormwater inspections, 473 commercial stormwater assessments, and 173 IPP screenings. A total of 202 informal (i.e., level one action, or inspection with requirements) and 18 formal enforcement letters were issued for stormwater-related violations.

  The most common violations identified were failure to develop and implement a SWMP or SWPPP (16%), the lack of secondary containment (14%) and lack of training records (9%). Most stormwater issues noted during commercial (e.g., restaurant) inspections involved housekeeping related issues that were easily corrected (e.g., spills around tallow bins and open dumpsters).

- **Corrective and enforcement actions needed and taken in response to inspections.**

  Informal enforcement actions included 202 inspection letters where requirements were made. Formal enforcement actions included NOVs (2) and Field NOVs (16). Most enforcement actions were resolved quickly, with 100 percent of all industrial inspections closed within one year of the initial inspection. The following cases went into escalated enforcement:

- **APS BioGroup:** The facility experienced a SSO on December 14, 2020 and industrial wastewater was discharged into a retention basin and spilled into nearby catch basins. A field NOV was issued for the discharge of a pollutant to the MS4. The facility cleaned the spill and made improvements to their pretreatment system.

- **Friedman Recycling:** On June 5, 2021, this facility was involved in a large fire. Multiple fire departments responded to the fire, which took several days to completely extinguish. Though emergency firefighting water is an allowable non-stormwater discharge under the MS4 permit, the facility was issued a field NOV on June 11 for trackout during the site cleanup after the fire. The facility implemented BMPs to reduce the trackout, and the NOV was closed after the demolition activities had been completed.

- **Greenfuel Technologies, LLC:** The facility was issued a field NOV for the discharge of a pollutant to the MS4. The owner allowed tractor-trailers to park on the road after-hours, and the drivers were discharging pollutants to the street. The owner was informed of the violation and stopped allowing the trucks to park on the street.

- **HM Stone Fabricators:** The facility was discharging wastewater from marble slab cutting operations to the street. Field NOVs were issued on March 24 and June 28. The facility has ceased discharging the water and WSD is currently working with the facility to permanently resolve the violations.

- **Whitfill Nursery:** Facility was drilling a well and the contractor was discharging the drilling mud to an irrigation ditch which connects to the storm drain system. An NOV for the discharge of a pollutant to the MS4 was issued on October 30, 2020. The contractor was required to clean the storm drain.

F. Construction Program Activities

The *City of Phoenix Stormwater Policies and Standards Manual* requires retention areas for buildings to account for drainage collected from the roof tops, parking lots, and other drainage areas. When the PDD reviews grading plans, staff ensure that the site retention volume is adequate to prevent runoff for the required storm event. If inspectors find that the plans are not being followed, they may stop work on the project. If the problem continues, court-ordered injunctions may be served or civil penalties assessed.

Chapter 32A, the City's Grading and Drainage Ordinance, establishes minimum requirements for regulating grading and drainage and establishes implementation and enforcement procedures. Grading and Drainage Permits are issued to applicants who fulfill the application requirements, including the submittal of a SWMP, when applicable. Activities regulated by the Grading and Drainage Ordinance are subject to inspection and enforcement action. Enforcement steps begin with a verbal warning, and may lead to a written warning, halting project inspections on the building, and/or a civil citation. The PDD Civil and Site Inspection team includes 33 members tasked with enforcing the ordinance.

Staff from PDD hold pre-construction meetings with private developers to discuss many issues, including on-site retention of stormwater, controlling erosion, and the installation of other BMPs. Communications with developers occur during periodic observations by inspection staff and during formal inspections.

An overview of the PDD process for stormwater related submittals is provided below:

- The customer submits grading/drainage and stormwater plans for review
- PDD provides red lines on plans
- The customer addresses the red lines
- Plans are approved for construction by PDD
- The customer applies for required permits
- Permits are created by PDD, including Civil Grading and Drainage and Civil Stormwater
- PDD office staff request a copy of the Arizona Pollutant Discharge Elimination System (AZPDES) Construction General Permit authorization number, which comes from submitting a Notice of Intent (NOI) before the customer can purchase permits
- The customer schedules a Pre-Construction Meeting prior to beginning work
- BMPs are implemented by the customer prior to the start of construction
- Inspector verifies that trackout and BMPs are properly maintained during each inspection
- The customer submits a Notice of Termination (NOT) when the project is completed
- Warranty inspection is performed by PDD, one-year after completion.

- **Status of inventory/plan review of these facilities.**

  The PDD database contains a comprehensive inventory of developments for which permits have been issued, plans have been reviewed, and inspections have been conducted. The permits are categorized in the database according to the type of work requested to be performed. In reporting year 2020/21, 827 Construction/Grading Plans were reviewed.

- **An overview of Inspection findings and significant findings.**

  Inspection findings are documented in the PDD database. During reporting year 2020/21, a total of 653 construction sites were inspected for stormwater. There were 59 permits with noted deficiencies where corrective action was requested at least one time, along with seven that required multiple requests to achieve compliance. The counts specific to the four types of deficiencies listed below are:

  - 19 – Stormwater controls missing, not per plan, or started work without notification
  - 31 – Trackout control not working
  - 9 – Failure to maintain stormwater controls.

  Some linear and utility municipal construction projects are not subject to PDD's stormwater permitting process and are inspected by either OEP or WSD staff to verify BMPs and compliance with the local stormwater ordinance. There were 24 documented deficiencies at 11 of the 19 municipal projects inspected, including:

  - Chemical storage lacking cover and/or secondary containment
  - Excess liquid in chemical secondary containment
  - Concrete washout located outside of designated bin, directly on the ground
  - Refuse/litter control/storage
  - Improper storage of scrap metal
  - Catch basin inlet protection not installed and/or properly maintained
  - Missing, insufficient or inaccurately maintained sediment or erosion controls around perimeter of material stockpiles not actively being worked or at site perimeters

- Silt/sediment accumulation on street and in gutter
- BMP site maps.

➢ **Corrective and enforcement actions needed and taken in response to inspections.**

Most documented deficiencies were corrected by the next day. Seven written notices were issued. No other escalated enforcement was required to bring projects into compliance (i.e., suspension of work), and most violations were corrected upon first request.

For municipal projects, inspection reports showing the specific deficiencies are sent to project managers who work with the contractor to correct the problem and send follow-up documentation that deficiencies have been corrected. For all the municipal projects with findings in 2020/21, deficiencies were corrected promptly and additional enforcement steps were not necessary.

PDD requires that the developer provide a "letter of explanation" when they cannot obtain a NOT at the end of the project. These are forwarded to ADEQ twice a year. In reporting year 2020/21, PDD had eleven projects that did not re-file with ADEQ (under the new permit).

Staff Training: The PDD Municipal Stormwater Inspection Training for Construction Inspectors trains plan review and inspection staff on administrative procedures (NOI and SWPPP), compliance, and appropriate BMPs to reduce pollution from construction activities.

PDD civil plan reviewers are trained on stormwater pollution prevention plans, Notice of Intent applications, and Maricopa County Flood Control District's Erosion Control Manual. Training occurs twice a year.

Details on training dates and number of attendees are included in Section C.

G. Post Construction Controls

➢ **Summary of any new post-construction controls for municipal projects.**

There were no new post-construction controls for municipal projects this reporting year.

Low Impact Development (LID) / Green Infrastructure (GI) Studies/Activities:

- The City is participating in a study conducted in partnership with The Nature Conservancy, the Bureau of Reclamation, the Flood Control District of Maricopa County, and the Maricopa County Air Quality Department. The study's aim is to identify key areas in the City of Phoenix that would benefit most (be most suitable) for stormwater infiltration and retention with LID using GIS spatial analysis. Activities completed this reporting year (third year of the study) include modeling of the selected catchment basin using the criteria of flooding, urban heat, stormwater quality, and air quality. The study and final report are scheduled to be completed by the fall of 2021.

➢ **An overview of the City's post-construction inspection program.**

PDD inspectors conduct a one-year warranty inspection on each construction project within their jurisdiction. This inspection provides an opportunity to identify corrective action to be implemented by the developer or responsible sub-contractor for a variety of items, including stormwater and grading and drainage controls.

For municipal projects not subject to PDD's stormwater permit program, OEP or WSD staff conducts post-construction stormwater inspections within one year of the project completion.

During reporting year 2020/21, post-construction stormwater inspections were conducted by PDD at 138 private construction projects and by OEP or WSD at 13 municipal construction projects.

- **Corrective and enforcement actions needed and taken in response to post-construction inspections.**

  The PDD database contains directives for items identified for follow-up during the warranty inspection. The PDD post-construction inspections had no findings. The municipal post-construction inspections also had no findings.

- **Summary of any new or revised post-construction requirements related to permits the City issues.**

  No new or revised post-construction requirements were identified by PDD personnel.

H. Outfall inspection program; describe the status of

- **Staff training.**

  Stormwater staff members are trained on sampling procedures and techniques when they are assigned to the Outfall Inspection rotation, typically within the first year of employment. As part of this, they are required to familiarize themselves with the applicable Code of Federal Regulations (CFR) at 40 CFR 122 and 40 CFR 136 and the Standard Operating Procedures (SOPs) concerning sampling and Quality Assurance/Quality Control (QA/QC). Refresher training is provided informally throughout the year and formally at least once every two years.

  Details on training dates and number of attendees are included in Section C.

- **Outfall inventory.**

  The City maintains a database to document stormwater outfalls. At the time of this report, the inventory includes 70 total outfalls with all of these designated as "Major" outfalls according to Environmental Protection Agency (EPA) guidelines. Fifteen outfalls are designated as "priority," either due to observed flow within the past five years, or because they received an illicit discharge in the past five years. Other priority outfalls have been removed because the source of an illicit discharge was found (and eliminated), or the source was identified and determined to be allowable and not a source of pollutants. Note that the City includes over 900 'outfalls' in our inventory and inspection program, but most of these features do not discharge to a designated water of the US and are therefore not considered outfalls according to the EPA guidelines. They are included in the same inspection schedule.

  In 2018, the City began to re-evaluate each outfall's designation, using the drainage area from the recently completed GIS upgrade. This effort, which will continue for the next two years, has resulted in a decrease in the total number of major outfalls. The outfall inventory is included as an attachment to this report. Note that only the outfalls that discharge to the Salt River are designated as outfalls according to the EPA guidelines in effect during the reporting period.

- **Inspection tracking system.**

  Each outfall inspection is conducted by a trained team of inspectors who use a form specifically designed to capture the data as they are observed. Once the inspection is completed and the

inspectors return to the office, all data are entered into a database. Entered data include the documentation and tracking of all (both major and minor) outfall inspections. All items required in 40 CFR 122 are found on the form including both visual and field screening activities.

- **Inspection and screening procedures and significant findings.**

  The inspection crew visits each "priority" outfall annually and the remaining major outfalls at least once every five years. The inspection begins with an overall visual observation of the outfall structure and surrounding area. Visual items are noted such as residue, staining, dead animals, and differences in plant life near the outfall. If a flow (greater than 0.03 gallons per minute) is observed, a sample is collected for field screening, which includes pH, temperature, total chlorine, sulfide, ammonia, phenol, detergent, lead, and copper. All observations are recorded on a standard inspection checklist and entered into a database.

  In reporting year 2020/21, staff inspected major outfalls along the Arizona Canal Diversion Channel (AC/DC), East Fork Wash, Central Arizona Project, Agua Fria River and the Salt River. All priority outfalls were inspected, regardless of location. Nine outfalls had dry-weather flow, which triggered the field screening process at those locations. Nine IDDE investigations were initiated based upon two consecutive days of dry-weather flow.

I. Description of any new or revised ordinances, rules or policies related to stormwater management or control, if applicable.

- **Complete Streets Design Manual and Policy –** In alignment with the Complete Streets Policy and Design Guidelines, which includes a chapter providing guidance on use of green infrastructure and low-impact development principles in the right-of-way for stormwater management (primarily adopted from, with permission, Watershed Management Group's *Green Infrastructure for Southwestern Neighborhoods (2012))*, standard details for common GI/LID features are being incorporated into the update of the overarching STR Design Manual. The common GI/LID features being adopted into the STR Design Manual are from the Sustainable Cities Network Greater Phoenix Metro Green Infrastructure Handbook. This effort was ongoing in reporting year 20/21, expected to be completed in August 2021. In 2020/21, the City's PDD adopted the full Sustainable Cities Network Greater Phoenix Metro Green Infrastructure Handbook for use outside the City's right-of-way.

J. Fiscal Expenditures: provide a brief report on expenditures related to implementation of the City's stormwater program for the previous fiscal year.

The City collects a stormwater fee to defray the costs of operating the stormwater management program.

Stormwater program charges from STR, WSD, and OEP are paid out of the Stormwater Fund. The fee does not cover the costs for most maintenance of the drainage system or infrastructure improvements, nor does it cover ancillary stormwater activities, such as street sweeping or the HHW program. Stormwater program costs for PDD are funded by construction inspection fees.

<u>Water Services Department</u>

WSD coordinates the City's Stormwater Program. In addition to overall program administration, WSD conducts stormwater outreach, complaint investigations, outfall inspections and IDDE investigations, industrial inspections, wet-weather monitoring, and reporting. Expenditures totaled over $2.0M in reporting year 2020/21.

Street Transportation Department

STR conducts storm drain maintenance and inspections, wash maintenance, and is responsible for the stormwater GIS. The stormwater budget for STR was over $3.4M in reporting year 2020/21. The budget included more than $2.7M for wash maintenance and approximately $700,000 for the stormwater GIS.

Office of Environmental Programs

OEP conducts environmental assessments of municipal facilities and operations and oversees the stormwater training plan. OEP also advises city departments on regulatory compliance issues. OEP also conducts stormwater inspections for those municipal construction and post-construction projects that did not go through the PDD permit process, with the exception of WSD projects. The stormwater operating expenditures for OEP was $166,248 in reporting year 2020/21. An additional $143,349 was spent on CIP projects.

Planning and Development Department

PDD conducts grading and drainage plan reviews and inspections. PDD costs are covered by plan review fees and construction permit fees, and their budget may vary significantly depending on the number of permitted construction projects. The grading and draining budget for PDD in reporting year 2020/21 was over $1.65M with stormwater expenditures at $410,000.

Table 3-3 Stormwater Management Program Fiscal Expenditures

City of Phoenix Department	Reporting Year 2020/21 Actual	Reporting Year 2021/22 Projected
Water Services Department		
Stormwater Program Support	$2,033,037	$2,288.140
Street Transportation Department		
Wash Maintenance	$2,801,311	$2,844,264
Geographic Information System	$767,598	$809,772
Planning and Development Department		
Grading and Drainage – Plan Review	$1,207,000	$1,080,000
Grading and Drainage – Inspections	$439,000	$400,000
Office of Environmental Programs		
Stormwater Program Support	$166,248	$180,884
Capital Improvement Projects	$143,349	$250,000

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PART 4: SUMMARY OF STORMWATER MANAGEMENT PROGRAM ACTIVITIES (NUMERIC)

Provide a summary of stormwater management practices and activities performed each year as indicated in the table below.

	REPORTING YEAR (July 1-June 30)						
STORMWATER MANAGEMENT PRACTICE OR ACTIVITY	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**
Illicit Discharge Detection and Elimination Program							
1. Municipal Employee Training							
Number of training sessions (on non-stormwater discharges and the IDDE program)	**9**	**17**	**10**	**15**	**48**	**25**	**5**
Number of employees attending training	**302**	**527**	**357**	**287**	**976**	**969**	**913**
2. Spill Prevention							
Number of municipal facilities identified with hazardous materials	**303**	**301**	**298**	**313**	**294**	**290**	**289**
Number of spills at municipal facilities with hazardous materials, that occurred in outside areas	**2**	**1**	**1**	**1[c]**	**2**	**2**	**6**
Number of Facility Assessments completed* *(*identify any issues found requiring follow-up in narrative and summarize new practices to minimize exposure)*	**107**	**112**	**111**	**143**	**119**	**55**	**126**
Date of last review of HMMP* (*Identify committee participant with stormwater expertise in narrative)	**06/2014**	**05/2015**	**05/2016**	**06/2017**	**06/2018**	**06/2020**	**06/2021**
3. Outfall Inspections							
Total number inspected* *(*attach or forward electronic copy of inventory or map of major out falls and priority outfalls)*	**214**	**307**	**251**	**169**	**175**	**216**	**275**
Number of 'Priority Outfalls' identified to date* *(*summarize findings and follow-up actions in narrative)*	**27**	**31**	**13**	**13**	**17**	**17**	**15**
Number of 'Priority outfalls' inspected* *(*summarize findings and follow-up actions in narrative)*	**27**	**30**	**13**	**13**	**17**	**17**	**15**
Number of dry weather flows detected	**15**	**24**	**14**	**10**	**20**	**21**	**11**
Number of dry weather flows investigated	**15**	**24**	**14**	**9**	**20**	**16**	**11**
Number of major outfalls sampled	**15**	**24**	**14**	**9**	**20**	**20**	**11**
Number of illicit discharges identified	**6**	**7**	**5**	**8**	**14**	**4**	**23**
Number of illicit discharges eliminated	**2**	**7**	**5**	**7**	**10**	**4**	**21**

	REPORTING YEAR (July 1-June 30)						
STORMWATER MANAGEMENT PRACTICE OR ACTIVITY	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**
Amount of storm drain inspected (length)	**3.8 miles**	**4.04 miles**	**5.76 miles**	**0.41 miles**	**7.73 miles**	**0.83 miles**	**1.63 Miles**
Number of storm drain cross connection investigations	**1**	**0**	**5**	**1**	**1**	**0**	**0**
Number of illicit connections detected	**1**	**1**	**1**	**2**	**3**	**4**	**5**
Number of illicit connections eliminated	**0**	**1**	**1**	**2**	**1**	**4**	**3**
Number of corrective or enforcement actions initiated within 60 days of identification	**1**	**2**	**5**	**2**	**3**	**6**	**28**
Percent of cases resolved within 1 calendar year of original Level One action	**100%**	**100%**	**80%**	**100%**	**100%**	**98%**	**100%**
Number of illicit discharge reports received from public	**195**	**186**	**188**	**286**	**120**	**370[b]**	**333[b]**
Percent of illicit discharge reports responded to	**100%**	**98%**	**100%**	**100%**	**99%**	**100%**	**99%**
Percent of responses initiated within 15 days of receipt	**98%**	**100%**	**100%**	**100%**	**98%**	**99%**	**99%**
Municipal Facilities							
1. Employee Training							
Number of training events* *(*dates and topics to be included in narrative)*	**484**	**37**	**61**	**40**	**39**	**24**	**75**
Number of staff trained	**1,354**	**753**	**1,989**	**1,056**	**1,568**	**662**	**1,374**
2. Inventory/Map/Database of MS4 Owned and Operated Facilities							
Total number of facilities on inventory	**301**	**298**	**313**	**294**	**287**	**290**	**289**
Date identification of "high risk" facilities completed	**6/30/2011**	**6/30/2011**	**6/30/2011**	**6/30/2011**	**6/30/2011**	**6/30/2011**	**6/30/2011**
Date prioritization of municipal facilities completed	**6/30/2011**	**6/30/2011**	**6/30/2011**	**6/30/2011**	**6/30/2011**	**6/30/2011**	**6/30/2011**
3. Inspections							
Miles of MS4 drainage system prioritized for inspection	**0[a]**	**0[a]**	**0[a]**	**0[a]**	**0[a]**	**0[a]**	**0[a]**
Miles visually inspected	**14.08**	**10.06**	**18.72**	**20.24**	**10.66**	**15.68**	**11.42**
Number of 'high risk' municipal facilities inspected	**24**	**18**	**19**	**24**	**18**	**16**	**24**
Number of 'high risk' municipal facilities found needing improved stormwater controls	**8**	**5**	**6**	**7**	**9**	**5**	**8**
4. System Maintenance							
Linear miles of drainage system cleaned each year* (*City to maintain records documenting specific street cleaning events)	**146,315**	**191,318**	**205,299**	**209,992**	**204,816**	**196,114**	**175,527**
Record amount of waste collected from street and lot sweeping (reported in tons)	**16,120**	**18,509**	**14,628**	**17,286**	**15,257**	**10,251**	**10,510**
Total number of catch basins	**19,648**	**20,644**	**21,015**	**33,829**	**36,576**	**38,743**	**40,686**
Number of catch basins cleaned	**10,552**	**6,682**	**4,441**	**3,402**	**2,431**	**3,031**	**2,205**

STORMWATER MANAGEMENT PRACTICE OR ACTIVITY	REPORTING YEAR (July 1-June 30) 2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Industrial Sites Not Owned by the MS4							
Number of training events for MS4 staff	1	2	1	3	2	3	2
Number of municipal staff trained	13	45	9	55	5	49	7
Number of industrial facilities on Part V.B. Inventory inspected	780	636	567	688	551	453	642
Number of corrective or enforcement actions initiated on industrial facilities	171	101	97	223	199	169	202
Percent of cases resolved within 1 calendar year of original Level One action	99%	99%	99%	96%	100%	98%	100%
Construction Program Activities							
Number of training events for MS4 staff* (*include topics in narrative summary)	7	3	3	2	5	10	10
Number of municipal staff trained	28	41	15	26	46	145	167
Number of construction/grading plans submitted for review	335	634	481	735	1,070	827	537
Number of construction/grading plans reviewed	335	634	481	735	1,070	827	537
Number of construction sites inspected	353 10 (municipal)	390 9 (municipal)	533 16 (municipal)	354 21 (municipal)	688 24 (municipal)	650 16 (municipal)	653 19 (municipal)
Number of corrective or enforcement actions initiated on construction facilities* (*identify the type of actions in narrative summary)	118 12 (municipal)	83 19 (municipal)	51 23 (municipal)	46 24 (municipal)	48 7 (municipal)	54 11 (municipal)	59 24 (municipal)
Post Construction Program Activities							
Number of post-construction inspections completed	130 6 (municipal)	121 3 (municipal)	176 15 (municipal)	168 13 (municipal)	199 26 (municipal)	234 9 (municipal)	138 13 (municipal)
Number of corrective or enforcement actions initiated for post-construction activities * (*identify the type of actions in narrative summary)	0 0 (municipal)	0 0 (municipal)	0 1 (municipal)	0 6 (municipal)	0 0 (municipal)	0 1 (municipal)	0 0 (municipal)

(a) The City does not measure linear miles of drainage system prioritized for inspection. Rather, these areas are listed by location. The lists are included in the SWMP and updated annually.
(b) Due to changes in database functionality, starting in FY20 this number represents all complaints received, including complaints of illicit discharge.
(c) This value was corrected from 13 to 1, to address a typo in the 2016/2017 report.

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PART 5: EVALUATION OF THE STORMWATER MANAGEMENT PROGRAM

In accordance with Section 5.4 of the permit, provide an evaluation of the progress and success of the stormwater management program each year, including an assessment of the effectiveness of stormwater management practices in reducing the discharge of pollutants to and from the municipal storm sewer system.

Program Management

The Stormwater Working Group (Working Group), which includes representatives from WSD, STR, OEP, PDD, PWD, PRD, and Law, continues to meet on a monthly basis. The Working Group discusses ongoing issues, such as IDDE investigations, municipal stormwater projects, the GIS database, and stormwater training. An Executive Committee composed of Management from the five key departments meets quarterly to discuss the stormwater budget and any ongoing issues that require management decisions. Since April 2020, the Working Group and Executive Committee have been conducting virtual meetings online.

Public Education and Outreach

The City continues to include stormwater messaging to school-aged children and citizens at City-sponsored or attended events. The City continues to utilize multi-media efforts, such as print advertisement, mailers, surveys, as well as actively participating in AZSTORM on a monthly basis.

This reporting year, 205 storm drain awareness surveys were completed. This number of surveys completed was less than last year, likely due to the reduction in outreach events due to COVID-19. This year, the survey was translated into Spanish, and seven responses to the Spanish survey were received. Most of the respondents answered the 14-question survey online via Survey Monkey distributed via NextDoor. The City uses Survey Monkey to track analytics over time and help determine whether awareness is increasing.

In summary:

This year 48% answered that runoff goes to a treatment plant or sewer system (the same as last year), and 80% chose wash or river (an 8% decrease over last year). This topic will be emphasized in FY 2021/22 outreach efforts.

Over 72% believe there is a problem in the Valley with pollution entering storm drains; a 7% increase over last year.

Nearly all responses *deny* that they dispose of household chemicals, pesticides, automotive fluids, yard waste, and pet waste in storm drains; the same as last year's measurements.

While most indicate that they would seek information on these topics by going to the City, ADEQ, or internet, nearly 28% were not sure where to go when observing someone dumping pollutants into the storm drain (statistic is unchanged from last year).

Demographic questions were added to the survey to assist in narrowing down information on the audience. These questions are:

- What is your gender: Female (54%), Male (38%), Prefer not to answer (7%).
- What is your age group: Under 21 (0%), 21-39 (22%), 40-59 (34%), 60+ (36%); generally, more mature audiences took this year's survey than last year.

Last, we ask how they heard about us, which may be used in the future to direct our method of contact:

> 36% indicated NextDoor; 8% said email, 29% from Facebook/Twitter, 14% from the Website and a few from email or Other. Most of the Other was through the City Bill Insert newsletter, which was a new addition this year.

The survey response summary is included in the attachments section of this annual report.

Pollutant Load

Annual and seasonal pollutant load estimates have been calculated for pollutants identified in Section 7.4 of the City's AZPDES Permit. Total pollutant load estimates for all watershed basins within the Phoenix MS4 are presented in Part 11 of this report.

As included in the 2013 MS4 Permit renewal application, City GIS staff acquired County land-use spatial data and combined them with sub-watershed boundaries developed by the Flood Control District of Maricopa County (FCDMC 2013). These sub-watershed boundaries are very similar to the Watershed Boundary Dataset 10-digit Hydrologic Unit Code (HUC), with exceptions made for local flood control and other man-made diversions (for example, White Tanks A Basin). Clipping these data to the City permit boundaries produced a watershed-based land-use map that was used to define 12 new areas, now sub-watersheds, used in the pollutant load estimate. Data from reporting years 2013/14 through 2019/20 are presented for comparison to the reporting year 2020/21 pollutant load analysis.

Pollutant load analysis does not offer much insight to BMP effectiveness as there appears to be a direct correlation between pollutant loading and quantity of flow, not necessarily program implementation measures.

PART 6: STORMWATER MANAGEMENT PROGRAM MODIFICATIONS

In accordance with Section 5.5 of the permit, provide a description of modifications, if applicable, to the stormwater management program each year as follows:

1. **Addition of New BMPs: Summarize the development and implementation of any new stormwater management practices or pollution controls each year.**

   The City was issued a new MS4 permit in December, with an effective date of July 1, 2021. In preparation for the new permit requirement, the City began holding an annual workshop to encourage participation in the stormwater management program. Other new BMPs will likely be added to comply with the new permit.

2. **Addition of Temporary BMPs: Specify the occasions when these controls were initiated and terminated, and the perceived success of these temporary BMPs.**

   The City started studying a trash collection device (netting) at two outfalls. The intent is to study the effectiveness of the netting in minimizing the discharge of trash to waters of the United States as well as the long-term maintenance costs. Unfortunately, because of delays in site selection and BMP fabrication, the nets were not installed during FY 2020/21. The study will be continued in FY 2021/22.

3. **Increase of Existing BMPs: Summarize modifications to existing stormwater management practices that increase the number of activities, increase the frequency of activities, or other increases in the level of implementation.**

   No existing BMPs were increased during this reporting year.

4. **Replacement of Existing BMPs: Briefly summarize any replacements made with prior approval of ADEQ per section 5.5(4) of the permit.**

   See below for a discussion on HHW changes under Programmatic Changes.

Programmatic Changes

As a result of the coronavirus pandemic, the City made several programmatic changes to protect the health and safety of the public and our employees.

No outreach events were scheduled for the 2020/21 reporting period. Outreach continued through other mechanisms, such as Stormwater Awareness Week, social media, videos, flyers, etc.

Typical HHW events (in-person drop-off) were cancelled for reporting year 2020/21. PWD provided information to the public on HHW alternatives via social media, the City services bill insert, and media interviews. This information is also available on the PWD website. A pilot HHW collection program was implemented where residents can make an appointment and a contractor will pick up HHW at their home.

Though routine industrial facility inspections were briefly halted in April and May 2020, while most businesses were closed due to the State stay-at-home order, in-person inspections resumed in FY 2020/21 with modifications to protect employees and the public. Complaint inspections continued, where feasible. In addition to using proper personal protective equipment, such as face masks, inspectors were allowed to schedule inspections during the first part of the fiscal year, to ensure the business would be accessible for the inspection. In addition, inspectors were encouraged to conduct some of the pre-inspection interview over the phone to limit the amount of time needed to spend face-to-face with the facility representative, and to focus only on inspecting exterior locations. These modifications were mostly discontinued after January 1.

The intergovernmental agreement with the United States Geologic Survey (USGS) to manage the City's wet-weather program was terminated in April 2021. The City (WSD) now collects the wet weather samples and maintains the sampling equipment.

In addition to the changes discussed above, the City also started evaluating programmatic changes needed for the new MS4 permit. The first change was to inactivate two monitoring locations, SC046 and AC033, as they are no longer required under the new MS4 permit. Several additional changes are expected to occur over the next twelve to twenty-four months, especially in the area of construction and post-construction controls.

Note: Modifications to reduce the number of stormwater management practices or activities, frequencies, time frames, level of implementation, or any other program standard specified in Appendix A of the permit requires permit modification (refer to Section 5.6 of the permit).

PART 7: MONITORING LOCATIONS

For the year one Annual Report**,** provide a brief description of each stormwater monitoring location (outfall), including the following information. For subsequent Annual Reports, advise if any of the information has changed or is updated.

Safety improvements were made to several of the monitoring locations, including improving the accessibility of rain gauges and adding handrails, where feasible.

The monitoring sites are described on the following pages. The information for each site corresponds to the requirements in Part 7 of Appendix B of the Permit. Latitude and longitude coordinates have been revised for some outfalls. Land-use data and catchment area information are approximate values based on a review of the available data and best engineering judgment. Maps of the drainage areas are included as an attachment to this report.

It should be noted that SR049 catchment area changed as a result of the 202 Connect Project. The revised catchment area map is included as an attachment to this report. Other catchment areas were also reviewed and updated as needed.

Note: Modifications to monitoring locations shall not be implemented without permit modification.

Name and Description of Receiving Water

New River, via the Arizona Canal Diversion Channel (AC/DC)

Outfall Identification Number

AC033

Address/Physical Location of the Site

Dunlap and 7th Avenue just south of Hatcher

Latitude/Longitude

33° 34' 8.016 "

-112° 4' 58.348"

Discharge Structure

60-inch box outlet

Size (acres) of Drainage Area

1,084 acres

Land Uses

Industrial	0.3%
Commercial	11.9%
Open Land	21.2%
Institutional	1.9%
Residential	47.9%
Heavy Residential	2.3%
Pavement	14%
Miscellaneous	0.5%

Type of Monitoring Equipment

Automated composite sampler (Isco Environmental model 6712), an Isco rain gauge, and an Isco flow meter for depth and flow measurement. Installed solar panels to augment battery performance.

Name and Description of Receiving Water

Indian Bend Wash

Outfall Identification Number

IB008

Address/Physical Location of the Site

12499 North 40th Street

Latitude/Longitude

33° 35' 58.218"

-111° 59' 44.292"

Discharge Structure

66-inch round inlet pipe (original) discharging to two 30-inch outlet pipes

48-inch round inlet pipe (new in 2005) discharging to one 48-inch outlet pipe

Size (acres) of Drainage Area

804.5 acres

Land Uses

Industrial	0.3%
Commercial	6.0%
Open Land	4.1%
Institutional	6.2%
Residential	64.5%
Heavy Residential	3.5%
Pavement	15.1%
Miscellaneous	0.3%

Type of Monitoring Equipment

Automated composite sampler (Isco Environmental model 6712), an Isco rain gauge, and an Isco flow meter for depth and flow measurement. Installed solar panels to augment battery performance. Adjusted flow meter device within the pipe, Winter 2018/19.

Name and Description of Receiving Water

Salt River

Outfall Identification Number

SR003

Address/Physical Location of the Site

3501 West Elwood Street

Latitude/Longitude

33° 24' 43.025"

-112° 8' 5.004"

Discharge Structure

75-inch round pipe

Size (acres) of Drainage Area

1,886 acres

Land Uses

Industrial	10.3%
Commercial	13.8%
Transportation	0.8%
Open Land	11.5%
Institutional	20.1%
Residential	29.6%
Heavy Residential	3.0%
Utilities	0.7%
Pavement	10.2%

Type of Monitoring Equipment

Automated composite sampler (Isco Environmental model 6712), an Isco rain gauge, and an Isco flow meter for depth and flow measurement. Installed solar panels to augment battery performance.

Name and Description of Receiving Water

Salt River

Outfall Identification Number

SR030

Address/Physical Location of the Site

27th Avenue at the Salt River (south bank)

Latitude/Longitude

33° 24' 31.447"

-112° 06' 59.142"

Discharge Structure

108-inch round pipe

Size (acres) of Drainage Area

1,620 acres

Land Uses

Industrial	14.1%
Commercial	4.5%
Open Land	33.4%
Institutional	2.8%
Residential	35.6%
Heavy Residential	0.3%
Pavement	9.2%
Miscellaneous	0.1%

Type of Monitoring Equipment

Automated composite sampler (Isco Environmental model 6712), an Isco rain gauge, and an Isco flow meter for depth and flow measurement. Installed solar panels to augment battery performance.

Name and Description of Receiving Water

Salt River

Outfall Identification Number

SR045

Address/Physical Location of the Site

2401 South 40th Street

Latitude/Longitude

33° 25' 34.082"

-111° 59' 44.274"

Discharge Structure

54-inch round pipe

Size (acres) of Drainage Area

879.7 acres

Land Uses

Industrial	27.1%
Commercial	43.0%
Open Land	5.7%
Institutional	4.3%
Residential	0.9%
Heavy Residential	0.0%
Pavement	19%

Type of Monitoring Equipment

Automated composite sampler (Isco Environmental model 6712), an Isco rain gauge, and an Isco flow meter for depth and flow measurement. Installed solar panels to augment battery performance.

Name and Description of Receiving Water

Salt River

Outfall Identification Number

SR049

Address/Physical Location of the Site

400 South 67th Avenue

Latitude/Longitude

33° 24' 0.510"

-112° 12' 15.095"

Discharge Structure

96-inch round pipe

Size (acres) of Drainage Area

1,974 acres

Land Uses

Industrial	16.6%
Commercial	6.8%
Transportation	0.1%
Open Land	26.3%
Institutional	3.2%
Residential	35.2%
Heavy Residential	1.1%
Utilities	0.1%
Pavement	8.8%
Miscellaneous	1.7%

Type of Monitoring Equipment

Automated composite sampler (Isco Environmental model 6712), an Isco rain gauge, and an Isco flow meter for depth and flow measurement. Installed solar panels to augment battery performance.

Note: The drainage area for this outfall changed significantly as part of the Connect 202 Project.

Name and Description of Receiving Water

Skunk Creek Wash (Tributary to New River)

Outfall Identification Number

SC046

Address/Physical Location of the Site

35206 North 27th Avenue

Latitude/Longitude

33° 48' 11.171"

-112° 7' 7.380"

Discharge Structure

Three 36-inch round pipes

Size (acres) of Drainage Area

46 acres

Land Uses

Industrial	0.0%
Commercial	0.0%
Transportation	0.0%
Open Land	24.7%
Residential	62.8%
Heavy Residential	0.0%
Pavement	12.4%

Type of Monitoring Equipment

Automated composite sampler (Isco Environmental model 6712), an Isco rain gauge, and an Isco flow meter for depth and flow measurement. Installed solar panels to augment battery performance.

PART 8: STORM EVENT RECORDS

For each outfall identified in Part 7.0, Table 1.0 of the permit, summarize all measurable storm events (greater than 0.1-inch rainfall) occurring in the drainage area of each outfall within the winter and summer wet seasons, respectively, until samples have been collected for the outfall. Include the date of each event, the amount of precipitation (inches) for each event, and whether a sample was collected, or if not collected, information on the conditions that prevented sampling. (Note: If unable to collect stormwater samples due to adverse climatic conditions, provide, in lieu of sampling data, a description of the conditions that prevented sampling. Adverse climatic conditions which may prevent the collection of samples include weather conditions that create dangerous conditions for personnel, such as local flooding, high winds, electrical storms, etc.).

In accordance with 40 CFR Part 122.21(g) (7), the City AZPDES Permit Section 7.3.1 defines a representative storm as rainfall in the amount of 0.2 inches or more. The section further directs that "Stormwater samples shall be collected from discharges resulting from a storm event producing 0.2 inches or more of rainfall and at least 72 hours after the previously measured storm event (greater than 0.1-inch rainfall)." Rainfall totals and sample collection information by outfall are provided in Table 8-1 in this section.

Summer Wet Season Sampling Summary

August 20, 2020: Grab and composite samples were collected from SR045.

Summer samples were not collected at SR003, SR030, SR049, AC033, IB008 and SC046 due to insufficient rainfall to trigger a flow event and equipment malfunction.

Winter Wet Season Sampling Summary

December 10, 2020: Grab and composite samples were collected at SR030, SR049, AC033, SC046 and IB008. Grab samples were collected at SR003, but composite samples were not collected due to a dead battery. Samples for SR045 were not collected during this event due to a missing sample bottle, possibly related to vandalism.

January 24, 2021: Grab and composite samples were collected from SR045.

Reported data was reviewed by AECOM to evaluate whether data and associated QA/QC information appear to be complete. Based on the QA/QC presented, analytical results appear to be generally usable for their intended purpose. The following procedures were used in validating the data:

- Analytical methods used in the monitoring program were reviewed to assess the appropriateness of sample collection, transport methods, and holding times.
- Original laboratory reports and the corresponding chain of custody forms were reviewed to determine if QA/QC requirements were met. Although full data packages were not provided, evaluation criteria included holding times, duplicate results, method blank results, matrix spike results, equipment calibration information, and sample collection and transport information (to the extent practical).

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Table 8-1 Storm Event Data for Reporting Year 2020/21

Season	Date	Outfall IB008	Rainfall inches	Outfall SR049	Rainfall inches	Outfall SR045	Rainfall inches	Outfall SR003	Rainfall inches	Outfall SR030	Rainfall inches	Outfall AC033	Rainfall inches	Outfall SC046	Rainfall inches
Summer (2020) (Jun 1 – Oct 31)	8/20/20	6HR	0.18	-	-	**SC**	0.84	-	-	-	-	-	-	EM	0.48
	8/29/20	-	-	-	-	-	-	-	-	-	-	-	-	6HR	0.19
	8/30/20	-	-	-	-	-	-	-	-	-	-	-	-	72HR	0.77
Winter (Nov 1 – May 31)	12/10/20	**SC**	0.39	**SC**	0.66	EM	UNK	SCG	UNK	**SC**	0.61	**SC**	0.50	**SC**	0.62
	1/23/21	-	-	-	-	-	-	-	-	-	-	-	-	-	0.11
	1/24/21	-	0.09	-	0.26	SC	0.21	6HR	0.10	-	0.09	-	0.28	-	0.35
	1/25/21	-	0.55	-	0.27	-	0.23	72HR	0.21	-	0.32	-	0.51	-	0.52
	1/29/21	-	0.18	-	0.16	-	0.11	6HR	0.12	-	0.13	-	0.22	-	0.19
	3/12/21	-	0.19	-	0.17	-	0.16	6HR	0.12	-	0.16	-	0.17	-	0.10
	3/13/21	-	-	-	-	-	0.15	6HR	0.19	-	0.14	-	-	-	-
Summer (2021) (Jun 1 – Oct 31)	6/23/21	-	-	-	-	6HR	0.11	-	-	-	-	6HR	0.11	-	-

SC – Sample Collected (all): SCG – Sample Collected Grab-only; EM – Equipment Malfunction; 6HR – not enough rain in first 6 hours; 72HR – 72-hour rule; UNK - Unknown

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PART 9: SUMMARY OF MONITORING DATA (BY LOCATION)

Use a separate table for each outfall monitoring location. Provide the outfall identification number, the receiving water designated uses, and the lowest surface water quality standards applicable to the receiving water. Enter the analytical results for the stormwater samples collected for each season of the reporting period for each year. Enter subsequent monitoring data for each location on the same form. Include, as an attachment, the laboratory reports for stormwater samples.

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OUTFALL ID: IB008	MONITORING SEASONS																													
RECEIVING WATER: Indian Bend Wash	Summer: June 1 - October 31																													
	Winter: November 1 - May 31																													
DESIGNATED USES: PBC and A&We	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019		Winter 2019/20		Summer 2020[6]		Winter 2020/21	
SAMPLING DATE(S):	SWQS	7/19/2013	SWQS	11/22/2013	SWQS	8/2/2014	SWQS	12/4/2014	SWQS	6/29/2015	SWQS	1/4/2016	SWQS	8/5/2016	SWQS	12/22/2016	SWQS	7/16/2017	SWQS	12/17/2017	SWQS	7/9/2018	SWQS	11/29/2018	SWQS	8/28/2019	SWQS	12/8/2019	SWQS	-	SWQS	12/10/2020
MONITORING PARAMETERS [1,2]																														
Conventional Parameters																														
Flow [3] (cfs)	NS	1.223	NS	12.34	NS	9.4	NS	0.212	NS	5.341	NS	2.296	NS	19.83	NS	59.094	NS	156.6	NS	6.33	NS	3.734	NS	0.001	NS	0.16	NS	0.25	-	-	NS	0.01
pH	6.5-9	7.18	6.5-9	8.38	6.5-9	7.46	6.5-9	7.49	6.5-9	7.3	6.5-9	7.51	6.5-9	7.14	6.5-9	6.83	6.5-9	7.25	6.5-9	7.56	6.5-9	7.42	6.5-9	7.64	6.5-9	7.39	6.5-9	6.72	-	-	6.5-9	6.77
Temperature (ºC)	Varies	31	Varies	15.5	Varies	30.5	Varies	17	Varies	29	Varies	14.1	Varies	25	Varies	16.5	Varies	28.9	Varies	14.5	Varies	29.9	Varies	18.6	Varies	29.7	Varies	17.9	-	-	Varies	17.8
Hardness (mg/L)	400	224	400	60.8	400	39.9	400	16.6	400	91.2	400	25.1	400	27.6	400	27.3	400	82.1	400	71.4	400	76.5	400	54.5	400	38.5	400	24.5	-	-	400	40
Total Dissolved Solids (TDS) (mg/L) [2]	NS	674	NS	182	NS	92	NS	56	NS	274	NS	60	NS	86	NS	60	NS	320	NS	216	NS	270	NS	154	NS	116	NS	1,760	-	-	NS	110
Total Suspended Solids (TSS) (mg/L) [2]	NS	279	NS	192	NS	212	NS	71	NS	252	NS	76	NS	458	NS	55	NS	804	NS	40	NS	376	NS	242	NS	452	NS	39	-	-	NS	144
Biochemical Oxygen Demand (BOD) (mg/L) [2]	NS	123	NS	41	NS	17	NS	7	NS	67	NS	10	NS	23	NS	7	NS	108	NS	46	NS	76	NS	33	NS	26	NS	12	-	-	NS	29
Chemical Oxygen Demand (COD) (mg/L) [2]	NS	600	NS	250	NS	110	NS	<50	NS	300	NS	90	NS	190	NS	<50	NS	560	NS	200	NS	390	NS	190	NS	280	NS	63	-	-	NS	220

IB008	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019		Winter 2019/20		Summer 2020[6]		Winter 2020/21	
SAMPLING DATE(S):	SWQS	7/19/2013	SWQS	11/22/2013	SWQS	8/2/2014	SWQS	12/2/2014	SWQS	6/29/2015	SWQS	1/4/2016	SWQS	8/5/2016	SWQS	12/22/2016	SWQS	7/16/2017	SWQS	12/17/2017	SWQS	7/9/2018	SWQS	11/29/2018	SWQS	8/29/2019	SWQS	12/8/2019	SWQS	8/29/2019	SWQS	12/10/2020
Inorganics																																
Cyanide, total (µg/L) [2]	84	<50	84	<5	84	<5	84	<5	84	<5	84	<5	84	<5	84	<5	84	<5	84	<5	84	<5	84	<5	84	<5	84	<5	-	-	84	<5
Nutrients (mg/L) [2]																																
Nitrate + Nitrite as N	NS	6.9	NS	1.3	NS	1.4	NS	0.4	NS	2.1	NS	0.5	NS	1.1	NS	0.4	NS	2.3	NS	1.8	NS	1.6	NS	1.3	NS	0.9	NS	0.4	-	-	NS	0.9
Ammonia as N	NS	3.7	NS	1.7	NS	1.7	NS	0.61	NS	2.7	NS	0.45	NS	1.5	NS	0.35	NS	3.1	NS	1.9	NS	2.4	NS	1.9	NS	1.7	NS	0.49	-	-	NS	1.4
Total Kjeldahl Nitrogen (TKN)	NS	15	NS	4.5	NS	3.1	NS	1.4	NS	7.7	NS	1.4	NS	4.7	NS	1.3	NS	11	NS	5.8	NS	11	NS	6.0	NS	4.5	NS	1.6	-	-	NS	4.4
Total Phosphorus as P	NS	0.83	NS	0.64	NS	0.44	NS	0.35	NS	0.82	NS	0.44	NS	3.3	NS	0.24	NS	0.48	NS	0.64	NS	1.8	NS	0.66	NS	0.67	NS	0.19	-	-	NS	0.45
Ortho-Phosphorus as P	NS	0.9	NS	0.3	NS	0.1	NS	0.1	NS	0.3	NS	0.1	NS	0.2	NS	0.1	NS	0.7	NS	0.4	NS	0.6	NS	0.1	NS	0.2	NS	<0.1	-	-	NS	0.3
Microbiological																																
Escherichia coli (*E. coli*) (CFU/100 mg or MPN/100 mL) [2]	575	**>2,419.6**	575	**>2,419.6**	575	**>2,419.6**	575	**>2,419.6**	575	**2,419.60**	575	**2,650.00**	575	**1,986.30**	575	**2,419.60**	575	**1,986.30**	575	**20,350**	575	456.9	575	**24,810**	575	**26,130**	575	**3,840**	-	-	575	**1,732.9**
Total Metals (µg/L) [2]																																
Antimony	747 T	3.7 T 1.9 D	747 T	1.7 T 0.8 D	747 T	1.5 T 1.1 D	747 T	1.2 T 0.4 D	747 T	2 T <5 D	747 T	1.4 T <5.0 D	747 T	2.3 T >5 D	747 T	0.69T <5 D	747 T	4.3 T <5 D	747 T	2.1 T <5 D	747 T	3.3 T <5.0 D	747 T	2.4 T <5.0 D	747 T	2.3 <5.0 D	747 T	0.76 <5.0 D	-	-	747 T	2.2 <2.0 D
Arsenic	280 T 440 D	5.9 T 2.8 D	280 T 440 D	2.0 T 1.0 D	280 T 440 D	2.5 T 1.2 D	280 T 440 D	1.6 T 0.5 D	280 T 440 D	3.3 T <5 D	280 T 440 D	2.0 T <5.0 D	280 T 440 D	6.2 T <5 D	280 T 440 D	1.7 T <5 D	280 T 440 D	7.8 T <5 D	280 T 440 D	2.3 T <5 D	280 T 440 D	6.7 T <5.0 D	280 T 440 D	3.5 T <5.0 D	280 T 440 D	4.3 <5.0 D	280 T 440 D	1.2 <5.0 D	-	-	280 T 440 D	3 T <2.0 D
Barium	98,000 T	225 T 90 D	98,000 T	86 T 26 D	98,000 T	55 T 22 D	98,000 T	40 T 8 D	98,000 T	106 T 50 D	98,000 T	58 T 12 D	98,000 T	176 T 19 D	98,000 T	42 T 12 D	98,000 T	271 T 58 D	98,000 T	74 T 33 D	98,000 T	260 T 49 D	98,000 T	121 T 26 D	98,000 T	157 26 D	98,000 T	26 10 D	-	-	98,000 T	121 T 17 D
Beryllium	1,867 T	0.46 T <0.15 D	1,867 T	<0.15 T <0.06 D	1,867 T	0.15 T <0.06 D	1,867 T	0.12 T <0.06 D	1,867 T	0.22 T <5 D	1,867 T	0.10 T <5.0 D	1,867 T	0.53 T <5 D	1,867 T	<0.25 T <5 D	1,867 T	0.73 T <5 D	1,867 T	<0.15 T <5 D	1,867 T	0.69 T <5.0 D	1,867 T	0.29 T <5.0 D	1,867 T	0.41 <5.0 D	1,867 T	<0.15 <5.0 D	-	-	1,867 T	<1.8 T <2.0 D
Cadmium	700 T 49.92 D	0.6 T <0.25 D	700 T 14.05 D	0.3 T <0.10 D	700 T 9.33 D	<0.30 T <0.12 D	700 T 3.67 D	<0.12 T <0.12 D	700 T 20.85 D	0.2 T <5 D	700 T 5.93 D	0.2 T <5.0	700 T 15.98 D	0.3 T <0.25 D	700 T 15.79 D	<0.25 T <0.25 D	700 T 52.16 D	0.8 T <0.2 D	700 T 44.83 D	<0.20 T <0.2	700 T 48.31	0.7 T <0.2 D	700 T 33.44	0.3 T <0.25 D	700 T 22.94	<0.25 <5.0 D	700 T 14.04	<0.25 <5.0 D	-	-	700 T 23.91	<2.1 T <1.0 D
Chromium	NS	20.1 T 3.3 D	NS	5.9 T 1.0 D	NS	5 T 1 D	NS	3.7 T 0.4 D	NS	6.8 T <5 D	NS	5.1 T <5.0 D	NS	17.2 T <5 D	NS	3.8 T <5 D	NS	20.7 T <5 D	NS	5 T <5 D	NS	18.9 T <5.0 D	NS	8.4 T <5.0 D	NS	12.1 <5.0 D	NS	4.7 <5.0 D	-	-	NS	<12.5 T <10 D
Copper	1,300 T 49.73 D	147 T **75.5 D**	1,300 T 14.55 D	51.2 T **20.8 D**	1,300 T 9.79 D	25.2 T **13.7 D**	1,300 T 4.28 D	16.0 T **5.8** D	1,300 T 21.32 D	62.5 T **40.6 D**	1,300 T 6.32 D	40.0 T **14.8 D**	1,300 T 2.98 D	61.3 T **12.8 D**	1,300 T 6.85 D	12 T 5.5 D	1,300 T 19.32 D	156 T **34.5 D**	1,300 T 16.93 D	46.5 T **28.4 D**	1,300 T 18.07	116 T **35.2 D**	1,300 T 13.13	53.7 T **16.2 D**	1,300 T 9.46	70.8 **15.7**	1,300 T 6.18	11.8 **11.7**	-	-	1,300 T 9.81	78.9 T **15.9 D**
Lead	15 T 323.97 D	**27.8 T** 2.4 D	15 T 78.97 D	11.0 T 0.5 D	15 T 49.48 D	7.3 T 0.7 D	15 T 18.45 D	7.6 T 0.3 D	15 T 123.27 D	10.4 T < 5 D	15 T 29.43 D	10.7 T <5.0 D	15 T 32.75 D	**24.3 T** 0.7 D	15 T 32.35 D	5.2 T <0.55 D	15 T 109.89 D	**41.5 T** 3.4 D	15 T 94.27 D	8 T 0.7 D	15 T 101.70	**37.6 T** 2.8 D	15 T 69.98	**17.3 T** 0.3 D	15 T 47.55	**21.4** <5.0 D	15 T 28.64	2.8 <5.0 D	-	-	15 T 49.62	14.7 T <1.0 D
Mercury	280 T 5 D	0.06 T 0.037 D	280 T 5 D	<0.020 T <0.020D	280 T 5 D	<0.092 T <0.2 D	280 T 5 D	<0.092 T <0.092 D	280 T 5 D	<0.2 T <0.2 D	280 T 5 D	<0.062 T <0.2 D	280 T 5 D	<0.068 T <0.068 D	280 T 5 D	<0.068 T <0.2D	280 T 5 D	0.132 T <0.2 D	280 T 5 D	<0.066 T <0.2 D	280 T 5 D	<0.080 T <0.080 D	280 T 5 D	0.043 T <0.2 D	280 T 5 D	<0.042 <0.2 D	280 T 5 D	<0.042 <0.2 D	-	-	280 T 5 D	<0.118 T <0.2 D
Nickel	28,000 T 8,227 D	34.0 T 18.0 D	28,000 T 2,729.4 D	10.0 T 4.6 D	28,000 T 1,911 D	5.7 T 2.7 D	28,000 T 910.2 D	3.5 T 0.7 D	28,000 T 3,846 D	11.7 T 6.3 D	28,000 T 1,291 D	5.1 T <5.0 D	28,000 T 1,399 D	16.6 T <5 D	280,000 T 1,386 D	3.6 T <5 D	280,000 T 3519.29 D	25.7 T 8.4 D	280,000 T 3127.15 D	7 T <5 D	28,000 T 3,315.11	25.8 T 8.1 D	28,000 T 2,488.35	9.4 T <5.0 D	28,000 T 1,854.47	13.2 <5.0 D	28,000 T 1,265.19	2.4 <5.0 D	-	28,000 T 1,915.42	10.8 T 2.2 D
Selenium	33 T	1.5 T 1.3 D	33 T	<0.60 T 0.3 D	33 T	0.64 T 0.4 D	33 T	0.25 T 0.1 D	33 T	0.99 T <5 D	33 T	<0.40 T <5.0 D	33T	1.6 T <5 D	33T	0.51 T <5 D	33T	1.2 T <5.0 D	33T	0.71 T <5 D	33 T	0.86 T <5.0 D	33 T	0.69 T <5.0 D	33 T	<0.55 <5.0 D	33 T	<0.55 <5.0 D	-	-	33 T	<4.05 T <2.0 D
Silver	4,667 T 12.88 D	0.4 T <0.15 D	4,667 T 1.364 D	<0.15 T <0.15 D	4,667 T 0.667D	<0.20 T <0.20 D	4,667 T 0.146 D	<0.08 T <0.08 D	4,667 T 2.75 D	<0.25 T *<5 D*	4,667 T 0.30 D	<0.25 T *<5.0 D*	4,667 T 0.35 D	<0.45 T <5 D	4,667 T 0.34 D	<0.45 T *<5 D*	4,667 T 2.29 D	0.5 T *<5.0 D*	4,667 T 1.80 D	<0.10 T *<5.0 D*	4,667 T 2.03	0.3 T *<5.0 D*	4,667 T 1.13	0.2 T *<5.0 D*	4,667 T 0.62	<0.2 *<5.0 D*	4,667 T 0.29	0.4 *<5.0D*	-	-	4,667 T 0.67	<1.25 T *<5.0 D*
Thallium	75 T	<0.20 T <0.20 D	75 T	<0.20 T <0.08 D	75 T	0.12 T <0.04 D	75 T	0.07 T <0.04 D	75 T	0.4 T <5 D	75 T	<0.15 T <5.0 D	75 T	0.26 T <5 D	75 T	0.34 T <5 D	75 T	0.35 T <5 D	75 T	<0.10 T <5.0 D	75 T	0.19 T <5.0 D	75 T	<0.15 T <5.0 D	75 T	0.15 <5.0 D	75 T	<0.15 <5.0D	-	-	75 T	<2.75 T <2.0 D
Zinc	280,000 T 2,202 D	362 T 109 D	280,000 T 729.8 D	211 T 61.6 D	280,000 T 510.9 D	77 T 19.2 D	280,000 T 242.8 D	63.3 T 8.4 D	280,000 T 1,029 D	209 T 70 D	280,000 T 345 D	141 T 12.0 D	280,000 T 374 D	261 T 15.4 D	280,000 T 370 D	42.5 T <8	280,000 T 940.87 D	476 T 90.5 D	280,000 T 835.88 D	151 T 53.2 D	280,000 T 886.20	464 T 68.5 D	280,000 T 664.90	271 T 34.1 D	280,000 T 495.30	279 <50D	280,000 T 337.71	52 <50D	-	-	280,000 T 511.60	250 T 26.3 D
Organic Toxic Pollutants																																
Total Petroleum Hydrocarbons (TPH) (mg/L) [2]	NS	<11	NS	<11	NS	<10	NS	<12	NS	<11	NS	<5.7	NS	<5.6	NS	<4.5	NS	<7.1	NS	<7.0	NS	<6.8	NS	<6.0	NS	N/A*	NS	<5.8	-	-	NS	<5.7
Total Oil and Grease (mg/L) [2]	NS	<5.6	NS	<5.7	NS	<5.0	NS	<6.0	NS	<5.6	NS	<5.7	NS	<5.6	NS	<4.5	NS	<5.9	NS	<5.9	NS	<5.6	NS	<6.0	NS	<5.8	NS	<5.8	-	-	NS	<6.8
VOCs, Semi-VOCs, and Pesticides (µg/L) [2]																																
Acrolein	467	<2.0	467	<0.20	467	<2.00	467	<0.40	467	<3.90	467	<0.78	467	<0.41	467	<0.41	467	<3.95	467	<0.79	467	<5.0	467	0.67	467	<0.55	467	<0.55	-	-	467	<0.950
Acrylonitrile	37,333	<1.6	37,333	<0.16	37,333	<0.70	37,333	<0.14	37,333	<2.65	37,333	<0.53	37,333	<0.42	37,333	<0.42	37,333	<2.95	37,333	<0.59	37,333	<5.0	37,333	<0.57	37,333	<0.57	37,333	<0.57	-	-	37,333	<0.524
Benzene	3,733	<1.20	3,733	<0.24	3,733	<1.20	3,733	<0.13	3,733	<0.65	3,733	<0.46	3,733	<0.29	3,733	<0.29	3,733	<1.30	3,733	<0.26	3,733	<1.30	3,733	<0.33	3,733	<3.3	3,733	<0.33	-	-	3,733	<0.31

IB008	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019		Winter 2019/20		Summer 2020[6]		Winter 2020/21	
SAMPLING DATE(S):	SWQS	7/19/2013	SWQS	11/22/2013	SWQS	8/2/2014	SWQS	12/2/2014	SWQS	6/29/2015	SWQS	1/4/2016	SWQS	8/5/2016	SWQS	12/22/2016	SWQS	7/16/2017	SWQS	12/17/2017	SWQS	7/9/2018	SWQS	11/29/2018	SWQS	8/29/2019	SWQS	12/8/2019	SWQS	8/29/2019	SWQS	12/10/2020
Bromoform	18,667	<2.35	18,667	<0.47	18,667	<2.35	18,667	<0.28	18,667	<1.40	18,667	<0.68	18,667	<0.33	18,667	<0.33	18,667	<1.05	18,667	<0.21	18,667	<1.05	18,667	<0.81	18,667	<8.1	18,667	<0.81	-	-	18,667	<0.37
Carbon tetrachloride	1,307	<1.30	1,307	<0.26	1,307	<1.30	1,307	<0.23	1,307	<1.15	1,307	<0.31	1,307	<0.20	1,307	<0.20	1,307	<1.50	1,307	<0.30	980	<1.50	980	<0.27	980	<2.7	980	<0.27	-	-	980	<0.32
Chlorobenzene	18,667	<0.80	18,667	<0.16	18,667	<0.80	18,667	<0.13	18,667	<0.65	18,667	<0.50	18,667	<0.33	18,667	<0.33	18,667	<1.15	18,667	<0.23	18,667	<1.15	18,667	<0.70	18,667	<7.0	18,667	<0.70	-	-	18,667	<0.42
Chlorodibromomethane	18,667	<0.90	18,667	<0.18	18,667	<0.90	18,667	<0.24	18,667	<1.20	18,667	<0.61	18,667	<0.32	18,667	<0.32	18,667	<1.20	18,667	<0.24	18,667	<1.20	18,667	<0.70	18,667	<7.0	18,667	<0.70	-	-	18,667	<0.21
Chloroethane (ethyl chloride)	NS	<1.10	NS	<0.22	NS	<1.10	NS	<0.19	NS	<0.95	NS	<0.40	NS	<0.33	NS	<0.33	NS	<1.40	NS	<0.28	NS	<1.40	NS	<0.33	NS	<3.3	NS	<0.33	-	-	NS	<0.66
2-Chloroethylvinyl ether	NS	<2.2	NS	<0.22	NS	<0.95	NS	<0.19	NS	<2.65	NS	<0.53	NS	<0.43	NS	<0.43	NS	<3.25	NS	<0.65	NS	<5.0	NS	<0.52	NS	<0.52	NS	<0.52	-	-	NS	<0.333
Chloroform	9,333	<1.15	9,333	<0.23	9,333	<1.15	9,333	<0.14	9,333	<0.70	9,333	<0.49	9,333	<0.32	9,333	<0.32	9,333	<1.20	9,333	<0.24	9,333	<1.20	9,333	<0.31	9,333	<3.1	9,333	<0.31	-	-	9,333	<0.31
Dichlorobromomethane	18,667	<1.15	18,667	<0.23	18,667	<1.15	18,667	<0.15	18,667	<0.75	18,667	<0.49	18,667	<0.29	18,667	<0.29	18,667	<1.30	18,667	<0.26	18,667	<1.30	18,667	<0.52	18,667	<5.2	18,667	<0.52	-	-	18,667	<0.21
1,1-Dichloroethane	NS	<1.30	NS	<0.26	NS	<1.30	NS	<0.19	NS	<0.95	NS	<0.42	NS	<0.29	NS	<0.29	NS	<1.35	NS	<0.27	NS	<1.35	NS	<0.32	NS	<3.2	NS	<0.32	-	-	NS	<0.30
1,2-Dichloroethane	186,667	<1.25	186,667	<0.25	186,667	<1.25	186,667	<0.11	186,667	<0.55	186,667	<0.51	186,667	<0.35	186,667	<0.35	186,667	<1.35	186,667	<0.27	186,667	<1.30	186,667	<0.28	186,667	<2.8	186,667	<0.28	-	-	186,667	<0.28
1,1-Dichloroethylene	46,667	<1.40	46,667	<0.28	46,667	<1.40	46,667	<0.27	46,667	<1.35	46,667	<0.34	46,667	<0.19	46,667	<0.19	46,667	<1.60	46,667	<0.32	46,667	<1.60	46,667	<0.40	46,667	<4.0	46,667	<0.40	-	-	46,667	<0.41
1,2-Dichloropropane	84,000	<1.25	84,000	<0.25	84,000	<1.25	84,000	<0.18	84,000	<0.90	84,000	<0.49	84,000	<0.32	84,000	<0.32	84,000	<1.60	84,000	<0.32	84,000	<1.60	84,000	<0.93	84,000	<9.3	84,000	<0.93	-	-	84,000	<0.33
1,3-Dichloropropylene[5]	28,000	cis <1.20 trans <1.10	28,000	cis <0.24 trans <0.22	28,000	cis <1.20 trans <1.10	28,000	cis <0.13 trans <0.13	28,000	cis <0.65 trans <0.65	28,000	cis <0.51 trans <0.50	28,000	<0.28	28,000	<0.28	28,000	<1.05	28,000	<0.21	28,000	<1.05	28,000	<0.43	28,000	<4.3	28,000	<0.43	- -	- -	28,000	<0.15
Ethylbenzene	93,333	<0.65	93,333	<0.13	93,333	<0.65	93,333	<0.15	93,333	<0.75	93,333	<0.46	93,333	<0.29	93,333	<0.29	93,333	<1.15	93,333	<0.23	93,333	<1.15	93,333	<0.61	93,333	<6.1	93,333	<0.61	-	-	93,333	<0.42
Methyl bromide	1,307	<0.95	1,307	<0.19	1,307	<0.95	1,307	<0.18	1,307	<0.90	1,307	<0.46	1,307	<0.28	1,307	<0.28	1,307	<1.15	1,307	<0.23	1,307	<1.15	1,307	<0.33	1,307	<3.3	1,307	<0.33	-	-	1,307	<0.39
Methyl chloride	NS	<1.40	NS	<0.28	NS	<01.40	NS	<0.23	NS	<1.15	NS	<0.46	NS	<0.28	NS	<0.28	NS	<1.85	NS	<0.37	NS	<1.85	NS	<0.33	NS	<3.3	NS	<0.33	-	-	NS	<0.57
Methylene chloride	56,000	<1.00	56,000	<0.20	56,000	<1.00	56,000	<0.20	56,000	<1.00	56,000	<0.81	56,000	<0.31	56,000	<0.31	56,000	<4.00	56,000	<0.80	56,000	<4.00	56,000	<0.44	56,000	14	56,000	<0.44	-	-	56,000	<0.41
1,1,2,2-Tetrachloroethane	93,333	<2.00	93,333	<0.40	93,333	<2.00	93,333	<0.35	93,333	<1.75	93,333	<0.80	93,333	<0.33	93,333	<0.33	93,333	<1.55	93,333	<0.31	56,000	<1.55	56,000	<0.83	56,000	<8.3	56,000	<0.83	-	-	56,000	<0.46
Tetrachloroethylene	9,333	<1.05	9,333	<0.21	9,333	<1.05	9,333	<0.13	9,333	<0.65	9,333	<0.35	9,333	<0.23	9,333	<0.23	9,333	<1.45	9,333	<0.29	9,333	<1.45	9,333	<0.38	9,333	<3.8	9,333	<0.38	-	-	9,333	<0.38
Toluene	373,333	<0.95	373,333	<0.19	373,333	<0.95	373,333	<0.11	373,333	<0.55	373,333	<0.43	373,333	<0.28	373,333	<0.28	373,333	<1.25	373,333	<0.25	280,000	<1.25	280,000	<0.38	280,000	<3.8	280,000	<0.38	-	-	280,000	<0.35
trans-1,2-Dichloroethylene	18,667	<1.25	18,667	<0.25	18,667	<1.25	18,667	<0.18	18,667	<0.90	18,667	<0.38	18,667	<0.24	18,667	<0.24	18,667	<1.25	18,667	<0.25	18,667	<1.25	18,667	<0.32	18,667	<3.2	18,667	<0.32	-	-	18,667	<0.32
1,1,1-Trichloroethane	1.867x10^{+6}	<1.00	1.867x10^{+6}	<0.20	1.867x10^{+6}	<1.00	1.867x10^{+6}	<0.14	1.867x10^{+6}	<0.70	1.867x10^{+6}	<0.34	1.867x10^{+6}	<0.23	1.867x10^{+6}	<0.23	1.867x10^{+6}	<1.40	1.867x10^{+6}	<0.28	1.867x10^{+6}	<1.40	1.867x10^{+6}	<0.31	1.867x10^{+6}	<3.1	1.867x10^{+6}	<0.31	-	-	1.867x10^{+6}	<0.32
1,1,2-Trichloroethane	3,733	<0.75	3,733	<0.15	3,733	<0.75	3,733	<0.13	3,733	<0.65	3,733	<0.60	3,733	<0.29	3,733	<0.29	3,733	<1.50	3,733	<0.30	3,733	<1.50	3,733	<0.68	3,733	<6.8	3,733	<0.68	-	-	3,733	<0.37
Trichloroethylene	280	<0.75	280	<0.15	280	<0.75	280	<0.22	280	<1.10	280	<0.48	280	<0.28	280	0.28	280	<1.80	280	<0.36	280	<1.80	280	<0.46	280	<4.6	280	<0.46	-	-	280	<0.38
1,2,4-Trimethylbenzene	NS	<5.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<1.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<10	NS	<1.0	-	-	NS	<1.0
1,3,5-Trimethylbenzene	NS	<5.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<1.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<10	NS	<1.0	-	-	NS	<1.0
Vinyl chloride	2,800	<1.00	2,800	<0.20	2,800	<1.00	2,800	<0.22	2,800	<1.10	2,800	<0.35	2,800	<0.24	2,800	<0.24	2,800	<2.10	2,800	<0.42	2,800	<2.10	2,800	<0.35	2,800	<3.5	2,800	<0.35	-	-	2,800	<0.47
Xylenes, Total	186,667	<1.50	186,667	<0.30	186,667	<1.50	186,667	<0.13	186,667	<0.65	186,667	<0.52	186,667	<0.32	186,667	<0.32	186,667	<1.15	186,667	<0.23	186,667	<1.15	186,667	<0.70	186,667	<7.0	186,667	<0.70	-	-	186,667	<0.33
Acid Compounds (µg/L) [2]																																
2-Chlorophenol	4,667	<214.5	4,667	<90.1	4,667	<29.6	4,667	<1.48	4,667	<3.13	4,667	<3.10	4,667	<2.92	4,667	<2.92	4,667	<42.3	4,667	<84.6	4,667	<4.52	4,667	<4.52	4,667	<4.52	4,667	<4.52	-	-	4,667	<1.06
2,4-Dichlorophenol	2,800	<211.0	2,800	<88.6	2,800	<33.0	2,800	<1.65	2,800	<2.84	2,800	<2.81	2,800	<3.21	2,800	<3.21	2,800	<48.2	2,800	<96.4	2,800	<4.77	2,800	<4.77	2,800	<4.77	2,800	<4.77	-	-	2,800	<1.44
2,4-Dimethylphenol	18,667	<114.0	18,667	<47.9	18,667	<44.0	18,667	<2.20	18,667	<2.67	18,667	<2.64	18,667	<1.32	18,667	<1.32	18,667	<70.7	18,667	<141.4	18,667	<2.04	18,667	<2.04	18,667	<2.04	18,667	<2.04	-	-	18,667	<2.70
4,6-Dinitro-o-cresol	3,733	<149.0	3,733	<62.6	3,733	<24.4	3,733	<1.22	3,733	<1.50	3,733	<1.49	3,733	<2.27	3,733	<2.27	3,733	<46.9	3,733	<93.8	3,733	<3.36	3,733	<3.36	3,733	<3.36	3,733	<3.36	-	-	3,733	<1.33
2,4-Dinitrophenol	1,867	<129.5	1,867	<54.4	1,867	<22.6	1,867	<1.13	1,867	<2.23	1,867	<2.21	1,867	<2.64	1,867	<2.64	1,867	<51.1	1,867	<102.2	1,867	<3.41	1,867	<3.41	1,867	<3.41	1,867	<3.41	-	-	1,867	4.4
2-Nitrophenol	NS	<205.5	NS	<86.3	NS	<31.4	NS	<1.57	NS	<2.87	NS	<2.84	NS	<2.61	NS	<2.61	NS	<78.3	NS	<156.6	NS	<4.68	NS	<4.68	NS	<4.68	NS	<4.68	-	-	NS	<0.99
4-Nitrophenol	NS	<233.5	NS	<98.1	NS	<22.8	NS	<1.14	NS	<3.01	NS	<2.98	NS	<2.03	NS	<2.03	NS	<40.3	NS	<80.6	NS	<3.52	NS	<3.52	NS	<3.52	NS	<3.52	-	-	NS	7.0
p-Chloro-m-cresol	48,000	<220.5	48,000	<92.6	48,000	<33.0	48,000	<1.65	48,000	<1.89	48,000	<1.87	48,000	<3.10	48,000	<3.10	48,000	<40.5	48,000	<81.0	48,000	<4.76	48,000	<4.76	48,000	<4.76	48,000	<4.76	-	-	48,000	<1.41
Pentachlorophenol	44.084	*<168.0*	147.244	<70.6	58.434	<27.8	60.177	<1.39	46.695	<1.48	61.4	<1.47	61.4	<3.44	61.4	<3.44	47.26	*<73.6*	64.53	*<147.2*	56.06	<4.00	69.94	<4.00	54.40	<4.00	27.74	<4.00	-	-	29.17	<2.02
Phenol	180,000	<177.5	180,000	<74.6	180,000	<26.8	180,000	<1.34	180,000	<2.32	180,000	<2.30	180,000	2.8	180,000	<1.84	180,000	<39.9	180,000	<79.8	180,000	<4.08	180,000	<4.08	180,000	<4.08	180,000	<4.08	-	-	180,000	<1.33
2,4,6-Trichlorophenol	130	*<239.5*	130	<100.6	130	<37.8	130	<1.89	130	<2.63	130	<2.60	130	<3.28	130	<3.28	130	<47.4	130	<94.8	130	<5.27	130	<5.27	130	<5.27	130	<5.27	-	-	130	<1.69
Bases/Neutrals (µg/L) [2]																																
Acenaphthene	56,000	<67.0	56,000	<28.1	56,000	<20.6	56,000	<1.03	56,000	<0.35	56,000	<0.35	56,000	<1.02	56,000	<1.02	56,000	<18.8	56,000	<37.6	56,000	<1.19	56,000	<1.19	56,000	<1.19	56,000	<1.19	-	-	56,000	<0.68
Acenaphthylene	NS	<86.5	NS	<36.3	NS	<20.0	NS	<1.00	NS	<1.24	NS	<1.23	NS	<6.10	NS	<6.10	NS	<17.5	NS	<35.0	NS	<1.41	NS	<1.41	NS	<1.41	NS	<1.41	-	-	NS	<0.59
Anthracene	280,000	<86.5	280,000	<36.3	280,000	<57.6	280,000	<2.88	280,000	<0.44	280,000	<0.44	280,000	<1.96	280,000	<1.96	280,000	<26.2	280,000	<52.4	280,000	<1.20	280,000	<1.20	280,000	<1.20	280,000	<1.20	-	-	280,000	<0.55
Benzo(a)anthracene	0.2	*<86.5*	0.2	*<36.3*	0.2	*<21.6*	0.2	*<1.08*	0.2	*<0.38*	0.2	*<0.38*	0.2	*<1.57*	0.2	*<1.57*	0.2	*<19.6*	0.2	*<39.2*	0.2	*<1.02*	0.2	*<1.02*	0.2	*<1.02*	0.2	*<1.02*	-	-	0.2	*<0.81*
Benzo(a)pyrene	0.2	*<93.5*	0.2	*<39.3*	0.2	*<75.4*	0.2	<3.77	0.2	*<1.42*	0.2	*<1.41*	0.2	*<3.12*	0.2	*<3.12*	0.2	*<37.7*	0.2	*<75.4*	0.2	*<1.08*	0.2	*<1.08*	0.2	*<1.08*	0.2	*<1.08*	-	-	0.2	*<1.58*
Benzo(b)fluoranthene	NS	<121.5	NS	<51.0	NS	<29.2	NS	<1.46	NS	<1.07	NS	<1.06	NS	<1.28	NS	<1.28	NS	<21.7	NS	<43.4	NS	<0.38	NS	<0.38	NS	<0.38	NS	<0.38	-	-	NS	<2.48
Benzo(g,h,i)perylene	NS	<86.5	NS	<36.3	NS	<25.8	NS	<1.29	NS	<0.73	NS	<0.72	NS	<2.83	NS	<2.83	NS	<25.1	NS	<50.2	NS	<1.14	NS	<1.14	NS	<1.14	NS	<1.14	-	-	NS	<1.92
Benzo(k)fluoranthene	1.9	*<70.0*	1.9	*<29.4*	1.9	*<20.8*	1.9	<1.04	1.9	<0.35	1.9	<0.35	1.9	<1.76	1.9	<1.76	1.9	*<23.3*	1.9	*<46.6*	1.9	<1.03	1.9	<1.03	1.9	<1.03	1.9	<1.03	-	-	1.9	*<1.92*
Chrysene	19	*<74.0*	19	*<31.1*	19	*<28.2*	19	<1.41	19	<0.46	19	<0.46	19	<1.08	19	<1.08	19	*<19.6*	19	*<39.2*	19	<1.16	19	<1.16	19	<1.16	19	<1.16	-	-	19	<0.81
Dibenz(a,h)anthracene	1.9	*<99.0*	1.9	*<41.6*	1.9	*<24.8*	1.9	<1.24	1.9	<0.47	1.9	<0.47	1.9	<1.93	1.9	<1.93	1.9	*<60.4*	1.9	*<120.8*	1.9	<1.02	1.9	<1.02	1.9	<1.02	1.9	<1.02	-	-	1.9	<1.66
1,2-Dichlorobenzene	5,900	<13.5	5,900	<5.7	5,900	<35.2	5,900	<1.76	5,900	<1.05	5,900	<1.04	5,900	<0.58	5,900	<0.58	5,900	<1.50	5,900	<0.30	5,900	<1.43	5,900	<1.43	5,900	<1.43	5,900	<1.43	-	-	5,900	<0.89
1,3-Dichlorobenzene	NS	<56.5	NS	<23.7	NS	<34.8	NS	<1.74	NS	<0.47	NS	<0.47	NS	<0.52	NS	<0.52	NS	<1.25	NS	<0.25	NS	<1.39	NS	<1.39	NS	<1.39	NS	<1.39	-	-	NS	<0.91
1,4-Dichlorobenzene	6,500	<52.5	6,500	<22.0	6,500	<31.2	6,500	<1.56	6,500	<1.29	6,500	<1.28	6,500	<0.50	6,500	<0.50	6,500	<1.45	6,500	<0.29	6,500	<1.48	6,500	<1.48	6,500	<1.48	6,500	<1.48	-	-	6,500	<0.98
3,3-Dichlorobenzidine	3	*<1363.5*	3	*<572.7*	3	*<121.2*	3	*<6.06*	3	*<11.72*	3	*<11.60*	3	*<23.45*	3	*<23.45*	3	*<254.3*	3	*<508.6*	3	*<6.99*	3	*<6.99*	3	*<6.99*	3	*<6.99*	-	-	3	*<6.24*
Diethyl phthalate	746,667	<95.0	746,667	<39.9	746,667	<47.4	746,667	<2.37	746,667	<0.36	746,667	<0.36	746,667	<1.07	746,667	<1.07	746,667	<19.9	746,667	<39.8	746,667	<1.08	746,667	<1.08	746,667	<1.08	746,667	<1.08	-	-	746,667	<7.95
Dimethyl phthalate	NS	<89.5	NS	<37.6	NS	<48.4	NS	<2.42	NS	<0.47	NS	<0.47	NS	<0.58	NS	<0.58	NS	<19.1	NS	<38.2	NS	<1.17	NS	<1.17	NS	<1.17	NS	<1.17	-	-	NS	<0.48
Di-n-butyl phthalate	1,100	<111.5	1,100	<46.8	1,100	<37.0	1,100	<1.85	1,100	<0.31	1,100	<0.31	1,100	<1.37	1,100	<1.37	1,100	<23.5	1,100	<47.0	1,100	<1.12	1,100	<1.12	1,100	<1.12	1,100	<1.12	-	-	1,100	<1.00
2,4-Dinitrotoluene	1,867	<102.5	1,867	<43.0	1,867	<42.4	1,867	<2.12	1,867	<0.26	1,867	<0.26	1,867	<1.30	1,867	<1.30	1,867	<31.0	1,867	<62.0	1,867	<1.17	1,867	<1.17	1,867	<1.17	1,867	<1.17	-	-	1,867	<0.84
2,6-Dinitrotoluene	3,733	<126.0	3,733	<52.9	3,733	<22.4	3,733	<1.12	3,733	<0.38	3,733	<0.38	3,733	<1.39	3,733	<1.39	3,733	<28.9	3,733	<57.8	3,733	<1.13	3,733	<1.13	3,733	<1.13	3,733	<1.13	-	-	3,733	<0.65
Di-n-octyl phthalate	373,333	<144.0	373,333	<60.5	373,333	<22.0	373,333	<1.10	373,333	<1.29	373,333	<1.28	373,333	<1.67	373,333	<1.67	373,333	<55.0	373,333	<110.0	373,333	<2.05	373,333	<2.05	373,333	<2.05	373,333	6.4	-	-	373,333	<2.44
1,2-Diphenylhydrazine (as azobenzene)	NS	<116.5	NS	<48.9	NS	<134.0	NS	<6.70	NS	<1.07	NS	<1.06	NS	<7.46	NS	<7.46	NS	<21.5	NS	<43.0	1.8	<1.11	1.8	<1.11	1.8	<1.11	1.8	<1.11	-	-	1.8	<1.16
Fluoranthene	37,333	<89.5	37,333	<37.6	37,333	<27.0	37,333	<1.35	37,333	<0.27	37,333	<0.27	37,333	<1.06	37,333	<1.06	37,333	<30.8	37,333	<61.6	37,333	<1.27	37,333	<1.27	37,333	<1.27	37,333	<1.27	-	-	37,333	<0.50
Fluorene	37,333	<77.0	37,333	<32.3	37,333	<96.2	37,333	<4.81	37,333	<0.29	37,333	<0.29	37,333	<0.51	37,333	<0.51	37,333	<28.7	37,333	<57.4	37,333	<1.18	37,333	<1.18	37,333	<1.18	37,333	<1.18	-	-	37,333	<0.50
Hexachlorobenzene	747	<69.5	747	<29.2	747	<24.6	747	<1.23	747	<0.34	747	<0.34	747	<0.47	747	<0.47	747	<15.7	747	<31.4	747	<1.01	747	<1.01	747	<1.01	747	<1.01	-	-	747	<0.37
Hexachlorobutadiene	187	<16.5	187	<6.9	187	<36.4	187	<1.82	187	<1.69	187	<1.67	187	<0.41	187	<0.41	187	<10.0	187	<20.0	187	<1.20	187	<1.20	187	<1.20	187	<1.20	-	-	187	<0.46
Hexachlorocyclopentadiene	11,200	<113.5	11,200	<47.7	11,200	<24.6	11,200	<1.23	11,200	<1.55	11,200	<1.53	11,200	<2.16	11,200	<2.16	11,200	<61.0	11,200	<122.0	9,800	<3.07	9,800	<3.07	9,800	<3.07	9,800	<3.07	-	-	9,800	<1.32
Hexachloroethane	850	<20.0	850	<8.4	850	<32.4	850	<1.62	850	<1.24	850	<1.23	850	<0.54	850	<0.54	850	<14.9	850	<29.8	850	<1.35	850	<1.35	850	<1.35	850	<1.35	-	-	850	<0.36
Indeno(1,2,3-cd)pyrene	1.9	*<101.5*	1.9	*<42.6*	1.9	*<27.8*	1.9	<1.39	1.9	<0.63	1.9	<0.62	1.9	*<2.38*	1.9	*<2.38*	1.9	*<61.1*	1.9	*<122.2*	1.9	<1.07	1.9	<1.07	1.9	<1.07	1.9	<1.07	-	-	1.9	*<2.38*

IB008	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019		Winter 2019/20		Summer 2020[6]		Winter 2020/21	
SAMPLING DATE(S):	SWQS	7/19/2013	SWQS	11/22/2013	SWQS	8/2/2014	SWQS	12/2/2014	SWQS	6/29/2015	SWQS	1/4/2016	SWQS	8/5/2016	SWQS	12/22/2016	SWQS	7/16/2017	SWQS	12/17/2017	SWQS	7/9/2018	SWQS	11/29/2018	SWQS	8/29/2019	SWQS	12/8/2019	SWQS	8/29/2019	SWQS	12/10/2020
Isophorone	186,667	<70.5	186,667	<29.6	186,667	<42.8	186,667	<2.14	186,667	<0.37	186,667	<0.37	186,667	<0.51	186,667	<0.51	186,667	<17.7	186,667	<35.4	186,667	<1.32	186,667	<1.32	186,667	<1.32	186,667	<1.32	-	-	186,667	<1.45
Naphthalene	18,667	<60.0	18,667	<25.2	18,667	<36.6	18,667	<1.83	18,667	<0.36	18,667	<0.36	18,667	<0.49	18,667	<0.49	18,667	<15.4	18,667	<30.8	18,667	<1.48	18,667	<1.48	18,667	<1.48	18,667	<1.48	-	-	18,667	<0.37
Nitrobenzene	467	<61.5	467	<25.8	467	<42.0	467	<2.10	467	<1.27	467	<1.26	467	<0.44	467	<0.44	467	<18.0	467	<36.0	467	<1.55	467	<1.55	467	<1.55	467	<1.55	-	-	467	<0.90
n-Nitrosodimethylamine	0.03	*<60.0*	0.03	*<25.2*	0.03	*<20.0*	0.03	*<1.00*	0.03	*<1.14*	0.03	*<1.13*	0.03	*<0.54*	0.03	*<0.54*	0.03	*<16.2*	0.03	*<32.4*	0.03	*<1.67*	0.03	*<1.67*	0.03	*<1.67*	0.03	*<1.67*	-	-	0.03	*<0.70*
n-Nitrosodi-n-propylamine	88,667	<75.5	88,667	<31.7	88,667	<23.0	88,667	<1.15	88,667	<1.18	88,667	<1.17	88,667	<1.02	88,667	<1.02	88,667	<16.5	88,667	<33.0	88,667	<1.65	88,667	<1.65	88,667	<1.65	88,667	<1.65	-	-	88,667	<2.50
n-Nitrosodiphenylamine	290	<152.0	290	<63.8	290	<71.4	290	<3.57	290	<1.16	290	<1.15	290	<1.67	290	<1.67	290	<31.3	290	<62.6	290	<1.07	290	<1.07	290	<1.07	290	<1.07	-	-	290	<0.88
Phenanthrene	NS	<81.5	NS	<34.2	NS	<27.8	NS	<1.39	NS	<0.31	NS	<0.31	NS	<0.49	NS	<0.49	NS	<30.2	NS	<60.4	NS	<1.33	NS	<1.33	NS	<1.33	NS	<1.33	-	-	NS	<0.32
Pyrene	28,000	<82.0	28,000	<34.4	28,000	<77.2	28,000	<3.86	28,000	<0.68	28,000	<0.67	28,000	<3.21	28,000	<3.21	28,000	<33.8	28,000	<67.6	28,000	<1.20	28,000	<1.20	28,000	<1.20	28,000	<1.20	-	-	28,000	<0.22
1,2,4-Trichlorobenzene	9,333	<16.0	9,333	<6.7	9,333	<33.8	9,333	<1.69	9,333	<1.05	9,333	<1.04	9,333	<0.55	9,333	<0.55	9,333	<12.1	9,333	<24.2	9,333	<1.34	9,333	<1.34	9,333	<1.34	9,333	<1.34	-	-	9,333	<1.05
Pesticides (µg/L) [2]																																
Aldrin	4.5	<0.047	4.5	0.043	4.5	<0.027	4.5	<0.027	4.5	<0.012	4.5	0.078	4.5	<0.019	4.5	<0.019	4.5	<0.013	4.5	<0.013	4.5	<0.010	4.5	<0.010	4.5	<0.010	4.5	<0.021	-	-	4.5	<0.0038
Alpha-BHC	1,600	<0.039	1,600	<0.017	1,600	<0.021	1,600	<0.021	1,600	<0.058	1,600	<0.058	1,600	<0.010	1,600	<0.010	1,600	<0.015	1,600	0.065	1,600	<0.012	1,600	0.022	1,600	<0.012	1,600	<0.021	-	-	1,600	<0.0031
Beta-BHC	560	<0.098	560	<0.092	560	<0.072	560	<0.072	560	<0.063	560	<0.063	560	<0.049	560	<0.049	560	<0.083	560	<0.083	560	<0.099	560	<0.099	560	<0.099	560	<0.031	-	-	560	<0.1802
Gamma-BHC	11	<0.034	11	<0.023	11	<0.034	11	<0.034	11	<0.058	11	<0.058	11	<0.019	11	<0.019	11	<0.020	11	<0.020	11	<0.013	11	0.095	11	<0.013	11	<0.021	-	-	11	<0.0034
Delta-BHC	1,600	<0.033	1,600	<0.018	1,600	<0.021	1,600	<0.021	1,600	<0.066	1,600	<0.066	1,600	<0.035	1,600	<0.035	1,600	<0.012	1,600	<0.012	1,600	<0.045	1,600	<0.045	1,600	<0.045	1,600	<0.021	-	-	1,600	<0.0155
Chlordane	3.2	<0.16	3.2	<0.020	3.2	<0.14	3.2	<0.14	3.2	<0.36	3.2	<0.36	3.2	<0.61	3.2	<0.61	3.2	<0.29	3.2	<0.29	3.2	<0.33	3.2	<0.33	3.2	<0.33	3.2	<0.21	-	-	3.2	<0.19
4,4'-DDT	1.1	<0.030	1.1	<0.016	1.1	<0.025	1.1	<0.025	1.1	<0.017	1.1	<0.017	1.1	<0.011	1.1	<0.011	1.1	<0.020	1.1	<0.020	1.1	<0.009	1.1	<0.009	1.1	<0.009	1.1	<0.021	-	-	1.1	<0.0014
4,4'-DDE	1.1	<0.035	1.1	<0.018	1.1	<0.010	1.1	<0.010	1.1	<0.013	1.1	<0.013	1.1	<0.020	1.1	<0.020	1.1	<0.019	1.1	<0.019	1.1	<0.015	1.1	<0.015	1.1	<0.015	1.1	<0.021	-	-	1.1	<0.0034
4,4'-DDD	1.1	<0.024	1.1	<0.014	1.1	<0.031	1.1	<0.031	1.1	<0.021	1.1	<0.021	1.1	<0.021	1.1	<0.021	1.1	<0.023	1.1	<0.023	1.1	<0.017	1.1	<0.017	1.1	<0.017	1.1	<0.021	-	-	1.1	<0.0022
Dieldrin	4	<0.029	4	<0.022	4	<0.030	4	<0.030	4	<0.060	4	<0.060	4	<0.019	4	<0.019	4	<0.015	4	<0.015	4	<0.012	4	0.032	4	<0.012	4	<0.021	-	-	4	<0.0037
Alpha-endosulfan	3 T	0.09	3 T	<0.018	3 T	0.054	3 T	0.061	3 T	<0.072	3 T	<0.072	3 T	0.083	3 T	0.061	3 T	<0.015	3 T	0.077	3 T	<0.020	3 T	<0.020	3 T	<0.020	3 T	0.038	-	-	3 T	<0.0058
Beta-endosulfan	3 T	<0.035	3 T	<0.013	3 T	<0.032	3 T	<0.032	3 T	<0.019	3 T	<0.019	3 T	<0.021	3 T	<0.021	3 T	<0.014	3 T	<0.014	3 T	<0.014	3 T	<0.014	3 T	<0.014	3 T	<0.021	-	-	3 T	<0.0021
Endosulfan sulfate	3	<0.026	3	<0.014	3	<0.008	3	<0.008	3	<0.016	3	<0.016	3	<0.022	3	<0.022	3	<0.019	3	<0.019	3	<0.017	3	<0.017	3	<0.017	3	<0.021	-	-	3	<0.0018
Endrin	0.7	<0.036	0.7	<0.016	0.7	<0.017	0.7	<0.017	0.7	<0.023	0.7	<0.023	0.7	<0.042	0.7	<0.042	0.7	<0.040	0.7	<0.040	0.7	<0.042	0.7	<0.042	0.7	<0.042	0.7	<0.021	-	-	0.7	<0.0082
Endrin aldehyde	0.7	<0.039	0.7	<0.023	0.7	<0.032	0.7	<0.032	0.7	<0.026	0.7	<0.026	0.7	<0.024	0.7	<0.024	0.7	<0.034	0.7	<0.034	0.7	<0.068	0.7	<0.068	0.7	<0.068	0.7	<0.021	-	-	0.7	<0.003
Heptachlor	0.9	<0.036	0.9	<0.018	0.9	<0.027	0.9	<0.027	0.9	<0.035	0.9	<0.035	0.9	<0.023	0.9	<0.023	0.9	<0.019	0.9	<0.019	0.9	<0.011	0.9	0.048	0.9	<0.011	0.9	<0.031	-	-	0.9	<0.0297
Heptachlor epoxide	0.9	<0.033	0.9	<0.020	0.9	<0.008	0.9	<0.008	0.9	<0.062	0.9	<0.062	0.9	<0.020	0.9	<0.020	0.9	<0.016	0.9	<0.016	0.9	<0.012	0.9	<0.012	0.9	<0.012	0.9	<0.031	-	-	0.9	<0.0015
PCB-1242	[4]	<0.42	[4]	<0.55	[4]	<0.37	[4]	<0.37	[4]	<0.14	[4]	<0.14	[4]	<0.72	[4]	<0.72	[4]	<0.33	[4]	<0.33	[4]	<0.28	[4]	<0.28	[4]	<0.28	[4]	<0.26	-	-	[4]	<0.0831
PCB-1254	[4]	<0.21	[4]	<0.28	[4]	<0.23	[4]	<0.23	[4]	<0.20	[4]	<0.20	[4]	<0.22	[4]	<0.22	[4]	<0.17	[4]	<0.17	[4]	<0.21	[4]	<0.21	[4]	<0.21	[4]	<0.26	-	-	[4]	<0.0831
PCB-1221	[4]	<0.70	[4]	<0.85	[4]	<0.22	[4]	<0.22	[4]	<0.64	[4]	<0.64	[4]	<0.46	[4]	<0.46	[4]	<0.36	[4]	<0.36	[4]	<0.50	[4]	<0.50	[4]	<0.50	[4]	<0.26	-	-	[4]	<0.0831
PCB-1232	[4]	<0.68	[4]	<0.34	[4]	<0.55	[4]	<0.55	[4]	<0.37	[4]	<0.37	[4]	<0.90	[4]	<0.90	[4]	<0.40	[4]	<0.40	[4]	<0.48	[4]	<0.48	[4]	<0.48	[4]	<0.26	-	-	[4]	<0.0831
PCB-1248	[4]	<0.80	[4]	<0.27	[4]	<0.19	[4]	<0.19	[4]	<0.22	[4]	<0.22	[4]	<0.24	[4]	<0.24	[4]	<0.21	[4]	<0.21	[4]	<0.35	[4]	<0.35	[4]	<0.35	[4]	<0.26	-	-	[4]	<0.0831
PCB-1260	[4]	<0.22	[4]	<0.23	[4]	<0.32	[4]	<0.32	[4]	<0.59	[4]	<0.59	[4]	<0.26	[4]	<0.26	[4]	<0.34	[4]	<0.34	[4]	<0.28	[4]	<0.28	[4]	<0.28	[4]	<0.26	-	-	[4]	<0.0831
PCB-1016	[4]	<0.37	[4]	<0.33	[4]	<0.18	[4]	<0.18	[4]	<0.55	[4]	<0.55	[4]	<0.29	[4]	<0.29	[4]	<0.33	[4]	<0.33	[4]	<0.40	[4]	<0.40	[4]	<0.40	[4]	<0.26	-	-	[4]	<0.0831
Toxaphene	11	<0.55	11	<0.34	11	<0.22	11	<0.22	11	<0.60	11	<0.60	11	<0.48	11	<0.48	11	<0.47	11	<0.47	11	<0.482	11	<0.482	11	<0.482	11	<0.52	-	-	11	<0.467

Notes:

NS = no standard applicable to the designated use

T = total

D = dissolved

Bold text indicates a sample result greater than the WQS

Italicized text indicates a laboratory detection limit higher than the WQS

* = Silica Gel treatment (SGT) not run if Hexane Extraction Method (HEM) is Non-Detect

Footnotes:

[1] The Permittee shall report on any additional parameters that were monitored for seasonal stormwater sampling as required by Section 6.0 of this permit (Special Conditions).

[2] Analytical results shall be reported in the units specified for each category or parameter.

[3] Report the average flow rate for the sampling period (no more than 6 hours).

[4] Standard for total PCBs of 11 µg/L A&We and 19 µg/L PBC.

[5] Beginning with the Summer 2016 reporting, total 1,3-dichloropropylene is reported (prior reporting periods included cis and trans isomers) .

[6] No sample collected. See Table 8.1 for storm event data.

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OUTFALL ID: SC046	MONITORING SEASONS																													
RECEIVING WATER: Skunk Creek Wash	Summer: June 1 - October 31																													
	Winter: November 1 - May 31																													
DESIGNATED USES: A&We and PBC	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019		Winter 2019/20 [7]		Summer 2020[6]		Winter 2020/21	
SAMPLING DATE(S):	SWQS	8/24/2013	SWQS	11/22/2013	SWQS	8/2/2014	SWQS	12/4/2014	SWQS	10/6/2015	SWQS	4/8/2016	SWQS	8/23/2016	SWQS	11/3/2016	SWQS	7/16/2017	SWQS	1/9/2018	SWQS	7/11/2018	SWQS	2/14/2019	SWQS	7/24/2019	SWQS	11/29/2019	SWQS	-	SWQS	12/10/2020
MONITORING PARAMETERS [1,2]																														
Conventional Parameters																														
Flow [3] (cfs)	NS	0.996	NS	0.16	NS	0.245	NS	0.088	NS	4.852	NS	3.363	NS	6.367	NS	2.519	NS	10.266	NS	8.01	NS	2.566	NS	4.62	NS	0.001	NS	5.73	-	-	NS	Trickle
pH	6.5-9	8	6.5-9	8.01	6.5-9	7.06	6.5-9	7.26	6.5-9	7.51	6.5-9	6.87	6.5-9	6.96	6.5-9	7.54	6.5-9	6.8	6.5-9	6.5	6.5-9	**6.22**	6.5-9	6.67	6.5-9	6.96	6.5-9	**5.7**	-	-	6.5-9	6.76
Temperature (ºC)	Varies	27.5	Varies	14.5	Varies	28.5	Varies	16	Varies	20.5	Varies	19.2	Varies	25.5	Varies	19.5	Varies	29.1	Varies	13.7	Varies	27.5	Varies	13.5	Varies	28.9	Varies	10.8	-	-	Varies	13.0
Hardness (mg/L)	400	23.7	400	17.4	400	176	400	24.6	400	23.8	400	43	400	29.6	400	35.3	400	63.2	400	81.4	400	24.8	400	22.1	400	31.0	400	16.6	-	-	400	24.1
Total Dissolved Solids (TDS) (mg/L) [2]	NS	88	NS	48	NS	534	NS	56	NS	118	NS	178	NS	50	NS	96	NS	262	NS	190	NS	-	NS	32	NS	114	NS	30	-	-	NS	48
Total Suspended Solids (TSS) (mg/L) [2]	NS	291	NS	57.2	NS	72	NS	14.7	NS	2,490	NS	133	NS	77	NS	226	NS	168	NS	324	NS	127	NS	14.0	NS	208	NS	224	-	-	NS	6.8
Biochemical Oxygen Demand (BOD) (mg/L) [2]	NS	21	NS	8	NS	167	NS	8	NS	15	NS	100	NS	16	NS	29	NS	115	NS	42	NS	26	NS	<17	NS	38	NS	<17	-	-	NS	15
Chemical Oxygen Demand (COD) (mg/L) [2]	NS	150	NS	<50	NS	620	NS	<50	NS	310	NS	300	NS	90	NS	190	NS	420	NS	270	NS	130	NS	<50	NS	170	NS	54	-	-	NS	56

SC046	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019		Winter 2019/20		Summer 2020[6]		Winter 2020/21	
SAMPLING DATE(S):	SWQS	8/24/2013	SWQS	11/22/2013	SWQS	8/2/2014	SWQS	12/4/2014	SWQS	10/6/2015	SWQS	4/8/2016	SWQS	8/23/2016	SWQS	11/3/2016	SWQS	7/16/2017	SWQS	1/9/2018	SWQS	7/11/2018	SWQS	2/14/2019	SWQS	7/24/2019	SWQS	11/29/2019	SWQS	-	SWQS	12/10/2020
Inorganics																																
Cyanide, total (µg/L) [2]	84	<5	84	<5	84	<5	84	<5	84	<5	84	<5	84	<5	84	<5	84	<5	84	<5	84	<5	84	<5	84	<5	84	<5	-	-	84	<5
Nutrients (mg/L) [2]																																
Nitrate + Nitrite as N	NS	1.2	NS	0.5	NS	<0.1	NS	0.6	NS	1.1	NS	0.7	NS	0.7	NS	0.8	NS	2.2	NS	1	NS	0.8	NS	0.3	NS	0.7	NS	0.2	-	-	NS	0.4
Ammonia as N	NS	1.3	NS	0.3	NS	3.7	NS	0.29	NS	0.5	NS	1.2	NS	0.77	NS	0.96	NS	2.7	NS	1.7	NS	1.5	NS	<0.20	NS	1.4	NS	0.28	-	-	NS	0.53
Total Kjeldahl Nitrogen (TKN)	NS	3.1	NS	0.98	NS	17	NS	0.75	NS	5.6	NS	10	NS	1.8	NS	3.1	NS	9.9	NS	4.2	NS	4.2	NS	0.76	NS	5.0	NS	1.2	-	-	NS	2.0
Total Phosphorus as P	NS	0.9	NS	0.26	NS	1.5	NS	0.19	NS	5.3	NS	0.86	NS	0.34	NS	0.42	NS	0.56	NS	0.33	NS	0.57	NS	0.21	NS	0.67	NS	0.56	-	-	NS	0.28
Ortho-Phosphorus as P	NS	0.2	NS	0.1	NS	0.5	NS	<0.1	NS	0.2	NS	0.7	NS	0.2	NS	0.2	NS	0.7	NS	0.2	NS	0.3	NS	<0.1	NS	0.3	NS	<0.1	-	-	NS	0.2
Microbiological																																
Escherichia coli (*E. coli*) (CFU/100 mg or MPN/100 mL) [2]	575	61.6	575	**>2,419.6**	575	**>2,419.6**	575	**1,413.60**	575	**1,046.20**	575	**1,732.90**	575	27.5	575	**1,986.30**	575	**1,553.10**	575	461.1	575	248.9	575	111.9	575	90.8	575	410	-	-	575	**5,630**
Total Metals (µg/L) [2]																																
Antimony	747 T	0.71 T 0.3 D	747 T	0.27 T 0.2 D	747 T	2.8 T 1 D	747 T	0.24 T 0.2 D	747 T	0.38 T <5.0 D	747 T	0.70 T <5.0 D	747 T	0.3 T <5 D	747 T	1.1 T <5 D	747 T	1.2 T <5 D	747 T	1.2 T <5 D	747 T	3.4 T <5.0 D	747 T	0.37 T <5.0 D	747 T	0.85 T <5.0 D	747 T	0.46 T <5.0 D	-	-	747 T	<2.0 T <2.0 D
Arsenic	280 T 440 D	3.2 T 0.8 D	280 T 440 D	<1.0 T 0.5 T	280 T 440 D	4.4 T 3.6 D	280 T 440 D	1.0 T 0.6 D	280 T 440 D	13.4 T <5.0 D	280 T 440 D	1.9 T <5.0 D	280 T 440 D	2.2 T <5 D	280 T 440 D	3.3 T <5 D	280 T 440 D	3.4 T <5 D	280 T 440 D	3.9 T <5 D	280 T 440 D	2.6 T <5.0 D	280 T 440 D	0.97 T <5.0 D	280 T 440 D	3.3 T <5.0 D	280 T 440 D	2.9 T <5.0 D	-	-	280 T 440 D	<2.45 T <2.0 D
Barium	98,000 T	119 T 12 D	98,000 T	21 T 5 T	98,000 T	113 T 94 D	98,000 T	12 T 7 D	98,000 T	831 T 14 D	98,000 T	64 T 19 D	98,000 T	34 T 13 D	98,000 T	113 T 14 D	98,000 T	102 T 36 D	98,000 T	140 T 28 D	98,000 T	67 T 16 D	98,000 T	13 T 7 D	98,000 T	109 T 22 D	98,000 T	94 T 5 D	-	-	98,000 T	12 T 9 D
Beryllium	1,867 T	0.36 T <0.06 D	1,867 T	<0.15 T <0.06 D	1,867 T	<0.15 T <0.06 D	1,867 T	<0.06 T <0.06 D	1,867 T	3.5 T <5.0 D	1,867 T	0.15 T <5.0 D	1,867 T	<0.25 T <5 D	1,867 T	0.33 T <5 D	1,867 T	0.3 T <5.0 D	1,867 T	0.43 T <5.0 D	1,867 T	0.16 T <5.0 D	1,867 T	<0.15 T <5.0 D	1,867 T	0.31 T <5.0 D	1,867 T	0.38 T <5.0 D	-	-	1,867 T	<1.8 T <2.0 D
Cadmium	700 T 5.61 D	<0.25 T <0.10 D	700 T 4.15 D	<0.25 T <0.10 D	700 T 39.50 D	<0.30 T <0.12 D	700 T 5.82 D	0.2 T <0.12 D	700 T 5.63 D	1.2 T <5.0 D	700 T 10.03 D	<0.15 T <5.0 D	700 T 17.24 D	<0.25 T <5 D	700 T 20.87 D	<0.25 T <0.25 D	700 T 39.27 D	<0.20 T <0.2 D	700 T 51.67 D	<0.20 T <0.5 D	700 T 14.23	<0.20 T <0.2 D	700 T 12.55	<0.25 T <0.25 D	700 T 18.13	<0.25 T <0.25 D	700 T 9.20	<0.25 T <5.0 D	-	-	700 T 13.79	<2.1 T <1.0 D
Chromium	NS	9.4 T <0.80 D	NS	<2.00 T <0.80 D	NS	3.2 T 1 D	NS	1.2 T <0.36 D	NS	36.4 T <5.0 D	NS	6.0 T <5.0 D	NS	2.6 T <5 D	NS	9.2 T <5 D	NS	7.8 T <5.0 D	NS	11.2 T <5.0 D	NS	5.1 T <5.0 D	NS	1.9 T <5.0 D	NS	7.4 T <5.0 D	NS	6.9 T <5.0 D	-	-	NS	<12.5 T <10 D
Copper	1,300 T 5.99 D	35.7 T **7.1 D**	1,300 T 4.48 D	14.0 T **5.6 D**	1,300 T 39.62 D	33.3 T 24.1 D	1,300 T 6.20 D	6.6 T 5.2 D	1,300 T 6.01 D	88.5 T **8.9 D**	1,300 T 10.50 D	33.5 T **32.1 D**	1,300 T 7.39 D	11.3 T **21.3 D**	1,300 T 8.72 D	39.8 T **10 D**	1,300 T 15.10 D	44.0 T **31.6 D**	1,300 T 19.16 D	38.9 T 9 D	1,300 T 6.25	22.3 T **12.9 D**	1,300 T 5.61	7.2 T **8.6 D**	1,300 T 7.72	58.0 T **41.4 D**	1,300 T 4.28	15.5 T **6.2 D**	-	-	1,300 T 6.09	7.2 T **15.6 D**
Lead	15 T 27.59 D	9.4 T 0.2 D	15 T 19.45 D	1.8 T <0.18 D	15 T 250.76 D	4.1 T 1.7 D	15 T 27.77 D	0.7 T 0.1 D	15 T 27.72 D	**140 T** <5.0 D	15 T 53.78 D	14.1 T <5.0 D	15 T 35.42 D	3.1 T <5 D	15 T 43.15 D	11 T <0.55 D	15 T 82.42 D	8.3 T 1.3 D	15 T 108.86 D	11.7 T 0.2 D	15 T 29.03	8.0 T 0.9 D	15 T 25.49	0.74 T 0.1 D	15 T 37.31	10.6 T 0.5 D	15 T 18.44	**22 T** <5.0 D	-	-	15 T 28.11	<1.70 T <1.0 D
Mercury	280 T 5 D	0.09 T 0.047 D	280 T 5 D	<0.020 T <0.020 D	280 T 5 D	<0.092 T <0.2 D	280 T 5 D	<0.092 T <0.092 D	280 T 5 D	0.12 T <0.2 D	280 T 5 D	<0.062 T <0.2 D	280 T 5 D	<0.068 T <0.2 D	280 T 5 D	<0.068 T <0.2 D	280 T 5 D	0.116 T <0.2 D	280 T 5 D	<0.066 T <0.2 D	280 T 5 D	<0.080 T <0.080 D	280 T 5 D	<0.042 T <0.2 D	280 T 5 D	0.065 T <0.2 D	280 T 5 D	<0.042 T <0.2 D	-	-	280 T 5 D	<0.118 T <0.2 D
Nickel	28,000 T 1,229.8 D	11.3 T 1.4 D	28,000 T 947.4 D	2.0 T 0.7 D	28,000 T 6,708 D	7.5 T 6.1 D	28,000 T 1,269.4 D	1.2 T 0.7 D	28,000 T 1,234.2 D	42.9 T <5.0 D	28,000 T 2,036 D	6.4 T <5.0 D	28,000 T 14.85 D	3.1 T <5 D	280,000 T 1723 D	10.8 T <5 D	280,000 T 2820.51 D	11.6 T 5.4 D	280,000 T 3493.88 D	12.2 T <5.0 D	28,000 T 1,278.28	7.4 T <5.0 D	28,000 T 1,159.51	1.5 T <5.0 D	28,000 T 1,543.88	9.3 T <5.0 D	28,000 T 910.19	6.6 T <5.0 D	-	-	28,000 T 1,247.69	<3.15 T <2.0 D
Selenium	33 T	<0.60 T 0.3 D	33 T	<0.60 T <0.24 D	33 T	1 T 0.7 D	33 T	0.19 T 0.1 D	33 T	2.2 T <5.0 D	33 T	0.45 T <5.0 D	33T	2.5 T <5 D	33T	<0.4 T <5 D	33T	0.97 T <5.0 D	33T	0.56 T <5.0 D	33 T	0.29 T <5.0 D	33 T	<0.55 T <5.0 D	33 T	<0.55 T <5.0 D	33 T	<0.55 T <5.0 D	-	-	33 T	<4.05 T <2.0 D
Silver	4,667 T 0.274 D	<0.15 T <0.15 D	4,667 T 0.158 D	<0.15 T <0.15 D	4,667 T 8.51 D	<0.20 T <0.20 D	4,667 T 0.292 D	0.2 T <0.08 D	4,667 T 0.28 D	0.4 T *<5.0 D*	4,667 T 0.75 D	<0.25 T *<5.0 D*	4,667 T 0.40 D	<0.45 T *<5 D*	4,667 T 0.54 D	<0.45 T *<5 D*	4,667 T 1.46 D	0.1 T *<5.0 D*	4,667 T 2.26 D	0.1 T *<5.0 D*	4,667 T 0.29	<0.10 T *<5.0 D*	4,667 T 0.24	<0.15 T *<5.0 D*	4,667 T 0.43	<0.15 T *<5.0 D*	4,667 T 0.15	0.8 T *<5.0 D*	-	-	4,667 T 0.28	<1.25 T *<5.0 D*
Thallium	75 T	<0.20 T <0.08 D	75 T	<0.20 T <0.08 D	75 T	<0.10 T <0.04 D	75 T	<0.04 T <0.04 D	75 T	0.46 T <5.0 D	75 T	0.19 T <5.0 D	75 T	<0.2 T <5 D	75 T	<0.2 T <5 D	75 T	<0.10 T <5.0 D	75 T	<0.10 T <5.0 D	75 T	<0.10 T <5.0 D	75 T	<0.15 T <5.0 D	75 T	<0.15 T <5.0 D	75 T	<0.15 T <5.0 D	-	-	75 T	<2.75 T <2.0 D
Zinc	280,000 T 328.4 D	193 T 31.7 D	280,000 T 252.8 D	50.1 T 17.1 D	280,000 T 1,795 D	174 T 128 D	280,000 T 339.2 D	30.5 T 17.6 D	280,000 T 329.6 D	566 T 7.3 D	280,000 T 544 D	178 T 93.6 D	280,000 T 396.4 D	73.5 T <50 D	280,000 T 460.2 D	176 T 33.8 D	280,000 T 753.79 D	195 T 104 D	280,000 T 934.06 D	179 T 29.3 D	280,000 T 341.21	213 T 113 D	280,000 T 309.46	62.8 T 41.2 D	280,000 T 412.23	198 T 69.4 D	280,000 T 242.83	97.6 T <50 D	-	-	280,000 T 333.03	40.3 T 37.8 D
Organic Toxic Pollutants																																
Total Petroleum Hydrocarbons (TPH) (mg/L) [2]	NS	<11	NS	<11	NS	<10	NS	<10	NS	<5.4	NS	<5.9	NS	<5.7	NS	<4.5	NS	<6.7	NS	<7.1	NS	<7.0	NS	4.4	NS	<5.9	NS	<5.8	-	-	NS	<5.6
Total Oil and Grease (mg/L) [2]	NS	<5.4	NS	<5.7	NS	<5.0	NS	<5.0	NS	<5.4	NS	<5.9	NS	<5.7	NS	<4.5	NS	<5.6	NS	<5.9	NS	<5.8	NS	4.4	NS	<5.9	NS	<5.8	-	-	NS	<6.8
VOCs, Semi-VOCs, and Pesticides (µg/L) [2]																																
Acrolein	467	<0.20	467	<0.20	467	<2.00	467	<0.40	467	<0.78	467	<0.41	467	<0.41	467	<0.41	467	<3.95	467	<0.79	467	<1.0	467	-	467	1.6	467	<0.55	-	-	467	<0.950
Acrylonitrile	37,333	<0.16	37,333	<0.16	37,333	<0.70	37,333	<0.14	37,333	<0.53	37,333	<0.42	37,333	<0.42	37,333	<0.42	37,333	<2.95	37,333	<0.59	37,333	<1.0	37,333	<0.57	37,333	<0.57	37,333	<0.57	-	-	37,333	<0.524
Benzene	3,733	<1.20	3,733	<0.24	3,733	<1.20	3,733	<0.13	3,733	<2.30	3,733	<2.30	3,733	<0.29	3,733	<0.29	3,733	<1.30	3,733	<0.26	3,733	<1.30	3,733	<0.33	3,733	<0.33	3,733	<0.33	-	-	3,733	<0.31

SC046	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019		Winter 2019/20		Summer 2020[6]		Winter 2020/21	
SAMPLING DATE(S):	SWQS	8/24/2013	SWQS	11/22/2013	SWQS	8/2/2014	SWQS	12/4/2014	SWQS	10/6/2015	SWQS	4/8/2016	SWQS	8/23/2016	SWQS	11/3/2016	SWQS	7/16/2017	SWQS	1/9/2018	SWQS	7/11/2018	SWQS	2/14/2019	SWQS	7/24/2019	SWQS	11/29/2019	SWQS	-	SWQS	12/10/2020
Bromoform	18,667	<2.35	18,667	<0.47	18,667	<2.35	18,667	<0.28	18,667	<3.40	18,667	<3.40	18,667	<0.33	18,667	<0.33	18,667	<1.05	18,667	<0.21	18,667	<1.05	18,667	<0.81	18,667	<0.81	18,667	<0.81	-	-	18,667	<0.37
Carbon tetrachloride	1,307	<1.30	1,307	<0.26	1,307	<1.30	1,307	<0.23	1,307	<1.55	1,307	<1.55	1,307	<0.20	1,307	<0.20	1,307	<1.50	1,307	<0.30	980	<1.50	980	<0.27	980	<0.27	980	<0.27	-	-	980	<0.32
Chlorobenzene	18,667	<0.80	18,667	<0.16	18,667	<0.80	18,667	<0.13	18,667	<2.50	18,667	<2.50	18,667	<0.33	18,667	<0.33	18,667	<1.15	18,667	<0.23	18,667	<1.15	18,667	<0.70	18,667	<0.70	18,667	<0.70	-	-	18,667	<0.42
Chlorodibromomethane	18,667	<0.90	18,667	<0.18	18,667	<0.90	18,667	<0.24	18,667	<3.05	18,667	<3.05	18,667	<0.32	18,667	<0.32	18,667	<1.20	18,667	<0.24	18,667	<1.20	18,667	<0.70	18,667	<0.70	18,667	<0.70	-	-	18,667	<0.21
Chloroethane (ethyl chloride)	NS	<1.10	NS	<0.22	NS	<1.10	NS	<0.19	NS	<2.00	NS	<2.00	NS	<0.33	NS	<0.33	NS	<1.40	NS	<0.28	NS	<1.40	NS	<0.33	NS	<0.33	NS	<0.33	-	-	NS	<0.66
2-Chloroethylvinyl ether	NS	<0.22	NS	<0.22	NS	<0.95	NS	<0.19	NS	<0.53	NS	<0.43	NS	<0.43	NS	<0.43	NS	<3.25	NS	<0.65	NS	<1.0	NS	<0.52	NS	<0.52	NS	<0.52	-	-	NS	<0.333
Chloroform	9,333	<1.15	9,333	<0.23	9,333	<1.15	9,333	<0.14	9,333	<2.45	9,333	<2.45	9,333	<0.32	9,333	<0.32	9,333	<1.20	9,333	<0.24	9,333	<1.20	9,333	<0.31	9,333	<0.31	9,333	<0.31	-	-	9,333	<0.31
Dichlorobromomethane	18,667	<1.15	18,667	<0.23	18,667	<1.15	18,667	<0.15	18,667	<2.45	18,667	<2.45	18,667	<0.29	18,667	<0.29	18,667	<1.30	18,667	<0.26	18,667	<1.30	18,667	<0.52	18,667	<0.52	18,667	<0.52	-	-	18,667	<0.21
1,1-Dichloroethane	NS	<1.30	NS	<0.26	NS	<1.30	NS	<0.19	NS	<2.10	NS	<2.10	NS	<0.29	NS	<0.29	NS	<1.35	NS	<0.27	NS	<1.35	NS	<0.32	NS	<0.32	NS	<0.32	-	-	NS	<0.30
1,2-Dichloroethane	186,667	<1.25	186,667	<0.25	186,667	<1.25	186,667	<0.11	186,667	<2.55	186,667	<2.55	186,667	<0.35	186,667	<0.35	186,667	<1.30	186,667	<0.26	186,667	<1.30	186,667	<0.28	186,667	<0.28	186,667	<0.28	-	-	186,667	<0.28
1,1-Dichloroethylene	46,667	<1.40	46,667	<0.28	46,667	<1.40	46,667	<0.27	46,667	<1.70	46,667	<1.70	46,667	<0.19	46,667	<0.19	46,667	<1.60	46,667	<0.32	46,667	<1.60	46,667	<0.40	46,667	<0.40	46,667	<0.40	-	-	46,667	<0.41
1,2-Dichloropropane	84,000	<1.25	84,000	<0.25	84,000	<1.25	84,000	<0.18	84,000	<2.45	84,000	<2.45	84,000	<0.32	84,000	<0.32	84,000	<1.60	84,000	<0.32	84,000	<1.60	84,000	<0.93	84,000	<0.93	84,000	<0.93	-	-	84,000	<0.33
1,3-Dichloropropylene[5]	28,000	<1.20	28,000	<0.24	28,000	<1.20	28,000	<0.13	28,000	cis <2.55 trans <2.50	28,000	cis <2.55 trans <2.50	28,000	<0.28	28,000	<0.28	28,000	<1.05	28,000	<0.21	28,000	<1.05	28,000	<0.43	28,000	<0.43	28,000	<0.43	- -	- -	28,000	<0.15
Ethylbenzene	93,333	<0.65	93,333	<0.13	93,333	<0.65	93,333	<0.15	93,333	<2.30	93,333	<2.30	93,333	<0.29	93,333	<0.29	93,333	<1.15	93,333	<0.23	93,333	<1.15	93,333	<0.61	93,333	<0.61	93,333	<0.61	-	-	93,333	<0.42
Methyl bromide	1,307	<0.95	1,307	<0.19	1,307	<0.95	1,307	<0.18	1,307	<2.30	1,307	<2.30	1,307	<0.28	1,307	<0.28	1,307	<1.15	1,307	<0.23	1,307	<1.15	1,307	<0.33	1,307	<0.33	1,307	<0.33	-	-	1,307	<0.39
Methyl chloride	NS	<1.40	NS	<0.28	NS	<1.40	NS	<0.23	NS	<2.30	NS	<2.30	NS	<0.28	NS	<0.28	NS	<1.85	NS	<0.37	NS	<1.85	NS	<0.33	NS	<0.33	NS	<0.33	-	-	NS	<0.57
Methylene chloride	56,000	<1.00	56,000	<0.20	56,000	<1.00	56,000	<0.20	56,000	<4.05	56,000	<4.05	56,000	<0.31	56,000	<0.31	56,000	<4.00	56,000	<0.80	56,000	<4.00	56,000	<0.44	56,000	<0.44	56,000	<0.44	-	-	56,000	<0.41
1,1,2,2-Tetrachloroethane	93,333	<2.00	93,333	<0.40	93,333	<2.00	93,333	<0.35	93,333	<4.00	93,333	<4.00	93,333	<0.33	93,333	<0.33	93,333	<1.55	93,333	<0.31	56,000	<1.55	56,000	<0.83	56,000	<0.83	56,000	<0.83	-	-	56,000	<0.46
Tetrachloroethylene	9,333	<1.05	9,333	<0.21	9,333	<1.05	9,333	<0.13	9,333	<1.75	9,333	<1.75	9,333	<0.23	9,333	<0.23	9,333	<1.45	9,333	<0.29	9,333	<1.45	9,333	<0.38	9,333	<0.38	9,333	<0.38	-	-	9,333	<0.38
Toluene	373,333	<0.95	373,333	<0.19	373,333	<0.95	373,333	<0.11	373,333	<2.15	373,333	<2.15	373,333	<0.28	373,333	<0.28	373,333	<1.25	373,333	<0.25	280,000	<1.25	280,000	<0.38	280,000	<0.38	280,000	<0.38	-	-	280,000	<0.35
trans-1,2-Dichloroethylene	18,667	<1.25	18,667	<0.25	18,667	<1.25	18,667	<0.18	18,667	<1.90	18,667	<1.90	18,667	<0.24	18,667	<0.24	18,667	<1.25	18,667	<0.25	18,667	<1.25	18,667	<0.32	18,667	<0.32	18,667	<0.32	-	-	18,667	<0.32
1,1,1-Trichloroethane	1.867x10^{+6}	<1.00	1.867x10^{+6}	<0.20	1.867x10^{+6}	<1.00	1.867x10^{+6}	<0.14	1.867x10^{+6}	<1.70	1.867x10^{+6}	<1.70	1.867x10^{+6}	<0.23	1.867x10^{+6}	<0.23	1.867x10^{+6}	<1.40	1.867x10^{+6}	<0.28	1.867x10^{+6}	<1.40	1.867x10^{+6}	<0.31	1.867x10^{+6}	<0.31	1.867x10^{+6}	<0.31	-	-	1.867x10^{+6}	<0.32
1,1,2-Trichloroethane	3,733	<0.75	3,733	<0.15	3,733	<0.75	3,733	<0.13	3,733	<3.00	3,733	<3.00	3,733	<0.29	3,733	<0.29	3,733	<1.50	3,733	<0.30	3,733	<1.50	3,733	<0.68	3,733	<0.68	3,733	<0.68	-	-	3,733	<0.37
Trichloroethylene	280	<0.75	280	<0.15	280	<0.75	280	<0.22	280	<2.40	280	<2.40	280	<0.28	280	<0.28	280	<1.80	280	<0.36	280	<1.80	280	<0.46	280	<0.46	280	<0.46	-	-	280	<0.38
1,2,4-Trimethylbenzene	NS	<5.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<5.0	NS	<5.0	NS	<1.0	NS	<1.0	NS	<5.0	NS	<5.0	NS	<5.0	NS	<1.0	NS	<1.0	NS	<1.0	-	-	NS	<1.0
1,3,5-Trimethylbenzene	NS	<5.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<5.0	NS	<5.0	NS	<1.0	NS	<1.0	NS	<1.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<1.0	NS	<1.0	-	-	NS	<1.0
Vinyl chloride	2,800	<1.00	2,800	<0.20	2,800	<1.00	2,800	<0.22	2,800	<1.75	2,800	<1.75	2,800	<0.24	2,800	<0.24	2,800	<2.10	2,800	<0.42	2,800	<2.10	2,800	<0.35	2,800	<0.35	2,800	<0.35	-	-	2,800	<0.47
Xylenes, Total	186,667	<1.50	186,667	<0.30	186,667	<1.50	186,667	<0.13	186,667	<2.60	186,667	<2.60	186,667	<0.32	186,667	<0.32	186,667	<1.15	186,667	<0.23	186,667	<1.15	186,667	<0.70	186,667	<0.70	186,667	<0.70	-	-	186,667	<0.33
Acid Compounds (µg/L) [2]																																
2-Chlorophenol	4,667	<85.8	4,667	<42.9	4,667	<14.8	4,667	<1.48	4,667	<3.10	4,667	<3.26	4,667	<2.92	4,667	<2.92	4,667	<42.3	4,667	<211.5	4,667	<4.52	4,667	<4.52	4,667	<45.2	4,667	<4.52	-	-	4,667	<1.06
2,4-Dichlorophenol	2,800	<84.4	2,800	<42.2	2,800	<16.5	2,800	<1.65	2,800	<2.81	2,800	<2.95	2,800	<3.21	2,800	<3.21	2,800	<48.2	2,800	<241.0	2,800	<4.77	2,800	<4.77	2,800	<47.7	2,800	<4.77	-	-	2,800	<1.44
2,4-Dimethylphenol	18,667	<45.6	18,667	<22.8	18,667	<22.0	18,667	<2.20	18,667	<2.64	18,667	<2.77	18,667	<1.32	18,667	<1.32	18,667	<70.7	18,667	<353.5	18,667	<2.04	18,667	<2.04	18,667	<20.4	18,667	<2.04	-	-	18,667	<2.70
4,6-Dinitro-o-cresol	3,733	<59.6	3,733	<29.8	3,733	<12.2	3,733	<1.22	3,733	<1.49	3,733	<1.56	3,733	<2.27	3,733	<2.27	3,733	<46.9	3,733	<234.5	3,733	<3.36	3,733	<3.36	3,733	<33.6	3,733	<3.36	-	-	3,733	<1.33
2,4-Dinitrophenol	1,867	<51.8	1,867	<25.9	1,867	<11.3	1,867	<1.13	1,867	<2.21	1,867	<2.32	1,867	<2.64	1,867	<2.64	1,867	<51.1	1,867	<255.5	1,867	<3.41	1,867	<3.41	1,867	<34.1	1,867	<3.41	-	-	1,867	<0.97
2-Nitrophenol	NS	<82.2	NS	<41.1	NS	<15.7	NS	<1.57	NS	<2.84	NS	<2.98	NS	<2.61	NS	<2.61	NS	<78.3	NS	<391.5	NS	<4.68	NS	<4.68	NS	<46.8	NS	<4.68	-	-	NS	<0.99
4-Nitrophenol	NS	<93.4	NS	<46.7	NS	<11.4	NS	<1.14	NS	<2.98	NS	<3.13	NS	<2.03	NS	<2.03	NS	<40.3	NS	<201.5	NS	<3.52	NS	<3.52	NS	<35.2	NS	<3.52	-	-	NS	2.6
p-Chloro-m-cresol	48,000	<88.2	48,000	<44.1	48,000	<16.5	48,000	<1.65	48,000	<1.87	48,000	<1.96	48,000	<3.10	48,000	<3.10	48,000	<40.5	48,000	<202.5	48,000	<4.76	48,000	<4.76	48,000	<47.6	48,000	<4.76	-	-	48,000	<1.41
Pentachlorophenol	100.424	<67.2	101.486	<33.6	39.092	<13.9	47.794	<1.39	61.4	<1.47	32.29	<1.54	35.31	<3.44	63.25	<3.44	30.07	*<73.6*	22.4	*<368.0*	16.79	<4.00	26.38	<4.00	35.31	*<40.0*	9.95	<4.00	-	-	28.88	<2.02
Phenol	180,000	<71.0	180,000	<35.5	180,000	<13.4	180,000	<1.34	180,000	<2.30	180,000	<2.42	180,000	<1.84	180,000	<1.84	180,000	<39.9	180,000	<199.5	180,000	<4.08	180,000	<4.08	180,000	<40.8	180,000	<4.08	-	-	180,000	1.5
2,4,6-Trichlorophenol	130	<95.8	130	<47.9	130	<18.9	130	<1.89	130	<2.60	130	<2.73	130	<3.28	130	<3.28	130	<47.4	130	*<237.0*	130	<5.27	130	<5.27	130	<52.7	130	<5.27	-	-	130	<1.69
Bases/Neutrals (µg/L) [2]																																
Acenaphthene	56,000	<26.8	56,000	<13.4	56,000	<10.3	56,000	<1.03	56,000	<0.35	56,000	<0.37	56,000	<1.02	56,000	<1.02	56,000	<18.8	56,000	<94.0	56,000	<1.19	56,000	<1.19	56,000	<11.9	56,000	<1.19	-	-	56,000	<0.68
Acenaphthylene	NS	<34.6	NS	<17.3	NS	<10.0	NS	<1.00	NS	<1.23	NS	<1.29	NS	<6.10	NS	<6.10	NS	<17.5	NS	<87.5	NS	<1.41	NS	<1.41	NS	<14.1	NS	<1.41	-	-	NS	<0.59
Anthracene	280,000	<34.6	280,000	<17.3	280,000	<28.8	280,000	<2.88	280,000	<0.44	280,000	<0.46	280,000	<1.96	280,000	<1.96	280,000	<26.2	280,000	<131.0	280,000	<1.20	280,000	<1.20	280,000	<12.0	280,000	<1.20	-	-	280,000	<0.55
Benzo(a)anthracene	0.2	*<34.6*	0.2	*<17.3*	0.2	*<10.8*	0.2	*<1.08*	0.2	*<0.38*	0.2	*<0.40*	0.2	*<1.57*	0.2	*<1.57*	0.2	*<19.6*	0.2	*<98.0*	0.2	*<1.02*	0.2	*<1.02*	0.2	*<10.2*	0.2	*<1.02*	-	-	0.2	*<0.81*
Benzo(a)pyrene	0.2	*<37.4*	0.2	*<18.7*	0.2	*<37.7*	0.2	<3.77	0.2	*<1.41*	0.2	*<1.48*	0.2	*<3.12*	0.2	*<3.12*	0.2	<37.7	0.2	*<188.5*	0.2	*<1.08*	0.2	*<1.08*	0.2	*<10.8*	0.2	**3.6**	-	-	0.2	*<1.58*
Benzo(b)fluoranthene	NS	<48.6	NS	<24.3	NS	<14.6	NS	<1.46	NS	<1.06	NS	<1.11	NS	<1.28	NS	<1.28	NS	<21.7	NS	<108.5	NS	<0.38	NS	<0.38	NS	<3.8	NS	<0.38	-	-	NS	<2.48
Benzo(g,h,i)perylene	NS	<34.6	NS	<17.3	NS	<12.9	NS	<1.29	NS	<0.72	NS	<0.76	NS	<2.83	NS	<2.83	NS	<25.1	NS	<125.5	NS	<1.14	NS	<1.14	NS	<11.4	NS	<1.14	-	-	NS	<1.92
Benzo(k)fluoranthene	1.9	*<28.0*	1.9	*<14.0*	1.9	*<10.4*	1.9	<1.04	1.9	<0.35	1.9	<0.37	1.9	<1.76	1.9	<1.76	1.9	*<23.3*	1.9	*<116.5*	1.9	<1.03	1.9	<1.03	1.9	*<10.3*	1.9	<1.03	-	-	1.9	*<1.92*
Chrysene	19	*<29.6*	19	<14.8	19	<14.1	19	<1.41	19	<0.46	19	<0.48	19	<1.08	19	<1.08	19	*<19.6*	19	*<98.0*	19	<1.16	19	<1.16	19	<11.6	19	<1.16	-	-	19	<0.81
Dibenz(a,h)anthracene	1.9	*<39.6*	1.9	*<19.8*	1.9	*<12.4*	1.9	<1.24	1.9	<0.47	1.9	<0.49	1.9	<1.93	1.9	<1.93	1.9	*<60.4*	1.9	*<302.0*	1.9	<1.02	1.9	<1.02	1.9	*<10.2*	1.9	<1.02	-	-	1.9	<1.66
1,2-Dichlorobenzene	5,900	<5.4	5,900	<2.7	5,900	<17.6	5,900	<1.76	5,900	<1.04	5,900	<1.09	5,900	<0.58	5,900	<0.58	5,900	<1.50	5,900	<0.30	5,900	<1.43	5,900	<1.43	5,900	<14.3	5,900	<1.43	-	-	5,900	<0.89
1,3-Dichlorobenzene	NS	<22.6	NS	<11.3	NS	<17.4	NS	<1.74	NS	<0.47	NS	<0.49	NS	<0.52	NS	<0.52	NS	<1.25	NS	<0.25	NS	<1.39	NS	<1.39	NS	<13.9	NS	<1.39	-	-	NS	<0.91
1,4-Dichlorobenzene	6,500	<21.0	6,500	<10.5	6,500	<15.6	6,500	<1.56	6,500	<1.28	6,500	<1.34	6,500	<0.50	6,500	<0.50	6,500	<1.45	6,500	<0.29	6,500	<1.48	6,500	<1.48	6,500	<14.8	6,500	<1.48	-	-	6,500	<0.98
3,3-Dichlorobenzidine	3	*<545.4*	3	*<272.7*	3	*<60.6*	3	*<6.06*	3	*<11.60*	3	*<12.18*	3	*<23.45*	3	*<23.45*	3	*<254.3*	3	*<1271.5*	3	*<6.99*	3	*<6.99*	3	*<69.9*	3	*<6.99*	-	-	3	*<6.24*
Diethyl phthalate	746,667	<38.0	746,667	<19.0	746,667	<23.7	746,667	<2.37	746,667	<0.36	746,667	<0.38	746,667	<1.07	746,667	<1.07	746,667	<19.9	746,667	<99.5	746,667	<1.08	746,667	<1.08	746,667	<10.8	746,667	<1.08	-	-	746,667	<7.95
Dimethyl phthalate	NS	<35.8	NS	<17.9	NS	<24.2	NS	<2.42	NS	<0.47	NS	<0.49	NS	<0.58	NS	<0.58	NS	<19.1	NS	<95.5	NS	<1.17	NS	<1.17	NS	<11.7	NS	<1.17	-	-	NS	<0.48
Di-n-butyl phthalate	1,100	<44.6	1,100	<22.3	1,100	<18.5	1,100	<1.85	1,100	<0.31	1,100	<0.33	1,100	<1.37	1,100	<1.37	1,100	<23.5	1,100	<117.5	1,100	<1.12	1,100	<1.12	1,100	<11.2	1,100	<1.12	-	-	1,100	<1.00
2,4-Dinitrotoluene	1,867	<41.0	1,867	<20.5	1,867	<21.2	1,867	<2.12	1,867	<0.26	1,867	<0.27	1,867	<1.30	1,867	<1.30	1,867	<31.0	1,867	<155.0	1,867	<1.17	1,867	<1.17	1,867	<11.7	1,867	<1.17	-	-	1,867	<0.84
2,6-Dinitrotoluene	3,733	<50.4	3,733	<25.2	3,733	<11.2	3,733	<1.12	3,733	<0.38	3,733	<0.40	3,733	<1.39	3,733	<1.39	3,733	<28.9	3,733	<144.5	3,733	<1.13	3,733	<1.13	3,733	<11.3	3,733	<1.13	-	-	3,733	<0.65
Di-n-octyl phthalate	373,333	<57.6	373,333	<28.8	373,333	<11.0	373,333	<1.10	373,333	<1.28	373,333	<1.34	373,333	<1.67	373,333	<1.67	373,333	<55.0	373,333	<275.0	373,333	<2.05	373,333	<2.05	373,333	<20.5	373,333	<2.05	-	-	373,333	<2.44
1,2-Diphenylhydrazine (as azobenzene)	NS	<46.6	NS	<23.3	NS	<67.0	NS	<6.70	NS	<1.06	NS	<1.11	NS	<7.46	NS	<7.46	NS	<21.5	NS	<107.5	1.8	<1.11	1.8	<1.11	1.8	*<11.1*	1.8	<1.11	-	-	1.8	<1.16
Fluoranthene	37,333	<35.8	37,333	<17.9	37,333	<13.5	37,333	<1.35	37,333	<0.27	37,333	<0.28	37,333	<1.06	37,333	<1.06	37,333	<30.8	37,333	<154.0	37,333	<1.27	37,333	<1.27	37,333	<12.7	37,333	<1.27	-	-	37,333	<0.50
Fluorene	37,333	<30.8	37,333	<15.4	37,333	<48.1	37,333	<4.81	37,333	<0.29	37,333	<0.30	37,333	<0.51	37,333	<0.51	37,333	<28.7	37,333	<143.5	37,333	<1.18	37,333	<1.18	37,333	<11.8	37,333	<1.18	-	-	37,333	<0.50
Hexachlorobenzene	747	<27.8	747	<13.9	747	<12.3	747	<1.23	747	<0.34	747	<0.36	747	<0.47	747	<0.47	747	<15.7	747	<78.5	747	<1.01	747	<1.01	747	<10.1	747	<1.01	-	-	747	<0.37
Hexachlorobutadiene	187	<6.6	187	<3.3	187	<18.2	187	<1.82	187	<1.67	187	<1.75	187	<0.41	187	<0.41	187	<10.0	187	<50.0	187	<1.20	187	<1.20	187	<12.0	187	<1.20	-	-	187	<0.46
Hexachlorocyclopentadiene	11,200	<45.4	11,200	<22.7	11,200	<12.3	11,200	<1.23	11,200	<1.53	11,200	<1.61	11,200	<2.16	11,200	<2.16	11,200	<61.0	11,200	<305.0	9,800	<3.07	9,800	<3.07	9,800	<30.7	9,800	<3.07	-	-	9,800	<1.32
Hexachloroethane	850	<8.0	850	<4.0	850	<16.2	850	<1.62	850	<1.23	850	<1.29	850	<0.54	850	<0.54	850	<14.9	850	<74.5	850	<1.35	850	<1.35	850	<13.5	850	<1.35	-	-	850	<0.36
Indeno(1,2,3-cd)pyrene	1.9	*<40.6*	1.9	*<20.3*	1.9	*<13.9*	1.9	<1.39	1.9	<0.62	1.9	<0.65	1.9	<2.38	1.9	<2.38	1.9	*<61.1*	1.9	*<305.5*	1.9	<1.07	1.9	<1.07	1.9	*<10.7*	1.9	**4.6**	-	-	1.9	*<2.38*

SC046	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019		Winter 2019/20		Summer 2020[6]		Winter 2020/21	
SAMPLING DATE(S):	SWQS	8/24/2013	SWQS	11/22/2013	SWQS	8/2/2014	SWQS	12/4/2014	SWQS	10/6/2015	SWQS	4/8/2016	SWQS	8/23/2016	SWQS	11/3/2016	SWQS	7/16/2017	SWQS	1/9/2018	SWQS	7/11/2018	SWQS	2/14/2019	SWQS	7/24/2019	SWQS	11/29/2019	SWQS	-	SWQS	12/10/2020
Isophorone	186,667	<28.2	186,667	<14.1	186,667	<21.4	186,667	<2.14	186,667	<0.37	186,667	<0.39	186,667	<0.51	186,667	<0.51	186,667	<17.7	186,667	<88.5	186,667	<1.32	186,667	<1.32	186,667	<13.2	186,667	<1.32	-	-	186,667	<1.45
Naphthalene	18,667	<24.0	18,667	<12.0	18,667	<18.3	18,667	<1.83	18,667	<0.36	18,667	<0.38	18,667	<0.49	18,667	<0.49	18,667	<15.4	18,667	<77.0	18,667	<1.48	18,667	<1.48	18,667	<14.8	18,667	<1.48	-	-	18,667	<0.37
Nitrobenzene	467	<24.6	467	<12.3	467	<21.0	467	<2.10	467	<1.26	467	<1.32	467	<0.44	467	<0.44	467	<18.0	467	<90.0	467	<1.55	467	<1.55	467	<15.5	467	<1.55	-	-	467	<0.90
n-Nitrosodimethylamine	0.03	*<24.0*	0.03	*<12.0*	0.03	*<10.0*	0.03	*<1.00*	0.03	*<1.13*	0.03	*<1.19*	0.03	*<0.54*	0.03	*<0.54*	0.03	*<16.2*	0.03	*<81.0*	0.03	*<1.67*	0.03	*<1.67*	0.03	*<16.7*	0.03	*<1.67*	-	-	0.03	*<0.70*
n-Nitrosodi-n-propylamine	88,667	<30.2	88,667	<15.1	88,667	<11.5	88,667	<1.15	88,667	<1.17	88,667	<1.23	88,667	<1.02	88,667	<1.02	88,667	<16.5	88,667	<82.5	88,667	<1.65	88,667	<1.65	88,667	<16.5	88,667	<1.65	-	-	88,667	<2.50
n-Nitrosodiphenylamine	290	<60.8	290	<30.4	290	<35.7	290	<3.57	290	<1.15	290	<1.21	290	<1.67	290	<1.67	290	<31.3	290	<156.5	290	<1.07	290	<1.07	290	<10.7	290	<1.07	-	-	290	<0.88
Phenanthrene	NS	<32.6	NS	<16.3	NS	<13.9	NS	<1.39	NS	<0.31	NS	<0.33	NS	<0.49	NS	<0.49	NS	<30.2	NS	<151.0	NS	<1.33	NS	<1.33	NS	<13.3	NS	<1.33	-	-	NS	<0.32
Pyrene	28,000	<32.8	28,000	<16.4	28,000	<38.6	28,000	<3.86	28,000	<0.67	28,000	<0.70	28,000	<3.21	28,000	<3.21	28,000	<33.8	28,000	<169.0	28,000	<1.20	28,000	<1.20	28,000	<12.0	28,000	<1.20	-	-	28,000	<0.22
1,2,4-Trichlorobenzene	9,333	<6.4	9,333	<3.2	9,333	<16.9	9,333	<1.69	9,333	<1.04	9,333	<1.09	9,333	<0.55	9,333	<0.55	9,333	<12.1	9,333	<60.5	9,333	<1.34	9,333	<1.34	9,333	<13.4	9,333	<1.34	-	-	9,333	<1.05
Pesticides (µg/L) [2]																																
Aldrin	4.5	<0.046	4.5	<0.015	4.5	<0.027	4.5	<0.027	4.5	0.06	4.5	<0.012	4.5	<0.019	4.5	<0.019	4.5	<0.013	4.5	<0.013	4.5	<0.010	4.5	<0.010	4.5	<0.010	4.5	<0.045	-	-	4.5	<0.0038
Alpha-BHC	1,600	<0.038	1,600	<0.016	1,600	<0.021	1,600	<0.021	1,600	<0.058	1,600	<0.058	1,600	<0.010	1,600	<0.010	1,600	<0.015	1,600	<0.015	1,600	<0.012	1,600	<0.012	1,600	<0.012	1,600	<0.033	-	-	1,600	<0.0031
Beta-BHC	560	<0.095	560	<0.090	560	<0.072	560	<0.072	560	<0.063	560	<0.063	560	<0.049	560	<0.049	560	<0.083	560	<0.083	560	<0.099	560	<0.099	560	<0.099	560	<0.041	-	-	560	<0.1802
Gamma-BHC	11	<0.033	11	<0.022	11	<0.034	11	<0.034	11	<0.058	11	<0.058	11	<0.019	11	<0.019	11	<0.020	11	<0.020	11	<0.013	11	<0.013	11	<0.013	11	<0.034	-	-	11	<0.0034
Delta-BHC	1,600	<0.032	1,600	0.041	1,600	<0.021	1,600	<0.021	1,600	<0.066	1,600	<0.066	1,600	<0.035	1,600	<0.035	1,600	<0.012	1,600	<0.012	1,600	<0.045	1,600	<0.045	1,600	<0.045	1,600	<0.041	-	-	1,600	<0.0155
Chlordane	3.2	<0.16	3.2	<0.19	3.2	<0.14	3.2	<0.14	3.2	<0.36	3.2	<0.36	3.2	<0.61	3.2	<0.61	3.2	<0.29	3.2	<0.29	3.2	<0.33	3.2	<0.33	3.2	<0.33	3.2	<0.17	-	-	3.2	<0.19
4,4'-DDT	1.1	<0.029	1.1	<0.015	1.1	<0.025	1.1	<0.025	1.1	<0.017	1.1	<0.017	1.1	<0.011	1.1	<0.011	1.1	<0.020	1.1	<0.020	1.1	<0.009	1.1	<0.009	1.1	<0.009	1.1	<0.032	-	-	1.1	<0.0014
4,4'-DDE	1.1	<0.034	1.1	<0.017	1.1	<0.010	1.1	<0.010	1.1	<0.013	1.1	<0.013	1.1	<0.020	1.1	<0.020	1.1	<0.019	1.1	<0.019	1.1	<0.015	1.1	<0.015	1.1	<0.015	1.1	<0.043	-	-	1.1	<0.0034
4,4'-DDD	1.1	<0.023	1.1	<0.013	1.1	<0.031	1.1	<0.031	1.1	<0.021	1.1	<0.021	1.1	<0.021	1.1	<0.021	1.1	<0.023	1.1	<0.023	1.1	<0.017	1.1	<0.017	1.1	<0.017	1.1	<0.039	-	-	1.1	<0.0022
Dieldrin	4	<0.028	4	<0.021	4	<0.030	4	<0.030	4	<0.060	4	<0.060	4	<0.019	4	<0.019	4	<0.015	4	0.026	4	<0.012	4	<0.012	4	<0.012	4	<0.031	-	-	4	<0.0037
Alpha-endosulfan	3 T	<0.034	3 T	<0.017	3 T	<0.018	3 T	0.019	3 T	<0.072	3 T	<0.072	3 T	0.037	3 T	<0.018	3 T	<0.015	3 T	<0.015	3 T	0.039	3 T	<0.020	3 T	<0.020	3 T	<0.033	-	-	3 T	<0.0058
Beta-endosulfan	3 T	<0.034	3 T	<0.012	3 T	<0.032	3 T	<0.032	3 T	<0.019	3 T	<0.019	3 T	<0.021	3 T	<0.021	3 T	<0.014	3 T	<0.014	3 T	<0.014	3 T	<0.014	3 T	<0.014	3 T	<0.035	-	-	3 T	<0.0021
Endosulfan sulfate	3	<0.025	3	<0.013	3	<0.008	3	<0.008	3	<0.016	3	<0.016	3	<0.022	3	<0.022	3	<0.019	3	<0.019	3	<0.017	3	<0.017	3	<0.017	3	<0.035	-	-	3	<0.0018
Endrin	0.7	<0.035	0.7	<0.015	0.7	<0.017	0.7	<0.017	0.7	<0.023	0.7	<0.023	0.7	<0.042	0.7	<0.042	0.7	<0.040	0.7	<0.040	0.7	<0.042	0.7	<0.042	0.7	<0.042	0.7	<0.033	-	-	0.7	<0.0082
Endrin aldehyde	0.7	<0.038	0.7	<0.022	0.7	<0.032	0.7	<0.032	0.7	<0.026	0.7	<0.026	0.7	<0.024	0.7	<0.024	0.7	<0.034	0.7	<0.034	0.7	<0.068	0.7	<0.068	0.7	<0.068	0.7	<0.090	-	-	0.7	<0.003
Heptachlor	0.9	<0.035	0.9	<0.017	0.9	<0.027	0.9	<0.027	0.9	<0.035	0.9	<0.035	0.9	<0.023	0.9	<0.023	0.9	<0.019	0.9	<0.019	0.9	<0.011	0.9	<0.011	0.9	<0.011	0.9	<0.069	-	-	0.9	<0.0297
Heptachlor epoxide	0.9	<0.032	0.9	<0.019	0.9	<0.008	0.9	<0.008	0.9	<0.062	0.9	<0.062	0.9	<0.020	0.9	<0.020	0.9	<0.016	0.9	<0.016	0.9	<0.012	0.9	<0.012	0.9	<0.012	0.9	<0.035	-	-	0.9	<0.0015
PCB-1242	[4]	<0.41	[4]	<0.53	[4]	<0.37	[4]	<0.37	[4]	<0.14	[4]	<0.14	[4]	<0.72	[4]	<0.72	[4]	<0.33	[4]	<0.33	[4]	<0.28	[4]	<0.28	[4]	<0.28	[4]	<0.26	-	-	[4]	<0.0831
PCB-1254	[4]	<0.20	[4]	<0.28	[4]	<0.23	[4]	<0.23	[4]	<0.20	[4]	<0.20	[4]	<0.22	[4]	<0.22	[4]	<0.17	[4]	<0.17	[4]	<0.21	[4]	<0.21	[4]	<0.21	[4]	<0.25	-	-	[4]	<0.0831
PCB-1221	[4]	<0.68	[4]	<0.83	[4]	<0.22	[4]	<0.22	[4]	<0.64	[4]	<0.64	[4]	<0.46	[4]	<0.46	[4]	<0.36	[4]	<0.36	[4]	<0.50	[4]	<0.50	[4]	<0.50	[4]	<0.25	-	-	[4]	<0.0831
PCB-1232	[4]	<0.66	[4]	<0.33	[4]	<0.55	[4]	<0.55	[4]	<0.37	[4]	<0.37	[4]	<0.90	[4]	<0.90	[4]	<0.40	[4]	<0.40	[4]	<0.48	[4]	<0.48	[4]	<0.48	[4]	<0.28	-	-	[4]	<0.0831
PCB-1248	[4]	<0.78	[4]	<0.27	[4]	<0.19	[4]	<0.19	[4]	<0.22	[4]	<0.22	[4]	<0.24	[4]	<0.24	[4]	<0.21	[4]	<0.21	[4]	<0.35	[4]	<0.35	[4]	<0.35	[4]	<0.21	-	-	[4]	<0.0831
PCB-1260	[4]	<0.21	[4]	<0.22	[4]	<0.32	[4]	<0.32	[4]	<0.59	[4]	<0.59	[4]	<0.26	[4]	<0.26	[4]	<0.34	[4]	<0.34	[4]	<0.28	[4]	<0.28	[4]	<0.28	[4]	<0.21	-	-	[4]	<0.0831
PCB-1016	[4]	<0.36	[4]	<0.32	[4]	<0.18	[4]	<0.18	[4]	<0.55	[4]	<0.55	[4]	<0.29	[4]	<0.29	[4]	<0.33	[4]	<0.33	[4]	<0.40	[4]	<0.40	[4]	<0.40	[4]	<0.23	-	-	[4]	<0.0831
Toxaphene	11	<0.53	11	<0.33	11	<0.22	11	<0.22	11	<0.60	11	<0.60	11	<0.48	11	<0.48	11	<0.47	11	<0.47	11	<0.482	11	<0.482	11	<0.482	11	<0.40	-	-	11	<0.467

Notes:

NS = no standard applicable to the designated use

T = total

D = dissolved

Bold text indicates a sample result greater than the WQS

Italicized text indicates a laboratory detection limit higher than the WQS

Footnotes:

[1] The Permittee shall report on any additional parameters that were monitored for seasonal stormwater sampling as required by Section 6.0 of this permit (Special Conditions).

[2] Analytical results shall be reported in the units specified for each category or parameter.

[3] Report the average flow rate for the sampling period (no more than 6 hours).

[4] Standard for total PCBs of 11 µg/L A&We and 19 µg/L PBC.

[5] Beginning with the Summer 2016 reporting, total 1,3-dichloropropylene is reported (prior reporting periods included cis and trans isomers) .

[6] No sample collected. See Table 8.1 for storm event data.

[7] Lab reported as <16.6 mg/L - used 16.6 to calculate applicable dissolved value metals standards

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OUTFALL ID: AC033	MONITORING SEASONS																													
	Summer: June 1 - October 31																													
RECEIVING WATER: New River	Winter: November 1 - May 31																													
DESIGNATED USES: A&We and PBC	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018[7]		Winter 2018/19		Summer 2019		Winter 2019/20		Summer 2020[9]		Winter 2020/21[10]	
SAMPLING DATE(S):	SWQS	7/20/2013	SWQS	11/22/2013	SWQS	8/12/2014	SWQS	12/4/2014	SWQS	10/6/2015	SWQS	1/4/2016	SWQS	8/22/2016	SWQS	11/3/2016	SWQS	7/16/2017	SWQS	1/9/2018	SWQS	7/9/2018	SWQS	11/29/2018	SWQS	8/28/2019	SWQS	11/29/2019	SWQS	-	SWQS	12/10/2020
MONITORING PARAMETERS [1,2]																														
Conventional Parameters																														
Flow [3] (cfs)	NS	4.788	NS	2	NS	2.7	NS	0.364	NS	3.01	NS	1.466	NS	1.548	NS	0.582	NS	6.094	NS	6.59	NS	0.038	NS	0.017	NS	0.02	NS	1.86	-	-	NS	0.042
pH	4.5-9.0	8.36	4.5-9.0	8.11	4.5-9.0	8.52	4.5-9.0	7.45	4.5-9.0	7.39	4.5-9.0	7.73	4.5-9.0	7.53	4.5-9.0	7.32	6.5-9	7.21	6.5-9	7.19	6.5-9	7.48	6.5-9	7.38	6.5-9	6.98	6.5-9	**5.22**	-	-	6.5-9	**6.05**
Temperature (ºC)	Varies	28.5	Varies	16.5	Varies	24.8	Varies	17	Varies	24	Varies	14	Varies	31	Varies	22	Varies	29.6	Varies	15.6	Varies	29.7	Varies	17.1	Varies	29.9	Varies	11.2	-	-	Varies	16.4
Hardness (mg/L)	400	56.6	400	25.7	400	33.9	400	19.4	400	34	400	16.9	400	49.8	400	46.3	400	64.6	400	28.9	400	44.9	400	63.5	400	51.5	400	16.6[8]	-	-	400	70.1
Total Dissolved Solids (TDS) (mg/L) [2]	NS	182	NS	72	NS	104	NS	42	NS	88	NS	46	NS	120	NS	144	NS	276	NS	96	NS	152	NS	168	NS	194	NS	40	-	-	NS	220
Total Suspended Solids (TSS) (mg/L) [2]	NS	573	NS	242	NS	352	NS	210	NS	182	NS	108	NS	305	NS	182	NS	620	NS	204	NS	724	NS	101	NS	258	NS	67.0	-	-	NS	200
Biochemical Oxygen Demand (BOD) (mg/L) [2]	NS	54	NS	18	NS	20	NS	12	NS	13	NS	10	NS	16	NS	50	NS	113	NS	31	NS	41	NS	35	NS	<17	NS	<17	-	-	NS	52
Chemical Oxygen Demand (COD) (mg/L) [2]	NS	370	NS	140	NS	180	NS	140	NS	140	NS	120	NS	160	NS	350	NS	570	NS	200	NS	400	NS	180	NS	340	NS	51	-	-	NS	370

AC033	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019		Winter 2019/20		Summer 2020[9]		Winter 2020/21	
SAMPLING DATE(S):	SWQS	7/20/2013	SWQS	11/22/2013	SWQS	8/12/2014	SWQS	12/4/2014	SWQS	10/6/2015	SWQS	1/4/2016	SWQS	8/22/2016	SWQS	11/3/2016	SWQS	7/16/2017	SWQS	1/9/2018	SWQS	7/9/2018	SWQS	11/29/2018	SWQS	8/28/2019	SWQS	11/29/2019	SWQS	-	SWQS	12/10/2020
Inorganics																																
Cyanide, total (µg/L) [2]	200 T	<50	200 T	<5	200 T	<5	200 T	<5	200 T	<5	200 T	<5	200 T	<5	200 T	<5	84	<5	84	<5	84	<5	84	<5	84	<5	84	<5	-	-	84	<5.0
Nutrients (mg/L) [2]																																
Nitrate + Nitrite as N	NS	1.7	NS	0.6	NS	1.2	NS	0.5	NS	0.8	NS	0.5	NS	2.1	NS	1.2	NS	1.8	NS	1	NS	1.2	NS	1.5	NS	1.3	NS	0.4	-	-	NS	1.4
Ammonia as N	NS	1.9	NS	0.86	NS	1.4	NS	0.85	NS	0.58	NS	0.52	NS	1.5	NS	2	NS	2.5	NS	1.6	NS	1.9	NS	2.1	NS	2.7	NS	0.38	-	-	NS	2.1
Total Kjeldahl Nitrogen (TKN)	NS	7.2	NS	2.2	NS	3.2	NS	2	NS	2.2	NS	1.3	NS	4.5	NS	5.3	NS	10	NS	4.6	NS	7.3	NS	4.7	NS	6.6	NS	0.82	-	-	NS	7.5
Total Phosphorus as P	NS	0.48	NS	0.8	NS	1	NS	0.38	NS	0.67	NS	0.48	NS	1.3	NS	0.66	NS	0.48	NS	1.3	NS	1.8	NS	0.59	NS	0.64	NS	0.23	-	-	NS	0.96
Ortho-Phosphorus as P	NS	0.5	NS	0.2	NS	0.2	NS	0.1	NS	0.1	NS	0.1	NS	0.3	NS	0.3	NS	0.6	NS	0.3	NS	0.3	NS	0.3	NS	0.4	NS	<0.1	-	-	NS	0.5
Microbiological																																
Escherichia coli (*E. coli*) (CFU/100 mg or MPN/100 mL) [2]	NS	2419.6	NS	>2,419.6	NS	727	NS	>2,419.6	NS	9,590	NS	1,610.00	NS	6,500	NS	57,940	575	**10,140**	575	**3,310**	575	**26,130**	575	**4,640**	575	**>2,419.6**	575	**2,590**	-	-	575	**5,300**
Total Metals (µg/L) [2]																																
Antimony	NS	1.9 T 0.9 D	NS	1.1 T 0.5 D	NS	1.6 T 1.0 D	NS	2.3 T 0.6 D	NS	2.1 T <5.0 D	NS	1.6 T <5.0 D	NS	1.7 T <5 D	NS	3.7 T <5 D	747 T	5.3 T <5 D	747 T	3.1 T <5 D	747 T	3.3 T <5.0 D	747 T	2.7 T <5.0 D	747 T	3 T <5.0 D	747 T	0.85 T <5.0 D	-	-	747 T	3.5 T <2.0 D
Arsenic	200 T	7.4 T 1.4 D	200 T	2.5 T 0.7 D	200 T	4.1 T 1.4 D	200 T	2.6 T 0.6 D	200 T	3.7 T <5.0 D	200 T	2.1 T <5.0 D	200 T	5.4 T <5 D	200 T	3 T <5 D	280 T 440 D	5 T <5.0 D	280 T 440 D	4.5 T <5.0 D	280 T 440 D	7.7 T <5.0 D	280 T 440 D	2.3 T <5.0 D	280 T 440 D	4.5 T <5.0 D	280 T 440 D	1.3 T <5.0 D	-	-	280 T 440 D	4.2 T <2.0 D
Barium	NS	283 T 39 D	NS	91 T 11 D	NS	126 T 20 D	NS	104 T 11 D	NS	92 T 18 D	NS	61 T 10 D	NS	176 T 28 D	NS	136 T 29 D	98,000 T	202 T 52 D	98,000 T	131 T 19 D	98,000 T	286 T 33 D	98,000 T	80 T 30 D	98,000 T	160 T 36 D	98,000 T	39 T 6 D	-	-	98,000 T	137 T 27 D
Beryllium	NS	0.73 T <0.15 D	NS	0.22 T <0.06 D	NS	0.29 T <0.15 D	NS	0.22 T <0.06	NS	0.15 T <5.0 D	NS	<0.10 T <5.0 D	NS	0.49 T <5 D	NS	<0.25 T <5 D	1,867 T	<0.15 T <5.0 D	1,867 T	0.37 T <5.0 D	1,867 T	0.78 T <5.0 D	1,867 T	<0.15 T <5.0 D	1,867 T	0.35 T <5.0 D	1,867 T	<0.15 T <5.0 D	-	-	1,867 T	<1.8 T <2.0 D
Cadmium	50 T	0.7 T <0.25 D	50 T	0.4 T <0.10 D	50 T	0.4 T <0.30 D	50 T	0.3 T <0.12 D	50 T	0.2 T 5.7 D	50 T	0.2 T <5.0 D	50 T	0.5 T <5 D	50 T	0.3 T <0.25 D	700 T 40.22 D	0.6 T <5.0D	700 T 16.80 D	0.2 T <5.0 D	700 T 27.10	0.6 T <5.0 D	700 T 39.48	<0.25 T <5.0 D	700 T 31.45	<0.25 T <5.0 D	700 T 9.25	<0.25 T <5.0 D	-	-	700 T 43.94	<2.1 T <1.0 D
Chromium	NS CrIII CrVI 1,000 T	27.5 T <2.00	NS CrIII CrVI 1,000 T	8.1 T <0.80 D	NS CrIII CrVI 1,000 T	14.0 T 0.9 D	NS CrIII CrVI 1,000 T	9.0 T 0.8 D	NS CrIII CrVI 1,000 T	8.7 T <5.0 D	NS CrIII CrVI 1,000 T	5.3 T <5.0 D	NS CrIII CrVI 1,000 T	16.9 T <5 D	NS CrIII CrVI 1,000 T	9 T <5 D	NS	13.8 T <5.0 D	NS	14 T <5.0 D	NS	29.2 T <5.0 D	NS	6.0 T <5.0 D	NS	13.4 T <5.0 D	NS	4.2 T <5.0 D	-	-	NS	<12.5 T <10.0 D
Copper	500 T	97.0 T 26.9 D	500 T	32.7 T 10.1 D	500 T	49.6 T 13.6 D	500 T	40.2 T 8.0 D	500 T	39.7 T 11.9 D	500 T	28.7 T 10.2 D	500 T	62.2 T 17.9 D	500 T	55.7 T 24.6 D	1,300 T 15.41 D	97.5 T **51.8 D**	1,300 T 7.22 D	51.5 T **16.2 D**	1,300 T 10.94	96.4 T **28.2 D**	1,300 T 15.16	35.1 T **23.5 D**	1,300 T 12.45	71.6 T **41.7 D**	1,300 T 4.28	13.6 T **6.1 D**	-	-	1,300 T 4.28	58.5 T **24.1 D**
Lead	100 T	71.1 T 3.1 D	100 T	15.3 T 0.4 D	100 T	37.5 T 1.1 D	100 T	25.2 T 0.7 D	100 T	19.7 T <5.0 D	100 T	13.3 T <5.0 D	100 T	43.4 T <5 D	100 T	15.7 T 0.8 D	15 T 84.44 D	**32.2 T** <5.0 D	15 T 34.49 D	**25.2 T** <5.0 D	15 T 56.43	**61.6 T** 1.5 D	15 T 82.85	**15.2 T** <5.0 D	15 T 65.72	**27.2 T** <5.0 D	15 T 18.54	7.2 T <5.0 D	-	-	15 T 92.39	**22.4 T** 1.2 D
Mercury	10 T	0.03 T 0.024 D	10 T	<0.020 T <0.020 D	10 T	<0.092 T <0.2 D	10 T	<0.092 T <0.092 D	10 T	<0.062 T <0.2 D	10 T	<0.062 T <0.2 D	10 T	<0.068 T <0.2 D	10 T	<0.068 T <0.2 D	280 T 5 D	0.084 T <0.2 D	280 T 5 D	<0.066 T <0.2 D	280 T 5 D	<0.080 T <0.080 D	280 T 5 D	<0.042 T <0.2 D	280 T 5 D	<0.042 T <0.2 D	280 T 5 D	<0.042 T <0.2 D	-	-	280 T 5 D	<0.118 T <0.2 D
Nickel	NS	29.2 T 6.4 D	NS	9.2 T 1.9 D	NS	13.4 T 2.3 D	NS	9.2 T 1.2 D	NS	9.0 T <5.0 D	NS	4.8 T <5.0 D	NS	15.8 T <5 D	NS	11.1 T <5 D	280,000 T 2873.27 D	20.2 T 8.8 D	280,000 T 1454.92 D	12.8 T <5.0 D	28,000 T 2,112.13	29.1 T <5.0 D	28,000 T 2,831.83	7.0 T <5.0 D	28,000 T 2,371.97	18.4 T 6.8 D	28,000 T 913.90	3.6 T <5.0 D	-	-	28,000 T 3,078.92	16.4 T 6.7 D
Selenium	20 T	<0.60 T <0.60 D	20 T	<0.60 T <0.24 D	20 T	0.3 T <0.25 D	20 T	0.29 T 0.1 D	20 T	0.67 T <5.0 D	20 T	<0.40 T <5.0 D	20 T	1 T <5 D	20 T	<0.4 T <5 D	33T	0.86 T <5.0 D	33T	0.27 T <5.0 D	33 T	0.53 T <5.0 D	33 T	0.72 T <5.0 D	33 T	0.57 T <5.0 D	33 T	<0.55 T <5.0 D	-	-	33 T	<4.05 T <2.0 D
Silver	NS	0.3 T <0.15 D	NS	<0.15 T <0.15 D	NS	<0.20 T <0.20 D	NS	0.1 T <0.08 D	NS	<0.25 T <5.0 D	NS	<0.25 T <5.0 D	NS	<0.45 T <5 D	NS	<0.45 T <5 D	4,667 T 1.52 D	0.2 T <5.0 D	4,667 T 0.38 D	0.2 T <5.0 D	4,667 T 0.81	0.3 T <*5.0 D*	4,667 T 1.47	<0.15 T <*5.0 D*	4,667 T 1.03	0.2 T <*5.0 D*	4,667 T 0.15	1.1 T <*5.0 D*	-	-	4,667 T 1.75	<5.0 T <1.25 D
Thallium	NS	0.34 T <0.20 D	NS	<0.20 T <0.08 D	NS	<0.10 T <0.10 D	NS	0.08 T <0.04 D	NS	<0.15 T <5.0 D	NS	<0.15 T <5.0 D	NS	0.45 T <5 D	NS	<0.2 T <5 D	75 T	0.1 T <5.0 D	75 T	<0.10 T <5.0 D	75 T	0.23 T <5.0 D	75 T	0.24 T <5.0 D	75 T	<0.15 T <5.0 D	75 T	0.24 T <5.0 D	-	-	75 T	<2.75 T <2.0 D
Zinc	10,000 T	424 T 80.6 D	10,000 T	170 T 32.1 D	10,000 T	197 T 19.8 D	10,000 T	195 T 15.0 D	10,000 T	180 T 26.6 D	10,000 T	173 T 18.0 D	10,000 T	232 T <50 D	10,000 T	284 T 96.8 D	280,000 T 767.92 D	562 T 217 D	280,000 T 388.44 D	211 T 23.8 D	280,000 T 564.23	422 T 40.8 D	280,000 T 756.82	209 T 66.5 D	280,000 T 633.75	439 T 161 D	280,000 T 243.82	68.4 T <50 D	-	-	280,000 T 822.97	337 T 94.0 D
Organic Toxic Pollutants																																
Total Petroleum Hydrocarbons (TPH) (mg/L) [2]	NS	<11	NS	<11	NS	<10.0	NS	<10	NS	<5.6	NS	<5.7	NS	<6.1	NS	<4.5	NS	<6.7	NS	<7.0	NS	<6.8	NS	6.1	NS	N/A*	NS	<6.5	-	-	NS	<5.6
Total Oil and Grease (mg/L) [2]	NS	<5.5	NS	6	NS	<5.0	NS	<5.0	NS	<5.6	NS	<5.7	NS	<6.1	NS	<4.5	NS	<5.6	NS	<5.8	NS	<5.7	NS	6.1	NS	<6.0	NS	<6.5	-	-	NS	<6.7
VOCs, Semi-VOCs, and Pesticides (µg/L) [2]																																
Acrolein	NS	1.1	NS	<0.20	NS	4.1	NS	<0.40	NS	<0.78	NS	<0.78	NS	<0.41	NS	0.74	467	<3.95	467	<0.79	467	<5.0	467	0.89	467	<0.55	467	<0.55	-	-	467	<0.950
Acrylonitrile	NS	<0.16	NS	<0.16	NS	<0.70	NS	<0.14	NS	<0.53	NS	<0.53	NS	<0.42	NS	<0.42	37,333	<2.95	37,333	<0.59	37,333	<5.0	37,333	<0.57	37,333	<0.57	37,333	<0.57	-	-	37,333	<0.524

AC033	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019		Winter 2019/20		Summer 2020[9]		Winter 2020/21	
SAMPLING DATE(S):	SWQS	7/20/2013	SWQS	11/22/2013	SWQS	8/12/2014	SWQS	12/4/2014	SWQS	10/6/2015	SWQS	1/4/2016	SWQS	8/22/2016	SWQS	11/3/2016	SWQS	7/16/2017	SWQS	1/9/2018	SWQS	7/9/2018	SWQS	11/29/2018	SWQS	8/28/2019	SWQS	11/29/2019	SWQS	-	SWQS	12/10/2020
Benzene	NS	<1.20	NS	<1.20	NS	<0.65	NS	<0.13	NS	<2.30	NS	<0.46	NS	<0.29	NS	<0.29	3,733	<1.30	3,733	<0.26	3,733	<1.30	3,733	<0.33	3,733	<3.3	3,733	<0.33	-	-	3,733	<0.31
Bromoform	NS	<2.35	NS	<2.35	NS	<1.40	NS	<0.28	NS	<3.40	NS	<0.68	NS	<0.33	NS	<0.33	18,667	<1.05	18,667	<0.21	18,667	<1.05	18,667	<0.81	18,667	<8.1	18,667	<0.81	-	-	18,667	<0.37
Carbon tetrachloride	NS	<1.30	NS	<1.30	NS	<1.15	NS	<0.23	NS	<1.55	NS	<0.31	NS	<0.20	NS	<0.20	1,307	<1.50	1,307	<0.30	980	<1.50	980	<0.27	980	<2.7	980	<0.27	-	-	980	<0.32
Chlorobenzene	NS	<0.80	NS	<0.80	NS	<0.65	NS	<0.13	NS	<2.50	NS	<0.50	NS	<0.33	NS	<0.33	18,667	<1.15	18,667	<0.23	18,667	<1.15	18,667	<0.70	18,667	<7.0	18,667	<0.70	-	-	18,667	<0.42
Chlorodibromomethane	NS	<0.90	NS	<0.90	NS	<1.20	NS	<0.24	NS	<3.05	NS	<0.61	NS	<0.32	NS	<0.32	18,667	<1.20	18,667	<0.24	18,667	<1.20	18,667	<0.70	18,667	<0.70	18,667	<0.70	-	-	18,667	<0.21
Chloroethane (ethyl chloride)	NS	<1.10	NS	<1.10	NS	<0.95	NS	<0.19	NS	<2.00	NS	<0.40	NS	<0.33	NS	<0.33	NS	<1.40	NS	<0.28	NS	<1.40	NS	<0.33	NS	<3.3	NS	<0.33	-	-	NS	<0.66
2-Chloroethylvinyl ether	NS	<0.22	NS	<0.22	NS	<0.95	NS	<0.19	NS	<0.53	NS	<0.53	NS	<0.43	NS	<0.43	NS	<3.25	NS	<0.65	NS	<5.0	NS	<0.52	NS	<0.52	NS	<0.52	-	-	NS	<0.333
Chloroform	NS	<1.15	NS	<1.15	NS	<0.70	NS	<0.14	NS	<2.45	NS	<0.49	NS	<0.32	NS	<0.32	9,333	<1.20	9,333	<0.24	9,333	<1.20	9,333	<0.31	9,333	<3.1	9,333	<0.31	-	-	9,333	<0.31
Dichlorobromomethane	NS	<1.15	NS	<1.15	NS	<0.75	NS	<0.15	NS	<2.45	NS	<0.49	NS	<0.29	NS	<0.29	18,667	<1.30	18,667	<0.26	18,667	<1.30	18,667	<0.52	18,667	<5.2	18,667	<0.52	-	-	18,667	<0.21
1,1-Dichloroethane	NS	<1.30	NS	<1.30	NS	<0.95	NS	<0.19	NS	<2.10	NS	<0.42	NS	<0.29	NS	<0.29	NS	<1.35	NS	<0.27	NS	<1.35	NS	<0.32	NS	<3.2	NS	<0.32	-	-	NS	<0.30
1,2-Dichloroethane	NS	<1.25	NS	<1.25	NS	<0.55	NS	<0.11	NS	<2.55	NS	<0.51	NS	<0.35	NS	<0.35	186,667	<1.30	186,667	<0.26	186,667	<1.30	186,667	<0.28	186,667	<2.8	186,667	<0.28	-	-	186,667	<0.28
1,1-Dichloroethylene	NS	<1.40	NS	<1.40	NS	<1.35	NS	<0.27	NS	<1.70	NS	<0.34	NS	<0.19	NS	<0.19	46,667	<1.60	46,667	<0.32	46,667	<1.60	46,667	<0.40	46,667	<4.0	46,667	<0.40	-	-	46,667	<0.41
1,2-Dichloropropane	NS	<1.25	NS	<1.25	NS	<0.90	NS	<0.18	NS	<2.45	NS	<0.49	NS	<0.32	NS	<0.32	84,000	<1.60	84,000	<0.32	84,000	<1.60	84,000	<0.93	84,000	<9.3	84,000	<0.93	-	-	84,000	<0.33
1,3-Dichloropropylene[5]	NS	<1.10	NS	<1.10	NS	<0.65	NS	<0.13	NS	cis <2.55 trans <2.50	NS	cis <0.51 trans <0.50	NS	<0.28	NS	<0.28	28,000	<1.05	28,000	<0.21	28,000	<1.05	28,000	<0.43	28,000	<4.3	28,000	<0.43	-	-	28,000	<0.15
Ethylbenzene	NS	<0.65	NS	<0.65	NS	<0.75	NS	<0.15	NS	<2.30	NS	<0.46	NS	<0.29	NS	<0.29	93,333	<1.15	93,333	<0.23	93,333	<1.15	93,333	<0.61	93,333	<6.1	93,333	<0.61	-	-	93,333	<0.42
Methyl bromide	NS	<0.95	NS	<0.95	NS	<0.90	NS	<0.18	NS	<2.30	NS	<0.46	NS	<0.28	NS	<0.28	1,307	<1.15	1,307	<0.32	1,307	<1.15	1,307	<0.33	1,307	<3.3	1,307	<0.33	-	-	1,307	<0.39
Methyl chloride	NS	<1.40	NS	<1.40	NS	<1.15	NS	<0.23	NS	<2.30	NS	<0.46	NS	<0.28	NS	<0.28	NS	<1.85	NS	<0.37	NS	<1.85	NS	<0.33	NS	<3.3	NS	<0.33	-	-	NS	<0.57
Methylene chloride	NS	<1.00	NS	<1.00	NS	<1.00	NS	<0.20	NS	<4.05	NS	<0.81	NS	<0.31	NS	<0.31	56,000	<4.00	56,000	>0.80	56,000	<4.00	56,000	<0.44	56,000	15	56,000	<0.44	-	-	56,000	<0.41
1,1,2,2-Tetrachloroethane	NS	<2.00	NS	<2.00	NS	<1.75	NS	<0.35	NS	<4.00	NS	<0.80	NS	<0.33	NS	<0.33	93,333	<1.55	93,333	<0.31	56,000	<1.55	56,000	<0.83	56,000	<8.3	56,000	<0.83	-	-	56,000	<0.46
Tetrachloroethylene	NS	<1.05	NS	<1.05	NS	<0.65	NS	<0.13	NS	<1.75	NS	<0.35	NS	<0.23	NS	<0.23	9,333	<1.45	9,333	<0.29	9,333	<1.45	9,333	<0.38	9,333	<3.8	9,333	<0.38	-	-	9,333	<0.38
Toluene	NS	<0.95	NS	<0.95	NS	<0.55	NS	<0.11	NS	<2.15	NS	<0.43	NS	0.42	NS	<0.28	373,333	<1.25	373,333	<0.25	280,000	<1.25	280,000	<0.38	280,000	<3.8	280,000	<0.38	-	-	280,000	<0.35
trans-1,2-Dichloroethylene	NS	<1.25	NS	<1.25	NS	<0.90	NS	<0.18	NS	<1.90	NS	<0.38	NS	<0.24	NS	<0.24	18,667	<1.25	18,667	<0.25	18,667	<1.25	18,667	<0.32	18,667	<3.2	18,667	<0.32	-	-	18,667	<0.32
1,1,1-Trichloroethane	1,000	<1.00	1,000	<1.00	1,000	<0.70	1,000	<0.14	1,000	<1.70	1,000	<0.34	1,000	<0.23	1,000	<0.23	$1.867x10^{+6}$	<1.40	$1.867x10^{+6}$	<0.28	$1.867x10^{+6}$	<1.40	$1.867x10^{+6}$	<0.31	$1.867x10^{+6}$	<3.1	$1.867x10^{+6}$	<0.31	-	-	$1.867x10^{+6}$	<0.32
1,1,2-Trichloroethane	NS	<0.75	NS	<0.75	NS	<0.65	NS	<0.13	NS	<3.00	NS	<0.60	NS	<0.29	NS	<0.29	3,733	<1.50	3,733	<0.30	3,733	<1.50	3,733	<0.68	3,733	<6.8	3,733	<0.68	-	-	3,733	<0.37
Trichloroethylene	NS	<0.75	NS	<0.75	NS	<1.10	NS	<0.22	NS	<2.40	NS	<0.48	NS	<0.28	NS	<0.28	280	<1.80	280	<0.36	280	<1.80	280	<0.46	280	<4.6	280	<0.46	-	-	280	<0.38
1,2,4-Trimethylbenzene	NS	<5.0	NS	<5.0	NS	<10.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<1.0	NS	<1.0	NS	<5.0	NS	<5.0	NS	<5.0	NS	<1.0	NS	<10	NS	<1.0	-	-	NS	<1.0
1,3,5-Trimethylbenzene	NS	<5.0	NS	<5.0	NS	<5.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<1.0	NS	<1.0	NS	<1.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<10	NS	<1.0	-	-	NS	<1.0
Vinyl chloride	NS	<1.00	NS	<1.00	NS	<1.10	NS	<0.22	NS	<1.75	NS	<0.35	NS	<0.24	NS	<0.24	2,800	<2.10	2,800	<0.42	2,800	<2.10	2,800	<0.35	2,800	<3.5	2,800	<0.35	-	-	2,800	<0.47
Xylenes, Total	NS	<1.50	NS	<1.50	NS	<1.25	NS	<0.13	NS	<2.60	NS	<0.52	NS	<0.32	NS	<0.32	186,667	<1.15	186,667	<0.23	186,667	<1.15	186,667	<0.70	186,667	<7.0	186,667	<0.70	-	-	186,667	<0.33
Acid Compounds (µg/L) [2]																																
2-Chlorophenol	NS	<223.1	NS	<90.9	NS	<1.48	NS	<1.48	NS	<3.10	NS	<3.10	NS	<2.92	NS	<2.92	4,667	<42.3	4,667	<211.5	4,667	<4.52	4,667	<4.52	4,667	<4.52	4,667	<4.52	-	-	4,667	<1.06
2,4-Dichlorophenol	NS	<219.4	NS	<89.5	NS	<1.65	NS	<1.65	NS	<2.81	NS	<2.81	NS	<3.21	NS	<3.21	2,800	<48.2	2,800	<241.0	2,800	<4.77	2,800	<4.77	2,800	<4.77	2,800	<4.77	-	-	2,800	<1.44
2,4-Dimethylphenol	NS	<118.6	NS	<48.3	NS	<2.20	NS	<2.20	NS	<2.64	NS	<2.64	NS	<1.32	NS	<1.32	18,667	<70.7	18,667	<353.5	18,667	<2.04	18,667	<2.04	18,667	<2.04	18,667	<2.04	-	-	18,667	<2.70
4,6-Dinitro-o-cresol	NS	<155.0	NS	<63.2	NS	<1.22	NS	<1.22	NS	<1.49	NS	<1.49	NS	<2.27	NS	<2.27	3,733	<46.9	3,733	<234.5	3,733	<3.36	3,733	<3.36	3,733	<3.36	3,733	<3.36	-	-	3,733	<1.33
2,4-Dinitrophenol	NS	<134.7	NS	<54.9	NS	<1.13	NS	<1.13	NS	<2.21	NS	<2.21	NS	<2.64	NS	<2.64	1,867	<51.1	1,867	<255.5	1,867	<3.41	1,867	<3.41	1,867	<3.41	1,867	<3.41	-	-	1,867	<0.97
2-Nitrophenol	NS	<213.7	NS	<87.1	NS	<1.57	NS	<1.57	NS	<2.84	NS	<2.84	NS	<2.61	NS	<2.61	NS	<78.3	NS	<391.5	NS	<4.68	NS	<4.68	NS	<4.68	NS	<4.68	-	-	NS	<0.99
4-Nitrophenol	NS	<242.8	NS	<99.0	NS	5.2	NS	2.1	NS	<2.98	NS	<2.98	NS	<2.03	NS	<2.03	NS	<40.3	NS	<201.5	NS	<3.52	NS	<3.52	NS	<3.52	NS	<3.52	-	-	NS	16.7
p-Chloro-m-cresol	NS	<229.3	NS	<93.5	NS	<1.65	NS	<1.65	NS	<1.87	NS	<1.87	NS	<3.10	NS	<3.10	48,000	<40.5	48,000	<202.5	48,000	<4.76	48,000	<4.76	48,000	<4.76	48,000	<4.76	-	-	48,000	<1.41
Pentachlorophenol	NS	<174.7	NS	<71.2	NS	<1.39	NS	<1.39	NS	<1.47	NS	<1.47	NS	<3.44	NS	<3.44	45.4	<73.6	44.49	*<368.0*	59.55	<4.00	53.86	<4.00	36.03	<4.00	6.14	<4.00	-	-	14.15	<2.02
Phenol	NS	<184.6	NS	<75.3	NS	1.4	NS	<1.34	NS	<2.30	NS	<2.30	NS	<1.84	NS	1.9	180,000	<39.9	180,000	<199.5	180,000	<4.08	180,000	<4.08	180,000	<4.08	180,000	<4.08	-	-	180,000	3.3
2,4,6-Trichlorophenol	NS	<249.1	NS	<101.5	NS	<1.89	NS	<1.89	NS	<2.60	NS	<2.60	NS	<3.28	NS	<3.28	130	<47.4	130	*<237.0*	130	<5.27	130	<5.27	130	<5.27	130	<5.27	-	-	130	<1.69
Bases/Neutrals (µg/L) [2]																																
Acenaphthene	NS	<69.7	NS	<28.4	NS	<1.03	NS	<1.03	NS	<0.35	NS	<0.35	NS	<1.02	NS	<1.02	56,000	<18.8	56,000	<94.0	56,000	<1.19	56,000	<1.19	56,000	<1.19	56,000	<1.19	-	-	56,000	<0.68
Acenaphthylene	NS	<90.0	NS	<36.7	NS	<1.00	NS	<1.00	NS	<1.23	NS	<1.23	NS	<6.10	NS	<6.10	NS	<17.5	NS	<87.5	NS	<1.41	NS	<1.41	NS	<1.41	NS	<1.41	-	-	NS	<0.59
Anthracene	NS	<90.0	NS	<36.7	NS	<2.88	NS	<2.88	NS	<0.44	NS	<0.44	NS	<1.96	NS	<1.96	280,000	<26.2	280,000	<131.0	280,000	<1.20	280,000	<1.20	280,000	<1.20	280,000	<1.20	-	-	280,000	<0.55
Benzo(a)anthracene	NS	<90.0	NS	<36.7	NS	<1.08	NS	<1.08	NS	<0.38	NS	<0.38	NS	<1.57	NS	<1.57	0.2	*<19.6*	0.2	*<98.0*	0.2	*<1.02*	0.2	*<1.02*	0.2	*<1.02*	0.2	*<1.02*	-	-	0.2	*<0.81*
Benzo(a)pyrene	NS	<97.2	NS	<39.6	NS	<3.77	NS	<3.77	NS	<1.41	NS	<1.41	NS	<3.12	NS	<3.12	0.2	<37.7	0.2	*<188.5*	0.2	*<1.08*	0.2	*<1.08*	0.2	*<1.08*	0.2	*<1.08*	-	-	0.2	*<1.58*
Benzo(b)fluoranthene	NS	<126.4	NS	<51.5	NS	<1.46	NS	<1.46	NS	<1.06	NS	<1.06	NS	<1.28	NS	<1.28	NS	<21.7	NS	<108.5	NS	<0.38	NS	<0.38	NS	<0.38	NS	<0.38	-	-	NS	<2.48
Benzo(g,h,i)perylene	NS	<90.0	NS	<36.7	NS	<1.29	NS	<1.29	NS	<0.72	NS	<0.72	NS	<2.83	NS	<2.83	NS	<25.1	NS	<125.5	NS	<1.14	NS	<1.14	NS	<1.14	NS	<1.14	-	-	NS	<1.92
Benzo(k)fluoranthene	NS	<72.8	NS	<29.7	NS	<1.04	NS	<1.04	NS	<0.35	NS	<0.35	NS	<1.76	NS	<1.76	1.9	*<23.3*	1.9	*<116.5*	1.9	<1.03	1.9	<1.03	1.9	<1.03	1.9	<1.03	-	-	1.9	*<1.92*
Chrysene	NS	<77.0	NS	<31.4	NS	<1.41	NS	<1.41	NS	<0.46	NS	<0.46	NS	<1.08	NS	<1.08	19	*<19.6*	19	*<98.0*	19	<1.16	19	<1.16	19	<1.16	19	<1.16	-	-	19	<0.81
Dibenz(a,h)anthracene	NS	<103.0	NS	<42.0	NS	<1.24	NS	<1.24	NS	<0.47	NS	<0.47	NS	<1.93	NS	<1.93	1.9	*<60.4*	1.9	*<302.0*	1.9	<1.02	1.9	<1.02	1.9	<1.02	1.9	<1.02	-	-	1.9	<1.66
1,2-Dichlorobenzene	NS	<14.0	NS	<5.7	NS	<1.76	NS	<1.76	NS	<1.04	NS	<1.04	NS	<0.58	NS	<0.58	5,900	<1.50	5,900	<0.30	5,900	<1.43	5,900	<1.43	5,900	<1.43	5,900	<1.43	-	-	5,900	<0.89
1,3-Dichlorobenzene	NS	<58.8	NS	<24.0	NS	<1.74	NS	<1.74	NS	<0.47	NS	<0.47	NS	<0.52	NS	<0.52	NS	<1.25	NS	<0.25	NS	<1.39	NS	<1.39	NS	<1.39	NS	<1.39	-	-	NS	<0.91
1,4-Dichlorobenzene	NS	<54.6	NS	<22.3	NS	<1.56	NS	<1.56	NS	<1.28	NS	<1.28	NS	<0.50	NS	<0.50	6,500	<1.45	6,500	<0.29	6,500	<1.48	6,500	<1.48	6,500	<1.48	6,500	<1.48	-	-	6,500	<0.98
3,3-Dichlorobenzidine	NS	<1418.0	NS	<578.1	NS	<6.06	NS	<6.06	NS	<11.60	NS	<11.60	NS	<23.45	NS	<23.45	3	*<254.3*	3	*<1,271.5*	3	*<6.99*	3	*<6.99*	3	*<6.99*	3	*<6.99*	-	-	3	*<6.24*
Diethyl phthalate	NS	<98.8	NS	<40.3	NS	<2.37	NS	<2.37	NS	0.4	NS	0.4	NS	<1.07	NS	<1.07	746,667	<19.9	746,667	<99.5	746,667	<1.08	746,667	1.9	746,667	<1.08	746,667	<1.08	-	-	746,667	<7.95
Dimethyl phthalate	NS	<93.1	NS	<37.9	NS	<2.42	NS	<2.42	NS	<0.47	NS	<0.47	NS	<0.58	NS	<0.58	NS	<19.1	NS	<95.5	NS	<1.17	NS	<1.17	NS	<1.17	NS	<1.17	-	-	NS	<0.48
Di-n-butyl phthalate	NS	<116.0	NS	<47.3	NS	<1.85	NS	<1.85	NS	<0.31	NS	<0.31	NS	<1.37	NS	<1.37	1,100	<23.5	1,100	<117.5	1,100	<1.12	1,100	<1.12	1,100	<1.12	1,100	<1.12	-	-	1,100	<1.00
2,4-Dinitrotoluene	NS	<106.6	NS	<43.5	NS	<2.12	NS	<2.12	NS	<0.26	NS	<0.26	NS	<1.30	NS	<1.30	1,867	<31.0	1,867	<155.0	1,867	<1.17	1,867	<1.17	1,867	<1.17	1,867	<1.17	-	-	1,867	<0.84
2,6-Dinitrotoluene	NS	<131.0	NS	<53.4	NS	<1.12	NS	<1.12	NS	<0.38	NS	<0.38	NS	<1.39	NS	<1.39	3,733	<28.9	3,733	<144.5	3,733	<1.13	3,733	<1.13	3,733	<1.13	3,733	<1.13	-	-	3,733	<0.65
Di-n-octyl phthalate	NS	<149.8	NS	<61.1	NS	<1.10	NS	<1.10	NS	<1.28	NS	<1.28	NS	<1.67	NS	<1.67	373,333	<55.0	373,333	<275.0	373,333	<2.05	373,333	<2.05	373,333	<2.05	373,333	<2.05	-	-	373,333	<2.44
1,2-Diphenylhydrazine (as azobenzene)	NS	<121.2	NS	<49.4	NS	<6.70	NS	<6.70	NS	<1.06	NS	<1.06	NS	<7.46	NS	<7.46	NS	<21.5	NS	<107.5	1.8	<1.11	1.8	<1.11	1.8	<1.11	1.8	<1.11	-	-	1.8	<1.16
Fluoranthene	NS	<93.1	NS	<37.9	NS	<1.35	NS	<1.35	NS	<0.27	NS	<0.27	NS	<1.06	NS	<1.06	37,333	<30.8	37,333	<154.0	37,333	<1.27	37,333	<1.27	37,333	<1.27	37,333	<1.27	-	-	37,333	0.6
Fluorene	NS	<80.1	NS	<32.6	NS	<4.81	NS	<4.81	NS	<0.29	NS	<0.29	NS	<0.51	NS	<0.51	37,333	<28.7	37,333	<143.5	37,333	<1.18	37,333	<1.18	37,333	<1.18	37,333	<1.18	-	-	37,333	<0.50
Hexachlorobenzene	NS	<72.3	NS	<29.5	NS	<1.23	NS	<1.23	NS	<0.34	NS	<0.34	NS	<0.47	NS	<0.47	747	<15.7	747	<78.5	747	<1.01	747	<1.01	747	<1.01	747	<1.01	-	-	747	<0.37
Hexachlorobutadiene	NS	<17.2	NS	<7.0	NS	<1.82	NS	<1.82	NS	<1.67	NS	<1.67	NS	<0.41	NS	<0.41	187	<10.0	187	<50.0	187	<1.20	187	<1.20	187	<1.20	187	<1.20	-	-	187	<0.46
Hexachlorocyclopentadiene	NS	<118.0	NS	<48.1	NS	<1.23	NS	<1.23	NS	<1.53	NS	<1.53	NS	<2.16	NS	<2.16	11,200	<61.0	11,200	<305.0	9,800	<3.07	9,800	<3.07	9,800	<3.07	9,800	<3.07	-	-	9,800	<1.32
Hexachloroethane	NS	<20.8	NS	<8.5	NS	<1.62	NS	<1.62	NS	<1.23	NS	<1.23	NS	<0.54	NS	<0.54	850	<14.9	850	<74.5	850	<1.35	850	<1.35	850	<1.35	850	<1.35	-	-	850	<0.36

AC033	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019		Winter 2019/20		Summer 2020[9]		Winter 2020/21	
SAMPLING DATE(S):	SWQS	7/20/2013	SWQS	11/22/2013	SWQS	8/12/2014	SWQS	12/4/2014	SWQS	10/6/2015	SWQS	1/4/2016	SWQS	8/22/2016	SWQS	11/3/2016	SWQS	7/16/2017	SWQS	1/9/2018	SWQS	7/9/2018	SWQS	11/29/2018	SWQS	8/28/2019	SWQS	11/29/2019	SWQS	-	SWQS	12/10/2020
Indeno(1,2,3-cd)pyrene	NS	<105.6	NS	<43.0	NS	<1.39	NS	<1.39	NS	<0.62	NS	<0.62	NS	<2.38	NS	**3.99**[6]	1.9	*<61.1*	1.9	*<305.5*	1.9	<1.07	1.9	<1.07	1.9	**4.5**	1.9	<1.07	-	-	1.9	*<2.38*
Isophorone	NS	<73.3	NS	<29.9	NS	<2.14	NS	<2.14	NS	<0.37	NS	<0.37	NS	<0.51	NS	<0.51	186,667	<17.7	186,667	<88.5	186,667	<1.32	186,667	<1.32	186,667	<1.32	186,667	<1.32	-	-	186,667	<1.45
Naphthalene	NS	<62.4	NS	<25.4	NS	<1.83	NS	<1.83	NS	<0.36	NS	<0.36	NS	<0.49	NS	<0.49	18,667	<15.4	18,667	<77.0	18,667	<1.48	18,667	<1.48	18,667	<1.48	18,667	<1.48	-	-	18,667	<0.37
Nitrobenzene	NS	<64.0	NS	<26.1	NS	<2.10	NS	<2.10	NS	<1.26	NS	<1.26	NS	<0.44	NS	<0.44	467	<18.0	467	<90.0	467	<1.55	467	<1.55	467	<1.55	467	<1.55	-	-	467	<0.90
n-Nitrosodimethylamine	NS	<62.4	NS	<25.4	NS	<1.00	NS	<1.00	NS	<1.13	NS	<1.13	NS	<0.54	NS	<0.54	0.03	*<16.2*	0.03	*<81.0*	0.03	*<1.67*	0.03	*<1.67*	0.03	*<1.67*	0.03	*<1.67*	-	-	0.03	*<0.70*
n-Nitrosodi-n-propylamine	NS	<78.5	NS	<32.0	NS	<1.15	NS	<1.15	NS	<1.17	NS	<1.17	NS	<1.02	NS	<1.02	88,667	<16.5	88,667	<82.5	88,667	<1.65	88,667	<1.65	88,667	<1.65	88,667	<1.65	-	-	88,667	<2.50
n-Nitrosodiphenylamine	NS	<158.1	NS	<64.4	NS	<3.57	NS	<3.57	NS	<1.15	NS	<1.15	NS	<1.67	NS	<1.67	290	<31.3	290	<156.5	290	<1.07	290	<1.07	290	<1.07	290	<1.07	-	-	290	<0.88
Phenanthrene	NS	<84.8	NS	<34.6	NS	<1.39	NS	<1.39	NS	<0.31	NS	<0.31	NS	<0.49	NS	<0.49	NS	<30.2	NS	<151.0	NS	<1.33	NS	<1.33	NS	<1.33	NS	<1.33	-	-	NS	<0.32
Pyrene	NS	<85.3	NS	<34.8	NS	<3.86	NS	<3.86	NS	<0.67	NS	<0.67	NS	<3.21	NS	<3.21	28,000	<33.8	28,000	<169.0	28,000	<1.20	28,000	<1.20	28,000	<1.20	28,000	<1.20	-	-	28,000	0.5
1,2,4-Trichlorobenzene	NS	<16.6	NS	<6.8	NS	<1.69	NS	<1.69	NS	<1.04	NS	<1.04	NS	<0.55	NS	<0.55	9,333	<12.0	9,333	<60.5	9,333	<1.34	9,333	<1.34	9,333	<1.34	9,333	<1.34	-	-	9,333	<1.05
Pesticides (µg/L) [2]																																
Aldrin	0.003	*<0.048*	0.003	**0.028**	0.003	*<0.027*	0.003	*<0.027*	0.003	*<0.012*	0.003	*<0.012*	0.003	**0.077**	0.003	*<0.019*	4.5	0.071	4.5	<0.013	4.5	0.068	4.5	<0.010	4.5	<0.010	4.5	<0.045	-	-	4.5	<0.0038
Alpha-BHC	NS	<0.040	NS	<0.017	NS	<0.021	NS	<0.021	NS	<0.058	NS	<0.058	NS	<0.010	NS	<0.010	1,600	<0.015	1,600	0.019	1,600	<0.012	1,600	<0.012	1,600	<0.012	1,600	<0.033	-	-	1,600	<0.0031
Beta-BHC	NS	<0.099	NS	<0.094	NS	<0.072	NS	<0.072	NS	0.078	NS	<0.063	NS	<0.049	NS	<0.049	560	<0.083	560	<0.083	560	<0.099	560	<0.099	560	<0.099	560	<0.041	-	-	560	<0.1802
Gamma-BHC	NS	0.074	NS	<0.024	NS	<0.034	NS	<0.034	NS	<0.058	NS	<0.058	NS	<0.019	NS	<0.019	11	<0.020	11	<0.020	11	<0.013	11	0.074	11	<0.013	11	<0.034	-	-	11	<0.0034
Delta-BHC	NS	<0.033	NS	<0.018	NS	<0.021	NS	<0.021	NS	<0.066	NS	<0.066	NS	<0.035	NS	<0.035	1,600	<0.012	1,600	<0.012	1,600	<0.045	1,600	<0.045	1,600	<0.045	1,600	<0.041	-	-	1,600	<0.0155
Chlordane	NS	<0.17	NS	<0.20	NS	<0.14	NS	<0.14	NS	<0.36	NS	<0.36	NS	<0.61	NS	<0.61	3.2	<0.29	3.2	<0.29	3.2	<0.33	3.2	<0.33	3.2	<0.33	3.2	<0.17	-	-	3.2	<0.19
4,4'-DDT	0.001	*<0.030*	0.001	*<0.016*	0.001	*<0.025*	0.001	*<0.025*	0.001	*<0.017*	0.001	*<0.017*	0.001	*<0.011*	0.001	*<0.011*	1.1	<0.020	1.1	<0.020	1.1	<0.009	1.1	<0.009	1.1	<0.009	1.1	<0.032	-	-	1.1	<0.0014
4,4'-DDE	0.001	*<0.035*	0.001	*<0.018*	0.001	*<0.010*	0.001	*<0.010*	0.001	*<0.013*	0.001	*<0.013*	0.001	*<0.020*	0.001	*<0.020*	1.1	<0.019	1.1	<0.019	1.1	<0.015	1.1	<0.015	1.1	<0.015	1.1	<0.043	-	-	1.1	<0.0034
4,4'-DDD	0.001	*<0.024*	0.001	*<0.014*	0.001	*<0.031*	0.001	*<0.031*	0.001	*<0.021*	0.001	*<0.021*	0.001	*<0.021*	0.001	*<0.021*	1.1	<0.023	1.1	<0.023	1.1	<0.017	1.1	<0.017	1.1	<0.017	1.1	<0.039	-	-	1.1	<0.0022
Dieldrin	0.003	*<0.029*	0.003	*<0.022*	0.003	*<0.030*	0.003	*<0.030*	0.003	*<0.060*	0.003	*<0.060*	0.003	**0.035**	0.003	*<0.019*	4	<0.015	4	<0.015	4	0.037	4	0.039	4	<0.012	4	<0.031	-	-	4	<0.0037
Alpha-endosulfan	NS	<0.035	NS	0.084	NS	0.072	NS	<0.018	NS	<0.072	NS	<0.072	NS	0.089	NS	<0.018	3 T	<0.015	3 T	<0.015	3 T	0.082	3 T	0.061	3 T	<0.020	3 T	<0.033	-	-	3 T	<0.0058
Beta-endosulfan	NS	<0.035	NS	<0.013	NS	<0.032	NS	<0.032	NS	<0.019	NS	<0.019	NS	<0.021	NS	<0.021	3 T	<0.014	3 T	<0.014	3 T	<0.014	3 T	<0.014	3 T	<0.014	3 T	<0.035	-	-	3 T	<0.0021
Endosulfan sulfate	NS	<0.026	NS	<0.014	NS	<0.008	NS	<0.008	NS	<0.016	NS	<0.016	NS	<0.022	NS	<0.022	3	<0.019	3	<0.019	3	<0.017	3	<0.017	3	<0.017	3	<0.035	-	-	3	<0.0018
Endrin	0.004	*<0.036*	0.004	*<0.016*	0.004	*<0.017*	0.004	*<0.017*	0.004	*<0.023*	0.004	*<0.023*	0.004	*<0.042*	0.004	*<0.042*	0.7	<0.040	0.7	<0.040	0.7	<0.042	0.7	<0.042	0.7	<0.042	0.7	<0.033	-	-	0.7	<0.0082
Endrin aldehyde	NS	<0.040	NS	<0.024	NS	<0.032	NS	<0.032	NS	<0.026	NS	<0.026	NS	<0.024	NS	<0.024	0.7	<0.034	0.7	<0.034	0.7	<0.068	0.7	<0.068	0.7	<0.068	0.7	<0.090	-	-	0.7	<0.003
Heptachlor	NS	0.092	NS	<0.018	NS	<0.027	NS	<0.027	NS	<0.035	NS	<0.035	NS	<0.023	NS	<0.023	0.9	<0.019	0.9	<0.019	0.9	<0.011	0.9	0.054	0.9	<0.011	0.9	<0.069	-	-	0.9	<0.0297
Heptachlor epoxide	NS	<0.033	NS	<0.020	NS	<0.008	NS	<0.008	NS	<0.062	NS	<0.062	NS	<0.020	NS	<0.020	0.9	<0.016	0.9	<0.016	0.9	<0.012	0.9	<0.012	0.9	<0.012	0.9	<0.035	-	-	0.9	<0.0015
PCB-1242	0.001	*<0.43*	0.001	<0.56	0.001	*<0.37*	0.001	*<0.37*	0.001	*<0.14*	0.001	*<0.14*	0.001	*<0.72*	0.001	*<0.72*	[4]	<0.33	[4]	<0.33	[4]	<0.28	[4]	<0.28	[4]	<0.28	[4]	<0.26	-	-	[4]	<0.0831
PCB-1254	0.001	*<0.21*	0.001	<0.29	0.001	*<0.23*	0.001	*<0.23*	0.001	*<0.20*	0.001	*<0.20*	0.001	*<0.22*	0.001	*<0.22*	[4]	<0.17	[4]	<0.17	[4]	<0.21	[4]	<0.21	[4]	<0.21	[4]	<0.25	-	-	[4]	<0.0831
PCB-1221	0.001	*<0.71*	0.001	<0.87	0.001	*<0.22*	0.001	*<0.22*	0.001	*<0.64*	0.001	*<0.64*	0.001	*<0.46*	0.001	*<0.46*	[4]	<0.36	[4]	<0.36	[4]	<0.50	[4]	<0.50	[4]	<0.50	[4]	<0.25	-	-	[4]	<0.0831
PCB-1232	0.001	*<0.69*	0.001	<0.34	0.001	*<0.55*	0.001	*<0.55*	0.001	*<0.37*	0.001	*<0.37*	0.001	*<0.90*	0.001	*<0.90*	[4]	<0.40	[4]	<0.40	[4]	<0.48	[4]	<0.48	[4]	<0.48	[4]	<0.28	-	-	[4]	<0.0831
PCB-1248	0.001	*<0.81*	0.001	<0.28	0.001	*<0.19*	0.001	*<0.19*	0.001	*<0.22*	0.001	*<0.22*	0.001	*<0.24*	0.001	*<0.24*	[4]	<0.21	[4]	<0.21	[4]	<0.35	[4]	<0.35	[4]	<0.35	[4]	<0.21	-	-	[4]	<0.0831
PCB-1260	0.001	*<0.22*	0.001	<0.24	0.001	*<0.32*	0.001	*<0.32*	0.001	*<0.59*	0.001	*<0.59*	0.001	*<0.26*	0.001	*<0.26*	[4]	<0.34	[4]	<0.34	[4]	<0.28	[4]	<0.28	[4]	<0.28	[4]	<0.21	-	-	[4]	<0.0831
PCB-1016	0.001	*<0.37*	0.001	<0.33	0.001	*<0.18*	0.001	*<0.18*	0.001	*<0.55*	0.001	*<0.55*	0.001	*<0.29*	0.001	*<0.29*	[4]	<0.33	[4]	<0.33	[4]	<0.40	[4]	<0.40	[4]	<0.40	[4]	<0.23	-	-	[4]	<0.0831
Toxaphene	0.005	*<0.55*	0.005	<0.34	0.005	*<0.22*	0.005	*<0.22*	0.005	*<0.60*	0.005	*<0.60*	0.005	*<0.48*	0.005	*<0.48*	11	<0.47	11	<0.47	11	<0.482	11	<0.482	11	<0.482	11	<0.40	-	-	11	<0.467

Notes:

NS = no standard applicable to the designated use

T = total

D = dissolved

Bold text indicates a sample result greater than the WQS

Italicized text indicates a laboratory detection limit higher than the WQS

* = Silica Gel treatment (SGT) not run if Hexane Extraction Method (HEM) is Non-Detect

Footnotes:

[1] The Permittee shall report on any additional parameters that were monitored for seasonal stormwater sampling as required by Section 6.0 of this permit (Special Conditions).

[2] Analytical results shall be reported in the units specified for each category or parameter.

[3] Report the average flow rate for the sampling period (no more than 6 hours).

[4] Standard for total PCBs of 11 µg/L A&We and 19 µg/L PBC.

[5] Beginning with the Summer 2016 reporting, total 1,3-dichloropropylene is reported (prior reporting periods included cis and trans isomers) .

[6] Data flagged due to contamination in the lab reagent blank; therefore, these are not true detections or exceedances.

[7] Site was reclassified as PBC and A&We beginning Summer 2018 sampling season.

[8] Lab reported as <16.6 mg/L - used 16.6 to allow for formulas in spreassheet to calculate dissolved values

[9] No sample collected. See Table 8.1 for storm event data.

[10] AC033 sampled in replicate. Higher value between original and replicate reported.

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OUTFALL ID: SR003	MONITORING SEASONS																													
	Summer: June 1 - October 31																													
RECEIVING WATER: Salt River	Winter: November 1 - May 31																													
DESIGNATED USES: A&Wedw, PBC, FC, AgI, AgL	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019[7]		Winter 2019/20		Summer 2020[7]		Winter 2020/21[8]	
SAMPLING DATE(S):	SWQS	7/21/2013	SWQS	11/23/2013	SWQS	8/12/2014	SWQS	12/4/2014	SWQS	7/31/2015	SWQS	1/4/2016	SWQS	7/29/2016	SWQS	11/3/2016	SWQS	7/24/2017	SWQS	1/9/2018	SWQS	7/9/2018	SWQS	2/21/2019	-	-	SWQS	11/29/2019	-	-	SWQS	12/10/2020
MONITORING PARAMETERS [1,2]																														
Conventional Parameters																														
Flow [3] (cfs)	NS	2.93	NS	2.23	NS	1.162	NS	1.116	NS	5.167	NS	2.656	NS	2.377	NS	6.224	NS	21.462	NS	18.08	NS	1.24	NS	12.6	-	-	NS	6.09	-	-	NS	1.426
pH	6.5-9	7.78	6.5-9	8.54	6.5-9	7.67	6.5-9	8.47	6.5-9	7.63	6.5-9	7.94	6.5-9	7.62	6.5-9	6.96	6.5-9	7.42	6.5-9	7.62	6.5-9	8.14	6.5-9	8.89	-	-	6.5-9	7.14	-	-	6.5-9	7.02
Temperature (ºC)	Varies	27.5	Varies	20	Varies	29.5	Varies	19.5	Varies	30.8	Varies	15.5	Varies	30.5	Varies	21.5	Varies	29	Varies	18	Varies	31.1	Varies	9.6	-	-	Varies	12.1	-	-	Varies	15.2
Hardness (mg/L)	400	39.1	400	74	400	38.9	400	32.5	400	46	400	41.4	400	63.5	400	69.9	400	38.1	400	62.4	400	101	400	40.7	-	-	400	21.0	-	-	-	-
Total Dissolved Solids (TDS) (mg/L) [2]	NS	130	NS	186	NS	130	NS	112	NS	172	NS	124	NS	260	NS	212	NS	138	NS	200	NS	432	NS	152	-	-	NS	72	-	-	-	-
Total Suspended Solids (TSS) (mg/L) [2]	NS	178	NS	84	NS	314	NS	1,600	NS	684	NS	196	NS	212	NS	192	NS	162	NS	130	NS	518	NS	285	-	-	NS	74.0	-	-	-	-
Biochemical Oxygen Demand (BOD) (mg/L) [2]	NS	27	NS	10	NS	18	NS	36	NS	30	NS	21	NS	43	NS	33	NS	24	NS	>59.48	NS	34	NS	18	-	-	NS	10	-	-	-	-
Chemical Oxygen Demand (COD) (mg/L) [2]	NS	160	NS	74	NS	200	NS	400	NS	330	NS	200	NS	240	NS	250	NS	200	NS	270	NS	350	NS	280	-	-	NS	69	-	-	-	-

SR003	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019[6]		Winter 2019/20		Summer 2020[7]		Winter 2020/21[8]	
SAMPLING DATE(S):	SWQS	7/21/2013	SWQS	11/23/2013	SWQS	8/12/2014	SWQS	12/4/2014	SWQS	7/31/2015	SWQS	1/4/2016	SWQS	7/29/2016	SWQS	11/3/2016	SWQS	7/24/2017	SWQS	1/9/2018	SWQS	7/9/2018	SWQS	2/21/2019	SWQS		SWQS	11/29/2019	SWQS		SWQS	12/10/2020
Inorganics																																
Cyanide, total (µg/L) [2]	41 T	*<50*	41 T	<5	41 T	<5	41 T	<5	41 T	<5	41 T	<5	41 T	<5	41 T	<5	41 T	<5.0	41 T	<5.0	41 T	<5	41 T	<5	-	-	41 T	<5	-	-	84	<5.0
Nutrients (mg/L) [2]																																
Nitrate + Nitrite as N	NS	1.6	NS	0.9	NS	0.9	NS	0.7	NS	0.7	NS	0.6	NS	2	NS	1.4	NS	0.8	NS	1.4	NS	1.0	NS	1.2	-	-	NS	0.5	-	-	-	-
Ammonia as N	12.56	1.2	2.98	0.47	10.18	0.98	2.28	1.1	16.2	1.6	9.42	0.78	16.5	2.3	37.3	1.3	22.3	0.98	16.5	2.3	6.4	1.1	1.6	0.43	-	-	31.5	0.36	-	-	-	-
Total Kjeldahl Nitrogen (TKN)	NS	4	NS	1.2	NS	2.8	NS	4.2	NS	4.3	NS	2.5	NS	7.3	NS	3.7	NS	3.2	NS	5.5	NS	5.0	NS	2.4	-	-	NS	1.1	-	-	-	-
Total Phosphorus as P	NS	0.79	NS	0.4	NS	1.1	NS	0.37	NS	1.8	NS	0.98	NS	1.4	NS	0.69	NS	0.72	NS	0.43	NS	2.0	NS	1.1	-	-	NS	0.43	-	-	-	-
Ortho-Phosphorus as P	NS	0.4	NS	0.1	NS	0.1	NS	0.2	NS	<0.1	NS	0.1	NS	0.4	NS	0.3	NS	0.2	NS	0.4	NS	0.2	NS	0.1	-	-	NS	<0.1	-	-	-	-
Microbiological																																
Escherichia coli (*E. coli*) (CFU/100 mg or MPN/100 mL) [2]	575	**>2,419.6**	575	**2,419.60**	575	**>2419.6**	575	**>2,419.6**	575	**10,710**	575	**8,130.00**	575	**1,986.30**	575	**5,940**	575	**104,620**	575	**4,140**	575	**34,480**	575	**6,970**	-	-	575	**12,360**	-	-	575	**3,230**
Total Metals (µg/L) [2]																																
Antimony	640 T 1,000 D	1.6 T 0.8 D	640 T 1,000 D	1.2 T 0.6 D	640 T 1,000 D	1.8 T 1.0 D	640 T 1,000 D	1.4 T 1.0 D	640 T 1,000 D	2.9 T <5.0 D	640 T 1,000 D	2.6 T <5.0 D	640 T 1,000 D	2.7 T <5 D	640 T 1,000 D	6 T <5 D	640 T 1,000 D	3.7 T <5.0 D	640 T 1,000 D	3.5 T <5.0 D	640 T 1,000 D	8.8 T <5.0 D	640 T 1,000 D	2.8 T <5.0 D	- -	- -	640 T 1,000 D	1.2 T <5.0 D	- -	- -	- -	- -
Arsenic	80 T 340 D	4.6 T 1.4 D	80 T 340 D	3.6 T 2.8 D	80 T 340 D	3.8 T 1.4 D	80 T 340 D	12.2 T 1.2 D	80 T 340 D	8.8 T <5.0 D	80 T 340 D	4.8 T <5.0 D	80 T 340 D	8.4 T <5 D	80 T 340 D	4.9 T <5 D	80 T 340 D	4.2 T <5.0 D	80 T 340 D	4.6 T <5.0 D	80 T 340 D	8.2 T <5.0 D	80 T 340 D	4.9 T <5.0 D	- -	- -	80 T 340 D	2.6 T <5.0 D	- -	- -	- -	- -
Barium	98,000 T	119 T 22 D	98,000 T	67 T 26 D	98,000 T	136 T 21 D	98,000 T	538 T 14 D	98,000 T	293 T 25 D	98,000 T	161 T 18 D	98,000 T	275 T 35 D	98,000 T	187 T 34 D	98,000 T	118 T 23 D	98,000 T	120 T 30 D	98,000 T	369 T 56 D	98,000 T	183 T 18 D	- -	- -	98,000 T	56 T 9 D	- -	- -	- -	- -
Beryllium	84 T	0.48 T <0.15 D	84 T	<0.15 <0.06 D	84 T	0.3 T <0.15 D	84 T	1.7 T <0.06 D	84 T	0.95 T <5.0 D	84 T	0.32 T <5.0 D	84 T	0.87 T <5 D	84 T	0.38 T <5 D	84 T	0.36 T <5.0 D	84 T	0.28 T <5.0 D	84 T 65 D	0.52 T <5.0 D	84 T 65 D	0.34 T <5.0 D	- -	- -	84 T 65 D	0.16 T <5.0 D	- -	- -	- -	- -
Cadmium	50 T 3.158 D	0.6 T <0.25 D	50 T 5.87 D	<0.3 T <0.10 D	50 T 3.14 D	0.8 T <0.30 D	50 T 2.64 D	2.7 T <0.12 D	50 T 3.70 D	1.1 T *<5.0 D*	50 T 3.33 D	1.2 T *<5.0 D*	50 T 2.61 D	1.4 T <0.25 D	50 T 2.89 D	1 T <0.25 D	50 T 1.5 D	0.8 T <0.2 D	50 T 2.56 D	0.3 T *<5.0 D*	50 T 4.31	4.3 T <0.2 D	50 T 1.61	0.6 T <0.25 D	- -	- -	50 T 0.78	0.3 T *<5.0 D*	- -	- -	- -	- -
Chromium	1,000 T	14.5 T <2.00 D	1,000 T	5.2 T 1.1 D	1,000 T	11.6 T 1.1 D	1,000 T	45.6 T 0.8 D	1,000 T	31.4 T <5.0 D	1,000 T	14.4 T <5.0 D	1,000 T	30.5 T <5 D	1,000 T	16.1 T <5 D	1,000 T	12.7 T <5.0 D	1,000 T	13.1 T <5.0 D	1,000 T	28.8 T <5.0 D	1,000 T	16.2 T <5.0 D	- -	- -	1,000 T	7.3 T <5.0 D	- -	- -	- -	- -
Copper	500 T 5.54 D	49.1 T **16.8 D**	500 T 10.12 D	25.1 T 6.8 D	500 T 5.52 D	78.3 T **9.6 D**	500 T 4.66 D	219 T **10.6 D**	500 T 6.47 D	147 T **16.6 D**	500 T 5.85 D	95.2 T **17.3 D**	500 T 8.76 D	180 T **28.6 D**	500 T 9.59 D	139 T **34.8 D**	500 T 5.41 D	59 T **18 D**	500 T 8.62 D	70.7 T **19.5 D**	500 T 13.57	340 T **64.5 D**	500 T 5.76	88.2 T **12.6 D**	- -	- -	500 T 3.09	29.3 T **10.6 D**	- -	- -	- -	- -
Lead	15 T 22.93 D	**34.4 T** 1.5 D	15 T 46.46 D	14.4 T 0.6 D	15 T 22.79 D	**49.6 T** 1.4 D	15 T 18.64 D	**110 T** 0.6 D	15 T 27.47 D	**64.4 T** 1.0 D	15 T 24.43 D	**44.1 T** <5.0 D	15 T 39.26 D	**79 T** 1.8 D	15 T 43.64 D	**58.4 T** 1 D	15 T 22.27 D	**28 T** 1.2 D	15 T 38.51 D	**28.7 T** 1.1 D	15 T 65.28	**299 T** 3.6 D	15 T 23.97	**57.4 T** 0.9 D	- -	- -	15 T 11.40	**17.1 T** <5.0 D	- -	- -	- -	- -
Mercury	10 T 2.4 D	0.02 T 0.023 D	10 T 2.4 D	<0.020 T <0.020 D	10 T 2.4 D	<0.092 T <0.2 D	10 T 2.4 D	<0.092 T <0.092 D	10 T 2.4 D	0.08 T <0.2 D	10 T 2.4 D	0.08 T <0.2 D	10 T 2.4 D	0.191 T <0.068 D	10 T 2.4 D	0.101 T <0.2 D	10 T 2.4 D	<0.20 T <0.20 D	10 T 2.4 D	<0.066 T <0.2 D	10 T 2.4 D	0.28 T <0.080 D	10 T 2.4 D	0.046 T <0.2 D	- -	- -	10 T 2.4 D	<0.042 T <0.2 D	- -	- -	- -	- -
Nickel	511 T 211.5 D	18.8 T 3.3 D	511 T 363 D	6.1 T 1.3 D	511 T 210.6 D	16.4 T 2.5 D	511 T 181 D	60.6 D 2.2 D	511 T 243 D	36.8 T 3.4 D	511 T 222 D	18.9 T <5.0 D	511 T 318.87 D	38 T 5 D	511 T 345.85 D	19.6 T <5 D	511 T 206.98 D	15.1 T <5.0 D	511 T 314.19 D	16.9 T <5.0 D	4,600 T 472.19	42.7 T <5.0 D	4,600 T 218.87	18.3 T <5.0 D	- -	- -	4,600 T 125.04	7.6 T <5.0 D	- -	- -	- -	- -
Selenium	20 T	<0.60 T <0.60 D	20 T	<0.60 T 0.7 D	20 T	<0.25 T <0.25 D	20 T	0.79 T 0.3 D	20 T	<0.40 T <5.0 D	20 T	<0.40 T <5.0 D	20 T	<0.4 T <5 D	20 T	0.64 T <5 D	20 T	0.79 T <5.0 D	20 T	0.37 T <5.0 D	20 T	0.75 T <5.0 D	20 T	<0.55 T <5.0 D	- -	- -	20 T	<0.55 T <5.0 D	- -	- -	- -	- -
Silver	4,667 T 0.643 D	0.2 T <0.15 D	4,667 T 1.92 D	<0.15 T <0.15 D	4,667 T 0.637 D	<0.20 T <0.20 D	4,667 T 0.465 D	0.5 T <0.08 D	4,667 T 0.85 D	0.4 T *<5.0 D*	4,667 T 0.70 D	<0.25 T *<5.0 D*	4,667 T 1.47 D	0.5 T *<5 D*	4,667 T 1.74 D	<0.45 T *<5 D*	4,667 T 0.61 D	0.2 T *<5.0 D*	4,667 T 1.43 D	0.2 T *<5.0 D*	4,667 T 3.27	1.0 T *<5.0 D*	4,667 T 0.69	0.2 T *<5.0 D*	- -	- -	4,667 T 0.22	1.2 T *<5.0 D*	- -	- -	- -	- -
Thallium	1 T 700 D	<0.20 T <0.20 D	1 T 700 D	<0.2 T <0.08 D	1 T 700 D	0.13 T <0.10 D	1 T 700 D	0.61 T <0.04 D	1 T 700 D	0.22 T <5.0 D	1 T 700 D	<0.15 T <5.0 D	1 T 700 D	0.5 T <5 D	1 T 700 D	<0.2 T <5 D	1 T 700 D	0.1 T <5.0 D	1 T 700 D	0.13 T <5.0 D	7.2 T 700 D	0.21 T <5.0 D	7.2 T 700 D	<0.15 T <5.0 D	- -	- -	7.2 T 700 D	<0.15 T <5.0 D	- -	- -	- -	- -
Zinc	5,106 T 52.9 D	213 T 27.4 D	5,106 T 90.8 D	120 T 18.6 D	5,106 T 52.7 D	391 T 30.4 D	5,106 T 45.2 D	919 T 12.9 D	5,106 T 60.7 D	688 T 29.5 D	5,106 T 55.5 D	395 T 27.4 D	5,106 T 79.75 D	858 T **79.8 D**	5,106 T 86.51 D	538 T 62 D	5,106 T 51.73 D	255 T 42.8 D	5,106 T 78.58 D	279 T 52.3 D	5,106 T 118.17	1,970 T 73.4 D	5,106 T 54.71	383 T 16.3 D	- -	- -	5,106 T 31.23	127 T *<50 D*	- -	- -	- -	- -
Organic Toxic Pollutants																																
Total Petroleum Hydrocarbons (TPH) (mg/L) [2]	NS	<11	NS	<11	NS	<13	NS	<10	NS	<12	NS	<5.4	NS	<5.7	NS	<4.4	NS	<7.0	NS	<6.6	NS	<7.0	NS	<4.2	-	-	NS	<5.8	-	-	NS	<5.3
Total Oil and Grease (mg/L) [2]	NS	<5.5	NS	<5.6	NS	<6.3	NS	5.4	NS	<5.8	NS	<5.4	NS	<5.7	NS	<4.4	NS	<5.8	NS	<5.5	NS	<5.8	NS	<4.2	-	-	NS	<5.8	-	-	NS	<6.4
VOCs, Semi-VOCs, and Pesticides (µg/L) [2]																																
Acrolein	1.9	<0.20	1.9	<0.20	1.9	<2.00	1.9	<0.40	1.9	<0.78	1.9	<0.78	1.9	<0.41	1.9	1.3	1.9	<3.95	1.9	<0.79	1.9	*<5.0*	1.9	<0.55	-	-	1.9	<0.55	-	-	1.9	<0.950
Acrylonitrile	0.2	<0.16	0.2	<0.16	0.2	<0.70	0.2	<0.14	0.2	*<0.53*	0.2	*<0.53*	0.2	*<0.42*	0.2	*<0.42*	0.2	<2.95	0.2	<0.59	0.2	*<5.0*	0.2	*<0.57*	-	-	0.2	*<0.57*	-	-	0.2	*<0.524*
Benzene	114	<1.20	114	<0.24	114	<0.65	114	<0.13	114	<0.46	114	<0.46	114	<0.46	114	<0.29	114	<1.30	114	<0.26	140	<1.30	140	<0.33	-	-	140	<0.33	-	-	140	<0.31

SR003	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019[6]		Winter 2019/20		Summer 2020[7]		Winter 2020/21[8]	
SAMPLING DATE(S):	SWQS	7/21/2013	SWQS	11/23/2013	SWQS	8/12/2014	SWQS	12/4/2014	SWQS	7/31/2015	SWQS	1/4/2016	SWQS	7/29/2016	SWQS	11/3/2016	SWQS	7/24/2017	SWQS	1/9/2018	SWQS	7/9/2018	SWQS	2/21/2019	SWQS		SWQS	11/29/2019	SWQS		SWQS	12/10/2020
Bromoform	133	<2.35	133	<0.47	133	<1.40	133	<0.28	133	<0.68	133	<0.68	133	<0.68	133	<0.33	133	<1.05	133	<0.21	133	<1.05	133	<0.81	-	-	133	<0.81	-	-	133	<0.37
Carbon tetrachloride	2	<1.30	2	<0.26	2	<1.15	2	<0.23	2	<0.31	2	<0.31	2	<0.31	2	<0.20	2	<1.50	2	<0.30	2	<1.50	2	<0.27	-	-	2	<0.27	-	-	2	<0.32
Chlorobenzene	1,553	<0.80	1,553	<0.16	1,553	<0.65	1,553	<0.13	1,553	<0.50	1,553	<0.50	1,553	<0.50	1,553	<0.33	1,553	<1.15	1,553	<0.23	1,553	<1.15	1,553	<0.70	-	-	1,553	<0.70	-	-	1,553	<0.42
Chlorodibromomethane	13	<0.90	13	<0.18	13	<1.20	13	<0.24	13	<0.61	13	<0.61	13	<0.61	13	<0.32	13	<1.20	13	<0.24	13	<1.20	13	<0.70	-	-	13	<0.70	-	-	13	<0.21
Chloroethane (ethyl chloride)	NS	<1.10	NS	<0.22	NS	<0.95	NS	<0.19	NS	<0.40	NS	<0.40	NS	<0.40	NS	<0.33	NS	<1.40	NS	<0.28	NS	<1.40	NS	<0.33	-	-	NS	<0.33	-	-	NS	<0.66
2-Chloroethylvinyl ether	180,000	<0.22	180,000	<0.22	180,000	<0.95	180,000	<0.19	180,000	<0.53	180,000	<0.53	180,000	<0.43	180,000	<0.43	180,000	<3.25	180,000	<0.65	180,000	<5.0	180,000	<0.52	-	-	180,000	<0.52	-	-	180,000	<0.333
Chloroform	2,133	<1.15	2,133	<0.23	2,133	0.72	2,133	<0.14	2,133	<0.49	2,133	<0.49	2,133	<0.49	2,133	<0.32	2,133	<1.20	2,133	<0.24	470	<1.20	470	<0.31	-	-	470	<0.31	-	-	470	<0.31
Dichlorobromomethane	17	<1.15	17	<0.23	17	<0.75	17	<0.15	17	<0.49	17	<0.49	17	<0.49	17	<0.29	17	<1.20	17	<0.24	17	<1.30	17	<0.52	-	-	17	<0.52	-	-	17	<0.21
1,1-Dichloroethane	NS	<1.30	NS	<0.26	NS	<0.95	NS	<0.19	NS	<0.42	NS	<0.42	NS	<0.42	NS	<0.29	NS	<1.35	NS	<0.27	NS	<1.35	NS	<0.32	-	-	NS	<0.32	-	-	NS	<0.30
1,2-Dichloroethane	37	<1.25	37	<0.25	37	<0.55	37	<0.11	37	<0.51	37	<0.51	37	<0.51	37	<0.35	37	<1.30	37	<0.26	37	<1.30	37	<0.28	-	-	37	<0.28	-	-	37	<0.28
1,1-Dichloroethylene	7,143	<1.40	7,143	<0.28	7,143	<1.35	7,143	<0.27	7,143	<0.34	7,143	<0.34	7,143	<0.34	7,143	<0.19	7,143	<1.60	7,143	<0.32	7,143	<1.60	7,143	<0.40	-	-	7,143	<0.40	-	-	7,143	<0.41
1,2-Dichloropropane	17,518	<1.25	17,518	<0.25	17,518	<0.90	17,518	<0.18	17,518	<0.49	17,518	<0.49	17,518	<0.49	17,518	<0.32	17,518	<1.60	17,518	<0.32	17,518	<1.60	17,518	<0.93	-	-	17,518	<0.93	-	-	17,518	<0.33
1,3-Dichloropropylene[5]	42	cis<1.20 trans<1.10	42	cis<0.24 trans<0.22	42	<0.65	42	<0.13	42	cis <0.51 trans <0.50	42	cis <0.51 trans <0.50	42	<0.51	42	<0.28	42	<1.05	42	<0.21	42	<1.05	42	<0.43	-	-	42	<0.43	-	-	42	<0.15
Ethylbenzene	2,133	<0.65	2,133	<0.13	2,133	<0.75	2,133	<0.15	2,133	<0.46	2,133	<0.46	2,133	<0.46	2,133	<0.29	2,133	<1.15	2,133	<0.23	2,133	<1.15	2,133	<0.61	-	-	2,133	<0.61	-	-	2,133	<0.42
Methyl bromide	299	<0.95	299	<0.19	299	<0.90	299	<0.18	299	<0.46	299	<0.46	299	<0.46	299	<0.28	299	<1.15	299	<0.23	299	<1.15	299	<0.33	-	-	299	<0.33	-	-	299	<0.39
Methyl chloride	270,000	<1.40	270,000	<0.28	270,000	<1.15	270,000	<0.23	270,000	<0.46	270,000	<0.46	270,000	<0.46	270,000	<0.28	270,000	<1.85	270,000	<0.37	270,000	<1.85	270,000	<0.33	-	-	270,000	<0.33	-	-	270,000	<0.57
Methylene chloride	593	<1.00	593	<0.20	593	<1.00	593	<0.20	593	<0.81	593	<0.81	593	<0.81	593	<0.31	593	<4.00	593	<0.80	593	<4.00	593	<0.44	-	-	593	<0.44	-	-	593	<0.41
1,1,2,2-Tetrachloroethane	4	<2.00	4	<0.40	4	<1.75	4	<0.35	4	<0.80	4	<0.80	4	<0.80	4	<0.33	4	<1.55	4	<0.31	4	<1.55	4	<0.83	-	-	4	<0.83	-	-	4	<0.46
Tetrachloroethylene	261	<1.05	261	<0.21	261	<0.65	261	<0.13	261	<0.35	261	<0.35	261	<0.35	261	<0.23	261	<1.45	261	<0.29	261	<1.45	261	<0.38	-	-	261	<0.38	-	-	261	<0.38
Toluene	8,700	<0.95	8,700	<0.19	8,700	<0.55	8,700	<0.11	8,700	<0.43	8,700	<0.43	8,700	<0.43	8,700	<0.28	8,700	<1.25	8,700	<0.25	8,700	<1.25	8,700	<0.38	-	-	8,700	<0.38	-	-	8,700	<0.35
trans-1,2-Dichloroethylene	10,127	<1.25	10,127	<0.25	10,127	<0.90	10,127	<0.18	10,127	<0.38	10,127	<0.38	10,127	<0.38	10,127	<0.24	10,127	<1.25	10,127	<0.25	10,127	<1.25	10,127	<0.32	-	-	10,127	<0.32	-	-	10,127	<0.32
1,1,1-Trichloroethane	1,000	<1.00	1,000	<0.20	1,000	<0.70	1,000	<0.14	1,000	<0.34	1,000	<0.34	1,000	<0.34	1,000	<0.23	1,000	<1.40	1,000	<0.28	1,000	<1.40	1,000	<0.31	-	-	1,000	<0.31	-	-	1,000	<0.32
1,1,2-Trichloroethane	16	<0.75	16	<0.15	16	<0.65	16	<0.13	16	<0.60	16	<0.60	16	<0.60	16	<0.29	16	<1.50	16	<0.30	16	<1.50	16	<0.68	-	-	16	<0.68	-	-	16	<0.37
Trichloroethylene	29	<0.75	29	<0.15	29	<1.10	29	<0.22	29	<0.48	29	<0.48	29	<0.48	29	<0.28	29	<1.80	29	<0.36	29	<1.80	29	<0.46	-	-	29	<0.46	-	-	29	<0.38
1,2,4-Trimethylbenzene	NS	<5.0	NS	<1.0	NS	<10.0	NS	<1.0	NS	<1.0	NS	<1.0	NS	<1.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<5.0	NS	<1.0	-	-	NS	<1.0	-	-	NS	<1.0
1,3,5-Trimethylbenzene	NS	<5.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<1.0	NS	<1.0	NS	<1.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<5.0	NS	<1.0	-	-	NS	<1.0	-	-	NS	<1.0
Vinyl chloride	5	<1.00	5	<0.20	5	<1.10	5	<0.22	5	<0.35	5	<0.35	5	<0.35	5	<0.24	5	<2.10	5	<0.42	5	<2.10	5	<0.35	-	-	5	<0.35	-	-	5	<0.47
Xylenes, Total	186,667	<1.50	186,667	<0.30	186,667	<1.25	186,667	<0.13	186,667	<0.52	186,667	<0.52	186,667	<0.52	186,667	<0.32	186,667	<1.15	186,667	<0.23	186,667	<1.15	186,667	<0.70	-	-	186,667	<0.70	-	-	186,667	<0.33
Acid Compounds (µg/L) [2]																																
2-Chlorophenol	30	*<89.2*	30	*<43.3*	30	<1.48	30	<1.48	30	<3.10	30	<3.10	30	<2.92	30	<2.92	30	<4.23	30	*<84.6*	30	<4.52	30	<4.52	-	-	30	<4.52	-	-	-	-
2,4-Dichlorophenol	59	*<87.8*	59	<42.6	59	<1.65	59	<1.65	59	<2.81	59	<2.81	59	<3.21	59	<3.21	59	<4.82	59	*<96.4*	59	<4.77	59	<4.77	-	-	59	<4.77	-	-	-	-
2,4-Dimethylphenol	171	<47.4	171	<23.0	171	<2.20	171	<2.20	171	<2.64	171	<2.64	171	<1.32	171	<1.32	171	<7.07	171	<141.4	171	<2.04	171	<2.04	-	-	171	<2.04	-	-	-	-
4,6-Dinitro-o-cresol	310	<62.0	310	<30.1	310	<1.22	310	<1.22	310	<1.49	310	<1.49	310	<2.27	310	<2.27	310	<4.69	310	<93.8	310	<3.36	310	<3.36	-	-	310	<3.36	-	-	-	-
2,4-Dinitrophenol	110	<53.9	110	<26.2	110	<1.13	110	<1.13	110	<2.21	110	<2.21	110	<2.64	110	<2.64	110	<5.11	110	<102.2	110	<3.41	110	<3.41	-	-	110	<3.41	-	-	-	-
2-Nitrophenol	NS	<85.5	NS	<41.5	NS	<1.57	NS	<1.57	NS	<2.84	NS	<2.84	NS	<2.61	NS	<2.61	NS	<7.83	NS	<156.6	NS	<4.68	NS	<4.68	-	-	NS	<4.68	-	-	-	-
4-Nitrophenol	4,100	<97.1	4,100	<47.2	4,100	3	4,100	3.7	4,100	<2.98	4,100	3.6	4,100	<2.03	4,100	<2.03	4,100	<4.03	4,100	<80.6	4,100	<3.52	4,100	<3.52	-	-	4,100	<3.52	-	-	-	-
p-Chloro-m-cresol	15	*<91.7*	15	*<44.5*	15	<1.65	15	<1.65	15	<1.87	15	<1.87	15	<3.10	15	<3.10	15	<4.05	15	*<81.0*	15	<4.76	15	<4.76	-	-	15	<4.76	-	-	-	-
Pentachlorophenol	19.879	*<69.9*	42.688	<33.9	17.803	<1.39	39.781	<1.39	17.1	6.7	23.36	<1.47	16.91	<3.44	8.71	<3.44	13.83	<7.36	16.91	*<147.2*	28.52	<4.00	60.61	<4.00	-	-	10.44	<4.00	-	-	-	-
Phenol	37	*<73.8*	37	<35.9	37	1.6	37	<1.34	37	<2.30	37	<2.30	37	3.7	37	2.1	37	<3.99	37	*<79.8*	37	<4.08	37	<4.08	-	-	37	<4.08	-	-	-	-
2,4,6-Trichlorophenol	2	*<99.6*	2	*<48.4*	2	<1.89	2	<1.89	2	*<2.60*	2	*<2.60*	2	*<3.28*	2	*<3.28*	2	*<4.74*	2	*<94.8*	2	<5.27	2	*<5.27*	-	-	2	*<5.27*	-	-	-	-
Bases/Neutrals (µg/L) [2]																																
Acenaphthene	198	<27.9	198	<13.5	198	<1.03	198	<1.03	198	<0.35	198	<0.35	198	<1.02	198	<1.02	198	<1.88	198	<37.6	198	<1.19	198	<1.19	-	-	198	<1.19	-	-	-	-
Acenaphthylene	NS	<36.0	NS	<17.5	NS	<1.00	NS	<1.00	NS	<1.23	NS	<1.23	NS	<6.10	NS	<6.10	NS	<1.75	NS	<35.0	NS	<1.41	NS	<1.41	-	-	NS	<1.41	-	-	-	-
Anthracene	74	<36.0	74	<17.5	74	<2.88	74	<2.88	74	<0.44	74	<0.44	74	<1.96	74	<1.96	74	<2.62	74	*<52.4*	74	<1.20	74	<1.20	-	-	74	<1.20	-	-	-	-
Benzo(a)anthracene	0.02	*<36.0*	0.02	*<17.5*	0.02	*<1.08*	0.02	*<1.08*	0.02	*<0.38*	0.02	*<0.38*	0.02	*<1.57*	0.02	*<1.57*	0.02	*<1.96*	0.02	*<39.2*	0.02	*<1.02*	0.02	*<1.02*	-	-	0.02	*<1.02*	-	-	-	-
Benzo(a)pyrene	0.02	*<38.9*	0.02	*<18.9*	0.02	*<3.77*	0.02	*<3.77*	0.02	*<1.41*	0.02	*<1.41*	0.02	*<3.12*	0.02	*<3.12*	0.02	*<3.77*	0.02	*<75.4*	0.02	*<1.08*	0.02	*<1.08*	-	-	0.02	*<1.08*	-	-	-	-
Benzo(b)fluoranthene	0.02	*<50.5*	0.02	*<24.5*	0.02	*<1.46*	0.02	*<1.46*	0.02	*<1.06*	0.02	*<1.06*	0.02	*<1.28*	0.02	*<1.28*	0.02	*<2.17*	0.02	*<43.4*	0.02	*<0.38*	0.02	*<0.38*	-	-	0.02	*<0.38*	-	-	-	-
Benzo(g,h,i)perylene	NS	<36.0	NS	<17.5	NS	<1.29	NS	<1.29	NS	<0.72	NS	<0.72	NS	<2.83	NS	<2.83	NS	<2.51	NS	<50.2	NS	<1.14	NS	<1.14	-	-	NS	<1.14	-	-	-	-
Benzo(k)fluoranthene	0.02	*<29.1*	0.02	*<14.1*	0.02	*<1.04*	0.02	*<1.04*	0.02	*<0.35*	0.02	*<0.35*	0.02	*<1.76*	0.02	*<1.76*	0.02	*<2.33*	0.02	*<46.6*	0.02	*<1.03*	0.02	*<1.03*	-	-	0.02	*<1.03*	-	-	-	-
Chrysene	0.02	*<30.8*	0.02	*<14.9*	0.02	*<1.41*	0.02	*<1.41*	0.02	*<0.46*	0.02	*<0.46*	0.02	*<1.08*	0.02	*<1.08*	0.02	*<1.96*	0.02	*<39.2*	0.02	*<1.16*	0.02	*<1.16*	-	-	0.02	*<1.16*	-	-	-	-
Dibenz(a,h)anthracene	0.02	*<41.2*	0.02	*<20.0*	0.02	*<1.24*	0.02	*<1.24*	0.02	*<0.47*	0.02	*<0.47*	0.02	*<1.93*	0.02	*<1.93*	0.02	*<6.04*	0.02	*<120.8*	0.02	*<1.02*	0.02	*<1.02*	-	-	0.02	*<1.02*	-	-	-	-
1,2-Dichlorobenzene	205	<5.6	205	<2.7	205	<1.76	205	<1.76	205	<1.04	205	<1.04	205	<0.58	205	<0.58	205	<1.33	205	<0.30	205	<1.43	205	<1.43	-	-	205	<1.43	-	-	205	<0.57
1,3-Dichlorobenzene	2,500	<23.5	2,500	<11.4	2,500	<1.74	2,500	<1.74	2,500	<0.47	2,500	<0.47	2,500	<0.52	2,500	<0.52	2,500	<1.25	2,500	<0.25	2,500	<1.39	2,500	<1.39	-	-	2,500	<1.39	-	-	2,500	<0.56
1,4-Dichlorobenzene	2,000	<21.8	2,000	<10.6	2,000	<1.56	2,000	<1.56	2,000	<1.28	2,000	<1.28	2,000	<0.50	2,000	<0.50	2,000	<1.25	2,000	<0.29	2,000	<1.48	2,000	<1.48	-	-	2,000	<1.48	-	-	-	-
3,3-Dichlorobenzidine	0.03	*<567.2*	0.03	*<275.4*	0.03	*<6.06*	0.03	*<6.06*	0.03	*<11.60*	0.03	*<11.60*	0.03	*<23.45*	0.03	*<23.45*	0.03	*<25.43*	0.03	*<508.6*	0.03	*<6.99*	0.03	*<6.99*	-	-	0.03	*<6.99*	-	-	-	-
Diethyl phthalate	8,767	<39.5	8,767	<19.2	8,767	<2.37	8,767	<2.37	8,767	0.4	8,767	<0.36	8,767	1.1	8,767	<1.07	8,767	<1.99	8,767	<39.8	8,767	<1.08	8,767	<1.08	-	-	8,767	<1.08	-	-	-	-
Dimethyl phthalate	17,000	<37.2	17,000	<18.1	17,000	<2.42	17,000	<2.42	17,000	<0.47	17,000	<0.47	17,000	<0.58	17,000	<0.58	17,000	<1.91	17,000	<38.2	17,000	<1.17	17,000	<1.17	-	-	17,000	<1.17	-	-	-	-
Di-n-butyl phthalate	470	<46.4	470	<22.5	470	<1.85	470	<1.85	470	<0.31	470	<0.31	470	<1.37	470	<1.37	470	<2.35	470	<47.0	470	<1.12	470	<1.12	-	-	470	<1.12	-	-	-	-
2,4-Dinitrotoluene	421	<42.6	421	<20.7	421	<2.12	421	<2.12	421	<0.26	421	<0.26	421	<1.30	421	<1.30	421	<3.10	421	<62.0	421	<1.17	421	<1.17	-	-	421	<1.17	-	-	-	-
2,6-Dinitrotoluene	3,733	<52.4	3,733	<25.5	3,733	<1.12	3,733	<1.12	3,733	<0.38	3,733	<0.38	3,733	<1.39	3,733	<1.39	3,733	<2.89	3,733	<57.8	3,733	<1.13	3,733	<1.13	-	-	3,733	<1.13	-	-	-	-
Di-n-octyl phthalate	373,333	<59.9	373,333	<29.1	373,333	<1.10	373,333	<1.10	373,333	<1.28	373,333	<1.28	373,333	<1.67	373,333	<1.67	373,333	<5.50	373,333	<110.0	373,333	<2.05	373,333	<2.05	-	-	373,333	<2.05	-	-	-	-
1,2-Diphenylhydrazine (as azobenzene)	NS	<48.5	NS	<23.5	NS	<6.70	NS	<6.70	NS	<1.06	NS	<1.06	NS	<7.46	NS	<7.46	NS	<2.15	NS	<43.0	0.2	*<1.11*	0.2	*<1.11*	-	-	0.2	*<1.11*	-	-	-	-
Fluoranthene	28	*<37.2*	28	<18.1	28	<1.35	28	<1.35	28	0.3	28	<0.27	28	<1.06	28	<1.06	28	<3.08	28	*<61.6*	28	<1.27	28	<1.27	-	-	28	<1.27	-	-	-	-
Fluorene	1,067	<32.0	1,067	<15.6	1,067	<4.81	1,067	<4.81	1,067	<0.29	1,067	<0.29	1,067	<0.51	1,067	<0.51	1,067	<2.87	1,067	<57.4	1,067	<1.18	1,067	<1.18	-	-	1,067	<1.18	-	-	-	-
Hexachlorobenzene	0.0003	*<28.9*	0.0003	*<14.0*	0.0003	*<1.23*	0.0003	*<1.23*	0.0003	*<0.34*	0.0003	*<0.34*	0.0003	*<0.47*	0.0003	*<0.47*	0.0003	*<1.57*	0.0003	*<31.4*	0.0003	*<1.01*	0.0003	*<1.01*	-	-	0.0003	*<1.01*	-	-	-	-
Hexachlorobutadiene	18	<6.9	18	<3.3	18	<1.82	18	<1.82	18	<1.67	18	<1.67	18	<0.41	18	<0.41	18	<1.00	18	<20.0	18	<1.20	18	<1.20	-	-	18	<1.20	-	-	-	-
Hexachlorocyclopentadiene	3.5	*<47.2*	3.5	*<22.9*	3.5	<1.23	3.5	<1.23	3.5	<1.53	3.5	<1.53	3.5	<2.16	3.5	<2.16	3.5	*<6.10*	3.5	*<122.0*	3.5	<3.07	3.5	<3.07	-	-	3.5	<3.07	-	-	-	-
Hexachloroethane	3.3	*<8.3*	3.3	*<4.0*	3.3	<1.62	3.3	<1.62	3.3	<1.23	3.3	<1.23	3.3	<0.54	3.3	<0.54	3.3	<1.49	3.3	*<29.8*	3.3	<1.35	3.3	<1.35	-	-	3.3	<1.35	-	-	-	-

SR003	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019[6]		Winter 2019/20		Summer 2020[7]		Winter 2020/21[8]	
SAMPLING DATE(S):	SWQS	7/21/2013	SWQS	11/23/2013	SWQS	8/12/2014	SWQS	12/4/2014	SWQS	7/31/2015	SWQS	1/4/2016	SWQS	7/29/2016	SWQS	11/3/2016	SWQS	7/24/2017	SWQS	1/9/2018	SWQS	7/9/2018	SWQS	2/21/2019	SWQS		SWQS	11/29/2019	SWQS		SWQS	12/10/2020
Indeno(1,2,3-cd)pyrene	0.2	*<42.2*	0.2	*<20.5*	0.2	*<1.39*	0.2	*<1.39*	0.2	*<0.62*	0.2	*<0.62*	0.2	*<2.38*	0.2	**3.89**	0.2	*<6.11*	0.2	*<122.2*	0.49	*<1.07*	0.49	*<1.07*	-	-	0.49	*<1.07*	-	-	-	-
Isophorone	961	<29.3	961	<14.2	961	<2.14	961	<2.14	961	<0.37	961	<0.37	961	<0.51	961	<0.51	961	<1.77	961	<35.4	961	<1.32	961	<1.32	-	-	961	<1.32	-	-	-	-
Naphthalene	1,524	<25.0	1,524	<12.1	1,524	<1.83	1,524	<1.83	1,524	<0.36	1,524	0.6	1,524	<0.49	1,524	<0.49	1,524	<1.54	1,524	<30.8	1,524	<1.48	1,524	<1.48	-	-	1,524	<1.48	-	-	-	-
Nitrobenzene	138	<25.6	138	<12.4	138	<2.10	138	<2.10	138	<1.26	138	<1.26	138	<0.44	138	<0.44	138	<1.80	138	<36.0	138	<1.55	138	<1.55	-	-	138	<1.55	-	-	-	-
n-Nitrosodimethylamine	0.03	*<25.0*	0.03	*<12.1*	0.03	*<1.00*	0.03	*<1.00*	0.03	*<1.13*	0.03	*<1.13*	0.03	*<0.54*	0.03	*<0.54*	0.03	*<1.62*	0.03	*<32.4*	0.03	*<1.67*	0.03	*<1.67*	-	-	0.03	*<1.67*	-	-	-	-
n-Nitrosodi-n-propylamine	0.5	*<31.4*	0.5	*<15.3*	0.5	*<1.15*	0.5	*<1.15*	0.5	*<1.17*	0.5	*<1.17*	0.5	*<1.02*	0.5	*<1.02*	0.5	*<1.65*	0.5	*<33.0*	0.5	*<1.65*	0.5	*<1.65*	-	-	0.5	*<1.65*	-	-	-	-
n-Nitrosodiphenylamine	6	*<63.2*	6	*<30.7*	6	<3.57	6	<3.57	6	<1.15	6	<1.15	6	<1.67	6	<1.67	6	<3.13	6	*<62.6*	6	<1.07	6	<1.07	-	-	6	<1.07	-	-	-	-
Phenanthrene	30	*<33.9*	30	<16.5	30	<1.39	30	<1.39	30	<0.31	30	<0.31	30	<0.49	30	<0.49	30	<3.02	30	*<60.4*	30	<1.33	30	<1.33	-	-	30	<1.33	-	-	-	-
Pyrene	800	<34.1	800	<16.6	800	<3.86	800	<3.86	800	<0.67	800	<0.67	800	<3.21	800	<3.21	800	<3.38	800	<67.6	800	<1.20	800	<1.20	-	-	800	<1.20	-	-	-	-
1,2,4-Trichlorobenzene	70	<6.7	70	<3.2	70	<1.69	70	<1.69	70	<1.04	70	<1.04	70	<0.55	70	<0.55	70	<1.21	70	<24.2	70	<1.34	70	<1.34	-	-	70	<1.34	-	-	-	-
Pesticides (µg/L) [2]																																
Aldrin	0.00005	*<0.046*	0.00005	[6]	0.00005	*<0.027*	0.00005	*<0.027*	0.00005	*<0.012*	0.00005	*<0.012*	0.00005	*<0.019*	0.00005	*<0.019*	0.00005	*<0.013*	0.00005	*<0.013*	0.00005	*<0.010*	0.00005	*<0.010*	-	-	0.00005	*<0.045*	-	-	-	-
Alpha-BHC	0.005	*<0.038*	0.005	[6]	0.005	*<0.021*	0.005	*<0.021*	0.005	*<0.058*	0.005	*<0.058*	0.005	*<0.010*	0.005	*<0.010*	0.005	*<0.015*	0.005	*0.036*	0.005	*<0.012*	0.005	*<0.012*	-	-	0.005	*<0.033*	-	-	-	-
Beta-BHC	0.02	*<0.095*	0.02	[6]	0.02	*<0.072*	0.02	*<0.072*	0.02	*<0.063*	0.02	*<0.063*	0.02	*<0.049*	0.02	*<0.049*	0.02	*<0.083*	0.02	*<0.083*	0.02	*<0.099*	0.02	*<0.099*	-	-	0.02	*<0.041*	-	-	-	-
Gamma-BHC	1	<0.033	1	[6]	1	<0.034	1	*<0.034*	1	<0.058	1	<0.058	1	<0.019	1	<0.019	1	<0.020	1	<0.020	1	<0.013	1	<0.013	-	-	1	<0.034	-	-	-	-
Delta-BHC	1,600	<0.032	1,600	[6]	1,600	<0.021	1,600	<0.021	1,600	<0.066	1,600	<0.066	1,600	<0.035	1,600	<0.035	1,600	0.093	1,600	<0.012	1,600	<0.045	1,600	<0.045	-	-	1,600	<0.041	-	-	-	-
Chlordane	0.0008	*<0.16*	0.0008	[6]	0.0008	*<0.14*	0.0008	*<0.14*	0.0008	*<0.36*	0.0008	*<0.36*	0.0008	*<0.61*	0.0008	*<0.61*	0.0008	*<0.29*	0.0008	*<0.29*	0.0008	*<0.33*	0.0008	*<0.33*	-	-	0.0008	*<0.17*	-	-	-	-
4,4'-DDT	0.0002	*<0.029*	0.0002	[6]	0.0002	*<0.025*	0.0002	*<0.025*	0.0002	*<0.017*	0.0002	*<0.017*	0.0002	*<0.011*	0.0002	*<0.011*	0.0002	*<0.020*	0.0002	*<0.020*	0.0002	**0.029**	0.0002	*<0.009*	-	-	0.0002	*<0.032*	-	-	-	-
4,4'-DDE	0.0002	*<0.034*	0.0002	[6]	0.0002	*<0.010*	0.0002	*<0.010*	0.0002	*<0.013*	0.0002	*<0.013*	0.0002	*<0.020*	0.0002	*<0.020*	0.0002	*<0.019*	0.0002	*<0.019*	0.0002	*<0.015*	0.0002	*<0.015*	-	-	0.0002	*<0.043*	-	-	-	-
4,4'-DDD	0.0002	*<0.023*	0.0002	[6]	0.0002	*<0.031*	0.0002	*<0.031*	0.0002	*<0.021*	0.0002	*<0.021*	0.0002	*<0.021*	0.0002	*<0.021*	0.0002	*<0.023*	0.0002	*<0.023*	0.0002	*<0.017*	0.0002	*<0.017*	-	-	0.0002	*<0.039*	-	-	-	-
Dieldrin	0.00005	*<0.028*	0.00005	[6]	0.00005	*<0.030*	0.00005	*<0.030*	0.00005	*<0.060*	0.00005	*<0.060*	0.00005	*<0.019*	0.00005	*<0.019*	0.00005	*<0.015*	0.00005	*<0.015*	0.00005	*<0.012*	0.00005	*<0.012*	-	-	0.00005	*<0.031*	-	-	-	-
Alpha-endosulfan	0.2	<0.034	0.2	[6]	0.2	<0.018	0.2	<0.018	0.2	<0.072	0.2	<0.072	0.2	<0.018	0.2	<0.018	0.2	<0.015	0.2	<0.015	0.2	<0.020	0.2	<0.020	-	-	0.2	<0.033	-	-	-	-
Beta-endosulfan	0.2	<0.034	0.2	[6]	0.2	<0.032	0.2	<0.032	0.2	<0.019	0.2	<0.019	0.2	<0.021	0.2	<0.021	0.2	<0.014	0.2	<0.014	0.2	<0.014	0.2	<0.014	-	-	0.2	<0.035	-	-	-	-
Endosulfan sulfate	0.2	<0.025	0.2	[6]	0.2	<0.008	0.2	0.078	0.2	<0.016	0.2	0.051	0.2	<0.022	0.2	<0.022	0.2	<0.019	0.2	<0.019	0.2	<0.017	0.2	0.028	-	-	0.2	<0.035	-	-	-	-
Endrin	0.004	*<0.035*	0.004	[6]	0.004	*<0.017*	0.004	*<0.017*	0.004	*<0.023*	0.004	*<0.023*	0.004	*<0.042*	0.004	*<0.042*	0.004	*<0.040*	0.004	*<0.040*	0.004	*<0.042*	0.004	*<0.042*	-	-	0.004	*<0.033*	-	-	-	-
Endrin aldehyde	0.09	<0.038	0.09	[6]	0.09	<0.032	0.09	<0.032	0.09	<0.026	0.09	<0.026	0.09	<0.024	0.09	<0.024	0.09	<0.034	0.09	<0.034	0.09	<0.068	0.09	<0.068	-	-	0.09	<0.090	-	-	-	-
Heptachlor	0.00008	*<0.035*	0.00008	[6]	0.00008	*<0.027*	0.00008	**0.063**	0.00008	*<0.035*	0.00008	**0.059**	0.00008	**0.073**	0.00008	*<0.023*	0.00008	*<0.019*	0.00008	*<0.019*	0.00008	**0.043**	0.00008	**0.046**	-	-	0.00008	*<0.069*	-	-	-	-
Heptachlor epoxide	0.00004	*<0.032*	0.00004	[6]	0.00004	*<0.008*	0.00004	*<0.008*	0.00004	*<0.062*	0.00004	*<0.062*	0.00004	*<0.020*	0.00004	*<0.020*	0.00004	*<0.016*	0.00004	*<0.016*	0.00004	*<0.012*	0.00004	*<0.012*	-	-	0.00004	*<0.035*	-	-	-	-
PCB-1242	[4]	<0.41	[4]	[6]	[4]	<0.37	[4]	<0.37	[4]	<0.14	[4]	<0.14	[4]	<0.72	[4]	<0.72	[4]	*<0.33*	[4]	*<0.33*	[4]	*<0.28*	[4]	*<0.28*	-	-	[4]	<0.26	-	-	-	-
PCB-1254	[4]	<0.20	[4]	[6]	[4]	<0.23	[4]	<0.23	[4]	<0.20	[4]	<0.20	[4]	<0.22	[4]	<0.22	[4]	*<0.17*	[4]	*<0.17*	[4]	*<0.21*	[4]	*<0.21*	-	-	[4]	<0.25	-	-	-	-
PCB-1221	[4]	<0.68	[4]	[6]	[4]	<0.22	[4]	<0.22	[4]	<0.64	[4]	<0.64	[4]	<0.46	[4]	<0.46	[4]	*<0.36*	[4]	*<0.36*	[4]	*<0.50*	[4]	*<0.50*	-	-	[4]	<0.25	-	-	-	-
PCB-1232	[4]	<0.66	[4]	[6]	[4]	<0.55	[4]	<0.55	[4]	<0.37	[4]	<0.37	[4]	<0.90	[4]	<0.90	[4]	*<0.40*	[4]	*<0.40*	[4]	*<0.48*	[4]	*<0.48*	-	-	[4]	<0.28	-	-	-	-
PCB-1248	[4]	<0.78	[4]	[6]	[4]	<0.19	[4]	<0.19	[4]	<0.22	[4]	<0.22	[4]	<0.24	[4]	<0.24	[4]	*<0.21*	[4]	*<0.21*	[4]	*<0.35*	[4]	*<0.35*	-	-	[4]	<0.21	-	-	-	-
PCB-1260	[4]	<0.21	[4]	[6]	[4]	<0.32	[4]	<0.32	[4]	<0.59	[4]	<0.59	[4]	<0.26	[4]	<0.26	[4]	*<0.34*	[4]	*<0.34*	[4]	*<0.28*	[4]	*<0.28*	-	-	[4]	<0.21	-	-	-	-
PCB-1016	[4]	<0.36	[4]	[6]	[4]	<0.18	[4]	<0.18	[4]	<0.55	[4]	<0.55	[4]	<0.29	[4]	<0.29	[4]	*<0.33*	[4]	*<0.33*	[4]	*<0.40*	[4]	*<0.40*	-	-	[4]	<0.23	-	-	-	-
Toxaphene	0.0003	*<0.53*	0.0003	[6]	0.0003	*<0.22*	0.0003	*<0.22*	0.0003	*<0.60*	0.0003	*<0.60*	0.0003	<0.48	0.0003	*<0.48*	0.0003	*<0.47*	0.0003	*<0.47*	0.0003	*<0.482*	0.0003	*<0.482*	-	-	0.0003	*<0.40*	-	-	-	-

Notes:

NS = no standard applicable to the designated use

T = total

D = dissolved

Bold text indicates a sample result greater than the WQS

Italicized text indicates a laboratory detection limit higher than the WQS

Footnotes:

[1] The Permittee shall report on any additional parameters that were monitored for seasonal stormwater sampling as required by Section 6.0 of this permit (Special Conditions).

[2] Analytical results shall be reported in the units specified for each category or parameter.

[3] Report the average flow rate for the sampling period (no more than 6 hours).

[4] Standard for total PCBs of 0.00006 µg/L FC, 19 µg/L PBC, 2 µg/L A&Wedw, and 0.001 µg/L Agl and AgL.

[5] Beginning with the Summer 2016 reporting, total 1,3-dichloropropylene is reported (prior reporting periods included cis and trans isomers) .

[6]The sample was lost during extraction at the laboratory due to the glassware breaking.

[7]No sample collected. See Table 8.1 for storm event data.

[8]No composite sample collected. See Table 8.1 for storm event data.

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OUTFALL ID: SR030	MONITORING SEASONS																													
	Summer: June 1 - October 31																													
RECEIVING WATER: Salt River	Winter: November 1 - May 31																													
DESIGNATED USES: A&Wedw, PBC, FC, AgI, AgL	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016[6]		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019[6]		Winter 2019/20		Summer 2020[6]		Winter 2020/21	
SAMPLING DATE(S):	SWQS	7/21/2013	SWQS	11/22/2013	SWQS	8/12/2014	SWQS	12/4/2014	SWQS	7/31/2015	SWQS	1/31/2016	-	-	SWQS	11/27/2016	SWQS	7/24/2017	SWQS	1/9/2018	SWQS	7/9/2018	SWQS	2/21/2019	-	-	SWQS	11/29/2019	-	-	SWQS	12/10/2020
MONITORING PARAMETERS [1,2]																														
Conventional Parameters																														
Flow [3] (cfs)	NS	40.52	NS	7.51	NS	69.2	NS	3.094	NS	30.58	NS	6.438	-	-	NS	0.387	NS	1.496	NS	1.14	NS	Trickle	NS	1.322	-	-	NS	0.99	-	-	NS	2.699
pH	6.5-9	8.14	6.5-9	8.49	6.5-9	8.17	6.5-9	8.15	6.5-9	7.9	6.5-9	8.09	-	-	6.5-9	7.96	6.5-9	6.68	6.5-9	7.59	6.5-9	7.53	6.5-9	8.63	-	-	6.5-9	7.20	-	-	6.5-9	8.61
Temperature (ºC)	Varies	26.5	Varies	18.5	Varies	26.2	Varies	19	Varies	30.5	Varies	13.5	-	-	Varies	17	Varies	29.8	Varies	17.4	Varies	28.2	Varies	9.4	-	-	Varies	11.8	-	-	Varies	13.7
Hardness (mg/L)	400	33.1	400	64.3	400	85.5	400	31	400	64.5	400	33.1	-	-	400	38	400	40.5	400	55.6	400	55.0	400	27.3	-	-	400	22.9	-	-	400	97.1
Total Dissolved Solids (TDS) (mg/L) [2]	NS	120	NS	204	NS	332	NS	96	NS	240	NS	114	-	-	NS	112	NS	134	NS	170	NS	210	NS	58	-	-	NS	76	-	-	NS	374
Total Suspended Solids (TSS) (mg/L) [2]	NS	392	NS	355	NS	251	NS	296	NS	124	NS	712	-	-	NS	145	NS	70	NS	528	NS	720	NS	270	-	-	NS	370	-	-	NS	258
Biochemical Oxygen Demand (BOD) (mg/L) [2]	NS	17	NS	53	NS	9	NS	14	NS	38	NS	20	-	-	NS	16	NS	15	NS	55	NS	41	NS	8	-	-	NS	13	-	-	NS	>44
Chemical Oxygen Demand (COD) (mg/L) [2]	NS	140	NS	340	NS	94	NS	160	NS	220	NS	250	-	-	NS	110	NS	120	NS	360	NS	380	NS	70	-	-	NS	150	-	-	NS	430

SR030	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016[6]		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019[6]		Winter 2019/20		Summer 2020[6]		Winter 2020/21	
SAMPLING DATE(S):	SWQS	7/21/2013	SWQS	11/22/2013	SWQS	8/12/2014	SWQS	12/4/2014	SWQS	7/31/2015	SWQS	1/31/2016	-	-	SWQS	11/27/2016	SWQS	7/24/2017	SWQS	1/9/2018	SWQS	7/9/2018	SWQS	2/21/2019	SWQS		SWQS	11/29/2019	SWQS		SWQS	12/10/2020
Inorganics																																
Cyanide, total (µg/L) [2]	41 T	*<50*	41 T	<5	41 T	<5	41 T	<5	41 T	<5	41 T	<5	-	-	41 T	<5	41 T	<5.0	41 T	<5.0	41 T	<5.0	41 T	<5	-	-	41 T	<5	-	-	41 T	<5
Nutrients (mg/L) [2]																																
Nitrate + Nitrite as N	NS	1.2	NS	2.1	NS	1	NS	0.8	NS	1.3	NS	1.5	-	-	NS	1	NS	0.8	NS	1.5	NS	1.3	NS	0.6	-	-	NS	0.4	-	-	NS	2.1
Ammonia as N	6.46	1.2	3.27	2.3	4.07	0.56	4.24	0.76	10.1	1.8	7.09	0.87	-	-	9.2	0.69	45	0.49	17.4	2.4	19.0	2.0	2.5	0.26	-	-	29.5	0.41	-	-	2.6	**3.8**
Total Kjeldahl Nitrogen (TKN)	NS	4.2	NS	6.3	NS	1.7	NS	2.3	NS	4.2	NS	3.8	-	-	NS	2.6	NS	2	NS	6.4	NS	7.2	NS	1.1	-	-	NS	1.8	-	-	NS	9.9
Total Phosphorus as P	NS	0.46	NS	1.4	NS	0.83	NS	0.39	NS	0.77	NS	1.8	-	-	NS	0.16	NS	0.43	NS	1.7	NS	3.0	NS	0.57	-	-	NS	1.2	-	-	NS	2.2
Ortho-Phosphorus as P	NS	0.4	NS	0.3	NS	0.1	NS	0.2	NS	<0.1	NS	0.2	-	-	NS	0.2	NS	0.1	NS	0.3	NS	0.3	NS	0.1	-	-	NS	<0.1	-	-	NS	0.4
Microbiological																																
Escherichia coli (*E. coli*) (CFU/100 mg or MPN/100 mL) [2]	575	**>2419.6**	575	**2419.6**	575	**>2,419.6**	575	**>2,419.6**	575	**1,553.10**	575	**4,320.00**	-	-	575	**9,320**	575	**20,140**	575	**1,986.30**	575	**21,870**	575	**3,690**	-	-	575	**9,590**	-	-	575	**4,100**
Total Metals (µg/L) [2]																																
Antimony	640 T 1,000 D	1.2 T 0.4 D	640 T 1,000 D	2.4 T 1.2 D	640 T 1,000 D	<25 TandD	640 T 1,000 D	<25 TandD	640 T 1,000 D	3.9 T <5.0 D	640 T 1,000 D	1.9 T <5.0 D	-	-	640 T 1,000 D	2 T <5 D	640 T 1,000 D	2 T <5.0 D	640 T 1,000 D	3.8 T <5.0 D	640 T 1,000 D	2.4 T <5.0 D	640 T 1,000 D	1.6 T <5.0 D	-	-	640 T 1,000 D	1.7 T <5.0 D	-	-	640 T 1,000 D	3.9 T <2.0 D
Arsenic	80 T 340 D	8.0 T 1.2 D	80 T 340 D	4.9 T 1.5 D	80 T 340 D	35 T <10 D	80 T 340 D	<10 TandD	80 T 340 D	4.2 T <5.0 D	80 T 340 D	7.8 T <5.0 D	-	-	80 T 340 D	3.2 T <5 D	80 T 340 D	3 T <5.0 D	80 T 340 D	6.2 T <5.0 D	80 T 340 D	11 T <5.0 D	80 T 340 D	2.3 T <5.0 D	-	-	80 T 340 D	5.4 T <5.0 D	-	-	80 T 340 D	9.1 T 2.7 D
Barium	98,000 T	236 T 14 D	98,000 T	160 T 28 D	98,000 T	670 T 13 D	98,000 T	206 T 38 D	98,000 T	110 T 33 D	98,000 T	256 T 16 D	-	-	98,000 T	69 T 16 D	98,000 T	58 T 21 D	98,000 T	221 T 28 D	98,000 T	407 T 31 D	98,000 T	5.8 T 10 D	-	-	98,000 T	171 T 8 D	-	-	98,000 T	252 T 38 D
Beryllium	84 T	0.94 T <0.15 D	84 T	0.45 T <0.06 D	84 T	2.2 T <2.0 D	84 T	<2 TandD	84 T	0.29 T <5.0 D	84 T	0.95 T <5.0 D	-	-	84 T	0.25 T <5 D	84 T	0.19 T <5.0 D	84 T	0.66 T <5.0 D	84 T 65 D	1.3 T <5.0 D	84 T 65 D	<0.15 T <5.0 D	-	-	84 T 65 D	0.57 T <5.0 D	-	-	84 T 65 D	<1.8 T <2.0 D
Cadmium	50 T 2.68 D	0.8 T <0.25 D	50 T 5.12 D	0.5 T <0.10 D	50 T 30.23 D	4.6 T <3.0 D	50 T 13.10 D	<3 TandD	50 T 5.14 D	0.5 T <5.0 D	50 T 2.68 D	0.7 T *<5.0 D*	-	-	50 T 1.49 D	0.3 T <0.25 D	50 T 1.60 D	<0.20 T <0.2 D	50 T 2.26 D	0.6 T <5.0 D	50 T 2.23	1.1 T <0.2 D	50 T 1.04	<0.25 T <0.25 D	-	-	50 T 0.86	0.4 T *<5.0 D*	-	-	50 T 4.13	<2.10 T <1.0 D
Chromium	1,000 T	23.9 T <2.00 D	1,000 T	13.7 T 1.5 D	1,000 T	57 T <10 D	1,000 T	17.8 T <10 D	1,000 T	11.6 T <5.0 D	1,000 T	24.8 T <5.0 D	-	-	1,000 T	28.1 T <5 D	1,000 T	6.3 T <5.0 D	1,000 T	21 T <5.0 D	1,000 T	37.3 T <5.0 D	1,000 T	6.8 T <5.0 D	-	-	1,000 T	17.4 T <5.0 D	-	-	1,000 T	25.6 T <10 D
Copper	500 T 4.74 D	65.8 T **10.6 D**	500 T 8.87 D	75.2 T **30.9 D**	500 T 49.62 D	210 T 10 D	500 T 22.03 D	75 T 14 D	500 T 8.89 D	58.6 T **33.5 D**	500 T 4.74 D	79.2 T **14.0 D**	-	-	500 T 5.40 D	26.6 T **10.3 D**	500 T 5.73 D	26.1 T **13.4 D**	500 T 7.73 D	87 T **28.5 D**	500 T 7.65	136 T **39.8 D**	500 T 3.95	23.2 T **12.4 D**	-	-	500 T 3.35	49.6 T **7.3 D**	-	-	500 T 13.07	85 T **35.9 D**
Lead	15 T 19.03 D	**60.8 T** 1.1 D	15 T 39.80 D	**27.6 T** 0.9 D	15 T 280.85 D	**110 T** <10 D	15 T 113.78 D	**71 T** <10 D	15 T 39.94 D	**38.6 T** 2.4 D	15 T 19.02 D	**45.0 T** <5.0 D	-	-	15 T 22.20 D	11.9 T <0.55 D	15 T 23.84 D	10.8 T 0.5 D	15 T 33.90 D	**49.3 T** 2.1 D	15 T 33.49	**104 T** 1.4 D	15 T 15.33	**17.3 T** 5 D	-	-	15 T 12.57	**53.2 T** <5.0 D	-	-	15 T 62.54	**48.0 T** 1.2 D
Mercury	10 T 2.4 D	0.04 T <0.020 D	10 T 2.4 D	<0.020 T <0.020 D	10 T 2.4 D	<0.2 TandD	10 T 2.4 D	<0.20 T <0.20 D	10 T 2.4 D	0.08 T <0.2 D	10 T 2.4 D	<0.062 T <0.2 D	-	-	10 T 2.4 D	<0.068 T <0.2 D	10 T 2.4 D	<0.20 T <0.20 D	10 T 2.4 D	<0.066 T <0.2 D	10 T 2.4 D	0.62 T <0.080 D	10 T 2.4 D	<0.042 T <0.2 D	-	-	10 T 2.4 D	<0.042 T <0.2 D	-	-	10 T 2.4 D	<0.118 T <0.2 D
Nickel	511 T 183.5 D	30.6 T 2.1 D	511 T 322.2 D	18.9 T 4.6 D	511 T 1,513 D	110 T <10 D	511 T 730 D	23 T <10 D	511 T 323 D	12.1 T 4.6 D	511 T 184 D	31.4 T <5.0 D	-	-	511 T 205.52 D	9 T <5	511 T 217.96 D	7.3 T <5.0 D	511 T 284.97 D	24.3 T <5.0 D	4,600 T 282.37	47.7 T <5.0 D	4,600 T 282.37	6.5 T <5.0 D	-	-	4,600 T 134.55	18 T <5.0 D	-	-	4,600 T 456.72	28.9 T 8.3 D
Selenium	20 T	<0.60 T <0.60 D	20 T	0.66 T 0.4 D	20 T	<2.0 TandD	20 T	<2.00 T <2.00 D	20 T	0.41 T <5.0 D	20 T	0.62 T <5.0 D	-	-	20 T	0.62 T <5 D	20 T	0.49 T <5.0 D	20 T	0.69 T <5.0 D	20 T	0.82 T <5.0 D	20 T	<0.55 T <5.0 D	-	-	20 T	<0.55 T <5.0 D	-	-	20 T	<4.05 T <2.0 D
Silver	4,667 T 0.482 D	0.2 T <0.15 D	4,667 T 1.502 D	0.2 T <0.15 D	4,667 T 34.91 D	<5 TandD	4,667 T 7.93 D	<5 TandD	4,667 T 1.51 D	<0.25 T *<5.0 D*	4,667 T 0.48 D	0.3 T *<5.0 D*	-	-	4,667 T 0.61 D	<0.45 T *<5 D*	4,667 T 0.68 D	<0.10 T *<5.0 D*	4,667 T 1.17 D	0.4 T *<5.0 D*	4,667 T 1.15	0.5 T *<5.0 D*	4,667 T 0.34	<0.15 T *<5.0 D*	-	-	4,667 T 0.25	1.4 T *<5.0 D*	-	-	4,667 T 3.06	<1.25 T *<5.0 D*
Thallium	1 T 700 D	0.20 T <0.20 D	1 T 700 D	<0.20 T <0.08 D	1 T 700 D	0.9 T <0.5 D	1 T 700 D	<0.5 TandD	1 T 700 D	0.26 T <5.0 D	1 T 700 D	0.37 T <5.0 D	-	-	1 T 700 D	<0.2 T <5 D	1 T 700 D	<0.10 T <5.0 D	1 T 700 D	0.18 T <5.0 D	7.2 T 700 D	0.31 T <5.0 D	7.2 T 700 D	<0.15 T <5.0 D	-	-	7.2 T 700 D	0.15 T <5.0 D	-	-	7.2 T 700 D	<2.75 T <2.0 D
Zinc	5,106 T 45.92 D	452 T 13.7 D	5,106 T 80.6 D	302 T 31.4 D	5,106 T 379.3 D	770 T <50 D	5,106 T 182.8 D	397 T <50 D	5,106 T 80.8 D	195 T 38.0 D	5,106 T 45.9 D	390 T 11.0 D	-	-	5,106 T 51.62 D	106 T 11.1 D	5,106 T 54.48 D	127 T 19.9 D	5,106 T 71.26 D	433 T 28.8 D	5,106 T 70.61	1,020 T 33.3 D	5,106 T 39.00	114 T 7.8 D	-	-	5,106 T 33.61	235 T *<50 D*	-	-	5,106 T 114.29	456 T 55.5 D
Organic Toxic Pollutants																																
Total Petroleum Hydrocarbons (TPH) (mg/L) [2]	NS	<11	NS	<11	NS	<10	NS	<10	NS	<12	NS	<5.8	-	-	NS	<4.2	NS	<6.9	NS	<6.6	NS	<7.4	NS	<4.3	-	-	NS	<6.3	-	-	NS	<5.5
Total Oil and Grease (mg/L) [2]	NS	<5.7	NS	6.4	NS	<5.0	NS	<5.0	NS	11	NS	<5.8	-	-	NS	<4.2	NS	<5.8	NS	<5.5	NS	<6.2	NS	<4.3	-	-	NS	<6.3	-	-	NS	<6.6
VOCs, Semi-VOCs, and Pesticides (µg/L) [2]																																
Acrolein	1.9	<0.20	1.9	<0.20	1.9	*<2.00*	1.9	<0.40	1.9	<0.78	1.9	<0.41	-	-	1.9	0.44	1.9	0.79	1.9	<0.79	1.9	*<5.0*	1.9	<0.55	-	-	1.9	<0.55	-	-	1.9	<0.950
Acrylonitrile	0.2	<0.16	0.2	<0.16	0.2	*<0.70*	0.2	<0.14	0.2	*<0.53*	0.2	*<0.42*	-	-	0.2	*<0.42*	0.2	*<0.59*	0.2	*<0.59*	0.2	*<5.0*	0.2	*<0.57*	-	-	0.2	*<0.57*	-	-	0.2	<0.524
Benzene	114	<1.20	114	<0.24	114	<0.65	114	<0.13	114	<0.46	114	<0.46	-	-	114	<0.29	114	<1.30	114	<0.26	140	<1.30	140	<0.33	-	-	140	<0.33	-	-	140	<0.31

SR030	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016[6]		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019[6]		Winter 2019/20		Summer 2020[6]		Winter 2020/21	
SAMPLING DATE(S):	SWQS	7/21/2013	SWQS	11/22/2013	SWQS	8/12/2014	SWQS	12/4/2014	SWQS	7/31/2015	SWQS	1/31/2016	-	-	SWQS	11/27/2016	SWQS	7/24/2017	SWQS	1/9/2018	SWQS	7/9/2018	SWQS	2/21/2019	SWQS		SWQS	11/29/2019	SWQS		SWQS	12/10/2020
Bromoform	133	<2.35	133	<0.47	133	<1.40	133	<0.28	133	<0.68	133	<0.68	-	-	133	<0.33	133	<1.05	133	<0.21	133	<1.05	133	<0.81	-	-	133	<0.81	-	-	133	<0.37
Carbon tetrachloride	2	<1.30	2	<0.26	2	<1.15	2	<0.23	2	<0.31	2	<0.31	-	-	2	<0.20	2	<1.50	2	<0.30	2	<1.50	2	<0.27	-	-	2	<0.27	-	-	2	<0.32
Chlorobenzene	1,553	<0.80	1,553	<0.16	1,553	<0.65	1,553	<0.13	1,553	<0.50	1,553	<0.50	-	-	1,553	<0.33	1,553	<1.15	1,553	<0.23	1,553	<1.15	1,553	<0.70	-	-	1,553	<0.70	-	-	1,553	<0.42
Chlorodibromomethane	13	<0.90	13	<0.18	13	2.6	13	<0.24	13	<0.61	13	<0.61	-	-	13	<0.32	13	<1.20	13	<0.24	13	<1.20	13	<0.70	-	-	13	<0.70	-	-	13	<0.21
Chloroethane (ethyl chloride)	NS	<1.10	NS	<0.22	NS	<0.95	NS	<0.19	NS	<0.40	NS	<0.40	-	-	NS	<0.33	NS	<1.40	NS	<0.28	NS	<1.40	NS	<0.33	-	-	NS	<0.33	-	-	NS	<0.66
2-Chloroethylvinyl ether	180,000	<0.22	180,000	<0.22	180,000	<0.95	180,000	<0.19	180,000	<0.53	180,000	<0.43	-	-	180,000	<0.43	180,000	<0.65	180,000	<0.65	180,000	<5.0	180,000	<0.52	-	-	180,000	<0.52	-	-	180,000	<0.333
Chloroform	2,133	<1.15	2,133	<0.23	2,133	0.92	2,133	<0.14	2,133	<0.49	2,133	<0.49	-	-	2,133	<0.32	2,133	<1.20	2,133	<0.24	470	<1.20	470	<0.31	-	-	470	<0.31	-	-	470	<0.31
Dichlorobromomethane	17	<1.15	17	<0.23	17	2.2	17	<0.15	17	<0.49	17	<0.49	-	-	17	<0.29	17	<1.30	17	<0.26	17	<1.30	17	<0.52	-	-	17	<0.52	-	-	17	<0.21
1,1-Dichloroethane	NS	<1.30	NS	<0.26	NS	<0.95	NS	<0.19	NS	<0.42	NS	<0.42	-	-	NS	<0.29	NS	<1.35	NS	<0.27	NS	<1.35	NS	<0.32	-	-	NS	<0.32	-	-	NS	<0.30
1,2-Dichloroethane	37	<1.25	37	<0.25	37	<0.55	37	<0.11	37	<0.51	37	<0.51	-	-	37	<0.35	37	<1.30	37	<0.26	37	<1.30	37	<0.28	-	-	37	<0.28	-	-	37	<0.28
1,1-Dichloroethylene	7,143	<1.40	7,143	<0.28	7,143	<1.35	7,143	<0.27	7,143	<0.34	7,143	<0.34	-	-	7,143	<0.19	7,143	<1.60	7,143	<0.32	7,143	<1.60	7,143	<0.40	-	-	7,143	<0.40	-	-	7,143	<0.41
1,2-Dichloropropane	17,518	<1.25	17,518	<0.25	17,518	<0.90	17,518	<0.18	17,518	<0.49	17,518	<0.49	-	-	17,518	<0.32	17,518	<1.60	17,518	<0.32	17,518	<1.60	17,518	<0.93	-	-	17,518	<0.93	-	-	17,518	<0.33
1,3-Dichloropropylene[5]	42	cis<1.20 trans<1.10	42	cis<0.24 trans<0.22	42	<0.65	42	<0.13	42	cis <0.51 trans <0.50	42	cis <0.51 trans <0.50	-	-	42	<0.28	42	<1.05	42	<0.21	42	<1.05	42	<0.43	-	-	42	<0.43	-	-	42	<0.15
Ethylbenzene	2,133	<0.65	2,133	<0.13	2,133	<0.75	2,133	<0.15	2,133	<0.46	2,133	<0.46	-	-	2,133	<0.29	2,133	<1.15	2,133	<0.23	2,133	<1.15	2,133	<0.61	-	-	2,133	<0.61	-	-	2,133	<0.42
Methyl bromide	299	<0.95	299	<0.19	299	<0.90	299	<0.18	299	<0.46	299	<0.46	-	-	299	<0.28	299	<1.15	299	<0.23	299	<1.15	299	<0.33	-	-	299	<0.33	-	-	299	<0.39
Methyl chloride	270,000	<1.40	270,000	<0.28	270,000	<1.15	270,000	<0.23	270,000	<0.46	270,000	<0.46	-	-	270,000	<0.28	270,000	<1.85	270,000	<0.37	270,000	<1.85	270,000	<0.33	-	-	270,000	<0.33	-	-	270,000	<0.57
Methylene chloride	593	<1.00	593	<0.20	593	<1.00	593	<0.20	593	<0.81	593	<0.81	-	-	593	<0.31	593	<4.00	593	<0.80	593	<4.00	593	<0.44	-	-	593	<0.44	-	-	593	<0.41
1,1,2,2-Tetrachloroethane	4	<2.00	4	<0.40	4	<1.75	4	<0.35	4	<0.80	4	<0.80	-	-	4	<0.33	4	<1.55	4	<0.31	4	<1.55	4	<0.83	-	-	4	<0.83	-	-	4	<0.46
Tetrachloroethylene	261	<1.05	261	<0.21	261	<0.65	261	<0.13	261	<0.35	261	<0.35	-	-	261	<0.23	261	<1.45	261	<0.29	261	<1.45	261	<0.38	-	-	261	<0.38	-	-	261	<0.38
Toluene	8,700	<0.95	8,700	<0.19	8,700	<0.55	8,700	<0.11	8,700	<0.43	8,700	<0.43	-	-	8,700	<0.28	8,700	<1.25	8,700	<0.25	8,700	<1.25	8,700	<0.38	-	-	8,700	<0.38	-	-	8,700	<0.35
trans-1,2-Dichloroethylene	10,127	<1.25	10,127	<0.25	10,127	<0.90	10,127	<0.18	10,127	<0.38	10,127	<0.38	-	-	10,127	<0.24	10,127	<1.25	10,127	<0.25	10,127	<1.25	10,127	<0.32	-	-	10,127	<0.32	-	-	10,127	<0.32
1,1,1-Trichloroethane	1,000	<1.00	1,000	<0.20	1,000	<0.70	1,000	<0.14	1,000	<0.34	1,000	<0.34	-	-	1,000	<0.23	1,000	<1.40	1,000	<0.28	1,000	<1.40	1,000	<0.31	-	-	1,000	<0.31	-	-	1,000	<0.32
1,1,2-Trichloroethane	16	<0.75	16	<0.15	16	<0.65	16	<0.13	16	<0.60	16	<0.60	-	-	16	<0.29	16	<1.50	16	<0.30	16	<1.50	16	<0.68	-	-	16	<0.68	-	-	16	<0.37
Trichloroethylene	29	<0.75	29	<0.15	29	<1.10	29	<0.22	29	<0.48	29	<0.48	-	-	29	<0.28	29	<1.80	29	<0.36	29	<1.80	29	<0.46	-	-	29	<0.46	-	-	29	<0.38
1,2,4-Trimethylbenzene	NS	<5.0	NS	<1.0	NS	<10.0	NS	<1.0	NS	<1.0	NS	<1.0	-	-	NS	<1.0	NS	<5.0	NS	<1.0	NS	<5.0	NS	<1.0	-	-	NS	<1.0	-	-	NS	<1.0
1,3,5-Trimethylbenzene	NS	<5.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<1.0	NS	<1.0	-	-	NS	<1.0	NS	<5.0	NS	<1.0	NS	<5.0	NS	<1.0	-	-	NS	<1.0	-	-	NS	<1.0
Vinyl chloride	5	<1.00	5	<0.20	5	<1.10	5	<0.22	5	<0.35	5	<0.35	-	-	5	<0.24	5	<2.10	5	<0.42	5	<2.10	5	<0.35	-	-	5	<0.35	-	-	5	<0.47
Xylenes, Total	186,667	<1.50	186,667	<0.30	186,667	<1.25	186,667	<0.13	186,667	<0.52	186,667	<0.52	-	-	186,667	<0.32	186,667	<1.15	186,667	<0.23	186,667	<1.15	186,667	<0.70	-	-	186,667	<0.70	-	-	186,667	<0.33
Acid Compounds (µg/L) [2]																																
2-Chlorophenol	30	*<214.5*	30	*<45.5*	30	<1.48	30	<1.48	30	<3.10	30	<3.10	-	-	30	<2.92	30	<4.23	30	*<211.5*	30	<4.52	30	<4.52	-	-	30	<4.52	-	-	30	<1.01
2,4-Dichlorophenol	59	*<211.0*	59	<44.7	59	<1.65	59	<1.65	59	<2.81	59	<2.81	-	-	59	<3.21	59	<4.82	59	*<241.0*	59	<4.77	59	<4.77	-	-	59	<4.77	-	-	59	<1.37
2,4-Dimethylphenol	171	<114.0	171	<24.2	171	<2.20	171	<2.20	171	<2.64	171	<2.64	-	-	171	<1.32	171	<7.07	171	*<353.5*	171	<2.04	171	<2.04	-	-	171	<2.04	-	-	171	<2.57
4,6-Dinitro-o-cresol	310	<149.0	310	<31.6	310	<1.22	310	<1.22	310	<1.49	310	<1.49	-	-	310	<2.27	310	<4.69	310	<234.5	310	<3.36	310	<3.36	-	-	310	<3.36	-	-	310	<1.27
2,4-Dinitrophenol	110	*<129.5*	110	<27.5	110	<1.13	110	<1.13	110	<2.21	110	<2.21	-	-	110	<2.64	110	<5.11	110	*<255.5*	110	<3.41	110	<3.41	-	-	110	<3.41	-	-	110	<0.92
2-Nitrophenol	NS	<205.5	NS	<43.6	NS	<1.57	NS	<1.57	NS	<2.84	NS	<2.84	-	-	NS	<2.61	NS	<7.83	NS	<391.5	NS	<4.68	NS	<4.68	-	-	NS	<4.68	-	-	NS	<0.94
4-Nitrophenol	4,100	<233.5	4,100	<49.5	4,100	<1.14	4,100	2.6	4,100	<2.98	4,100	<2.98	-	-	4,100	<2.03	4,100	<4.03	4,100	<201.5	4,100	<3.52	4,100	<3.52	-	-	4,100	<3.52	-	-	4,100	<1.70
p-Chloro-m-cresol	15	*<220.5*	15	*<46.7*	15	<1.65	15	<1.65	15	<1.87	15	<1.87	-	-	15	<3.10	15	<4.05	15	*<202.5*	15	<4.76	15	<4.76	-	-	15	<4.76	-	-	15	<1.34
Pentachlorophenol	28.558	<168.0	40.564	<35.6	29.427	<1.39	28.848	<1.39	22.41	7.4	27.137	<1.47	-	-	23.8	<3.44	6.58	*<7.36*	16.41	*<368.0*	15.45	<4.00	46.67	<4.00	-	-	11.09	<4.00	-	-	45.74	<1.92
Phenol	37	*<177.5*	37	*<37.6*	37	<1.34	37	<1.34	37	<2.30	37	<2.30	-	-	37	2.2	37	<3.99	37	*<199.5*	37	<4.08	37	<4.08	-	-	37	<4.08	-	-	37	4.0
2,4,6-Trichlorophenol	2	*<239.5*	2	*<50.8*	2	<1.89	2	<1.89	2	*<2.60*	2	*<2.60*	-	-	2	<3.28	2	*<4.74*	2	*<237.0*	2	*<5.27*	2	*<5.27*	-	-	2	*<5.27*	-	-	2	<1.61
Bases/Neutrals (µg/L) [2]																																
Acenaphthene	198	<67.0	198	<14.2	198	<1.03	198	<1.03	198	<0.35	198	<0.35	-	-	198	<1.02	198	<1.88	198	<94.0	198	<1.19	198	<1.19	-	-	198	<1.19	-	-	198	<0.65
Acenaphthylene	NS	<86.5	NS	<18.3	NS	<1.00	NS	<1.00	NS	<1.23	NS	<1.23	-	-	NS	<6.10	NS	<1.75	NS	<87.5	NS	<1.41	NS	<1.41	-	-	NS	<1.41	-	-	NS	<0.56
Anthracene	74	*<86.5*	74	<18.3	74	<2.88	74	<2.88	74	<0.44	74	<0.44	-	-	74	<1.96	74	<2.62	74	*<131.0*	74	<1.20	74	<1.20	-	-	74	<1.20	-	-	74	<0.52
Benzo(a)anthracene	0.02	*<86.5*	0.02	*<18.3*	0.02	*<1.08*	0.02	*<1.08*	0.02	*<0.38*	0.02	*<0.38*	-	-	0.02	*<1.57*	0.02	*<1.96*	0.02	*<98.0*	0.02	*<1.02*	0.02	*<1.02*	-	-	0.02	*<1.02*	-	-	0.02	*<0.77*
Benzo(a)pyrene	0.02	*<93.5*	0.02	*<19.8*	0.02	*<3.77*	0.02	*<3.77*	0.02	*<1.41*	0.02	*<1.41*	-	-	0.02	*<3.12*	0.02	*<3.77*	0.02	*<188.5*	0.02	*<1.08*	0.02	*<1.08*	-	-	0.02	*<1.08*	-	-	0.02	*<1.50*
Benzo(b)fluoranthene	0.02	*<121.5*	0.02	*<25.8*	0.02	*<1.46*	0.02	*<1.46*	0.02	*<1.06*	0.02	*<1.06*	-	-	0.02	*<1.28*	0.02	*<2.17*	0.02	*<108.5*	0.02	*<0.38*	0.02	*<0.38*	-	-	0.02	*<0.38*	-	-	0.02	*<2.36*
Benzo(g,h,i)perylene	NS	<86.5	NS	<18.3	NS	<1.29	NS	<1.29	NS	<0.72	NS	<0.72	-	-	NS	<2.83	NS	<2.51	NS	<125.5	NS	<1.14	NS	<1.14	-	-	NS	<1.14	-	-	NS	<1.83
Benzo(k)fluoranthene	0.02	*<70.0*	0.02	*<14.8*	0.02	*<1.04*	0.02	*<1.04*	0.02	*<0.35*	0.02	*<0.35*	-	-	0.02	*<1.76*	0.02	*<2.33*	0.02	*<116.5*	0.02	*<1.03*	0.02	*<1.03*	-	-	0.02	*<1.03*	-	-	0.02	*<1.83*
Chrysene	0.02	*<74.0*	0.02	*<15.7*	0.02	*<1.41*	0.02	*<1.41*	0.02	*<0.46*	0.02	*<0.46*	-	-	0.02	*<1.08*	0.02	*<1.96*	0.02	*<98.0*	0.02	*<1.16*	0.02	*<1.16*	-	-	0.02	*<1.16*	-	-	0.02	*<0.77*
Dibenz(a,h)anthracene	0.02	*<99.0*	0.02	*<21.0*	0.02	*<1.24*	0.02	*<1.24*	0.02	*<0.47*	0.02	*<0.47*	-	-	0.02	*<1.93*	0.02	*<6.04*	0.02	*<302.0*	0.02	*<1.02*	0.02	*<1.02*	-	-	0.02	*<1.02*	-	-	0.02	*<1.58*
1,2-Dichlorobenzene	205	<13.5	205	<2.9	205	<1.76	205	<1.76	205	<1.04	205	<1.04	-	-	205	<0.58	205	<1.33	205	<0.30	205	<1.43	205	<1.43	-	-	205	<1.43	-	-	205	<0.85
1,3-Dichlorobenzene	2,500	<56.5	2,500	<12.0	2,500	<1.74	2,500	<1.74	2,500	<0.47	2,500	<0.47	-	-	2,500	<0.52	2,500	<1.25	2,500	<0.25	2,500	<1.39	2,500	<1.39	-	-	2,500	<1.39	-	-	2,500	<0.87
1,4-Dichlorobenzene	2,000	<52.5	2,000	<11.1	2,000	<1.56	2,000	<1.56	2,000	<1.28	2,000	<1.28	-	-	2,000	<0.50	2,000	<1.25	2,000	<0.29	2,000	<1.48	2,000	<1.48	-	-	2,000	<1.48	-	-	2,000	<0.93
3,3-Dichlorobenzidine	0.03	*<1363.5*	0.03	*<289.1*	0.03	*<6.06*	0.03	*<6.06*	0.03	*<11.60*	0.03	*<11.60*	-	-	0.03	*<23.45*	0.03	*<25.43*	0.03	*<1,271.5*	0.03	*<6.99*	0.03	*<6.99*	-	-	0.03	*<6.99*	-	-	0.03	*<5.94*
Diethyl phthalate	8,767	<95.0	8,767	<20.1	8,767	<2.37	8,767	<2.37	8,767	0.6	8,767	0.5	-	-	8,767	<1.07	8,767	<1.99	8,767	<99.5	8,767	<1.08	8,767	<1.08	-	-	8,767	<1.08	-	-	8,767	<7.57
Dimethyl phthalate	17,000	<89.5	17,000	<19.0	17,000	<2.42	17,000	<2.42	17,000	<0.47	17,000	<0.47	-	-	17,000	<0.58	17,000	<1.91	17,000	<95.5	17,000	<1.17	17,000	<1.17	-	-	17,000	<1.17	-	-	17,000	<0.46
Di-n-butyl phthalate	470	<111.5	470	<23.6	470	<1.85	470	<1.85	470	<0.31	470	<0.31	-	-	470	<1.37	470	<2.35	470	<117.5	470	<1.12	470	<1.12	-	-	470	<1.12	-	-	470	<0.95
2,4-Dinitrotoluene	421	<102.5	421	<21.7	421	<2.12	421	<2.12	421	<0.26	421	<0.26	-	-	421	<1.30	421	<3.10	421	<155.0	421	<1.17	421	<1.17	-	-	421	<1.17	-	-	421	<0.80
2,6-Dinitrotoluene	3,733	<126.0	3,733	<26.7	3,733	<1.12	3,733	<1.12	3,733	<0.38	3,733	<0.38	-	-	3,733	<1.39	3,733	<2.89	3,733	<144.5	3,733	<1.13	3,733	<1.13	-	-	3,733	<1.13	-	-	3,733	<0.62
Di-n-octyl phthalate	373,333	<144.0	373,333	<30.5	373,333	<1.10	373,333	<1.10	373,333	<1.28	373,333	<1.28	-	-	373,333	<1.67	373,333	<5.50	373,333	<275.0	373,333	<2.05	373,333	<2.05	-	-	373,333	<2.05	-	-	373,333	<2.32
1,2-Diphenylhydrazine (as azobenzene)	NS	<116.5	NS	<24.7	NS	<6.70	NS	<6.70	NS	<1.06	NS	<1.06	-	-	NS	<7.46	NS	<2.15	NS	<107.5	0.2	*<1.11*	0.2	*<1.11*	-	-	0.2	*<1.11*	-	-	0.2	*<1.10*
Fluoranthene	28	*<89.5*	28	<19.0	28	<1.35	28	<1.35	28	<0.27	28	<0.27	-	-	28	<1.06	28	<3.08	28	*<154.0*	28	<1.27	28	<1.27	-	-	28	<1.27	-	-	28	<0.48
Fluorene	1,067	<77.0	1,067	<16.3	1,067	<4.81	1,067	<4.81	1,067	<0.29	1,067	<0.29	-	-	1,067	<0.51	1,067	<2.87	1,067	<143.5	1,067	<1.18	1,067	<1.18	-	-	1,067	<1.18	-	-	1,067	<0.48
Hexachlorobenzene	0.0003	*<69.5*	0.0003	*<14.7*	0.0003	*<1.23*	0.0003	*<1.23*	0.0003	*<0.34*	0.0003	*<0.34*	-	-	0.0003	*<0.47*	0.0003	*<1.57*	0.0003	*<78.5*	0.0003	*<1.01*	0.0003	*<1.01*	-	-	0.0003	*<1.01*	-	-	0.0003	*<0.35*
Hexachlorobutadiene	18	<16.5	18	<3.5	18	<1.82	18	<1.82	18	<1.67	18	<1.67	-	-	18	<0.41	18	<1.00	18	*<50.0*	18	<1.20	18	<1.20	-	-	18	<1.20	-	-	18	<0.44
Hexachlorocyclopentadiene	3.5	*<113.5*	3.5	*<24.1*	3.5	<1.23	3.5	<1.23	3.5	<1.53	3.5	<1.53	-	-	3.5	<2.16	3.5	*<6.10*	3.5	*<305.0*	3.5	<3.07	3.5	<3.07	-	-	3.5	<3.07	-	-	3.5	<1.26
Hexachloroethane	3.3	*<20.0*	3.3	*<4.2*	3.3	<1.62	3.3	<1.62	3.3	<1.23	3.3	<1.23	-	-	3.3	<0.54	3.3	<1.49	3.3	*<74.5*	3.3	<1.35	3.3	<1.35	-	-	3.3	<1.35	-	-	3.3	<0.34
Indeno(1,2,3-cd)pyrene	0.2	*<101.5*	0.2	*<21.5*	0.2	*<1.39*	0.2	*<1.39*	0.2	*<0.62*	0.2	*<0.62*	-	-	0.2	**4.89**	0.2	*<6.11*	0.2	*<305.5*	0.49	*<1.07*	0.49	*<1.07*	-	-	0.49	*<1.07*	-	-	0.49	*<2.27*

SR030	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016[6]		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019[6]		Winter 2019/20		Summer 2020[6]		Winter 2020/21	
SAMPLING DATE(S):	SWQS	7/21/2013	SWQS	11/22/2013	SWQS	8/12/2014	SWQS	12/4/2014	SWQS	7/31/2015	SWQS	1/31/2016	-	-	SWQS	11/27/2016	SWQS	7/24/2017	SWQS	1/9/2018	SWQS	7/9/2018	SWQS	2/21/2019	SWQS		SWQS	11/29/2019	SWQS		SWQS	12/10/2020
Isophorone	961	<70.5	961	<14.9	961	<2.14	961	<2.14	961	<0.37	961	<0.37	-	-	961	<0.51	961	<1.77	961	<88.5	961	<1.32	961	<1.32	-	-	961	<1.32	-	-	961	<1.38
Naphthalene	1,524	<60.0	1,524	<12.7	1,524	<1.83	1,524	<1.83	1,524	<0.36	1,524	<0.36	-	-	1,524	<0.49	1,524	<1.54	1,524	<77.0	1,524	<1.48	1,524	<1.48	-	-	1,524	<1.48	-	-	1,524	<0.35
Nitrobenzene	138	<61.5	138	<13.0	138	<2.10	138	<2.10	138	<1.26	138	<1.26	-	-	138	<0.44	138	<1.80	138	<90.0	138	<1.55	138	<1.55	-	-	138	<1.55	-	-	138	<0.86
n-Nitrosodimethylamine	0.03	*<60.0*	0.03	*<12.7*	0.03	*<1.00*	0.03	*<1.00*	0.03	*<1.13*	0.03	*<1.13*	-	-	0.03	*<0.54*	0.03	*<1.62*	0.03	*<81.0*	0.03	*<1.67*	0.03	*<1.67*	-	-	0.03	*<1.67*	-	-	0.03	*<0.67*
n-Nitrosodi-n-propylamine	0.5	*<75.5*	0.5	*<16.0*	0.5	*<1.15*	0.5	*<1.15*	0.5	*<1.17*	0.5	*<1.17*	-	-	0.5	*<1.02*	0.5	*<1.65*	0.5	*<82.5*	0.5	*<1.65*	0.5	*<1.65*	-	-	0.5	*<1.65*	-	-	0.5	*<2.38*
n-Nitrosodiphenylamine	6	*<152.0*	6	<32.2	6	<3.57	6	<3.57	6	<1.15	6	<1.15	-	-	6	<1.67	6	<3.13	6	*<156.5*	6	<1.07	6	<1.07	-	-	6	<1.07	-	-	6	<0.84
Phenanthrene	30	*<81.5*	30	<17.3	30	<1.39	30	<1.39	30	<0.31	30	<0.31	-	-	30	<0.49	30	<3.02	30	*<151.0*	30	<1.33	30	<1.33	-	-	30	<1.33	-	-	30	<0.30
Pyrene	800	<82.0	800	<17.4	800	<3.86	800	<3.86	800	<0.67	800	<0.67	-	-	800	<3.21	800	<3.38	800	<169.0	800	<1.20	800	<1.20	-	-	800	<1.20	-	-	800	<0.21
1,2,4-Trichlorobenzene	70	<16.0	70	<3.4	70	<1.69	70	<1.69	70	<1.04	70	<1.04	-	-	70	<0.55	70	<1.21	70	<60.5	70	<1.34	70	<1.34	-	-	70	<1.34	-	-	70	<1.00
Pesticides (µg/L) [2]																																
Aldrin	0.00005	*<0.046*	0.00005	*<0.016*	0.00005	*<0.027*	0.00005	*<0.027*	0.00005	*<0.012*	0.00005	*<0.012*	-	-	0.00005	*<0.019*	0.00005	*<0.013*	0.00005	*<0.013*	0.00005	**0.099**	0.00005	*<0.010*	-	-	0.00005	*<0.045*	-	-	0.00005	*<0.0038*
Alpha-BHC	0.005	*<0.038*	0.005	*<0.017*	0.005	*<0.021*	0.005	*<0.021*	0.005	*<0.058*	0.005	*<0.058*	-	-	0.005	*<0.010*	0.005	*<0.015*	0.005	**0.036**	0.005	*<0.012*	0.005	*<0.012*	-	-	0.005	*<0.033*	-	-	0.005	*<0.0031*
Beta-BHC	0.02	*<0.095*	0.02	*<0.092*	0.02	*<0.072*	0.02	*<0.072*	0.02	*<0.063*	0.02	*<0.063*	-	-	0.02	*<0.049*	0.02	*<0.083*	0.02	*<0.083*	0.02	*<0.099*	0.02	*<0.099*	-	-	0.02	*<0.041*	-	-	0.02	*<0.1802*
Gamma-BHC	1	<0.033	1	<0.023	1	<0.034	1	<0.034	1	<0.058	1	<0.058	-	-	1	<0.019	1	<0.020	1	<0.020	1	<0.013	1	<0.013	-	-	1	<0.034	-	-	1	<0.0034
Delta-BHC	1,600	<0.032	1,600	<0.018	1,600	<0.021	1,600	<0.021	1,600	<0.066	1,600	<0.066	-	-	1,600	<0.035	1,600	<0.012	1,600	<0.012	1,600	<0.045	1,600	<0.045	-	-	1,600	<0.041	-	-	1,600	<0.0155
Chlordane	0.0008	*<0.16*	0.0008	*<0.020*	0.0008	*<0.14*	0.0008	*<0.14*	0.0008	*<0.36*	0.0008	*<0.36*	-	-	0.0008	*<0.61*	0.0008	*<0.29*	0.0008	*<0.29*	0.0008	*<0.33*	0.0008	*<0.33*	-	-	0.0008	*<0.17*	-	-	0.0008	*<0.19*
4,4'-DDT	0.0002	*<0.029*	0.0002	*<0.016*	0.0002	*<0.025*	0.0002	*<0.025*	0.0002	*<0.017*	0.0002	*<0.017*	-	-	0.0002	*<0.011*	0.0002	*<0.020*	0.0002	*<0.020*	0.0002	*<0.009*	0.0002	*<0.009*	-	-	0.0002	*<0.032*	-	-	0.0002	*<0.0014*
4,4'-DDE	0.0002	**0.037**	0.0002	*<0.018*	0.0002	*<0.010*	0.0002	**0.027**	0.0002	*<0.013*	0.0002	*<0.013*	-	-	0.0002	<0.020	0.0002	*<0.019*	0.0002	**0.076**	0.0002	*<0.015*	0.0002	*<0.015*	-	-	0.0002	*<0.043*	-	-	0.0002	*<0.0034*
4,4'-DDD	0.0002	*<0.023*	0.0002	*<0.014*	0.0002	*<0.031*	0.0002	*<0.031*	0.0002	*<0.021*	0.0002	*<0.021*	-	-	0.0002	*<0.021*	0.0002	*<0.023*	0.0002	*<0.023*	0.0002	*<0.017*	0.0002	*<0.017*	-	-	0.0002	*<0.039*	-	-	0.0002	*<0.0022*
Dieldrin	0.00005	*<0.028*	0.00005	*<0.022*	0.00005	*<0.030*	0.00005	*<0.030*	0.00005	*<0.060*	0.00005	*<0.060*	-	-	0.00005	*<0.019*	0.00005	*<0.015*	0.00005	*<0.015*	0.00005	*<0.012*	0.00005	*<0.012*	-	-	0.00005	*<0.031*	-	-	0.00005	*<0.0037*
Alpha-endosulfan	0.2	<0.034	0.2	<0.018	0.2	<0.018	0.2	<0.018	0.2	<0.072	0.2	<0.072	-	-	0.2	<0.018	0.2	<0.015	0.2	0.085	0.2	<0.020	0.2	0.075	-	-	0.2	<0.033	-	-	0.2	<0.0058
Beta-endosulfan	0.2	<0.034	0.2	<0.013	0.2	<0.032	0.2	<0.032	0.2	<0.019	0.2	<0.019	-	-	0.2	<0.021	0.2	<0.014	0.2	<0.014	0.2	<0.014	0.2	<0.014	-	-	0.2	<0.035	-	-	0.2	<0.0021
Endosulfan sulfate	0.2	<0.025	0.2	<0.014	0.2	<0.008	0.2	0.028	0.2	<0.016	0.2	<0.016	-	-	0.2	<0.022	0.2	<0.019	0.2	<0.019	0.2	<0.017	0.2	<0.017	-	-	0.2	<0.035	-	-	0.2	<0.0018
Endrin	0.004	*<0.035*	0.004	*<0.016*	0.004	*<0.017*	0.004	*<0.017*	0.004	*<0.023*	0.004	*<0.023*			0.004	*<0.042*	0.004	*<0.040*	0.004	*<0.040*	0.004	*<0.042*	0.004	*<0.042*	-	-	0.004	*<0.033*	-	-	0.004	*<0.0082*
Endrin aldehyde	0.09	<0.038	0.09	<0.023	0.09	<0.032	0.09	<0.032	0.09	<0.026	0.09	<0.026	-	-	0.09	<0.024	0.09	<0.034	0.09	<0.034	0.09	<0.068	0.09	<0.068	-	-	0.09	<0.090	-	-	0.09	*<0.003*
Heptachlor	0.00008	*<0.035*	0.00008	*<0.018*	0.00008	*<0.027*	0.00008	*<0.027*	0.00008	*<0.035*	0.00008	*<0.035*	-	-	0.00008	**0.04**	0.00008	*0.031*	0.00008	*<0.019*	0.00008	**0.056**	0.00008	*<0.011*	-	-	0.00008	*<0.069*	-	-	0.00008	*<0.0297*
Heptachlor epoxide	0.00004	*<0.032*	0.00004	*<0.020*	0.00004	*<0.008*	0.00004	*<0.008*	0.00004	*<0.062*	0.00004	*<0.062*	-	-	0.00004	*<0.020*	0.00004	*<0.016*	0.00004	*<0.016*	0.00004	*<0.012*	0.00004	*<0.012*	-	-	0.00004	*<0.035*	-	-	0.00004	*<0.0015*
PCB-1242	[4]	<0.41	[4]	<0.55	[4]	<0.37	[4]	<0.37	[4]	<0.14	[4]	<0.14	-	-	[4]	<0.72	[4]	*<0.33*	[4]	*<0.33*	[4]	*<0.28*	[4]	*<0.28*	-	-	[4]	<0.26	-	-	[4]	*<0.0831*
PCB-1254	[4]	<0.20	[4]	<0.28	[4]	<0.23	[4]	<0.23	[4]	<0.20	[4]	<0.20	-	-	[4]	<0.22	[4]	*<0.17*	[4]	*<0.17*	[4]	*<0.21*	[4]	*<0.21*	-	-	[4]	<0.25	-	-	[4]	*<0.0831*
PCB-1221	[4]	<0.68	[4]	<0.85	[4]	<0.22	[4]	<0.22	[4]	<0.64	[4]	<0.64	-	-	[4]	<0.46	[4]	*<0.36*	[4]	*<0.36*	[4]	*<0.50*	[4]	*<0.50*	-	-	[4]	<0.25	-	-	[4]	*<0.0831*
PCB-1232	[4]	<0.66	[4]	<0.34	[4]	<0.55	[4]	<0.55	[4]	<0.37	[4]	<0.37	-	-	[4]	<0.90	[4]	*<0.40*	[4]	*<0.40*	[4]	*<0.48*	[4]	*<0.48*	-	-	[4]	<0.28	-	-	[4]	*<0.0831*
PCB-1248	[4]	<0.78	[4]	<0.27	[4]	<0.19	[4]	<0.19	[4]	<0.22	[4]	<0.22	-	-	[4]	<0.24	[4]	*<0.21*	[4]	*<0.21*	[4]	*<0.35*	[4]	*<0.35*	-	-	[4]	<0.21	-	-	[4]	*<0.0831*
PCB-1260	[4]	<0.21	[4]	<0.23	[4]	<0.32	[4]	<0.32	[4]	<0.59	[4]	<0.59	-	-	[4]	<0.26	[4]	*<0.34*	[4]	*<0.34*	[4]	*<0.28*	[4]	*<0.28*	-	-	[4]	<0.21	-	-	[4]	*<0.0831*
PCB-1016	[4]	<0.36	[4]	<0.33	[4]	<0.18	[4]	<0.18	[4]	<0.55	[4]	<0.55	-	-	[4]	<0.29	[4]	*<0.33*	[4]	*<0.33*	[4]	*<0.40*	[4]	*<0.40*	-	-	[4]	<0.23	-	-	[4]	*<0.0831*
Toxaphene	0.0003	*<0.53*	0.0003	*<0.34*	0.0003	*<0.22*	0.0003	*<0.22*	0.0003	*<0.60*	0.0003	*<0.60*	-	-	0.0003	*<0.48*	0.0003	*<0.47*	0.0003	*<0.47*	0.0003	*<0.482*	0.0003	*<0.482*	-	-	0.0003	*<0.40*	-	-	0.0003	*<0.467*

Notes:

NS = no standard applicable to the designated use

T = total

D = dissolved

Bold text indicates a sample result greater than the WQS

Italicized text indicates a laboratory detection limit higher than the WQS

Footnotes:

[1] The Permittee shall report on any additional parameters that were monitored for seasonal stormwater sampling as required by Section 6.0 of this permit (Special Conditions).

[2] Analytical results shall be reported in the units specified for each category or parameter.

[3] Report the average flow rate for the sampling period (no more than 6 hours).

[4] Standard for total PCBs of 0.00006 µg/L FC, 19 µg/L PBC, 2 µg/L A&Wedw, and 0.001 µg/L Agl and AgL.

[5] Beginning with the Summer 2016 reporting, total 1,3-dichloropropylene is reported (prior reporting periods included cis and trans isomers) .

[6]No sample collected. See Table 8.1 for storm event data.

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OUTFALL ID: SR045	MONITORING SEASONS																													
	Summer: June 1 - October 31																													
RECEIVING WATER: Salt River	Winter: November 1 - May 31																													
DESIGNATED USES: A&We and PBC	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16 [6]		Summer 2016		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019[6]		Winter 2019/20		Summer 2020		Winter 2020/21	
SAMPLING DATE(S):	SWQS	7/21/2013	SWQS	11/22/2013	SWQS	8/12/2014	SWQS	12/4/2014	SWQS	7/31/2015	-	-	SWQS	7/29/2016	SWQS	11/3/2016	SWQS	7/16/2017	SWQS	2/14/2018	SWQS	8/7/2019	SWQS	11/29/2019	-	-	SWQS	11/29/2019	SWQS	8/20/2020	SWQS	1/24/2021
MONITORING PARAMETERS [1,2]																														
Conventional Parameters																														
Flow [3] (cfs)	NS	8.88	NS	1.01	NS	0.725	NS	1.371	NS	1.898	-	-	NS	7.105	NS	1.251	NS	11.503	NS	1.38	NS	0.648	NS	Trickle	-	-	NS	3.64	NS	0.001	NS	0.188
pH	6.5-9	8.24	6.5-9	8.3	6.5-9	7.94	6.5-9	7.73	6.5-9	7.62	-	-	6.5-9	7.09	6.5-9	**6.34**	6.5-9	7.36	6.5-9	7.82	6.5-9	7.89	6.5-9	7.41	-	-	6.5-9	6.91	6.5-9	7.42	6.5-9	7.67
Temperature (ºC)	Varies	28	Varies	19.5	Varies	30.1	Varies	19	Varies	30.5	-	-	Varies	30	Varies	21	Varies	30.3	Varies	17.8	Varies	31.2	Varies	16.9	-	-	Varies	13.0	Varies	30.3	Varies	17.5
Hardness (mg/L)	400	40.1	400	31.2	400	96.1	400	42.2	400	42.4	-	-	400	45.4	400	87.8	400	102	400	152	400	63.9	400	81.5	-	-	400	262	400	74	400	160
Total Dissolved Solids (TDS) (mg/L) [2]	NS	98	NS	82	NS	340	NS	124	NS	126	-	-	NS	166	NS	302	NS	408	NS	514	NS	228	NS	250	-	-	NS	824	NS	246	NS	480
Total Suspended Solids (TSS) (mg/L) [2]	NS	60	NS	420	NS	192	NS	1070	NS	126	-	-	NS	80	NS	162	NS	668	NS	486	NS	133	NS	110	-	-	NS	388	NS	62.5	NS	103
Biochemical Oxygen Demand (BOD) (mg/L) [2]	NS	13	NS	56	NS	45	NS	175	NS	25	-	-	NS	35	NS	127	NS	141	NS	388	NS	<120	NS	104	-	-	NS	>224	NS	50	NS	150
Chemical Oxygen Demand (COD) (mg/L) [2]	NS	100	NS	540	NS	280	NS	950	NS	160	-	-	NS	150	NS	410	NS	700	NS	1,100	NS	220	NS	290	-	-	NS	980	NS	220	NS	510

SR045	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16 [6]		Summer 2016		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019[6]		Winter 2019/20		Summer 2020		Winter 2020/21	
SAMPLING DATE(S):	SWQS	7/21/2013	SWQS	11/22/2013	SWQS	8/12/2014	SWQS	12/4/2014	SWQS	7/31/2015	-	-	SWQS	7/29/2016	SWQS	11/3/2016	SWQS	7/16/2017	SWQS	2/14/2018	SWQS	8/7/2018	SWQS	11/30/2019	SWQS		SWQS	11/29/2019	SWQS	8/20/2020	SWQS	1/24/2021
Inorganics																																
Cyanide, total (µg/L) [2]	84	<50	84	<5	84	<5	84	<5	84	<5	-	-	84	<5	84	<5	84	<5	84	<5	84	<5	84	<5	-	-	84	<5	84	<5	84	<5
Nutrients (mg/L) [2]																																
Nitrate + Nitrite as N	NS	0.8	NS	0.6	NS	1.7	NS	0.5	NS	1.2	-	-	NS	1.4	NS	1.4	NS	1.9	NS	1.6	NS	1.7	NS	1.2	-	-	NS	0.9	NS	1.9	NS	3.1
Ammonia as N	NS	0.64	NS	0.42	NS	1.4	NS	0.51	NS	1.4	-	-	NS	1.3	NS	1.1	NS	1.4	NS	1.6	NS	1.3	NS	1.6	-	-	NS	1.7	NS	1.8	NS	1.9
Total Kjeldahl Nitrogen (TKN)	NS	3.3	NS	6.9	NS	4.5	NS	14	NS	2.9	-	-	NS	3.9	NS	6.8	NS	9.3	NS	15	NS	4.9	NS	6.7	-	-	NS	16	NS	6.0	NS	10
Total Phosphorus as P	NS	0.41	NS	1.5	NS	0.91	NS	0.58	NS	0.55	-	-	NS	1.3	NS	0.89	NS	0.46	NS	1.1	NS	0.49	NS	0.70	-	-	NS	2.4	NS	0.44	NS	1.3
Ortho-Phosphorus as P	NS	<0.1	NS	0.2	NS	0.2	NS	0.1	NS	<0.1	-	-	NS	0.2	NS	0.3	NS	0.2	NS	0.7	NS	0.3	NS	0.3	-	-	NS	0.6	NS	0.3	NS	0.4
Microbiological																																
Escherichia coli (*E. coli*) (CFU/100 mg or MPN/100 mL) [2]	575	**2,419.60**	575	**>2,419.6**	575	**>2,419.6**	575	**>2,419.6**	575	**34,480**	-	-	575	**5,040**	575	**2,419.60**	575	**17,230**	575	**14,390**	575	**4,480**	575	**3,930**	-	-	575	**64,880**	575	**2,430**	575	**2,419.6**
Total Metals (µg/L) [2]																																
Antimony	747 T	1.8 T 0.9 D	747 T	2.6 T 0.6 D	747 T	3.5 T 3.1 D	747 T	4.8 T 1.0 D	747 T	3.2 T <5.0 D	-	-	747 T	1.8 T <5 D	747 T	3.7 T <5 D	747 T	4.7 T <5 D	747 T	7.1 T <5 D	747 T	2.7 T <5.0 D	747 T	3.0 T <5.0 D	-	-	747 T	5.2 T <5.0 D	747 T	2.6 T <2.0 D	747 T	4.4 T 2.8 D
Arsenic	280 T 440 D	2.6 T 1.0 D	280 T 440 D	8.1 T 1.1 D	280 T 440 D	5.0 T 3.2 D	280 T 440 D	10.5 T 1.2 D	280 T 440 D	3.5 T <5.0 D	-	-	280 T 440 D	2.5 T <5 D	280 T 440 D	3.8 T <5 D	280 T 440 D	7.2 T <5.0 D	280 T 440 D	8.1 T <5 D	280 T 440 D	3.1 T <5.0 D	280 T 440 D	2.4 T <5.0 D	-	-	280 T 440 D	6.2 T <5.0 D	280 T 440 D	2.6 T <2.0 D	280 T 440 D	3.8 T 2.1 D
Barium	98,000 T	86 T 22 D	98,000 T	344 T 8 D	98,000 T	98 T 39 D	98,000 T	599 T 11 D	98,000 T	120 T 19 D	-	-	98,000 T	62 T 18 D	98,000 T	160 T 25 D	98,000 T	241 T 7 D	98,000 T	255 T 22 D	98,000 T	89 T 24 D	98,000 T	88 T 22 D	-	-	98,000 T	275 T 50 D	98,000 T	70 T 26 D	98,000 T	109 T 31 D
Beryllium	1,867 T	0.22 T <0.15 D	1,867 T	0.53 T <0.06 D	1,867 T	<0.15 T <0.15 D	1,867 T	0.75 T <0.06 D	1,867 T	0.21 T <5.0 D	-	-	1,867 T	<0.25 T <5 D	1,867 T	<0.25 T <5 D	1,867 T	0.53 T <5 D	1,867 T	0.44 T <5 D	1,867 T	0.26 T <5.0 D	1,867 T	<0.15 T <5.0 D	-	-	1,867 T	0.29 T <5.0 D	1,867 T	<1.8 T <2.0 D	1,867 T	<1.8 T <2.0 D
Cadmium	700 T 9.37 D	0.4 T <0.25 D	700 T 7.34 D	2.1 T <0.10 D	700 T 21.94 D	<0.30 T <0.30 D	700 T 9.85 D	2.2 T <0.12 D	700 T 9.89 D	0.4 T <5.0 D	-	-	700 T 27.43 D	0.3 T <0.25 D	700 T 56.09 D	0.4 T <0.25	700 T 65.99 D	0.9 T <0.2 D	700 T 101.65 D	1.3 T <0.2 D	700 T 39.74	0.3 T <0.25 D	700 T 51.74	0.4 T <0.25 D	-	-	700 T 183.25	1.3 T <5.0 D	700 T 46.60	<2.1 T <1.0 D	700 T 107.46	<2.1 T <1.0 D
Chromium	NS	7.3 T <2.00 D	NS	23.8 T 0.8 D	NS	7.7 T 2.5 D	NS	34.6 T 1.9 D	NS	10.4 T <5.0 D	-	-	NS	6.5 T <5 D	NS	10.4 T <5 D	NS	21.1 T <5 D	NS	26.4 T 6.2 D	NS	8.3 T <5.0 D	NS	7.2 T <5.0 D	-	-	NS	23.6 T 9.7 D	NS	7.3 T <10 D	NS	<12.5 T <10 D
Copper	1,300 T 9.83 D	72.0 T **23.8 D**	1,300 T 7.77 D	206 T **12.2 D**	1,300 T 22.40 D	60.6 T **32.7 D**	1,300 T 10.32 D	263 T **16.7** D	1,300 T 10.36 D	66.6 T **21.6 D**	-	-	1,300 T 11.05 D	44.4 T **30.9 D**	1,300 T 20.58 D	76.2 T **38.4 D**	1,300 T 23.70 D	150 T 11.3 D	1,300 T 34.51 D	178 T **70.6 D**	1,300 T 15.25	56.8 T **34 D**	1,300 T 19.18	51.2 T **31.4 D**	-	-	1,300 T 57.64	157 T **86 D**	1,300 T 17.52	47 T **35.3 D**	1,300 T 36.22	88.2 T **61.1 D**
Lead	15 T 49.76 D	**21.4 T** 1.2 D	15 T 37.58 D	**75.3 T** 0.6 D	15 T 130.52 D	14.3 T 1.4 D	15 T 52.67 D	**97.9 T** 0.6 D	15 T 52.95 D	**19.4 T** <0.8 D	-	-	15 T 57.13 D	10.9 T 0.9 D	15 T 118.26 D	**17.3 T** 0.9 D	15 T 139.27 D	**50.4 T** 0.2 D	15 T 214.34 D	**50 T** 2 D	15 T 83.43	11.7 T 0.8 D	15 T 109.01	13.8 T 1.2 D	-	-	15 T 382.08	**45.8 T** 9.4 D	15 T 98.05	9.2 T 1.1 D	15 T 226.46	12.4 T 1.3 D
Mercury	280 T 5 D	0.02 T <0.020 D	280 T 5 D	0.20 T 0.026 D	280 T 5 D	<0.092 T <0.2 D	280 T 5 D	0.30 T <0.092 D	280 T 5 D	0.08 T <0.2 D	-	-	280 T 5 D	0.094 T <0.068 D	280 T 5 D	0.095 T <0.2 D	280 T 5 D	0.134 T <0.2 D	280 T 5 D	0.26 T <0.20 D	280 T 5 D	<0.080 T <0.080 D	280 T 5 D	<0.042 T <0.2 D	-	-	280 T 5 D	0.163 T <0.2 D	280 T 5 D	<0.118 T <0.2 D	280 T 5 D	<0.118 T <0.2 D
Nickel	28,000 T 1,919 D	10.3 T 3.5 D	28,000 T 1,552 D	32.3 T 1.7 D	28,000 T 4021 D	14.6 T 8.4 D	28,000 T 2004 D	37.9 T 2.1 D	28,000 T 2,012 D	11.2 T 2.7 D	-	-	28,000 T 2,132 D	7.9 T <5 D	28,000 T 3725 D	13.4 T 6.9 D	28,000 T 4,229 D	28.1 T <5 D	28,000 T 5,926 D	29 T 13.2 D	28,000 T 2,846.91	11.4 T 5.7 D	28,000 T 3,497.52	9.1 T <5.0 D	-	-	28,000 T 9,392.98	34.2 T 22.6 D	28,000 T 3,223.22	8.2 T 5.7 D	28,000 T 6,188.79	16.4 T 10.9 D
Selenium	33 T	<0.60 T <0.60 D	33 T	0.69 T <0.24 D	33 T	0.76 T 0.5 D	33 T	0.87 T 0.4 D	33 T	0.51 T <5.0 D	-	-	33 T	0.96 T <5 D	33 T	0.87 T <5 D	33 T	1.3 T <5 D	33 T	1.3 T <5 D	33 T	1.1 T <5.0 D	33 T	0.71 T <5.0 D	-	-	33 T	0.86 T <5.0 D	33 T	<4.05 T <2.0 D	33 T	<4.05 T <2.0 D
Silver	4,667 T 0.672 D	0.2 T <0.15 D	4,667 T 0.434 D	0.5 T <0.15 D	4,667 T 3.005 D	<0.20 T <0.20 D	4,667 T 0.726 D	0.8 T <0.08 D	4,667 T 0.73 D	0.3 T *<5.0 D*	-	-	4,667 T 0.83 D	<0.45 T *<5 D*	4,667 T 2.57 D	<0.45 T *<5 D*	4,667 T 3.33 D	0.4 T *<5 D*	4,667 T 6.61 D	0.8 T <5 D	4,667 T 1.49	<0.15 T *<5.0 D*	4,667 T 2.26	0.2 T *<5.0 D*	-	-	4,667 T 16.86	2.6 T <5.0 D	4,667 T 1.92	<1.25 T *<5.0 D*	4,667 T 7.22	<4.1 T <5.0 D
Thallium	75 T	<0.20 T <0.20 D	75 T	<0.20 T <0.08 D	75 T	<0.10 T <0.10 D	75 T	0.25 T <0.04 D	75 T	<0.15 T <5.0 D	-	-	75 T	0.32 T <5 D	75 T	<0.2 T <5 D	75 T	0.23 T <5 D	75 T	0.18 T <5 D	75 T	<0.15 T <5.0 D	75 T	<0.15 T <5.0 D	-	-	75 T	<0.15 T <5 D	75 T	<2.75 T <2.0 D	75 T	<2.75 T <2.0 D
Zinc	280,000 T 513 D	207 T 63.2 D	280,000 T 414 D	1020 T 23.0 D	280,000 T 1075 D	192 T 66.4 D	280,000 T 535.2 D	1,410 T 32.8 D	280,000 T 537 D	288 T 50.9 D	-	-	280,000 T 570 D	202 T 58.2 D	280,000 T 996 D	274 T 82.4 D	280,000 T 1,131 D	633 T 22.3 D	280,000 T 1,586 D	662 T 109 D	280,000 T 760.86	218 T 58.8 D	280,000 T 935.04	269 T 90.7 D	-	-	280,000 T 2,514.96	588 T 242 D	280,000 T 861.60	286 T 139 D	280,000 T 1,655.98	273 T 111 D
Organic Toxic Pollutants																																
Total Petroleum Hydrocarbons (TPH) (mg/L) [2]	NS	<11	NS	15	NS	<10	NS	<10	NS	<11	-	-	NS	<5.7	NS	<4.3	NS	<7.3	NS	<7.1	NS	<7.2	NS	<5.5	-	-	NS	<5.6	NS	<5.8	NS	<5.6
Total Oil and Grease (mg/L) [2]	NS	<5.7	NS	42	NS	<5.0	NS	6	NS	5.8	-	-	NS	<5.7	NS	<4.3	NS	7.8	NS	7.6	NS	<6.0	NS	<5.5	-	-	NS	8.2	NS	<5.8	NS	<6.7
VOCs, Semi-VOCs, and Pesticides (µg/L) [2]																																
Acrolein	467	<0.20	467	<0.20	467	2.7	467	<0,40	467	<0.78	-	-	467	<0.41	467	1.3	467	<3.95	467	<0.79	467	<2.75	467	1.5	-	-	467	0.55	467	<4.750	467	<9.50
Acrylonitrile	37,333	<0.16	37,333	<0.16	37,333	<0.70	37,333	<0.14	37,333	<0.53	-	-	37,333	<0.42	37,333	<0.42	37,333	<2.95	37,333	<0.59	37,333	<2.85	37,333	<0.57	-	-	37,333	<0.57	37,333	<1.255	37,333	<5.24
Benzene	3,733	<0.15	3,733	<1.20	3,733	<0.65	3,733	<0.13	3,733	<0.46	-	-	3,733	<0.46	3,733	<0.29	3,733	<1.30	3,733	<0.26	3,733	<1.65	3,733	0.36	-	-	3,733	<0.33	3,733	<1.55	3,733	<3.1

SR045	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16 [6]		Summer 2016		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019[6]		Winter 2019/20		Summer 2020		Winter 2020/21	
SAMPLING DATE(S):	SWQS	7/21/2013	SWQS	11/22/2013	SWQS	8/12/2014	SWQS	12/4/2014	SWQS	7/31/2015	-	-	SWQS	7/29/2016	SWQS	11/3/2016	SWQS	7/16/2017	SWQS	2/14/2018	SWQS	8/7/2018	SWQS	11/30/2019	SWQS		SWQS	11/29/2019	SWQS	8/20/2020	SWQS	1/24/2021
Bromoform	18,667	<0.43	18,667	<2.35	18,667	<1.40	18,667	<0.28	18,667	<0.68	-	-	18,667	<0.68	18,667	<0.33	18,667	<1.05	18,667	<0.21	18,667	<4.05	18,667	<0.81	-	-	18,667	<0.81	18,667	<1.85	18,667	<3.7
Carbon tetrachloride	1,307	<0.33	1,307	<1.30	1,307	<1.15	1,307	<0.23	1,307	<0.31	-	-	1,307	<0.31	1,307	<0.20	1,307	<1.50	1,307	<0.30	980	<1.35	980	<0.27	-	-	980	<0.27	980	<1.60	980	<3.2
Chlorobenzene	18,667	<0.28	18,667	<0.80	18,667	<0.65	18,667	<0.13	18,667	<0.50	-	-	18,667	<0.50	18,667	<0.33	18,667	<1.15	18,667	<0.23	18,667	<3.50	18,667	<0.70	-	-	18,667	<0.70	18,667	<2.10	18,667	<4.2
Chlorodibromomethane	18,667	<0.26	18,667	<0.90	18,667	<1.20	18,667	<0.24	18,667	<0.61	-	-	18,667	<0.61	18,667	<0.32	18,667	<1.20	18,667	<0.24	18,667	<3.50	18,667	<0.70	-	-	18,667	<0.70	18,667	<1.05	18,667	<3.9
Chloroethane (ethyl chloride)	NS	<0.27	NS	<1.10	NS	<0.95	NS	<0.19	NS	<0.40	-	-	NS	<0.40	NS	<0.33	NS	<1.40	NS	<0.28	NS	<1.65	NS	<0.33	-	-	NS	<0.33	NS	<3.30	NS	<3.6
2-Chloroethylvinyl ether	NS	<0.22	NS	<0.22	NS	<0.95	NS	<0.19	NS	<0.53	-	-	NS	<0.43	NS	<0.43	NS	<3.25	NS	<0.65	NS	<2.60	NS	<0.52	-	-	NS	<0.52	NS	<1.665	NS	<3.33
Chloroform	9,333	<0.21	9,333	<1.15	9,333	<0.70	9,333	<0.14	9,333	<0.49	-	-	9,333	<0.49	9,333	<0.32	9,333	<1.20	9,333	<0.24	9,333	<1.55	9,333	<0.31	-	-	9,333	<0.31	9,333	<1.55	9,333	<3.1
Dichlorobromomethane	18,667	<0.15	18,667	<1.15	18,667	<0.75	18,667	<0.15	18,667	<0.49	-	-	18,667	<0.49	18,667	<0.29	18,667	<1.30	18,667	<0.26	18,667	<2.60	18,667	<0.52	-	-	18,667	<0.52	18,667	<1.05	18,667	<2.1
1,1-Dichloroethane	NS	<0.13	NS	<1.30	NS	<0.95	NS	<0.19	NS	<0.42	-	-	NS	<0.42	NS	<0.29	NS	<1.35	NS	<0.27	NS	<1.60	NS	<0.32	-	-	NS	<0.32	NS	<1.50	NS	<3.0
1,2-Dichloroethane	186,667	<0.16	186,667	<1.25	186,667	<0.55	186,667	<0.11	186,667	<0.51	-	-	186,667	<0.51	186,667	<0.35	186,667	<1.30	186,667	<0.26	186,667	<1.40	186,667	<0.28	-	-	186,667	<0.28	186,667	<1.40	186,667	<2.8
1,1-Dichloroethylene	46,667	<0.37	46,667	<1.40	46,667	<1.35	46,667	<0.27	46,667	<0.34	-	-	46,667	<0.34	46,667	<0.19	46,667	<1.60	46,667	<0.32	46,667	<2.00	46,667	<0.40	-	-	46,667	<0.40	46,667	<2.05	46,667	<4.1
1,2-Dichloropropane	84,000	<0.15	84,000	<1.25	84,000	<0.90	84,000	<0.18	84,000	<0.49	-	-	84,000	<0.49	84,000	<0.32	84,000	<1.60	84,000	<0.32	84,000	<4.65	84,000	<0.93	-	-	84,000	<0.93	84,000	<1.65	84,000	<3.3
1,3-Dichloropropylene[5]	28,000	cis <0.10 trans <0.15	28,000	cis <1.20 trans <1.10	28,000	<0.65	28,000	<0.13	28,000	cis <0.51 trans <0.50	-	-	28,000	cis <0.51 trans <0.50	28,000	<0.28	28,000	<1.45	28,000	<0.21	28,000	<2.15	28,000	<0.43	-	-	28,000	<0.43	28,000	<0.75	28,000	<3.1
Ethylbenzene	93,333	<0.29	93,333	<0.65	93,333	<0.75	93,333	<0.15	93,333	<0.46	-	-	93,333	<0.46	93,333	<0.29	93,333	<1.15	93,333	<0.23	93,333	<3.05	93,333	<0.61	-	-	93,333	<0.61	93,333	<2.10	93,333	<4.2
Methyl bromide	1,307	<0.19	1,307	<0.95	1,307	<0.90	1,307	<0.18	1,307	<0.46	-	-	1,307	<0.46	1,307	<0.28	1,307	<1.15	1,307	<0.23	1,307	<1.65	1,307	<0.33	-	-	1,307	<0.33	1,307	<1.95	1,307	<3.9
Methyl chloride	NS	<0.37	NS	<1.40	NS	<1.15	NS	<0.23	NS	<0.46	-	-	NS	<0.46	NS	<0.28	NS	<1.85	NS	<0.37	NS	<1.65	NS	<0.33	-	-	NS	<0.33	NS	<2.85	NS	<5.7
Methylene chloride	56,000	<0.28	56,000	<1.00	56,000	<1.00	56,000	<0.20	56,000	<0.81	-	-	56,000	<0.81	56,000	<0.31	56,000	<4.00	56,000	<0.80	56,000	<2.20	56,000	<0.44	-	-	56,000	<0.44	56,000	<2.05	56,000	<8.7
1,1,2,2-Tetrachloroethane	93,333	<0.49	93,333	<2.00	93,333	<1.75	93,333	<0.35	93,333	<0.80	-	-	93,333	<0.80	93,333	<0.33	93,333	<1.55	93,333	<0.31	56,000	<4.15	56,000	<0.83	-	-	56,000	<0.83	56,000	<2.30	56,000	<4.6
Tetrachloroethylene	9,333	<0.23	9,333	<1.05	9,333	<0.65	9,333	<0.13	9,333	<0.35	-	-	9,333	<0.35	9,333	<0.23	9,333	<1.45	9,333	<0.29	9,333	<1.90	9,333	<0.38	-	-	9,333	<0.38	9,333	<1.90	9,333	<3.8
Toluene	373,333	<0.12	373,333	<0.95	373,333	<0.55	373,333	<0.11	373,333	<0.43	-	-	373,333	<0.43	373,333	<0.28	373,333	<1.25	373,333	<0.25	280,000	<1.90	280,000	<0.38	-	-	280,000	<0.38	280,000	<1.75	280,000	<3.5
trans-1,2-Dichloroethylene	18,667	<0.17	18,667	<1.25	18,667	<0.90	18,667	<0.18	18,667	<0.38	-	-	18,667	<0.38	18,667	<0.24	18,667	<1.25	18,667	<0.25	18,667	<1.60	18,667	<0.32	-	-	18,667	<0.32	18,667	<1.60	18,667	<3.2
1,1,1-Trichloroethane	1,866,667	<0.23	1,866,667	<1.00	1,866,667	<0.70	1,866,667	<0.14	1,866,667	<0.34	-	-	1,866,667	<0.34	1,866,667	<0.23	1,866,667	<1.40	1,866,667	<0.28	$1.867x10^{+6}$	<1.55	$1.867x10^{+6}$	<0.31	-	-	$1.867x10^{+6}$	<0.31	$1.867x10^{+6}$	<1.60	$1.867x10^{+6}$	<3.2
1,1,2-Trichloroethane	3,733	<0.24	3,733	<0.75	3,733	<0.65	3,733	<0.13	3,733	<0.60	-	-	3,733	<0.60	3,733	<0.29	3,733	<1.50	3,733	<0.30	3,733	<3.40	3,733	<0.68	-	-	3,733	<0.68	3,733	<1.85	3,733	<3.7
Trichloroethylene	280	<0.24	280	<0.75	280	<1.10	280	<0.22	280	<0.48	-	-	280	<0.48	280	<0.28	280	<1.80	280	<0.36	280	<2.30	280	<0.46	-	-	280	<0.46	280	<1.90	280	<3.8
1,2,4-Trimethylbenzene	NS	<1.0	NS	<5.0	NS	<10.0	NS	<1.0	NS	<1.0	-	-	NS	<1.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<5.0	NS	<1.0	-	-	NS	<1.0	NS	<5.0	NS	<10
1,3,5-Trimethylbenzene	NS	<1.0	NS	<5.0	NS	<5.0	NS	<1.0	NS	<1.0	-	-	NS	<1.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<5.0	NS	<1.0	-	-	NS	<1.0	NS	<5.0	NS	<10
Vinyl chloride	2,800	<0.50	2,800	<1.00	2,800	<1.10	2,800	<0.22	2,800	<0.35	-	-	2,800	<0.35	2,800	<0.24	2,800	<2.10	2,800	<0.42	2,800	<1.75	2,800	<0.35	-	-	2,800	<0.35	2,800	<2.35	2,800	<4.7
Xylenes, Total	186,667	<0.58	186,667	<1.50	186,667	<1.25	186,667	<0.13	186,667	<0.52	-	-	186,667	<0.52	186,667	<0.32	186,667	<1.15	186,667	<0.23	186,667	<3.50	186,667	<0.70	-	-	186,667	<0.70	186,667	<1.65	186,667	<3.3
Acid Compounds (µg/L) [2]																																
2-Chlorophenol	4,667	<85.8	4,667	<214.5	4,667	<1.48	4,667	<1.48	4,667	<3.10	-	-	4,667	<2.92	4,667	<2.92	4,667	<42.3	4,667	<84.6	4,667	<45.2	4,667	<4.52	-	-	4,667	<4.52	4,667	<1.01	4,667	<1.01
2,4-Dichlorophenol	2,800	<84.4	2,800	<211.0	2,800	<1.65	2,800	<1.65	2,800	<2.81	-	-	2,800	<3.21	2,800	<3.21	2,800	<48.2	2,800	<96.4	2,800	<47.7	2,800	<4.77	-	-	2,800	<4.77	2,800	<1.37	2,800	<1.37
2,4-Dimethylphenol	18,667	<45.6	18,667	<114.0	18,667	<2.20	18,667	<2.20	18,667	<2.64	-	-	18,667	<1.32	18,667	<1.32	18,667	<70.7	18,667	<141.4	18,667	<20.4	18,667	<2.04	-	-	18,667	<2.04	18,667	<2.57	18,667	<2.57
4,6-Dinitro-o-cresol	3,733	<59.6	3,733	<149.0	3,733	<1.22	3,733	<1.22	3,733	<1.49	-	-	3,733	<2.27	3,733	<2.27	3,733	<46.9	3,733	<93.8	3,733	<33.6	3,733	<3.36	-	-	3,733	<3.36	3,733	<1.27	3,733	<1.27
2,4-Dinitrophenol	1,867	<51.8	1,867	<129.5	1,867	<1.13	1,867	<1.13	1,867	<2.21	-	-	1,867	<2.64	1,867	<2.64	1,867	<51.1	1,867	<102.2	1,867	<34.1	1,867	<3.41	-	-	1,867	<3.41	1,867	<0.92	1,867	<0.92
2-Nitrophenol	NS	<82.2	NS	<205.5	NS	<1.57	NS	<1.57	NS	<2.84	-	-	NS	<2.61	NS	<2.61	NS	<78.3	NS	<156.6	NS	<46.8	NS	<4.68	-	-	NS	<4.68	NS	<0.94	NS	<0.94
4-Nitrophenol	NS	<93.4	NS	<233.5	NS	<1.14	NS	3.1	NS	<2.98	-	-	NS	<2.03	NS	<2.03	NS	<40.3	NS	<80.6	NS	<35.2	NS	<3.52	-	-	NS	<3.52	NS	<1.70	NS	<1.70
p-Chloro-m-cresol	48,000	<88.2	48,000	<220.5	48,000	<1.65	48,000	<1.65	48,000	<1.87	-	-	48,000	<3.10	48,000	<3.10	48,000	<40.5	48,000	<81.0	48,000	<47.6	48,000	<4.76	-	-	48,000	<4.76	48,000	<1.34	48,000	<1.34
Pentachlorophenol	127.97	<67.2	135.76	*<168.0*	94.663	<1.39	76.64	<1.39	68.6	6.6	-	-	40.24	3.8	18.94	<3.44	52.78	*<73.6*	83.81	*<147.2*	89.91	<40.0	55.50	<4.00	-	-	33.58	<4.00	56.06	3.0	72.08	<1.92
Phenol	180,000	<71.0	180,000	<177.5	180,000	2.8	180,000	1.9	180,000	<2.30	-	-	180,000	2.7	180,000	2.4	180,000	<39.9	180,000	<79.8	180,000	<40.8	180,000	<4.08	-	-	180,000	<4.08	180,000	4.4	180,000	<1.27
2,4,6-Trichlorophenol	130	<95.8	130	*<239.5*	130	<1.89	130	<1.89	130	<2.60	-	-	130	<3.28	130	<3.28	130	<47.4	130	<94.8	130	<52.7	130	<5.27	-	-	130	<5.27	130	<1.61	130	<1.61
Bases/Neutrals (µg/L) [2]																																
Acenaphthene	56,000	<26.8	56,000	<67.0	56,000	<1.03	56,000	<1.03	56,000	<0.35	-	-	56,000	<1.02	56,000	<1.02	56,000	<18.8	56,000	<37.6	56,000	<11.9	56,000	<1.19	-	-	56,000	<1.19	56,000	<0.65	56,000	<0.65
Acenaphthylene	NS	<34.6	NS	<86.5	NS	<1.00	NS	<1.00	NS	<1.23	-	-	NS	<6.10	NS	<6.10	NS	<17.5	NS	<35.0	NS	<14.1	NS	<1.41	-	-	NS	<1.41	NS	<0.56	NS	<0.56
Anthracene	280,000	<34.6	280,000	<86.5	280,000	<2.88	280,000	<2.88	280,000	<0.44	-	-	280,000	<1.96	280,000	<1.96	280,000	<26.2	280,000	<52.4	280,000	<12.0	280,000	<1.20	-	-	280,000	<1.20	280,000	<0.52	280,000	<0.52
Benzo(a)anthracene	0.2	*<34.6*	0.2	*<86.5*	0.2	*<1.08*	0.2	*<1.08*	0.2	*<0.38*	-	-	0.2	*<1.57*	0.2	*<1.57*	0.2	*<19.6*	0.2	*<39.2*	0.2	*<10.2*	0.2	*<1.02*	-	-	0.2	*<1.02*	0.2	*<0.77*	0.2	*<0.77*
Benzo(a)pyrene	0.2	*<37.4*	0.2	*<93.5*	0.2	*<3.77*	0.2	*<3.77*	0.2	*<1.41*	-	-	0.2	*<3.12*	0.2	*<3.12*	0.2	*<37.7*	0.2	*<75.4*	0.2	*<10.8*	0.2	*<1.08*	-	-	0.2	*<1.08*	0.2	*<1.50*	0.2	*<1.50*
Benzo(b)fluoranthene	1.9	*<48.6*	1.9	*<121.5*	1.9	<1.46	1.9	<1.46	1.9	<1.06	-	-	1.9	<1.28	1.9	<1.28	1.9	*<21.7*	1.9	*<43.4*	NS	<3.8	NS	<0.38	-	-	NS	<0.38	NS	<2.36	NS	<2.36
Benzo(g,h,i)perylene	NS	<34.6	NS	<86.5	NS	<1.29	NS	<1.29	NS	<0.72	-	-	NS	<2.83	NS	<2.83	NS	<25.1	NS	<50.2	NS	<11.4	NS	<1.14	-	-	NS	<1.14	NS	<1.83	NS	<1.83
Benzo(k)fluoranthene	1.9	*<28.0*	1.9	*<70.0*	1.9	<1.04	1.9	<1.04	1.9	<0.35	-	-	1.9	<1.76	1.9	<1.76	1.9	*<23.3*	1.9	*<46.6*	1.9	*<10.3*	1.9	<1.03	-	-	1.9	<1.03	1.9	<1.83	1.9	<1.83
Chrysene	19	*<29.6*	19	*<74.0*	19	<1.41	19	<1.41	19	<0.46	-	-	19	<1.08	19	<1.08	19	*<19.6*	19	*<39.2*	19	<11.6	19	<1.16	-	-	19	<1.16	19	<0.77	19	<0.77
Dibenz(a,h)anthracene	1.9	*<39.6*	1.9	*<99.0*	1.9	<1.24	1.9	<1.24	1.9	<0.47	-	-	1.9	<1.93	1.9	<1.93	1.9	*<60.4*	1.9	*<120.8*	1.9	*<10.2*	1.9	<1.02	-	-	1.9	<1.02	1.9	<1.58	1.9	<1.58
1,2-Dichlorobenzene	5,900	<5.4	5,900	<13.5	5,900	<1.76	5,900	<1.76	5,900	<1.04	-	-	5,900	<0.58	5,900	<0.58	5,900	<1.50	5,900	<0.30	5,900	<14.3	5,900	<1.43	-	-	5,900	<1.43	5,900	<0.85	5,900	<0.85
1,3-Dichlorobenzene	NS	<22.6	NS	<56.5	NS	<1.74	NS	<1.74	NS	<0.47	-	-	NS	<0.52	NS	<0.52	NS	<1.25	NS	<0.25	NS	<13.9	NS	<1.39	-	-	NS	<1.39	NS	<0.87	NS	<0.87
1,4-Dichlorobenzene	6,500	<21.0	6,500	<52.5	6,500	<1.56	6,500	<1.56	6,500	<1.28	-	-	6,500	<0.50	6,500	<0.50	6,500	<1.25	6,500	<0.29	6,500	<14.8	6,500	<1.48	-	-	6,500	<1.48	6,500	<0.93	6,500	<0.93
3,3-Dichlorobenzidine	3	*<545.4*	3	*<1363.5*	3	*<6.06*	3	*<6.06*	3	*<11.60*	-	-	3	*<23.45*	3	*<23.45*	3	*<254.3*	3	*<508.6*	3	*<69.9*	3	*<6.99*	-	-	3	*<6.99*	3	*<5.94*	3	<5.94
Diethyl phthalate	746,667	<38.0	746,667	<95.0	746,667	<2.37	746,667	<2.37	746,667	0.7	-	-	746,667	<1.07	746,667	<1.07	746,667	<19.9	746,667	<39.8	746,667	<10.8	746,667	1.1	-	-	746,667	<1.08	746,667	<7.57	746,667	<7.57
Dimethyl phthalate	NS	<35.8	NS	<89.5	NS	<2.42	NS	<2.42	NS	<0.47	-	-	NS	<0.58	NS	<0.58	NS	<19.1	NS	<39.2	NS	<11.7	NS	<1.17	-	-	NS	<1.17	NS	1.2	NS	<0.46
Di-n-butyl phthalate	1,100	<44.6	1,100	<111.5	1,100	<1.85	1,100	<1.85	1,100	<0.31	-	-	1,100	<1.37	1,100	<1.37	1,100	<23.5	1,100	<47.0	1,100	<11.2	1,100	<1.12	-	-	1,100	<1.12	1,100	<0.95	1,100	1.3
2,4-Dinitrotoluene	1,867	<41.0	1,867	<102.5	1,867	<2.12	1,867	<2.12	1,867	<0.26	-	-	1,867	<1.30	1,867	<1.30	1,867	<31.0	1,867	<62.0	1,867	<11.7	1,867	<1.17	-	-	1,867	<1.17	1,867	<0.80	1,867	<0.80
2,6-Dinitrotoluene	3,733	<50.4	3,733	<126.0	3,733	<1.12	3,733	<1.12	3,733	<0.38	-	-	3,733	<1.39	3,733	<1.39	3,733	<28.9	3,733	<57.8	3,733	<11.3	3,733	<1.13	-	-	3,733	<1.13	3,733	<0.62	3,733	<0.62
Di-n-octyl phthalate	373,333	<57.6	373,333	<144.0	373,333	<1.10	373,333	<1.10	373,333	<1.28	-	-	373,333	<1.67	373,333	<1.67	373,333	<55.0	373,333	<110.0	373,333	<20.5	373,333	<2.05	-	-	373,333	<2.05	373,333	<2.32	373,333	<2.32
1,2-Diphenylhydrazine (as azobenzene)	NS	<46.6	NS	<116.5	NS	<6.70	NS	<6.70	NS	<1.06	-	-	NS	<7.46	NS	<7.46	NS	<21.5	NS	<43.0	1.8	*<11.1*	1.8	<1.11	-	-	1.8	<1.11	1.8	<1.10	1.8	<1.10
Fluoranthene	37,333	<35.8	37,333	<89.5	37,333	<1.35	37,333	<1.35	37,333	<0.27	-	-	37,333	<1.06	37,333	<1.06	37,333	<30.8	37,333	<61.6	37,333	<12.7	37,333	<1.27	-	-	37,333	<1.27	37,333	<0.48	37,333	<0.48
Fluorene	37,333	<30.8	37,333	<77.0	37,333	<4.81	37,333	<4.81	37,333	<0.29	-	-	37,333	<0.51	37,333	<0.51	37,333	<28.7	37,333	<57.4	37,333	<11.8	37,333	<1.18	-	-	37,333	<1.18	37,333	<0.48	37,333	<0.48
Hexachlorobenzene	747	<27.8	747	<69.5	747	<1.23	747	<1.23	747	<0.34	-	-	747	<0.47	747	<0.47	747	<15.7	747	<31.4	747	<10.1	747	<1.01	-	-	747	<1.01	747	<0.35	747	<0.35
Hexachlorobutadiene	187	<6.6	187	<16.5	187	<1.82	187	<1.82	187	<1.67	-	-	187	<0.41	187	<0.41	187	<10.0	187	<20.0	187	<12.0	187	<1.20	-	-	187	<1.20	187	<0.44	187	<0.44
Hexachlorocyclopentadiene	11,200	<45.4	11,200	<113.5	11,200	<1.23	11,200	<1.23	11,200	<1.53	-	-	11,200	<2.16	11,200	<2.16	11,200	<61.0	11,200	<122.0	9,800	<30.7	9,800	<3.07	-	-	9,800	<3.07	9,800	<1.26	9,800	<1.26
Hexachloroethane	850	<8.0	850	<20.0	850	<1.62	850	<1.62	850	<1.23	-	-	850	<0.54	850	<0.54	850	<14.9	850	<29.8	850	<13.5	850	<1.35	-	-	850	<1.35	850	<0.34	850	<0.34
Indeno(1,2,3-cd)pyrene	1.9	*<40.6*	1.9	*<101.5*	1.9	<1.39	1.9	<1.39	1.9	<0.62	-	-	1.9	<2.38	1.9	**3.89**[7]	1.9	*<61.1*	1.9	*<122.2*	1.9	*<10.7*	1.9	<1.07	-	-	1.9	<1.07	1.9	<2.27	1.9	*<2.27*

SR045	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16 [6]		Summer 2016		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019[6]		Winter 2019/20		Summer 2020		Winter 2020/21	
SAMPLING DATE(S):	SWQS	7/21/2013	SWQS	11/22/2013	SWQS	8/12/2014	SWQS	12/4/2014	SWQS	7/31/2015	-	-	SWQS	7/29/2016	SWQS	11/3/2016	SWQS	7/16/2017	SWQS	2/14/2018	SWQS	8/7/2018	SWQS	11/30/2019	SWQS		SWQS	11/29/2019	SWQS	8/20/2020	SWQS	1/24/2021
Isophorone	186,667	<28.2	186,667	<70.5	186,667	<2.14	186,667	<2.14	186,667	<0.37	-	-	186,667	<0.51	186,667	<0.51	186,667	<17.7	186,667	<35.4	186,667	<13.2	186,667	<1.32	-	-	186,667	<1.32	186,667	<1.38	186,667	<1.38
Naphthalene	18,667	<24.0	18,667	<60.0	18,667	<1.83	18,667	<1.83	18,667	<0.36	-	-	18,667	<0.49	18,667	<0.49	18,667	<15.4	18,667	<30.8	18,667	<14.8	18,667	<1.48	-	-	18,667	<1.48	18,667	<0.35	18,667	<0.35
Nitrobenzene	467	<24.6	467	<61.5	467	<2.10	467	<2.10	467	<1.26	-	-	467	<0.44	467	<0.44	467	<18.0	467	<36.0	467	<15.5	467	<1.55	-	-	467	<1.55	467	<0.86	467	<0.86
n-Nitrosodimethylamine	0.03	*<24.0*	0.03	*<60.0*	0.03	*<1.00*	0.03	*<1.00*	0.03	*<1.13*	-	-	0.03	*<0.54*	0.03	*<0.54*	0.03	*<16.2*	0.03	*<32.4*	0.03	*<16.7*	0.03	*<1.67*	-	-	0.03	*<1.67*	0.03	*<0.67*	0.03	*<0.67*
n-Nitrosodi-n-propylamine	86,667	<30.2	86,667	<75.5	86,667	<1.15	86,667	<1.15	86,667	<1.17	-	-	86,667	<1.02	86,667	<1.02	86,667	<16.5	86,667	<33.0	88,667	<16.5	88,667	<1.65	-	-	88,667	<1.65	88,667	<2.38	88,667	<2.38
n-Nitrosodiphenylamine	290	<60.8	290	<152.0	290	<3.57	290	<3.57	290	<1.15	-	-	290	<1.67	290	<1.67	290	<31.3	290	<62.6	290	<10.7	290	<1.07	-	-	290	<1.07	290	<0.84	290	<0.84
Phenanthrene	NS	<32.6	NS	<81.5	NS	<1.39	NS	<1.39	NS	<0.31	-	-	NS	<0.49	NS	<0.49	NS	<30.2	NS	<60.4	NS	<13.3	NS	<1.33	-	-	NS	<1.33	NS	<0.30	NS	<0.30
Pyrene	28,000	<32.8	28,000	<82.0	28,000	<3.86	28,000	<3.86	28,000	<0.67	-	-	28,000	<3.21	28,000	<3.21	28,000	<33.8	28,000	<67.6	28,000	<12.0	28,000	<1.20	-	-	28,000	<1.20	28,000	<0.21	28,000	<0.21
1,2,4-Trichlorobenzene	9,333	<6.4	9,333	<16.0	9,333	<1.69	9,333	<1.69	9,333	<1.04	-	-	9,333	<0.55	9,333	<0.55	9,333	<12.1	9,333	<24.2	9,333	<13.4	9,333	<1.34	-	-	9,333	<1.34	9,333	<1.00	9,333	<1.00
Pesticides (µg/L) [2]																																
Aldrin	4.5	<0.048	4.5	<0.015	4.5	<0.027	4.5	<0.027	4.5	<0.012	-	-	4.5	<0.019	4.5	<0.019	4.5	<0.013	4.5	<0.014	4.5	<0.010	4.5	<0.010	-	-	4.5	<0.045	4.5	<0.0040	4.5	<0.0038
Alpha-BHC	1,600	<0.040	1,600	<0.016	1,600	<0.021	1,600	<0.021	1,600	<0.058	-	-	1,600	<0.010	1,600	<0.010	1,600	<0.015	1,600	<0.016	1,600	<0.012	1,600	0.041	-	-	1,600	<0.033	1,600	<0.0033	1,600	<0.0031
Beta-BHC	560	<0.100	560	<0.088	560	<0.072	560	<0.072	560	<0.063	-	-	560	<0.049	560	<0.049	560	<0.083	560	<0.086	560	<0.099	560	<0.099	-	-	560	<0.041	560	<0.1910	560	<0.1802
Gamma-BHC	11	0.052	11	<0.022	11	<0.034	11	<0.034	11	<0.058	-	-	11	<0.019	11	<0.019	11	<0.020	11	<0.021	11	<0.013	11	<0.013	-	-	11	<0.034	11	<0.0036	11	<0.0034
Delta-BHC	1,600	<0.034	1,600	<0.017	1,600	<0.021	1,600	<0.021	1,600	<0.066	-	-	1,600	<0.035	1,600	<0.035	1,600	<0.012	1,600	<0.012	1,600	<0.045	1,600	<0.045	-	-	1,600	<0.041	1,600	<0.0164	1,600	<0.0155
Chlordane	3.2	<0.17	3.2	<0.19	3.2	<0.14	3.2	<0.14	3.2	<0.36	-	-	3.2	<0.61	3.2	<0.61	3.2	<0.029	3.2	<0.030	3.2	<0.33	3.2	<0.33	-	-	3.2	<0.17	3.2	<0.20	3.2	<0.19
4,4'-DDT	1.1	<0.030	1.1	<0.015	1.1	<0.025	1.1	<0.025	1.1	<0.017	-	-	1.1	<0.011	1.1	<0.011	1.1	<0.020	1.1	<0.021	1.1	<0.009	1.1	<0.009	-	-	1.1	<0.032	1.1	<0.0015	1.1	<0.0014
4,4'-DDE	1.1	<0.036	1.1	<0.017	1.1	<0.010	1.1	<0.010	1.1	<0.013	-	-	1.1	<0.020	1.1	<0.020	1.1	<0.019	1.1	<0.020	1.1	<0.015	1.1	<0.015	-	-	1.1	<0.043	1.1	<0.0036	1.1	<0.0034
4,4'-DDD	1.1	<0.024	1.1	<0.013	1.1	<0.031	1.1	<0.031	1.1	<0.021	-	-	1.1	<0.021	1.1	<0.021	1.1	<0.023	1.1	<0.024	1.1	<0.017	1.1	<0.017	-	-	1.1	<0.039	1.1	<0.0023	1.1	<0.0022
Dieldrin	4	<0.029	4	0.07	4	<0.030	4	<0.030	4	<0.060	-	-	4	<0.019	4	<0.019	4	<0.015	4	<0.041	4	<0.012	4	<0.012	-	-	4	<0.031	4	<0.0039	4	<0.0037
Alpha-endosulfan	3 T	0.089	3 T	<0.017	3 T	<0.018	3 T	<0.018	3 T	<0.072	-	-	3 T	<0.018	3 T	<0.018	3 T	<0.015	3 T	<0.016	3 T	<0.020	3 T	<0.020	-	-	3 T	0.3	3 T	<0.0061	3 T	<0.0058
Beta-endosulfan	3 T	<0.036	3 T	<0.012	3 T	<0.032	3 T	<0.032	3 T	<0.019	-	-	3 T	<0.021	3 T	<0.021	3 T	<0.014	3 T	<0.015	3 T	<0.014	3 T	<0.014	-	-	3 T	<0.035	3 T	<0.0022	3 T	<0.0021
Endosulfan sulfate	3	<0.026	3	<0.013	3	<0.008	3	<0.008	3	0.028	-	-	3	<0.022	3	<0.022	3	<0.019	3	<0.020	3	<0.017	3	<0.017	-	-	3	<0.035	3	<0.0019	3	<0.0018
Endrin	0.7	<0.037	0.7	<0.015	0.7	<0.017	0.7	<0.017	0.7	<0.023	-	-	0.7	<0.042	0.7	<0.042	0.7	<0.040	0.7	<0.042	0.7	<0.042	0.7	<0.042	-	-	0.7	<0.033	0.7	<0.0087	0.7	<0.0082
Endrin aldehyde	0.7	<0.040	0.7	<0.022	0.7	<0.032	0.7	<0.032	0.7	<0.026	-	-	0.7	<0.024	0.7	<0.024	0.7	<0.034	0.7	<0.035	0.7	<0.068	0.7	<0.068	-	-	0.7	<0.090	0.7	<0.003	0.7	<0.003
Heptachlor	0.9	<0.037	0.9	<0.017	0.9	<0.027	0.9	0.045	0.9	<0.035	-	-	0.9	<0.023	0.9	<0.023	0.9	<0.019	0.9	<0.020	0.9	0.095	0.9	<0.011	-	-	0.9	<0.069	0.9	<0.0315	0.9	<0.0297
Heptachlor epoxide	0.9	<0.034	0.9	<0.019	0.9	<0.008	0.9	<0.008	0.9	<0.062	-	-	0.9	<0.020	0.9	<0.020	0.9	<0.016	0.9	<0.017	0.9	<0.012	0.9	<0.012	-	-	0.9	<0.035	0.9	<0.0016	0.9	<0.0015
PCB-1242	[4]	<0.43	[4]	<0.52	[4]	<0.37	[4]	<0.37	[4]	<0.14	-	-	[4]	<0.72	[4]	<0.72	[4]	<0.33	[4]	<0.34	[4]	<0.28	[4]	<0.28	-	-	[4]	<0.26	[4]	<0.0881	[4]	<0.0831
PCB-1254	[4]	<0.21	[4]	<0.27	[4]	<0.23	[4]	<0.23	[4]	<0.20	-	-	[4]	<0.22	[4]	<0.22	[4]	<0.17	[4]	<0.18	[4]	<0.21	[4]	<0.21	-	-	[4]	<0.25	[4]	<0.0881	[4]	<0.0831
PCB-1221	[4]	<0.71	[4]	<0.81	[4]	<0.22	[4]	<0.22	[4]	<0.64	-	-	[4]	<0.46	[4]	<0.46	[4]	<0.36	[4]	<0.37	[4]	<0.50	[4]	<0.50	-	-	[4]	<0.25	[4]	<0.0881	[4]	<0.0831
PCB-1232	[4]	<0.69	[4]	<0.32	[4]	<0.55	[4]	<0.55	[4]	<0.37	-	-	[4]	<0.90	[4]	<0.90	[4]	<0.40	[4]	<0.42	[4]	<0.48	[4]	<0.48	-	-	[4]	<0.28	[4]	<0.0881	[4]	<0.0831
PCB-1248	[4]	<0.82	[4]	<0.26	[4]	<0.19	[4]	<0.19	[4]	<0.22	-	-	[4]	<0.24	[4]	<0.24	[4]	<0.21	[4]	<0.22	[4]	<0.35	[4]	<0.35	-	-	[4]	<0.21	[4]	<0.0881	[4]	<0.0831
PCB-1260	[4]	<0.22	[4]	<0.22	[4]	<0.32	[4]	<0.32	[4]	<0.59	-	-	[4]	<0.26	[4]	<0.26	[4]	<0.34	[4]	<0.35	[4]	<0.28	[4]	<0.28	-	-	[4]	<0.21	[4]	<0.0881	[4]	<0.0831
PCB-1016	[4]	<0.38	[4]	<0.31	[4]	<0.18	[4]	<0.18	[4]	<0.55	-	-	[4]	<0.29	[4]	<0.29	[4]	<0.33	[4]	<0.34	[4]	<0.40	[4]	<0.40	-	-	[4]	<0.23	[4]	<0.0881	[4]	<0.0831
Toxaphene	11	<0.56	11	<0.32	11	<0.22	11	<0.22	11	<0.60	-	-	11	<0.48	11	<0.48	11	<0.47	11	<0.49	11	<0.482	11	<0.482	-	-	11	<0.40	11	<0.495	11	<0.467

Notes:

NS = no standard applicable to the designated use

T = total

D = dissolved

Bold text indicates a sample result greater than the WQS

Italicized text indicates a laboratory detection limit higher than the WQS

Footnotes:

[1] The Permittee shall report on any additional parameters that were monitored for seasonal stormwater sampling as required by Section 6.0 of this permit (Special Conditions).

[2] Analytical results shall be reported in the units specified for each category or parameter.

[3] Report the average flow rate for the sampling period (no more than 6 hours).

[4] Standard for total PCBs of 11 µg/L A&We and 19 µg/L PBC.

[5] Beginning with the Summer 2016 reporting, total 1,3-dichloropropylene is reported (prior reporting periods included cis and trans isomers) .

[6]No sample collected. See Table 8.1 for storm event data.

[7]Data flagged due to contamination in the lab reagent blank; therefore, these are not true detections or exceedances.

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OUTFALL ID: SR049 RECEIVING WATER: Salt River	MONITORING SEASONS Summer: June 1 - October 31 Winter: November 1 - May 31																													
DESIGNATED USES: A&Wedw, PBC, FC, AgI, AgL	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016[6]		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019[6]		Winter 2019/20		Summer 2020[6]		Winter 2020/21	
SAMPLING DATE(S):	SWQS	7/21/2013	SWQS	11/22/2013	SWQS	8/1/2014	SWQS	12/4/2014	SWQS	7/31/2015	SWQS	1/4/2016	-	-	SWQS	11/3/2016	SWQS	7/14/2017	SWQS	1/9/2018	SWQS	8/11/2018	SWQS	3/12/2019	-	-	SWQS	11/29/2019	-	-	SWQS	12/10/2020
MONITORING PARAMETERS [1,2]																														
Conventional Parameters																														
Flow [3] (cfs)	NS	18.84	NS	13.48	NS	10.791	NS	10.166	NS	24.5	NS	22.997	-	-	NS	55.936	NS	101.82	NS	13.82	NS	22.3	NS	2.27	-	-	NS	4.89	-	-	NS	5.39
pH	6.5-9	8.03	6.5-9	8.54	6.5-9	7.64	6.5-9	8.01	6.5-9	7.5	6.5-9	7.73	-	-	6.5-9	7.16	6.5-9	7.29	6.5-9	7.95	6.5-9	8.55	6.5-9	7.55	-	-	6.5-9	8.21	-	-	6.5-9	7.67
Temperature (ºC)	Varies	28.6	Varies	17	Varies	28.5	Varies	18	Varies	30.8	Varies	16.5	-	-	Varies	21.5	Varies	27.8	Varies	18.3	Varies	25.3	Varies	18.4	-	-	Varies	13.2	-	-	Varies	14
Hardness (mg/L)	400	39.9	400	32.8	400	74.8	400	142	400	66.8	400	48.9	-	-	400	171	400	57.3	400	68.9	400	42.8	400	56.3	-	-	400	26.7	-	-	400	64
Total Dissolved Solids (TDS) (mg/L) [2]	NS	134	NS	100	NS	290	NS	362	NS	270	NS	146	-	-	NS	486	NS	190	NS	216	NS	188	NS	158	-	-	NS	86	-	-	NS	186
Total Suspended Solids (TSS) (mg/L) [2]	NS	440	NS	420	NS	508	NS	200	NS	2,290	NS	420	-	-	NS	256	NS	295	NS	488	NS	1,220	NS	127	-	-	NS	378	-	-	NS	126
Biochemical Oxygen Demand (BOD) (mg/L) [2]	NS	35	NS	22	NS	66	NS	33	NS	61	NS	25	-	-	NS	35	NS	26	NS	45	NS	23	NS	24	-	-	NS	9	-	-	NS	27
Chemical Oxygen Demand (COD) (mg/L) [2]	NS	270	NS	200	NS	440	NS	210	NS	750	NS	280	-	-	NS	260	NS	230	NS	310	NS	280	NS	150	-	-	NS	140	-	-	NS	150

SR049	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016[5]		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019[6]		Winter 2019/20		Summer 2020[6]		Winter 2020/21	
SAMPLING DATE(S):	SWQS	7/21/2013	SWQS	11/22/2013	SWQS	8/1/2014	SWQS	12/4/2014	SWQS	7/31/2015	SWQS	1/4/2016	-	-	SWQS	11/3/2016	SWQS	7/14/2017	SWQS	1/9/2018	SWQS	8/11/2018	SWQS	3/12/2019	-	-	SWQS	11/29/2019	-	-	SWQS	12/10/2020
Inorganics																														
Cyanide, total (µg/L) [2]	41 T	<50	41 T	<5	41 T	<5	41 T	<5	41 T	<5	41 T	<5	-	-	41 T	<5	41 T	<5	41 T	<5	41 T	<5	41 T	<5	-	-	41 T	<5	-	-	41 T	<5
Nutrients (mg/L) [2]																														
Nitrate + Nitrite as N	NS	1.2	NS	0.8	NS	2.8	NS	1.9	NS	1.3	NS	1.0	-	-	NS	1.5	NS	1.2	NS	1.4	NS	1.0	NS	1.0	-	-	NS	0.6	-	-	NS	1.2
Ammonia as N	5.33	1.3	1.99	1.1	10.7	2.8	5.52	1.4	19.9	2.5	13.7	1.2	-	-	30.9	2	26.5	0.9	9.2	2.5	2.9	2.4	18.4	0.96	-	-	5.6	0.44	-	-	15.2	1.5
Total Kjeldahl Nitrogen (TKN)	NS	5.3	NS	3.8	NS	8	NS	4.7	NS	5.2	NS	3.9	-	-	NS	5.3	NS	3.6	NS	6.3	NS	5.0	NS	2.7	-	-	NS	2.1	-	-	NS	4.3
Total Phosphorus as P	NS	0.46	NS	1.5	NS	2.1	NS	0.35	NS	3.5	NS	1.4	-	-	NS	0.6	NS	0.83	NS	1.6	NS	0.65	NS	0.55	-	-	NS	1.1	-	-	NS	0.51
Ortho-Phosphorus as P	NS	0.3	NS	0.2	NS	0.6	NS	0.1	NS	<0.1	NS	0.2	-	-	NS	0.3	NS	0.1	NS	0.4	NS	0.2	NS	0.1	-	-	NS	0.1	-	-	NS	0.4
Microbiological																														
Escherichia coli (*E. coli*) (CFU/100 mg or MPN/100 mL) [2]	575	**>2,419.6**	575	**>2,419.6**	575	**>2,419.6**	575	**>2,419.6**	575	**8,570**	575	**5,040.00**	-	**-**	575	**48,840**	575	**141,360**	575	**4,040**	575	**5,560**	575	**>2,419.6**	-	-	575	**17,850**	-	-	575	**4,350**
Total Metals (µg/L) [2]																														
Antimony	640 T 1,000 D	1.8 T 0.7 D	640 T 1,000 D	1.8 T 0.3 D	640 T 1,000 D	4.3 T 1.9 D	640 T 1,000 D	2.7 T 1.6 D	640 T 1,000 D	2.6 T <5.0 D	640 T 1,000 D	3.0 T <5.0 D	-	-	640 T 1,000 D	3.6 T <5 D	640 T 1,000 D	1.4 T <5 D	640 T 1,000 D	2.9 T <5 D	640 T 1,000 D	1.2 T <5.0 D	640 T 1,000 D	2.0 T <5.0 D	-	-	640 T 1,000 D	2.3 T <5.0 D	-	-	640 T 1,000 D	2.6 T <2.0 D
Arsenic	80 T 340 D	6.5 T 1.4 D	80 T 340 D	4.2 T 0.6 D	80 T 340 D	7.7 T 2.3 D	80 T 340 D	4.4 T 2.0 D	80 T 340 D	16.6 T <5.0 D	80 T 340 D	6.0 T <5.0 D	-	-	80 T 340 D	5.4 T <5 D	80 T 340 D	5 T <5 D	80 T 340 D	7.4 T <5 D	80 T 340 D	12.7 T <5.0 D	80 T 340 D	4.0 T <5.0 D	-	-	80 T 340 D	6.2 T <5.0 D	-	-	80 T 340 D	3.4 T <2.0 D
Barium	98,000 T	241 T 25 D	98,000 T	157 T 8 D	98,000 T	251 T 44 D	98,000 T	160 T 56 D	98,000 T	572 T 43 D	98,000 T	244 T 27 D	-	-	98,000 T	187 T 83 D	98,000 T	137 T 33 D	98,000 T	212 T 37 D	98,000 T	443 T 38 D	98,000 T	155 T 63 D	-	-	98,000 T	177 T 14 D	-	-	98,000 T	111 T 30 D
Beryllium	84 T	0.79 T <0.15 D	84 T	0.4 T <0.06 D	84 T	0.74 T <0.06 D	84 T	0.3 T <0.06 D	84 T	2.1 T <5.0 D	84 T	0.53 T <5.0 D	-	-	84 T	0.35 T <5 D	84 T	0.43 T <5 D	84 T	0.69 T <5 D	84 T	1.7 T 65 D	84 T	0.24 T <5.0 D	-	-	84 T	0.62 T <5.0 D	-	-	84 T	<1.8 T <2.0 D
Cadmium	50 T 3.22 D	1.0 T <0.25 T	50 T 2.66 D	0.9 T <0.10 D	50 T 5.93 D	0.9 T <0.12 D	50 T 11.07 D	0.4 T <0.12 D	50 T 5.31 D	2.4 T <5.0 D	50 T 3.92 D	1.1 T *<5.0 D*	-	-	50 T 7.62 D	0.4 T <0.25 D	50 T 2.33 D	0.4 T <0.2 D	50 T 2.85 D	0.5 T *<5.0 D*	50 T 1.70	1.0 T <0.25 D	50 T 2.29	0.3 T <0.25 D	-	-	50 T 1.02	0.6 T *<5.0 D*	-	-	50 T 2.63	<2.1 T <1.0 D
Chromium	1,000 T	26.3 T <2.00 D	1,000 T	14.4 T <0.80 D	1,000 T	27.3 T 2.2 D	1,000 T	11.2 T 1.4 D	1,000 T	67.0 T <5.0 D	1,000 T	20.1 T <5.0 D	-	-	1,000 T	12.8 T <5 D	1,000 T	18 T <5 D	1,000 T	25 T <5 D	1,000 T	57.4 T <5.0 D	1,000 T	11.8 T <5.0 D	-	-	1,000 T	24.1 T <5.0 D	-	-	1,000 T	<12.5 T <10 D
Copper	500 T 5.66 D	149 T **11.8 D**	500 T 4.70 D	79.1 T **5.5 D**	500 T 10.22 D	127 T **18.4 D**	500 T 18.7	75.6 T **19.8 D**	500 T 9.19 D	268 T **17.2 D**	500 T 6.85 D	137 T **10.5 D**	-	-	500 T 22.28 D	66.8 T 9.3 D	500 T 7.95 D	49.1 T **13.2 D**	500 T 9.46 D	82.6 T **22.8 D**	500 T 6.04	133 T **15.6 D**	500 T 7.82	35.8 T **15.8 D**	-	-	500 T 3.87	48.8 T **11.8 D**	-	-	500 T 8.83	41.2 T **29.3 D**
Lead	15 T 23.45 D	**48.2 T** 2.3 D	15 T 18.83 D	**39.5 T** 0.3 D	15 T 47.01 D	**35.4 T** 2.0 D	15 T 94.4	**16.0 T** 0.5 D	15 T 41,51 D	**93.5 T** 2.1 D	15 T 29.40 D	**38.4 T** <5.0 D	-	-	15 T 115.22 D	14 T 0.7 D	15 T 35.05 D	12.8 T 0.2 D	15 T 42.95 D	**19.6 T** 0.8 D	15 T 25.35	**45.4 T** 0.4 D	15 T 34.37	10.6 T 0.2 D	-	-	15 T 14.95	**16.9 T** <5.0 D	-	-	15 T 39.60	10.2 T <1.0 D
Mercury	10 T 2.4 D	0.06 T <0.020 D	10 T 2.4 D	0.04 T <0.020 D	10 T 2.4 D	0.13 T <0.2 D	10 T 2.4 D	<0.092 T <0.092 D	10 T 2.4 D	0.11 T <0.2 D	10 T 2.4 D	0.08 T <0.2 D	-	-	10 T 2.4 D	<0.068 T <0.2 D	10 T 2.4 D	<0.20 T <0.20 D	10 T 2.4 D	<0.066 T <0.2 D	10 T 2.4 D	0.105 T <0.2 D	10 T 2.4 D	<0.042 T <0.2 D	-	-	10 T 2.4 D	<0.042 T <0.2 D	-	-	10 T 2.4 D	<0.118 T <0.2 D
Nickel	511 T 215.5 D	34.8 T 4.4 D	511 T 182.2 D	18.5 T 1.1 D	511 T 366.2 D	34.6 T 7.2 D	511 T 630	16.0 T 4.3 D	511 T 333 D	86.7 T 8.1 D	511 T 256 D	27.8 T <5.0 D	-	-	511 T 737.19 D	16.7 T <5 D	511 T 292.32 D	22.6 T <5 D	511 T 341.66 D	30.5 T <5 D	4,600 T 228.38	70.4 T <5.0 D	4,600 T 288.00	13.5 T <5.0 D	-	-	4,600 T 153.21	24.4 T <5.0 D	-	-	4,600 T 320.99	12.2 T 3.0 D
Selenium	20 T	<0.60 T <0.60 D	20 T	<0.60 T <0.24 D	20 T	1.1 T 0.7 D	20 T	0.78 T 0.6 D	20 T	1.2 T <5.0 D	20 T	0.59 T <5.0 D	-	-	20 T	0.44 T <5 D	20 T	0.53 T <5 D	20 T	0.65 T <5 D	20 T	1.0 T <5.0 D	20 T	<0.55 T <5.0 D	-	-	20 T	<0.55 T <5.0 D	-	-	20 T	<4.05 T <2.0 D
Silver	4,667 T 0.667 D	0.3 T <0.15 D	4,667 T 0.474 D	0.2 T <0.15 D	4,667 T 1.952 D	0.2 T <0.20 D	4,667 T 5.88 D	0.1 T <0.08 D	4,667 T 1.61 D	0.4 T *<5.0 D*	4,667 T 0.94 D	<0.25 T *<5.0 D*	-	-	4,667 T 8.09 D	<0.45 T <5 D	4,667 T 1.23 D	<0.1 T *<5 D*	4,667 T 1.69 D	<0.2 T *<5 D*	4,667 T 0.75	0.3 T *<5.0 D*	4,667 T 1.20	<0.15 T *<5.0 D*	-	-	4,667 T 0.33	1.3 T *<5.0 D*	-	-	4,667 T 1.49	<1.25 T *<5.0 D*
Thallium	1 T 700 D	<0.20 T <0.20 D	1 T 700 D	0.29 T <0.08 D	1 T 700 D	0.37 T <0.04 D	1 T 700 D	0.30 T <0.04 D	1 T 700 D	0.41 T <5.0 D	1 T 700 D	0.15 T <5.0 D	-	-	1 T 700 D	<0.2 T <5 D	1 T 700 D	<0.10 T <5 D	1 T 700 D	<0.26 T <5 D	7.2 T 700 D	0.39 T <5.0 D	7.2 T 700 D	<0.15 T <5.0 D	-	-	7.2 T 700 D	0.22 T <5.0 D	-	-	7.2 T 700 D	<2.75 T <2.0 D
Zinc	5,106 T 53.79 D	458 T 39.5 D	5,106 T 45.56 D	349 T 11.6 D	5,106 T 91.6 D	502 T 51.4 D	5,106 T 157.7	180 T 25.6 D	5,106 T 83.3 D	1,510 T *70.8 D*	5,106 T 63.9 D	740 T 21.2 D	-	-	5,106T 184.62 D	259 T 34.9 D	5,106 T 73.10 D	210 T 18.6 D	5,106 T 85.46 D	308 T 34.7 D	5,106 T 57.09	529 T 8.3 D	5,106 T 72.02	134 T 17 D	-	-	5,106 T 38.28	183 T *<50 D*	-	-	5,106 T 80.28	156 T 30.9 D
Organic Toxic Pollutants																														
Total Petroleum Hydrocarbons (TPH) (mg/L) [2]	NS	<11	NS	<11	NS	<10	NS	<10	NS	<10	NS	<6	-	-	NS	<4.6	NS	<6.9	NS	<7.1	NS	<7.2	NS	<4.6	-	-	NS	<5.7	-	-	NS	<5.5
Total Oil and Grease (mg/L) [2]	NS	<5.7	NS	<5.7	NS	7	NS	7.6	NS	<5.1	NS	<6	-	-	NS	<4.6	NS	<5.8	NS	<5.9	NS	<6.0	NS	<4.6	-	-	NS	<5.7	-	-	NS	<6.5
VOCs, Semi-VOCs, and Pesticides (µg/L) [2]																														
Acrolein	1.9	<0.20	1.9	<0.20	1.9	*<2.00*	1.9	<0.40	1.9	<0.78	1.9	<0.78	-	-	1.9	<0.41	1.9	*<3.95*	1.9	*<0.79*	1.9	<0.55	1.9	0.94	-	-	1.9	<0.55	-	-	1.9	<0.950
Acrylonitrile	0.2	<0.16	0.2	<0.16	0.2	*<0.70*	0.2	<0.14	0.2	*<0.53*	0.2	*<0.53*	-	-	0.2	*<0.42*	0.2	*<2.95*	0.2	*<0.59*	0.2	*<0.57*	0.2	*<0.57*	-	-	0.2	*<0.57*	-	-	0.2	*<0.524*
Benzene	114	<1.20	114	<0.24	114	<1.20	114	<0.13	114	<0.46	114	<0.46	-	-	114	<0.29	114	<1.30	114	<0.26	140	<0.33	140	<0.33	-	-	140	<0.33	-	-	140	<0.31

SR049	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016[5]		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019[6]		Winter 2019/20		Summer 2020[6]		Winter 2020/21	
SAMPLING DATE(S):	SWQS	7/21/2013	SWQS	11/22/2013	SWQS	8/1/2014	SWQS	12/4/2014	SWQS	7/31/2015	SWQS	1/4/2016	-	-	SWQS	11/3/2016	SWQS	7/14/2017	SWQS	1/9/2018	SWQS	8/11/2018	SWQS	3/12/2019	-	-	SWQS	11/29/2019	-	-	SWQS	12/10/2020
Bromoform	133	<2.35	133	<0.47	133	<2.35	133	<0.28	133	<0.68	133	<0.68	-	-	133	<0.33	133	<1.05	133	<0.21	133	<0.81	133	<0.81	-	-	133	<0.81	-	-	133	<0.37
Carbon tetrachloride	2	<1.30	2	<0.26	2	<1.30	2	<0.23	2	<0.31	2	<0.31	-	-	2	<0.20	2	<1.50	2	<0.30	2	<0.27	2	<0.27	-	-	2	<0.27	-	-	2	<0.32
Chlorobenzene	1,553	<0.80	1,553	<0.16	1,553	<0.80	1,553	<0.13	1,553	<0.50	1,553	<0.50	-	-	1,553	<0.33	1,553	<1.15	1,553	<0.23	1,553	<0.70	1,553	<0.70	-	-	1,553	<0.70	-	-	1,553	<0.42
Chlorodibromomethane	13	<0.90	13	<0.18	13	<0.90	13	<0.24	13	<0.61	13	<0.61	-	-	13	<0.32	13	<1.20	13	<0.24	13	<0.70	13	<0.70	-	-	13	<0.70	-	-	13	<0.21
Chloroethane (ethyl chloride)	NS	<1.10	NS	<0.22	NS	<1.10	NS	<0.19	NS	<0.40	NS	<0.40	-	-	NS	<0.33	NS	<1.40	NS	<0.28	NS	<0.33	NS	<0.33	-	-	NS	<0.33	-	-	NS	<0.66
2-Chloroethylvinyl ether	180,000	<0.22	180,000	<0.22	180,000	<0.95	180,000	<0.19	180,000	<0.53	180,000	<0.53	-	-	180,000	<0.43	180,000	<3.25	180,000	<0.65	180,000	<0.52	180,000	<0.52	-	-	180,000	<0.52	-	-	180,000	<0.333
Chloroform	2,133	<1.15	2,133	<0.23	2,133	<1.15	2,133	<0.14	2,133	<0.49	2,133	<0.49	-	-	2,133	<0.32	2,133	<1.20	2,133	<0.24	470	<0.31	470	<0.31	-	-	470	<0.31	-	-	470	<0.31
Dichlorobromomethane	17	<1.15	17	<0.23	17	<1.15	17	<0.15	17	<0.49	17	<0.49	-	-	17	<0.29	17	<1.30	17	<0.26	17	<0.52	17	<0.52	-	-	17	<0.52	-	-	17	<0.21
1,1-Dichloroethane	NS	<1.30	NS	<0.26	NS	<1.30	NS	<0.19	NS	<0.42	NS	<0.42	-	-	NS	<0.29	NS	<1.35	NS	<0.27	NS	<0.32	NS	<0.32	-	-	NS	<0.32	-	-	NS	<0.30
1,2-Dichloroethane	37	<1.25	37	<0.25	37	<1.25	37	<0.11	37	<0.51	37	<0.51	-	-	37	<0.35	37	<1.30	37	<0.26	37	<0.28	37	<0.28	-	-	37	<0.28	-	-	37	<0.28
1,1-Dichloroethylene	7,143	<1.40	7,143	<0.28	7,143	<1.40	7,143	<0.27	7,143	<0.34	7,143	<0.34	-	-	7,143	<0.19	7,143	<1.60	7,143	<0.32	7,143	<0.40	7,143	<0.40	-	-	7,143	<0.40	-	-	7,143	<0.41
1,2-Dichloropropane	17,518	<1.25	17,518	<0.25	17,518	<1.25	17,518	<0.18	17,518	<0.49	17,518	<0.49	-	-	17,518	<0.32	17,518	<1.60	17,518	<0.32	17,518	<0.93	17,518	<0.93	-	-	17,518	<0.93	-	-	17,518	<0.33
1,3-Dichloropropylene[5]	42	cis<1.20 trans<1.10	42	cis<0.24 trans<0.22	42	cis<1.20 trans<1.10	42	<0.13	42	cis <0.51 trans <0.50	42	cis <0.51 trans <0.50	-	-	42	cis <0.51 trans <0.28	42	<1.05	42	<0.21	42	<0.43	42	<0.43	-	-	42	<0.43	-	-	42	<0.15
Ethylbenzene	2,133	<0.65	2,133	<0.13	2,133	<0.65	2,133	<0.15	2,133	<0.46	2,133	<0.46	-	-	2,133	<0.29	2,133	<1.15	2,133	<0.23	2,133	<0.61	2,133	<0.61	-	-	2,133	<0.61	-	-	2,133	<0.42
Methyl bromide	299	<0.95	299	<0.19	299	<0.95	299	<0.18	299	<0.46	299	<0.46	-	-	299	<0.28	299	<1.15	299	<0.23	299	<0.33	299	<0.33	-	-	299	<0.33	-	-	299	<0.39
Methyl chloride	270,000	<1.40	270,000	<0.28	270,000	<1.40	270,000	<0.23	270,000	<0.46	270,000	<0.46	-	-	270,000	<0.28	270,000	<1.85	270,000	<0.37	270,000	<0.33	270,000	<0.33	-	-	270,000	<0.33	-	-	270,000	<0.57
Methylene chloride	593	<1.00	593	<0.20	593	<1.00	593	<0.20	593	<0.81	593	<0.81	-	-	593	<0.31	593	<4.00	593	<0.80	593	<0.44	593	<0.44	-	-	593	<0.44	-	-	593	<0.41
1,1,2,2-Tetrachloroethane	4	<2.00	4	<0.40	4	<2.00	4	<0.35	4	<0.80	4	<0.80	-	-	4	<0.33	4	<1.55	4	<0.31	4	<0.83	4	<0.83	-	-	4	<0.83	-	-	4	<0.46
Tetrachloroethylene	261	<1.05	261	<0.21	261	<1.05	261	<0.13	261	<0.35	261	<0.35	-	-	261	<0.23	261	<1.45	261	<0.29	261	<0.38	261	<0.38	-	-	261	<0.38	-	-	261	<0.38
Toluene	8,700	<0.95	8,700	<0.19	8,700	<0.95	8,700	0.16	8,700	<0.43	8,700	<0.43	-	-	8,700	0.43	8,700	<1.25	8,700	<0.25	8,700	0.53	8,700	<0.38	-	-	8,700	<0.38	-	-	8,700	<0.35
trans-1,2-Dichloroethylene	10,127	<1.25	10,127	<0.25	10,127	<1.25	10,127	<0.18	10,127	<0.38	10,127	<0.38	-	-	10,127	<0.24	10,127	<1.25	10,127	<0.25	10,127	<0.32	10,127	<0.32	-	-	10,127	<0.32	-	-	10,127	<0.32
1,1,1-Trichloroethane	1,000	<1.00	1,000	<0.20	1,000	<1.00	1,000	<0.14	1,000	<0.34	1,000	<0.34	-	-	1,000	<0.23	1,000	<1.40	1,000	<0.28	1,000	<0.31	1,000	<0.31	-	-	1,000	<0.31	-	-	1,000	<0.32
1,1,2-Trichloroethane	16	<0.75	16	<0.15	16	<0.75	16	<0.13	16	<0.60	16	<0.60	-	-	16	<0.29	16	<1.50	16	<0.30	16	<0.68	16	<0.68	-	-	16	<0.68	-	-	16	<0.37
Trichloroethylene	29	<0.75	29	<0.15	29	<0.75	29	<0.22	29	<0.48	29	<0.48	-	-	29	<0.28	29	<1.80	29	<0.36	29	<0.46	29	<0.46	-	-	29	<0.46	-	-	29	<0.38
1,2,4-Trimethylbenzene	NS	<5.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<1.0	NS	<1.0	-	-	NS	<1.0	NS	<5.0	NS	<1.0	NS	<1.0	NS	<1.0	-	-	NS	<1.0	-	-	NS	<1.0
1,3,5-Trimethylbenzene	NS	<5.0	NS	<1.0	NS	<5.0	NS	<1.0	NS	<1.0	NS	<1.0	-	-	NS	<1.0	NS	<5.0	NS	<1.0	NS	<1.0	NS	<1.0	-	-	NS	<1.0	-	-	NS	<1.0
Vinyl chloride	5	<1.00	5	<0.20	5	<1.00	5	<0.22	5	<0.35	5	<0.35	-	-	5	<0.24	5	<2.10	5	<0.42	5	<0.35	5	<0.35	-	-	5	<0.35	-	-	5	<0.47
Xylenes, Total	186,667	<1.50	186,667	<0.30	186,667	<1.50	186,667	<0.13	186,667	<0.52	186,667	<0.52	-	-	186,667	<0.32	186,667	<1.15	186,667	<0.23	186,667	<0.70	186,667	<0.70	-	-	186,667	<0.70	-	-	186,667	<0.33
Acid Compounds (µg/L) [2]																																
2-Chlorophenol	30	*<220.9*	30	*<220.9*	30	*<74.0*	30	<1.48	30	<3.10	30	<3.10	-	-	30	<2.92	30	<4.23	30	<84.6	30	*<90.4*	30	<4.52	-	-	30	<4.52	-	-	30	<1.01
2,4-Dichlorophenol	59	*<217.3*	59	*<217.3*	59	*<82.5*	59	<1.65	59	<2.81	59	<2.81	-	-	59	<3.21	59	<4.82	59	<96.4	59	*<95.4*	59	<4.77	-	-	59	<4.77	-	-	59	<1.37
2,4-Dimethylphenol	171	<117.4	171	<117.4	171	<110.0	171	<2.20	171	<2.64	171	<2.64	-	-	171	<1.32	171	<7.07	171	<141.4	171	<40.8	171	<2.04	-	-	171	<2.04	-	-	171	<2.57
4,6-Dinitro-o-cresol	310	<153.5	310	<153.5	310	<61.0	310	<1.22	310	<1.49	310	<1.49	-	-	310	<2.27	310	<4.69	310	<93.8	310	<67.2	310	<3.36	-	-	310	<3.36	-	-	310	<1.27
2,4-Dinitrophenol	110	*<133.4*	110	*<133.4*	110	<56.6	110	<1.13	110	<2.21	110	<2.21	-	-	110	<2.64	110	<5.11	110	<102.2	110	<68.2	110	<3.41	-	-	110	<3.41	-	-	110	<0.92
2-Nitrophenol	NS	<211.7	NS	<211.7	NS	<78.5	NS	<1.57	NS	<2.84	NS	<2.84	-	-	NS	<2.61	NS	<7.83	NS	<156.6	NS	<93.6	NS	<4.68	-	-	NS	<4.68	-	-	NS	<0.94
4-Nitrophenol	4,100	<240.5	4,100	<240.5	4,100	<57.0	4,100	<1.14	4,100	<2.98	4,100	3.6	-	-	4,100	<2.03	4,100	<4.03	4,100	<80.6	4,100	<70.4	4,100	<3.52	-	-	4,100	<3.52	-	-	4,100	5.6
p-Chloro-m-cresol	15	*<227.1*	15	*<227.1*	15	*<82.5*	15	<1.65	15	<1.87	15	<1.87	-	-	15	<3.10	15	<4.05	15	*<81.0*	15	*<95.2*	15	<4.76	-	-	15	<4.76	-	-	15	<1.34
Pentachlorophenol	25.56	*<173.0*	42.69	<173.0	17.278	*<69.5*	25.041	<1.39	14.992	7.5	18.91	<1.47	-	-	10.65	<3.44	12.14	<7.36	23.56	*<147.2*	43.07	*<80.0*	15.76	<4.00	-	-	30.60	<4.00	-	-	17.78	<1.92
Phenol	37	*<182.8*	37	<182.8	37	*<67.0*	37	2.1	37	<2.30	37	<2.30	-	-	37	<1.84	37	<3.99	37	<79.8	37	*<81.6*	37	<4.08	-	-	37	<4.08	-	-	37	1.5
2,4,6-Trichlorophenol	2	*<246.7*	2	<246.7	2	*<94.5*	2	<1.89	2	*<2.60*	2	*<2.60*	-	-	2	*<3.28*	2	*<4.74*	2	*<94.8*	2	*<105.4*	2	*<5.27*	-	-	2	*<5.27*	-	-	2	<1.61
Bases/Neutrals (µg/L) [2]																																
Acenaphthene	198	<69.0	198	<69.0	198	<51.5	198	<1.03	198	<0.35	198	<0.35	-	-	198	<1.02	198	<1.88	198	<37.6	198	<23.8	198	<1.19	-	-	198	<1.19	-	-	198	<0.65
Acenaphthylene	NS	<89.1	NS	<89.1	NS	<50.0	NS	<1.00	NS	<1.23	NS	<1.23	-	-	NS	<6.10	NS	<1.75	NS	<35.0	NS	<28.2	NS	<1.41	-	-	NS	<1.41	-	-	NS	<0.56
Anthracene	74	*<89.1*	74	*<89.1*	74	*<144.0*	74	<2.88	74	<0.44	74	<0.44	-	-	74	<1.96	74	<2.62	74	<52.4	74	<24.0	74	<1.20	-	-	74	<1.20	-	-	74	<0.52
Benzo(a)anthracene	0.02	*<89.1*	0.02	*<89.1*	0.02	*<54.0*	0.02	*<1.08*	0.02	*<0.38*	0.02	*<0.38*	-	-	0.02	*<1.57*	0.02	*<1.96*	0.02	*<39.2*	0.02	*<20.4*	0.02	*<1.02*	-	-	0.02	*<1.02*	-	-	0.02	*<0.77*
Benzo(a)pyrene	0.02	*<96.3*	0.02	*<96.3*	0.02	*<188.5*	0.02	*<3.77*	0.02	*<1.41*	0.02	*<1.41*	-	-	0.02	*<3.12*	0.02	*<3.77*	0.02	*<75.4*	0.02	*<21.6*	0.02	*<1.08*	-	-	0.02	*<1.08*	-	-	0.02	*<1.50*
Benzo(b)fluoranthene	0.02	*<125.1*	0.02	<125.1	0.02	*<73.0*	0.02	*<1.46*	0.02	*<1.06*	0.02	*<1.06*	-	-	0.02	*<1.28*	0.02	*<2.17*	0.02	*<43.4*	0.02	*<7.6*	0.02	*<0.38*	-	-	0.02	*<0.38*	-	-	0.02	*<2.36*
Benzo(g,h,i)perylene	NS	<89.1	NS	<89.1	NS	<64.5	NS	<1.29	NS	<0.72	NS	<0.72	-	-	NS	<2.83	NS	<2.51	NS	<50.2	NS	<22.8	NS	<1.14	-	-	NS	<1.14	-	-	NS	<1.83
Benzo(k)fluoranthene	0.02	*<72.1*	0.02	*<72.1*	0.02	*<52.0*	0.02	*<1.04*	0.02	*<0.35*	0.02	*<0.35*	-	-	0.02	*<1.76*	0.02	*<2.33*	0.02	*<46.4*	0.02	*<20.6*	0.02	*<1.03*	-	-	0.02	*<1.03*	-	-	0.02	*<1.83*
Chrysene	0.02	*<76.2*	0.02	*<76.2*	0.02	*<70.5*	0.02	*<1.41*	0.02	*<0.46*	0.02	*<0.46*	-	-	0.02	*<1.08*	0.02	*<1.96*	0.02	*<39.2*	0.02	*<23.2*	0.02	*<1.16*	-	-	0.02	*<1.16*	-	-	0.02	*<0.77*
Dibenz(a,h)anthracene	0.02	*<102.0*	0.02	*<102.0*	0.02	*<62.0*	0.02	*<1.24*	0.02	*<0.47*	0.02	*<0.47*	-	-	0.02	*<1.93*	0.02	*<6.04*	0.02	*<120.8*	0.02	*<20.4*	0.02	*<1.02*	-	-	0.02	*<1.02*	-	-	0.02	*<1.58*
1,2-Dichlorobenzene	205	<13.9	205	<13.9	205	<88.0	205	<1.76	205	<1.04	205	<1.04	-	-	205	<0.58	205	<1.33	205	<0.30	205	<28.6	205	<1.43	-	-	205	<1.43	-	-	205	<0.85
1,3-Dichlorobenzene	2,500	<58.2	2,500	<58.2	2,500	<87.0	2,500	<1.74	2,500	<0.47	2,500	<0.47	-	-	2,500	<0.52	2,500	<1.25	2,500	<0.25	2,500	<27.8	2,500	<1.39	-	-	2,500	<1.39	-	-	2,500	<0.87
1,4-Dichlorobenzene	2,000	<54.1	2,000	<54.1	2,000	<78.0	2,000	<1.56	2,000	<1.28	2,000	<1.28	-	-	2,000	<0.50	2,000	<1.25	2,000	<0.29	2,000	<29.6	2,000	<1.48	-	-	2,000	<1.48	-	-	2,000	<0.93
3,3-Dichlorobenzidine	0.03	*<1404.4*	0.03	*<1404.4*	0.03	*<303.0*	0.03	*<6.06*	0.03	*<11.60*	0.03	*<11.60*	-	-	0.03	*<23.45*	0.03	*<25.43*	0.03	*<508.6*	0.03	*<139.8*	0.03	*<6.99*	-	-	0.03	*<6.99*	-	-	0.03	*<5.94*
Diethyl phthalate	8,767	<97.8	8,767	<97.8	8,767	<118.5	8,767	<2.37	8,767	<0.36	8,767	<0.36	-	-	8,767	<1.07	8,767	<1.99	8,767	<39.8	8,767	<21.6	8,767	<1.08	-	-	8,767	<1.08	-	-	8,767	<7.57
Dimethyl phthalate	17,000	<92.2	17,000	<92.2	17,000	<121.0	17,000	*<2.42*	17,000	<0.47	17,000	<0.47	-	-	17,000	<0.58	17,000	<1.91	17,000	<38.2	17,000	*<23.4*	17,000	<1.17	-	-	17,000	<1.17	-	-	17,000	<0.46
Di-n-butyl phthalate	470	<114.8	470	<114.8	470	<92.5	470	<1.85	470	<0.31	470	<0.31	-	-	470	<1.37	470	<2.35	470	<47.0	470	<22.4	470	<1.12	-	-	470	<1.12	-	-	470	<0.95
2,4-Dinitrotoluene	421	<105.6	421	<105.6	421	<106.0	421	<2.12	421	<0.26	421	<0.26	-	-	421	<1.30	421	<3.10	421	<62.0	421	<23.4	421	<1.17	-	-	421	<1.17	-	-	421	<0.80
2,6-Dinitrotoluene	3,733	<129.8	3,733	<129.8	3,733	<56.0	3,733	<1.12	3,733	<0.38	3,733	<0.38	-	-	3,733	<1.39	3,733	<2.89	3,733	<57.8	3,733	<22.6	3,733	<1.13	-	-	3,733	<1.13	-	-	3,733	<0.62
Di-n-octyl phthalate	373,333	<148.3	373,333	<148.3	373,333	<55.0	373,333	<1.10	373,333	<1.28	373,333	<1.28	-	-	373,333	<1.67	373,333	<5.50	373,333	<110.0	373,333	<41.0	373,333	<2.05	-	-	373,333	<2.05	-	-	373,333	<2.32
1,2-Diphenylhydrazine (as azobenzene)	NS	<120.0	NS	<120.0	NS	<335.0	NS	<6.70	NS	<1.06	NS	<1.06	-	-	NS	<7.46	NS	<2.15	NS	<43.0	0.2	*<22.2*	0.2	*<1.11*	-	-	0.2	*<1.11*	-	-	0.2	*<1.10*
Fluoranthene	28	*<92.2*	28	*<92.2*	28	*<67.5*	28	<1.35	28	<0.27	28	<0.27	-	-	28	<1.06	28	<3.08	28	*<61.6*	28	<25.4	28	<1.27	-	-	28	<1.27	-	-	28	<0.48
Fluorene	1,067	<79.3	1,067	<79.3	1,067	<240.5	1,067	<4.81	1,067	<0.29	1,067	<0.29	-	-	1,067	<0.51	1,067	<2.87	1,067	<57.4	1,067	<23.6	1,067	<1.18	-	-	1,067	<1.18	-	-	1,067	<0.48
Hexachlorobenzene	0.0003	*<71.6*	0.0003	*<71.6*	0.0003	*<61.5*	0.0003	*<1.23*	0.0003	*<0.34*	0.0003	*<0.34*	-	-	0.0003	*<0.47*	0.0003	*<1.57*	0.0003	*<31.4*	0.0003	*<20.2*	0.0003	*<1.01*	-	-	0.0003	*<1.01*	-	-	0.0003	*<0.35*
Hexachlorobutadiene	18	<17.0	18	<17.0	18	*<91.0*	18	<1.82	18	<1.67	18	<1.67	-	-	18	<0.41	18	<1.00	18	*<20.0*	18	*<24.0*	18	<1.20	-	-	18	<1.20	-	-	18	<0.44
Hexachlorocyclopentadiene	3.5	*<116.9*	3.5	*<116.9*	3.5	*<61.5*	3.5	<1.23	3.5	<1.53	3.5	<1.53	-	-	3.5	<2.16	3.5	*<6.10*	3.5	*<122.0*	3.5	*<61.4*	3.5	<3.07	-	-	3.5	<3.07	-	-	3.5	<1.26
Hexachloroethane	3.3	*<20.6*	3.3	*<20.6*	3.3	*<81.0*	3.3	<1.62	3.3	<1.23	3.3	<1.23	-	-	3.3	<0.54	3.3	<1.49	3.3	*<29.8*	3.3	*<27.0*	3.3	<1.35	-	-	3.3	<1.35	-	-	3.3	<0.34
Indeno(1,2,3-cd)pyrene	0.2	*<104.5*	0.2	*<104.5*	0.2	*<69.5*	0.2	*<1.39*	0.2	*<0.62*	0.2	*<0.62*	-	-	0.2	**4.19**	0.2	*<6.11*	0.2	*<122.2*	0.49	*<21.4*	0.49	*<1.07*	-	-	0.49	*<1.07*	-	-	0.49	<2.27

SR049	Summer 2013		Winter 2013/14		Summer 2014		Winter 2014/15		Summer 2015		Winter 2015/16		Summer 2016[5]		Winter 2016/17		Summer 2017		Winter 2017/18		Summer 2018		Winter 2018/19		Summer 2019[6]		Winter 2019/20		Summer 2020[6]		Winter 2020/21	
SAMPLING DATE(S):	SWQS	7/21/2013	SWQS	11/22/2013	SWQS	8/1/2014	SWQS	12/4/2014	SWQS	7/31/2015	SWQS	1/4/2016	-	-	SWQS	11/3/2016	SWQS	7/14/2017	SWQS	1/9/2018	SWQS	8/11/2018	SWQS	3/12/2019	-	-	SWQS	11/29/2019	-	-	SWQS	12/10/2020
Isophorone	961	*<72.6*	961	<72.6	961	<107.0	961	<2.14	961	<0.37	961	<0.37	-	-	961	<0.51	961	<1.77	961	*<35.4*	961	*<26.4*	961	<1.32	-	-	961	<1.32	-	-	961	<1.38
Naphthalene	1,524	<61.8	1,524	<61.8	1,524	<91.5	1,524	<1.83	1,524	<0.36	1,524	<0.36	-	-	1,524	<0.49	1,524	<1.54	1,524	<30.8	1,524	<29.6	1,524	<1.48	-	-	1,524	<1.48	-	-	1,524	<0.35
Nitrobenzene	138	<63.3	138	<63.3	138	<105.0	138	<2.10	138	<1.26	138	<1.26	-	-	138	<0.44	138	<1.80	138	<36.0	138	<31.0	138	<1.55	-	-	138	<1.55	-	-	138	<0.86
n-Nitrosodimethylamine	0.03	*<61.8*	0.03	*<61.8*	0.03	*<50.0*	0.03	*<1.00*	0.03	*<1.13*	0.03	*<1.13*	-	-	0.03	*<0.54*	0.03	*<1.62*	0.03	*<32.4*	0.03	*<33.4*	0.03	*<1.67*	-	-	0.03	*<1.67*	-	-	0.03	*<0.67*
n-Nitrosodi-n-propylamine	0.5	*<77.8*	0.5	*<77.8*	0.5	*<57.5*	0.5	*<1.15*	0.5	*<1.17*	0.5	*<1.17*	-	-	0.5	*<1.02*	0.5	*<1.65*	0.5	*<33.0*	0.5	*<33.0*	0.5	*<1.65*	-	-	0.5	*<1.65*	-	-	0.5	*<2.38*
n-Nitrosodiphenylamine	6	*<156.6*	6	*<156.6*	6	*<178.5*	6	<3.57	6	<1.15	6	<1.15	-	-	6	<1.67	6	<3.13	6	*<62.6*	6	*<21.4*	6	<1.07	-	-	6	<1.07	-	-	6	<0.84
Phenanthrene	30	<83.9	30	*<83.9*	30	*<69.5*	30	<1.39	30	<0.31	30	<0.31	-	-	30	<0.49	30	<3.02	30	*<60.4*	30	<26.6	30	<1.33	-	-	30	<1.33	-	-	30	<0.30
Pyrene	800	<84.5	800	<84.5	800	<193.0	800	<3.86	800	<0.67	800	<0.67	-	-	800	<3.21	800	<3.38	800	<67.6	800	<24.0	800	<1.20	-	-	800	<1.20	-	-	800	<0.21
1,2,4-Trichlorobenzene	70	<16.5	70	<16.5	70	*<84.5*	70	<1.69	70	<1.04	70	<1.04	-	-	70	<0.55	70	<1.21	70	<24.2	70	<26.8	70	<1.34	-	-	70	<1.34	-	-	70	<1.00
Pesticides (µg/L) [2]																																
Aldrin	0.00005	*<0.046*	0.00005	*<0.016*	0.00005	*<0.027*	0.00005	*<0.027*	0.00005	*<0.012*	0.00005	*<0.012*	-	-	0.00005	*<0.019*	0.00005	*<0.013*	0.00005	*<0.013*	0.00005	*<0.010*	0.00005	*<0.010*	-	-	0.00005	*<0.045*	-	-	0.00005	*<0.0038*
Alpha-BHC	0.005	*<0.038*	0.005	*<0.017*	0.005	*<0.021*	0.005	*<0.021*	0.005	*<0.058*	0.005	*<0.058*	-	-	0.005	*<0.010*	0.005	*<0.015*	0.005	**0.023**	0.005	*<0.012*	0.005	*<0.012*	-	-	0.005	*<0.033*	-	-	0.005	<0.0031
Beta-BHC	0.02	*<0.095*	0.02	<0.093	0.02	*<0.072*	0.02	*<0.072*	0.02	*<0.063*	0.02	*<0.063*	-	-	0.02	*<0.049*	0.02	*<0.083*	0.02	*<0.083*	0.02	*<0.099*	0.02	*<0.099*	-	-	0.02	*<0.041*	-	-	0.02	*<0.1802*
Gamma-BHC	1	0.062	1	<0.023	1	<0.034	1	<0.034	1	<0.058	1	<0.058	-	-	1	<0.019	1	<0.020	1	<0.020	1	<0.013	1	<0.013	-	-	1	<0.034	-	-	1	<0.0034
Delta-BHC	1,600	<0.032	1,600	<0.018	1,600	<0.021	1,600	<0.021	1,600	<0.066	1,600	<0.066	-	-	1,600	<0.035	1,600	<0.012	1,600	<0.012	1,600	<0.045	1,600	<0.045	-	-	1,600	<0.041	-	-	1,600	<0.0155
Chlordane	0.0008	*<0.16*	0.0008	*<0.20*	0.0008	*<0.14*	0.0008	*<0.14*	0.0008	*<0.36*	0.0008	*<0.36*	-	-	0.0008	*<0.61*	0.0008	*<0.029*	0.0008	*<0.029*	0.0008	*<0.33*	0.0008	*<0.33*	-	-	0.0008	*<0.17*	-	-	0.0008	*<0.19*
4,4'-DDT	0.0002	*<0.029*	0.0002	*<0.016*	0.0002	*<0.025*	0.0002	*<0.025*	0.0002	*<0.017*	0.0002	*<0.017*	-	-	0.0002	*<0.011*	0.0002	<0.020	0.0002	*<0.020*	0.0002	*<0.009*	0.0002	*<0.009*	-	-	0.0002	*<0.032*	-	-	0.0002	<0.0014
4,4'-DDE	0.0002	*<0.034*	0.0002	*<0.018*	0.0002	*<0.010*	0.0002	*<0.010*	0.0002	*0.033*	0.0002	*<0.013*	-	-	0.0002	*<0.020*	0.0002	*<0.019*	0.0002	*<0.019*	0.0002	*<0.015*	0.0002	*<0.015*	-	-	0.0002	*<0.043*	-	-	0.0002	*<0.0034*
4,4'-DDD	0.0002	*<0.023*	0.0002	*<0.014*	0.0002	*<0.031*	0.0002	*<0.031*	0.0002	*<0.021*	0.0002	*<0.021*	-	-	0.0002	*<0.021*	0.0002	*<0.023*	0.0002	*<0.023*	0.0002	*<0.017*	0.0002	*<0.017*	-	-	0.0002	*<0.039*	-	-	0.0002	*<0.0022*
Dieldrin	0.00005	*<0.028*	0.00005	*<0.022*	0.00005	*<0.030*	0.00005	*<0.030*	0.00005	*<0.060*	0.00005	*<0.060*	-	-	0.00005	*<0.019*	0.00005	*<0.015*	0.00005	*<0.015*	0.00005	*<0.012*	0.00005	*<0.012*	-	-	0.00005	*<0.031*	-	-	0.00005	*<0.0037*
Alpha-endosulfan	0.2	<0.034	0.2	<0.018	0.2	<0.018	0.2	<0.018	0.2	<0.072	0.2	<0.072	-	-	0.2	<0.018	0.2	<0.015	0.2	<0.015	0.2	<0.020	0.2	<0.020	-	-	0.2	<0.033	-	-	0.2	<0.0058
Beta-endosulfan	0.2	<0.034	0.2	<0.013	0.2	<0.032	0.2	<0.032	0.2	<0.019	0.2	<0.019	-	-	0.2	<0.021	0.2	<0.014	0.2	<0.014	0.2	<0.014	0.2	<0.014	-	-	0.2	<0.035	-	-	0.2	<0.0021
Endosulfan sulfate	0.2	<0.025	0.2	<0.014	0.2	<0.008	0.2	0.071	0.2	<0.016	0.2	0.08	-	-	0.2	<0.022	0.2	*0.021*	0.2	*0.048*	0.2	<0.017	0.2	0.034	-	-	0.2	<0.035	-	-	0.2	<0.0018
Endrin	0.004	*<0.035*	0.004	*<0.016*	0.004	*<0.017*	0.004	*<0.017*	0.004	*<0.023*	0.004	*<0.023*	-	-	0.004	*<0.042*	0.004	*<0.040*	0.004	*<0.040*	0.004	*<0.042*	0.004	*<0.042*	-	-	0.004	*<0.033*	-	-	0.004	*<0.0082*
Endrin aldehyde	0.09	<0.038	0.09	*<0.023*	0.09	<0.032	0.09	*<0.032*	0.09	<0.026	0.09	<0.026	-	-	0.09	*<0.024*	0.09	<0.034	0.09	<0.034	0.09	<0.068	0.09	<0.068	-	-	0.09	<0.090	-	-	0.09	<0.003
Heptachlor	0.00008	*<0.035*	0.00008	*<0.018*	0.00008	*<0.027*	0.00008	***0.063***	0.00008	*<0.035*	0.00008	*<0.035*	-	-	0.00008	*<0.023*	0.00008	*<0.019*	0.00008	*<0.019*	0.00008	**0.033**	0.00008	**0.081**	-	-	0.00008	*<0.069*	-	-	0.00008	*<0.0297*
Heptachlor epoxide	0.00004	*<0.032*	0.00004	*<0.020*	0.00004	*<0.008*	0.00004	*<0.008*	0.00004	*<0.062*	0.00004	*<0.062*	-	-	0.00004	*<0.020*	0.00004	*<0.016*	0.00004	*<0.016*	0.00004	*<0.012*	0.00004	*<0.012*	-	-	0.00004	*<0.035*	-	-	0.00004	*<0.0015*
PCB-1242	[4]	<0.41	[4]	<0.55	[4]	<0.37	[4]	<0.37	[4]	<0.14	[4]	<0.14	-	-	[4]	<0.72	[4]	*<0.33*	[4]	*<0.33*	[4]	*<0.28*	[4]	*<0.28*	-	-	[4]	<0.26	-	-	[4]	<0.0831
PCB-1254	[4]	<0.20	[4]	<0.29	[4]	<0.23	[4]	<0.23	[4]	<0.20	[4]	<0.20	-	-	[4]	<0.22	[4]	*<0.17*	[4]	*<0.17*	[4]	*<0.21*	[4]	*<0.21*	-	-	[4]	<0.25	-	-	[4]	<0.0831
PCB-1221	[4]	<0.68	[4]	<0.86	[4]	<0.22	[4]	<0.22	[4]	<0.64	[4]	<0.64	-	-	[4]	<0.46	[4]	*<0.36*	[4]	*<0.36*	[4]	*<0.50*	[4]	*<0.50*	-	-	[4]	<0.25	-	-	[4]	<0.0831
PCB-1232	[4]	<0.66	[4]	<0.34	[4]	<0.55	[4]	<0.55	[4]	<0.37	[4]	<0.37	-	-	[4]	<0.90	[4]	*<0.40*	[4]	*<0.40*	[4]	*<0.48*	[4]	*<0.48*	-	-	[4]	<0.28	-	-	[4]	<0.0831
PCB-1248	[4]	<0.78	[4]	<0.28	[4]	<0.19	[4]	<0.19	[4]	<0.22	[4]	<0.22	-	-	[4]	<0.24	[4]	*<0.21*	[4]	*<0.21*	[4]	*<0.35*	[4]	*<0.35*	-	-	[4]	<0.21	-	-	[4]	<0.0831
PCB-1260	[4]	<0.21	[4]	<0.23	[4]	<0.32	[4]	<0.32	[4]	<0.59	[4]	<0.59	-	-	[4]	<0.26	[4]	*<0.34*	[4]	*<0.34*	[4]	*<0.28*	[4]	*<0.28*	-	-	[4]	<0.21	-	-	[4]	<0.0831
PCB-1016	[4]	<0.36	[4]	<0.33	[4]	<0.18	[4]	<0.18	[4]	<0.55	[4]	<0.55	-	-	[4]	<0.29	[4]	*<0.33*	[4]	*<0.33*	[4]	*<0.40*	[4]	*<0.40*	-	-	[4]	<0.23	-	-	[4]	<0.0831
Toxaphene	0.0003	*<0.53*	0.0003	*<0.34*	0.0003	*<0.22*	0.0003	*<0.22*	0.0003	*<0.60*	0.0003	*<0.60*	-	-	0.0003	*<0.48*	0.0003	*<0.47*	0.0003	*<0.47*	0.0003	*<0.482*	0.0003	*<0.482*	-	-	0.0003	*<0.40*	-	-	0.0003	*<0.467*

Notes:

NS = no standard applicable to the designated use

T = total

D = dissolved

Bold text indicates a sample result greater than the WQS

Italicized text indicates a laboratory detection limit higher than the WQS

Footnotes:

[1] The Permittee shall report on any additional parameters that were monitored for seasonal stormwater sampling as required by Section 6.0 of this permit (Special Conditions).

[2] Analytical results shall be reported in the units specified for each category or parameter.

[3] Report the average flow rate for the sampling period (no more than 6 hours).

[4] Standard for total PCBs of 0.00006 µg/L FC, 19 µg/L PBC, 2 µg/L A&Wedw, and 0.001 µg/L AgI and AgL.

[5] Beginning with the Summer 2016 reporting, total 1,3-dichloropropylene is reported (prior reporting periods included cis and trans isomers) .

[6] No sample collected. See Table 8.1 for storm event data.

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PART 10: ASSESSMENT OF MONITORING DATA

A. Stormwater Quality: Provide an evaluation of the sampling results for each outfall monitoring location, including an assessment of any improvements or degradation of stormwater quality from each drainage area. In the year 4, Annual Report, discuss possible explanations for stormwater quality trends, including the implementation of stormwater management practices to reduce the discharge of pollutants to and from the storm sewer system.

Escherichia Coli (*E. coli*) has been detected at concentrations greater than the applicable Surface Water Quality Standards (SWQS) at all monitored outfalls throughout the permit term.

Total lead and dissolved copper have been observed in elevated concentrations at all monitored outfalls. A few of the monitored outfalls occasionally have elevated detections of pesticides including 4,4' DDE, 4,4' DDT, heptachlor, alpha-BHC, and aldrin.

A discussion of the historical exceedances by outfall is provided below. (Note: the data in the tables in Part 9 of this report begin in Summer 2013, so exceedances that occurred early in the permit term included below are no longer present in Part 9.)

AC033

The primary land uses are open land and residential. The designated uses for the receiving water for this outfall, the AC/DC, were modified in 2018. Prior to 2018, the City was viewing AC033 as discharging to a Phoenix Area Canal. However, upon further review of the City's sampling locations during the ADEQ Triennial Review, it was decided that, since the AC/DC is a diversion channel and not a canal, the standard for a tributary to New River, below Interstate 17 to confluence with Agua Fria River applies. As a result, the applicable uses for AC033 have been updated to include only aquatic and wildlife ephemeral (A&We) and partial body contact (PBC). Over the last decade, we had compared laboratory results to the SWQSs for designated uses that include agricultural irrigation (AgI) and agricultural livestock watering (AgL), which resulted in a different set of parameters being above the standard. Elevated concentrations of dissolved copper, total lead and *E. coli* have been detected.

IB008

Stormwater runoff from this outfall discharges to the Indian Bend Wash. Applicable designated uses are A&We and PBC. The dominant land use category in this area is residential. Elevated concentrations of dissolved copper, total lead and *E. coli* have been detected. Endrin aldehyde was detected once (2009).

SR003

The receiving water for SR003 is the Salt River. Designated uses include aquatic and wildlife effluent dependent water (A&Wedw), PBC, Fish Consumption (FC), AgI and AgL. Land use for this outfall is divided amongst residential, institutional, commercial, and open land. Elevated concentrations of dissolved copper, total lead, *E. coli* and occasional pesticides, including heptachlor, alpha-BHC, beta-BHC and 4,4'-DDT have been detected in this outfall.

SR030

This outfall discharges to the Salt River. Designated uses are the same as those listed for SR003. Primary land use categories are open land, residential, and industrial. Elevated concentrations of dissolved copper, total lead, *E. coli*, ammonia (2010), hardness (2009/2010) and occasional pesticides including heptachlor, aldrin, alpha-BHC and 4,4' DDE have been detected in this outfall.

SR045

This outfall discharges stormwater to the Salt River. The designated uses for this segment of the Salt River are A&We and PBC. The properties in this area are primarily commercial, industrial, and institutional. Elevated concentrations of dissolved copper, total lead, and *E. coli* have been detected in this outfall.

SR049

The receiving water for this outfall is the Salt River. The applicable designated uses are A&Wedw, PBC, FC, AgI and AgL. This catchment area includes several agricultural properties, along with newer residential, commercial, and light industrial properties. Elevated concentrations of dissolved copper, total lead, *E. coli*, dissolved zinc (2009), high pH (2010), and occasional pesticides including heptachlor, dieldrin, alpha-BHC, beta-BHC, and 4,4' DDE have been detected in this outfall.

SC046

Skunk Creek Wash (a tributary to New River) is the receiving water for this outfall, with designated uses of A&We and PBC. This area is primarily residential with some open land. Elevated concentrations of dissolved copper, total lead and *E. coli* have been detected.

B. Surface Water Quality Standards (SWQS): Compare the sampling results for each outfall monitoring location with the applicable SWQS for the receiving water.

The applicable SWQS for each monitoring station are dependent upon the designated uses for the specific receiving water. Prior to 2018, the City was viewing AC033 as discharging to a Phoenix Area Canal. However, upon further review, it was determined that AC/DC is a tributary to New River, below Interstate 17 to confluence with Agua Fria River. As a result, the applicable uses for AC033 were updated as being A&We and PBC, only. Table 10-1 includes the designated uses for each monitoring location:

Table 10-1 Designated Uses for Monitoring Locations

Outfall	Receiving Water	Designated Uses
AC033	ACDC, Skunk Creek, New River	A&We, PBC
IB008	Indian Bend Wash	A&We, PBC
SR003	Salt River at 35th Avenue	A&Wedw, PBC, FC, AgI, and AgL
SR030	Salt River at 27th Avenue	A&Wedw, PBC, FC, AgI, and AgL
SR045	Salt River at 40th Street	A&We, PBC
SR049	Salt River at 67th Avenue	A&Wedw, PBC, FC, AgI, and AgL
SC046	Skunk Creek Wash, New River	A&We, PBC

AgI = Agricultural Irrigation
AgL = Agricultural Livestock Watering
A&We = Aquatic and Wildlife, Ephemeral
A&Wedw =Aquatic and Wildlife, Effluent Dependent Water (acute)
PBC = Partial Body Contact
FC = Fish Consumption

The analytical results reported were compared to the lowest applicable standard, as documented in Part 9.

C. Exceeding a SWQS: Note any exceedance of a surface water quality standard (as measured at the outfall) during the reporting year, including, at a minimum, the following information:

1. Sampling dates: See Table 10-2
2. Monitoring location (outfall identification number): See Table 10-2
3. Receiving water and surface water quality standard exceeded: See Table 10-2
4. Outfall monitoring results (laboratory reports): See Table 10-2 and Part 13.

Table 10-2 Analytical Results Exceeding SWQS for Reporting Year 2020/21

Outfall	Sample Date	Parameter	Desig Use	SWQS	Result	Unit
AC033	12/10/20	pH	A&We	6.5 - 9	6.05	SU
	12/10/20	Copper (D)	A&We	4.28	24.1	ug/L
	12/10/20	Lead (T)	A&We	15	22.4	ug/L
	12/10/20	E. coli	PBC	575	3,320	MPN
IB008	12/10/20	Copper (D)	A&We	9.81	15.9	ug/L
	12/10/20	E. coli	PBC	575	1,732.9	MPN
SC046	12/10/20	Copper (D)	A&We	6.09	15.6	ug/L
	12/10/20	E. coli	PBC	575	5,630	MPN
SR003	12/10/20	E. coli	PBC	575	3,230	MPN
SR030	12/10/20	Lead (T)	PBC	15	48.0	ug/L
	12/10/20	Copper (D)	A&We	13.07	35.9	ug/L
	12/10/20	Ammonia (as N)	A&We	2.6	3.8	mg/L
	12/10/20	E. coli	PBC	575	4,100	MPN
SR045	8/20/20	Copper (D)	A&We	17.52	35.3	ug/L
	8/20/20	E. coli	PBC	575	2,430	MPN
	1/24/21	Copper (D)	A&We	36.22	61.1	ug/L
	1/24/21	E. coli	PBC	575	2,419.6	MPN
SR049	12/10/20	Copper (D)	A&We	8.83	29.3	ug/L
	12/10/20	E. coli	PBC	575	4,350	MPN

ug/L-micrograms per liter; MPN-most probable number per 100 mL; mg/L-milligrams per liter; D-dissolved; T-total; SU-standard units

5. A description of the circumstances that may have caused or contributed to the exceedance of an applicable surface water quality standard:

All monitoring stations showed elevated *E. coli* levels. These exceedances seem to be independent of predominant land uses and varied from site to site and season to season. E. *coli* can be associated with pets, humans, and wildlife, such as birds, rodents, and mammals. It can accumulate between rain events causing results to be elevated locally.

The City started a study to try to identify the source of the *E. coli* at each monitoring station. Preliminary results indicate the sources vary between locations and sample events, with canine being the predominant source at AC033, IB008, SR003, SR030, and SR049; human being the predominant source at SR045; and avian being the predominant source at SC046. The intent is to determine if BMPs can be focused to address the predominant source(s). The study is ongoing.

Dissolved copper was elevated at all outfalls, except SR003. Copper is a common component in pesticides, fungicides, and insecticides. This includes algaecides commonly used in pools, spas, and fountains. Copper is also used in automotive parts such as brake pads, brake linings, and moving engine parts. Consequently, sources of elevated copper could include automotive repair shops, roadway run-off, and pool backwashing. In addition, copper occurs naturally in Arizona soils (also known as “The Copper State”).

Only SR030 showed elevated lead levels this reporting period, though it has been found in all monitoring locations in the past. Lead is used in automotive parts, including tires and batteries.

Lead-based paint is sometimes used on buildings and road stripping, and lead was a common additive in gasoline until the 1970's and early 1980's. Therefore, sources of elevated lead could include automotive repair shops, lead tire weights, roadway runoff, and lead-containing sediment deposited in the past from automotive exhaust.

Low pH was detected at AC033 for the first time. The cause has not been determined. The pH meter was calibrated; however, equipment malfunction or calibration error cannot be ruled out at this time.

6. If a pollutant is noted at levels above the SWQS at a particular outfall, more than 1X ('reoccurs'), describe actions taken to determine the source(s) of the pollutant per Sections 4.3 and 4.4 of the permit. Also state any proposed follow-up actions or additional and/or revised management practices or pollution controls to prevent the discharge from causing or contributing to an exceedance of a surface water quality standard in the future.

The City follows an internal Standard Operating Procedure (SOP #6004) "Stormwater Quality Evaluation and Action Plan," to identify the source of pollutants. The purpose of the procedure is to ensure compliance with Sections 4.2, 4.4, and 8.3 of the MS4 Permit. The procedure discusses how a SWQS exceedance is identified, assigns the responsibility for attempting to identify potential sources of the pollutant(s) of concern and evaluating existing BMPs that may require revision to address the issue(s), provides a schedule for implementation, and outlines the requirements for reporting the occurrence to ADEQ.

This reporting year, the City identified recurring exceedances of *E. coli* at all monitoring stations in one season, or both. The City identified recurring exceedances for total lead at two monitoring stations. The City also identified all monitoring stations, with the exception of one, with recurring exceedances of dissolved copper this year.

The first step in evaluating each exceedance was to research potential sources of these pollutants in stormwater. A summary of these findings is discussed in Part 10, Section C.5. Water Quality Inspectors were provided with a summary of the potential sources, along with catchment area information for each outfall in question. The inspectors then drove through each catchment area, looking for obvious causes of the exceedances. In most situations, the inspectors were unable to confirm a specific source of the elevated levels. A summary of their findings is included below:

SC046

Samples at this outfall contained pollutants in exceedance of the SWQS for *E. coli* and dissolved copper.

<u>E. coli</u>
Potential sources of *E. coli* could be from wildlife in the vicinity of the outfall. Other sources could be pet waste. The *E. coli* study showed avian to be the predominant source at this location, with a secondary contribution by human, canine and horse, all at similar levels.

<u>Copper</u>
During the investigation, it was noted that landscaping is primarily rock. The catchment area is in a mountainous drainage area, including a natural wash, which could be the source of naturally occurring copper. Additional sources of copper could be from vehicular traffic; numerous cars were observed in driveways and on streets.

IB008

Samples at this outfall contained pollutants in exceedance of the SWQS for *E. coli* and dissolved copper.

E. coli
Potential sources of *E. coli* could be from properties with livestock privileges. Other sources could be parks and pet waste. The *E. coli* study showed canine to be the predominant source at this location, with a secondary contribution by human.

Copper
The copper exceedances may be the result of the vehicular traffic in this area. There are also nurseries which may use pesticides. Active construction may have contributed to overall pollutant levels.

AC033

Samples at this outfall contained pollutants in exceedance of the SWQS for *E. coli* and dissolved copper.

E. coli
Potential sources of *E. coli* could be from homeless camps, previous SSO's and parks and pet waste. The *E. coli* study showed canine to be the predominant source at this location, with a secondary contribution by human.

Copper
The copper exceedances may be the result of the vehicular traffic in this area. Other sources can be pesticides or roofing remodels.

pH
A low pH reading was detected. This is the first time it was detected at this monitoring station.

SR003

Samples at this outfall contained pollutants in exceedance of the SWQS for *E. coli*. However, due to insufficient rain and an equipment malfunction, only grab samples were collected from this site.

E. coli
A possible source of *E. coli* may be goats that are kept on a palm tree orchard located on the southwest corner of Buckeye Road and 35th Avenue (irrigated property), though other sources are possible. The *E. coli* study showed canine to be the predominant source at this location.

SR030

Samples at this outfall contained pollutants in exceedance of the SWQS for *E. coli*, total lead and dissolved copper.

E. coli
Possible sources are the wildlife and domestic animals around the parks, neighborhood, and industrial areas. The *E. coli* study showed canine to be the predominant source at this location.

Copper and Lead
This drainage area is 75% industrial and 25% residential. The main source of copper and lead may include vehicle brake pads, vehicle fluids, leaks, dumping, and soil erosion.

SR045

Samples at this outfall contained pollutants in exceedance of the SWQS for *E. coli* and dissolved copper.

E. coli
The north border of this catchment is the Salt River, which is the home of wildlife and transient human populations. Animal feces, and homeless activity could contribute to the elevated E. *coli* in runoff. The *E. coli* study showed human to be the predominant source at this location, with a secondary contribution by canine.

Copper
The area is dense with industrial, commercial, construction, auto body, auto repair, and waste transfer and recycling facilities. It's a high traffic area adjacent to businesses and major transportation, and includes numerous potential sources, such as heavy vehicle traffic, wood, oil or coal combustion, refuse incineration, fertilizers, heavy industry, industrial part cleaning operations, and junkyards.

SR049

Samples at this outfall contained pollutants in exceedance of the SWQS for *E. coli* and dissolved copper.

E. coli
There is a cattle feed lot and several residences with livestock (including goats and horses), as well as various wildlife in the vicinity. Pet waste was also observed. The *E. coli* study showed canine to be the predominant source at this location, with a secondary contribution by ruminant.

Copper
Moderate vehicular traffic was observed, and there was construction of the 202 Highway within this drainage area and a lot of construction traffic was observed.

7. A schedule for implementing the proposed follow-up, stormwater or non-stormwater management practices or pollution controls:

As described above, City Inspectors conducted thorough visual reconnaissance of each catchment area, searching for potential sources of the elevated levels. No obvious cause of the elevated constituents was identified.

The potential sources for these pollutants are varied. *E. coli* can come from a variety of sources, including pet waste and bird droppings. Though the City cannot control wild birds, the Neighborhood Services Department (NSD) does enforce pet waste requirements. Phoenix City Code, Chapter 39, Section 39-7A requires all animal owners and custodians to immediately clean up and properly dispose of animal waste left on any public street, alley, gutter, sidewalk, right-of-way, or park. Staff hang notices on doorknobs to educate the public regarding the need to clean up and properly dispose of pet wastes. The door hangers or similarly worded placards are posted

at public facilities such as parks, libraries, and other locations. Pet waste bags are also provided at city parks.

As mentioned above, the City is in the process of undertaking an *E. coli* study. The intent of this study is to give the City a better understanding on the source of *E. coli* (i.e. human, dog, avian) to help focus outreach efforts. Preliminary results indicate that a majority of the sources of *E. coli* appear to be canine in nature. A few sites indicated human activity, potentially homeless populations. One site, SC046 indicated the predominant source is avian, which may be indicative of the location of this outfall in North Phoenix next to open desert terrain.

Elevated levels of dissolved copper were identified in each monitored catchment area, and lead in one catchment area, regardless of catchment location, size, or predominant land use. These pollutants can come from a variety of residential, commercial, and industrial sources. They are wide-spread and attempts to identify obvious sources in each catch basin over the past ten years have been unsuccessful. One potential source for lead and copper that seems to be universal is vehicular traffic. But even areas with light residential traffic (SC046) have elevated levels from time to time.

The City will continue to evaluate reduction strategies for these pollutants. However, metals such as lead and copper can come from automotive sources such as dust from brake pads, rubber tires, lead tire weights, and engine exhaust. Since these sources are ubiquitous, they may be best controlled at the state or national level.

PART 11: ESTIMATE OF ANNUAL POLLUTANT LOADINGS

Provide an estimate of the pollutant loadings each year from the municipal storm sewer system to waters of the U.S. for each constituent listed in Section 7.4 of the permit detected by stormwater monitoring within the permit term. Pollutant loadings and event mean concentrations may be estimated from sampling data collected at the representative monitoring locations, taking into consideration land uses and drainage areas for the outfall. Include a description of the procedures for estimating pollutant loads and concentrations, including any modeling, data analysis, and calculation methods. Compare the pollutant loadings estimated each year to previous estimates of pollutant loadings.

Seasonal and annual pollutant load estimates were developed for all of the City's twelve stormwater sub-watersheds (Table 11-1). Winter, summer, and total annual loads were computed for all water quality parameters where sufficient validated data is available. As in past years, results from the City's monitoring data were used to correlate pollutant concentrations with land uses for twelve stormwater sub-watersheds in Phoenix. Where data were insufficient to perform this evaluation, information from past annual reports was used. The "Simple Method" as described in USEPA's guidance documents was used in performing this analysis.

Table 11-1
Seasonal and Total Permit Year Load, City of Phoenix MS4 Permit Pollutants of Concern

Constituent	Summer Pollutant Load (pounds)	Winter Pollutant Load (pounds)	Total Annual Pollutant Load (pounds)
BOD_5	162,711	536,706	699,417
COD	794,289	2,636,237	3,430,525
TDS	862,285	2,975,326	3,837,611
Nitrogen, NO2 + NO3, Total	15,478	50,169	65,646
Nitrogen, Organic, Total Kjeldahl	18,507	73,073	91,580
Phosphorous, Total	2,831	9,692	12,523
Arsenic, Total	29	105	133
Antimony, Total	12	45	57
Barium, Total	670	2,598	3,268
Beryllium, Total	1.6	5.6	7.2
Cadmium, Total	19	73	92
Chromium, Total	125	409	534
Copper, Total	269	960	1,229
Lead, Total	162	569	731
Mercury, Total	4.4	13.5	17.9
Nickel, Total	138	463	601
Selenium, Total	26	79	106
Silver, Total	3.1	10.6	13.7
Thallium, Total	1.6	5.4	6.9
Zinc, Total	940	3,349	4,289

The following methodology was used in developing pollutant loads:

In the Part 1 MS4 NPDES Permit Application, the City was divided into 13 stormwater sub-watersheds, based upon outfall locations that impacted specific water conveyance structures or tributaries of the Salt River. This division of the permit area was followed until the last AZPDES permit application in 2012. Through annexation, the City had acquired by this time substantial new undeveloped land, primarily in the north. In order to integrate this new land into the load calculation and to provide a consistent basis for analysis, a watershed-based approach was developed.

City GIS staff acquired County land-use spatial data and combined them with sub-watershed boundaries developed by the Maricopa County Flood Control District (MCFCD 2013). These sub-watershed boundaries are very similar to the Watershed Boundary Dataset 10-digit HUC, with exceptions made for local flood control and other man-made diversions (for example, White Tanks A Basin). Clipping these data to the City permit boundaries produced a watershed-based, land-use map that was used to define 12 new areas, now sub-watersheds, used in the pollutant load estimate.

For the purposes of this model, four land-uses were defined from the data: Industrial, Commercial, Residential, and Open Space. The Part 1 application demonstrated that, on a city-wide scale, these four land-use types provide the strongest distinction in stormwater composition.

The Part 1 application also developed pollutant-specific, rainfall-event-normalized, stormwater loading factors for each of the four land-use categories. These factors, called *event-mean concentrations* or EMCs, represent the concentration of each pollutant of concern in the runoff from the four land-use types. The concentration is normalized to the amount of rainfall in the sampling event to accommodate the dynamic nature of runoff chemistry, including a first flush of pollutant buildup between events.

Rainfall/runoff estimates were generated from data collected by the fifty-six Maricopa County Flood Control District (MCFCD) ALERT meteorological stations. Stations were located on GIS projections and rainfall records spatially correlated to each of the twelve sub-watersheds. Monthly rainfall depths were averaged by sub-watershed for the summer (June 2020 to October 2020) and winter (November 2020 to May 2021) total amounts for the permit year.

Rainfall was translated to runoff as part of the load calculation, using Schuler (1987),

$$R = P_j\,(P)(R_v)(A)$$

where, P = rainfall depth (inches)

P_j = fraction of events that produce runoff (0.9)

R_v = runoff coefficient

A = sub-watershed area (acres)

Sub-watershed areas were measured from GIS projections. Runoff coefficients that were used for each land use were developed specially for Phoenix under the 2001 Permit Renewal Application effort:

Industrial: 0.053

Commercial: 0.745

Residential: 0.236

Open Space: 0.040

The current AZPDES permit indicates that, if possible, annual monitoring data be used to generate concentration factors in the load model. As in past years, EMCs were taken from the COP Part 1 NPDES MS4 characterization data. These values were compared to USGS monitoring results (Table 11-2) from representative storms.

EMCs were determined for each land-use type and pollutant of concern, as possible (Table 11-2). For each of the twelve stormwater sub-watersheds, EMCs were weighted by the percentage of land-use type, or

$$EMC_{k,\,j} = (EMC_{j,\,industrial} * \%\ area_{k,\,industrial}) + (EMC_{j,\,commercial} * \%\ area_{k,\,commercial}) + (EMC_{j,\,residential} * \%\ area_{k,\,residential}) + (EMC_{j,\,open\ space} * \%\ area_{k,\,open\ space})$$

where, $EMC_{k,\,j}$ = event mean concentration for the kth sub-watershed and the jth pollutant

Thus, each sub-watershed has a unique EMC for each pollutant, dependent upon land use.

For each of the twelve stormwater sub-watersheds, total runoff was calculated for the summer and winter seasons. These volumes were multiplied by the EMCs and the seasonal load was calculated (Tables 11-3 through 11-14). Seasonal loads were added to give the annual load per pollutant per sub-watershed. Summation over the twelve stormwater sub-watersheds produced the estimated annual load to the Salt River from stormwater for each pollutant over the permit year.

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Table 11-2
Land-Use Based Event Mean Concentrations for City of Phoenix MS4 Permit Pollutants of Concern[2]

Pollutants	2020-21 data (average all sites)[1]	EMC_O	EMC_R	EMC_I	EMC_C
BOD_5 (mg/L)	53.7	31.0	12.0	55.3	0.00
COD High Level (mg/L)	269	130	42.3	68.8	148
Residue, Total at 105 Deg.C (TDS)	238	120	111	123	84.0
Nitrogen NO_2 + NO_3, Total, (mg/L as N)	1.60	3.12	1.24	1.14	0.70
Nitrogen Organic, Total Kjeldahl (mg/L as N)	6.26	0.11	5.19	7.24	1.67
Phosphorous, Total, (mg/L as P)	0.88	0.41	0.26	0.78	0.30
Arsenic, Total, (µg/L as As)	4.12	2.40	5.24	7.77	2.95
Antimony Total (µg/L as Sb)	3.12	0.64	1.96	4.81	2.12
Barium Total (µg/L as Ba)	109	20.0	170	311	35.6
Beryllium, Total Recoverable, (µg/L as Be)	<1.8	0.20	0.12	0.22	0.39
Cadmium, Total Recoverable, (µg/L as Cd)	<2.1	0.00	3.38	3.68	6.63
Chromium, Total Recoverable, (µg/L as Cr)	16.5	24.3	12.3	3.68	5.71
Copper, Total Recoverable, (µg/L as Cu)	55.5	29.0	23.3	204	15.0
Lead, Total Recoverable, (µg/L as Pb)	18.0	19.9	25.2	29.7	12.5
Mercury, Total Recoverable, (µg/L as Hg)	<0.118	1.08	0.20	0.08	0.04
Nickel, Total Recoverable, (µg/L as Ni)	14.8	23.4	13.4	15.4	12.1
Selenium Total Recoverable, (µg/L as Se)	<4.05	7.13	0.09	1.20	0.39
Silver, Total Recoverable, (µg/L as Ag)	<1.25	0.45	0.37	0.42	0.32
Thallium Total Recoverable, (µg/L as Th)	<2.75	0.20	0.21	0.04	0.21
Zinc, Total Recoverable, (µg/L as Zn)	241	96.0	109	346	135

NOTES:
[1]Censored non detects include in mean as per USACOE 2008, Manual 1110-1-4014, ENVIRONMENTAL STATISTICS
[2] Event mean concentrations from 2001 MS4 application, as modified by monitoring data to date. See text.

O = open space land use, R = residential land use, I = industrial land use, C = commercial land use

Table 11-3
Lower Arizona Canal Diversion Channel Watershed Pollutant Loadings

Total area, acres:	94,321	Residential:	41.14%
		Industrial :	13.58%
		Undeveloped:	19.67%
		Commercial:	25.60%

Total Summer (June-Oct)		Total Winter (Nov -May)	
Runoff (cubic feet)	39,084,593	Runoff (cubic feet)	148,346,448

Constituent	Land Use weighted concentrations	Summer Pollutant Load (pounds)	Winter Pollutant Load (pounds)	Total Annual Pollutant Load (pounds)
BOD_5 (mg/L)	18.6	45,263	171,796	217,058
COD High Level (mg/L)	90.2	220,080	835,320	1,055,401
Residue, Total at 105 Deg.C (TDS)	107	262,138	994,952	1,257,090
Nitrogen NO_2 + NO_3, Total, (mg/L as N)	1.46	3,558	13,503	17,061
Nitrogen Organic, Total Kjeldahl (mg/L as N)	3.57	8,709	33,053	41,762
Phosphorous, Total, (mg/L as P)	0.37	904	3,430	4,334
Arsenic, Total, (µg/L as As)	4.44	11	41.1	52
Antimony Total (µg/L as Sb)	2.13	5.2	19.7	25
Barium Total (µg/L as Ba)	125	306	1,161	1,467
Beryllium, Total Recoverable, (µg/L as Be)	0.22	0.53	2.01	2.5
Cadmium, Total Recoverable, (µg/L as Cd)	3.59	9	33.2	42
Chromium, Total Recoverable, (µg/L as Cr)	11.8	29	109	138
Copper, Total Recoverable, (µg/L as Cu)	46.8	114	433	547
Lead, Total Recoverable, (µg/L as Pb)	21.5	52	199	252
Mercury, Total Recoverable, (µg/L as Hg)	0.31	0.8	2.91	3.7
Nickel, Total Recoverable, (µg/L as Ni)	15.3	37	142	179
Selenium Total Recoverable, (µg/L as Se)	1.70	4.2	15.8	20
Silver, Total Recoverable, (µg/L as Ag)	0.38	0.9	3.49	4.4
Thallium Total Recoverable, (µg/L as Th)	0.19	0.46	1.74	2.2
Zinc, Total Recoverable, (µg/L as Zn)	145	354	1,344	1,698

Table 11-4
Upper Arizona Canal Diversion Channel Watershed Pollutant Loadings

Total area, acres:	63,903	Residential:	46.30%
		Industrial :	3.90%
		Undeveloped:	31.91%
		Commercial:	17.88%

Total Summer (June-Oct) Runoff (cubic feet)	14,962,670	Total Winter (Nov -May) Runoff (cubic feet)	91,602,699

Constituent	Land Use weighted concentrations	Summer Pollutant Load (pounds)	Winter Pollutant Load (pounds)	Total Annual Pollutant Load (pounds)
BOD_5 (mg/L)	17.6	16,447	100,689	117,136
COD High Level (mg/L)	90.2	84,257	515,827	600,084
Residue, Total at 105 Deg.C (TDS)	109	102,279	626,162	728,441
Nitrogen NO_2 + NO_3, Total, (mg/L as N)	1.74	1,625	9,947	11,572
Nitrogen Organic, Total Kjeldahl (mg/L as N)	3.02	2,822	17,278	20,100
Phosphorous, Total, (mg/L as P)	0.34	313	1,917	2,231
Arsenic, Total, (µg/L as As)	4.02	3.8	23.0	27
Antimony Total (µg/L as Sb)	1.68	1.6	9.6	11.2
Barium Total (µg/L as Ba)	104	97	593	690
Beryllium, Total Recoverable, (µg/L as Be)	0.20	0.18	1.12	1.30
Cadmium, Total Recoverable, (µg/L as Cd)	2.89	2.7	16.5	19.2
Chromium, Total Recoverable, (µg/L as Cr)	14.6	14	84	97
Copper, Total Recoverable, (µg/L as Cu)	30.6	29	175	204
Lead, Total Recoverable, (µg/L as Pb)	21.4	20	122	142
Mercury, Total Recoverable, (µg/L as Hg)	0.45	0.42	2.55	3.0
Nickel, Total Recoverable, (µg/L as Ni)	16.4	15	94	109
Selenium Total Recoverable, (µg/L as Se)	2.43	2.3	13.9	16.2
Silver, Total Recoverable, (µg/L as Ag)	0.39	0.36	2.20	2.6
Thallium Total Recoverable, (µg/L as Th)	0.20	0.19	1.17	1.36
Zinc, Total Recoverable, (µg/L as Zn)	119	111	678	789

Table 11-5
South Mountain Watershed Pollutant Loadings

Total area, acres:	61,998	Residential:	27.03%
		Industrial :	4.37%
		Undeveloped:	52.98%
		Commercial:	15.35%

Total Summer (June-Oct) Runoff (cubic feet)	13,775,951	Total Winter (Nov -May) Runoff (cubic feet)	67,131,238

Constituent	Land Use weighted concentrations	Summer Pollutant Load (pounds)	Winter Pollutant Load (pounds)	Total Annual Pollutant Load (pounds)
BOD_5 (mg/L)	22.1	19,023	92,701	111,724
COD High Level (mg/L)	106	91,276	444,793	536,068
Residue, Total at 105 Deg.C (TDS)	112	96,434	469,932	566,366
Nitrogen NO_2 + NO_3, Total, (mg/L as N)	2.15	1,848	9,005	10,853
Nitrogen Organic, Total Kjeldahl (mg/L as N)	2.05	1,763	8,592	10,355
Phosphorous, Total, (mg/L as P)	0.37	317	1,544	1,860
Arsenic, Total, (µg/L as As)	3.49	3.0	14.6	17.6
Antimony Total (µg/L as Sb)	1.41	1.2	5.9	7.1
Barium Total (µg/L as Ba)	76.2	65	319	385
Beryllium, Total Recoverable, (µg/L as Be)	0.21	0.18	0.86	1.04
Cadmium, Total Recoverable, (µg/L as Cd)	2.10	1.8	8.8	10.6
Chromium, Total Recoverable, (µg/L as Cr)	17.3	15	72	87
Copper, Total Recoverable, (µg/L as Cu)	32.9	28	138	166
Lead, Total Recoverable, (µg/L as Pb)	20.6	18	86	104
Mercury, Total Recoverable, (µg/L as Hg)	0.63	0.5	2.66	3.2
Nickel, Total Recoverable, (µg/L as Ni)	18.6	16	78	94
Selenium Total Recoverable, (µg/L as Se)	3.92	3.4	16.4	20
Silver, Total Recoverable, (µg/L as Ag)	0.40	0.35	1.69	2.0
Thallium Total Recoverable, (µg/L as Th)	0.20	0.17	0.84	1.02
Zinc, Total Recoverable, (µg/L as Zn)	116	100	488	588

Table 11-6
Upper Indian Bend Watershed Pollutant Loadings

Total area, acres:	17,187	Residential:	12.38%
		Industrial :	2.10%
		Undeveloped:	70.78%
		Commercial:	14.73%

Total Summer (June-Oct) Runoff (cubic feet)	4,463,316	Total Winter (Nov -May) Runoff (cubic feet)	21,016,356

Constituent	Land Use weighted concentrations	Summer Pollutant Load (pounds)	Winter Pollutant Load (pounds)	Total Annual Pollutant Load (pounds)
BOD_5 (mg/L)	24.6	6,852	32,263	39,115
COD High Level (mg/L)	121	33,576	158,098	191,674
Residue, Total at 105 Deg.C (TDS)	114	31,663	149,092	180,755
Nitrogen NO_2 + NO_3, Total, (mg/L as N)	2.49	694	3,266	3,959
Nitrogen Organic, Total Kjeldahl (mg/L as N)	1.12	312	1,471	1,783
Phosphorous, Total, (mg/L as P)	0.38	107	502	609
Arsenic, Total, (µg/L as As)	2.94	0.8	3.86	4.7
Antimony Total (µg/L as Sb)	1.11	0.31	1.46	1.77
Barium Total (µg/L as Ba)	47.0	13	62	75
Beryllium, Total Recoverable, (µg/L as Be)	0.22	0.06	0.28	0.34
Cadmium, Total Recoverable, (µg/L as Cd)	1.47	0.41	1.93	2.3
Chromium, Total Recoverable, (µg/L as Cr)	19.6	5	25.8	31
Copper, Total Recoverable, (µg/L as Cu)	29.9	8	39.2	48
Lead, Total Recoverable, (µg/L as Pb)	19.7	5	25.8	31
Mercury, Total Recoverable, (µg/L as Hg)	0.80	0.22	1.04	1.26
Nickel, Total Recoverable, (µg/L as Ni)	20.3	6	26.7	32
Selenium Total Recoverable, (µg/L as Se)	5.14	1.4	6.7	8.2
Silver, Total Recoverable, (µg/L as Ag)	0.42	0.12	0.55	0.66
Thallium Total Recoverable, (µg/L as Th)	0.20	0.06	0.27	0.32
Zinc, Total Recoverable, (µg/L as Zn)	109	30	142	173

Table 11-7
Middle Indian Bend Watershed Pollutant Loadings

Total area, acres:	19,142	Residential:	65.54%
		Industrial :	0.35%
		Undeveloped:	22.42%
		Commercial:	12.69%

Total Summer (June-Oct)		Total Winter (Nov -May)	
Runoff (cubic feet)	5,523,399	Runoff (cubic feet)	30,218,593

Constituent	Land Use weighted concentrations	Summer Pollutant Load (pounds)	Winter Pollutant Load (pounds)	Total Annual Pollutant Load (pounds)
BOD_5 (mg/L)	14.9	5,134	28,087	33,221
COD High Level (mg/L)	75	26,013	142,317	168,330
Residue, Total at 105 Deg.C (TDS)	110	37,803	206,819	244,622
Nitrogen NO_2 + NO_3, Total, (mg/L as N)	1.59	549	3,005	3,554
Nitrogen Organic, Total Kjeldahl (mg/L as N)	3.61	1,246	6,817	8,063
Phosphorous, Total, (mg/L as P)	0.30	104	567	671
Arsenic, Total, (µg/L as As)	4.32	1.5	8.1	9.6
Antimony Total (µg/L as Sb)	1.69	0.6	3.20	3.8
Barium Total (µg/L as Ba)	120	41	226	268
Beryllium, Total Recoverable, (µg/L as Be)	0.17	0.06	0.32	0.38
Cadmium, Total Recoverable, (µg/L as Cd)	3.03	1.0	5.7	6.8
Chromium, Total Recoverable, (µg/L as Cr)	14.1	5	27	32
Copper, Total Recoverable, (µg/L as Cu)	24.1	8	46	54
Lead, Total Recoverable, (µg/L as Pb)	22.4	8	42	50
Mercury, Total Recoverable, (µg/L as Hg)	0.37	0.13	0.71	0.8
Nickel, Total Recoverable, (µg/L as Ni)	15.5	5	29	35
Selenium Total Recoverable, (µg/L as Se)	1.71	0.6	3.2	3.8
Silver, Total Recoverable, (µg/L as Ag)	0.38	0.13	0.71	0.84
Thallium Total Recoverable, (µg/L as Th)	0.21	0.07	0.40	0.47
Zinc, Total Recoverable, (µg/L as Zn)	110	38	208	246

Table 11-8
Cave Creek Watershed Pollutant Loadings

Total area, acres:	18,009	Residential:	16.83%
		Industrial :	0.28%
		Undeveloped:	77.63%
		Commercial:	5.26%

Total Summer (June-Oct) Runoff (cubic feet)	8,472,254	Total Winter (Nov -May) Runoff (cubic feet)	13,137,664

Constituent	Land Use weighted concentrations	Summer Pollutant Load (pounds)	Winter Pollutant Load (pounds)	Total Annual Pollutant Load (pounds)
BOD_5 (mg/L)	26.2	13,878	21,520	35,398
COD High Level (mg/L)	116	61,359	95,148	156,507
Residue, Total at 105 Deg.C (TDS)	117	61,669	95,628	157,297
Nitrogen NO_2 + NO_3, Total, (mg/L as N)	2.67	1,413	2,190	3,603
Nitrogen Organic, Total Kjeldahl (mg/L as N)	1.07	566	877	1,443
Phosphorous, Total, (mg/L as P)	0.38	201	312	513
Arsenic, Total, (µg/L as As)	2.92	1.55	2.40	3.9
Antimony Total (µg/L as Sb)	0.95	0.50	0.78	1.29
Barium Total (µg/L as Ba)	46.9	25	38.5	63
Beryllium, Total Recoverable, (µg/L as Be)	0.19	0.10	0.16	0.26
Cadmium, Total Recoverable, (µg/L as Cd)	0.93	0.49	0.76	1.25
Chromium, Total Recoverable, (µg/L as Cr)	21.2	11.2	17.4	28.7
Copper, Total Recoverable, (µg/L as Cu)	27.8	14.7	22.8	37
Lead, Total Recoverable, (µg/L as Pb)	20.4	10.8	16.8	27.6
Mercury, Total Recoverable, (µg/L as Hg)	0.87	0.46	0.72	1.18
Nickel, Total Recoverable, (µg/L as Ni)	21.1	11.2	17.3	28.5
Selenium Total Recoverable, (µg/L as Se)	5.58	2.9	4.6	7.5
Silver, Total Recoverable, (µg/L as Ag)	0.43	0.23	0.35	0.57
Thallium Total Recoverable, (µg/L as Th)	0.21	0.11	0.17	0.28
Zinc, Total Recoverable, (µg/L as Zn)	101	53	83	136

Table 11-9
Skunk Creek Watershed Pollutant Loadings

Total area, acres: 26,174

Residential:	19.12%
Industrial :	1.15%
Undeveloped:	59.46%
Commercial:	20.26%

Total Summer (June-Oct)
Runoff (cubic feet) 23,190,743

Total Winter (Nov -May)
Runoff (cubic feet) 37,897,068

Constituent	Land Use weighted concentrations	Summer Pollutant Load (pounds)	Winter Pollutant Load (pounds)	Total Annual Pollutant Load (pounds)
BOD_5 (mg/L)	21.4	30,931	50,545	81,476
COD High Level (mg/L)	116	168,175	274,823	442,998
Residue, Total at 105 Deg.C (TDS)	111	160,721	262,641	423,362
Nitrogen NO_2 + NO_3, Total, (mg/L as N)	2.25	3,254	5,317	8,570
Nitrogen Organic, Total Kjeldahl (mg/L as N)	1.48	2,145	3,506	5,651
Phosphorous, Total, (mg/L as P)	0.36	526	859	1,385
Arsenic, Total, (µg/L as As)	3.12	4.5	7.4	11.9
Antimony Total (µg/L as Sb)	1.24	1.80	2.94	4.7
Barium Total (µg/L as Ba)	55.3	80	131	211
Beryllium, Total Recoverable, (µg/L as Be)	0.22	0.32	0.52	0.84
Cadmium, Total Recoverable, (µg/L as Cd)	2.03	2.9	4.8	7.7
Chromium, Total Recoverable, (µg/L as Cr)	18.0	26.1	42.6	69
Copper, Total Recoverable, (µg/L as Cu)	27.1	39	64	103
Lead, Total Recoverable, (µg/L as Pb)	19.5	28	46	74
Mercury, Total Recoverable, (µg/L as Hg)	0.69	1.00	1.63	2.62
Nickel, Total Recoverable, (µg/L as Ni)	19.1	28	45	73
Selenium Total Recoverable, (µg/L as Se)	4.35	6.3	10.3	16.6
Silver, Total Recoverable, (µg/L as Ag)	0.40	0.59	0.96	1.54
Thallium Total Recoverable, (µg/L as Th)	0.21	0.30	0.49	0.78
Zinc, Total Recoverable, (µg/L as Zn)	109	158	258	416

Table 11-10
Upper New River Watershed Pollutant Loadings

Total area, acres:	30,056	Residential:	14.35%
		Industrial :	0.64%
		Undeveloped:	80.59%
		Commercial:	4.42%

Total Summer (June-Oct) Runoff (cubic feet)	14,244,221	Total Winter (Nov -May) Runoff (cubic feet)	22,016,753

Constituent	Land Use weighted concentrations	Summer Pollutant Load (pounds)	Winter Pollutant Load (pounds)	Total Annual Pollutant Load (pounds)
BOD_5 (mg/L)	27.1	24,063	37,193	61,255
COD High Level (mg/L)	118	104,761	161,925	266,686
Residue, Total at 105 Deg.C (TDS)	117	104,161	160,997	265,158
Nitrogen NO_2 + NO_3, Total, (mg/L as N)	2.73	2,428	3,753	6,181
Nitrogen Organic, Total Kjeldahl (mg/L as N)	0.96	851	1,315	2,165
Phosphorous, Total, (mg/L as P)	0.39	343	531	874
Arsenic, Total, (µg/L as As)	2.87	2.55	3.94	6.5
Antimony Total (µg/L as Sb)	0.92	0.82	1.27	2.09
Barium Total (µg/L as Ba)	44.1	39	61	100
Beryllium, Total Recoverable, (µg/L as Be)	0.19	0.17	0.27	0.44
Cadmium, Total Recoverable, (µg/L as Cd)	0.80	0.71	1.10	1.81
Chromium, Total Recoverable, (µg/L as Cr)	21.6	19.2	29.7	49
Copper, Total Recoverable, (µg/L as Cu)	28.7	25.5	39.4	65
Lead, Total Recoverable, (µg/L as Pb)	20.4	18.1	28.0	46
Mercury, Total Recoverable, (µg/L as Hg)	0.90	0.80	1.24	2.04
Nickel, Total Recoverable, (µg/L as Ni)	21.4	19.0	29.4	48
Selenium Total Recoverable, (µg/L as Se)	5.79	5.1	8.0	13.1
Silver, Total Recoverable, (µg/L as Ag)	0.43	0.38	0.59	0.97
Thallium Total Recoverable, (µg/L as Th)	0.21	0.18	0.28	0.46
Zinc, Total Recoverable, (µg/L as Zn)	101	90	139	229

Table 11-11
Lower New River Watershed Pollutant Loadings

Total area, acres:	1,395	Residential:	37.20%
		Industrial :	2.48%
		Undeveloped:	53.59%
		Commercial:	6.74%

Total Summer (June-Oct) Runoff (cubic feet)	637,113	Total Winter (Nov -May) Runoff (cubic feet)	1,069,179

Constituent	Land Use weighted concentrations	Summer Pollutant Load (pounds)	Winter Pollutant Load (pounds)	Total Annual Pollutant Load (pounds)
BOD_5 (mg/L)	22.4	893	1,498	2,391
COD High Level (mg/L)	97.1	3,860	6,478	10,338
Residue, Total at 105 Deg.C (TDS)	114	4,546	7,629	12,174
Nitrogen NO_2 + NO_3, Total, (mg/L as N)	2.21	88	147	235
Nitrogen Organic, Total Kjeldahl (mg/L as N)	2.28	91	152	243
Phosphorous, Total, (mg/L as P)	0.36	14.2	23.8	38
Arsenic, Total, (µg/L as As)	3.63	0.14	0.24	0.39
Antimony Total (µg/L as Sb)	1.34	0.05	0.09	0.14
Barium Total (µg/L as Ba)	84.2	3.3	5.6	9.0
Beryllium, Total Recoverable, (µg/L as Be)	0.18	0.01	0.01	0.02
Cadmium, Total Recoverable, (µg/L as Cd)	1.79	0.07	0.12	0.19
Chromium, Total Recoverable, (µg/L as Cr)	18.1	0.72	1.21	1.92
Copper, Total Recoverable, (µg/L as Cu)	30.2	1.20	2.02	3.2
Lead, Total Recoverable, (µg/L as Pb)	21.6	0.86	1.44	2.30
Mercury, Total Recoverable, (µg/L as Hg)	0.66	0.03	0.04	0.07
Nickel, Total Recoverable, (µg/L as Ni)	18.7	0.74	1.25	1.99
Selenium Total Recoverable, (µg/L as Se)	3.91	0.16	0.26	0.42
Silver, Total Recoverable, (µg/L as Ag)	0.41	0.02	0.03	0.04
Thallium Total Recoverable, (µg/L as Th)	0.20	0.01	0.01	0.02
Zinc, Total Recoverable, (µg/L as Zn)	110	4.4	7.3	11.7

Table 11-12
Upper Agua Fria River Watershed Pollutant Loadings

Total area, acres:	492	Residential:	0.00%
		Industrial :	0.00%
		Undeveloped:	100.00%
		Commercial:	0.00%

Total Summer (June-Oct) Runoff (cubic feet)	112,757	Total Winter (Nov -May) Runoff (cubic feet)	170,581

Constituent	Land Use weighted concentrations	Summer Pollutant Load (pounds)	Winter Pollutant Load (pounds)	Total Annual Pollutant Load (pounds)
BOD_5 (mg/L)	31.0	218	330	548
COD High Level (mg/L)	130	915	1,384	2,299
Residue, Total at 105 Deg.C (TDS)	120	845	1,278	2,123
Nitrogen NO_2 + NO_3, Total, (mg/L as N)	3.12	22.0	33.2	55
Nitrogen Organic, Total Kjeldahl (mg/L as N)	0.11	0.80	1.20	2.00
Phosphorous, Total, (mg/L as P)	0.41	2.9	4.37	7.3
Arsenic, Total, (µg/L as As)	2.40	0.02	0.03	0.04
Antimony Total (µg/L as Sb)	0.64	0.00	0.01	0.01
Barium Total (µg/L as Ba)	20.0	0.14	0.21	0.35
Beryllium, Total Recoverable, (µg/L as Be)	0.20	0.00	0.00	0.00
Cadmium, Total Recoverable, (µg/L as Cd)	0.00	0.00	0.00	0.00
Chromium, Total Recoverable, (µg/L as Cr)	24.3	0.17	0.26	0.43
Copper, Total Recoverable, (µg/L as Cu)	29.0	0.20	0.31	0.51
Lead, Total Recoverable, (µg/L as Pb)	19.9	0.14	0.21	0.35
Mercury, Total Recoverable, (µg/L as Hg)	1.08	0.01	0.01	0.02
Nickel, Total Recoverable, (µg/L as Ni)	23.4	0.16	0.25	0.41
Selenium Total Recoverable, (µg/L as Se)	7.13	0.05	0.08	0.13
Silver, Total Recoverable, (µg/L as Ag)	0.45	0.00	0.00	0.01
Thallium Total Recoverable, (µg/L as Th)	0.20	0.00	0.00	0.00
Zinc, Total Recoverable, (µg/L as Zn)	96.0	0.68	1.02	1.70

Table 11-13
Lower Agua Fria River Watershed Pollutant Loadings

Total area, acres:	24	Residential:	0.00%
		Industrial :	89.39%
		Undeveloped:	10.61%
		Commercial:	0.00%

Total Summer (June-Oct)		Total Winter (Nov -May)	
Runoff (cubic feet)	873	Runoff (cubic feet)	6,648

Constituent	Land Use weighted concentrations	Summer Pollutant Load (pounds)	Winter Pollutant Load (pounds)	Total Annual Pollutant Load (pounds)
BOD_5 (mg/L)	52.7	2.9	21.9	25
COD High Level (mg/L)	75.3	4.1	31.3	35
Residue, Total at 105 Deg.C (TDS)	122	7	51	57
Nitrogen NO_2 + NO_3, Total, (mg/L as N)	1.35	0.07	0.56	0.63
Nitrogen Organic, Total Kjeldahl (mg/L as N)	6.48	0.35	2.69	3.0
Phosphorous, Total, (mg/L as P)	0.74	0.04	0.31	0.35
Arsenic, Total, (µg/L as As)	7.20	0.00	0.00	0.00
Antimony Total (µg/L as Sb)	4.37	0.00	0.00	0.00
Barium Total (µg/L as Ba)	280	0.02	0.12	0.13
Beryllium, Total Recoverable, (µg/L as Be)	0.22	0.00	0.00	0.00
Cadmium, Total Recoverable, (µg/L as Cd)	3.29	0.00	0.00	0.00
Chromium, Total Recoverable, (µg/L as Cr)	5.87	0.00	0.00	0.00
Copper, Total Recoverable, (µg/L as Cu)	185	0.01	0.08	0.09
Lead, Total Recoverable, (µg/L as Pb)	28.6	0.00	0.01	0.01
Mercury, Total Recoverable, (µg/L as Hg)	0.19	0.00	0.00	0.00
Nickel, Total Recoverable, (µg/L as Ni)	16.3	0.00	0.01	0.01
Selenium Total Recoverable, (µg/L as Se)	1.83	0.00	0.00	0.00
Silver, Total Recoverable, (µg/L as Ag)	0.43	0.00	0.00	0.00
Thallium Total Recoverable, (µg/L as Th)	0.06	0.00	0.00	0.00
Zinc, Total Recoverable, (µg/L as Zn)	319	0.02	0.13	0.15

Table 11-14
White Tanks A Watershed Pollutant Loadings

Total area, acres:	39	Residential:	0.00%
		Industrial :	90.30%
		Undeveloped:	4.26%
		Commercial:	5.44%

Total Summer (June-Oct)		Total Winter (Nov -May)	
Runoff (cubic feet)	2,541	Runoff (cubic feet)	19,346

Constituent	Land Use weighted concentrations	Summer Pollutant Load (pounds)	Winter Pollutant Load (pounds)	Total Annual Pollutant Load (pounds)
BOD_5 (mg/L)	51.3	8	62	70
COD High Level (mg/L)	75.7	12	91	103
Residue, Total at 105 Deg.C (TDS)	120	19	145	165
Nitrogen NO_2 + NO_3, Total, (mg/L as N)	1.20	0.19	1.45	1.64
Nitrogen Organic, Total Kjeldahl (mg/L as N)	6.63	1.1	8.0	9.1
Phosphorous, Total, (mg/L as P)	0.74	0.12	0.89	1.01
Arsenic, Total, (µg/L as As)	7.28	0.00	0.01	0.01
Antimony Total (µg/L as Sb)	4.49	0.00	0.01	0.01
Barium Total (µg/L as Ba)	284	0.05	0.34	0.39
Beryllium, Total Recoverable, (µg/L as Be)	0.23	0.00	0.00	0.00
Cadmium, Total Recoverable, (µg/L as Cd)	3.69	0.00	0.00	0.01
Chromium, Total Recoverable, (µg/L as Cr)	4.67	0.00	0.01	0.01
Copper, Total Recoverable, (µg/L as Cu)	186	0.03	0.22	0.25
Lead, Total Recoverable, (µg/L as Pb)	28.3	0.00	0.03	0.04
Mercury, Total Recoverable, (µg/L as Hg)	0.12	0.00	0.00	0.00
Nickel, Total Recoverable, (µg/L as Ni)	15.6	0.00	0.02	0.02
Selenium Total Recoverable, (µg/L as Se)	1.41	0.00	0.00	0.00
Silver, Total Recoverable, (µg/L as Ag)	0.42	0.00	0.00	0.00
Thallium Total Recoverable, (µg/L as Th)	0.06	0.00	0.00	0.00
Zinc, Total Recoverable, (µg/L as Zn)	324	0.05	0.39	0.44

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ASSESSMENT OF POLLUTANT LOADS

The City uses a pollutant load model that estimates individual pollutant loads by basin and season. As discussed at the end of Part 5 of this report, land use data obtained from the FCDMC is used because it is viewed as more accurate and consistent.

The load is a function of rainfall amounts in each basin, the areal percentage of four land-use classifications (undeveloped, residential, commercial and industrial) and a set of event mean concentrations (EMCs). For each of the City sub-watersheds, the same land-use classifications, rainfall-runoff relationship, and EMCs have been used. The only variable has been the amount of rainfall. In this way, the load has decreased or increased as rainfall has changed from year to year and only reflects this variation.

Because rainfall and runoff in central Arizona follow a discontinuous and unpredictable pattern, especially during summer monsoon season when local convection patterns drive rainfall patterns, the volume of runoff observed at a specific outfall can vary by several orders of magnitude from year to year, and can vary just as much from one outfall location to another (i.e., rainfall associated with a specific storm event will vary widely across the COP system). Although some sampled outfalls may receive abundant runoff, precipitation may not occur at others. These factors skew data obtained via statistical analysis; thus efforts to identify overall patterns or trends in pollutant concentrations based on statistical analysis is not meaningful.

From 1997 to 2021, Phoenix and the southwestern US have experienced severe to mild drought. In March of 2021, NOAA released the national, 1981-to-2020 normal weather values. For the Phoenix Sky Harbor weather station, the new annual normal precipitation is 7.22 inches, with 4.23 inches for the winter and 2.99 inches for the summer permit seasons. This is significantly lower than the previous, 1971-to-2010, normal values of 8.03 inches, annual, 4.74 inches, winter and 3.29 inches, summer. Compounding that change was the unusually low rainfall depth (2.59 inches) for the 2020 to 2021 permit year. The importance of this observation is that annual pollutant loads are very difficult to compare over such an extreme precipitation variation. It should be noted that data from the single NOAA gage at Sky Harbor are different from the averages used in modeling the annual pollutant load. Rainfall depths used in the model are generalized from many gages in all parts of the Phoenix metropolitan area.

Table 11-15 contains a summary of the pollutant load data calculated for reporting years 2014 through the current reporting year. As discussed above, the data demonstrate that changes in pollutant load calculations vary strictly with rainfall volume.

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Table 11-15 Pollutant Load Comparison 2014-2021

Constituent	Total Annual Pollutant Load 2013/14 (pounds)	Total Annual Pollutant Load 2014/15 (pounds)	Total Annual Pollutant Load 2015/16 (pounds)	Total Annual Pollutant Load 2016/17 (pounds)	Total Annual Pollutant Load 2017/18 (pounds)	Total Annual Pollutant Load 2018/19 (pounds)	Total Annual Pollutant Load 2019/20 (pounds)	Total Annual Pollutant Load 2020/21 (pounds)
BOD_5 (mg/L)	2,127,604	3,733,690	1,839,037	2,372,602	1,004,453	3,340,326	2,890,094	699,417
COD High Level (mg/L)	10,426,176	18,377,162	8,971,215	11,578,413	4,889,256	16,384,770	14,201,876	3,430,525
Residue, Total at 105 Deg. C (TDS)	11,704,768	20,634,575	10,081,558	12,988,914	5,515,942	18,613,613	16,094,324	3,837,611
Nitrogen NO2 + NO3, Total, (mg/L as N)	199,774	352,787	171,979	222,705	92,876	308,574	270,799	65,646
Nitrogen Organic, Total Kjeldahl (mg/L as N)	281,558	494,542	242,821	309,620	136,068	471,601	397,485	91,580
Phosphorous, Total, (mg/L as P)	38,294	67,305	32,947	42,339	18,082	60,836	52,261	12,523
Arsenic, Total, (mg/L as As)	404	726	43,969	57,037	21,358	665	568	133
Antimony Total (mg/l as Sb)	175	309	151	192	83.98	289	243	57
Barium Total (mg/l as Ba)	10,054	17,722	8,669	11,057	4,846	16,733	14,107	3,268
Beryllium, Total Recoverable, (mg/L as Be)	46	81.2	39.9	52.2	10.29	35.0	30	7.2
Cadmium, Total Recoverable, (mg/L as Cd)	280	492	241	309	135.26	470	395	92
Chromium, Total Recoverable, (mg/L as Cr)	1,610	2,844	1,395	1,812	750.26	2,515	2,210	534
Copper, Total Recoverable, (mg/L as Cu)	3,784	6,588	3,260	4,149	1,817	6,162	5,158	1,229
Lead, Total Recoverable, (mg/L as Pb)	2,220	3,908	1,920	2,474	1,051	3,575	3,081	731
Mercury, Total Recoverable, (mg/L as Hg)	54	94.9	46.6	60.7	24.76	81.9	73	17.9
Nickel, Total Recoverable, (mg/L as Ni)	1,819	3,206	1,574	2,037	853.39	2,875	2,501	601
Selenium Total Recoverable, (mg/L as Se)	317	560	275	359	145.59	478	426	106
Silver, Total Recoverable, (mg/L as Ag)	0	0.00	0.00	0.00	19.5	66.1	57	13.7
Thallium Total Recoverable, (mg/L as Th)	NC	NC	NC	NC	6.2	33.5	29	6.9
Zinc, Total Recoverable, (mg/L as Zn)	13,083	22,934	11,294	14,475	6,265	21,271	18,071	4,289
Total Annual Runoff (millions of cubic feet)	1,633.2	2,882.6	1,404.1	1,819.7	1,169.0	2,711.9	2,340.9	557.1

NC - A statistically representative event mean concentration for thallium could not be calculated as thallium occurs infrequently in stormwater samples regionally.

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PART 12: ANNUAL EXPENDITURES

Provide a brief statement of the expenditures incurred each reporting period (July 1-June 30) to implement and maintain the stormwater management program, including associated monitoring and reporting activities. This figure should include funds related exclusively to implementation of the stormwater program. Provide the estimated budget for implementing and maintaining the stormwater program in the subsequent reporting period. Include a statement of the funding sources used to support program expenditures.

Personnel from the City departments responsible for implementation of the stormwater program provided actual and estimated expenditure data for each fiscal year. The expenditures are included in Table 12-1.

Table 12-1 Annual Expenditures Stormwater Program Implementation

	Fiscal Year 2015	Fiscal Year 2016	Fiscal Year 2017	Fiscal Year 2018	Fiscal Year 2019	Fiscal Year 2020	Fiscal Year 2021	Fiscal Year 2022 (estimated)
Street Transportation Department	$1,886,898	$1,949,181	$2,464,300	$2,733,694	$2,304,523	$3,364,258	$3,568,909	$3,694,036
Water Services Department	$1,867,870	$1,702,105	$1,842,748	$1,792,284	$1,890,000	$1,995,290	$2,003,037	$2,288,140
Planning and Development Department	$910,900	$1,288,398	$1,563,702	$1,846,831	$1,914,000	$1,944,000	$2,050,000	$2,000,000
Office of Environmental Programs	$121,232 (revised)	$139,424	$132,627	$147,219	$159,786	$145,433	$166,248	$184,078
Office of Environmental Programs – Capital Improvement Projects*	$240,854 (revised)	$231,716	$173,421	$99,276	$95,154	$319,108	$143,349	$250,000
TOTALS	$5,027,754 (revised)	$5,310,824	$6,176,798	$6,805,480	$5,440,161	$8,231,175	$8,231,175	$7,677,415

* Up to $250,000 in capital improvement project funding is made available each year, and used as necessary to ensure compliance and/or enhance the City's overall stormwater program. Revisions to prior year's expenditures are based on a recent re-evaluation of program expense tracking. FY 20 includes $155,000 carryover from the previous year.

The City collects a stormwater fee to defray the costs of operating the stormwater management program. Stormwater program charges from the WSD, STD, and OEP are paid out of these funds. The fee does not cover the costs for maintenance of the storm drain system, infrastructure improvements, or other ancillary programs (e.g., HHW, street sweeping, etc.). Stormwater program costs for PDD are funded by construction permit fees.

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PART 13: ATTACHMENTS

Attach a copy of each of the following documents for the first year Annual Report, and each subsequent year if changes are made. If no changes are made to these during a reporting period, indicate, *'no changes were made this period, the 2009 submittal is current'.*

☒ Drainage System Maps

The City considers the storm drains to be protected critical infrastructure. As such, the City has not provided an electronic copy of the GIS maps as an attachment. GIS maps are available for review by ADEQ upon request. Hard copies of the drainage basin maps are provided.

☒ List of major outfalls

☒ List of changes to the major outfall inventory (new outfalls, outfalls out of service), including drainage area and coordinates for the outfalls listed in Table 1 of the permit (4^{th} year report).

☒ Laboratory reports for stormwater monitoring performed in the reporting period.

☐ New or revised ordinances associated with stormwater management.

☒ New or revised public outreach documents.

The following attachments to the Annual Report are in addition to those required as listed above:

☒ STORM Annual Report

☒ Select Outreach Images

☒ Public Awareness Survey

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Attachments

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Drainage System Maps

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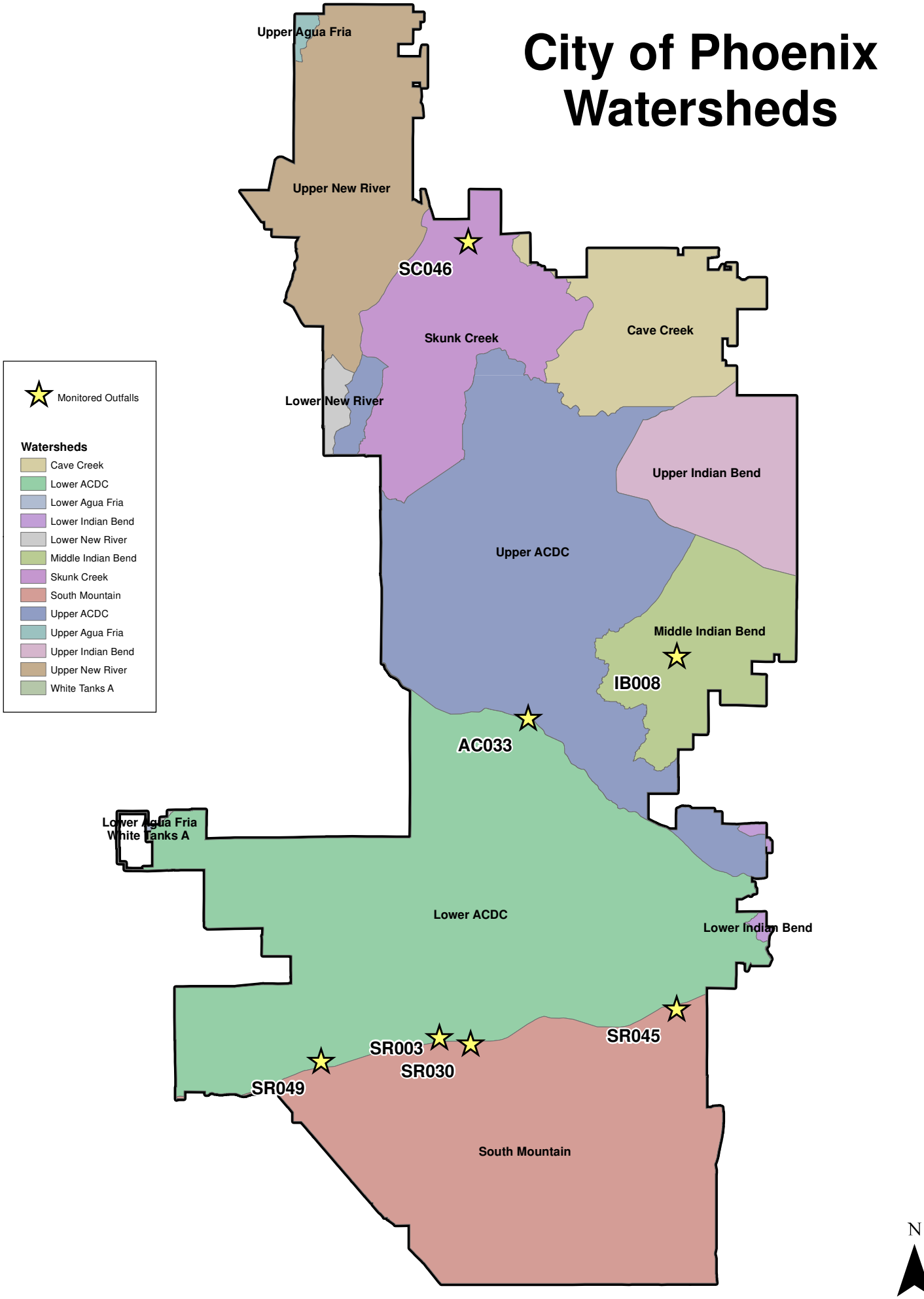
City of Phoenix Watersheds



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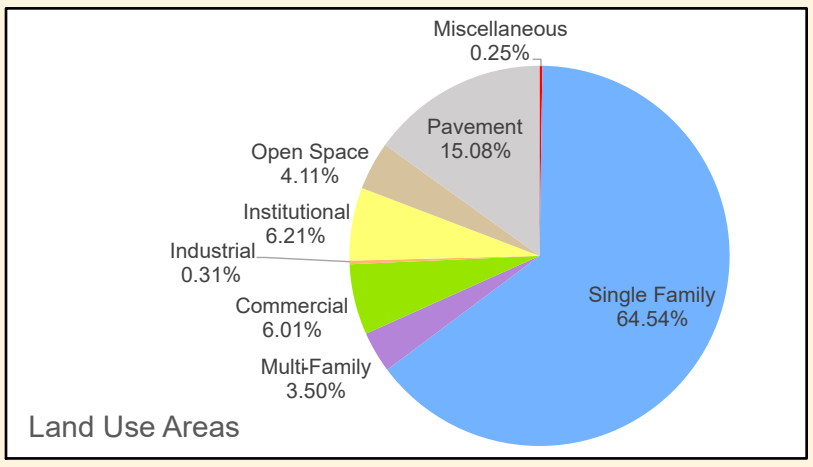
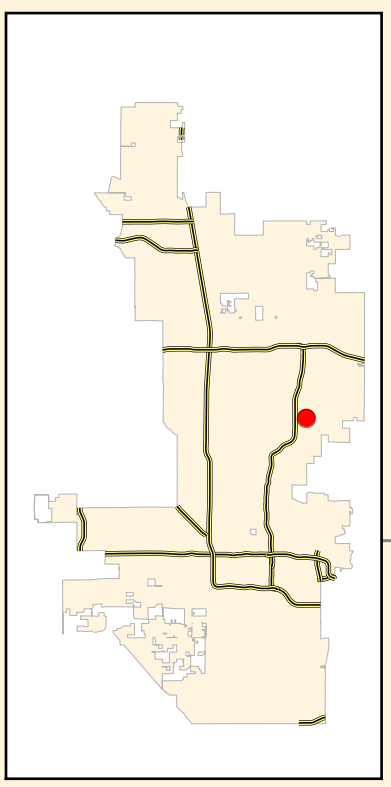
Drainage Area IB008



Outfalls
Freeways
Streets
Canals
Rivers
Pavement
City Limit
Drainage Areas

Land Use

Commercial
Industrial
Institutional
Miscellaneous
Multi Family Residential
Open Space
Single Family Residential
Transportation
Utilities



Central Arizona Project Canal
N 40TH ST
E UNION HILLS DR
E BELL RD
N TATUM BLVD
E GREENWAY RD
N 44TH ST
E THUNDERBIRD RD
51
IB008
N
0 0.5 1 Miles

City of Phoenix
Street Transportation Department

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Drainage Area SC046

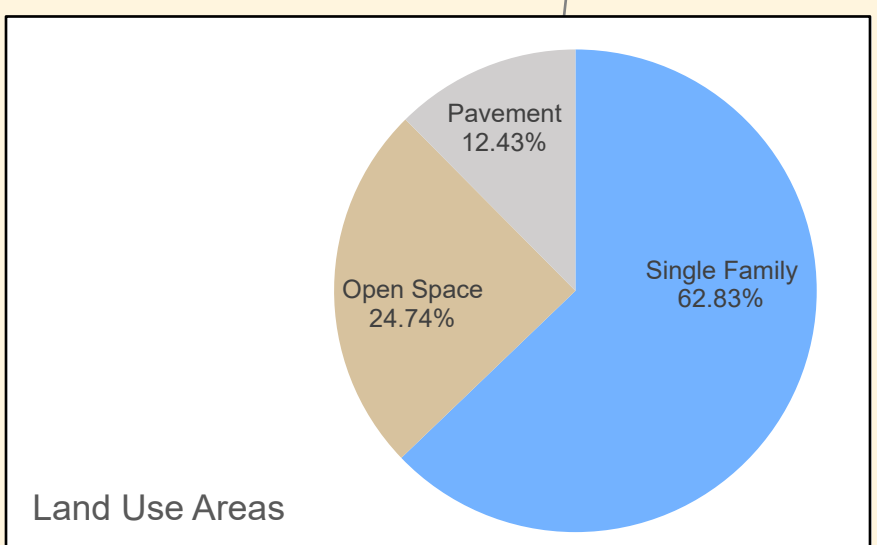
N VIA TRAMONTO

W FLORIMOND RD

W PERDIDO WAY

N 27TH DR

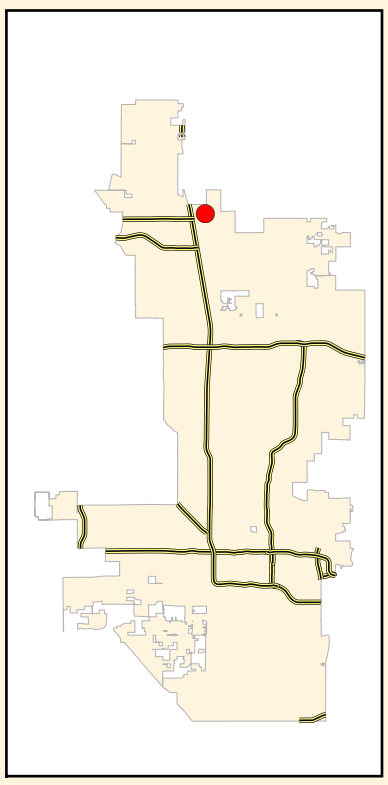
SC046



Outfalls
Freeways
Streets
Canals
Rivers
Pavement
City Limit
Drainage Areas

Land Use

Commercial
Industrial
Institutional
Miscellaneous
Multi Family Residential
Open Space
Single Family Residential
Transportation
Utilities



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0 0.05 0.1 Miles

City of Phoenix
Street Transportation Department

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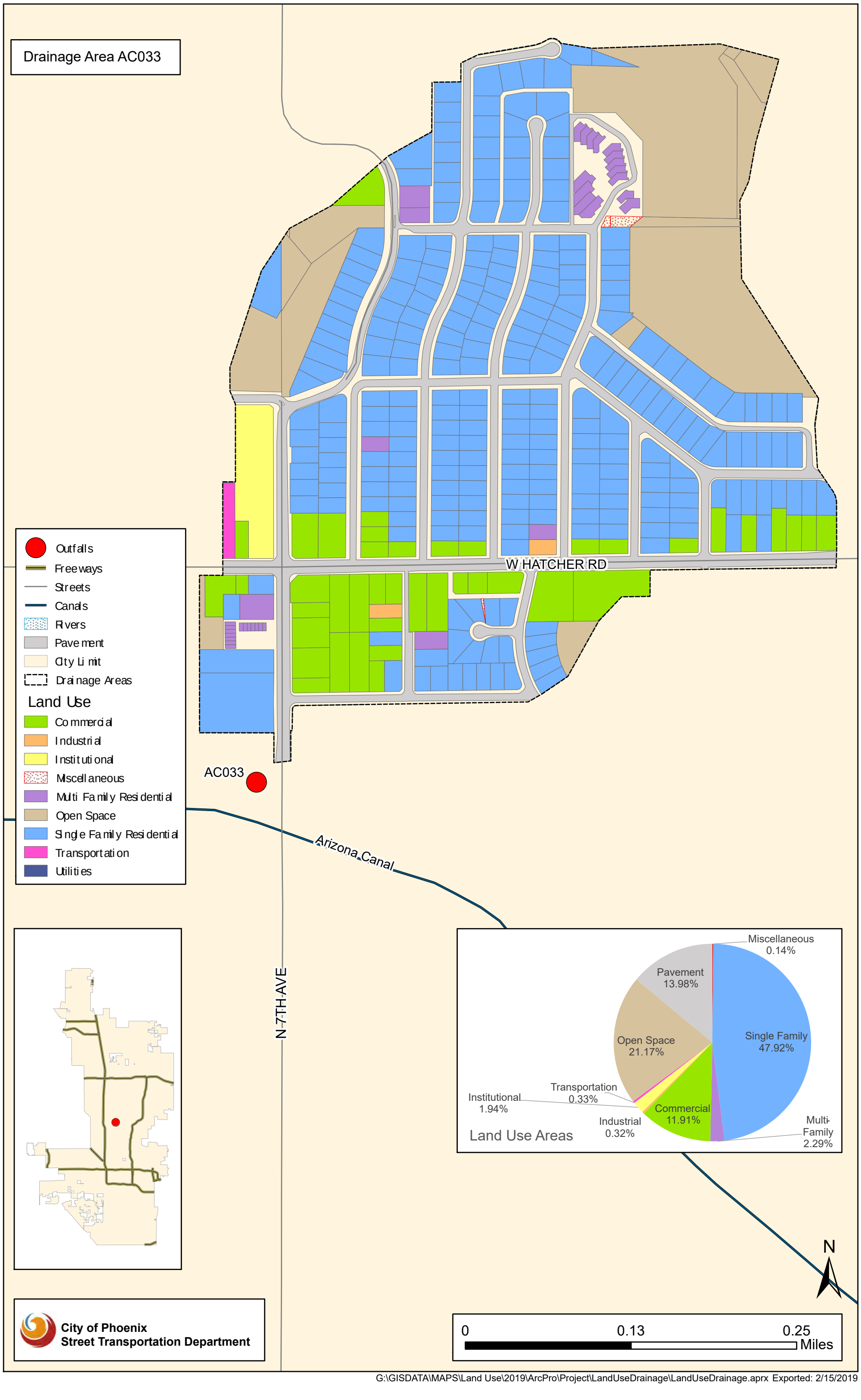
Drainage Area AC033



City of Phoenix
Street Transportation Department

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Drainage Area SR045

SR045

W UNIVERSITY DR

S 44TH ST

S 40TH ST

S 44TH ST

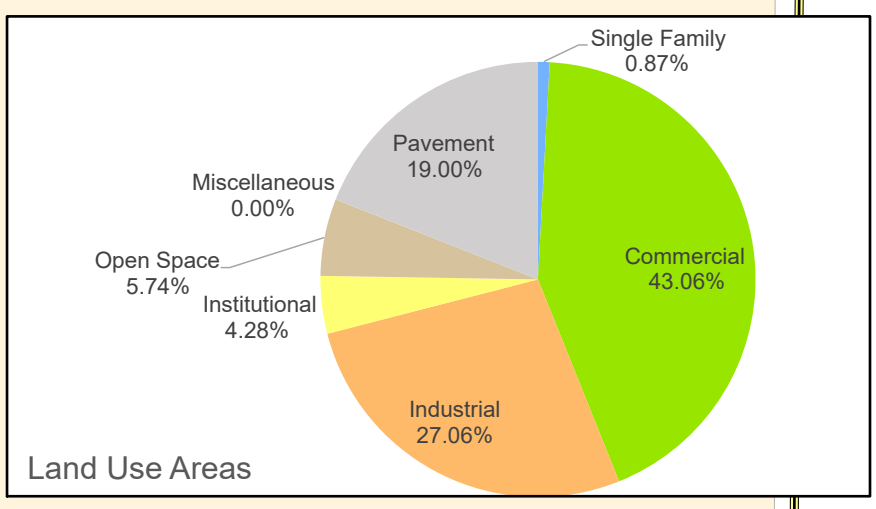
143

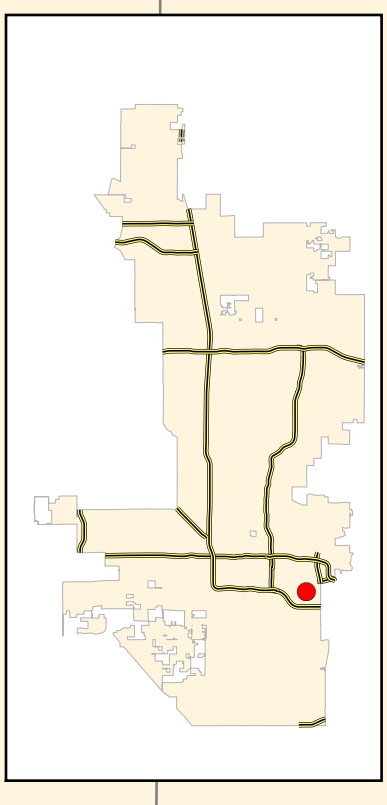
10

Outfalls
Freeways
Streets
Canals
Rivers
Pavement
City Limit
Drainage Areas

Land Use

Commercial
Industrial
Institutional
Miscellaneous
Multi Family Residential
Open Space
Single Family Residential
Transportation
Utilities





City of Phoenix
Street Transportation Department

0 0.25 0.5 Miles

N

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Drainage Area SR030

SR030

W BROADWAY RD

S 19TH AVE

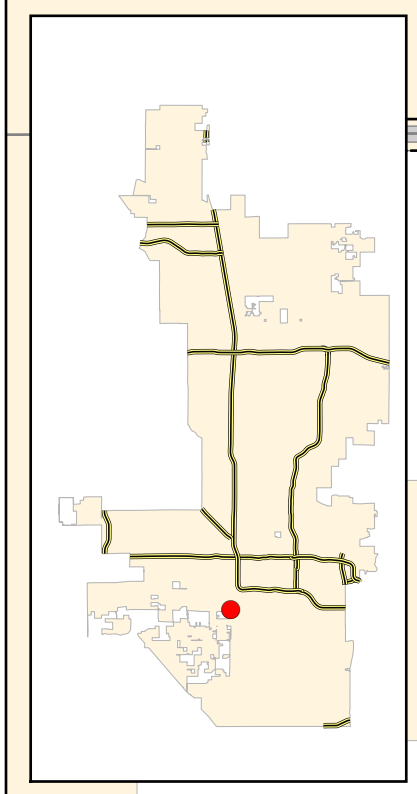
S 27TH AVE

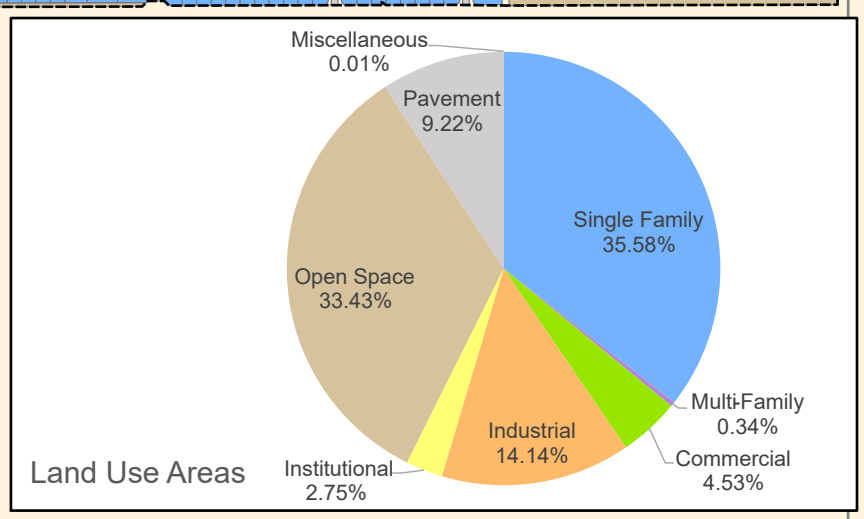
W SOUTHERN AVE

Outfalls
Freeways
Streets
Canals
Rivers
Pavement
City Limit
Drainage Areas

Land Use

Commercial
Industrial
Institutional
Miscellaneous
Multi Family Residential
Open Space
Single Family Residential
Transportation
Utilities





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City of Phoenix
Street Transportation Department

0 0.25 0.5 Miles

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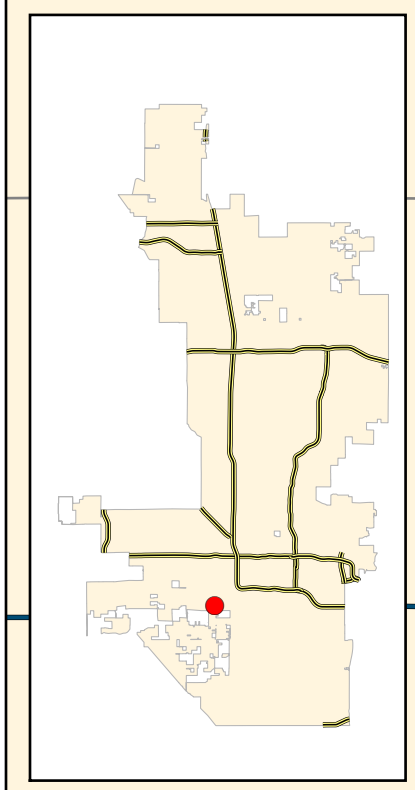
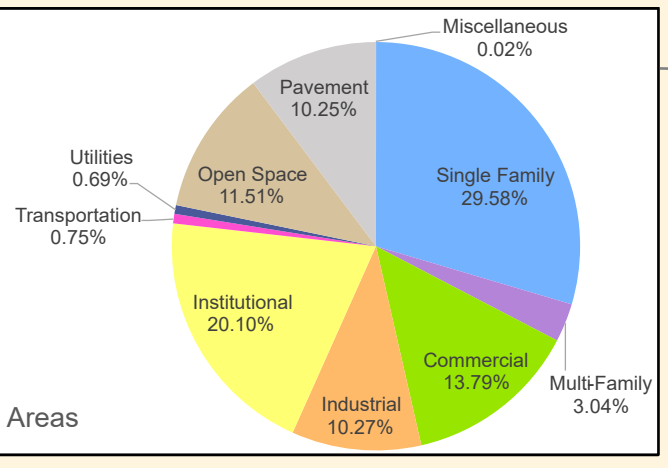
Drainage Area SR003

- Outfalls
- Freeways
- Streets
- Canals
- Rivers
- Pavement
- City Limit
- Drainage Areas

Land Use

- Commercial
- Industrial
- Institutional
- Miscellaneous
- Multi Family Residential
- Open Space
- Single Family Residential
- Transportation
- Utilities





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SR003

0 0.5 1 Miles

City of Phoenix
Street Transportation Department

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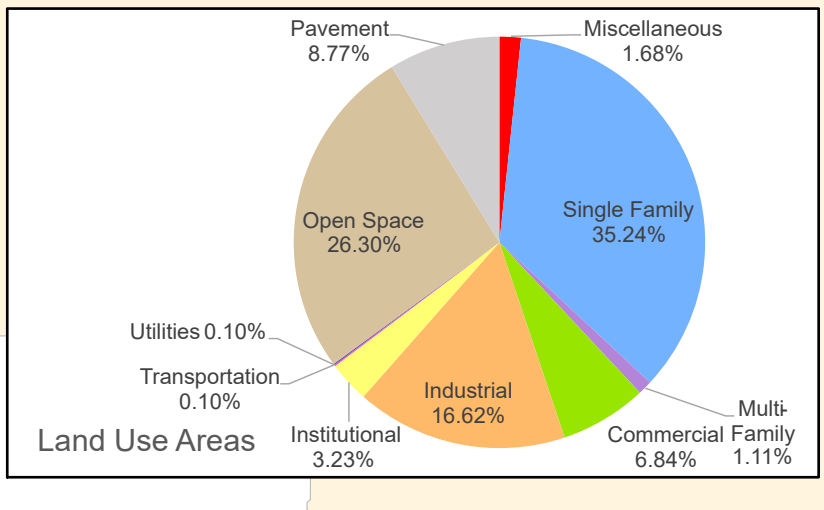
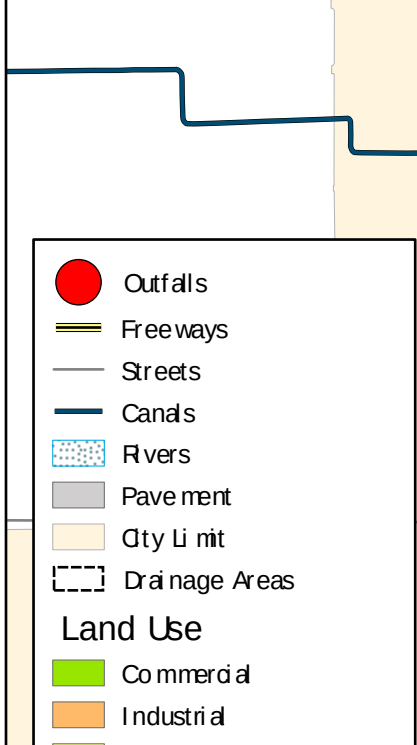
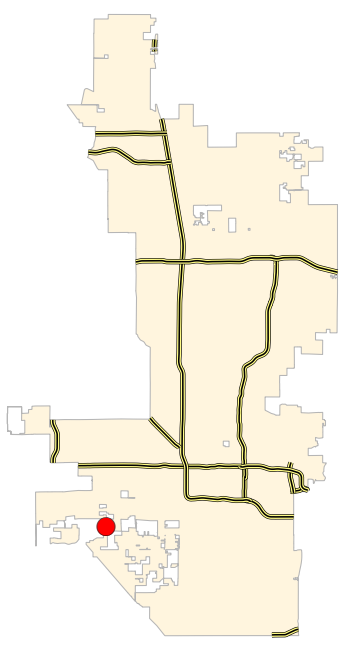
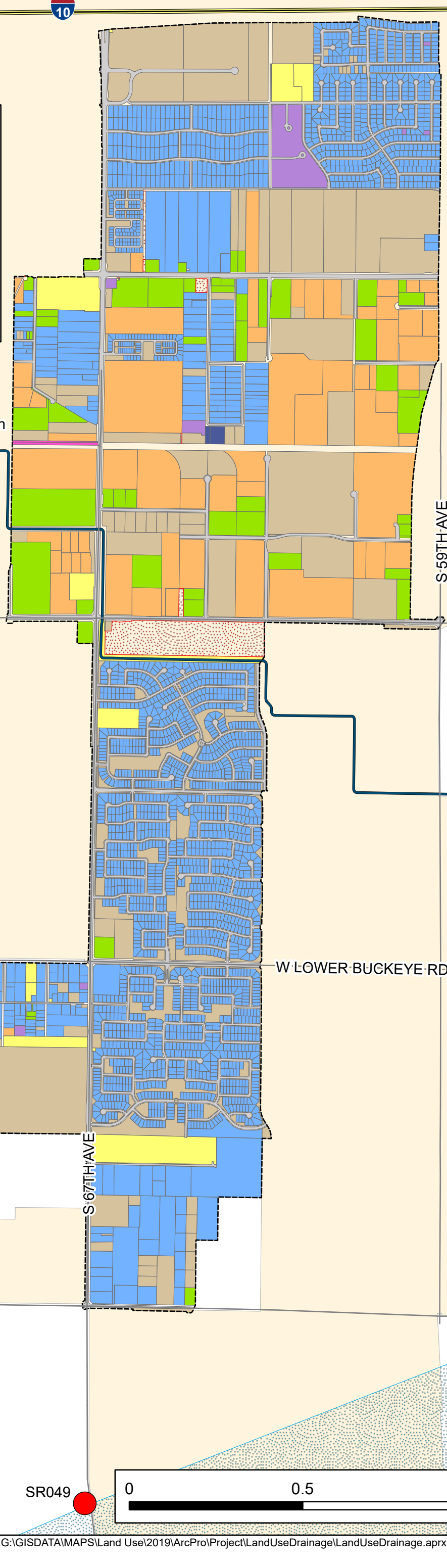
Drainage Area SR049









City of Phoenix
Street Transportation Department

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List of Major Outfalls

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The report contains all active major outfalls 36" or greater serving>50 acres or 12" or greater outfalls serving>2 acres of industrial land use known to the City

Stormwater Management
Total Outfalls: 417

Outfall Id	Site Address	Latitude	Longitude	Drain Size	Last Inspection	Next Inspection
AC/DC-Arizona Canal Diversion Channel	**Count: 89**					
AC001	51st Ave And Cactus Road, Phoenix, AZ	33.5965	-112.1695	78 Inches	01/12/2021	2026
AC002	43rd Ave And Peoria Ave, Phoenix, AZ	33.5829	-112.1519	90 Inches	01/12/2021	
AC003	43rd Ave And Peoria Ave, Phoenix, AZ	33.5817	-111.8500	42 Inches	01/12/2021	2026
AC004	35th Ave And Acdc Channel, Phoenix, AZ	33.5725	-111.8656	96 Inches	01/11/2021	2027
AC005	30th Ave And Metrocenter, Phoenix, AZ	33.5697	-111.8744	53 Inches	01/11/2021	
AC006	29th Ave And Metrocenter, Phoenix, AZ	33.5708	-111.8789	48 Inches	01/11/2021	2026
AC007	29th Ave And Metrocenter, Phoenix, AZ	33.5708	-111.8789	43 Inches	01/11/2021	2026
AC008	I-17 (Black Canyon Fwy) And Acdc Channel, Phoenix, AZ	33.5714	-111.8825	27 Inches	02/03/2021	2026
AC010	19th Ave And Acdc Channel, Phoenix, AZ	33.5721	-112.0997	36 Inches	01/13/2021	2026
AC011	7th St And Acdc Channel, Phoenix, AZ	33.5964	-111.1694	42 Inches	02/04/2021	2026
AC012	18th Pl And Acdc Channel, Phoenix, AZ	33.5357	-112.0422	48 Inches	02/09/2021	2026
AC013	24th St. Water Treatment Plant And Acdc Channel, Phoenix, AZ	33.5264	-111.9692	36 Inches	02/10/2021	2026
AC014	2 Mile Tunnel And Acdc Channel, Phoenix, AZ	33.5964	-111.8308	36 Inches	02/10/2021	2026
AC015	33rd Dr And Acdc Channel, Phoenix, AZ	33.5714	-111.8692	12 Inches	01/11/2021	2026
AC018	18th Ave And Hatcher, Phoenix, AZ	33.5715	-112.0974	36 Inches	01/13/2021	2026
AC021	49th Dr And Acdc Channel, Phoenix, AZ	33.5919	-112.1644	50 Feet	01/12/2021	2026
AC022	Lupine Dr And Acdc Channel, Phoenix, AZ	33.5899	-112.1624	50 Feet	01/12/2021	2026
AC023	Yucca St And ACDC Channel, Phoenix, AZ	33.5877	-112.1585	27 Feet	01/12/2021	2026
AC024	39th Ave And Acdc Channel, Phoenix, AZ	33.5781	-112.1443	30 Feet	01/11/2021	2026
AC025	Ironwood Dr And Acdc Channel, Phoenix, AZ	33.5761	-111.8589	30 Feet	01/11/2021	2026
AC026	3rd St And Acdc Channel, Phoenix, AZ	33.5564	-111.9375	70 Feet	02/04/2021	2026
AC028	10th St And Acdc Channel, Phoenix, AZ	33.5564	-111.9375	100 Feet	02/04/2021	2026
AC029	12th St And Acdc Channel, Phoenix, AZ	33.5458	-111.9433	16 Feet	02/04/2021	2026
AC030	13th St And Orangewood, Phoenix, AZ	33.5447	-111.9456	50 Feet	02/04/2021	2026
AC031	14th St And State Ave, Phoenix, AZ	33.5436	-111.9483	90 Feet	02/04/2021	2026
AC033	7th Ave And Acdc Channel, Phoenix, AZ	33.5690	-112.0829	42 Inches	02/03/2021	2026
AC034	12th Ave And Acdc Channel, Phoenix, AZ	33.5700	-111.9086	36 Inches	02/04/2021	2026
AC039	14th St And Acdc Channel, Phoenix, AZ	33.5817	-111.8503	36 Inches	02/04/2021	2026
AC044	6th St And Acdc Channel, Phoenix, AZ	33.5581	-111.9339	36 Inches	02/04/2021	2026
AC048	10th St And Acdc Channel, Phoenix, AZ	33.5564	-111.9375	96 Inches	02/04/2021	2026
AC070	Dunlap Ave And Short Tunnel, Phoenix, AZ	33.5708	-111.8794	60 Inches	02/04/2021	2026
AC081	Hwy 51 And Acdc Channel, Phoenix, AZ	33.5353	-112.0415	6 x 6 Feet	02/09/2021	2026

Outfall Id	Site Address	Latitude	Longitude	Drain Size	Last Inspection	Next Inspection
AC/DC-Arizona Canal Diversion Channel	**Count: 89**					
AC083	24th St. Water Treatment Plant And Acdc Channel, Phoenix, AZ	33.5714	-111.8822	36 Inches	02/10/2021	2026
AC085	2 Mile Tunnel And Acdc Channel, Phoenix, AZ	33.5714	-111.8822	30 Inches	02/10/2021	2026
AC106	2 Mile Tunnel And Acdc Channel, Phoenix, AZ	33.5189	-111.9872	36 Inches	02/10/2021	2026
AC128	7th Ave And Dunlap Ave, Phoenix, AZ	33.5681	-111.9200	12 Inches	02/03/2021	2027
AC130	Paradise Dr And Acdc, Phoenix, AZ	33.5933	-112.1656	64 Feet	01/12/2021	2026
AC131	47th Ave And Acdc, Phoenix, AZ	33.5888	-112.1602	64 Feet	01/12/2021	2026
AC132	46th Ave And Acdc, Phoenix, AZ	33.5848	-112.1562	32 Feet	01/12/2021	2026
AC133	43rd Ave And Acdc, Phoenix, AZ	33.5836	-112.1536	32 Feet	01/12/2021	2026
AC134	43rd Ave And Acdc, Phoenix, AZ	33.5833	-111.8467	32 Feet	01/12/2021	2026
AC135	43rd Ave And Acdc, Phoenix, AZ	33.5831	-111.8478	24 Feet	01/12/2021	2026
AC136	North Ln And Acdc, Phoenix, AZ	33.5811	-111.8506	24 Feet	01/12/2021	2026
AC137	41st Dr And Acdc, Phoenix, AZ	33.5806	-111.8517	24 Feet	01/12/2021	2026
AC138	41st Ln And Acdc, Phoenix, AZ	33.5803	-111.8519	24 Feet	01/12/2021	2026
AC139	41st Ave And Acdc, Phoenix, AZ	33.5800	-111.8528	24 Feet	01/12/2021	2026
AC140	40th Dr And Acdc, Phoenix, AZ	33.5794	-111.8533	24 Feet	01/12/2021	2026
AC141	40th Ln And Acdc, Phoenix, AZ	33.5793	-112.1462	24 Feet	01/11/2021	2026
AC142	40th Ave And Acdc, Phoenix, AZ	33.5789	-112.1456	24 Feet	01/11/2021	2026
AC143	39th Ln And Acdc, Phoenix, AZ	33.5783	-111.8553	24 Feet	01/11/2021	2026
AC144	37th Ave And Acdc, Phoenix, AZ	33.5742	-111.8617	64 Feet	01/11/2021	2026
AC145	36th Ave And Acdc, Phoenix, AZ	33.5733	-111.8636	40 Feet	01/11/2021	2026
AC146	33rd Ave And Acdc, Phoenix, AZ	33.5711	-111.1300	48 Feet	01/11/2021	2026
AC147	23rd Ave And Acdc, Phoenix, AZ	33.5733	-111.8928	40 Feet	02/08/2021	2026
AC148	21st Dr And Acdc, Phoenix, AZ	33.5728	-111.8956	40 Feet	02/08/2021	2026
AC150	20th Dr And Acdc, Phoenix, AZ	33.5725	-111.8969	50 Feet	02/08/2021	2026
AC151	20th Ave And Acdc, Phoenix, AZ	33.5722	-111.8983	40 Feet	02/08/2021	2026
AC152	20th Dr And Acdc, Phoenix, AZ	33.5719	-111.8994	24 Feet	02/08/2021	2026
AC153	16th Ave And Acdc, Phoenix, AZ	33.5703	-111.9067	36 Feet	02/08/2021	2026
AC154	15th Ave And Acdc, Phoenix, AZ	33.5700	-111.9089	60 Feet	02/08/2021	2026
AC155	14th Ave And Acdc, Phoenix, AZ	33.5697	-111.9100	60 Feet	02/08/2021	2026
AC156	13th Ave And Acdc, Phoenix, AZ	33.5694	-111.9108	60 Feet	02/08/2021	2026
AC157	9th Ave And Acdc, Phoenix, AZ	33.5690	-112.0854	46 Feet	02/08/2021	2026
AC158	8th Ave And Acdc, Phoenix, AZ	33.5686	-111.9156	48 Feet	02/08/2021	2026
AC159	Central Ave And Short Channel, Phoenix, AZ	33.5617	-111.9269	30 Feet	02/08/2021	2026
AC160	8th St And Acdc, Phoenix, AZ	33.5572	-111.9358	24 Feet	02/08/2021	2026
AC161	8th Pl And Acdc, Phoenix, AZ	33.5569	-111.9369	24 Feet	02/08/2021	2026

Outfall Id	Site Address		Latitude	Longitude	Drain Size	Last Inspection	Next Inspection	
AC/DC-Arizona Canal Diversion Channel		**Count: 89**						
AC162	Harmont Dr And Acdc, Phoenix, AZ		33.5544	-111.9386	56 Feet	02/08/2021	2026	
AC163	Northern Ave And Acdc, Phoenix, AZ		33.5519	-111.9389	80 Feet	02/08/2021	2026	
AC165	E Desert Park Ln And Acdc, Phoenix, AZ		33.5497	-111.9406	40 Feet	02/09/2021	2026	
AC166	Haywood Ave And Acdc, Phoenix, AZ		33.5492	-111.9411	40 Feet	02/09/2021	2026	
AC169	Morten Ave And Acdc, Phoenix, AZ		33.5472	-111.9422	40 Feet	02/09/2021	2026	
AC171	15th St And Acdc, Phoenix, AZ		33.5419	-111.9517	320 Feet	02/09/2021	2026	
AC173	17th St And Acdc, Phoenix, AZ		33.5372	-111.9556	40 Feet	02/09/2021	2026	
AC176	19th St And Acdc, Phoenix, AZ		33.5331	-111.9600	80 Feet	02/09/2021	2026	
AC177	20th St And Acdc, Phoenix, AZ		33.5321	-112.0389	40 Feet	02/09/2021	2026	
AC178	Maryland Ave And Acdc, Phoenix, AZ		33.5311	-111.9619	24 Feet	02/09/2021	2026	
AC179	Maryland Ave And Acdc, Phoenix, AZ		33.5300	-111.0383	40 Feet	02/09/2021	2026	
AC180	Maryland Ave And Acdc, Phoenix, AZ		33.5297	-111.9631	32 Feet	02/09/2021	2026	
AC181	Maryland Ave And Acdc, Phoenix, AZ		33.5294	-111.9633	40 Feet	02/09/2021	2026	
AC182	Marlette Ave And Acdc, Phoenix, AZ		33.5286	-111.9642	32 Feet	02/10/2021	2026	
AC183	Claremont St And Acdc, Phoenix, AZ		33.5283	-111.9647	32 Feet	02/10/2021	2026	
AC184	Squaw Peak Water Treatment Plant And Acdc, Phoenix, AZ		33.5281	-111.9661	72 Feet	02/10/2021	2026	
AC191	I-17 And Acdc Channel, Phoenix, AZ		33.5714	-111.8825	31 Feet	02/03/2021	2026	
AC192	3858 W MalapaiDr Phoenix, AZ		33.5780	-112.1435	25 Feet	01/11/2021	2026	
AC193	3848 W MalapaiDr Phoenix, AZ		33.5772	-111.8567	25 Feet	01/11/2021	2026	
AC194	3832 W MalapaiDr Phoenix, AZ		33.5769	-111.8569	25 Feet	01/11/2021	2026	
AC195	9th Avenue And Acdc Channel, Phoenix, AZ		33.5689	112.0844	72 Inches	09/07/2016	2022	*(2)*
AC196	1330 North State Ave And Acdc, Phoenix, AZ		33.5439	112.0525	5 Feet	02/24/2017	2022	*(2)*
AF-Agua Fria		**Count: 4**						
AF002	Encanto Blvd And Sr101 West (9500 W), Phoenix, AZ		33.4722	-111.7342	42 Inches	07/22/2020	2026	
AF003	Mcdowell Rd And Sr101 West (9700 W), Phoenix, AZ		33.4653	-111.7325	4 x 11 Feet	07/22/2020	2026	
AF005	Camelback Rd And Sr Loop 101, Phoenix, AZ		33.5081	-111.7317	35 Inches	07/22/2020	2026	
AF006	Camelback Road And 114th Aveune, Phoenix, AZ		33.5067	-111.6958	60 Inches	07/22/2020	2026	
AZ-Arizona Canal		**Count: 7**						
AZ001	Arizona Canal And 42nd St, Phoenix, AZ		33.5073	-111.9913	36 Inches	02/10/2020	2025	
AZ002	Arizona Canal And 56th St, Phoenix, AZ		33.4894	-111.9606	48 Inches	02/04/2020	2025	
AZ003	Arizona Canal And 57th St, Phoenix, AZ		33.4896	-111.9595	48 Inches	02/04/2020	2025	
AZ024	Arizona Canal And 21st St, Phoenix, AZ		33.5273	-112.0345	36 Inches	02/10/2020	2025	
AZ025	Arizona Canal And 21st St, Phoenix, AZ		33.5275	-112.0346	36 Inches	02/10/2020	2025	
AZ028	Arizona Canal And 56th St, Phoenix, AZ		33.4891	-111.9610	6 Feet	02/04/2020	2025	
AZ030	Arizona Canal And 44th St, Phoenix, AZ		33.5043	-111.9869	6 Feet	02/10/2020	2025	

Outfall Id	Site Address		Latitude	Longitude	Drain Size	Last Inspection	Next Inspection
CAP-Central Arizona Project		**Count: 2**					
CAP002	19224 N North TatumBlvd Phoenix, AZ		33.6592	11.9828	20 Feet	08/17/2020	2027
CAP003	56th Street And Cap (Central Arizona Project), Phoenix, AZ		33.6453	11.9469	20 Feet	08/17/2020	2027

Outfall Id	Site Address	Latitude	Longitude	Drain Size	Last Inspection	Next Inspection
CC-Cave Creek Wash	**Count: 47**					
CC002	23rd Ave And Vogel Ave, Phoenix, AZ	33.5746	-112.1088	48 Inches	07/16/2019	2025
CC003	Peoria Ave And Cave Creek Wash, Phoenix, AZ	33.5816	-112.1119	84 Inches	07/16/2019	
CC004	25th Ave And Cholla Rd, Phoenix, AZ	33.5892	-112.1145	78 Inches	07/23/2019	2025
CC005	25th Ave And Cactus Rd, Phoenix, AZ	33.5963	-112.1119	48 Inches	06/03/2020	2025
CC006	25th Ave And Larkspur Dr, Phoenix, AZ	33.5999	-112.1111	30 Inches	08/27/2019	2025
CC008	23rd Ave And Thunderbird Rd, Phoenix, AZ	33.6108	-112.1076	72 Inches	09/10/2019	2025
CC010	19th Ave And Greenway Rd, Phoenix, AZ	33.6243	-112.0999	90 Inches	09/13/2019	2025
CC024	Shangri-La Rd And Cave Creek Wash, Phoenix, AZ	33.5881	-112.1147	36 Inches	08/15/2019	2025
CC041	901 W DanburyRd Phoenix, AZ	33.6421	-112.0849	10 Feet	10/10/2019	2025
CC042	17407 N 8thAve Phoenix, AZ	33.6441	-112.0844	10 Feet	10/10/2019	2025
CC043	7th Ave And Cave Creek Wash, Phoenix, AZ	33.6444	-112.0830	60 Inches	10/10/2019	2025
CC044	3rd Ave And Grovers Ave, Phoenix, AZ	33.6476	-112.0790	16 Feet	10/10/2019	2025
CC045	5th Ave And Michelle Dr, Phoenix, AZ	33.6495	-112.0796	10 Feet	10/23/2019	2025
CC046	5th Ave And Michigan Ave, Phoenix, AZ	33.6510	-112.0794	10 Feet	10/23/2019	2025
CC047	232 W MichiganAve Phoenix, AZ	33.6508	-112.0782	14 Feet	10/23/2019	2025
CC048	5th Ave And Bluefield Cir, Phoenix, AZ	33.6524	-112.0795	10 Feet	10/23/2019	2025
CC049	237 W WagonerRd Phoenix, AZ	33.6524	-112.0785	8 Feet	10/23/2019	2025
CC050	Union Hills Dr And Cave Creek Wash, Phoenix, AZ	33.6544	-112.0788	72 Inches	10/23/2019	2025
CC052	15478 N 13thAve Phoenix, AZ	33.6279	-112.0907	10 Feet	10/03/2019	2025
CC055	19th Ave And Greenway Rd, Phoenix, AZ	33.6243	-112.0995	3 x 6 Feet	09/13/2019	2025
CC056	19th Ave And Greenway Rd, Phoenix, AZ	33.6243	-112.0998	3 x 6 Feet	09/13/2019	2025
CC057	Cave Creek Golf Course At Acoma Dr, Phoenix, AZ	33.6183	-112.1067	42 Inches	09/10/2019	2025
CC060	18019 N Villa RitaDr Phoenix, AZ	33.6498	-112.0786	18 Feet	04/21/2020	2025
CC062	19823 N 3rdSt Phoenix, AZ	33.6664	-112.0701	29 Feet	11/13/2019	2025
CC063	19819 N 3rdSt Phoenix, AZ	33.6663	-112.0701	20 Feet	11/13/2019	2025
CC064	19801 N 3rdSt Phoenix, AZ	33.6658	-112.0699	7 Feet	11/13/2019	2025
CC065	301 E BehrendDr Phoenix, AZ	33.6655	-112.0699	9 Feet	11/13/2019	2025
CC066	301 E WikieupLn Phoenix, AZ	33.6651	-112.0700	9 Feet	11/13/2019	2025
CC067	301 E SequoiaDr Phoenix, AZ	33.6643	-112.0699	9 Feet	11/13/2019	2025
CC068	301 E OraibiDr Phoenix, AZ	33.6638	-112.0699	9 Feet	11/13/2019	2025
CC069	301 E PiuteAve Phoenix, AZ	33.6632	-112.0699	9 Feet	11/13/2019	2025
CC070	301 E UtopiaRd Phoenix, AZ	33.6621	-112.0699	9 Feet	11/13/2019	2025
CC071	401 E WescottDr Phoenix, AZ	33.6587	-112.0696	13 Feet	11/13/2019	2025
CC072	18650 N 2ndAve Phoenix, AZ	33.6566	-112.0761	12 Feet	11/13/2019	2025
CC073	18819 N 2ndAve Phoenix, AZ	33.6576	-112.0758	10 Feet	11/13/2019	2025

Outfall Id	Site Address		Latitude	Longitude	Drain Size	Last Inspection	Next Inspection	
CC-Cave Creek Wash		**Count: 47**						
CC074	18802 N 2ndDr Phoenix, AZ		33.6567	-112.0780	9 Feet	11/13/2019	2025	
CC075	201 W TaroLn Phoenix, AZ		33.6591	-112.0759	10 Feet	11/13/2019	2025	
CC076	27th Ave And Cholla Rd, Phoenix, AZ		33.5892	-112.1144	62 Feet	08/22/2019	2025	
CC077	519 W HelenaDr Phoenix, AZ		33.6448	-112.0814	15 Feet	10/10/2019	2025	
CC078	4th Ave And Muriel Dr, Phoenix, AZ		33.6463	-112.0792	24 Feet	10/10/2019	2025	
CC079	4th Ave And Angela Dr, Phoenix, AZ		33.6457	-112.0798	16 Feet	10/10/2019	2025	
CC080	4th Ave And Angela Dr, Phoenix, AZ		33.6458	-112.0797	16 Feet	10/10/2019	2025	
CC081	17415 N 6thAve Phoenix, AZ		33.6444	-112.0823	19 Feet	10/10/2019	2025	
CC082	Cave Creek Gc And Cave Creek Wash, Phoenix, AZ		33.6237	-112.1054	42 Inches	10/17/2019	2025	
CC083	23rd Ave And Greenway Rd, Phoenix, AZ		33.6234	-112.1054	48 Inches	10/17/2019	2025	
CC087	Deer Valley Road And 11th Pl, Phoenix, AZ		33.6843	-112.0575	66 Inches	11/19/2019	2025	
CC094	7th St And Lone Cactus, Phoenix, AZ		33.6809	-112.0659	54 Inches	11/19/2019	2026	
CO-Charter Oak		**Count: 18**						
CO001	Nisbet Rd And 42nd St, Phoenix, AZ		33.6225	111.9906	5 Feet	12/13/2016	2022	*(2)*
CO003	42nd St And Whitney Ln, Phoenix, AZ		33.6208	111.9911	11 Feet	12/13/2016	2022	*(2)*
CO005	42nd St. South Of Acoma Dr. East Side Of Channel, Phoenix, AZ		33.6183	111.9917	5 Feet	12/13/2016	2022	*(2)*
CO006	Located At 14245 N. 42nd St. East Side Of Channel, Phoenix, AZ		33.6169	111.9917	5 Feet	12/13/2016	2022	*(2)*
CO007	42nd St And Hearn Rd. East Side Of Channel, Phoenix, AZ		33.6158	111.9917	9 Feet	12/13/2016	2022	*(2)*
CO008	41st Place And Gelding Dr., Phoenix, AZ		33.6175	111.9922	30 Feet	12/14/2016	2022	*(2)*
CO009	41st Place And Sheena Dr., Phoenix, AZ		33.6147	111.9922	9 Feet	12/14/2016	2022	*(2)*
CO010	Thunderbird Rd And 41st Pl, Phoenix, AZ		33.6119	111.9917	5 Feet	12/14/2016	2022	*(2)*
CO011	Thunderbird Rd And 41st Place, Phoenix, AZ		33.6119	111.9917	5 Feet	12/14/2016	2022	*(2)*
CO012	4202 E 4202 East Sheena Dr.Dr Phoenix, AZ		33.6147	111.9911	10 Feet	12/14/2016	2022	*(2)*
CO013	4202 E RedfieldDr Phoenix, AZ		33.6147	111.9911	10 Feet	12/14/2016	2022	*(2)*
CO014	Thunderbird Rd And 41st Place, Phoenix, AZ		33.6114	111.9917	5 Feet	12/14/2016	2022	*(2)*
CO015	Thunderbird Rd And 41st Place, Phoenix, AZ		33.6114	111.9917	5 Feet	12/14/2016	2022	*(2)*
CO017	4215 E AndoraDr Phoenix, AZ		33.6069	111.9908	4 Feet	12/14/2016	2022	*(2)*
CO018	13221 N 42ndSt Phoenix, AZ		33.6072	111.9914	9 Feet	12/14/2016	2022	*(2)*
CO019	13021 N 42ndSt Phoenix, AZ		33.6050	111.9914	9 Feet	12/15/2016	2022	*(2)*
CO020	4156 E SweetwaterAve Phoenix, AZ		33.6046	-111.9910	5 Feet	12/15/2016	2022	*(2)*
CO021	4127 E WindroseDr Phoenix, AZ		33.6017	111.9922	9 Feet	12/15/2016	2022	*(2)*

Outfall Id	Site Address	Latitude	Longitude	Drain Size	Last Inspection	Next Inspection
EF-East Fork of Cave Creek	**Count: 57**					
EF001	Cave Creek Rd And Greenway Pkwy, Phoenix, AZ	33.6317	-111.9689	72 Inches	11/18/2020	2026
EF002	16th St And Greenway Pkwy, Phoenix, AZ	33.6342	-111.9561	84 Inches	10/14/2020	2026
EF003	18th St And Greenway Pkwy, Phoenix, AZ	33.6342	-111.9558	84 Inches	10/14/2020	2026
EF004	20th St And Greenway Pkwy, Phoenix, AZ	33.6322	-111.9606	96 Inches	12/01/2020	2026
EF006	9th St And Greenway Pkwy, Phoenix, AZ	33.6369	-111.9386	96 Inches	10/14/2020	2026
EF007	9th St And Greenway Pkwy, Phoenix, AZ	33.6372	-111.9386	36 Inches	10/13/2020	2026
EF008	Cave Creek Rd And Greenway Pkwy, Phoenix, AZ	33.6317	-111.9686	72 Inches	11/18/2020	2026
EF009	16th St And Greenway Pkwy, Phoenix, AZ	33.6361	-111.9522	48 Inches	10/14/2020	2026
EF010	7th St And Greenway Pkwy, Phoenix, AZ	33.6374	-112.0660	84 Inches	10/20/2020	2026
EF011	7th St And Greenway Pkwy, Phoenix, AZ	33.6370	-112.0657	36 Inches	10/20/2020	2026
EF012	7th St And Greenway Pkwy, Phoenix, AZ	33.6373	-112.0657	36 Inches	10/20/2020	2026
EF013	Cave Creek Rd And Greenway Pkwy, Phoenix, AZ	33.6317	-111.9686	22 Feet	11/18/2020	2026
EF014	22nd Pl And Monte Cristo, Phoenix, AZ	33.6322	-111.9653	50 Feet	11/03/2020	2026
EF015	22nd St And East Fork, Phoenix, AZ	33.6322	-111.9650	36 Inches	11/18/2020	2026
EF016	22nd St And East Fork, Phoenix, AZ	33.6322	-111.9650	36 Inches	11/18/2020	2026
EF017	22nd St And Monte Cristo, Phoenix, AZ	33.6322	-111.9647	40 Feet	11/03/2020	2026
EF018	21st St And East Fork, Phoenix, AZ	33.6322	-111.9628	36 Inches	11/18/2020	2026
EF019	21st St And East Fork, Phoenix, AZ	33.6322	-111.9628	42 Inches	11/18/2020	2026
EF020	20th Pl And Monte Cristo, Phoenix, AZ	33.6322	-111.9617	12 Feet	11/03/2020	2026
EF021	2012 E Monte CristoAve Phoenix, AZ	33.6322	-112.0388	21 Feet	11/03/2020	2026
EF022	20th St And Greenway Pkwy, Phoenix, AZ	33.6322	-111.9608	15 Feet	11/18/2020	2026
EF023	19th St And East Fork (1926 E Monte Cristo), Phoenix, AZ	33.6322	-111.9594	10 Feet	11/03/2020	2026
EF025	1410 E SandraTer Phoenix, AZ	33.6361	-111.9489	15 Feet	11/18/2020	2026
EF026	14th St And Grandview Rd, Phoenix, AZ	33.6361	-111.9475	21 Feet	10/14/2020	2026
EF027	12th St And East Fork, Phoenix, AZ	33.6369	-111.9428	36 Feet	10/13/2020	2026
EF028	16431 N 12thSt Phoenix, AZ	33.6361	-111.9444	50 Feet	11/03/2020	2026
EF033	301 W LemarcheAve Phoenix, AZ	33.6317	-111.9233	10 Feet	10/21/2020	2026
EF034	301 W Monte CristoAve Phoenix, AZ	33.6313	-112.0771	6 Feet	10/21/2020	2026
EF035	15802 N 4thAve Phoenix, AZ	33.6300	-111.9214	12 Feet	10/21/2020	2026
EF036	15803 N 4thDr Phoenix, AZ	33.6297	-111.9211	14 Feet	10/21/2020	2026
EF037	Moon Valley Park, Phoenix, AZ	33.6272	-111.9183	5 Feet	10/21/2020	2026
EF038	214 W KathleenRd Phoenix, AZ	33.6301	-112.0769	10 Feet	11/04/2020	2026
EF039	16042 N 1stSt Phoenix, AZ	33.6325	-111.9267	8 Feet	11/04/2020	2026
EF040	1407 W BeckLn Phoenix, AZ	33.6260	-112.0907	21 Feet	11/04/2020	2026
EF041	1101 W BeckLn Phoenix, AZ	33.6263	-112.0859	19 Feet	11/04/2020	2026

Outfall Id	Site Address		Latitude	Longitude	Drain Size	Last Inspection	Next Inspection
EF-East Fork of Cave Creek		**Count: 57**					
EF042	15406 N 7thDr Phoenix, AZ		33.6256	-111.9167	25 Feet	11/04/2020	2026
EF043	1527 W CaribbeanLn Phoenix, AZ		33.6243	-112.0927	10 Feet	11/04/2020	2026
EF044	1445 W CaribbeanLn Phoenix, AZ		33.6248	-112.0902	6 Feet	11/04/2020	2026
EF045	1455 W CaribbeanLn Phoenix, AZ		33.6244	-112.0907	10 Feet	11/04/2020	2026
EF046	1503 W CaribbeanLn Phoenix, AZ		33.6247	-112.0918	6 Feet	11/04/2020	2026
EF051	19th Pl And Greenway Pkwy, Phoenix, AZ		33.6331	-111.9581	36 Inches	10/14/2020	2026
EF052	Cave Creek Rd And Greenway Pkwy, Phoenix, AZ		33.6317	-111.9692	48 Feet	11/18/2020	2026
EF053	1802 E ParadiseLn Phoenix, AZ		33.6335	-112.0437	18 Feet	11/03/2020	2026
EF054	16th St And Greenway Pkwy, Phoenix, AZ		33.6358	-111.9519	23 Feet	11/18/2020	2026
EF055	16th St And Greenway Pkwy, Phoenix, AZ		33.6358	-111.9519	14 Feet	11/18/2020	2026
EF056	1610 E SandraTer Phoenix, AZ		33.6356	-111.9522	6 Feet	11/18/2020	2026
EF057	1526 W CaribbeanLn Phoenix, AZ		33.6246	-112.0933	12 Feet	11/04/2020	2026
EF058	15406 N 7thDr Phoenix, AZ		33.6256	-111.9167	90 Inches	12/01/2020	2026
EF063	7th St And Greenway Pkwy, Phoenix, AZ		33.6373	-112.0663	150 Feet	10/20/2020	2026
EF065	Union Hills And 25th Way, Phoenix, AZ		33.6547	112.0264	48 Inches	11/24/2020	2026
EF066	Union Hills And 25th Way, Phoenix, AZ		33.6547	112.0261	63 Inches	11/24/2020	2026
EF069	Utopia Rd Between 27th And 28th Street, Phoenix, AZ		33.6622	112.0239	48 Inches	11/17/2020	2026
EF070	Utopia Road Between 27th And 28th St., Phoenix, AZ		33.6622	112.0239	96 Inches	11/17/2020	2026
EF086	20300 N 26thSt Phoenix, AZ		33.6747	112.0364	76 Inches	11/24/2020	2026
EF087	20300 N 26thSt Phoenix, AZ		33.6747	112.0183	76 Inches	11/24/2020	2026
EF088	Cave Creek And 101, Phoenix, AZ		33.6747	112.0397	58 Inches	12/07/2020	2026
EF091	2302 E GroversAve Phoenix, AZ		33.6482	-112.0320	96 Inches	11/05/2020	2026
GC-Grand Canal		**Count: 3**					
GC001	Grand Ave And Grand Canal, Phoenix, AZ		33.4892	-112.1273	24 Inches	01/28/2020	2025
GC002	Grand Ave And Grand Canal, Phoenix, AZ		33.4891	-112.1276	36 Inches	02/03/2020	2025
GC033	Grand Canal And E Of Pueblo Grande Museum Park, Phoenix, AZ		33.4441	-111.9816	14 Feet	01/14/2020	2025

Outfall Id	Site Address	Latitude	Longitude	Drain Size	Last Inspection	Next Inspection
IB-Indian Bend Wash	**Count: 21**					
IB001	52nd St And Shea Blvd, Phoenix, AZ	33.5825	-111.9679	36 Inches	09/26/2018	2024
IB002	52nd St And Shea Blvd, Phoenix, AZ	33.5825	-111.9688	84 Inches	09/26/2018	2024
IB003	Tatum Blvd And Cholla St, Phoenix, AZ	33.5906	-111.9774	66 Inches	09/26/2018	2024
IB004	Tatum Blvd And Cholla St, Phoenix, AZ	33.5901	-111.9770	66 Inches	09/26/2018	2024
IB005	52nd St And Indian Bend Wash, Phoenix, AZ	33.5837	-111.9688	14 x 3 Feet	09/26/2018	2024
IB007	36th St And Sweetwater Ave, Phoenix, AZ	33.6036	-112.0042	78 Inches	09/11/2018	2024
IB008	40th St And Indian Bend Wash, Phoenix, AZ	33.5989	-111.9953	66 Inches	12/15/2020	
IB010	40th Street And Indian Bend Wash. North Side Of Wash., Phoenix, AZ	33.5989	-111.9954	36 Inches	09/11/2018	2027
IB011	56th St And Indian Bend Wash, Phoenix, AZ	33.5739	-111.9609	66 Inches	10/11/2018	2024
IB013	Cactus Rd And Indian Bend Wash, Phoenix, AZ	33.5974	-111.9929	72 Inches	09/12/2018	2024
IB016	Tatum Blvd And Cholla St, Phoenix, AZ	33.5914	-111.9779	36 Inches	09/26/2018	2024
IB018	Cactus Rd And Indian Bend Wash, Phoenix, AZ	33.5975	-111.9929	72 Inches	12/15/2020	
IB021	10202 N 54thPl Phoenix, AZ	33.5791	-111.9643	36 Inches	10/11/2018	2024
IB024	3631 E DahliaDr Phoenix, AZ	33.6032	-112.0028	21 Feet	08/23/2018	2024
IB026	12806 N 37thCt Phoenix, AZ	33.6023	-112.0012	8 Feet	08/23/2018	2024
IB035	Thunderbird Rd And Indian Bend Wash, Phoenix, AZ	33.6118	-112.0090	60 Inches	08/22/2018	2024
IB036	Thunderbird Rd And Indian Bend Wash, Phoenix, AZ	33.6119	-112.0091	60 Inches	08/22/2018	2024
IB037	Thunderbird Rd And Indian Bend Wash, Phoenix, AZ	33.6130	-112.0090	6 x 10 Feet	08/22/2018	2024
IB038	Thunderbird Rd And Indian Bend Wash, Phoenix, AZ	33.6130	-112.0090	84 Inches	08/22/2018	2024
IB045	4943 E CholllaSt Phoenix, AZ	33.5899	-111.9749	7 Feet	10/11/2018	2024
IB050	40th St And Indian Bend Wash. North Side Of Wash., Phoenix, AZ	33.5989	-111.9953	48 Inches	09/11/2018	2027
LC-Laveen Channel	**Count: 12**					
LC001	4532 W Alta VistaRd Phoenix, AZ	33.3875	-111.8433	9 Feet	09/15/2021	2027
LC002	6616 S 46th Gn, Phoenix, AZ	33.3861	-111.8428	13 Feet	09/15/2021	2027
LC003	46th Dr And Vineyard Rd, Phoenix, AZ	33.3847	-111.8417	32 Feet	09/15/2021	2027
LC008	53rd Ln And Baseline Rd, Phoenix, AZ	33.3781	-112.1750	66 Inches	07/22/2021	2027
LC015	63rd Land And Beverly Rd, Phoenix, AZ	33.3731	112.1969	26 Inches	09/15/2021	2027
LC017	7377 W Magdalena Ln, Phoenix, AZ	33.3703	112.2136	34 Inches	09/15/2021	
LC018	7810 S 74thAve Phoenix, AZ	33.3742	-111.7808	36 Inches	09/15/2021	2027
LC020	S 63rd Ave And Lacc, Phoenix, AZ	33.3731	112.1947	60 Inches	09/16/2021	2027
LC022	4724 W CarsonRd Phoenix, AZ	33.3831	-111.8383	8 Feet	09/16/2021	2027
LC023	North Side Of Channel. About 50 Ft. West Of 51st Street Culvert., Phoenix, AZ	33.3825	-112.1690	62 Inches	07/22/2021	2027
LC026	Inside West Tunnel Culvert @ Baseline And Lacc, Phoenix, AZ	33.3772	-112.1810	48 Inches	07/22/2021	2027
LC028	74th Lane And Fawn, Phoenix, AZ	33.3747	112.2194	10 Feet	09/16/2021	2027

Outfall Id	Site Address		Latitude	Longitude	Drain Size	Last Inspection	Next Inspection
MV-Moon Valley		**Count: 7**					
MV001	19th Ave And Sweetwater Ave, Phoenix, AZ		33.6040	112.0990	48 Inches	07/12/2017	2023
MV005	12th Ave And Thunderbird Rd, Phoenix, AZ		33.6070	112.0870	54 Inches	07/12/2017	2023
MV007	7th St And Hearn Rd, Phoenix, AZ		33.6153	-111.9344	48 Inches	08/02/2017	2023
MV016	13th Ln And Thunderbird Rd, Phoenix, AZ		33.6075	-111.9125	11 Feet	07/12/2017	2023
MV019	7th St. And E. Roberts Rd. West Side Of Street, Phoenix, AZ		33.6120	112.0600	50 Inches	08/09/2017	
MV020	7th St. And E. Roberts Rd. West Side Of Street., Phoenix, AZ		33.6110	112.0600	50 Inches	08/09/2017	
MV023	23rd Avenue And Wood DriveAve Phoenix, AZ		33.6030	-112.1080	46 Feet	07/12/2017	
NR-New River		**Count: 5**					
NR001	44th Lane And Kastler Ln, Phoenix, AZ		33.8100	112.1228	40 Inches	09/13/2021	2027
NR002	44th Lane And Lapenna Drive, Phoenix, AZ		33.8814	112.1561	40 Inches	09/13/2021	2027
NR004	4640 W HeyerdahlCt Phoenix, AZ		33.8725	112.1611	40 Inches	09/13/2021	2027
NR005	N 45th Ave And W Emily Dr, Phoenix, AZ		33.8786	112.1575	40 Inches	09/13/2021	2027
NR006	45th Ave And Judson Drive, Phoenix, AZ		33.8764	112.1581	36 Inches	09/13/2021	2027
OC-Old Cross-Cut Canal		**Count: 16**					
OC001	Old Cross Cut And Washington St, South Tunnel, Phoenix, AZ		33.4478	-111.9810	36 Inches	12/13/2018	2024
OC002	Old Cross Cut And Van Buren St, South Tunnel, Phoenix, AZ		33.4511	-111.9810	42 Inches	12/13/2018	2024
OC004	46th St And Mcdowell Rd, Phoenix, AZ		33.4660	-111.9810	42 Inches	01/16/2019	2024
OC005	48th St And Thomas Rd, Phoenix, AZ		33.4800	-111.9780	36 Inches	01/30/2019	2024
OC006	48th St And Earll Dr, Phoenix, AZ		33.4840	-111.9780	52 Inches	01/30/2019	2024
OC007	48th St And Indian School Rd, Phoenix, AZ		33.4940	-111.9780	36 Inches	01/31/2019	2024
OC008	46th St And Mcdowell Rd, Phoenix, AZ		33.4660	-111.9810	54 Inches	01/16/2019	2024
OC022	48th St And Oak St, Phoenix, AZ		33.4730	-111.9780	48 Inches	01/31/2019	2024
OC039	46th Street And Roosevelt Street - Old Cross Cut, Phoenix, AZ		33.4580	-111.9820	6 x 5 Feet	12/13/2018	2024
OC053	48th St And Osborn Rd, Phoenix, AZ		33.4880	-111.9780	52 Inches	01/29/2019	2024
OC054	48th St And Osborn Rd, Phoenix, AZ		33.4870	-111.9780	8 x 6 Feet	01/29/2019	2024
OC055	48th St And Weldon Ave, Phoenix, AZ		33.4900	-111.9780	48 Inches	01/29/2019	2024
OC062	48th St And Thomas Rd, Phoenix, AZ		33.4800	-111.9780	36 Inches	01/30/2019	2024
OC072	Old Cross Cut And Granada, Phoenix, AZ		33.4680	-111.9790	42 Inches	01/17/2019	2024
OC090	48th St. And Indian School, Phoenix, AZ				102 Inches	01/31/2019	
OC091	48th st And OsbornRd Phoenix, AZ				48 Inches	02/01/2019	
PD-Papago Diversion Channel		**Count: 1**					
PD010	35th Ave And Papago Diversion Channel, Phoenix, AZ		33.4636	-112.1347	54 Inches	03/26/2019	2024

Outfall Id	Site Address		Latitude	Longitude	Drain Size	Last Inspection	Next Inspection
PV-Paradise Valley		**Count: 2**					
PV002	34th St And Lincoln Dr, Phoenix, AZ		33.5300	112.0000	48 Inches	08/23/2017	2023
PV004	35th St And Lincoln Dr, Phoenix, AZ		33.5300	112.0000	48 Inches	08/23/2017	2023

Outfall Id	Site Address	Latitude	Longitude	Drain Size	Last Inspection	Next Inspection	
SC-Skunk Creek	**Count: 42**						
SC001	56th Ave And Union Hills Dr, Phoenix, AZ	33.6553	-111.8208	10x11 Feet	07/13/2016	2022	(2)
SC002	51st Ave And Skunk Creek, Near Norhtwest Bike Lane Off Bridge., Phoenix, AZ	33.6622	-111.8308	36 Inches	07/07/2016	2022	(2)
SC006	19432 N 50thAve Phoenix, AZ	33.6628	-111.8319	10 Feet	07/07/2016	2022	(2)
SC008	19653 N 48thLn Phoenix, AZ	33.6636	-111.8356	16 Feet	07/13/2016	2022	(2)
SC009	19623 N 48thAve Phoenix, AZ	33.6633	-112.1626	24 Feet	07/07/2016	2022	(2)
SC010	47th Dr And Behrend Dr, Phoenix, AZ	33.6644	-111.8381	6 Feet	07/07/2016	2022	(2)
SC012	4790 W OraibiDr Phoenix, AZ	33.6625	-112.1646	6 Feet	07/13/2016	2022	(2)
SC013	19634 N 47thDr Phoenix, AZ	33.6639	-111.8389	4 Feet	07/07/2016	2022	(2)
SC014	19640 N 47thAve Phoenix, AZ	33.6641	-112.1604	6 Feet	07/07/2016	2022	(2)
SC015	46th Dr And Behrend Dr, Phoenix, AZ	33.6650	-111.8397	6 Feet	07/07/2016	2022	(2)
SC016	19810 N 46thAve Phoenix, AZ	33.6659	-112.1596	6 Feet	07/07/2016	2022	(2)
SC017	19828 N 45thLn Phoenix, AZ	33.6661	112.1586	6 Feet	07/13/2016	2022	(2)
SC022	2749 W DarienWay Phoenix, AZ	33.8028	-111.8800	10 Feet	07/12/2016	2022	(2)
SC023	27th Ct And Florimond Rd, Phoenix, AZ	33.8036	-111.8797	50 Feet	07/12/2016	2022	(2)
SC024	27th Ln And Via Aquila, Phoenix, AZ	33.8072	-111.8803	4 x 2 Feet	07/12/2016	2022	(2)
SC025	27th Ln And Via Aquila, West Side, Phoenix, AZ	33.8072	-111.8800	4 x 2 Feet	07/12/2016	2022	(2)
SC027	Carefree Hwy And 27th Dr, Phoenix, AZ	33.7986	-111.8817	36 Inches	07/12/2016	2022	(2)
SC031	35th Dr And Soft Wind Dr, Phoenix, AZ	33.7017	-111.8644	30 Inches	08/16/2016	2022	(2)
SC032	20659 N 41stLn Phoenix, AZ	33.6744	-111.8514	18 Feet	07/26/2016	2022	(2)
SC033	20669 N 41stLn Phoenix, AZ	33.6747	-111.8514	17 Feet	07/26/2016	2022	(2)
SC034	20657 N 42ndAve Phoenix, AZ	33.6746	-112.1494	18 Feet	07/26/2016	2022	(2)
SC035	20622 N 42ndAve Phoenix, AZ	33.6733	-112.1501	17 Feet	07/26/2016	2022	(2)
SC036	20670 N 41stAve Phoenix, AZ	33.6750	-112.1480	45 Feet	07/26/2016	2022	(2)
SC037	Sc Wash And Sr101 Frontage Rd, Phoenix, AZ	33.6700	-111.8489	36 Inches	07/26/2016	2022	(2)
SC040	Via Puzzola And Via Del Deserto, Phoenix, AZ	33.8089	-111.8783	36 Inches	07/12/2016	2022	(2)
SC043	2761 W Via Calabria , Phoenix, AZ	33.7994	0.0000	19 Feet	07/12/2016	2022	(2)
SC044	35th Ave And Parkside Ln, Phoenix, AZ	33.6939	112.1344	35 Inches	08/16/2016	2022	(2)
SC046	35206 N 27thDr Phoenix, AZ	33.8031	-112.1187	36 Inches	07/12/2016	2022	(2)
SC048	W Oberlin Way And N 26th Ave, Phoenix, AZ	33.7367	112.1147	32 Feet	08/16/2016	2022	(2)
SC049	Pinnacle Peack Road And 40th Lane, Phoenix, AZ	33.6981	112.1472	62 Inches	08/17/2016	2022	(2)
SC050	South Side Of Pinnacle Peak Road At 40th Lane., Phoenix, AZ	33.6981	112.1475	60 Inches	08/17/2016	2022	(2)
SC052	Southside Of Pinnacle Peak Road Just Before 47th Avenue., Phoenix, AZ	33.6978	112.1592	54 Inches	08/17/2016	2022	(2)
SC053	Southside Of Pinnacle Peak Road Just Before 47th Avenue., Phoenix, AZ	33.6978	112.1594	48 Inches	08/17/2016	2022	(2)
SC054	Southside Of Pinnacle Peak Road Just Before 47th Avenue., Phoenix, AZ	33.6978	112.1594	42 Inches	08/17/2016	2022	(2)
SC055	Southside Of Pinnacle Peak Road And 51st Avenue., Phoenix, AZ	33.6978	112.1697	42 Inches	08/17/2016	2022	(2)

Outfall Id	Site Address		Latitude	Longitude	Drain Size	Last Inspection	Next Inspection	
SC-Skunk Creek		**Count: 42**						
SC058	4531 W Soft WindDr Phoenix, AZ		33.7211	112.1569	11 feet	08/17/2016	2022	*(2)*
SC059	23620 N 45thAve Phoenix, AZ		33.7050	112.1567	24 Inches	08/17/2016	2022	*(2)*
SC060	23804 N 44thLn Phoenix, AZ		33.7019	112.1556	6 Feet	08/17/2016	2022	*(2)*
SC061	Mariposa Grande And 45th Dr, Phoenix, AZ		33.7031	112.1569	10 Feet	08/17/2016	2022	*(2)*
SC064	Alamedia Road Between 43rd Ave And 45th Dr, Phoenix, AZ		33.7053	112.1553	24 Inches	08/17/2016	2022	*(2)*
SC065	44th Ln And W Misty Willow Ln, Phoenix, AZ		33.7039	112.1556	9 Feet	08/17/2016	2022	*(2)*
SC067	35th Avenue And Williams Drive, Phoenix, AZ		112.2125	34.1564	56 Inches	08/16/2016	2022	*(2)*

Outfall Id	Site Address	Latitude	Longitude	Drain Size	Last Inspection	Next Inspection	
SR-Salt River	**Count: 59**						
SR001	51st Ave And Salt River, Phoenix, AZ	33.4087	-112.1695	96 Inches	08/03/2021	2023	
SR002	43rd Ave And Salt River, Phoenix, AZ	33.4124	-112.1515	90 Inches	08/03/2021		
SR003	35th Ave And Salt River, Phoenix, AZ	33.4119	-112.1347	75 Inches	08/03/2021		
SR004	27th Ave And Salt River, Phoenix, AZ	33.4178	-112.1169	72 Inches	08/03/2021	2023	*(4)*
SR005	25th Ave And Salt River, Phoenix, AZ	33.4169	-112.1131	102 Inches	09/09/2021		
SR006	22nd Ave And Salt River, Phoenix, AZ	33.4187	-112.1066	72 Inches	08/26/2021		
SR007	19th Ave And Salt River, Phoenix, AZ	33.4114	-112.0997	54 Inches	09/07/2021		
SR008	15th Ave And Salt River, Phoenix, AZ	33.4149	-112.0908	96 Inches	09/08/2021	2026	
SR009	11th Ave And Salt River, Phoenix, AZ	33.4213	-112.0873	81 Inches	08/31/2021	2025	
SR010	7th Ave And Salt River, Phoenix, AZ	33.4194	-112.0824	54 Inches	08/04/2021		
SR012	Central Ave And Salt River, Phoenix, AZ	33.4234	-112.0741	42 Inches	08/31/2021	2025	
SR013	Central Ave And Salt River, Phoenix, AZ	33.4238	-112.0740	10 x 21 Feet	09/09/2021	2025	
SR014	3rd St And Salt River, Phoenix, AZ	33.4224	-112.0695	36 Inches	08/31/2021	2026	
SR015	3rd St And Salt River, Phoenix, AZ	33.4224	-112.0695	84 Inches	08/04/2021	2023	*(4)*
SR016	10th St And Salt River, Phoenix, AZ	33.4217	-112.0605	54 Inches	08/31/2021	2025	
SR017	12th St And Salt River, Phoenix, AZ	33.4212	-112.0561	96 Inches	01/08/2020	2025	
SR018	16th St And Salt River, Phoenix, AZ	33.4196	-112.0485	66 Inches	01/09/2020	2025	
SR019	20th St And Salt River, Phoenix, AZ	33.4204	-112.0394	10 x 21 Feet	03/17/2020	2026	
SR020	24th St And Salt River, Phoenix, AZ	33.4184	-112.0304	84 Inches	08/09/2021	2023	*(3)*
SR024	28th St And Salt River, Phoenix, AZ	33.4204	-112.0186	90 Inches	04/14/2020	2025	
SR026	37th St And Salt River, Phoenix, AZ	33.4270	-112.0056	42 Inches	04/15/2020	2025	
SR027	36th St And Salt River, Under Sky Harbor, Phoenix, AZ	33.4276	-112.0011	82 Inches	04/15/2020		
SR029	47th St And Salt River, Phoenix, AZ	33.4334	-111.9813	78 Inches	04/22/2020		
SR030	27th Ave And Salt River, Phoenix, AZ	33.4088	-112.1164	108 Inches	08/04/2021		
SR031	19th Ave And Salt River, Phoenix, AZ	33.4101	-112.1000	60 Inches	04/01/2020		
SR032	7th Ave And Salt River, Phoenix, AZ	33.4164	-112.0824	72 Inches	04/07/2020	2026	
SR033	Central Ave And Salt River, Phoenix, AZ	33.4209	-112.0738	66 Inches	02/20/2020	2025	
SR035	7th St And Salt River, Phoenix, AZ	33.4203	-112.0650	72 Inches	02/19/2020		
SR036	15th St And Salt River, Phoenix, AZ	33.4178	-111.9503	72 Inches	01/09/2020	2025	
SR037	16th St And Salt River, Phoenix, AZ	33.4172	-112.0481	36 Inches	03/17/2020	2025	
SR038	24th St And Salt River, Phoenix, AZ	33.4155	-112.0303	72 Inches	01/09/2020	2025	
SR039	28th St And Salt River, Phoenix, AZ	33.4164	-112.0209	96 Inches	08/25/2021	2023	*(4)*
SR045	40th St And Salt River, Phoenix, AZ	33.4261	-111.9956	54 Inches	12/10/2020	2025	
SR046	7th St And Salt River, Phoenix, AZ	33.4216	-112.0651	24 Inches	04/08/2020	2025	
SR048	45th St And Salt River, Phoenix, AZ	33.4265	-111.9927	48 Inches	04/22/2020	2025	

Outfall Id	Site Address		Latitude	Longitude	Drain Size	Last Inspection	Next Inspection	
SR-Salt River		**Count: 59**						
SR049	67th Ave And Salt River, Phoenix, AZ		33.4001	-112.2042	96 Inches	08/09/2021		
SR052	52nd St And Hohokam Frwy, Phoenix, AZ		33.4370	-111.9729	8 x 5 Feet	04/22/2020	2025	
SR056	28th St And Salt River, Phoenix, AZ		33.4199	-112.0199	36 Inches	04/14/2020	2025	
SR059	25th Ave And Salt River, Phoenix, AZ		33.4167	-112.1131	60 Inches	03/27/2020		
SR061	32nd St And Salt River, Phoenix, AZ		33.4230	-112.0133	7 x 5 Feet	08/25/2021		
SR062	38th St And Salt River, Phoenix, AZ		33.4277	-112.0012	60 Inches	04/15/2020	2025	
SR063	15th Ave And Salt River, Phoenix, AZ		33.4149	-112.0908	60 Inches	04/03/2020	2025	
SR064	19th Ave And Salt River, Phoenix, AZ		33.4115	-112.0990	36 Inches	04/02/2020	2025	
SR068	28th St And Salt River, Phoenix, AZ		33.4205	-112.0182	8 x 8 Feet	08/25/2021		
SR069	31st St And Salt River, Phoenix, AZ		33.4228	-111.9858	60 Inches	04/14/2020	2025	
SR070	33rd St And Salt River, Phoenix, AZ		33.4236	-112.0125	36 Inches	04/15/2020	2025	
SR071	33rd St And Salt River, Phoenix, AZ		33.4247	-112.0105	60 Inches	04/15/2020	2025	
SR072	45th St And Salt River, Phoenix, AZ		33.4313	-111.9867	48 Inches	04/22/2020	2025	
SR073	45th St And Salt River, Phoenix, AZ		33.4313	-111.9867	60 Inches	04/21/2020	2025	
SR075	43rd Ave And Broadway Rd, Phoenix, AZ		33.4038	-112.1514	10 Feet	03/24/2020		
SR076	43rd Ave And Broadway Rd, Phoenix, AZ		33.4041	-112.1509	48 Inches	03/24/2020		
SR077	22nd Ave And Rio Salado Service Yard, Phoenix, AZ		33.4185	-112.1071	17 Feet	03/25/2020		
SR079	35th Ave And Salt River, Phoenix, AZ		33.4096	-112.1343	42 Inches	03/25/2020		
SR080	51st Ave And Salt River, Phoenix, AZ		33.4043	-112.1691	42 Inches	03/23/2020		
SR082	75th Ave S/O Broadway Rd, Phoenix, AZ		33.3961	-112.2205	84 Inches	02/27/2020		
SR083	83rd Ave And Salt River, Phoenix, AZ		33.3861	-112.2315	12 Inches	08/23/2021	2023	*(4)*
SR084	Sw Corner Of The 153 Expressway And The Salt River, Phoenix, AZ		33.4309	-111.9801	72" Inches	04/22/2020	2025	
SR088	31st Ave. And Salt River, Phoenix, AZ		33.4080	-112.1248	30 Inches	08/05/2021	2023	*(4)*
SR089	31st And Salt River, Phoenix, AZ		33.4080	-112.1248	11 Feet	08/05/2021	2023	*(4)*
ST-Sweetwater Tributary of Indian Bend Wash		**Count: 1**						
ST004	Sweetwater Ave And 35th St, Phoenix, AZ		33.6042	112.0060	36 Inches	08/17/2017	2023	

Outfall Id	Site Address		Latitude	Longitude	Drain Size	Last Inspection	Next Inspection	
SW-Scatter Wash		**Count: 10**						
SW001	33rd Ave And Deer Valley Rd, Phoenix, AZ		33.4000	-112.0700	54 Inches	12/14/2017	2023	
SW006	43rd Ave And Behrend Dr, Phoenix, AZ		33.6650	-111.8481	36 Inches	10/31/2017	2023	
SW009	21041 N 33rdAve Phoenix, AZ		33.6775	-112.1300	8 Feet	12/28/2017	2023	
SW011	33rd Ave And Deer Valley Rd, Phoenix, AZ		33.4100	-112.0700	36 Inches	12/14/2017	2023	
SW015	38th Ave And Beardsley Rd, Phoenix, AZ		33.6689	-111.8592	96 Inches	12/13/2017	2023	
SW019	31st Dr And Deer Valley Rd, Phoenix, AZ		33.4100	-112.0700	36 Inches	12/14/2017	2023	
SW026	31st Ave And Deer Valley Rd, Phoenix, AZ		33.4100	-112.0700	36 Inches	12/14/2017	2023	
SW032	22125 SandsDr Phoenix, AZ		33.6867	-112.1190	53 Inches	12/28/2017	2023	
SW037	35th Avenue And Mohawk Lane, Phoenix, AZ		33.6722	-112.1353	48 Inches	12/13/2017	2023	
SW040	35th Avenue And Mohawk Lane, Phoenix, AZ		33.6700	-112.1300	42 Inches	12/13/2017		
TD-Tempe Drainage Channel		**Count: 3**						
TD008	3402 S 40thSt Phoenix, AZ		33.4160	-111.9961	36 Inches	10/17/2017	2023	
TD010	3425 S 40thSt Phoenix, AZ		33.4158	-111.9944	18 Inches	10/17/2017	2023	
TD013	3402 E IlliniSt Phoenix, AZ		33.4127	-112.0083	24 Inches	10/17/2017	2023	
TS-Tenth Street Wash		**Count: 9**						
TS002	11421 N Cave CreekRd Phoenix, AZ		33.5896	-112.0460	48 Inches	09/13/2016	2022	*(2)*
TS007	1425 E Desert CoveRd Phoenix, AZ		33.5847	-111.9489	36 Inches	09/13/2016	2022	*(2)*
TS008	14th St And Desert Cove Ave, Phoenix, AZ		33.5858	-111.9481	52 Feet	09/13/2016	2022	*(2)*
TS009	15th Way And Sahauro Dr., Phoenix, AZ		33.5842	-111.9514	36 Inches	09/13/2016	2022	*(2)*
TS011	10th St. And Townley Ave., Phoenix, AZ		33.5658	-111.9397	36 Feet	10/11/2016	2022	*(2)*
TS013	11th Street And Townley Ave., Phoenix, AZ		33.5656	112.0425	8 Feet	10/18/2016	2022	*(2)*
TS014	Dunlap And 11th Street, Phoenix, AZ		33.5675	112.0594	72 Inches	10/18/2016	2022	*(2)*
TS018	1107 HatcherRd Phoenix, AZ		33.5711	112.0589	45 Inches	10/19/2016	2022	*(2)*
TS025	1839 E CinnabarAve Phoenix, AZ		33.5758	112.0564	9 Feet	10/19/2016	2022	*(2)*
ZT-Emile Zola Tributary of Indian Bend Wash		**Count: 2**						
ZT001	33rd Pl And Sharon Dr, Phoenix, AZ		33.6114	-111.9894	18 Feet	10/05/2016	2022	*(2)*
ZT002	33rd Pl And Emile Zola Ave, Phoenix, AZ		33.6078	-111.9897	46 Feet	10/05/2016	2022	*(2)*

List of Changes to the Major Outfall Inventory

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The report contains all active major outfalls 36" or greater serving>50 acres or 12" or greater outfalls serving>2 acres of industrial land use known to the City

Stormwater Management

Outfall Changes - Fiscal Year: 2021

Outfall Id	Site Address	Latitude	Longitude	Drain Size	Last Inspection
Outfalls Added: 1					
IB-Indian Bend Wash					
IB053	4133 E Charter OakRd Phoenix, AZ	-111.9930	33.5980	12 Inches	02/25/2021
Outfalls Removed: 3					
EF-East Fork of Cave Creek					
EF114	At The Corner Of Canterbury Dr. And Aire Libre Ave., Phoenix, AZ	33.6372	112.0739	4 Feet	02/08/2021
EF115	On Aire Libre And 1st Avenue, Phoenix, AZ	33.6364	112.0744	20 Feet	02/08/2021
PD-Papago Diversion Channel					
PD008	43rd Ave And Papago Diversion Channel, Phoenix, AZ	33.4626	-112.1514	54 Inches	03/26/2019

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Laboratory Reports

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IB008

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City of Phoenix
Water Services Laboratory
ADHS Lic. # AZ0088
2474 S. 22nd Ave
(602) 534-2960

AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089512**

Sample ID : IB008
Sampling Date/Time: 12/10/2020 08:35
Approval Date : 01/22/2021 14:21
Received Date/Time: 12/10/2020 15:22
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Alex Araiza
Receipt Temperature (°C) : 1.4

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
608.3-STORM	EPA 608.3							JG	
alpha-BHC		<0.0031	ug/L	1	E8;N1	0.0031	0.005		01/15/2021 01:16
gamma-BHC		<0.0034	ug/L	1	E8;N1	0.0034	0.005		01/15/2021 01:16
beta-BHC		<0.1802	ug/L	1	E8;N1;V9	0.1802	0.5		01/15/2021 01:16
d-BHC		<0.0155	ug/L	1	E8;N1;V9	0.0155	0.02		01/15/2021 01:16
Heptachlor		<0.0297	ug/L	1	E8;N1;V9	0.0297	0.05		01/15/2021 01:16
Aldrin		<0.0038	ug/L	1	E8;N1;V9	0.0038	0.005		01/15/2021 01:16
Heptachlor Epoxide		<0.0015	ug/L	1	E8;N1;V9	0.0015	0.005		01/15/2021 01:16
4,4'-DDE		<0.0034	ug/L	1	E8;N1;V9	0.0034	0.005		01/15/2021 01:16
Endosulfan I		<0.0058	ug/L	1	E8;N1;V9	0.0058	0.020		01/15/2021 01:16
Dieldrin		<0.0037	ug/L	1	E8;N1	0.0037	0.005		01/15/2021 01:16
Endrin		<0.0082	ug/L	1	E8;N1	0.0082	0.02		01/15/2021 01:16
4,4'-DDD		<0.0022	ug/L	1	E8;N1;V9	0.0022	0.005		01/15/2021 01:16
Endosulfan II		<0.0021	ug/L	1	E8;N1;V9	0.0021	0.005		01/15/2021 01:16
4,4'-DDT		<0.0014	ug/L	1	E8;N1;V9	0.0014	0.005		01/15/2021 01:16
Endrin Aldehyde		<0.003	ug/L	1	E8;N1	0.003	0.005		01/15/2021 01:16
Endosulfan Sulfate		<0.0018	ug/L	1	E8;N1	0.0018	0.005		01/15/2021 01:16
Chlordane		<0.19	ug/L	1	E8;N1	0.19	0.5		01/15/2021 01:16
Toxaphene		<0.467	ug/L	1	E8;N1	0.467	1.0		01/15/2021 01:16
Arochlor-1016		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 01:16
Arochlor-1221		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 01:16
Arochlor-1232		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 01:16
Arochlor-1242		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 01:16
Arochlor-1248		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 01:16
Arochlor-1254		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 01:16
Arochlor-1260		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 01:16

* SM20 = Standard Methods 20th Edition SM21 = Standard Methods 21st Edition SM22 = Standard Methods 22nd Edition § = Not licensed by ADHS ¤ = Non NELAP accredited

/S/K. McFarlin

City of Phoenix
Water Services Laboratory
ADHS Lic. # AZ0088
2474 S. 22nd Ave
(602) 534-2960

AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089512**

Sample ID : IB008
Sampling Date/Time: 12/10/2020 08:35
Approval Date : 01/22/2021 14:21
Received Date/Time: 12/10/2020 15:22
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Alex Araiza
Receipt Temperature (°C) : 1.4

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
608.3-STORM	EPA 608.3							JG	
Decachlorobiphenyl		54	% Recovery	1					01/15/2021 01:16
Total Endosulfan		<0.0021	ug/L	1	E8;N1	0.0021	0.005		01/15/2021 01:16
TOTAL PCB		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 01:16
Aldrin/Dieldrin		<0.0037	ug/L	1	E8;N1	0.0037	0.005		01/15/2021 01:16

608.3-STORM Case Narrative: Batch QC did not meet laboratory acceptance criteria in sample 2020089497LFM/LFMD for multiple analytes percent recovery. The closing CCV did not meet laboratory acceptance criteria for multiple analytes percent recovery. The sample pH was not checked within 72 hours of receipt.

Extraction - 608.3	EPA 608.3	COMPLETE	JG	12/15/2020 00:00

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

* SM20 = Standard Methods 20th Edition SM21 = Standard Methods 21st Edition SM22 = Standard Methods 22nd Edition § = Not licensed by ADHS ¤ = Non NELAP accredited

/S/K. McFarlin

City of Phoenix
Water Services Laboratory
ADHS Lic. # AZ0088
2474 S. 22nd Ave
(602) 534-2960

AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089513**

Sample ID : IB008
Sampling Date/Time: 12/10/2020 08:35
Approval Date : 01/06/2021 10:50
Received Date/Time: 12/10/2020 15:22
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Alex Araiza
Receipt Temperature (°C) : 1.4

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
	Acenaphthene	<0.68	ug/L	1.05	E8;D4	0.68	10		12/18/2020 19:34
	Acenaphthylene	<0.59	ug/L	1.05	E8;D4	0.59	10		12/18/2020 19:34
	Anthracene	<0.55	ug/L	1.05	E8;D4	0.55	10		12/18/2020 19:34
	Benzo(a)anthracene	<0.81	ug/L	1.05	E8;D4	0.81	10		12/18/2020 19:34
	Benzo(a)pyrene	<1.58	ug/L	1.05	E8;D4	1.58	10		12/18/2020 19:34
	Benzo(b)fluoranthene	<2.48	ug/L	1.05	E8;D4	2.48	10		12/18/2020 19:34
	Benzo(ghi)perylene	<1.92	ug/L	1.05	E8;D4	1.92	10		12/18/2020 19:34
	Benzo(k)fluoranthene	<1.92	ug/L	1.05	E8;D4	1.92	10		12/18/2020 19:34
	Chrysene	<0.81	ug/L	1.05	E8;D4	0.81	10		12/18/2020 19:34
	Dibenzo(a,h)anthracene	<1.66	ug/L	1.05	E8;D4	1.66	10		12/18/2020 19:34
	1,2-Dichlorobenzene	<0.89	ug/L	1.05	E8;D4;T2	0.89	10		12/18/2020 19:34
	1,3-Dichlorobenzene	<0.91	ug/L	1.05	E8;D4;T2	0.91	10		12/18/2020 19:34
	1,4-Dichlorobenzene	<0.98	ug/L	1.05	E8;D4;T2	0.98	10		12/18/2020 19:34
	3,3'-Dichlorobenzidine	<6.24	ug/L	1.05	E8;D4	6.24	52		12/18/2020 19:34
	Diethyl phthalate	<7.95	ug/L	1.05	E8;D4	7.95	10		12/18/2020 19:34
	Dimethyl phthalate	<0.48	ug/L	1.05	E8;D4	0.48	21		12/18/2020 19:34
	Di-n-butyl phthalate	<1.00	ug/L	1.05	E8;D4	1.00	10		12/18/2020 19:34
	2,4-Dinitrotoluene	<0.84	ug/L	1.05	E8;D4	0.84	10		12/18/2020 19:34
	2,6-Dinitrotoluene	<0.65	ug/L	1.05	E8;D4	0.65	10		12/18/2020 19:34
	Di-n-octyl phthalate	<2.44	ug/L	1.05	E8;D4	2.44	10		12/18/2020 19:34
	1,2-Diphenyl hydrazine (as azobenzene)	<1.16	ug/L	1.05	E8;D4;T2	1.16	10		12/18/2020 19:34
	Fluoranthene	<0.50	ug/L	1.05	E8;D4	0.50	10		12/18/2020 19:34
	Fluorene	<0.50	ug/L	1.05	E8;D4	0.50	10		12/18/2020 19:34
	Hexachlorobenzene	<0.37	ug/L	1.05	E8;D4	0.37	10		12/18/2020 19:34
	Hexachlorobutadiene	<0.46	ug/L	1.05	E8;D4	0.46	10		12/18/2020 19:34

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(602) 534-2960
AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089513**

Sample ID	: IB008			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:35	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 01/06/2021 10:50	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 15:22			Delivered	: Alex Araiza
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.4

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
	Hexachlorocyclopentadiene	<1.32	ug/L	1.05	E8;D4;T2	1.32	10		12/18/2020 19:34
	Hexachloroethane	<0.36	ug/L	1.05	E8;D4	0.36	10		12/18/2020 19:34
	Indeno(1,2,3-cd)pyrene	<2.38	ug/L	1.05	E8;D4	2.38	10		12/18/2020 19:34
	Isophorone	<1.45	ug/L	1.05	E8;D4	1.45	10		12/18/2020 19:34
	Naphthalene	<0.37	ug/L	1.05	E8;D4	0.37	10		12/18/2020 19:34
	Nitrobenzene	<0.90	ug/L	1.05	E8;D4	0.90	10		12/18/2020 19:34
	N-Nitrosodimethylamine	<0.70	ug/L	1.05	E8;D4;T2	0.70	10		12/18/2020 19:34
	N-Nitrosodi-n-propylamine	<2.50	ug/L	1.05	E8;D4	2.50	10		12/18/2020 19:34
	N-Nitrosodiphenylamine	<0.88	ug/L	1.05	E8;D4;T2	0.88	10		12/18/2020 19:34
	Phenanthrene	<0.32	ug/L	1.05	E8;D4	0.32	10		12/18/2020 19:34
	Pyrene	<0.22	ug/L	1.05	E8;D4	0.22	10.5		12/18/2020 19:34
	1,2,4-Trichlorobenzene	<1.05	ug/L	1.05	E8;D4	1.05	10		12/18/2020 19:34
	2-Chlorophenol	<1.06	ug/L	1.05	E8;D4	1.06	10		12/18/2020 19:34
	2,4-Dichlorophenol	<1.44	ug/L	1.05	E8;D4	1.44	10		12/18/2020 19:34
	2,4-Dimethylphenol	<2.70	ug/L	1.05	E8;D4	2.70	10		12/18/2020 19:34
	2-Methyl-4,6-dinitrophenol	<1.33	ug/L	1.05	E8;D4	1.33	10		12/18/2020 19:34
	2,4-Dinitrophenol	4.4	ug/L	1.05	D4;E4	0.97	10		12/18/2020 19:34
	2-Nitrophenol	<0.99	ug/L	1.05	E8;D4	0.99	10		12/18/2020 19:34
	4-Nitrophenol	7.0	ug/L	1.05	D4;E4;N1	1.78	10		12/18/2020 19:34
	4-Nitrophenol Case Narrative: Matrix causing elevated value.								
	4-Chloro-3-methylphenol	<1.41	ug/L	1.05	E8;D4	1.41	10		12/18/2020 19:34
	Pentachlorophenol	<2.02	ug/L	1.05	E8;D4	2.02	10		12/18/2020 19:34
	Phenol	<1.33	ug/L	1.05	E8;D4	1.33	10		12/18/2020 19:34
	2,4,6-Trichlorophenol	<1.69	ug/L	1.05	E8;D4	1.69	10		12/18/2020 19:34
	2,4,6-Tribromophenol	123	% Recovery	1					12/18/2020 19:34

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089513**

Sample ID	: IB008			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:35	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 01/06/2021 10:50	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 15:22			Delivered	: Alex Araiza
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.4

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
Dibromooctafluorobiphenyl		53	% Recovery	1					12/18/2020 19:34
4,4-Dibromobiphenyl		56	% Recovery	1					12/18/2020 19:34

625.1-STORM Case Narrative: Batch QC did not meet laboratory acceptance criteria in the 2020089498 LFM/LFMD for multiple compounds. The LFMD RPD could not be calculated for 3,3-Dichlorobenzidine due to the results being zero. Dilution factor = 1.05X from ext.

Extraction - 625.1	EPA 625.1	COMPLETE	CC	12/16/2020 00:00

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089514**

Sample ID : IB008
Sampling Date/Time: 12/10/2020 08:35
Approval Date : 12/31/2020 07:13
Received Date/Time: 12/10/2020 15:22
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Alex Araiza
Receipt Temperature (°C) : 1.4

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Silver - Total Recoverable	EPA 200.8	<0.00125	mg/L	5	D1;E8	0.00125	0.0050	SS	12/28/2020 00:00
Arsenic - Total Recoverable	EPA 200.8	0.0030	mg/L	5	D1;E4	0.00245	0.0050	SS	12/28/2020 00:00
Barium - Total Recoverable	EPA 200.8	0.121	mg/L	5	D1	0.00340	0.0050	SS	12/29/2020 00:00
Beryllium - Total Recoverable	EPA 200.8	<0.00180	mg/L	5	D1;E8	0.00180	0.0050	SS	12/29/2020 00:00
Cadmium - Total Recoverable	EPA 200.8	<0.00210	mg/L	5	D1;E8	0.00210	0.0050	SS	12/28/2020 00:00
Chromium - Total Recoverable	EPA 200.8	<0.0125	mg/L	5	D1;E8	0.0125	0.025	SS	12/29/2020 00:00
Copper - Total Recoverable	EPA 200.8	0.0789	mg/L	5	D1	0.00455	0.0050	SS	12/29/2020 00:00
Nickel - Total Recoverable	EPA 200.8	0.0108	mg/L	5	D1	0.00315	0.0050	SS	12/29/2020 00:00
Lead - Total Recoverable	EPA 200.8	0.0147	mg/L	5	D1	0.00170	0.0050	SS	12/28/2020 00:00
Antimony - Total Recoverable	EPA 200.8	0.0022	mg/L	5	D1;E4	0.00200	0.0050	SS	12/28/2020 00:00
Selenium - Total Recoverable	EPA 200.8	<0.00405	mg/L	5	D1;E8	0.00405	0.0050	SS	12/28/2020 00:00
Thallium - Total Recoverable	EPA 200.8	<0.00275	mg/L	5	D1;E8	0.00275	0.0050	SS	12/28/2020 00:00
Zinc - Total Recoverable	EPA 200.8	0.250	mg/L	5	D1	0.0380	0.050	SS	12/29/2020 00:00

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089514**

Sample ID	: IB008			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:35	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 12/31/2020 07:13	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 15:22			Delivered	: Alex Araiza
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.4

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Metals Prep - TR	SM22 3030 F ¤	COMPLETE						CG	12/21/2020 17:06
Mercury - Total	EPA 245.1	<0.000118	mg/L	2	D1;E8	0.000118	0.0002	GA	12/23/2020 09:32
Mercury - Total Case Narrative: Batch LFM (2020087987) %R = 15.9%. Acceptance range 70-130%.									
pH<2Verification	pH <2 Verification	COMPLETE						CG	12/14/2020 13:01

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089515**

Sample ID	: IB008			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:35	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 12/30/2020 11:58	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 15:22			Delivered	: Alex Araiza
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.4

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Filtration Prep Dissolved Metals	SM22 3030 B	COMPLETE						SS	12/16/2020 11:30
Filtration Prep Dissolved Metals Case Narrative: COC states that the sample is field-filtered.									
Hardness - Total	SM22 2340 B							CG	
Hardness - Total		40.0	mg/L	1		1.31	16.6		12/22/2020 18:05
Calcium Hardness		31.2	mg/L	1		1.00	12.5		12/22/2020 18:05
Calcium - Total Recoverable	EPA 200.7	12.5	mg/L	1		0.40	5.00	CG	12/22/2020 18:05
Magnesium - Total Recoverable	EPA 200.7	2.14	mg/L	1		0.076	1.00	CG	12/22/2020 18:05
Silver - Dissolved	EPA 200.8	<0.0050	mg/L	5	D1	0.00125	0.0050	SS	12/28/2020 00:00
Arsenic - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00098	0.0020	SS	12/17/2020 00:00
Barium - Dissolved	EPA 200.8	0.017	mg/L	2	D1	0.00136	0.0020	SS	12/17/2020 00:00
Beryllium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00072	0.0020	SS	12/17/2020 00:00
Cadmium - Dissolved	EPA 200.8	<0.0010	mg/L	1		0.00042	0.0010	SS	12/17/2020 00:00
Chromium - Dissolved	EPA 200.8	<0.010	mg/L	2	D1	0.0028	0.010	SS	12/17/2020 00:00
Copper - Dissolved	EPA 200.8	0.0159	mg/L	1		0.00091	0.0010	SS	12/17/2020 00:00

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089515**

Sample ID	: IB008			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:35	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 12/30/2020 11:58	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 15:22			Delivered	: Alex Araiza
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.4

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Nickel - Dissolved	EPA 200.8	0.0022	mg/L	2	D1	0.00126	0.0020	SS	12/17/2020 00:00
Lead - Dissolved	EPA 200.8	<0.0010	mg/L	1		0.00034	0.0010	SS	12/17/2020 00:00
Antimony - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00080	0.0020	SS	12/17/2020 00:00
Selenium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00162	0.0020	SS	12/17/2020 00:00
Thallium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00110	0.0020	SS	12/17/2020 00:00
Zinc - Dissolved	EPA 200.8	0.0263	mg/L	1		0.0076	0.010	SS	12/17/2020 00:00
Metals Prep - TR	SM22 3030 F ¤	COMPLETE						CG	12/21/2020 17:06
Mercury - Diss	EPA 245.1	<0.0002	mg/L	2	D1	0.000118	0.0002	GA	12/23/2020 09:34
Mercury - Diss Case Narrative: Batch LFM (2020087987) %R = 15.9%. Acceptance range 70-130%.									
pH<2Verification	pH <2 Verification	COMPLETE						CG	12/14/2020 13:01

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089516**

Sample ID	: IB008			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:35	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 12/22/2020 13:40	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 15:22			Delivered	: Alex Araiza
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.4

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Ammonia	EPA 350.1	1.4	mg/L	1		0.08	0.20	CA	12/15/2020 10:03
Total Kjeldahl Nitrogen	EPA 351.2	4.4	mg/L	1		0.16	0.25	CA	12/21/2020 10:46

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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12/23/2020 00:34

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089517**

Sample ID	: IB008			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:35	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 12/22/2020 12:40	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 15:22			Delivered	: Alex Araiza
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.4

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
BOD, 5 Day	SM22 5210 B	29	mg/L	1		2	2	DT	12/11/2020 08:25
COD	HACH-8000	220	mg/L	1		11.69	50	LA	12/11/2020 14:15
Suspended Solids	SM22 2540 D	144	mg/L	40		100	100	BM	12/11/2020 12:57
Total Dissolved Solids	SM22 2540 C	110	mg/L	1		10	10	BM	12/11/2020 15:05

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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01/01/2021 00:28

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089518**

Sample ID	: IB008			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:35	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 12/31/2020 12:58	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 15:22			Delivered	: Alex Araiza
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.4

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
O-Phosphate-P	EPA 300.0	0.3	mg/L	1		0.024	0.1	SS	12/11/2020 01:18
Nitrate-N	EPA 300.0	0.9	mg/L	1		0.014	0.1	SS	12/11/2020 01:18
Nitrite-N	EPA 300.0	<0.1	mg/L	1		0.014	0.1	SS	12/11/2020 01:18

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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01/13/2021 00:30

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089519**

Sample ID	: IB008			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:35	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 01/12/2021 10:23	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 15:22			Delivered	: Alex Araiza
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.4

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Phosphorus - Total	SM 4500 P E	0.45	mg/L	1			0.020	TAM	12/22/2020 12:53

Phosphorus - Total Case Narrative: No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

non-NELAC Outside Lab: Test America - ADHS Lic. # AZ0728

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089520**

Sample ID	: IB008			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 13:45	Temperature	: 17.8 Deg. C	Account Number	: Stormwater
Approval Date	: 12/29/2020 15:46	pH	: 6.77	Sampled by	: USGS
Received Date/Time	: 12/10/2020 15:22			Delivered	: Alex Araiza
Sample Type	: GRAB			Receipt Temperature (°C)	: 1.4

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
	Chloromethane	<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 15:15
	Vinyl Chloride	<0.47	ug/L	1	E8	0.47	1.0		12/16/2020 15:15
	Bromomethane	<0.39	ug/L	1	E8	0.39	1.0		12/16/2020 15:15
	Chloroethane	<0.66	ug/L	1	E8	0.66	1.0		12/16/2020 15:15
	Trichlorofluoromethane	<0.43	ug/L	1	E8	0.43	1.0		12/16/2020 15:15
	1,1-Dichloroethylene	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 15:15
	Methylene chloride	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 15:15
	trans-1,2-Dichloroethene	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 15:15
	1,1-Dichloroethane	<0.30	ug/L	1	E8	0.30	1.0		12/16/2020 15:15
	Chloroform	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 15:15
	1,2-Dichloroethane	<0.28	ug/L	1	E8	0.28	1.0		12/16/2020 15:15
	1,1,1-Trichloroethane	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 15:15
	Carbon Tetrachloride	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 15:15
	Benzene	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 15:15
	1,2-Dichloropropane	<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 15:15
	Trichloroethene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 15:15
	Bromodichloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 15:15
	cis-1,3-Dichloropropene	<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 15:15
	trans-1,3-Dichloropropene	<0.19	ug/L	1	E8	0.19	1.0		12/16/2020 15:15
	1,1,2-Trichloroethane	<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 15:15
	Toluene	<0.35	ug/L	1	E8	0.35	1.0		12/16/2020 15:15
	Dibromochloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 15:15
	Tetrachloroethylene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 15:15
	Chlorobenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 15:15
	Ethylbenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 15:15

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089520**

Sample ID	: IB008			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 13:45	Temperature	: 17.8 Deg. C	Account Number	: Stormwater
Approval Date	: 12/29/2020 15:46	pH	: 6.77	Sampled by	: USGS
Received Date/Time	: 12/10/2020 15:22			Delivered	: Alex Araiza
Sample Type	: GRAB			Receipt Temperature (°C)	: 1.4

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
m- & p-Xylene		<0.84	ug/L	1	E8	0.84	2.0		12/16/2020 15:15
Bromoform		<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 15:15
o-Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 15:15
1,1,2,2-Tetrachloroethane		<0.46	ug/L	1	E8	0.46	1.0		12/16/2020 15:15
1,3-Dichlorobenzene		<0.56	ug/L	1	E8	0.56	1.0		12/16/2020 15:15
1,2-Dichlorobenzene		<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 15:15
1,4-Dichlorobenzene		<0.50	ug/L	1	E8	0.50	1.0		12/16/2020 15:15
Pentafluorobenzene (Surrogate1)		98	% Recovery	1					12/16/2020 15:15
Fluorobenzene (Surrogate2)		99	% Recovery	1					12/16/2020 15:15
4-Bromofluorobenzene (Surrogate)		94	% Recovery	1					12/16/2020 15:15
1,3-Dichloropropene (cis & trans)		<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 15:15
Total Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 15:15
Method 8260B Stormwater	EPA 8260B							TH	
1,3,5-Trimethylbenzene		<1.0	ug/L	1		0.18	1.0		12/16/2020 15:15
1,2,4-Trimethylbenzene		<1.0	ug/L	1		0.20	1.0		12/16/2020 15:15
Pentafluorobenzene (Surrogate1)		98	% Recovery	1					12/16/2020 15:15
Fluorobenzene (Surrogate2)		99	% Recovery	1					12/16/2020 15:15
4-Bromofluorobenzene (Surrogate)		94	% Recovery	1					12/16/2020 15:15

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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01/01/2021 00:28

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089521**

Sample ID : IB008
Sampling Date/Time: 12/10/2020 13:45
Approval Date : 12/31/2020 14:24
Received Date/Time: 12/10/2020 15:22
Sample Type : GRAB

Temperature : 17.8 Deg. C
pH : 6.77

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Alex Araiza
Receipt Temperature (°C) : 1.4

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
GC/MS-Method 624-for Acrolein	EPA 624.1 ¤							AL	
Acrolein		<0.950	ug/L	1	E8	0.950	1.0		12/11/2020 14:30
Acrylonitrile		<0.524	ug/L	1	E8	0.524	1.0		12/11/2020 14:30
Pentafluorobenzene (Surrogate1)		94	% Recovery	1					12/11/2020 14:30
Fluorobenzene (Surrogate2)		96	% Recovery	1					12/11/2020 14:30
4-Bromofluorobenzene (Surrogate)		92	% Recovery	1					12/11/2020 14:30
GC/MS-Method 624-for Acrolein and Acrylonitrile Samples Case Narrative: The batch QC did not meet acceptance criteria in 2020089566 LFM/LFMD for acrolein (27%,33%) and acrylonitrile (24%,30%); control limits: 40-160%.									
GC/MS-Method 624.1for 2-	EPA 624.1 ¤							AL	
2-Chloroethyl vinyl ether		<0.333	ug/L	1	E8	0.333	1.0		12/11/2020 14:30
Pentafluorobenzene (Surrogate1)		94	% Recovery	1					12/11/2020 14:30
Fluorobenzene (Surrogate2)		96	% Recovery	1					12/11/2020 14:30
4-Bromofluorobenzene (Surrogate)		92	% Recovery	1					12/11/2020 14:30

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089522**

Sample ID : IB008
Sampling Date/Time: 12/10/2020 13:45
Approval Date : 12/18/2020 09:45
Received Date/Time: 12/10/2020 15:22
Sample Type : GRAB

Temperature : 17.8 Deg. C
pH : 6.77

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Alex Araiza
Receipt Temperature (°C) : 1.4

Test		Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Coliform - E. Coli		SM22 9223 B							DC	
	Total Coliform		>2419.6	MPN/100mL	1		1	1		12/10/2020 16:31
	E. coli		1732.9	MPN/100mL	1		1	1		12/10/2020 16:31

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089523**

Sample ID	: IB008			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 13:45	Temperature	: 17.8 Deg. C	Account Number	: Stormwater
Approval Date	: 12/22/2020 12:42	pH	: 6.77	Sampled by	: USGS
Received Date/Time	: 12/10/2020 15:22			Delivered	: Alex Araiza
Sample Type	: GRAB			Receipt Temperature (°C)	: 1.4

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Cyanide	EPA 335.4	<0.005	mg/L	1	N1	0.0019	0.005	DL	12/16/2020 10:47

Cyanide Case Narrative: 2020089733 spike recovery = 84%, CL = 90-110%

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089524**

Sample ID	: IB008			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 13:45	Temperature	: 17.8 Deg. C	Account Number	: Stormwater
Approval Date	: 01/12/2021 10:23	pH	: 6.77	Sampled by	: USGS
Received Date/Time	: 12/10/2020 15:22			Delivered	: Alex Araiza
Sample Type	: GRAB			Receipt Temperature (°C)	: 1.4

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
EPA 1664 With Silica Gel	EPA 1664B							TAMD	
Hexane Extractable Material		<5.7	mg/L	1			5.7		12/23/2020 16:04
Hexane Extractable Material - Silica Gel		<6.8	mg/L	1	L4		6.8		12/23/2020 16:04

EPA 1664 With Silica Gel Treatment Case Narrative: General Chemistry
Method 1664B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 280-521546 and analytical batch 280-521638.
Method 1664B: Analysis for Hexane Extractable Material (HEM) was performed for the following samples: 2020089569 (550-154558-2), 2020089539 (550-154558-4), 2020089554 (550-154558-6) and 2020089524 (550-154558-9). Since the HEM result(s) was below the reporting limit (RL), the result(s) for Silica Gel Treated - Hexane Extractable Material (SGT-HEM) was reported as a non-detect. All HEM quality control criteria were met.
No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

non-NELAC Outside Lab: Test America - ADHS Lic. # AZ0713

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089525**

Sample ID	: IB008 Trip Blank			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 13:45	Temperature	: 17.8 Deg. C	Account Number	: Stormwater
Approval Date	: 12/29/2020 15:46	pH	: 6.77	Sampled by	: USGS
Received Date/Time	: 12/10/2020 15:22			Delivered	: Alex Araiza
Sample Type	: TIME			Receipt Temperature (°C)	: 1.4

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
	Chloromethane	<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 15:44
	Vinyl Chloride	<0.47	ug/L	1	E8	0.47	1.0		12/16/2020 15:44
	Bromomethane	<0.39	ug/L	1	E8	0.39	1.0		12/16/2020 15:44
	Chloroethane	<0.66	ug/L	1	E8	0.66	1.0		12/16/2020 15:44
	Trichlorofluoromethane	<0.43	ug/L	1	E8	0.43	1.0		12/16/2020 15:44
	1,1-Dichloroethylene	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 15:44
	Methylene chloride	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 15:44
	trans-1,2-Dichloroethene	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 15:44
	1,1-Dichloroethane	<0.30	ug/L	1	E8	0.30	1.0		12/16/2020 15:44
	Chloroform	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 15:44
	1,2-Dichloroethane	<0.28	ug/L	1	E8	0.28	1.0		12/16/2020 15:44
	1,1,1-Trichloroethane	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 15:44
	Carbon Tetrachloride	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 15:44
	Benzene	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 15:44
	1,2-Dichloropropane	<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 15:44
	Trichloroethene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 15:44
	Bromodichloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 15:44
	cis-1,3-Dichloropropene	<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 15:44
	trans-1,3-Dichloropropene	<0.19	ug/L	1	E8	0.19	1.0		12/16/2020 15:44
	1,1,2-Trichloroethane	<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 15:44
	Toluene	<0.35	ug/L	1	E8	0.35	1.0		12/16/2020 15:44
	Dibromochloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 15:44
	Tetrachloroethylene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 15:44
	Chlorobenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 15:44
	Ethylbenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 15:44

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089525**

Sample ID	: IB008 Trip Blank			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 13:45	Temperature	: 17.8 Deg. C	Account Number	: Stormwater
Approval Date	: 12/29/2020 15:46	pH	: 6.77	Sampled by	: USGS
Received Date/Time	: 12/10/2020 15:22			Delivered	: Alex Araiza
Sample Type	: TIME			Receipt Temperature (°C)	: 1.4

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
m- & p-Xylene		<0.84	ug/L	1	E8	0.84	2.0		12/16/2020 15:44
Bromoform		<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 15:44
o-Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 15:44
1,1,2,2-Tetrachloroethane		<0.46	ug/L	1	E8	0.46	1.0		12/16/2020 15:44
1,3-Dichlorobenzene		<0.56	ug/L	1	E8	0.56	1.0		12/16/2020 15:44
1,2-Dichlorobenzene		<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 15:44
1,4-Dichlorobenzene		<0.50	ug/L	1	E8	0.50	1.0		12/16/2020 15:44
Pentafluorobenzene (Surrogate1)		97	% Recovery	1					12/16/2020 15:44
Fluorobenzene (Surrogate2)		100	% Recovery	1					12/16/2020 15:44
4-Bromofluorobenzene (Surrogate)		94	% Recovery	1					12/16/2020 15:44
1,3-Dichloropropene (cis & trans)		<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 15:44
Total Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 15:44
Method 8260B Stormwater	EPA 8260B							TH	
1,3,5-Trimethylbenzene		<1.0	ug/L	1		0.18	1.0		12/16/2020 15:44
1,2,4-Trimethylbenzene		<1.0	ug/L	1		0.20	1.0		12/16/2020 15:44
Pentafluorobenzene (Surrogate1)		97	% Recovery	1					12/16/2020 15:44
Fluorobenzene (Surrogate2)		100	% Recovery	1					12/16/2020 15:44
4-Bromofluorobenzene (Surrogate)		94	% Recovery	1					12/16/2020 15:44

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089526**

Sample ID	: IB008 Trip Blank			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 13:45	Temperature	: 17.8 Deg. C	Account Number	: Stormwater
Approval Date	: 12/31/2020 14:24	pH	: 6.77	Sampled by	: USGS
Received Date/Time	: 12/10/2020 15:22			Delivered	: Alex Araiza
Sample Type	: TIME			Receipt Temperature (°C)	: 1.4

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
GC/MS-Method 624-for Acrolein	EPA 624.1 ¤							AL	
Acrolein		<0.950	ug/L	1	E8	0.950	1.0		12/11/2020 18:26
Acrylonitrile		<0.524	ug/L	1	E8	0.524	1.0		12/11/2020 18:26
Pentafluorobenzene (Surrogate1)		96	% Recovery	1					12/11/2020 18:26
Fluorobenzene (Surrogate2)		98	% Recovery	1					12/11/2020 18:26
4-Bromofluorobenzene (Surrogate)		94	% Recovery	1					12/11/2020 18:26

GC/MS-Method 624-for Acrolein and Acrylonitrile Samples Case Narrative: The batch QC did not meet acceptance criteria in 2020089566 LFM/LFMD for acrolein (27%,33%) and acrylonitrile (24%,30%); control limits: 40-160%.

GC/MS-Method 624.1for 2-	EPA 624.1 ¤							AL	
2-Chloroethyl vinyl ether		<0.333	ug/L	1	E8	0.333	1.0		12/11/2020 18:26
Pentafluorobenzene (Surrogate1)		96	% Recovery	1					12/11/2020 18:26
Fluorobenzene (Surrogate2)		98	% Recovery	1					12/11/2020 18:26
4-Bromofluorobenzene (Surrogate)		94	% Recovery	1					12/11/2020 18:26

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089542**

Sample ID	: SC046			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:44	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 01/22/2021 14:21	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 14:32			Delivered	: Scott Stirek
Sample Type	: COMPOS			Receipt Temperature (°C)	: 0.4-0.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
608.3-STORM	EPA 608.3							JG	
	alpha-BHC	<0.0031	ug/L	1	E8;N1	0.0031	0.005		01/15/2021 02:05
	gamma-BHC	<0.0034	ug/L	1	E8;N1	0.0034	0.005		01/15/2021 02:05
	beta-BHC	<0.1802	ug/L	1	E8;N1;V9	0.1802	0.5		01/15/2021 02:05
	d-BHC	<0.0155	ug/L	1	E8;N1;V9	0.0155	0.02		01/15/2021 02:05
	Heptachlor	<0.0297	ug/L	1	E8;N1;V9	0.0297	0.05		01/15/2021 02:05
	Aldrin	<0.0038	ug/L	1	E8;N1;V9	0.0038	0.005		01/15/2021 02:05
	Heptachlor Epoxide	<0.0015	ug/L	1	E8;N1;V9	0.0015	0.005		01/15/2021 02:05
	4,4'-DDE	<0.0034	ug/L	1	E8;N1;V9	0.0034	0.005		01/15/2021 02:05
	Endosulfan I	<0.0058	ug/L	1	E8;N1;V9	0.0058	0.020		01/15/2021 02:05
	Dieldrin	<0.0037	ug/L	1	E8;N1	0.0037	0.005		01/15/2021 02:05
	Endrin	<0.0082	ug/L	1	E8;N1	0.0082	0.02		01/15/2021 02:05
	4,4'-DDD	<0.0022	ug/L	1	E8;N1;V9	0.0022	0.005		01/15/2021 02:05
	Endosulfan II	<0.0021	ug/L	1	E8;N1;V9	0.0021	0.005		01/15/2021 02:05
	4,4'-DDT	<0.0014	ug/L	1	E8;N1;V9	0.0014	0.005		01/15/2021 02:05
	Endrin Aldehyde	<0.003	ug/L	1	E8;N1	0.003	0.005		01/15/2021 02:05
	Endosulfan Sulfate	<0.0018	ug/L	1	E8;N1	0.0018	0.005		01/15/2021 02:05
	Chlordane	<0.19	ug/L	1	E8;N1	0.19	0.5		01/15/2021 02:05
	Toxaphene	<0.467	ug/L	1	E8;N1	0.467	1.0		01/15/2021 02:05
	Arochlor-1016	<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:05
	Arochlor-1221	<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:05
	Arochlor-1232	<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:05
	Arochlor-1242	<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:05
	Arochlor-1248	<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:05
	Arochlor-1254	<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:05
	Arochlor-1260	<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:05

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089542**

Sample ID : SC046
Sampling Date/Time: 12/10/2020 08:44
Approval Date : 01/22/2021 14:21
Received Date/Time: 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.4-0.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
608.3-STORM	EPA 608.3							JG	
Decachlorobiphenyl		53	% Recovery	1					01/15/2021 02:05
Total Endosulfan		<0.0021	ug/L	1	E8;N1	0.0021	0.005		01/15/2021 02:05
TOTAL PCB		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:05
Aldrin/Dieldrin		<0.0037	ug/L	1	E8;N1	0.0037	0.005		01/15/2021 02:05

608.3-STORM Case Narrative: Batch QC did not meet laboratory acceptance criteria in sample 2020089497LFM/LFMD for multiple analytes percent recovery. The closing CCV did not meet laboratory acceptance criteria for multiple analytes percent recovery. The sample pH was not checked within 72 hours of receipt.

Extraction - 608.3	EPA 608.3	COMPLETE	JG	12/15/2020 00:00

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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ADHS Lic. # AZ0088
2474 S. 22nd Ave
(602) 534-2960
AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089543**

Sample ID : SC046
Sampling Date/Time: 12/10/2020 08:44
Approval Date : 01/06/2021 10:50
Received Date/Time: 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.4-0.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
	Acenaphthene	<0.68	ug/L	1.05	E8;D4	0.68	10		12/18/2020 20:22
	Acenaphthylene	<0.59	ug/L	1.05	E8;D4	0.59	10		12/18/2020 20:22
	Anthracene	<0.55	ug/L	1.05	E8;D4	0.55	10		12/18/2020 20:22
	Benzo(a)anthracene	<0.81	ug/L	1.05	E8;D4	0.81	10		12/18/2020 20:22
	Benzo(a)pyrene	<1.58	ug/L	1.05	E8;D4	1.58	10		12/18/2020 20:22
	Benzo(b)fluoranthene	<2.48	ug/L	1.05	E8;D4	2.48	10		12/18/2020 20:22
	Benzo(ghi)perylene	<1.92	ug/L	1.05	E8;D4	1.92	10		12/18/2020 20:22
	Benzo(k)fluoranthene	<1.92	ug/L	1.05	E8;D4	1.92	10		12/18/2020 20:22
	Chrysene	<0.81	ug/L	1.05	E8;D4	0.81	10		12/18/2020 20:22
	Dibenzo(a,h)anthracene	<1.66	ug/L	1.05	E8;D4	1.66	10		12/18/2020 20:22
	1,2-Dichlorobenzene	<0.89	ug/L	1.05	E8;D4;T2	0.89	10		12/18/2020 20:22
	1,3-Dichlorobenzene	<0.91	ug/L	1.05	E8;D4;T2	0.91	10		12/18/2020 20:22
	1,4-Dichlorobenzene	<0.98	ug/L	1.05	E8;D4;T2	0.98	10		12/18/2020 20:22
	3,3'-Dichlorobenzidine	<6.24	ug/L	1.05	E8;D4	6.24	52		12/18/2020 20:22
	Diethyl phthalate	<7.95	ug/L	1.05	E8;D4	7.95	10		12/18/2020 20:22
	Dimethyl phthalate	<0.48	ug/L	1.05	E8;D4	0.48	21		12/18/2020 20:22
	Di-n-butyl phthalate	<1.00	ug/L	1.05	E8;D4	1.00	10		12/18/2020 20:22
	2,4-Dinitrotoluene	<0.84	ug/L	1.05	E8;D4	0.84	10		12/18/2020 20:22
	2,6-Dinitrotoluene	<0.65	ug/L	1.05	E8;D4	0.65	10		12/18/2020 20:22
	Di-n-octyl phthalate	<2.44	ug/L	1.05	E8;D4	2.44	10		12/18/2020 20:22
	1,2-Diphenyl hydrazine (as azobenzene)	<1.16	ug/L	1.05	E8;D4;T2	1.16	10		12/18/2020 20:22
	Fluoranthene	<0.50	ug/L	1.05	E8;D4	0.50	10		12/18/2020 20:22
	Fluorene	<0.50	ug/L	1.05	E8;D4	0.50	10		12/18/2020 20:22
	Hexachlorobenzene	<0.37	ug/L	1.05	E8;D4	0.37	10		12/18/2020 20:22
	Hexachlorobutadiene	<0.46	ug/L	1.05	E8;D4	0.46	10		12/18/2020 20:22

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(602) 534-2960

AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089543**

Sample ID : SC046
Sampling Date/Time: 12/10/2020 08:44
Approval Date : 01/06/2021 10:50
Received Date/Time: 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.4-0.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
	Hexachlorocyclopentadiene	<1.32	ug/L	1.05	E8;D4;T2	1.32	10		12/18/2020 20:22
	Hexachloroethane	<0.36	ug/L	1.05	E8;D4	0.36	10		12/18/2020 20:22
	Indeno(1,2,3-cd)pyrene	<2.38	ug/L	1.05	E8;D4	2.38	10		12/18/2020 20:22
	Isophorone	<1.45	ug/L	1.05	E8;D4	1.45	10		12/18/2020 20:22
	Naphthalene	<0.37	ug/L	1.05	E8;D4	0.37	10		12/18/2020 20:22
	Nitrobenzene	<0.90	ug/L	1.05	E8;D4	0.90	10		12/18/2020 20:22
	N-Nitrosodimethylamine	<0.70	ug/L	1.05	E8;D4;T2	0.70	10		12/18/2020 20:22
	N-Nitrosodi-n-propylamine	<2.50	ug/L	1.05	E8;D4	2.50	10		12/18/2020 20:22
	N-Nitrosodiphenylamine	<0.88	ug/L	1.05	E8;D4;T2	0.88	10		12/18/2020 20:22
	Phenanthrene	<0.32	ug/L	1.05	E8;D4	0.32	10		12/18/2020 20:22
	Pyrene	<0.22	ug/L	1.05	E8;D4	0.22	10.5		12/18/2020 20:22
	1,2,4-Trichlorobenzene	<1.05	ug/L	1.05	E8;D4	1.05	10		12/18/2020 20:22
	2-Chlorophenol	<1.06	ug/L	1.05	E8;D4	1.06	10		12/18/2020 20:22
	2,4-Dichlorophenol	<1.44	ug/L	1.05	E8;D4	1.44	10		12/18/2020 20:22
	2,4-Dimethylphenol	<2.70	ug/L	1.05	E8;D4	2.70	10		12/18/2020 20:22
	2-Methyl-4,6-dinitrophenol	<1.33	ug/L	1.05	E8;D4	1.33	10		12/18/2020 20:22
	2,4-Dinitrophenol	<0.97	ug/L	1.05	E8;D4	0.97	10		12/18/2020 20:22
	2-Nitrophenol	<0.99	ug/L	1.05	E8;D4	0.99	10		12/18/2020 20:22
	4-Nitrophenol	2.6	ug/L	1.05	D4;E4	1.78	10		12/18/2020 20:22
	4-Chloro-3-methylphenol	<1.41	ug/L	1.05	E8;D4	1.41	10		12/18/2020 20:22
	Pentachlorophenol	<2.02	ug/L	1.05	E8;D4	2.02	10		12/18/2020 20:22
	Phenol	1.5	ug/L	1.05	D4;E4	1.33	10		12/18/2020 20:22
	2,4,6-Trichlorophenol	<1.69	ug/L	1.05	E8;D4	1.69	10		12/18/2020 20:22
	2,4,6-Tribromophenol	132	% Recovery	1					12/18/2020 20:22
	Dibromooctafluorobiphenyl	77	% Recovery	1					12/18/2020 20:22

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(602) 534-2960
AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089543**

Sample ID	: SC046			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:44	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 01/06/2021 10:50	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 14:32			Delivered	: Scott Stirek
Sample Type	: COMPOS			Receipt Temperature (°C)	: 0.4-0.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
4,4-Dibromobiphenyl		83	% Recovery	1					12/18/2020 20:22

625.1-STORM Case Narrative: Batch QC did not meet laboratory acceptance criteria in the 2020089498 LFM/LFMD for multiple compounds. The LFMD RPD could not be calculated for 3,3-Dichlorobenzidine due to the results being zero. Dilution factor = 1.05X from ext.

Extraction - 625.1	EPA 625.1	COMPLETE	CC	12/16/2020 00:00

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089544**

Sample ID : SC046
Sampling Date/Time: 12/10/2020 08:44
Approval Date : 12/31/2020 07:13
Received Date/Time: 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.4-0.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Silver - Total Recoverable	EPA 200.8	<0.00125	mg/L	5	D1;E8	0.00125	0.0050	SS	12/28/2020 00:00
Arsenic - Total Recoverable	EPA 200.8	<0.00245	mg/L	5	D1;E8	0.00245	0.0050	SS	12/28/2020 00:00
Barium - Total Recoverable	EPA 200.8	0.012	mg/L	5	D1	0.00340	0.0050	SS	12/29/2020 00:00
Beryllium - Total Recoverable	EPA 200.8	<0.00180	mg/L	5	D1;E8	0.00180	0.0050	SS	12/29/2020 00:00
Cadmium - Total Recoverable	EPA 200.8	<0.00210	mg/L	5	D1;E8	0.00210	0.0050	SS	12/28/2020 00:00
Chromium - Total Recoverable	EPA 200.8	<0.0125	mg/L	5	D1;E8	0.0125	0.025	SS	12/29/2020 00:00
Copper - Total Recoverable	EPA 200.8	0.0072	mg/L	5	D1	0.00455	0.0050	SS	12/29/2020 00:00
Nickel - Total Recoverable	EPA 200.8	<0.00315	mg/L	5	D1;E8	0.00315	0.0050	SS	12/29/2020 00:00
Lead - Total Recoverable	EPA 200.8	<0.00170	mg/L	5	D1;E8	0.00170	0.0050	SS	12/28/2020 00:00
Antimony - Total Recoverable	EPA 200.8	<0.00200	mg/L	5	D1;E8	0.00200	0.0050	SS	12/28/2020 00:00
Selenium - Total Recoverable	EPA 200.8	<0.00405	mg/L	5	D1;E8	0.00405	0.0050	SS	12/28/2020 00:00
Thallium - Total Recoverable	EPA 200.8	<0.00275	mg/L	5	D1;E8	0.00275	0.0050	SS	12/28/2020 00:00
Zinc - Total Recoverable	EPA 200.8	0.0403	mg/L	5	D1;E4	0.0380	0.050	SS	12/29/2020 00:00

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(602) 534-2960

AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089544**

Sample ID	: SC046			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:44	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 12/31/2020 07:13	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 14:32			Delivered	: Scott Stirek
Sample Type	: COMPOS			Receipt Temperature (°C)	: 0.4-0.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Metals Prep - TR	SM22 3030 F ¤	COMPLETE						CG	12/21/2020 17:06
Mercury - Total	EPA 245.1	<0.000118	mg/L	2	D1;E8	0.000118	0.0002	GA	12/23/2020 09:41
pH<2Verification	pH <2 Verification	COMPLETE						CG	12/14/2020 13:01

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089545**

Sample ID	: SC046			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:44	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 12/30/2020 11:58	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 14:32			Delivered	: Scott Stirek
Sample Type	: COMPOS			Receipt Temperature (°C)	: 0.4-0.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Filtration Prep Dissolved Metals	SM22 3030 B	COMPLETE						SS	12/16/2020 11:30
Filtration Prep Dissolved Metals Case Narrative: COC states that the sample is field-filtered.									
Hardness - Total	SM22 2340 B							CG	
Hardness - Total		24.1	mg/L	1		1.31	16.6		12/22/2020 18:20
Calcium Hardness		20.2	mg/L	1		1.00	12.5		12/22/2020 18:20
Calcium - Total Recoverable	EPA 200.7	8.10	mg/L	1		0.40	5.00	CG	12/22/2020 18:20
Magnesium - Total Recoverable	EPA 200.7	0.95	mg/L	1	E4	0.076	1.00	CG	12/22/2020 18:20
Silver - Dissolved	EPA 200.8	<0.0050	mg/L	5	D1	0.00125	0.0050	SS	12/28/2020 00:00
Arsenic - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00098	0.0020	SS	12/17/2020 00:00
Barium - Dissolved	EPA 200.8	0.009	mg/L	2	D1	0.00136	0.0020	SS	12/17/2020 00:00
Beryllium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00072	0.0020	SS	12/17/2020 00:00
Cadmium - Dissolved	EPA 200.8	<0.0010	mg/L	1		0.00042	0.0010	SS	12/17/2020 00:00
Chromium - Dissolved	EPA 200.8	<0.010	mg/L	2	D1	0.0028	0.010	SS	12/17/2020 00:00
Copper - Dissolved	EPA 200.8	0.0156	mg/L	1		0.00091	0.0010	SS	12/17/2020 00:00

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089545**

Sample ID	: SC046			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:44	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 12/30/2020 11:58	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 14:32			Delivered	: Scott Stirek
Sample Type	: COMPOS			Receipt Temperature (°C)	: 0.4-0.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Nickel - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00126	0.0020	SS	12/17/2020 00:00
Lead - Dissolved	EPA 200.8	<0.0010	mg/L	1		0.00034	0.0010	SS	12/17/2020 00:00
Antimony - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00080	0.0020	SS	12/17/2020 00:00
Selenium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00162	0.0020	SS	12/17/2020 00:00
Thallium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00110	0.0020	SS	12/17/2020 00:00
Zinc - Dissolved	EPA 200.8	0.0378	mg/L	1		0.0076	0.010	SS	12/17/2020 00:00
Metals Prep - TR	SM22 3030 F ¤	COMPLETE						CG	12/21/2020 17:06
Mercury - Diss	EPA 245.1	<0.0002	mg/L	2	D1	0.000118	0.0002	GA	12/23/2020 09:48
pH<2Verification	pH <2 Verification	COMPLETE						CG	12/14/2020 13:01

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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(602) 534-2960

AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089546**

Sample ID	: SC046			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:44	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 12/22/2020 13:40	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 14:32			Delivered	: Scott Stirek
Sample Type	: COMPOS			Receipt Temperature (°C)	: 0.4-0.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Ammonia	EPA 350.1	0.53	mg/L	1		0.08	0.20	CA	12/15/2020 10:03
Total Kjeldahl Nitrogen	EPA 351.2	2.0	mg/L	1		0.16	0.25	CA	12/21/2020 10:46

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

12/23/2020 00:34

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089547**

Sample ID	: SC046			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:44	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 12/22/2020 12:40	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 14:32			Delivered	: Scott Stirek
Sample Type	: COMPOS			Receipt Temperature (°C)	: 0.4-0.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
BOD, 5 Day	SM22 5210 B	15	mg/L	1		2	2	DT	12/11/2020 08:25
COD	HACH-8000	56	mg/L	1		11.69	50	LA	12/11/2020 14:15
Suspended Solids	SM22 2540 D	6.8	mg/L	2		5.0	5.0	BM	12/11/2020 12:57
Total Dissolved Solids	SM22 2540 C	48	mg/L	1		10	10	BM	12/11/2020 15:05

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089548**

Sample ID	: SC046			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:44	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 12/31/2020 12:58	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 14:32			Delivered	: Scott Stirek
Sample Type	: COMPOS			Receipt Temperature (°C)	: 0.4-0.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
O-Phosphate-P	EPA 300.0	0.2	mg/L	1		0.024	0.1	SS	12/11/2020 05:35
Nitrate-N	EPA 300.0	0.4	mg/L	1		0.014	0.1	SS	12/11/2020 05:35
Nitrite-N	EPA 300.0	<0.1	mg/L	1		0.014	0.1	SS	12/11/2020 05:35

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

01/13/2021 00:30

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089549**

Sample ID	: SC046			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:44	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 01/12/2021 10:23	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 14:32			Delivered	: Scott Stirek
Sample Type	: COMPOS			Receipt Temperature (°C)	: 0.4-0.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Phosphorus - Total	SM 4500 P E	0.28	mg/L	1			0.020	TAM	12/22/2020 12:53

Phosphorus - Total Case Narrative: No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

non-NELAC Outside Lab: Test America - ADHS Lic. # AZ0728

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089550**

Sample ID : SC046
Sampling Date/Time: 12/10/2020 12:45
Approval Date : 12/29/2020 15:46
Received Date/Time: 12/10/2020 14:32
Sample Type : GRAB

Temperature : 6.76 Deg. C
pH : 13.0

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.4-0.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
	Chloromethane	<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 17:12
	Vinyl Chloride	<0.47	ug/L	1	E8	0.47	1.0		12/16/2020 17:12
	Bromomethane	<0.39	ug/L	1	E8	0.39	1.0		12/16/2020 17:12
	Chloroethane	<0.66	ug/L	1	E8	0.66	1.0		12/16/2020 17:12
	Trichlorofluoromethane	<0.43	ug/L	1	E8	0.43	1.0		12/16/2020 17:12
	1,1-Dichloroethylene	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 17:12
	Methylene chloride	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 17:12
	trans-1,2-Dichloroethene	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 17:12
	1,1-Dichloroethane	<0.30	ug/L	1	E8	0.30	1.0		12/16/2020 17:12
	Chloroform	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 17:12
	1,2-Dichloroethane	<0.28	ug/L	1	E8	0.28	1.0		12/16/2020 17:12
	1,1,1-Trichloroethane	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 17:12
	Carbon Tetrachloride	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 17:12
	Benzene	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 17:12
	1,2-Dichloropropane	<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 17:12
	Trichloroethene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 17:12
	Bromodichloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 17:12
	cis-1,3-Dichloropropene	<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 17:12
	trans-1,3-Dichloropropene	<0.19	ug/L	1	E8	0.19	1.0		12/16/2020 17:12
	1,1,2-Trichloroethane	<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 17:12
	Toluene	<0.35	ug/L	1	E8	0.35	1.0		12/16/2020 17:12
	Dibromochloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 17:12
	Tetrachloroethylene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 17:12
	Chlorobenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 17:12
	Ethylbenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 17:12

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089550**

Sample ID : SC046
Sampling Date/Time: 12/10/2020 12:45
Approval Date : 12/29/2020 15:46
Received Date/Time: 12/10/2020 14:32
Sample Type : GRAB

Temperature : 6.76 Deg. C
pH : 13.0

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.4-0.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
m- & p-Xylene		<0.84	ug/L	1	E8	0.84	2.0		12/16/2020 17:12
Bromoform		<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 17:12
o-Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 17:12
1,1,2,2-Tetrachloroethane		<0.46	ug/L	1	E8	0.46	1.0		12/16/2020 17:12
1,3-Dichlorobenzene		<0.56	ug/L	1	E8	0.56	1.0		12/16/2020 17:12
1,2-Dichlorobenzene		<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 17:12
1,4-Dichlorobenzene		<0.50	ug/L	1	E8	0.50	1.0		12/16/2020 17:12
Pentafluorobenzene (Surrogate1)		96	% Recovery	1					12/16/2020 17:12
Fluorobenzene (Surrogate2)		98	% Recovery	1					12/16/2020 17:12
4-Bromofluorobenzene (Surrogate)		92	% Recovery	1					12/16/2020 17:12
1,3-Dichloropropene (cis & trans)		<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 17:12
Total Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 17:12
Method 8260B Stormwater	EPA 8260B							TH	
1,3,5-Trimethylbenzene		<1.0	ug/L	1		0.18	1.0		12/16/2020 17:12
1,2,4-Trimethylbenzene		<1.0	ug/L	1		0.20	1.0		12/16/2020 17:12
Pentafluorobenzene (Surrogate1)		96	% Recovery	1					12/16/2020 17:12
Fluorobenzene (Surrogate2)		98	% Recovery	1					12/16/2020 17:12
4-Bromofluorobenzene (Surrogate)		92	% Recovery	1					12/16/2020 17:12

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089551**

Sample ID : SC046
Sampling Date/Time: 12/10/2020 12:45
Approval Date : 12/31/2020 14:24
Received Date/Time: 12/10/2020 14:32
Sample Type : GRAB

Temperature : 6.76 Deg. C
pH : 13.0

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.4-0.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
GC/MS-Method 624-for Acrolein	EPA 624.1 ¤							AL	
Acrolein		<0.950	ug/L	1	E8	0.950	1.0		12/11/2020 15:17
Acrylonitrile		<0.524	ug/L	1	E8	0.524	1.0		12/11/2020 15:17
Pentafluorobenzene (Surrogate1)		98	% Recovery	1					12/11/2020 15:17
Fluorobenzene (Surrogate2)		99	% Recovery	1					12/11/2020 15:17
4-Bromofluorobenzene (Surrogate)		95	% Recovery	1					12/11/2020 15:17
GC/MS-Method 624.1for 2-	EPA 624.1 ¤							AL	
2-Chloroethyl vinyl ether		<0.333	ug/L	1	E8	0.333	1.0		12/11/2020 15:17
Pentafluorobenzene (Surrogate1)		98	% Recovery	1					12/11/2020 15:17
Fluorobenzene (Surrogate2)		99	% Recovery	1					12/11/2020 15:17
4-Bromofluorobenzene (Surrogate)		95	% Recovery	1					12/11/2020 15:17

GC/MS-Method 624-for Acrolein and Acrylonitrile Samples Case Narrative: The batch QC did not meet acceptance criteria in 2020089566 LFM/LFMD for acrolein (27%,33%) and acrylonitrile (24%,30%); control limits: 40-160%.

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089552**

Sample ID : SC046
Sampling Date/Time : 12/10/2020 12:45
Approval Date : 12/18/2020 09:45
Received Date/Time : 12/10/2020 14:32
Sample Type : GRAB

Temperature : 6.76 Deg. C
pH : 13.0

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.4-0.7

Test		Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Coliform - E. Coli		SM22 9223 B							DC	
	Total Coliform		>241960	MPN/100mL	1		1	1		12/10/2020 16:31
	E. coli		5630	MPN/100mL	1		1	1		12/10/2020 16:31

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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12/23/2020 00:34

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089553**

Sample ID	: SC046			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 12:45	Temperature	: 6.76 Deg. C	Account Number	: Stormwater
Approval Date	: 12/22/2020 12:42	pH	: 13.0	Sampled by	: USGS
Received Date/Time	: 12/10/2020 14:32			Delivered	: Scott Stirek
Sample Type	: GRAB			Receipt Temperature (°C)	: 0.4-0.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Cyanide	EPA 335.4	<0.005	mg/L	1	N1	0.0019	0.005	DL	12/16/2020 10:47

Cyanide Case Narrative: 2020089733 spike recovery = 84%, CL = 90-110%

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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01/13/2021 00:30

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089554**

Sample ID : SC046
Sampling Date/Time: 12/10/2020 12:45
Approval Date : 01/12/2021 10:23
Received Date/Time: 12/10/2020 14:32
Sample Type : GRAB

Temperature : 6.76 Deg. C
pH : 13.0

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.4-0.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
EPA 1664 With Silica Gel	EPA 1664B							TAMD	
Hexane Extractable Material		<5.6	mg/L	1			5.6		12/23/2020 16:04
Hexane Extractable Material - Silica Gel		<6.8	mg/L	1	L4		6.8		12/23/2020 16:04

EPA 1664 With Silica Gel Treatment Case Narrative: General Chemistry
Method 1664B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 280-521546 and analytical batch 280-521638.
Method 1664B: Analysis for Hexane Extractable Material (HEM) was performed for the following samples: 2020089569 (550-154558-2), 2020089539 (550-154558-4), 2020089554 (550-154558-6) and 2020089524 (550-154558-9). Since the HEM result(s) was below the reporting limit (RL), the result(s) for Silica Gel Treated - Hexane Extractable Material (SGT-HEM) was reported as a non-detect. All HEM quality control criteria were met.
No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

non-NELAC Outside Lab: Test America - ADHS Lic. # AZ0713

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089555**

Sample ID	: SC046 Trip Blank			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 12:45	Temperature	: 6.76 Deg. C	Account Number	: Stormwater
Approval Date	: 12/29/2020 15:46	pH	: 13.0	Sampled by	: USGS
Received Date/Time	: 12/10/2020 14:32			Delivered	: Scott Stirek
Sample Type	: TIME			Receipt Temperature (°C)	: 0.4-0.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
	Chloromethane	<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 17:41
	Vinyl Chloride	<0.47	ug/L	1	E8	0.47	1.0		12/16/2020 17:41
	Bromomethane	<0.39	ug/L	1	E8	0.39	1.0		12/16/2020 17:41
	Chloroethane	<0.66	ug/L	1	E8	0.66	1.0		12/16/2020 17:41
	Trichlorofluoromethane	<0.43	ug/L	1	E8	0.43	1.0		12/16/2020 17:41
	1,1-Dichloroethylene	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 17:41
	Methylene chloride	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 17:41
	trans-1,2-Dichloroethene	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 17:41
	1,1-Dichloroethane	<0.30	ug/L	1	E8	0.30	1.0		12/16/2020 17:41
	Chloroform	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 17:41
	1,2-Dichloroethane	<0.28	ug/L	1	E8	0.28	1.0		12/16/2020 17:41
	1,1,1-Trichloroethane	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 17:41
	Carbon Tetrachloride	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 17:41
	Benzene	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 17:41
	1,2-Dichloropropane	<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 17:41
	Trichloroethene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 17:41
	Bromodichloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 17:41
	cis-1,3-Dichloropropene	<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 17:41
	trans-1,3-Dichloropropene	<0.19	ug/L	1	E8	0.19	1.0		12/16/2020 17:41
	1,1,2-Trichloroethane	<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 17:41
	Toluene	<0.35	ug/L	1	E8	0.35	1.0		12/16/2020 17:41
	Dibromochloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 17:41
	Tetrachloroethylene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 17:41
	Chlorobenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 17:41
	Ethylbenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 17:41

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089555**

Sample ID : SC046 Trip Blank
Sampling Date/Time: 12/10/2020 12:45
Approval Date : 12/29/2020 15:46
Received Date/Time: 12/10/2020 14:32
Sample Type : TIME

Temperature : 6.76 Deg. C
pH : 13.0

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.4-0.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
m- & p-Xylene		<0.84	ug/L	1	E8	0.84	2.0		12/16/2020 17:41
Bromoform		<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 17:41
o-Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 17:41
1,1,2,2-Tetrachloroethane		<0.46	ug/L	1	E8	0.46	1.0		12/16/2020 17:41
1,3-Dichlorobenzene		<0.56	ug/L	1	E8	0.56	1.0		12/16/2020 17:41
1,2-Dichlorobenzene		<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 17:41
1,4-Dichlorobenzene		<0.50	ug/L	1	E8	0.50	1.0		12/16/2020 17:41
Pentafluorobenzene (Surrogate1)		96	% Recovery	1					12/16/2020 17:41
Fluorobenzene (Surrogate2)		100	% Recovery	1					12/16/2020 17:41
4-Bromofluorobenzene (Surrogate)		93	% Recovery	1					12/16/2020 17:41
1,3-Dichloropropene (cis & trans)		<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 17:41
Total Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 17:41
Method 8260B Stormwater	EPA 8260B							TH	
1,3,5-Trimethylbenzene		<1.0	ug/L	1		0.18	1.0		12/16/2020 17:41
1,2,4-Trimethylbenzene		<1.0	ug/L	1		0.20	1.0		12/16/2020 17:41
Pentafluorobenzene (Surrogate1)		96	% Recovery	1					12/16/2020 17:41
Fluorobenzene (Surrogate2)		100	% Recovery	1					12/16/2020 17:41
4-Bromofluorobenzene (Surrogate)		93	% Recovery	1					12/16/2020 17:41

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089556**

Sample ID : SC046 Trip Blank
Sampling Date/Time: 12/10/2020 12:45
Approval Date : 12/31/2020 14:24
Received Date/Time: 12/10/2020 14:32
Sample Type : TIME

Temperature : 6.76 Deg. C
pH : 13.0

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.4-0.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
GC/MS-Method 624-for Acrolein	EPA 624.1 ¤							AL	
Acrolein		<0.950	ug/L	1	E8	0.950	1.0		12/11/2020 19:13
Acrylonitrile		<0.524	ug/L	1	E8	0.524	1.0		12/11/2020 19:13
Pentafluorobenzene (Surrogate1)		95	% Recovery	1					12/11/2020 19:13
Fluorobenzene (Surrogate2)		97	% Recovery	1					12/11/2020 19:13
4-Bromofluorobenzene (Surrogate)		93	% Recovery	1					12/11/2020 19:13

GC/MS-Method 624-for Acrolein and Acrylonitrile Samples Case Narrative: The batch QC did not meet acceptance criteria in 2020089566 LFM/LFMD for acrolein (27%,33%) and acrylonitrile (24%,30%); control limits: 40-160%.

GC/MS-Method 624.1for 2-	EPA 624.1 ¤							AL	
2-Chloroethyl vinyl ether		<0.333	ug/L	1	E8	0.333	1.0		12/11/2020 19:13
Pentafluorobenzene (Surrogate1)		95	% Recovery	1					12/11/2020 19:13
Fluorobenzene (Surrogate2)		97	% Recovery	1					12/11/2020 19:13
4-Bromofluorobenzene (Surrogate)		93	% Recovery	1					12/11/2020 19:13

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AC033

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City of Phoenix
Water Services Laboratory
ADHS Lic. # AZ0088
2474 S. 22nd Ave
(602) 534-2960

AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089527**

Sample ID	: AC033			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 07:51	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 01/22/2021 14:21	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 14:32			Delivered	: Scott Stirek
Sample Type	: COMPOS			Receipt Temperature (°C)	: 0.8-1.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
608.3-STORM	EPA 608.3							JG	
alpha-BHC		<0.0031	ug/L	1	E8;D4;N1	0.0031	0.005		01/15/2021 01:41
gamma-BHC		<0.0034	ug/L	1	E8;D4;N1	0.0034	0.005		01/15/2021 01:41
beta-BHC		<0.1802	ug/L	1	E8;D4;N1;V9	0.1802	0.5		01/15/2021 01:41
d-BHC		<0.0155	ug/L	1	E8;D4;N1;V9	0.0155	0.02		01/15/2021 01:41
Heptachlor		<0.0297	ug/L	1	E8;D4;N1;V9	0.0297	0.05		01/15/2021 01:41
Aldrin		<0.0038	ug/L	1	E8;D4;N1;V9	0.0038	0.005		01/15/2021 01:41
Heptachlor Epoxide		<0.0015	ug/L	1	E8;D4;N1;V9	0.0015	0.005		01/15/2021 01:41
4,4'-DDE		<0.0034	ug/L	1	E8;D4;N1;V9	0.0034	0.005		01/15/2021 01:41
Endosulfan I		<0.0058	ug/L	1	E8;D4;N1;V9	0.0058	0.020		01/15/2021 01:41
Dieldrin		<0.0037	ug/L	1	E8;D4;N1	0.0037	0.005		01/15/2021 01:41
Endrin		<0.0082	ug/L	1	E8;D4;N1	0.0082	0.02		01/15/2021 01:41
4,4'-DDD		<0.0022	ug/L	1	E8;D4;N1;V9	0.0022	0.005		01/15/2021 01:41
Endosulfan II		<0.0021	ug/L	1	E8;D4;N1;V9	0.0021	0.005		01/15/2021 01:41
4,4'-DDT		<0.0014	ug/L	1	E8;D4;N1;V9	0.0014	0.005		01/15/2021 01:41
Endrin Aldehyde		<0.003	ug/L	1	E8;D4;N1	0.003	0.005		01/15/2021 01:41
Endosulfan Sulfate		<0.0018	ug/L	1	E8;D4;N1	0.0018	0.005		01/15/2021 01:41
Chlordane		<0.19	ug/L	1	E8;D4;N1	0.19	0.5		01/15/2021 01:41
Toxaphene		<0.467	ug/L	1	E8;D4;N1	0.467	1.0		01/15/2021 01:41
Arochlor-1016		<0.0831	ug/L	1	E8;D4;N1	0.0831	0.1		01/15/2021 01:41
Arochlor-1221		<0.0831	ug/L	1	E8;D4;N1	0.0831	0.1		01/15/2021 01:41
Arochlor-1232		<0.0831	ug/L	1	E8;D4;N1	0.0831	0.1		01/15/2021 01:41
Arochlor-1242		<0.0831	ug/L	1	E8;D4;N1	0.0831	0.1		01/15/2021 01:41
Arochlor-1248		<0.0831	ug/L	1	E8;D4;N1	0.0831	0.1		01/15/2021 01:41
Arochlor-1254		<0.0831	ug/L	1	E8;D4;N1	0.0831	0.1		01/15/2021 01:41
Arochlor-1260		<0.0831	ug/L	1	E8;D4;N1	0.0831	0.1		01/15/2021 01:41

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City of Phoenix
Water Services Laboratory
ADHS Lic. # AZ0088
2474 S. 22nd Ave
(602) 534-2960
AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089527**

Sample ID	: AC033			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 07:51	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 01/22/2021 14:21	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 14:32			Delivered	: Scott Stirek
Sample Type	: COMPOS			Receipt Temperature (°C)	: 0.8-1.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
608.3-STORM	EPA 608.3							JG	
Decachlorobiphenyl		48	% Recovery	1					01/15/2021 01:41
Total Endosulfan		<0.0021	ug/L	1	E8;D4;N1	0.0021	0.005		01/15/2021 01:41
TOTAL PCB		<0.0831	ug/L	1	E8;D4;N1	0.0831	0.1		01/15/2021 01:41
Aldrin/Dieldrin		<0.0037	ug/L	1	E8;D4;N1	0.0037	0.005		01/15/2021 01:41

608.3-STORM Case Narrative: Batch QC did not meet laboratory acceptance criteria in sample 2020089497LFM/LFMD for multiple analytes percent recovery. The closing CCV did not meet laboratory acceptance criteria for multiple analytes percent recovery. The sample pH was not checked within 72 hours of receipt. Dilution factor = 1.08X from the extraction.

Extraction - 608.3	EPA 608.3	COMPLETE	JG	12/15/2020 00:00

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089528**

Sample ID	: AC033			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 07:51	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 01/06/2021 10:50	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 14:32			Delivered	: Scott Stirek
Sample Type	: COMPOS			Receipt Temperature (°C)	: 0.8-1.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
	Acenaphthene	<0.68	ug/L	1.05	E8;D4	0.68	10		12/18/2020 19:58
	Acenaphthylene	<0.59	ug/L	1.05	E8;D4	0.59	10		12/18/2020 19:58
	Anthracene	<0.55	ug/L	1.05	E8;D4	0.55	10		12/18/2020 19:58
	Benzo(a)anthracene	<0.81	ug/L	1.05	E8;D4	0.81	10		12/18/2020 19:58
	Benzo(a)pyrene	<1.58	ug/L	1.05	E8;D4	1.58	10		12/18/2020 19:58
	Benzo(b)fluoranthene	<2.48	ug/L	1.05	E8;D4	2.48	10		12/18/2020 19:58
	Benzo(ghi)perylene	<1.92	ug/L	1.05	E8;D4	1.92	10		12/18/2020 19:58
	Benzo(k)fluoranthene	<1.92	ug/L	1.05	E8;D4	1.92	10		12/18/2020 19:58
	Chrysene	<0.81	ug/L	1.05	E8;D4	0.81	10		12/18/2020 19:58
	Dibenzo(a,h)anthracene	<1.66	ug/L	1.05	E8;D4	1.66	10		12/18/2020 19:58
	1,2-Dichlorobenzene	<0.89	ug/L	1.05	E8;D4;T2	0.89	10		12/18/2020 19:58
	1,3-Dichlorobenzene	<0.91	ug/L	1.05	E8;D4;T2	0.91	10		12/18/2020 19:58
	1,4-Dichlorobenzene	<0.98	ug/L	1.05	E8;D4;T2	0.98	10		12/18/2020 19:58
	3,3'-Dichlorobenzidine	<6.24	ug/L	1.05	E8;D4	6.24	52		12/18/2020 19:58
	Diethyl phthalate	<7.95	ug/L	1.05	E8;D4	7.95	10		12/18/2020 19:58
	Dimethyl phthalate	<0.48	ug/L	1.05	E8;D4	0.48	21		12/18/2020 19:58
	Di-n-butyl phthalate	<1.00	ug/L	1.05	E8;D4	1.00	10		12/18/2020 19:58
	2,4-Dinitrotoluene	<0.84	ug/L	1.05	E8;D4	0.84	10		12/18/2020 19:58
	2,6-Dinitrotoluene	<0.65	ug/L	1.05	E8;D4	0.65	10		12/18/2020 19:58
	Di-n-octyl phthalate	<2.44	ug/L	1.05	E8;D4	2.44	10		12/18/2020 19:58
	1,2-Diphenyl hydrazine (as azobenzene)	<1.16	ug/L	1.05	E8;D4;T2	1.16	10		12/18/2020 19:58
	Fluoranthene	<0.50	ug/L	1.05	E8;D4	0.50	10		12/18/2020 19:58
	Fluorene	<0.50	ug/L	1.05	E8;D4	0.50	10		12/18/2020 19:58
	Hexachlorobenzene	<0.37	ug/L	1.05	E8;D4	0.37	10		12/18/2020 19:58
	Hexachlorobutadiene	<0.46	ug/L	1.05	E8;D4	0.46	10		12/18/2020 19:58

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City of Phoenix
Water Services Laboratory
ADHS Lic. # AZ0088
2474 S. 22nd Ave
(602) 534-2960

AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089528**

Sample ID : AC033
Sampling Date/Time : 12/10/2020 07:51
Approval Date : 01/06/2021 10:50
Received Date/Time : 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.8-1.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
	Hexachlorocyclopentadiene	<1.32	ug/L	1.05	E8;D4;T2	1.32	10		12/18/2020 19:58
	Hexachloroethane	<0.36	ug/L	1.05	E8;D4	0.36	10		12/18/2020 19:58
	Indeno(1,2,3-cd)pyrene	<2.38	ug/L	1.05	E8;D4	2.38	10		12/18/2020 19:58
	Isophorone	<1.45	ug/L	1.05	E8;D4	1.45	10		12/18/2020 19:58
	Naphthalene	<0.37	ug/L	1.05	E8;D4	0.37	10		12/18/2020 19:58
	Nitrobenzene	<0.90	ug/L	1.05	E8;D4	0.90	10		12/18/2020 19:58
	N-Nitrosodimethylamine	<0.70	ug/L	1.05	E8;D4;T2	0.70	10		12/18/2020 19:58
	N-Nitrosodi-n-propylamine	<2.50	ug/L	1.05	E8;D4	2.50	10		12/18/2020 19:58
	N-Nitrosodiphenylamine	<0.88	ug/L	1.05	E8;D4;T2	0.88	10		12/18/2020 19:58
	Phenanthrene	<0.32	ug/L	1.05	E8;D4	0.32	10		12/18/2020 19:58
	Pyrene	0.4	ug/L	1.05	D4;E4	0.22	10.5		12/18/2020 19:58
	1,2,4-Trichlorobenzene	<1.05	ug/L	1.05	E8;D4	1.05	10		12/18/2020 19:58
	2-Chlorophenol	<1.06	ug/L	1.05	E8;D4	1.06	10		12/18/2020 19:58
	2,4-Dichlorophenol	<1.44	ug/L	1.05	E8;D4	1.44	10		12/18/2020 19:58
	2,4-Dimethylphenol	<2.70	ug/L	1.05	E8;D4	2.70	10		12/18/2020 19:58
	2-Methyl-4,6-dinitrophenol	<1.33	ug/L	1.05	E8;D4	1.33	10		12/18/2020 19:58
	2,4-Dinitrophenol	<0.97	ug/L	1.05	E8;D4	0.97	10		12/18/2020 19:58
	2-Nitrophenol	<0.99	ug/L	1.05	E8;D4	0.99	10		12/18/2020 19:58
	4-Nitrophenol	16.7	ug/L	1.05	D4;N1	1.78	10		12/18/2020 19:58
	4-Nitrophenol Case Narrative: Matrix causing elevated value.								
	4-Chloro-3-methylphenol	<1.41	ug/L	1.05	E8;D4	1.41	10		12/18/2020 19:58
	Pentachlorophenol	<2.02	ug/L	1.05	E8;D4	2.02	10		12/18/2020 19:58
	Phenol	3.3	ug/L	1.05	D4;E4	1.33	10		12/18/2020 19:58
	2,4,6-Trichlorophenol	<1.69	ug/L	1.05	E8;D4	1.69	10		12/18/2020 19:58
	2,4,6-Tribromophenol	131	% Recovery	1					12/18/2020 19:58

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Water Services Laboratory
ADHS Lic. # AZ0088
2474 S. 22nd Ave
(602) 534-2960

AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089528**

Sample ID : AC033
Sampling Date/Time: 12/10/2020 07:51
Approval Date : 01/06/2021 10:50
Received Date/Time: 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.8-1.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
	Dibromooctafluorobiphenyl	65	% Recovery	1					12/18/2020 19:58
	4,4-Dibromobiphenyl	65	% Recovery	1					12/18/2020 19:58

625.1-STORM Case Narrative: Batch QC did not meet laboratory acceptance criteria in the 2020089498 LFM/LFMD for multiple compounds. The LFMD RPD could not be calculated for 3,3-Dichlorobenzidine due to the results being zero. Dilution factor = 1.05X from ext.

Extraction - 625.1	EPA 625.1	COMPLETE	CC	12/16/2020 00:00

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089529**

Sample ID : AC033
Sampling Date/Time: 12/10/2020 07:51
Approval Date : 12/31/2020 07:13
Received Date/Time: 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.8-1.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Silver - Total Recoverable	EPA 200.8	<0.00125	mg/L	5	D1;E8	0.00125	0.0050	SS	12/28/2020 00:00
Arsenic - Total Recoverable	EPA 200.8	0.0028	mg/L	5	D1;E4	0.00245	0.0050	SS	12/28/2020 00:00
Barium - Total Recoverable	EPA 200.8	0.090	mg/L	5	D1	0.00340	0.0050	SS	12/29/2020 00:00
Beryllium - Total Recoverable	EPA 200.8	<0.00180	mg/L	5	D1;E8	0.00180	0.0050	SS	12/29/2020 00:00
Cadmium - Total Recoverable	EPA 200.8	<0.00210	mg/L	5	D1;E8	0.00210	0.0050	SS	12/28/2020 00:00
Chromium - Total Recoverable	EPA 200.8	<0.0125	mg/L	5	D1;E8	0.0125	0.025	SS	12/29/2020 00:00
Copper - Total Recoverable	EPA 200.8	0.0412	mg/L	5	D1	0.00455	0.0050	SS	12/29/2020 00:00
Nickel - Total Recoverable	EPA 200.8	0.0124	mg/L	5	D1	0.00315	0.0050	SS	12/29/2020 00:00
Lead - Total Recoverable	EPA 200.8	0.0135	mg/L	5	D1	0.00170	0.0050	SS	12/28/2020 00:00
Antimony - Total Recoverable	EPA 200.8	0.0030	mg/L	5	D1;E4	0.00200	0.0050	SS	12/28/2020 00:00
Selenium - Total Recoverable	EPA 200.8	<0.00405	mg/L	5	D1;E8	0.00405	0.0050	SS	12/28/2020 00:00
Thallium - Total Recoverable	EPA 200.8	<0.00275	mg/L	5	D1;E8	0.00275	0.0050	SS	12/28/2020 00:00
Zinc - Total Recoverable	EPA 200.8	0.223	mg/L	5	D1	0.0380	0.050	SS	12/29/2020 00:00

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2474 S. 22nd Ave
(602) 534-2960
AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089529**

Sample ID : AC033
Sampling Date/Time: 12/10/2020 07:51
Approval Date : 12/31/2020 07:13
Received Date/Time: 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.8-1.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Metals Prep - TR	SM22 3030 F ¤	COMPLETE						CG	12/21/2020 17:06
Mercury - Total	EPA 245.1	<0.000118	mg/L	2	D1;E8	0.000118	0.0002	GA	12/23/2020 09:36
Mercury - Total Case Narrative: Batch LFM (2020087987) %R = 15.9%. Acceptance range 70-130%.									
pH<2Verification	pH <2 Verification	COMPLETE						CG	12/14/2020 13:01

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089530**

Sample ID : AC033
Sampling Date/Time: 12/10/2020 07:51
Approval Date : 12/30/2020 11:58
Received Date/Time: 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.8-1.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Filtration Prep Dissolved Metals	SM22 3030 B	COMPLETE						SS	12/16/2020 11:30
Filtration Prep Dissolved Metals Case Narrative: COC states that the sample is field-filtered.									
Hardness - Total	SM22 2340 B							CG	
Hardness - Total		69.6	mg/L	1		1.31	16.6		12/22/2020 18:13
Calcium Hardness		54.9	mg/L	1		1.00	12.5		12/22/2020 18:13
Calcium - Total Recoverable	EPA 200.7	22.0	mg/L	2	D1	0.80	10.00	CG	12/22/2020 18:13
Magnesium - Total Recoverable	EPA 200.7	3.55	mg/L	2	D1	0.152	2.00	CG	12/22/2020 18:13
Silver - Dissolved	EPA 200.8	<0.0050	mg/L	5	D1	0.00125	0.0050	SS	12/28/2020 00:00
Arsenic - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00098	0.0020	SS	12/17/2020 00:00
Barium - Dissolved	EPA 200.8	0.026	mg/L	2	D1	0.00136	0.0020	SS	12/17/2020 00:00
Beryllium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00072	0.0020	SS	12/17/2020 00:00
Cadmium - Dissolved	EPA 200.8	<0.0010	mg/L	1		0.00042	0.0010	SS	12/17/2020 00:00
Chromium - Dissolved	EPA 200.8	<0.010	mg/L	2	D1	0.0028	0.010	SS	12/17/2020 00:00
Copper - Dissolved	EPA 200.8	0.0210	mg/L	1		0.00091	0.0010	SS	12/17/2020 00:00

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089530**

Sample ID : AC033
Sampling Date/Time: 12/10/2020 07:51
Approval Date : 12/30/2020 11:58
Received Date/Time: 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.8-1.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Nickel - Dissolved	EPA 200.8	0.0064	mg/L	2	D1	0.00126	0.0020	SS	12/17/2020 00:00
Lead - Dissolved	EPA 200.8	0.0012	mg/L	1		0.00034	0.0010	SS	12/17/2020 00:00
Antimony - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00080	0.0020	SS	12/17/2020 00:00
Selenium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00162	0.0020	SS	12/17/2020 00:00
Thallium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00110	0.0020	SS	12/17/2020 00:00
Zinc - Dissolved	EPA 200.8	0.0940	mg/L	1		0.0076	0.010	SS	12/17/2020 00:00
Metals Prep - TR	SM22 3030 F ¤	COMPLETE						CG	12/21/2020 17:06
Mercury - Diss	EPA 245.1	<0.0002	mg/L	2	D1	0.000118	0.0002	GA	12/23/2020 09:39
Mercury - Diss Case Narrative: Batch LFM (2020087987) %R = 15.9%. Acceptance range 70-130%.									
pH<2Verification	pH <2 Verification	COMPLETE						CG	12/14/2020 13:01

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089531**

Sample ID : AC033
Sampling Date/Time : 12/10/2020 07:51
Approval Date : 12/22/2020 13:40
Received Date/Time : 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.8-1.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Ammonia	EPA 350.1	2.1	mg/L	1		0.08	0.20	CA	12/15/2020 10:03
Total Kjeldahl Nitrogen	EPA 351.2	7.2	mg/L	1		0.16	0.25	CA	12/21/2020 10:46

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089532**

Sample ID : AC033
Sampling Date/Time: 12/10/2020 07:51
Approval Date : 12/22/2020 12:40
Received Date/Time: 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.8-1.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
BOD, 5 Day	SM22 5210 B	51	mg/L	1		2	2	DT	12/11/2020 08:25
COD	HACH-8000	300	mg/L	1		11.69	50	LA	12/11/2020 14:15
Suspended Solids	SM22 2540 D	98.0	mg/L	20		50	50	BM	12/11/2020 12:57
Total Dissolved Solids	SM22 2540 C	220	mg/L	1		10	10	BM	12/11/2020 15:05

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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01/01/2021 00:28

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089533**

Sample ID : AC033
Sampling Date/Time : 12/10/2020 07:51
Approval Date : 12/31/2020 12:58
Received Date/Time : 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.8-1.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
O-Phosphate-P	EPA 300.0	0.5	mg/L	1		0.024	0.1	SS	12/11/2020 02:44
Nitrate-N	EPA 300.0	1.4	mg/L	1		0.014	0.1	SS	12/11/2020 02:44
Nitrite-N	EPA 300.0	<0.1	mg/L	1		0.014	0.1	SS	12/11/2020 02:44

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089534**

Sample ID	: AC033			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 07:51	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 01/12/2021 10:23	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 14:32			Delivered	: Scott Stirek
Sample Type	: COMPOS			Receipt Temperature (°C)	: 0.8-1.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Phosphorus - Total	SM 4500 P E	0.96	mg/L	1			0.020	TAM	12/22/2020 12:53

Phosphorus - Total Case Narrative: No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

non-NELAC Outside Lab: Test America - ADHS Lic. # AZ0728

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089535**

Sample ID : AC033
Sampling Date/Time : 12/10/2020 11:45
Approval Date : 12/29/2020 15:46
Received Date/Time : 12/10/2020 14:32
Sample Type : GRAB

Temperature : 16.4 Deg. C
pH : 6.05

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.8-1.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
	Chloromethane	<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 16:13
	Vinyl Chloride	<0.47	ug/L	1	E8	0.47	1.0		12/16/2020 16:13
	Bromomethane	<0.39	ug/L	1	E8	0.39	1.0		12/16/2020 16:13
	Chloroethane	<0.66	ug/L	1	E8	0.66	1.0		12/16/2020 16:13
	Trichlorofluoromethane	<0.43	ug/L	1	E8	0.43	1.0		12/16/2020 16:13
	1,1-Dichloroethylene	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 16:13
	Methylene chloride	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 16:13
	trans-1,2-Dichloroethene	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 16:13
	1,1-Dichloroethane	<0.30	ug/L	1	E8	0.30	1.0		12/16/2020 16:13
	Chloroform	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 16:13
	1,2-Dichloroethane	<0.28	ug/L	1	E8	0.28	1.0		12/16/2020 16:13
	1,1,1-Trichloroethane	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 16:13
	Carbon Tetrachloride	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 16:13
	Benzene	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 16:13
	1,2-Dichloropropane	<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 16:13
	Trichloroethene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 16:13
	Bromodichloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 16:13
	cis-1,3-Dichloropropene	<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 16:13
	trans-1,3-Dichloropropene	<0.19	ug/L	1	E8	0.19	1.0		12/16/2020 16:13
	1,1,2-Trichloroethane	<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 16:13
	Toluene	<0.35	ug/L	1	E8	0.35	1.0		12/16/2020 16:13
	Dibromochloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 16:13
	Tetrachloroethylene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 16:13
	Chlorobenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 16:13
	Ethylbenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 16:13

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089535**

Sample ID : AC033
Sampling Date/Time: 12/10/2020 11:45
Approval Date : 12/29/2020 15:46
Received Date/Time: 12/10/2020 14:32
Sample Type : GRAB

Temperature : 16.4 Deg. C
pH : 6.05

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.8-1.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
m- & p-Xylene		<0.84	ug/L	1	E8	0.84	2.0		12/16/2020 16:13
Bromoform		<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 16:13
o-Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 16:13
1,1,2,2-Tetrachloroethane		<0.46	ug/L	1	E8	0.46	1.0		12/16/2020 16:13
1,3-Dichlorobenzene		<0.56	ug/L	1	E8	0.56	1.0		12/16/2020 16:13
1,2-Dichlorobenzene		<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 16:13
1,4-Dichlorobenzene		<0.50	ug/L	1	E8	0.50	1.0		12/16/2020 16:13
Pentafluorobenzene (Surrogate1)		97	% Recovery	1					12/16/2020 16:13
Fluorobenzene (Surrogate2)		98	% Recovery	1					12/16/2020 16:13
4-Bromofluorobenzene (Surrogate)		90	% Recovery	1					12/16/2020 16:13
1,3-Dichloropropene (cis & trans)		<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 16:13
Total Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 16:13
Method 8260B Stormwater	EPA 8260B							TH	
1,3,5-Trimethylbenzene		<1.0	ug/L	1		0.18	1.0		12/16/2020 16:13
1,2,4-Trimethylbenzene		<1.0	ug/L	1		0.20	1.0		12/16/2020 16:13
Pentafluorobenzene (Surrogate1)		97	% Recovery	1					12/16/2020 16:13
Fluorobenzene (Surrogate2)		98	% Recovery	1					12/16/2020 16:13
4-Bromofluorobenzene (Surrogate)		90	% Recovery	1					12/16/2020 16:13

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089536**

Sample ID : AC033
Sampling Date/Time: 12/10/2020 11:45
Approval Date : 12/31/2020 14:24
Received Date/Time: 12/10/2020 14:32
Sample Type : GRAB

Temperature : 16.4 Deg. C
pH : 6.05

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.8-1.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
GC/MS-Method 624-for Acrolein	EPA 624.1 ¤							AL	
Acrolein		<0.950	ug/L	1	E8	0.950	1.0		12/11/2020 14:54
Acrylonitrile		<0.524	ug/L	1	E8	0.524	1.0		12/11/2020 14:54
Pentafluorobenzene (Surrogate1)		100	% Recovery	1					12/11/2020 14:54
Fluorobenzene (Surrogate2)		101	% Recovery	1					12/11/2020 14:54
4-Bromofluorobenzene (Surrogate)		106	% Recovery	1					12/11/2020 14:54

GC/MS-Method 624-for Acrolein and Acrylonitrile Samples Case Narrative: The batch QC did not meet acceptance criteria in 2020089566 LFM/LFMD for acrolein (27%,33%) and acrylonitrile (24%,30%); control limits: 40-160%.

GC/MS-Method 624.1for 2-	EPA 624.1 ¤							AL	
2-Chloroethyl vinyl ether		<0.333	ug/L	1	E8	0.333	1.0		12/11/2020 14:54
Pentafluorobenzene (Surrogate1)		100	% Recovery	1					12/11/2020 14:54
Fluorobenzene (Surrogate2)		101	% Recovery	1					12/11/2020 14:54
4-Bromofluorobenzene (Surrogate)		106	% Recovery	1					12/11/2020 14:54

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089537**

Sample ID	: AC033			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 11:45	Temperature	: 16.4 Deg. C	Account Number	: Stormwater
Approval Date	: 12/18/2020 09:45	pH	: 6.05	Sampled by	: USGS
Received Date/Time	: 12/10/2020 14:32			Delivered	: Scott Stirek
Sample Type	: GRAB			Receipt Temperature (°C)	: 0.8-1.7

Test		Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Coliform - E. Coli		SM22 9223 B							DC	
	Total Coliform		>241960	MPN/100mL	1		1	1		12/10/2020 16:31
	E. coli		3320	MPN/100mL	1		1	1		12/10/2020 16:31

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089538**

Sample ID	: AC033			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 11:45	Temperature	: 16.4 Deg. C	Account Number	: Stormwater
Approval Date	: 12/22/2020 12:42	pH	: 6.05	Sampled by	: USGS
Received Date/Time	: 12/10/2020 14:32			Delivered	: Scott Stirek
Sample Type	: GRAB			Receipt Temperature (°C)	: 0.8-1.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Cyanide	EPA 335.4	<0.005	mg/L	1	N1	0.0019	0.005	DL	12/16/2020 10:47

Cyanide Case Narrative: 2020089733 spike recovery = 84%, CL = 90-110%

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089539**

Sample ID	: AC033			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 11:45	Temperature	: 16.4 Deg. C	Account Number	: Stormwater
Approval Date	: 01/12/2021 10:23	pH	: 6.05	Sampled by	: USGS
Received Date/Time	: 12/10/2020 14:32			Delivered	: Scott Stirek
Sample Type	: GRAB			Receipt Temperature (°C)	: 0.8-1.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
EPA 1664 With Silica Gel	EPA 1664B							TAMD	
Hexane Extractable Material		<5.6	mg/L	1			5.6		12/23/2020 16:04
Hexane Extractable Material - Silica Gel		<6.7	mg/L	1	L4		6.7		12/23/2020 16:04

EPA 1664 With Silica Gel Treatment Case Narrative: General Chemistry
Method 1664B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 280-521546 and analytical batch 280-521638.
Method 1664B: Analysis for Hexane Extractable Material (HEM) was performed for the following samples: 2020089569 (550-154558-2), 2020089539 (550-154558-4), 2020089554 (550-154558-6) and 2020089524 (550-154558-9). Since the HEM result(s) was below the reporting limit (RL), the result(s) for Silica Gel Treated - Hexane Extractable Material (SGT-HEM) was reported as a non-detect. All HEM quality control criteria were met.
No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

non-NELAC Outside Lab: Test America - ADHS Lic. # AZ0713

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089540**

Sample ID : AC033 Trip Blank
Sampling Date/Time: 12/10/2020 11:45
Approval Date : 12/29/2020 15:46
Received Date/Time: 12/10/2020 14:32
Sample Type : TIME

Temperature : 16.4 Deg. C
pH : 6.05

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 0.8-1.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
	Chloromethane	<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 16:43
	Vinyl Chloride	<0.47	ug/L	1	E8	0.47	1.0		12/16/2020 16:43
	Bromomethane	<0.39	ug/L	1	E8	0.39	1.0		12/16/2020 16:43
	Chloroethane	<0.66	ug/L	1	E8	0.66	1.0		12/16/2020 16:43
	Trichlorofluoromethane	<0.43	ug/L	1	E8	0.43	1.0		12/16/2020 16:43
	1,1-Dichloroethylene	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 16:43
	Methylene chloride	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 16:43
	trans-1,2-Dichloroethene	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 16:43
	1,1-Dichloroethane	<0.30	ug/L	1	E8	0.30	1.0		12/16/2020 16:43
	Chloroform	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 16:43
	1,2-Dichloroethane	<0.28	ug/L	1	E8	0.28	1.0		12/16/2020 16:43
	1,1,1-Trichloroethane	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 16:43
	Carbon Tetrachloride	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 16:43
	Benzene	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 16:43
	1,2-Dichloropropane	<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 16:43
	Trichloroethene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 16:43
	Bromodichloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 16:43
	cis-1,3-Dichloropropene	<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 16:43
	trans-1,3-Dichloropropene	<0.19	ug/L	1	E8	0.19	1.0		12/16/2020 16:43
	1,1,2-Trichloroethane	<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 16:43
	Toluene	<0.35	ug/L	1	E8	0.35	1.0		12/16/2020 16:43
	Dibromochloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 16:43
	Tetrachloroethylene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 16:43
	Chlorobenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 16:43
	Ethylbenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 16:43

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089540**

Sample ID	: AC033 Trip Blank			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 11:45	Temperature	: 16.4 Deg. C	Account Number	: Stormwater
Approval Date	: 12/29/2020 15:46	pH	: 6.05	Sampled by	: USGS
Received Date/Time	: 12/10/2020 14:32			Delivered	: Scott Stirek
Sample Type	: TIME			Receipt Temperature (°C)	: 0.8-1.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
m- & p-Xylene		<0.84	ug/L	1	E8	0.84	2.0		12/16/2020 16:43
Bromoform		<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 16:43
o-Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 16:43
1,1,2,2-Tetrachloroethane		<0.46	ug/L	1	E8	0.46	1.0		12/16/2020 16:43
1,3-Dichlorobenzene		<0.56	ug/L	1	E8	0.56	1.0		12/16/2020 16:43
1,2-Dichlorobenzene		<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 16:43
1,4-Dichlorobenzene		<0.50	ug/L	1	E8	0.50	1.0		12/16/2020 16:43
Pentafluorobenzene (Surrogate1)		97	% Recovery	1					12/16/2020 16:43
Fluorobenzene (Surrogate2)		101	% Recovery	1					12/16/2020 16:43
4-Bromofluorobenzene (Surrogate)		94	% Recovery	1					12/16/2020 16:43
1,3-Dichloropropene (cis & trans)		<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 16:43
Total Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 16:43
Method 8260B Stormwater	EPA 8260B							TH	
1,3,5-Trimethylbenzene		<1.0	ug/L	1		0.18	1.0		12/16/2020 16:43
1,2,4-Trimethylbenzene		<1.0	ug/L	1		0.20	1.0		12/16/2020 16:43
Pentafluorobenzene (Surrogate1)		97	% Recovery	1					12/16/2020 16:43
Fluorobenzene (Surrogate2)		101	% Recovery	1					12/16/2020 16:43
4-Bromofluorobenzene (Surrogate)		94	% Recovery	1					12/16/2020 16:43

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089541**

Sample ID	: AC033 Trip Blank			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 11:45	Temperature	: 16.4 Deg. C	Account Number	: Stormwater
Approval Date	: 12/31/2020 14:24	pH	: 6.05	Sampled by	: USGS
Received Date/Time	: 12/10/2020 14:32			Delivered	: Scott Stirek
Sample Type	: TIME			Receipt Temperature (°C)	: 0.8-1.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
GC/MS-Method 624-for Acrolein	EPA 624.1 ¤							AL	
Acrolein		<0.950	ug/L	1	E8	0.950	1.0		12/11/2020 18:50
Acrylonitrile		<0.524	ug/L	1	E8	0.524	1.0		12/11/2020 18:50
Pentafluorobenzene (Surrogate1)		96	% Recovery	1					12/11/2020 18:50
Fluorobenzene (Surrogate2)		98	% Recovery	1					12/11/2020 18:50
4-Bromofluorobenzene (Surrogate)		95	% Recovery	1					12/11/2020 18:50

GC/MS-Method 624-for Acrolein and Acrylonitrile Samples Case Narrative: The batch QC did not meet acceptance criteria in 2020089566 LFM/LFMD for acrolein (27%,33%) and acrylonitrile (24%,30%); control limits: 40-160%.

GC/MS-Method 624.1for 2-	EPA 624.1 ¤							AL	
2-Chloroethyl vinyl ether		<0.333	ug/L	1	E8	0.333	1.0		12/11/2020 18:50
Pentafluorobenzene (Surrogate1)		96	% Recovery	1					12/11/2020 18:50
Fluorobenzene (Surrogate2)		98	% Recovery	1					12/11/2020 18:50
4-Bromofluorobenzene (Surrogate)		95	% Recovery	1					12/11/2020 18:50

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089557**

Sample ID : AC033 Replicant
Sampling Date/Time : 12/10/2020 07:51
Approval Date : 01/22/2021 14:21
Received Date/Time : 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 1.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
608.3-STORM	EPA 608.3							JG	
alpha-BHC		<0.0031	ug/L	1	E8;N1	0.0031	0.005		01/15/2021 02:29
gamma-BHC		<0.0034	ug/L	1	E8;N1	0.0034	0.005		01/15/2021 02:29
beta-BHC		<0.1802	ug/L	1	E8;N1;V9	0.1802	0.5		01/15/2021 02:29
d-BHC		<0.0155	ug/L	1	E8;N1;V9	0.0155	0.02		01/15/2021 02:29
Heptachlor		<0.0297	ug/L	1	E8;N1;V9	0.0297	0.05		01/15/2021 02:29
Aldrin		<0.0038	ug/L	1	E8;N1;V9	0.0038	0.005		01/15/2021 02:29
Heptachlor Epoxide		<0.0015	ug/L	1	E8;N1;V9	0.0015	0.005		01/15/2021 02:29
4,4'-DDE		<0.0034	ug/L	1	E8;N1;V9	0.0034	0.005		01/15/2021 02:29
Endosulfan I		<0.0058	ug/L	1	E8;N1;V9	0.0058	0.020		01/15/2021 02:29
Dieldrin		<0.0037	ug/L	1	E8;N1	0.0037	0.005		01/15/2021 02:29
Endrin		<0.0082	ug/L	1	E8;N1	0.0082	0.02		01/15/2021 02:29
4,4'-DDD		<0.0022	ug/L	1	E8;N1;V9	0.0022	0.005		01/15/2021 02:29
Endosulfan II		<0.0021	ug/L	1	E8;N1;V9	0.0021	0.005		01/15/2021 02:29
4,4'-DDT		<0.0014	ug/L	1	E8;N1;V9	0.0014	0.005		01/15/2021 02:29
Endrin Aldehyde		<0.003	ug/L	1	E8;N1	0.003	0.005		01/15/2021 02:29
Endosulfan Sulfate		<0.0018	ug/L	1	E8;N1	0.0018	0.005		01/15/2021 02:29
Chlordane		<0.19	ug/L	1	E8;N1	0.19	0.5		01/15/2021 02:29
Toxaphene		<0.467	ug/L	1	E8;N1	0.467	1.0		01/15/2021 02:29
Arochlor-1016		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:29
Arochlor-1221		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:29
Arochlor-1232		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:29
Arochlor-1242		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:29
Arochlor-1248		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:29
Arochlor-1254		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:29
Arochlor-1260		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:29

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089557**

Sample ID : AC033 Replicant
Sampling Date/Time : 12/10/2020 07:51
Approval Date : 01/22/2021 14:21
Received Date/Time : 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 1.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
608.3-STORM	EPA 608.3							JG	
Decachlorobiphenyl		86	% Recovery	1					01/15/2021 02:29
Total Endosulfan		<0.0021	ug/L	1	E8;N1	0.0021	0.005		01/15/2021 02:29
TOTAL PCB		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:29
Aldrin/Dieldrin		<0.0037	ug/L	1	E8;N1	0.0037	0.005		01/15/2021 02:29

608.3-STORM Case Narrative: Batch QC did not meet laboratory acceptance criteria in sample 2020089497LFM/LFMD for multiple analytes percent recovery. The closing CCV did not meet laboratory acceptance criteria for multiple analytes percent recovery. The sample pH was not checked within 72 hours of receipt.

Extraction - 608.3	EPA 608.3	COMPLETE	JG	12/15/2020 00:00

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089558**

Sample ID : AC033 Replicant
Sampling Date/Time: 12/10/2020 07:51
Approval Date : 01/06/2021 10:50
Received Date/Time: 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 1.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
	Acenaphthene	<0.65	ug/L	1	E8	0.65	10		12/18/2020 20:45
	Acenaphthylene	<0.56	ug/L	1	E8	0.56	10		12/18/2020 20:45
	Anthracene	<0.52	ug/L	1	E8	0.52	10		12/18/2020 20:45
	Benzo(a)anthracene	<0.77	ug/L	1	E8	0.77	10		12/18/2020 20:45
	Benzo(a)pyrene	<1.50	ug/L	1	E8	1.50	10		12/18/2020 20:45
	Benzo(b)fluoranthene	<2.36	ug/L	1	E8	2.36	10		12/18/2020 20:45
	Benzo(ghi)perylene	<1.83	ug/L	1	E8	1.83	10		12/18/2020 20:45
	Benzo(k)fluoranthene	<1.83	ug/L	1	E8	1.83	10		12/18/2020 20:45
	Chrysene	<0.77	ug/L	1	E8	0.77	10		12/18/2020 20:45
	Dibenzo(a,h)anthracene	<1.58	ug/L	1	E8	1.58	10		12/18/2020 20:45
	1,2-Dichlorobenzene	<0.85	ug/L	1	E8;T2	0.85	10		12/18/2020 20:45
	1,3-Dichlorobenzene	<0.87	ug/L	1	E8;T2	0.87	10		12/18/2020 20:45
	1,4-Dichlorobenzene	<0.93	ug/L	1	E8;T2	0.93	10		12/18/2020 20:45
	3,3'-Dichlorobenzidine	<5.94	ug/L	1	E8	5.94	50		12/18/2020 20:45
	Diethyl phthalate	<7.57	ug/L	1	E8	7.57	10		12/18/2020 20:45
	Dimethyl phthalate	<0.46	ug/L	1	E8	0.46	20		12/18/2020 20:45
	Di-n-butyl phthalate	<0.95	ug/L	1	E8	0.95	10		12/18/2020 20:45
	2,4-Dinitrotoluene	<0.80	ug/L	1	E8	0.80	10		12/18/2020 20:45
	2,6-Dinitrotoluene	<0.62	ug/L	1	E8	0.62	10		12/18/2020 20:45
	Di-n-octyl phthalate	<2.32	ug/L	1	E8	2.32	10		12/18/2020 20:45
	1,2-Diphenyl hydrazine (as azobenzene)	<1.10	ug/L	1	E8;T2	1.10	10		12/18/2020 20:45
	Fluoranthene	0.6	ug/L	1	E4	0.48	10		12/18/2020 20:45
	Fluorene	<0.48	ug/L	1	E8	0.48	10		12/18/2020 20:45
	Hexachlorobenzene	<0.35	ug/L	1	E8	0.35	10		12/18/2020 20:45
	Hexachlorobutadiene	<0.44	ug/L	1	E8	0.44	10		12/18/2020 20:45

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089558**

Sample ID : AC033 Replicant
Sampling Date/Time: 12/10/2020 07:51
Approval Date : 01/06/2021 10:50
Received Date/Time: 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 1.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
	Hexachlorocyclopentadiene	<1.26	ug/L	1	E8;T2	1.26	10		12/18/2020 20:45
	Hexachloroethane	<0.34	ug/L	1	E8	0.34	10		12/18/2020 20:45
	Indeno(1,2,3-cd)pyrene	<2.27	ug/L	1	E8	2.27	10		12/18/2020 20:45
	Isophorone	<1.38	ug/L	1	E8	1.38	10		12/18/2020 20:45
	Naphthalene	<0.35	ug/L	1	E8	0.35	10		12/18/2020 20:45
	Nitrobenzene	<0.86	ug/L	1	E8	0.86	10		12/18/2020 20:45
	N-Nitrosodimethylamine	<0.67	ug/L	1	E8;T2	0.67	10		12/18/2020 20:45
	N-Nitrosodi-n-propylamine	<2.38	ug/L	1	E8	2.38	10		12/18/2020 20:45
	N-Nitrosodiphenylamine	<0.84	ug/L	1	E8;T2	0.84	10		12/18/2020 20:45
	Phenanthrene	<0.30	ug/L	1	E8	0.30	10		12/18/2020 20:45
	Pyrene	0.5	ug/L	1	E4	0.21	10.0		12/18/2020 20:45
	1,2,4-Trichlorobenzene	<1.00	ug/L	1	E8	1.00	10		12/18/2020 20:45
	2-Chlorophenol	<1.01	ug/L	1	E8	1.01	10		12/18/2020 20:45
	2,4-Dichlorophenol	<1.37	ug/L	1	E8	1.37	10		12/18/2020 20:45
	2,4-Dimethylphenol	<2.57	ug/L	1	E8	2.57	10		12/18/2020 20:45
	2-Methyl-4,6-dinitrophenol	<1.27	ug/L	1	E8	1.27	10		12/18/2020 20:45
	2,4-Dinitrophenol	<0.92	ug/L	1	E8	0.92	10		12/18/2020 20:45
	2-Nitrophenol	<0.94	ug/L	1	E8	0.94	10		12/18/2020 20:45
	4-Nitrophenol	14.9	ug/L	1	N1	1.70	10		12/18/2020 20:45
	4-Nitrophenol Case Narrative: Matrix causing elevated value.								
	4-Chloro-3-methylphenol	<1.34	ug/L	1	E8	1.34	10		12/18/2020 20:45
	Pentachlorophenol	<1.92	ug/L	1	E8	1.92	10		12/18/2020 20:45
	Phenol	3.3	ug/L	1	E4	1.27	10		12/18/2020 20:45
	2,4,6-Trichlorophenol	<1.61	ug/L	1	E8	1.61	10		12/18/2020 20:45
	2,4,6-Tribromophenol	127	% Recovery	1					12/18/2020 20:45

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089558**

Sample ID : AC033 Replicant
Sampling Date/Time: 12/10/2020 07:51
Approval Date : 01/06/2021 10:50
Received Date/Time: 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 1.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	12/18/2020 20:45
	Dibromooctafluorobiphenyl	57	% Recovery	1					12/18/2020 20:45
	4,4-Dibromobiphenyl	56	% Recovery	1					

625.1-STORM Case Narrative: Batch QC did not meet laboratory acceptance criteria in the 2020089498 LFM/LFMD for multiple compounds. The LFMD RPD could not be calculated for 3,3-Dichlorobenzidine due to the results being zero.

Extraction - 625.1	EPA 625.1	COMPLETE	CC	12/16/2020 00:00

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089559**

Sample ID : AC033 Replicant
Sampling Date/Time : 12/10/2020 07:51
Approval Date : 12/31/2020 07:13
Received Date/Time : 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 1.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Metals Prep - TR	SM22 3030 F ¤	COMPLETE						CG	12/21/2020 17:06
Mercury - Total	EPA 245.1	<0.000118	mg/L	2	D1;E8	0.000118	0.0002	GA	12/23/2020 09:50
pH<2Verification	pH <2 Verification	COMPLETE						CG	12/14/2020 13:01

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089560**

Sample ID : AC033 Replicant
Sampling Date/Time: 12/10/2020 07:51
Approval Date : 12/30/2020 11:58
Received Date/Time: 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 1.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Filtration Prep Dissolved Metals	SM22 3030 B	COMPLETE						SS	12/16/2020 11:30
Filtration Prep Dissolved Metals Case Narrative: COC states that the sample is field-filtered.									
Hardness - Total	SM22 2340 B							CG	
Hardness - Total		70.1	mg/L	1		1.31	16.6		12/22/2020 18:49
Calcium Hardness		55.4	mg/L	1		1.00	12.5		12/22/2020 18:49
Calcium - Total Recoverable	EPA 200.7	22.2	mg/L	2	D1	0.80	10.00	CG	12/22/2020 18:49
Magnesium - Total Recoverable	EPA 200.7	3.56	mg/L	2	D1	0.152	2.00	CG	12/22/2020 18:49
Silver - Dissolved	EPA 200.8	<0.0050	mg/L	5	D1	0.00125	0.0050	SS	12/28/2020 00:00
Arsenic - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00098	0.0020	SS	12/17/2020 00:00
Barium - Dissolved	EPA 200.8	0.027	mg/L	2	D1	0.00136	0.0020	SS	12/17/2020 00:00
Beryllium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00072	0.0020	SS	12/17/2020 00:00
Cadmium - Dissolved	EPA 200.8	<0.0010	mg/L	1		0.00042	0.0010	SS	12/17/2020 00:00
Chromium - Dissolved	EPA 200.8	<0.010	mg/L	2	D1	0.0028	0.010	SS	12/17/2020 00:00
Copper - Dissolved	EPA 200.8	0.0241	mg/L	1		0.00091	0.0010	SS	12/17/2020 00:00

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089560**

Sample ID : AC033 Replicant
Sampling Date/Time: 12/10/2020 07:51
Approval Date : 12/30/2020 11:58
Received Date/Time: 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 1.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Nickel - Dissolved	EPA 200.8	0.0067	mg/L	2	D1	0.00126	0.0020	SS	12/17/2020 00:00
Lead - Dissolved	EPA 200.8	0.0012	mg/L	1		0.00034	0.0010	SS	12/17/2020 00:00
Antimony - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00080	0.0020	SS	12/17/2020 00:00
Selenium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00162	0.0020	SS	12/17/2020 00:00
Thallium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00110	0.0020	SS	12/17/2020 00:00
Zinc - Dissolved	EPA 200.8	0.0933	mg/L	1		0.0076	0.010	SS	12/17/2020 00:00
Metals Prep - TR	SM22 3030 F ¤	COMPLETE						CG	12/21/2020 17:06
Mercury - Diss	EPA 245.1	<0.0002	mg/L	2	D1	0.000118	0.0002	GA	12/23/2020 09:57
pH<2Verification	pH <2 Verification	COMPLETE						CG	12/14/2020 13:01

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089561**

Sample ID : AC033 Replicant
Sampling Date/Time : 12/10/2020 07:51
Approval Date : 12/22/2020 13:40
Received Date/Time : 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 1.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Ammonia	EPA 350.1	2.1	mg/L	1	M1	0.08	0.20	CA	12/15/2020 10:03
Ammonia Case Narrative: LFM %R=113% (Acceptance Range 90-110)									
Total Kjeldahl Nitrogen	EPA 351.2	7.5	mg/L	1		0.16	0.25	CA	12/21/2020 10:46

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089562**

Sample ID : AC033 Replicant
Sampling Date/Time : 12/10/2020 07:51
Approval Date : 12/22/2020 12:40
Received Date/Time : 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 1.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
BOD, 5 Day	SM22 5210 B	52	mg/L	1		2	2	DT	12/11/2020 08:25
COD	HACH-8000	370	mg/L	1		11.69	50	LA	12/11/2020 14:15
Suspended Solids	SM22 2540 D	200	mg/L	40		100	100	BM	12/11/2020 12:57
Total Dissolved Solids	SM22 2540 C	216	mg/L	1		10	10	BM	12/11/2020 15:05

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089563**

Sample ID : AC033 Replicant
Sampling Date/Time: 12/10/2020 07:51
Approval Date : 12/31/2020 12:58
Received Date/Time: 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 1.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
O-Phosphate-P	EPA 300.0	0.5	mg/L	1		0.024	0.1	SS	12/11/2020 07:01
Nitrate-N	EPA 300.0	1.4	mg/L	1		0.014	0.1	SS	12/11/2020 07:01
Nitrite-N	EPA 300.0	<0.1	mg/L	1		0.014	0.1	SS	12/11/2020 07:01

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ10000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089564**

Sample ID : AC033 Replicant
Sampling Date/Time : 12/10/2020 07:51
Approval Date : 01/12/2021 10:23
Received Date/Time : 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 1.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Phosphorus - Total	SM 4500 P E	0.62	mg/L	1			0.020	TAM	12/22/2020 12:53

Phosphorus - Total Case Narrative: No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

non-NELAC Outside Lab: Test America - ADHS Lic. # AZ0728

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089565**

Sample ID : AC033 Replicant
Sampling Date/Time: 12/10/2020 11:46
Approval Date : 12/29/2020 15:46
Received Date/Time: 12/10/2020 14:32
Sample Type : GRAB

Temperature : 16.4 Deg. C
pH : 6.05

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 1.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
	Chloromethane	<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 18:11
	Vinyl Chloride	<0.47	ug/L	1	E8	0.47	1.0		12/16/2020 18:11
	Bromomethane	<0.39	ug/L	1	E8	0.39	1.0		12/16/2020 18:11
	Chloroethane	<0.66	ug/L	1	E8	0.66	1.0		12/16/2020 18:11
	Trichlorofluoromethane	<0.43	ug/L	1	E8	0.43	1.0		12/16/2020 18:11
	1,1-Dichloroethylene	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 18:11
	Methylene chloride	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 18:11
	trans-1,2-Dichloroethene	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 18:11
	1,1-Dichloroethane	<0.30	ug/L	1	E8	0.30	1.0		12/16/2020 18:11
	Chloroform	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 18:11
	1,2-Dichloroethane	<0.28	ug/L	1	E8	0.28	1.0		12/16/2020 18:11
	1,1,1-Trichloroethane	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 18:11
	Carbon Tetrachloride	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 18:11
	Benzene	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 18:11
	1,2-Dichloropropane	<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 18:11
	Trichloroethene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 18:11
	Bromodichloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 18:11
	cis-1,3-Dichloropropene	<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 18:11
	trans-1,3-Dichloropropene	<0.19	ug/L	1	E8	0.19	1.0		12/16/2020 18:11
	1,1,2-Trichloroethane	<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 18:11
	Toluene	<0.35	ug/L	1	E8	0.35	1.0		12/16/2020 18:11
	Dibromochloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 18:11
	Tetrachloroethylene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 18:11
	Chlorobenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 18:11
	Ethylbenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 18:11

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089565**

Sample ID : AC033 Replicant
Sampling Date/Time: 12/10/2020 11:46
Approval Date : 12/29/2020 15:46
Received Date/Time: 12/10/2020 14:32
Sample Type : GRAB

Temperature : 16.4 Deg. C
pH : 6.05

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 1.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
	m- & p-Xylene	<0.84	ug/L	1	E8	0.84	2.0		12/16/2020 18:11
	Bromoform	<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 18:11
	o-Xylene	<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 18:11
	1,1,2,2-Tetrachloroethane	<0.46	ug/L	1	E8	0.46	1.0		12/16/2020 18:11
	1,3-Dichlorobenzene	<0.56	ug/L	1	E8	0.56	1.0		12/16/2020 18:11
	1,2-Dichlorobenzene	<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 18:11
	1,4-Dichlorobenzene	<0.50	ug/L	1	E8	0.50	1.0		12/16/2020 18:11
	Pentafluorobenzene (Surrogate1)	98	% Recovery	1					12/16/2020 18:11
	Fluorobenzene (Surrogate2)	101	% Recovery	1					12/16/2020 18:11
	4-Bromofluorobenzene (Surrogate)	93	% Recovery	1					12/16/2020 18:11
	1,3-Dichloropropene (cis & trans)	<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 18:11
	Total Xylene	<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 18:11
Method 8260B Stormwater	EPA 8260B							TH	
	1,3,5-Trimethylbenzene	<1.0	ug/L	1		0.18	1.0		12/16/2020 18:11
	1,2,4-Trimethylbenzene	<1.0	ug/L	1		0.20	1.0		12/16/2020 18:11
	Pentafluorobenzene (Surrogate1)	98	% Recovery	1					12/16/2020 18:11
	Fluorobenzene (Surrogate2)	101	% Recovery	1					12/16/2020 18:11
	4-Bromofluorobenzene (Surrogate)	93	% Recovery	1					12/16/2020 18:11

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089566**

Sample ID : AC033 Replicant
Sampling Date/Time: 12/10/2020 00:00
Approval Date : 12/31/2020 14:24
Received Date/Time: 12/10/2020 14:32
Sample Type : GRAB

Temperature : 16.4 Deg. C
pH : 6.05

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 1.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
GC/MS-Method 624-for Acrolein	EPA 624.1 ¤							AL	
Acrolein		<0.950	ug/L	1	E8;M2	0.950	1.0		12/11/2020 15:41
Acrylonitrile		<0.524	ug/L	1	E8;M2	0.524	1.0		12/11/2020 15:41
Pentafluorobenzene (Surrogate1)		96	% Recovery	1					12/11/2020 15:41
Fluorobenzene (Surrogate2)		98	% Recovery	1					12/11/2020 15:41
4-Bromofluorobenzene (Surrogate)		94	% Recovery	1					12/11/2020 15:41

GC/MS-Method 624-for Acrolein and Acrylonitrile Samples Case Narrative: The batch QC did not meet acceptance criteria in 2020089566 LFM/LFMD for acrolein (27%,33%) and acrylonitrile (24%,30%); control limits: 40-160%.

GC/MS-Method 624.1for 2-	EPA 624.1 ¤							AL	
2-Chloroethyl vinyl ether		<0.333	ug/L	1	E8	0.333	1.0		12/11/2020 15:41
Pentafluorobenzene (Surrogate1)		96	% Recovery	1					12/11/2020 15:41
Fluorobenzene (Surrogate2)		98	% Recovery	1					12/11/2020 15:41
4-Bromofluorobenzene (Surrogate)		94	% Recovery	1					12/11/2020 15:41

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089567**

Sample ID : AC033 Replicant
Sampling Date/Time: 12/10/2020 00:00
Approval Date : 12/18/2020 09:45
Received Date/Time: 12/10/2020 14:32
Sample Type : GRAB

Temperature : 16.4 Deg. C
pH : 6.05

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Strirek
Receipt Temperature (°C) : 1.2

Test		Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Coliform - E. Coli		SM22 9223 B							DC	
	Total Coliform		>241960	MPN/100mL	1		1	1		12/10/2020 16:31
	E. coli		5300	MPN/100mL	1		1	1		12/10/2020 16:31

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

12/23/2020 00:34

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089568**

Sample ID : AC033 Replicant
Sampling Date/Time: 12/10/2020 00:00
Approval Date : 12/22/2020 12:42
Received Date/Time: 12/10/2020 14:32
Sample Type : GRAB

Temperature : 16.4 Deg. C
pH : 6.05

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 1.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Cyanide	EPA 335.4	<0.005	mg/L	1	N1	0.0019	0.005	DL	12/16/2020 10:47

Cyanide Case Narrative: 2020089733 spike recovery = 84%, CL = 90-110%

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089569**

Sample ID : AC033 Replicant
Sampling Date/Time: 12/10/2020 00:00
Approval Date : 01/12/2021 10:23
Received Date/Time: 12/10/2020 14:32
Sample Type : GRAB

Temperature : 16.4 Deg. C
pH : 6.05

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 1.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
								TAMD	
EPA 1664 With Silica Gel	EPA 1664B								
Hexane Extractable Material		<5.6	mg/L	1			5.6		12/23/2020 16:04
Hexane Extractable Material - Silica Gel		<6.7	mg/L	1	L4		6.7		12/23/2020 16:04

EPA 1664 With Silica Gel Treatment Case Narrative: General Chemistry
Method 1664B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 280-521546 and analytical batch 280-521638.
Method 1664B: Analysis for Hexane Extractable Material (HEM) was performed for the following samples: 2020089569 (550-154558-2), 2020089539 (550-154558-4), 2020089554 (550-154558-6) and 2020089524 (550-154558-9). Since the HEM result(s) was below the reporting limit (RL), the result(s) for Silica Gel Treated - Hexane Extractable Material (SGT-HEM) was reported as a non-detect. All HEM quality control criteria were met.
No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

non-NELAC Outside Lab: Test America - ADHS Lic. # AZ0713

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089570**

Sample ID : AC033 Replicant Trip Blank
Sampling Date/Time : 12/10/2020 00:00
Approval Date : 12/29/2020 15:46
Received Date/Time : 12/10/2020 14:32
Sample Type : TIME

Temperature : 16.4 Deg. C
pH : 6.05

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 1.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
	Chloromethane	<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 18:40
	Vinyl Chloride	<0.47	ug/L	1	E8	0.47	1.0		12/16/2020 18:40
	Bromomethane	<0.39	ug/L	1	E8	0.39	1.0		12/16/2020 18:40
	Chloroethane	<0.66	ug/L	1	E8	0.66	1.0		12/16/2020 18:40
	Trichlorofluoromethane	<0.43	ug/L	1	E8	0.43	1.0		12/16/2020 18:40
	1,1-Dichloroethylene	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 18:40
	Methylene chloride	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 18:40
	trans-1,2-Dichloroethene	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 18:40
	1,1-Dichloroethane	<0.30	ug/L	1	E8	0.30	1.0		12/16/2020 18:40
	Chloroform	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 18:40
	1,2-Dichloroethane	<0.28	ug/L	1	E8	0.28	1.0		12/16/2020 18:40
	1,1,1-Trichloroethane	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 18:40
	Carbon Tetrachloride	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 18:40
	Benzene	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 18:40
	1,2-Dichloropropane	<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 18:40
	Trichloroethene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 18:40
	Bromodichloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 18:40
	cis-1,3-Dichloropropene	<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 18:40
	trans-1,3-Dichloropropene	<0.19	ug/L	1	E8	0.19	1.0		12/16/2020 18:40
	1,1,2-Trichloroethane	<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 18:40
	Toluene	<0.35	ug/L	1	E8	0.35	1.0		12/16/2020 18:40
	Dibromochloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 18:40
	Tetrachloroethylene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 18:40
	Chlorobenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 18:40
	Ethylbenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 18:40

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2474 S. 22nd Ave
(602) 534-2960
AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089570**

Sample ID : AC033 Replicant Trip Blank
Sampling Date/Time: 12/10/2020 00:00
Approval Date : 12/29/2020 15:46
Received Date/Time: 12/10/2020 14:32
Sample Type : TIME

Temperature : 16.4 Deg. C
pH : 6.05

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 1.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
m- & p-Xylene		<0.84	ug/L	1	E8	0.84	2.0		12/16/2020 18:40
Bromoform		<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 18:40
o-Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 18:40
1,1,2,2-Tetrachloroethane		<0.46	ug/L	1	E8	0.46	1.0		12/16/2020 18:40
1,3-Dichlorobenzene		<0.56	ug/L	1	E8	0.56	1.0		12/16/2020 18:40
1,2-Dichlorobenzene		<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 18:40
1,4-Dichlorobenzene		<0.50	ug/L	1	E8	0.50	1.0		12/16/2020 18:40
Pentafluorobenzene (Surrogate1)		96	% Recovery	1					12/16/2020 18:40
Fluorobenzene (Surrogate2)		98	% Recovery	1					12/16/2020 18:40
4-Bromofluorobenzene (Surrogate)		93	% Recovery	1					12/16/2020 18:40
1,3-Dichloropropene (cis & trans)		<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 18:40
Total Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 18:40
Method 8260B Stormwater	EPA 8260B							TH	
1,3,5-Trimethylbenzene		<1.0	ug/L	1		0.18	1.0		12/16/2020 18:40
1,2,4-Trimethylbenzene		<1.0	ug/L	1		0.20	1.0		12/16/2020 18:40
Pentafluorobenzene (Surrogate1)		96	% Recovery	1					12/16/2020 18:40
Fluorobenzene (Surrogate2)		98	% Recovery	1					12/16/2020 18:40
4-Bromofluorobenzene (Surrogate)		93	% Recovery	1					12/16/2020 18:40

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089559**

Sample ID : AC033 Replicant
Sampling Date/Time: 12/10/2020 07:51
Approval Date : 12/31/2020 07:13
Received Date/Time: 12/10/2020 14:32
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 1.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Silver - Total Recoverable	EPA 200.8	<0.00125	mg/L	5	D1;E8	0.00125	0.0050	SS	12/28/2020 00:00
Arsenic - Total Recoverable	EPA 200.8	0.0042	mg/L	5	D1;E4	0.00245	0.0050	SS	12/28/2020 00:00
Barium - Total Recoverable	EPA 200.8	0.137	mg/L	5	D1	0.00340	0.0050	SS	12/29/2020 00:00
Beryllium - Total Recoverable	EPA 200.8	<0.00180	mg/L	5	D1;E8	0.00180	0.0050	SS	12/29/2020 00:00
Cadmium - Total Recoverable	EPA 200.8	<0.00210	mg/L	5	D1;E8	0.00210	0.0050	SS	12/28/2020 00:00
Chromium - Total Recoverable	EPA 200.8	<0.0125	mg/L	5	D1;E8	0.0125	0.025	SS	12/29/2020 00:00
Copper - Total Recoverable	EPA 200.8	0.0585	mg/L	5	D1	0.00455	0.0050	SS	12/29/2020 00:00
Nickel - Total Recoverable	EPA 200.8	0.0164	mg/L	5	D1	0.00315	0.0050	SS	12/29/2020 00:00
Lead - Total Recoverable	EPA 200.8	0.0224	mg/L	5	D1	0.00170	0.0050	SS	12/28/2020 00:00
Antimony - Total Recoverable	EPA 200.8	0.0035	mg/L	5	D1;E4	0.00200	0.0050	SS	12/28/2020 00:00
Selenium - Total Recoverable	EPA 200.8	<0.00405	mg/L	5	D1;E8	0.00405	0.0050	SS	12/28/2020 00:00
Thallium - Total Recoverable	EPA 200.8	<0.00275	mg/L	5	D1;E8	0.00275	0.0050	SS	12/28/2020 00:00
Zinc - Total Recoverable	EPA 200.8	0.337	mg/L	5	D1	0.0380	0.050	SS	12/29/2020 00:00

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089571**

Sample ID : AC033 Replicant Trip Blank
Sampling Date/Time: 12/10/2020 00:00
Approval Date : 12/31/2020 14:24
Received Date/Time: 12/10/2020 14:32
Sample Type : TIME

Temperature : 16.4 Deg. C
pH : 6.05

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Scott Stirek
Receipt Temperature (°C) : 1.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
GC/MS-Method 624-for Acrolein	EPA 624.1 ¤							AL	
Acrolein		<0.950	ug/L	1	E8	0.950	1.0		12/11/2020 19:36
Acrylonitrile		<0.524	ug/L	1	E8	0.524	1.0		12/11/2020 19:36
Pentafluorobenzene (Surrogate1)		94	% Recovery	1					12/11/2020 19:36
Fluorobenzene (Surrogate2)		97	% Recovery	1					12/11/2020 19:36
4-Bromofluorobenzene (Surrogate)		92	% Recovery	1					12/11/2020 19:36

GC/MS-Method 624-for Acrolein and Acrylonitrile Samples Case Narrative: The batch QC did not meet acceptance criteria in 2020089566 LFM/LFMD for acrolein (27%,33%) and acrylonitrile (24%,30%); control limits: 40-160%.

GC/MS-Method 624.1for 2-	EPA 624.1 ¤							AL	
2-Chloroethyl vinyl ether		<0.333	ug/L	1	E8	0.333	1.0		12/11/2020 19:36
Pentafluorobenzene (Surrogate1)		94	% Recovery	1					12/11/2020 19:36
Fluorobenzene (Surrogate2)		97	% Recovery	1					12/11/2020 19:36
4-Bromofluorobenzene (Surrogate)		92	% Recovery	1					12/11/2020 19:36

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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SR003

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089490**

Sample ID	: SR003			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 09:50	Temperature	: 15.2 Deg. C	Account Number	: Stormwater
Approval Date	: 12/29/2020 15:46	pH	: 7.02	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: Christopher Molina
Sample Type	: GRAB			Receipt Temperature (°C)	: 2.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
	Chloromethane	<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 13:18
	Vinyl Chloride	<0.47	ug/L	1	E8	0.47	1.0		12/16/2020 13:18
	Bromomethane	<0.39	ug/L	1	E8	0.39	1.0		12/16/2020 13:18
	Chloroethane	<0.66	ug/L	1	E8	0.66	1.0		12/16/2020 13:18
	Trichlorofluoromethane	<0.43	ug/L	1	E8	0.43	1.0		12/16/2020 13:18
	1,1-Dichloroethylene	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 13:18
	Methylene chloride	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 13:18
	trans-1,2-Dichloroethene	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 13:18
	1,1-Dichloroethane	<0.30	ug/L	1	E8	0.30	1.0		12/16/2020 13:18
	Chloroform	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 13:18
	1,2-Dichloroethane	<0.28	ug/L	1	E8	0.28	1.0		12/16/2020 13:18
	1,1,1-Trichloroethane	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 13:18
	Carbon Tetrachloride	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 13:18
	Benzene	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 13:18
	1,2-Dichloropropane	<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 13:18
	Trichloroethene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 13:18
	Bromodichloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 13:18
	cis-1,3-Dichloropropene	<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 13:18
	trans-1,3-Dichloropropene	<0.19	ug/L	1	E8	0.19	1.0		12/16/2020 13:18
	1,1,2-Trichloroethane	<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 13:18
	Toluene	<0.35	ug/L	1	E8	0.35	1.0		12/16/2020 13:18
	Dibromochloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 13:18
	Tetrachloroethylene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 13:18
	Chlorobenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 13:18
	Ethylbenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 13:18

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089490**

Sample ID	: SR003			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 09:50	Temperature	: 15.2 Deg. C	Account Number	: Stormwater
Approval Date	: 12/29/2020 15:46	pH	: 7.02	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: Christopher Molina
Sample Type	: GRAB			Receipt Temperature (°C)	: 2.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
m- & p-Xylene		<0.84	ug/L	1	E8	0.84	2.0		12/16/2020 13:18
Bromoform		<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 13:18
o-Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 13:18
1,1,2,2-Tetrachloroethane		<0.46	ug/L	1	E8	0.46	1.0		12/16/2020 13:18
1,3-Dichlorobenzene		<0.56	ug/L	1	E8	0.56	1.0		12/16/2020 13:18
1,2-Dichlorobenzene		<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 13:18
1,4-Dichlorobenzene		<0.50	ug/L	1	E8	0.50	1.0		12/16/2020 13:18
Pentafluorobenzene (Surrogate1)		98	% Recovery	1					12/16/2020 13:18
Fluorobenzene (Surrogate2)		99	% Recovery	1					12/16/2020 13:18
4-Bromofluorobenzene (Surrogate)		96	% Recovery	1					12/16/2020 13:18
1,3-Dichloropropene (cis & trans)		<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 13:18
Total Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 13:18
Method 8260B Stormwater	EPA 8260B							TH	
1,3,5-Trimethylbenzene		<1.0	ug/L	1		0.18	1.0		12/16/2020 13:18
1,2,4-Trimethylbenzene		<1.0	ug/L	1		0.20	1.0		12/16/2020 13:18
Pentafluorobenzene (Surrogate1)		98	% Recovery	1					12/16/2020 13:18
Fluorobenzene (Surrogate2)		99	% Recovery	1					12/16/2020 13:18
4-Bromofluorobenzene (Surrogate)		96	% Recovery	1					12/16/2020 13:18

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089491**

Sample ID	: SR003			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 09:50	Temperature	: 15.2 Deg. C	Account Number	: Stormwater
Approval Date	: 12/31/2020 14:24	pH	: 7.02	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: Christopher Molina
Sample Type	: GRAB			Receipt Temperature (°C)	: 2.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
GC/MS-Method 624-for Acrolein	EPA 624.1 ¤							AL	
Acrolein		<0.950	ug/L	1	E8	0.950	1.0		12/11/2020 13:43
Acrylonitrile		<0.524	ug/L	1	E8	0.524	1.0		12/11/2020 13:43
Pentafluorobenzene (Surrogate1)		95	% Recovery	1					12/11/2020 13:43
Fluorobenzene (Surrogate2)		98	% Recovery	1					12/11/2020 13:43
4-Bromofluorobenzene (Surrogate)		93	% Recovery	1					12/11/2020 13:43
GC/MS-Method 624-for Acrolein and Acrylonitrile Samples Case Narrative: The batch QC did not meet acceptance criteria in 2020089566 LFM/LFMD for acrolein (27%,33%) and acrylonitrile (24%,30%); control limits: 40-160%.									
GC/MS-Method 624.1for 2-	EPA 624.1 ¤							AL	
2-Chloroethyl vinyl ether		<0.333	ug/L	1	E8	0.333	1.0		12/11/2020 13:43
Pentafluorobenzene (Surrogate1)		95	% Recovery	1					12/11/2020 13:43
Fluorobenzene (Surrogate2)		98	% Recovery	1					12/11/2020 13:43
4-Bromofluorobenzene (Surrogate)		93	% Recovery	1					12/11/2020 13:43

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089492**

Sample ID	: SR003			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 09:50	Temperature	: 15.2 Deg. C	Account Number	: Stormwater
Approval Date	: 12/18/2020 09:45	pH	: 7.02	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: Christopher Molina
Sample Type	: GRAB			Receipt Temperature (°C)	: 2.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Coliform - E. Coli	SM22 9223 B							DC	
Total Coliform		>241960	MPN/100mL	1		1	1		12/10/2020 15:09
E. coli		3230	MPN/100mL	1		1	1		12/10/2020 15:09

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089493**

Sample ID : SR003
Sampling Date/Time: 12/10/2020 09:50
Approval Date : 12/22/2020 12:42
Received Date/Time: 12/10/2020 11:12
Sample Type : GRAB

Temperature : 15.2 Deg. C
pH : 7.02

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Christopher Molina
Receipt Temperature (°C) : 2.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Cyanide	EPA 335.4	<0.005	mg/L	1	N1	0.0019	0.005	DL	12/16/2020 10:47

Cyanide Case Narrative: 2020089733 spike recovery = 84%, CL = 90-110%

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089494**

Sample ID	: SR003			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 09:50	Temperature	: 15.2 Deg. C	Account Number	: Stormwater
Approval Date	: 12/24/2020 10:06	pH	: 7.02	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: Christopher Molina
Sample Type	: GRAB			Receipt Temperature (°C)	: 2.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
EPA 1664 With Silica Gel	EPA 1664B							TAMD	
Hexane Extractable Material		<5.3	mg/L	1			5.3		12/17/2020 14:44
Hexane Extractable Material - Silica Gel		<6.4	mg/L	1	L4		6.4		12/17/2020 14:44

EPA 1664 With Silica Gel Treatment Case Narrative: General Chemistry
Method 1664B: Analysis for Hexane Extractable Material (HEM) was performed for the following samples: 2020089479 (550-154496-1), 2020089494 (550-154496-2), 2020089509 (550-154496-4), (550-154496-B-1-A MS) and (550-154496-A-1-A MSD). Since the HEM result(s) was below the reporting limit (RL), the result(s) for Silica Gel Treated - Hexane Extractable Material (SGT-HEM) was reported as a non-detect. All HEM quality control criteria were met.

non-NELAC Outside Lab: Test America - ADHS Lic. # AZ0713

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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City of Phoenix
Water Services Laboratory
ADHS Lic. # AZ0088
2474 S. 22nd Ave
(602) 534-2960

AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089495**

Sample ID	: SR003 Trip Blank			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 09:50	Temperature	: 15.2 Deg. C	Account Number	: Stormwater
Approval Date	: 12/29/2020 15:46	pH	: 7.02	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: Christopher Molina
Sample Type	: TIME			Receipt Temperature (°C)	: 2.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
	Chloromethane	<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 13:47
	Vinyl Chloride	<0.47	ug/L	1	E8	0.47	1.0		12/16/2020 13:47
	Bromomethane	<0.39	ug/L	1	E8	0.39	1.0		12/16/2020 13:47
	Chloroethane	<0.66	ug/L	1	E8	0.66	1.0		12/16/2020 13:47
	Trichlorofluoromethane	<0.43	ug/L	1	E8	0.43	1.0		12/16/2020 13:47
	1,1-Dichloroethylene	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 13:47
	Methylene chloride	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 13:47
	trans-1,2-Dichloroethene	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 13:47
	1,1-Dichloroethane	<0.30	ug/L	1	E8	0.30	1.0		12/16/2020 13:47
	Chloroform	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 13:47
	1,2-Dichloroethane	<0.28	ug/L	1	E8	0.28	1.0		12/16/2020 13:47
	1,1,1-Trichloroethane	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 13:47
	Carbon Tetrachloride	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 13:47
	Benzene	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 13:47
	1,2-Dichloropropane	<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 13:47
	Trichloroethene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 13:47
	Bromodichloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 13:47
	cis-1,3-Dichloropropene	<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 13:47
	trans-1,3-Dichloropropene	<0.19	ug/L	1	E8	0.19	1.0		12/16/2020 13:47
	1,1,2-Trichloroethane	<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 13:47
	Toluene	<0.35	ug/L	1	E8	0.35	1.0		12/16/2020 13:47
	Dibromochloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 13:47
	Tetrachloroethylene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 13:47
	Chlorobenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 13:47
	Ethylbenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 13:47

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(602) 534-2960
AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089495**

Sample ID	: SR003 Trip Blank			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 09:50	Temperature	: 15.2 Deg. C	Account Number	: Stormwater
Approval Date	: 12/29/2020 15:46	pH	: 7.02	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: Christopher Molina
Sample Type	: TIME			Receipt Temperature (°C)	: 2.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
m- & p-Xylene		<0.84	ug/L	1	E8	0.84	2.0		12/16/2020 13:47
Bromoform		<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 13:47
o-Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 13:47
1,1,2,2-Tetrachloroethane		<0.46	ug/L	1	E8	0.46	1.0		12/16/2020 13:47
1,3-Dichlorobenzene		<0.56	ug/L	1	E8	0.56	1.0		12/16/2020 13:47
1,2-Dichlorobenzene		<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 13:47
1,4-Dichlorobenzene		<0.50	ug/L	1	E8	0.50	1.0		12/16/2020 13:47
Pentafluorobenzene (Surrogate1)		99	% Recovery	1					12/16/2020 13:47
Fluorobenzene (Surrogate2)		100	% Recovery	1					12/16/2020 13:47
4-Bromofluorobenzene (Surrogate)		94	% Recovery	1					12/16/2020 13:47
1,3-Dichloropropene (cis & trans)		<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 13:47
Total Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 13:47
Method 8260B Stormwater	EPA 8260B							TH	
1,3,5-Trimethylbenzene		<1.0	ug/L	1		0.18	1.0		12/16/2020 13:47
1,2,4-Trimethylbenzene		<1.0	ug/L	1		0.20	1.0		12/16/2020 13:47
Pentafluorobenzene (Surrogate1)		99	% Recovery	1					12/16/2020 13:47
Fluorobenzene (Surrogate2)		100	% Recovery	1					12/16/2020 13:47
4-Bromofluorobenzene (Surrogate)		94	% Recovery	1					12/16/2020 13:47

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089496**

Sample ID	: SR003 Trip Blank			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 09:50	Temperature	: 15.2 Deg. C	Account Number	: Stormwater
Approval Date	: 12/31/2020 14:24	pH	: 7.02	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: Christopher Molina
Sample Type	: TIME			Receipt Temperature (°C)	: 2.2

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
GC/MS-Method 624-for Acrolein	EPA 624.1 ¤							AL	
Acrolein		<0.950	ug/L	1	E8	0.950	1.0		12/11/2020 17:40
Acrylonitrile		<0.524	ug/L	1	E8	0.524	1.0		12/11/2020 17:40
Pentafluorobenzene (Surrogate1)		92	% Recovery	1					12/11/2020 17:40
Fluorobenzene (Surrogate2)		97	% Recovery	1					12/11/2020 17:40
4-Bromofluorobenzene (Surrogate)		93	% Recovery	1					12/11/2020 17:40

GC/MS-Method 624-for Acrolein and Acrylonitrile Samples Case Narrative: The batch QC did not meet acceptance criteria in 2020089566 LFM/LFMD for acrolein (27%,33%) and acrylonitrile (24%,30%); control limits: 40-160%.

GC/MS-Method 624.1for 2-	EPA 624.1 ¤							AL	
2-Chloroethyl vinyl ether		<0.333	ug/L	1	E8	0.333	1.0		12/11/2020 17:40
Pentafluorobenzene (Surrogate1)		92	% Recovery	1					12/11/2020 17:40
Fluorobenzene (Surrogate2)		97	% Recovery	1					12/11/2020 17:40
4-Bromofluorobenzene (Surrogate)		93	% Recovery	1					12/11/2020 17:40

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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SR030

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Water Services Laboratory
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(602) 534-2960

AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089497**

Sample ID : SR030
Sampling Date/Time: 12/10/2020 08:17
Approval Date : 01/22/2021 14:21
Received Date/Time: 12/10/2020 11:12
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 1.8-1.9

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
608.3-STORM	EPA 608.3							JG	
alpha-BHC		<0.0031	ug/L	1	E8;N1	0.0031	0.005		01/15/2021 00:03
gamma-BHC		<0.0034	ug/L	1	E8;N1	0.0034	0.005		01/15/2021 00:03
beta-BHC		<0.1802	ug/L	1	E8;N1;V9	0.1802	0.5		01/15/2021 00:03
d-BHC		<0.0155	ug/L	1	E8;N1;V9	0.0155	0.02		01/15/2021 00:03
Heptachlor		<0.0297	ug/L	1	E8;N1;M2;	0.0297	0.05		01/15/2021 00:03
Aldrin		<0.0038	ug/L	1	E8;N1;M2;	0.0038	0.005		01/15/2021 00:03
Heptachlor Epoxide		<0.0015	ug/L	1	E8;N1;M2;	0.0015	0.005		01/15/2021 00:03
4,4'-DDE		<0.0034	ug/L	1	E8;N1;M2;	0.0034	0.005		01/15/2021 00:03
Endosulfan I		<0.0058	ug/L	1	E8;N1;M2;	0.0058	0.020		01/15/2021 00:03
Dieldrin		<0.0037	ug/L	1	E8;N1;M2	0.0037	0.005		01/15/2021 00:03
Endrin		<0.0082	ug/L	1	E8;N1;M2	0.0082	0.02		01/15/2021 00:03
4,4'-DDD		<0.0022	ug/L	1	E8;N1;M2;	0.0022	0.005		01/15/2021 00:03
Endosulfan II		<0.0021	ug/L	1	E8;N1;V9	0.0021	0.005		01/15/2021 00:03
4,4'-DDT		<0.0014	ug/L	1	E8;N1;M2;	0.0014	0.005		01/15/2021 00:03
Endrin Aldehyde		<0.003	ug/L	1	E8;N1;M2	0.003	0.005		01/15/2021 00:03
Endosulfan Sulfate		<0.0018	ug/L	1	E8;N1	0.0018	0.005		01/15/2021 00:03
Chlordane		<0.19	ug/L	1	E8;N1	0.19	0.5		01/15/2021 00:03
Toxaphene		<0.467	ug/L	1	E8;N1	0.467	1.0		01/15/2021 00:03
Arochlor-1016		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 00:03
Arochlor-1221		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 00:03
Arochlor-1232		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 00:03
Arochlor-1242		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 00:03
Arochlor-1248		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 00:03
Arochlor-1254		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 00:03
Arochlor-1260		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 00:03

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089497**

Sample ID : SR030
Sampling Date/Time: 12/10/2020 08:17
Approval Date : 01/22/2021 14:21
Received Date/Time: 12/10/2020 11:12
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 1.8-1.9

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
608.3-STORM	EPA 608.3							JG	
Decachlorobiphenyl		46	% Recovery	1					01/15/2021 00:03
Total Endosulfan		<0.0021	ug/L	1	E8;N1	0.0021	0.005		01/15/2021 00:03
TOTAL PCB		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 00:03
Aldrin/Dieldrin		<0.0037	ug/L	1	E8;N1	0.0037	0.005		01/15/2021 00:03

608.3-STORM Case Narrative: Batch QC did not meet laboratory acceptance criteria in sample 2020089497LFM/LFMD for multiple analytes percent recovery. The closing CCV did not meet laboratory acceptance criteria for multiple analytes percent recovery. The sample pH was not checked within 72 hours of receipt.

Extraction - 608.3	EPA 608.3	COMPLETE	JG	12/15/2020 00:00

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089498**

Sample ID	: SR030			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:17	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 01/06/2021 13:12	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: USGS
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.8-1.9

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
Acenaphthene		<0.65	ug/L	1	E8	0.65	10		12/18/2020 18:23
Acenaphthylene		<0.56	ug/L	1	E8	0.56	10		12/18/2020 18:23
Anthracene		<0.52	ug/L	1	E8	0.52	10		12/18/2020 18:23
Benzo(a)anthracene		<0.77	ug/L	1	E8	0.77	10		12/18/2020 18:23
Benzo(a)pyrene		<1.50	ug/L	1	E8	1.50	10		12/18/2020 18:23
Benzo(b)fluoranthene		<2.36	ug/L	1	E8	2.36	10		12/18/2020 18:23
Benzo(ghi)perylene		<1.83	ug/L	1	E8	1.83	10		12/18/2020 18:23
Benzo(k)fluoranthene		<1.83	ug/L	1	E8	1.83	10		12/18/2020 18:23
Chrysene		<0.77	ug/L	1	E8	0.77	10		12/18/2020 18:23
Dibenzo(a,h)anthracene		<1.58	ug/L	1	E8	1.58	10		12/18/2020 18:23
1,2-Dichlorobenzene		<0.85	ug/L	1	E8;T2	0.85	10		12/18/2020 18:23
1,3-Dichlorobenzene		<0.87	ug/L	1	E8;T2	0.87	10		12/18/2020 18:23
1,4-Dichlorobenzene		<0.93	ug/L	1	E8;T2	0.93	10		12/18/2020 18:23
3,3'-Dichlorobenzidine		<5.94	ug/L	1	E8;M2;N1	5.94	50		12/18/2020 18:23
Diethyl phthalate		<7.57	ug/L	1	E8	7.57	10		12/18/2020 18:23
Dimethyl phthalate		<0.46	ug/L	1	E8	0.46	20		12/18/2020 18:23
Di-n-butyl phthalate		<0.95	ug/L	1	E8	0.95	10		12/18/2020 18:23
2,4-Dinitrotoluene		<0.80	ug/L	1	E8	0.80	10		12/18/2020 18:23
2,6-Dinitrotoluene		<0.62	ug/L	1	E8	0.62	10		12/18/2020 18:23
Di-n-octyl phthalate		<2.32	ug/L	1	E8	2.32	10		12/18/2020 18:23
1,2-Diphenyl hydrazine (as azobenzene)		<1.10	ug/L	1	E8;T2	1.10	10		12/18/2020 18:23
Fluoranthene		<0.48	ug/L	1	E8	0.48	10		12/18/2020 18:23
Fluorene		<0.48	ug/L	1	E8;M2	0.48	10		12/18/2020 18:23
Hexachlorobenzene		<0.35	ug/L	1	E8	0.35	10		12/18/2020 18:23
Hexachlorobutadiene		<0.44	ug/L	1	E8	0.44	10		12/18/2020 18:23

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(602) 534-2960

AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089498**

Sample ID	: SR030			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:17	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 01/06/2021 13:12	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: USGS
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.8-1.9

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
	Hexachlorocyclopentadiene	<1.26	ug/L	1	E8;T2	1.26	10		12/18/2020 18:23
	Hexachloroethane	<0.34	ug/L	1	E8	0.34	10		12/18/2020 18:23
	Indeno(1,2,3-cd)pyrene	<2.27	ug/L	1	E8	2.27	10		12/18/2020 18:23
	Isophorone	<1.38	ug/L	1	E8	1.38	10		12/18/2020 18:23
	Naphthalene	<0.35	ug/L	1	E8	0.35	10		12/18/2020 18:23
	Nitrobenzene	<0.86	ug/L	1	E8	0.86	10		12/18/2020 18:23
	N-Nitrosodimethylamine	<0.67	ug/L	1	E8;T2	0.67	10		12/18/2020 18:23
	N-Nitrosodi-n-propylamine	<2.38	ug/L	1	E8	2.38	10		12/18/2020 18:23
	N-Nitrosodiphenylamine	<0.84	ug/L	1	E8;T2;M2	0.84	10		12/18/2020 18:23
	Phenanthrene	<0.30	ug/L	1	E8;M2	0.30	10		12/18/2020 18:23
	Pyrene	<0.21	ug/L	1	E8;M2	0.21	10.0		12/18/2020 18:23
	1,2,4-Trichlorobenzene	<1.00	ug/L	1	E8	1.00	10		12/18/2020 18:23
	2-Chlorophenol	<1.01	ug/L	1	E8	1.01	10		12/18/2020 18:23
	2,4-Dichlorophenol	<1.37	ug/L	1	E8	1.37	10		12/18/2020 18:23
	2,4-Dimethylphenol	<2.57	ug/L	1	E8	2.57	10		12/18/2020 18:23
	2-Methyl-4,6-dinitrophenol	<1.27	ug/L	1	E8	1.27	10		12/18/2020 18:23
	2,4-Dinitrophenol	<0.92	ug/L	1	E8	0.92	10		12/18/2020 18:23
	2-Nitrophenol	<0.94	ug/L	1	E8	0.94	10		12/18/2020 18:23
	4-Nitrophenol	<1.70	ug/L	1	E8	1.70	10		12/18/2020 18:23
	4-Chloro-3-methylphenol	<1.34	ug/L	1	E8	1.34	10		12/18/2020 18:23
	Pentachlorophenol	<1.92	ug/L	1	E8	1.92	10		12/18/2020 18:23
	Phenol	4.0	ug/L	1	E4	1.27	10		12/18/2020 18:23
	2,4,6-Trichlorophenol	<1.61	ug/L	1	E8	1.61	10		12/18/2020 18:23
	2,4,6-Tribromophenol	122	% Recovery	1					12/18/2020 18:23
	Dibromooctafluorobiphenyl	23	% Recovery	1	S6				12/18/2020 18:23

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089498**

Sample ID : SR030
Sampling Date/Time: 12/10/2020 08:17
Approval Date : 01/06/2021 13:12
Received Date/Time: 12/10/2020 11:12
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 1.8-1.9

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
	Dibromooctafluorobiphenyl Case Narrative: Control limits: 33-136%.								
	4,4-Dibromobiphenyl	26	% Recovery	1	S6				12/18/2020 18:23
	4,4-Dibromobiphenyl Case Narrative: Control limits: 45-134%.								

625.1-STORM Case Narrative: Batch QC did not meet laboratory acceptance criteria in the 2020089498 LFM/LFMD for multiple compounds. The LFMD RPD could not be calculated for 3,3-Dichlorobenzidine due to the results being zero.

Extraction - 625.1	EPA 625.1	COMPLETE	CC	12/16/2020 00:00

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089499**

Sample ID : SR030
Sampling Date/Time: 12/10/2020 08:17
Approval Date : 12/31/2020 07:13
Received Date/Time: 12/10/2020 11:12
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 1.8-1.9

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Silver - Total Recoverable	EPA 200.8	<0.00125	mg/L	5	D1;E8	0.00125	0.0050	SS	12/28/2020 00:00
Arsenic - Total Recoverable	EPA 200.8	0.0091	mg/L	5	D1	0.00245	0.0050	SS	12/28/2020 00:00
Barium - Total Recoverable	EPA 200.8	0.252	mg/L	5	D1	0.00340	0.0050	SS	12/29/2020 00:00
Beryllium - Total Recoverable	EPA 200.8	<0.00180	mg/L	5	D1;E8	0.00180	0.0050	SS	12/29/2020 00:00
Cadmium - Total Recoverable	EPA 200.8	<0.00210	mg/L	5	D1;E8	0.00210	0.0050	SS	12/28/2020 00:00
Chromium - Total Recoverable	EPA 200.8	0.0256	mg/L	5	D1	0.0125	0.025	SS	12/29/2020 00:00
Copper - Total Recoverable	EPA 200.8	0.0850	mg/L	5	D1	0.00455	0.0050	SS	12/29/2020 00:00
Nickel - Total Recoverable	EPA 200.8	0.0289	mg/L	5	D1	0.00315	0.0050	SS	12/29/2020 00:00
Lead - Total Recoverable	EPA 200.8	0.0480	mg/L	5	D1	0.00170	0.0050	SS	12/28/2020 00:00
Antimony - Total Recoverable	EPA 200.8	0.0039	mg/L	5	D1;E4	0.00200	0.0050	SS	12/28/2020 00:00
Selenium - Total Recoverable	EPA 200.8	<0.00405	mg/L	5	D1;E8	0.00405	0.0050	SS	12/28/2020 00:00
Thallium - Total Recoverable	EPA 200.8	<0.00275	mg/L	5	D1;E8	0.00275	0.0050	SS	12/28/2020 00:00
Zinc - Total Recoverable	EPA 200.8	0.456	mg/L	5	D1	0.0380	0.050	SS	12/29/2020 00:00

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089499**

Sample ID	: SR030			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:17	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 12/31/2020 07:13	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: USGS
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.8-1.9

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Metals Prep - TR	SM22 3030 F ¤	COMPLETE						CG	12/21/2020 17:06
Mercury - Total	EPA 245.1	<0.000118	mg/L	2	D1;E8	0.000118	0.0002	GA	12/23/2020 09:23
Mercury - Total Case Narrative: Batch LFM (2020087987) %R = 15.9%. Acceptance range 70-130%.									
pH<2Verification	pH <2 Verification	COMPLETE						CG	12/14/2020 13:01

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089500**

Sample ID	: SR030			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:17	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 12/30/2020 11:58	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: USGS
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.8-1.9

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Filtration Prep Dissolved Metals	SM22 3030 B	COMPLETE						SS	12/16/2020 11:30
Filtration Prep Dissolved Metals Case Narrative: COC states that the sample is field-filtered.									
Hardness - Total	SM22 2340 B							CG	
Hardness - Total		97.1	mg/L	1		1.31	16.6		12/22/2020 17:58
Calcium Hardness		74.4	mg/L	1		1.00	12.5		12/22/2020 17:58
Calcium - Total Recoverable	EPA 200.7	29.8	mg/L	2	D1	0.80	10.00	CG	12/22/2020 17:58
Magnesium - Total Recoverable	EPA 200.7	5.51	mg/L	2	D1	0.152	2.00	CG	12/22/2020 17:58
Silver - Dissolved	EPA 200.8	<0.0050	mg/L	5	D1	0.00125	0.0050	SS	12/28/2020 00:00
Arsenic - Dissolved	EPA 200.8	0.0027	mg/L	2	D1	0.00098	0.0020	SS	12/17/2020 00:00
Barium - Dissolved	EPA 200.8	0.038	mg/L	2	D1	0.00136	0.0020	SS	12/17/2020 00:00
Beryllium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00072	0.0020	SS	12/17/2020 00:00
Cadmium - Dissolved	EPA 200.8	<0.0010	mg/L	1		0.00042	0.0010	SS	12/17/2020 00:00
Chromium - Dissolved	EPA 200.8	<0.010	mg/L	2	D1	0.0028	0.010	SS	12/17/2020 00:00
Copper - Dissolved	EPA 200.8	0.0359	mg/L	1		0.00091	0.0010	SS	12/17/2020 00:00

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089500**

Sample ID	: SR030			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:17	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 12/30/2020 11:58	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: USGS
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.8-1.9

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Nickel - Dissolved	EPA 200.8	0.0083	mg/L	2	D1	0.00126	0.0020	SS	12/17/2020 00:00
Lead - Dissolved	EPA 200.8	0.0012	mg/L	1		0.00034	0.0010	SS	12/17/2020 00:00
Antimony - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00080	0.0020	SS	12/17/2020 00:00
Selenium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00162	0.0020	SS	12/17/2020 00:00
Thallium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00110	0.0020	SS	12/17/2020 00:00
Zinc - Dissolved	EPA 200.8	0.0555	mg/L	1		0.0076	0.010	SS	12/17/2020 00:00
Metals Prep - TR	SM22 3030 F ¤	COMPLETE						CG	12/21/2020 17:06
Mercury - Diss	EPA 245.1	<0.0002	mg/L	2	D1	0.000118	0.0002	GA	12/23/2020 09:29
Mercury - Diss Case Narrative: Batch LFM (2020087987) %R = 15.9%. Acceptance range 70-130%.									
pH<2Verification	pH <2 Verification	COMPLETE						CG	12/14/2020 13:01

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089501**

Sample ID	: SR030			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:17	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 12/22/2020 13:40	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: USGS
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.8-1.9

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Ammonia	EPA 350.1	3.8	mg/L	1		0.08	0.20	CA	12/15/2020 10:03
Total Kjeldahl Nitrogen	EPA 351.2	9.9	mg/L	1		0.16	0.25	CA	12/21/2020 10:46

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089502**

Sample ID : SR030
Sampling Date/Time: 12/10/2020 08:17
Approval Date : 12/22/2020 12:40
Received Date/Time: 12/10/2020 11:12
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 1.8-1.9

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
BOD, 5 Day	SM22 5210 B	>44	mg/L	1	K2	2	2	DT	12/11/2020 08:25
COD	HACH-8000	430	mg/L	1		11.69	50	LA	12/10/2020 14:49
Suspended Solids	SM22 2540 D	258	mg/L	20		50	50	LA	12/10/2020 14:40
Total Dissolved Solids	SM22 2540 C	374	mg/L	1		10	10	BM	12/11/2020 15:05

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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01/01/2021 00:28

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089503**

Sample ID : SR030
Sampling Date/Time : 12/10/2020 08:17
Approval Date : 12/31/2020 12:58
Received Date/Time : 12/10/2020 11:12
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 1.8-1.9

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
O-Phosphate-P	EPA 300.0	0.4	mg/L	1		0.024	0.1	SS	12/10/2020 22:27
Nitrate-N	EPA 300.0	2.1	mg/L	1		0.014	0.1	SS	12/10/2020 22:27
Nitrite-N	EPA 300.0	<0.1	mg/L	1		0.014	0.1	SS	12/10/2020 22:27

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089504**

Sample ID	: SR030			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:17	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 12/24/2020 10:06	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: USGS
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.8-1.9

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Phosphorus - Total	SM 4500 P E	2.2	mg/L	10	D2		2.0	TAM	12/15/2020 14:27

Phosphorus - Total Case Narrative: No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

non-NELAC Outside Lab: Test America - ADHS Lic. # AZ0728

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089505**

Sample ID : SR030
Sampling Date/Time : 12/10/2020 09:00
Approval Date : 12/29/2020 15:46
Received Date/Time : 12/10/2020 11:12
Sample Type : GRAB

Temperature : 13.7 Deg. C
pH : 8.61

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 1.8-1.9

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
	Chloromethane	<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 14:16
	Vinyl Chloride	<0.47	ug/L	1	E8	0.47	1.0		12/16/2020 14:16
	Bromomethane	<0.39	ug/L	1	E8	0.39	1.0		12/16/2020 14:16
	Chloroethane	<0.66	ug/L	1	E8	0.66	1.0		12/16/2020 14:16
	Trichlorofluoromethane	<0.43	ug/L	1	E8	0.43	1.0		12/16/2020 14:16
	1,1-Dichloroethylene	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 14:16
	Methylene chloride	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 14:16
	trans-1,2-Dichloroethene	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 14:16
	1,1-Dichloroethane	<0.30	ug/L	1	E8	0.30	1.0		12/16/2020 14:16
	Chloroform	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 14:16
	1,2-Dichloroethane	<0.28	ug/L	1	E8	0.28	1.0		12/16/2020 14:16
	1,1,1-Trichloroethane	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 14:16
	Carbon Tetrachloride	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 14:16
	Benzene	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 14:16
	1,2-Dichloropropane	<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 14:16
	Trichloroethene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 14:16
	Bromodichloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 14:16
	cis-1,3-Dichloropropene	<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 14:16
	trans-1,3-Dichloropropene	<0.19	ug/L	1	E8	0.19	1.0		12/16/2020 14:16
	1,1,2-Trichloroethane	<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 14:16
	Toluene	<0.35	ug/L	1	E8	0.35	1.0		12/16/2020 14:16
	Dibromochloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 14:16
	Tetrachloroethylene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 14:16
	Chlorobenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 14:16
	Ethylbenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 14:16

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089505**

Sample ID	: SR030			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 09:00	Temperature	: 13.7 Deg. C	Account Number	: Stormwater
Approval Date	: 12/29/2020 15:46	pH	: 8.61	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: USGS
Sample Type	: GRAB			Receipt Temperature (°C)	: 1.8-1.9

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
m- & p-Xylene		<0.84	ug/L	1	E8	0.84	2.0		12/16/2020 14:16
Bromoform		<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 14:16
o-Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 14:16
1,1,2,2-Tetrachloroethane		<0.46	ug/L	1	E8	0.46	1.0		12/16/2020 14:16
1,3-Dichlorobenzene		<0.56	ug/L	1	E8	0.56	1.0		12/16/2020 14:16
1,2-Dichlorobenzene		<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 14:16
1,4-Dichlorobenzene		<0.50	ug/L	1	E8	0.50	1.0		12/16/2020 14:16
Pentafluorobenzene (Surrogate1)		97	% Recovery	1					12/16/2020 14:16
Fluorobenzene (Surrogate2)		99	% Recovery	1					12/16/2020 14:16
4-Bromofluorobenzene (Surrogate)		94	% Recovery	1					12/16/2020 14:16
1,3-Dichloropropene (cis & trans)		<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 14:16
Total Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 14:16
Method 8260B Stormwater	EPA 8260B							TH	
1,3,5-Trimethylbenzene		<1.0	ug/L	1		0.18	1.0		12/16/2020 14:16
1,2,4-Trimethylbenzene		<1.0	ug/L	1		0.20	1.0		12/16/2020 14:16
Pentafluorobenzene (Surrogate1)		97	% Recovery	1					12/16/2020 14:16
Fluorobenzene (Surrogate2)		99	% Recovery	1					12/16/2020 14:16
4-Bromofluorobenzene (Surrogate)		94	% Recovery	1					12/16/2020 14:16

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089506**

Sample ID	: SR030			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 09:00	Temperature	: 13.7 Deg. C	Account Number	: Stormwater
Approval Date	: 12/31/2020 14:24	pH	: 8.61	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: USGS
Sample Type	: GRAB			Receipt Temperature (°C)	: 1.8-1.9

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
GC/MS-Method 624-for Acrolein	EPA 624.1 ¤							AL	
Acrolein		<0.950	ug/L	1	E8	0.950	1.0		12/11/2020 14:07
Acrylonitrile		<0.524	ug/L	1	E8	0.524	1.0		12/11/2020 14:07
Pentafluorobenzene (Surrogate1)		93	% Recovery	1					12/11/2020 14:07
Fluorobenzene (Surrogate2)		96	% Recovery	1					12/11/2020 14:07
4-Bromofluorobenzene (Surrogate)		93	% Recovery	1					12/11/2020 14:07

GC/MS-Method 624-for Acrolein and Acrylonitrile Samples Case Narrative: The batch QC did not meet acceptance criteria in 2020089566 LFM/LFMD for acrolein (27%,33%) and acrylonitrile (24%,30%); control limits: 40-160%.

GC/MS-Method 624.1for 2-	EPA 624.1 ¤							AL	
2-Chloroethyl vinyl ether		<0.333	ug/L	1	E8	0.333	1.0		12/11/2020 14:07
Pentafluorobenzene (Surrogate1)		93	% Recovery	1					12/11/2020 14:07
Fluorobenzene (Surrogate2)		96	% Recovery	1					12/11/2020 14:07
4-Bromofluorobenzene (Surrogate)		93	% Recovery	1					12/11/2020 14:07

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089507**

Sample ID	: SR030			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 09:00	Temperature	: 13.7 Deg. C	Account Number	: Stormwater
Approval Date	: 12/18/2020 09:45	pH	: 8.61	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: USGS
Sample Type	: GRAB			Receipt Temperature (°C)	: 1.8-1.9

Test		Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Coliform - E. Coli		SM22 9223 B							DC	
	Total Coliform		>241960	MPN/100mL	1		1	1		12/10/2020 15:09
	E. coli		4100	MPN/100mL	1		1	1		12/10/2020 15:09

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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12/23/2020 00:34

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089508**

Sample ID	: SR030			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 09:00	Temperature	: 13.7 Deg. C	Account Number	: Stormwater
Approval Date	: 12/22/2020 12:42	pH	: 8.61	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: USGS
Sample Type	: GRAB			Receipt Temperature (°C)	: 1.8-1.9

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Cyanide	EPA 335.4	<0.005	mg/L	1	N1	0.0019	0.005	DL	12/16/2020 10:47

Cyanide Case Narrative: 2020089733 spike recovery = 84%, CL = 90-110%

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089509**

Sample ID	: SR030			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 09:00	Temperature	: 13.7 Deg. C	Account Number	: Stormwater
Approval Date	: 12/24/2020 10:06	pH	: 8.61	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: USGS
Sample Type	: GRAB			Receipt Temperature (°C)	: 1.8-1.9

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
EPA 1664 With Silica Gel	EPA 1664B							TAMD	
Hexane Extractable Material		<5.5	mg/L	1			5.5		12/17/2020 14:44
Hexane Extractable Material - Silica Gel		<6.6	mg/L	1	L4		6.6		12/17/2020 14:44

EPA 1664 With Silica Gel Treatment Case Narrative: General Chemistry
Method 1664B: Analysis for Hexane Extractable Material (HEM) was performed for the following samples: 2020089479 (550-154496-1), 2020089494 (550-154496-2), 2020089509 (550-154496-4), (550-154496-B-1-A MS) and (550-154496-A-1-A MSD). Since the HEM result(s) was below the reporting limit (RL), the result(s) for Silica Gel Treated - Hexane Extractable Material (SGT-HEM) was reported as a non-detect. All HEM quality control criteria were met.

non-NELAC Outside Lab: Test America - ADHS Lic. # AZ0713

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089510**

Sample ID : SR030 Trip Blank
Sampling Date/Time: 12/10/2020 09:00
Approval Date : 12/29/2020 15:46
Received Date/Time: 12/10/2020 11:12
Sample Type : TIME

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 1.8-1.9

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
	Chloromethane	<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 14:45
	Vinyl Chloride	<0.47	ug/L	1	E8	0.47	1.0		12/16/2020 14:45
	Bromomethane	<0.39	ug/L	1	E8	0.39	1.0		12/16/2020 14:45
	Chloroethane	<0.66	ug/L	1	E8	0.66	1.0		12/16/2020 14:45
	Trichlorofluoromethane	<0.43	ug/L	1	E8	0.43	1.0		12/16/2020 14:45
	1,1-Dichloroethylene	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 14:45
	Methylene chloride	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 14:45
	trans-1,2-Dichloroethene	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 14:45
	1,1-Dichloroethane	<0.30	ug/L	1	E8	0.30	1.0		12/16/2020 14:45
	Chloroform	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 14:45
	1,2-Dichloroethane	<0.28	ug/L	1	E8	0.28	1.0		12/16/2020 14:45
	1,1,1-Trichloroethane	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 14:45
	Carbon Tetrachloride	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 14:45
	Benzene	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 14:45
	1,2-Dichloropropane	<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 14:45
	Trichloroethene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 14:45
	Bromodichloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 14:45
	cis-1,3-Dichloropropene	<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 14:45
	trans-1,3-Dichloropropene	<0.19	ug/L	1	E8	0.19	1.0		12/16/2020 14:45
	1,1,2-Trichloroethane	<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 14:45
	Toluene	<0.35	ug/L	1	E8	0.35	1.0		12/16/2020 14:45
	Dibromochloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 14:45
	Tetrachloroethylene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 14:45
	Chlorobenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 14:45
	Ethylbenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 14:45

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089510**

Sample ID : SR030 Trip Blank
Sampling Date/Time: 12/10/2020 09:00
Approval Date : 12/29/2020 15:46
Received Date/Time: 12/10/2020 11:12
Sample Type : TIME

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 1.8-1.9

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
m- & p-Xylene		<0.84	ug/L	1	E8	0.84	2.0		12/16/2020 14:45
Bromoform		<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 14:45
o-Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 14:45
1,1,2,2-Tetrachloroethane		<0.46	ug/L	1	E8	0.46	1.0		12/16/2020 14:45
1,3-Dichlorobenzene		<0.56	ug/L	1	E8	0.56	1.0		12/16/2020 14:45
1,2-Dichlorobenzene		<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 14:45
1,4-Dichlorobenzene		<0.50	ug/L	1	E8	0.50	1.0		12/16/2020 14:45
Pentafluorobenzene (Surrogate1)		97	% Recovery	1					12/16/2020 14:45
Fluorobenzene (Surrogate2)		101	% Recovery	1					12/16/2020 14:45
4-Bromofluorobenzene (Surrogate)		94	% Recovery	1					12/16/2020 14:45
1,3-Dichloropropene (cis & trans)		<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 14:45
Total Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 14:45
Method 8260B Stormwater	EPA 8260B							TH	
1,3,5-Trimethylbenzene		<1.0	ug/L	1		0.18	1.0		12/16/2020 14:45
1,2,4-Trimethylbenzene		<1.0	ug/L	1		0.20	1.0		12/16/2020 14:45
Pentafluorobenzene (Surrogate1)		97	% Recovery	1					12/16/2020 14:45
Fluorobenzene (Surrogate2)		101	% Recovery	1					12/16/2020 14:45
4-Bromofluorobenzene (Surrogate)		94	% Recovery	1					12/16/2020 14:45

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089511**

Sample ID : SR030 Trip Blank
Sampling Date/Time: 12/10/2020 09:00
Approval Date : 12/31/2020 14:24
Received Date/Time: 12/10/2020 11:12
Sample Type : TIME

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 1.8-1.9

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
GC/MS-Method 624-for Acrolein	EPA 624.1 ¤							AL	
Acrolein		<0.950	ug/L	1	E8	0.950	1.0		12/11/2020 18:03
Acrylonitrile		<0.524	ug/L	1	E8	0.524	1.0		12/11/2020 18:03
Pentafluorobenzene (Surrogate1)		92	% Recovery	1					12/11/2020 18:03
Fluorobenzene (Surrogate2)		96	% Recovery	1					12/11/2020 18:03
4-Bromofluorobenzene (Surrogate)		93	% Recovery	1					12/11/2020 18:03

GC/MS-Method 624-for Acrolein and Acrylonitrile Samples Case Narrative: The batch QC did not meet acceptance criteria in 2020089566 LFM/LFMD for acrolein (27%,33%) and acrylonitrile (24%,30%); control limits: 40-160%.

GC/MS-Method 624.1for 2-	EPA 624.1 ¤							AL	
2-Chloroethyl vinyl ether		<0.333	ug/L	1	E8	0.333	1.0		12/11/2020 18:03
Pentafluorobenzene (Surrogate1)		92	% Recovery	1					12/11/2020 18:03
Fluorobenzene (Surrogate2)		96	% Recovery	1					12/11/2020 18:03
4-Bromofluorobenzene (Surrogate)		93	% Recovery	1					12/11/2020 18:03

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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SR045

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Sample # Sample ID
2020061803

City of Phoenix, Water Services
Environmental Services Division
Chain of Custody Report

Project ID: STORMWATER

LIMS Number (Lab Use Only)	Bill Code / Account ID	Sample Location	Test Requested	Bottle Count	Collection Date	Collection Time	Preservation
202006							
1803	Stormwater	SR045	608-STORM	1	8/20/20	2015	ICE
1804	Stormwater	SR045	625-STORM	1			ICE
1805	Stormwater	SR045	TOTAL METALS STORMWATER	1			HNO3
1806	Stormwater	SR045	METALS DISSOLVED STORMWATER	1			HNO3/FIELD FILTERED
1807	Stormwater	SR045	NH3-WC and TKN-WC	1			H2SO4
1808	Stormwater	SR045	Group A with TDS	1			ICE
1809	Stormwater	SR045	IC300 Nitrate, Nitrite, Orthophosphate	1			ICE
1810	Stormwater	SR045	TOTAL PHOSPHOROUS	1			H2SO4

COMPOSITE SAMPLES

8/24/20

* Composite sample time 20:15 per Luis & USGS. 8/24/20

Sampler Print & Sign/Relinquished By	Date	Time	Received By	Condition (Lab Use Only)
Amada Hernandez / amada Hernandez	8/20/2020	2345	Fridge	
Fridge				C

RECEIVED
WSLAB
AUG 21 2020

TIME: 0707
TEMP °C: +6 1.5 8/21/20

Sample # Sample ID
2020061813

City of Phoenix, Water Services
Environmental Services Division
Chain of Custody Report

Project ID: STORMWATER

LIMS Number (Lab Use Only)	Bill Code / Account ID	Sample Location	Test Requested	Bottle Count	Collection Date	Collection Time	Preservation
202006							
1811	Stormwater	**SR045**	8260B-Storm 624-Storm	6	8/20/20	2255	HCL
1812	Stormwater	**SR045**	624 ACAC 624 CEVE	6	↓	↓	ICE
1813	Stormwater	**SR045**	COLILERT – MPN	1			NaSO4
1814	Stormwater	**SR045**	CYANIDE	1			NaOH
1815	Stormwater	**SR045**	1664 HEMSGT	3			H2SO4
1816	Stormwater	**SR045 Trip Blank**	8260B-Storm 624-Storm	2			HCL
1817	Stormwater	**SR045 Trip Blank**	624 ACAC 624 CEVE	2	↓	↓	ICE

GRAB SAMPLES

pH 7.42 Air Temp 28.0 Water Temp 30.3 Specific Conductance 346

Barometric Pressure 726 Dissolved Oxygen 6.56

Sample # Sample ID
2020061813 - SR045
2020061814 - SR045
2020061815 - SR045
2020061816 - SR045 Trip Blank
2020061817 - SR045 Trip Blank

Sampler Print & Sign/Relinquished By	Date	Time	Received By	Condition (Lab Use Only)
Amada Hernandez/amada Hernandez	RECEIVED WS LAB AUG 21 2020	2345	Fridge	
Fridge				C

Page 2 of 2

TIME: 0757
TEMP °C: 1.6

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061803**

Sample ID	: SR045			Project Link Code	: Stormwater
Sampling Date/Time	: 08/20/2020 20:15	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 09/28/2020 07:28	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 08/21/2020 07:07			Delivered	: USGS
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.5

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
608.3-STORM	EPA 608.3							JG	
alpha-BHC		<0.0033	ug/L	1.06	D4;E8;N1	0.0033	0.005		09/09/2020 20:53
gamma-BHC		<0.0036	ug/L	1.06	D4;E8;N1	0.0036	0.005		09/09/2020 20:53
beta-BHC		<0.1910	ug/L	1.06	D4;E8;N1	0.1910	0.5		09/09/2020 20:53
d-BHC		<0.0164	ug/L	1.06	D4;E8;N1	0.0164	0.02		09/09/2020 20:53
Heptachlor		<0.0315	ug/L	1.06	D4;E8	0.0315	0.05		09/09/2020 20:53
Aldrin		<0.0040	ug/L	1.06	D4;E8	0.0040	0.005		09/09/2020 20:53
Heptachlor Epoxide		<0.0016	ug/L	1.06	D4;E8	0.0016	0.005		09/09/2020 20:53
4,4'-DDE		<0.0036	ug/L	1.06	D4;E8	0.0036	0.005		09/09/2020 20:53
Endosulfan I		<0.0061	ug/L	1.06	D4;E8	0.0061	0.021		09/09/2020 20:53
Dieldrin		<0.0039	ug/L	1.06	D4;E8	0.0039	0.005		09/09/2020 20:53
Endrin		<0.0087	ug/L	1.06	D4;E8	0.0087	0.02		09/09/2020 20:53
4,4'-DDD		<0.0023	ug/L	1.06	D4;E8;N1	0.0023	0.005		09/09/2020 20:53
Endosulfan II		<0.0022	ug/L	1.06	D4;E8;N1	0.0022	0.005		09/09/2020 20:53
4,4'-DDT		<0.0015	ug/L	1.06	D4;E8;N1	0.0015	0.005		09/09/2020 20:53
Endrin Aldehyde		<0.003	ug/L	1.06	D4;E8	0.003	0.005		09/09/2020 20:53
Endosulfan Sulfate		<0.0019	ug/L	1.06	D4;E8;N1	0.0019	0.005		09/09/2020 20:53
Chlordane		<0.20	ug/L	1.06	D4;E8	0.20	0.5		09/09/2020 20:53
Toxaphene		<0.495	ug/L	1.06	D4;E8	0.495	1.1		09/09/2020 20:53
Arochlor-1016		<0.0881	ug/L	1.06	D4;E8	0.0881	0.1		09/09/2020 20:53
Arochlor-1221		<0.0881	ug/L	1.06	D4;E8	0.0881	0.1		09/09/2020 20:53
Arochlor-1232		<0.0881	ug/L	1.06	D4;E8	0.0881	0.1		09/09/2020 20:53
Arochlor-1242		<0.0881	ug/L	1.06	D4;E8	0.0881	0.1		09/09/2020 20:53
Arochlor-1248		<0.0881	ug/L	1.06	D4;E8	0.0881	0.1		09/09/2020 20:53
Arochlor-1254		<0.0881	ug/L	1.06	D4;E8	0.0881	0.1		09/09/2020 20:53
Arochlor-1260		<0.0881	ug/L	1.06	D4;E8	0.0881	0.1		09/09/2020 20:53

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(602) 534-2960

AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061803**

Sample ID	: SR045			Project Link Code	: Stormwater
Sampling Date/Time	: 08/20/2020 20:15	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 09/28/2020 07:28	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 08/21/2020 07:07			Delivered	: USGS
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.5

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
608.3-STORM	EPA 608.3							JG	
Decachlorobiphenyl		53	% Recovery	1					09/09/2020 20:53
Total Endosulfan		<0.0022	ug/L	1.06	D4;E8	0.0022	0.005		09/09/2020 20:53
TOTAL PCB		<0.0881	ug/L	1.06	D4;E8	0.0881	0.1		09/09/2020 20:53
Aldrin/Dieldrin		<0.0039	ug/L	1.06	D4;E8	0.0039	0.005		09/09/2020 20:53

608.3-STORM Case Narrative: Batch QC did not meet laboratory acceptance criteria in sample 2020060935LFM/LFMD for multiple analytes percent recovery. The closing CCV did not meet laboratory acceptance criteria for multiple analytes percent recovery. Dilution factor = 1.06X from the extraction.

Extraction - 608.3	EPA 608.3	COMPLETE	AA	08/24/2020 00:00

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

09/11/2020 00:36

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061804**

Sample ID	: SR045			Project Link Code	: Stormwater
Sampling Date/Time	: 08/20/2020 20:15	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 09/10/2020 08:54	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 08/21/2020 07:07			Delivered	: USGS
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.5

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
	Acenaphthene	<0.65	ug/L	1	E8	0.65	10		08/26/2020 18:01
	Acenaphthylene	<0.56	ug/L	1	E8	0.56	10		08/26/2020 18:01
	Anthracene	<0.52	ug/L	1	E8	0.52	10		08/26/2020 18:01
	Benzo(a)anthracene	<0.77	ug/L	1	E8	0.77	10		08/26/2020 18:01
	Benzo(a)pyrene	<1.50	ug/L	1	E8	1.50	10		08/26/2020 18:01
	Benzo(b)fluoranthene	<2.36	ug/L	1	E8	2.36	10		08/26/2020 18:01
	Benzo(ghi)perylene	<1.83	ug/L	1	E8	1.83	10		08/26/2020 18:01
	Benzo(k)fluoranthene	<1.83	ug/L	1	E8	1.83	10		08/26/2020 18:01
	Chrysene	<0.77	ug/L	1	E8	0.77	10		08/26/2020 18:01
	Dibenzo(a,h)anthracene	<1.58	ug/L	1	E8	1.58	10		08/26/2020 18:01
	1,2-Dichlorobenzene	<0.85	ug/L	1	E8	0.85	10		08/26/2020 18:01
	1,3-Dichlorobenzene	<0.87	ug/L	1	E8	0.87	10		08/26/2020 18:01
	1,4-Dichlorobenzene	<0.93	ug/L	1	E8	0.93	10		08/26/2020 18:01
	3,3'-Dichlorobenzidine	<5.94	ug/L	1	E8;M2;N1	5.94	50		08/26/2020 18:01
	Diethyl phthalate	<7.57	ug/L	1	E8	7.57	10		08/26/2020 18:01
	Dimethyl phthalate	1.2	ug/L	1	E4	0.46	20		08/26/2020 18:01
	Di-n-butyl phthalate	<0.95	ug/L	1	E8	0.95	10		08/26/2020 18:01
	2,4-Dinitrotoluene	<0.80	ug/L	1	E8	0.80	10		08/26/2020 18:01
	2,6-Dinitrotoluene	<0.62	ug/L	1	E8	0.62	10		08/26/2020 18:01
	Di-n-octyl phthalate	<2.32	ug/L	1	E8	2.32	10		08/26/2020 18:01
	1,2-Diphenyl hydrazine (as azobenzene)	<1.10	ug/L	1	E8	1.10	10		08/26/2020 18:01
	Fluoranthene	<0.48	ug/L	1	E8	0.48	10		08/26/2020 18:01
	Fluorene	<0.48	ug/L	1	E8	0.48	10		08/26/2020 18:01
	Hexachlorobenzene	<0.35	ug/L	1	E8	0.35	10		08/26/2020 18:01
	Hexachlorobutadiene	<0.44	ug/L	1	E8	0.44	10		08/26/2020 18:01

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061804**

Sample ID	: SR045			Project Link Code	: Stormwater
Sampling Date/Time	: 08/20/2020 20:15	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 09/10/2020 08:54	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 08/21/2020 07:07			Delivered	: USGS
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.5

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
	Hexachlorocyclopentadiene	<1.26	ug/L	1	E8	1.26	10		08/26/2020 18:01
	Hexachloroethane	<0.34	ug/L	1	E8	0.34	10		08/26/2020 18:01
	Indeno(1,2,3-cd)pyrene	<2.27	ug/L	1	E8	2.27	10		08/26/2020 18:01
	Isophorone	<1.38	ug/L	1	E8	1.38	10		08/26/2020 18:01
	Naphthalene	<0.35	ug/L	1	E8	0.35	10		08/26/2020 18:01
	Nitrobenzene	<0.86	ug/L	1	E8	0.86	10		08/26/2020 18:01
	N-Nitrosodimethylamine	<0.67	ug/L	1	E8	0.67	10		08/26/2020 18:01
	N-Nitrosodi-n-propylamine	<2.38	ug/L	1	E8	2.38	10		08/26/2020 18:01
	N-Nitrosodiphenylamine	<0.84	ug/L	1	E8	0.84	10		08/26/2020 18:01
	Phenanthrene	<0.30	ug/L	1	E8	0.30	10		08/26/2020 18:01
	Pyrene	<0.21	ug/L	1	E8	0.21	10.0		08/26/2020 18:01
	1,2,4-Trichlorobenzene	<1.00	ug/L	1	E8	1.00	10		08/26/2020 18:01
	2-Chlorophenol	<1.01	ug/L	1	E8	1.01	10		08/26/2020 18:01
	2,4-Dichlorophenol	<1.37	ug/L	1	E8	1.37	10		08/26/2020 18:01
	2,4-Dimethylphenol	<2.57	ug/L	1	E8	2.57	10		08/26/2020 18:01
	2-Methyl-4,6-dinitrophenol	<1.27	ug/L	1	E8	1.27	10		08/26/2020 18:01
	2,4-Dinitrophenol	<0.92	ug/L	1	E8	0.92	10		08/26/2020 18:01
	2-Nitrophenol	<0.94	ug/L	1	E8	0.94	10		08/26/2020 18:01
	4-Nitrophenol	<1.70	ug/L	1	E8	1.70	10		08/26/2020 18:01
	4-Chloro-3-methylphenol	<1.34	ug/L	1	E8	1.34	10		08/26/2020 18:01
	Pentachlorophenol	3.0	ug/L	1	E4	1.92	10		08/26/2020 18:01
	Phenol	4.4	ug/L	1	E4	1.27	10		08/26/2020 18:01
	2,4,6-Trichlorophenol	<1.61	ug/L	1	E8	1.61	10		08/26/2020 18:01
	2,4,6-Tribromophenol	99	% Recovery	1					08/26/2020 18:01
	Dibromooctafluorobiphenyl	69	% Recovery	1					08/26/2020 18:01

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061804**

Sample ID	: SR045			Project Link Code	: Stormwater
Sampling Date/Time	: 08/20/2020 20:15	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 09/10/2020 08:54	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 08/21/2020 07:07			Delivered	: USGS
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.5

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
4,4-Dibromobiphenyl		87	% Recovery	1					08/26/2020 18:01

625.1-STORM Case Narrative: Batch QC did not meet acceptance criteria in sample 2020061804 LFM/LFMD 3,3-Dichlorobenzidine (0%/0%); Control Limits: 1-262%. The LFMD RPD could not be calculated for 3,3-Dichlorobenzidine due to the results being zero.

Extraction - 625.1	EPA 625.1	COMPLETE	BC	08/24/2020 00:00

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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09/04/2020 00:34

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061805**

Sample ID	: SR045			Project Link Code	: Stormwater
Sampling Date/Time	: 08/20/2020 20:15	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 09/03/2020 06:45	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 08/21/2020 07:07			Delivered	: USGS
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.5

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Silver - Total Recoverable	EPA 200.8	<0.00125	mg/L	5	D1;E8	0.00125	0.0050	TS	09/01/2020 00:00
Arsenic - Total Recoverable	EPA 200.8	0.0026	mg/L	5	D1;E4	0.00245	0.0050	TS	09/01/2020 00:00
Barium - Total Recoverable	EPA 200.8	0.070	mg/L	5	D1	0.00340	0.0050	TS	09/02/2020 00:00
Beryllium - Total Recoverable	EPA 200.8	<0.00180	mg/L	5	D1;E8	0.00180	0.0050	TS	09/02/2020 00:00
Cadmium - Total Recoverable	EPA 200.8	<0.00210	mg/L	5	D1;E8	0.00210	0.0050	TS	09/01/2020 00:00
Chromium - Total Recoverable	EPA 200.8	0.0073	mg/L	5	D1;E4	0.0070	0.025	TS	09/02/2020 00:00
Copper - Total Recoverable	EPA 200.8	0.0470	mg/L	5	D1	0.00455	0.0050	TS	09/02/2020 00:00
Nickel - Total Recoverable	EPA 200.8	0.0082	mg/L	5	D1	0.00315	0.0050	TS	09/02/2020 00:00
Lead - Total Recoverable	EPA 200.8	0.0092	mg/L	5	D1	0.00170	0.0050	TS	09/01/2020 00:00
Antimony - Total Recoverable	EPA 200.8	0.0026	mg/L	5	D1;E4	0.00200	0.0050	TS	09/01/2020 00:00
Selenium - Total Recoverable	EPA 200.8	<0.00405	mg/L	5	D1;E8	0.00405	0.0050	TS	09/01/2020 00:00
Thallium - Total Recoverable	EPA 200.8	<0.00275	mg/L	5	D1;E8	0.00275	0.0050	TS	09/01/2020 00:00
Zinc - Total Recoverable	EPA 200.8	0.286	mg/L	5	D1	0.0380	0.050	TS	09/02/2020 00:00

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061805**

Sample ID	: SR045			Project Link Code	: Stormwater
Sampling Date/Time	: 08/20/2020 20:15	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 09/03/2020 06:45	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 08/21/2020 07:07			Delivered	: USGS
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.5

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Metals Prep - TR	SM22 3030 F ¤	COMPLETE						AK	08/27/2020 06:30
Mercury - Total	EPA 245.1	<0.000118	mg/L	2	D1;E8	0.000118	0.0002	GA	08/27/2020 18:47
pH<2Verification	pH <2 Verification	COMPLETE						AK	08/24/2020 06:33

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061806**

Sample ID	: SR045			Project Link Code	: Stormwater
Sampling Date/Time	: 08/20/2020 20:15	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 09/03/2020 06:37	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 08/21/2020 07:07			Delivered	: USGS
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.5

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Filtration Prep Dissolved Metals	SM22 3030 B	COMPLETE						AK	08/25/2020 06:31
Filtration Prep Dissolved Metals Case Narrative: Field Filtered on 08/20/2020									
Hardness - Total	SM22 2340 B							CG	
Hardness - Total		74.0	mg/L	1		1.31	16.6		08/27/2020 19:37
Calcium Hardness		61.9	mg/L	1		1.00	12.5		08/27/2020 19:37
Calcium - Total Recoverable	EPA 200.7	24.8	mg/L	1		0.40	5.00	CG	08/27/2020 19:37
Magnesium - Total Recoverable	EPA 200.7	2.92	mg/L	1		0.076	1.00	CG	08/27/2020 19:37
Silver - Dissolved	EPA 200.8	<0.0050	mg/L	5	D1	0.00125	0.0050	TS	09/01/2020 00:00
Arsenic - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00098	0.0020	TS	08/26/2020 00:00
Barium - Dissolved	EPA 200.8	0.026	mg/L	2	D1	0.00136	0.0020	TS	08/26/2020 00:00
Beryllium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00072	0.0020	TS	08/26/2020 00:00
Cadmium - Dissolved	EPA 200.8	<0.0010	mg/L	1		0.00042	0.0010	TS	08/26/2020 00:00
Chromium - Dissolved	EPA 200.8	<0.010	mg/L	2	D1	0.0028	0.010	TS	08/26/2020 00:00
Copper - Dissolved	EPA 200.8	0.0353	mg/L	1		0.00091	0.0010	TS	08/26/2020 00:00

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061806**

Sample ID : SR045
Sampling Date/Time: 08/20/2020 20:15
Approval Date : 09/03/2020 06:37
Received Date/Time: 08/21/2020 07:07
Sample Type : COMPOS

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 1.5

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Nickel - Dissolved	EPA 200.8	0.0057	mg/L	2	D1	0.00126	0.0020	TS	08/26/2020 00:00
Lead - Dissolved	EPA 200.8	0.0011	mg/L	1		0.00034	0.0010	TS	08/26/2020 00:00
Antimony - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00080	0.0020	TS	08/26/2020 00:00
Selenium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00162	0.0020	TS	08/26/2020 00:00
Thallium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00110	0.0020	TS	08/26/2020 00:00
Zinc - Dissolved	EPA 200.8	0.139	mg/L	1		0.0076	0.010	TS	08/26/2020 00:00
Metals Prep - TR	SM22 3030 F ¤	COMPLETE						AK	08/27/2020 06:30
Mercury - Diss	EPA 245.1	<0.0002	mg/L	2	D1	0.000118	0.0002	GA	08/27/2020 18:49
pH<2Verification	pH <2 Verification	COMPLETE						AK	08/24/2020 06:33

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061807**

Sample ID	: SR045			Project Link Code	: Stormwater
Sampling Date/Time	: 08/20/2020 20:15	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 09/22/2020 15:23	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 08/21/2020 07:07			Delivered	: USGS
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.5

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Ammonia	EPA 350.1	1.8	mg/L	1	M1	0.13	0.20	JS	09/10/2020 15:45
	Ammonia Case Narrative: LFM=114%. Acceptance criteria is 90-110%.								
Total Kjeldahl Nitrogen	EPA 351.2	6.0	mg/L	1		0.21	0.25	JS	09/15/2020 12:23

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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09/09/2020 00:33

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061808**

Sample ID	: SR045			Project Link Code	: Stormwater
Sampling Date/Time	: 08/20/2020 20:15	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 09/08/2020 07:34	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 08/21/2020 07:07			Delivered	: USGS
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.5

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
BOD, 5 Day	SM22 5210 B	50	mg/L	1		2	2	BM	08/22/2020 11:28
COD	HACH-8000	220	mg/L	1		11.69	50	BM	08/21/2020 12:28
Suspended Solids	SM22 2540 D	62.5	mg/L	5	N1	12.5	12.5	DT	08/21/2020 08:00
Suspended Solids Case Narrative: 2020061902 sample duplicate RPD = 9%. CL <= 5%.									
Total Dissolved Solids	SM22 2540 C	246	mg/L	1		10	10	CA	08/26/2020 10:09

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

09/12/2020 00:32

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061809**

Sample ID	: SR045			Project Link Code	: Stormwater
Sampling Date/Time	: 08/20/2020 20:15	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 09/11/2020 11:39	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 08/21/2020 07:07			Delivered	: USGS
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.5

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
O-Phosphate-P	EPA 300.0	0.3	mg/L	1		0.025	0.1	GA	08/21/2020 18:39
Nitrate-N	EPA 300.0	1.9	mg/L	1		0.037	0.1	GA	08/21/2020 18:39
Nitrite-N	EPA 300.0	<0.1	mg/L	1		0.027	0.1	GA	08/21/2020 18:39

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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09/11/2020 00:36

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061810**

Sample ID	: SR045			Project Link Code	: Stormwater
Sampling Date/Time	: 08/20/2020 20:15	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 09/10/2020 09:29	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 08/21/2020 07:07			Delivered	: USGS
Sample Type	: COMPOS			Receipt Temperature (°C)	: 1.5

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Phosphorus - Total	SM 4500 P E	0.44	mg/L	1			0.020	TAM	09/02/2020 18:05

Phosphorus - Total Case Narrative: No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

non-NELAC Outside Lab: Test America - ADHS Lic. # AZ0728

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

09/11/2020 00:36

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061811**

Sample ID	: SR045			Project Link Code	: Stormwater
Sampling Date/Time	: 08/20/2020 22:55	Temperature	: 30.3 Deg. C	Account Number	: Stormwater
Approval Date	: 09/10/2020 10:49	pH	: 7.42	Sampled by	: USGS
Received Date/Time	: 08/21/2020 07:07			Delivered	: USGS
Sample Type	: GRAB			Receipt Temperature (°C)	: 1.5

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							AL	
	Chloromethane	<2.85	ug/L	5	E8;D1	2.85	5.0		08/22/2020 00:34
	Vinyl Chloride	<2.35	ug/L	5	E8;D1	2.35	5.0		08/22/2020 00:34
	Bromomethane	<1.95	ug/L	5	E8;D1	1.95	5.0		08/22/2020 00:34
	Chloroethane	<3.30	ug/L	5	E8;D1	3.30	5.0		08/22/2020 00:34
	Trichlorofluoromethane	<2.15	ug/L	5	E8;D1	2.15	5.0		08/22/2020 00:34
	1,1-Dichloroethylene	<2.05	ug/L	5	E8;D1	2.05	5.0		08/22/2020 00:34
	Methylene chloride	<2.05	ug/L	5	E8;D1	2.05	5.0		08/22/2020 00:34
	trans-1,2-Dichloroethene	<1.60	ug/L	5	E8;D1	1.60	5.0		08/22/2020 00:34
	1,1-Dichloroethane	<1.50	ug/L	5	E8;D1	1.50	5.0		08/22/2020 00:34
	Chloroform	<1.55	ug/L	5	E8;D1	1.55	5.0		08/22/2020 00:34
	1,2-Dichloroethane	<1.40	ug/L	5	E8;D1	1.40	5.0		08/22/2020 00:34
	1,1,1-Trichloroethane	<1.60	ug/L	5	E8;D1	1.60	5.0		08/22/2020 00:34
	Carbon Tetrachloride	<1.60	ug/L	5	E8;D1	1.60	5.0		08/22/2020 00:34
	Benzene	<1.55	ug/L	5	E8;D1	1.55	5.0		08/22/2020 00:34
	1,2-Dichloropropane	<1.65	ug/L	5	E8;D1	1.65	5.0		08/22/2020 00:34
	Trichloroethene	<1.90	ug/L	5	E8;D1	1.90	5.0		08/22/2020 00:34
	Bromodichloromethane	<1.05	ug/L	5	E8;D1	1.05	5.0		08/22/2020 00:34
	cis-1,3-Dichloropropene	<0.75	ug/L	5	E8;D1	0.75	5.0		08/22/2020 00:34
	trans-1,3-Dichloropropene	<0.95	ug/L	5	E8;D1	0.95	5.0		08/22/2020 00:34
	1,1,2-Trichloroethane	<1.85	ug/L	5	E8;D1	1.85	5.0		08/22/2020 00:34
	Toluene	<1.75	ug/L	5	E8;D1	1.75	5.0		08/22/2020 00:34
	Dibromochloromethane	<1.05	ug/L	5	E8;D1	1.05	5.0		08/22/2020 00:34
	Tetrachloroethylene	<1.90	ug/L	5	E8;D1	1.90	5.0		08/22/2020 00:34
	Chlorobenzene	<2.10	ug/L	5	E8;D1	2.10	5.0		08/22/2020 00:34
	Ethylbenzene	<2.10	ug/L	5	E8;D1	2.10	5.0		08/22/2020 00:34

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061811**

Sample ID	: SR045			Project Link Code	: Stormwater
Sampling Date/Time	: 08/20/2020 22:55	Temperature	: 30.3 Deg. C	Account Number	: Stormwater
Approval Date	: 09/10/2020 10:49	pH	: 7.42	Sampled by	: USGS
Received Date/Time	: 08/21/2020 07:07			Delivered	: USGS
Sample Type	: GRAB			Receipt Temperature (°C)	: 1.5

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							AL	
m- & p-Xylene		<4.20	ug/L	5	E8;D1	4.20	10.0		08/22/2020 00:34
Bromoform		<1.85	ug/L	5	E8;D1	1.85	5.0		08/22/2020 00:34
o-Xylene		<1.65	ug/L	5	E8;D1	1.65	5.0		08/22/2020 00:34
1,1,2,2-Tetrachloroethane		<2.30	ug/L	5	E8;D1	2.30	5.0		08/22/2020 00:34
1,3-Dichlorobenzene		<2.80	ug/L	5	E8;D1	2.80	5.0		08/22/2020 00:34
1,2-Dichlorobenzene		<2.85	ug/L	5	E8;D1	2.85	5.0		08/22/2020 00:34
1,4-Dichlorobenzene		<2.50	ug/L	5	E8;D1	2.50	5.0		08/22/2020 00:34
Pentafluorobenzene (Surrogate1)		101	% Recovery	5					08/22/2020 00:34
Fluorobenzene (Surrogate2)		103	% Recovery	5					08/22/2020 00:34
4-Bromofluorobenzene (Surrogate)		91	% Recovery	5					08/22/2020 00:34
1,3-Dichloropropene (cis & trans)		<0.75	ug/L	5	E8;D1	0.75	5.0		08/22/2020 00:34
Total Xylene		<1.65	ug/L	5	E8;D1	1.65	5.0		08/22/2020 00:34
624.1-STORM Case Narrative: DF=5									
Method 8260B Stormwater	EPA 8260B							AL	
1,3,5-Trimethylbenzene		<5.0	ug/L	5	D1	0.90	5.0		09/01/2020 17:10
1,2,4-Trimethylbenzene		<5.0	ug/L	5	D1	1.00	5.0		09/01/2020 17:10
Pentafluorobenzene (Surrogate1)		102	% Recovery	5					09/01/2020 17:10
Fluorobenzene (Surrogate2)		102	% Recovery	5					09/01/2020 17:10
4-Bromofluorobenzene (Surrogate)		98	% Recovery	5					09/01/2020 17:10
Method 8260B Stormwater Analysis Case Narrative: DF=5									

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

09/05/2020 00:33

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061812**

Sample ID	: SR045			Project Link Code	: Stormwater
Sampling Date/Time	: 08/20/2020 22:55	Temperature	: 30.3 Deg. C	Account Number	: Stormwater
Approval Date	: 09/04/2020 16:05	pH	: 7.42	Sampled by	: USGS
Received Date/Time	: 08/21/2020 07:07			Delivered	: USGS
Sample Type	: GRAB			Receipt Temperature (°C)	: 1.5

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
GC/MS-Method 624-for Acrolein	EPA 624.1 ¤							AL	
Acrolein		<4.750	ug/L	5	E8;D1	4.750	5.0		08/21/2020 17:31
Acrylonitrile		<1.255	ug/L	5	E8;D1	1.255	5.0		08/21/2020 17:31
Pentafluorobenzene (Surrogate1)		100	% Recovery	5					08/21/2020 17:31
Fluorobenzene (Surrogate2)		100	% Recovery	5					08/21/2020 17:31
4-Bromofluorobenzene (Surrogate)		102	% Recovery	5					08/21/2020 17:31
GC/MS-Method 624-for Acrolein and Acrylonitrile Samples Case Narrative: DF=5									
GC/MS-Method 624.1for 2-	EPA 624.1 ¤							AL	
2-Chloroethyl vinyl ether		<1.665	ug/L	5	E8;D1	1.665	5.0		08/21/2020 17:31
Pentafluorobenzene (Surrogate1)		100	% Recovery	5					08/21/2020 17:31
Fluorobenzene (Surrogate2)		100	% Recovery	5					08/21/2020 17:31
4-Bromofluorobenzene (Surrogate)		102	% Recovery	5					08/21/2020 17:31
GC/MS-Method 624.1for 2-Chloroethyl vinyl ether samples Case Narrative: DF=5									

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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08/28/2020 00:29

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061813**

Sample ID	: SR045			Project Link Code	: Stormwater
Sampling Date/Time	: 08/20/2020 22:55	Temperature	: 30.3 Deg. C	Account Number	: Stormwater
Approval Date	: 08/27/2020 07:33	pH	: 7.42	Sampled by	: USGS
Received Date/Time	: 08/21/2020 07:07			Delivered	: USGS
Sample Type	: GRAB			Receipt Temperature (°C)	: 1.5

Test		Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Coliform - E. Coli		SM22 9223 B							DDP	
	Total Coliform		46110	MPN/100mL	100		100	100		08/21/2020 05:24
	E. coli		2430	MPN/100mL	100		100	100		08/21/2020 05:24

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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08/28/2020 00:29

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061814**

Sample ID	: SR045			Project Link Code	: Stormwater
Sampling Date/Time	: 08/20/2020 22:55	Temperature	: 30.3 Deg. C	Account Number	: Stormwater
Approval Date	: 08/27/2020 17:19	pH	: 7.42	Sampled by	: USGS
Received Date/Time	: 08/21/2020 07:07			Delivered	: USGS
Sample Type	: GRAB			Receipt Temperature (°C)	: 1.5

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Cyanide	EPA 335.4	<0.005	mg/L	1		0.0019	0.005	CA	08/24/2020 10:35

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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09/11/2020 00:36

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061815**

Sample ID	: SR045			Project Link Code	: Stormwater
Sampling Date/Time	: 08/20/2020 22:55	Temperature	: 30.3 Deg. C	Account Number	: Stormwater
Approval Date	: 09/10/2020 09:29	pH	: 7.42	Sampled by	: USGS
Received Date/Time	: 08/21/2020 07:07			Delivered	: USGS
Sample Type	: GRAB			Receipt Temperature (°C)	: 1.5

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
EPA 1664 With Silica Gel	EPA 1664B							TAMD	
Hexane Extractable Material		<5.8	mg/L	1			5.8		08/24/2020 18:45
Hexane Extractable Material - Silica Gel		<5.8	mg/L	1			5.8		08/24/2020 18:45

EPA 1664 With Silica Gel Treatment Case Narrative: General Chemistry
Method 1664B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 280-506562 and analytical batch 280-506678.

non-NELAC Outside Lab: Test America - ADHS Lic. # AZ0713

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061816**

Sample ID	: SR045 Trip Blank			Project Link Code	: Stormwater
Sampling Date/Time	: 08/21/2020 07:07	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 09/10/2020 10:49	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 08/21/2020 07:07			Delivered	: USGS
Sample Type	: TIME			Receipt Temperature (°C)	: 1.5

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							AL	
	Chloromethane	<0.57	ug/L	1	E8	0.57	1.0		08/21/2020 22:02
	Vinyl Chloride	<0.47	ug/L	1	E8	0.47	1.0		08/21/2020 22:02
	Bromomethane	<0.39	ug/L	1	E8	0.39	1.0		08/21/2020 22:02
	Chloroethane	<0.66	ug/L	1	E8	0.66	1.0		08/21/2020 22:02
	Trichlorofluoromethane	<0.43	ug/L	1	E8	0.43	1.0		08/21/2020 22:02
	1,1-Dichloroethylene	<0.41	ug/L	1	E8	0.41	1.0		08/21/2020 22:02
	Methylene chloride	<0.41	ug/L	1	E8	0.41	1.0		08/21/2020 22:02
	trans-1,2-Dichloroethene	<0.32	ug/L	1	E8	0.32	1.0		08/21/2020 22:02
	1,1-Dichloroethane	<0.30	ug/L	1	E8	0.30	1.0		08/21/2020 22:02
	Chloroform	<0.31	ug/L	1	E8	0.31	1.0		08/21/2020 22:02
	1,2-Dichloroethane	<0.28	ug/L	1	E8	0.28	1.0		08/21/2020 22:02
	1,1,1-Trichloroethane	<0.32	ug/L	1	E8	0.32	1.0		08/21/2020 22:02
	Carbon Tetrachloride	<0.32	ug/L	1	E8	0.32	1.0		08/21/2020 22:02
	Benzene	<0.31	ug/L	1	E8	0.31	1.0		08/21/2020 22:02
	1,2-Dichloropropane	<0.33	ug/L	1	E8	0.33	1.0		08/21/2020 22:02
	Trichloroethene	<0.38	ug/L	1	E8	0.38	1.0		08/21/2020 22:02
	Bromodichloromethane	<0.21	ug/L	1	E8	0.21	1.0		08/21/2020 22:02
	cis-1,3-Dichloropropene	<0.15	ug/L	1	E8	0.15	1.0		08/21/2020 22:02
	trans-1,3-Dichloropropene	<0.19	ug/L	1	E8	0.19	1.0		08/21/2020 22:02
	1,1,2-Trichloroethane	<0.37	ug/L	1	E8	0.37	1.0		08/21/2020 22:02
	Toluene	<0.35	ug/L	1	E8	0.35	1.0		08/21/2020 22:02
	Dibromochloromethane	<0.21	ug/L	1	E8	0.21	1.0		08/21/2020 22:02
	Tetrachloroethylene	<0.38	ug/L	1	E8	0.38	1.0		08/21/2020 22:02
	Chlorobenzene	<0.42	ug/L	1	E8	0.42	1.0		08/21/2020 22:02
	Ethylbenzene	<0.42	ug/L	1	E8	0.42	1.0		08/21/2020 22:02

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061816**

Sample ID : SR045 Trip Blank
Sampling Date/Time: 08/21/2020 07:07
Approval Date : 09/10/2020 10:49
Received Date/Time: 08/21/2020 07:07
Sample Type : TIME

Temperature : n/a Deg. C
pH : n/a

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 1.5

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							AL	
	m- & p-Xylene	<0.84	ug/L	1	E8	0.84	2.0		08/21/2020 22:02
	Bromoform	<0.37	ug/L	1	E8	0.37	1.0		08/21/2020 22:02
	o-Xylene	<0.33	ug/L	1	E8	0.33	1.0		08/21/2020 22:02
	1,1,2,2-Tetrachloroethane	<0.46	ug/L	1	E8	0.46	1.0		08/21/2020 22:02
	1,3-Dichlorobenzene	<0.56	ug/L	1	E8	0.56	1.0		08/21/2020 22:02
	1,2-Dichlorobenzene	<0.57	ug/L	1	E8	0.57	1.0		08/21/2020 22:02
	1,4-Dichlorobenzene	<0.50	ug/L	1	E8	0.50	1.0		08/21/2020 22:02
	Pentafluorobenzene (Surrogate1)	105	% Recovery	1					08/21/2020 22:02
	Fluorobenzene (Surrogate2)	100	% Recovery	1					08/21/2020 22:02
	4-Bromofluorobenzene (Surrogate)	92	% Recovery	1					08/21/2020 22:02
	1,3-Dichloropropene (cis & trans)	<0.15	ug/L	1	E8	0.15	1.0		08/21/2020 22:02
	Total Xylene	<0.33	ug/L	1	E8	0.33	1.0		08/21/2020 22:02
Method 8260B Stormwater	EPA 8260B							AL	
	1,3,5-Trimethylbenzene	<1.0	ug/L	1		0.18	1.0		09/01/2020 17:40
	1,2,4-Trimethylbenzene	<1.0	ug/L	1		0.20	1.0		09/01/2020 17:40
	Pentafluorobenzene (Surrogate1)	100	% Recovery	1					09/01/2020 17:40
	Fluorobenzene (Surrogate2)	101	% Recovery	1					09/01/2020 17:40
	4-Bromofluorobenzene (Surrogate)	97	% Recovery	1					09/01/2020 17:40

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

09/05/2020 00:33

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020061817**

Sample ID	: SR045 Trip Blank			Project Link Code	: Stormwater
Sampling Date/Time	: 08/21/2020 07:07	Temperature	: n/a Deg. C	Account Number	: Stormwater
Approval Date	: 09/04/2020 16:05	pH	: n/a	Sampled by	: USGS
Received Date/Time	: 08/21/2020 07:07			Delivered	: USGS
Sample Type	: TIME			Receipt Temperature (°C)	: 1.5

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
GC/MS-Method 624-for Acrolein	EPA 624.1 ¤							AL	
Acrolein		<0.950	ug/L	1	E8	0.950	1.0		08/21/2020 18:42
Acrylonitrile		<0.251	ug/L	1	E8	0.251	1.0		08/21/2020 18:42
Pentafluorobenzene (Surrogate1)		102	% Recovery	1					08/21/2020 18:42
Fluorobenzene (Surrogate2)		100	% Recovery	1					08/21/2020 18:42
4-Bromofluorobenzene (Surrogate)		100	% Recovery	1					08/21/2020 18:42
GC/MS-Method 624.1for 2-	EPA 624.1 ¤							AL	
2-Chloroethyl vinyl ether		<0.333	ug/L	1	E8	0.333	1.0		08/21/2020 18:42
Pentafluorobenzene (Surrogate1)		102	% Recovery	1					08/21/2020 18:42
Fluorobenzene (Surrogate2)		100	% Recovery	1					08/21/2020 18:42
4-Bromofluorobenzene (Surrogate)		100	% Recovery	1					08/21/2020 18:42

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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ANALYTICAL REPORT

Eurofins TestAmerica, Phoenix
4625 East Cotton Ctr Blvd
Suite 189
Phoenix, AZ 85040
Tel: (602)437-3340

Laboratory Job ID: 550-147735-1
Client Project/Site: IPP

For:
City of Phoenix Water Services
2474 South 22nd Ave
Bld. 31
Phoenix, Arizona 85009

Attn: Britney Dempster

Authorized for release by:
9/4/2020 8:22:24 AM

Rachel Sester, Project Manager I
(602)659-7615
Rachel.Sester@Eurofinset.com

Table of Contents

Definitions/Glossary

Client: City of Phoenix Water Services
Project/Site: IPP

Job ID: 550-147735-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 550-147735-1

Laboratory: Eurofins TestAmerica, Phoenix

Narrative

Job Narrative
550-147735-1

Comments
No additional comments.

Receipt
The samples were received on 8/21/2020 1:15 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.1° C.

General Chemistry
Method 1664B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 280-506562 and analytical batch 280-506678.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Sample Summary

Client: City of Phoenix Water Services
Project/Site: IPP

Job ID: 550-147735-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
550-147735-1	2020061810	Water	08/20/20 00:00	08/21/20 13:15	
550-147735-2	2020061815	Water	08/20/20 22:55	08/21/20 13:15	

Client Sample Results

Client: City of Phoenix Water Services
Project/Site: IPP

Job ID: 550-147735-1

Client Sample ID: 2020061810

Date Collected: 08/20/20 00:00
Date Received: 08/21/20 13:15

Lab Sample ID: 550-147735-1

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus	0.44		0.020		mg/L		09/02/20 09:55	09/02/20 18:05	1

Client Sample ID: 2020061815

Date Collected: 08/20/20 22:55
Date Received: 08/21/20 13:15

Lab Sample ID: 550-147735-2

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil and Grease)	ND		5.8		mg/L		08/24/20 09:24	08/24/20 18:45	1

Method: 1664B - HEM and SGT-HEM

Lab Sample ID: MB 280-506561/3-B
Matrix: Water
Analysis Batch: 506678

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 506561

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil and Grease)	ND		5.0		mg/L		08/24/20 09:22	08/24/20 18:45	1

Lab Sample ID: LCS 280-506561/1-B
Matrix: Water
Analysis Batch: 506678

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 506561

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM (Oil and Grease)	40.0	36.30		mg/L		91	78 - 114

Lab Sample ID: LCSD 280-506561/2-B
Matrix: Water
Analysis Batch: 506678

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 506561

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM (Oil and Grease)	40.0	35.90		mg/L		90	78 - 114	1	18

Method: SM 4500 P E - Phosphorus

Lab Sample ID: MB 550-219039/1-B
Matrix: Water
Analysis Batch: 219229

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 219074

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus	ND		0.020		mg/L		09/02/20 09:55	09/02/20 18:05	1

Lab Sample ID: MB 550-219074/3-A
Matrix: Water
Analysis Batch: 219229

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 219074

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus	ND		0.020		mg/L		09/02/20 09:55	09/02/20 18:05	1

Lab Sample ID: LCS 550-219074/4-A
Matrix: Water
Analysis Batch: 219229

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 219074

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Phosphorus	0.300	0.320		mg/L		107	90 - 110

Lab Sample ID: LCSD 550-219074/5-A
Matrix: Water
Analysis Batch: 219229

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 219074

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Phosphorus	0.300	0.320		mg/L		107	90 - 110	0	20

Client: City of Phoenix Water Services
Project/Site: IPP

Job ID: 550-147735-1

Method: SM 4500 P E - Phosphorus (Continued)

Lab Sample ID: 550-147146-A-1-E MS
Matrix: Water
Analysis Batch: 219229

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 219074

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Phosphorus	0.020		0.300	0.271		mg/L		84	80 - 120		

Lab Sample ID: 550-147146-A-1-F MSD
Matrix: Water
Analysis Batch: 219229

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 219074

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Phosphorus	0.020		0.300	0.262		mg/L		81	80 - 120	3	20

Lab Chronicle

Client: City of Phoenix Water Services
Project/Site: IPP

Job ID: 550-147735-1

Client Sample ID: 2020061810
Date Collected: 08/20/20 00:00
Date Received: 08/21/20 13:15

Lab Sample ID: 550-147735-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SM 4500 P B			219074	09/02/20 09:55	MRR	TAL PHX
Total/NA	Analysis	SM 4500 P E		1	219229	09/02/20 18:05	RLS	TAL PHX

Client Sample ID: 2020061815
Date Collected: 08/20/20 22:55
Date Received: 08/21/20 13:15

Lab Sample ID: 550-147735-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1664B			506562	08/24/20 09:24	DLB	TAL DEN
Total/NA	Analysis	1664B		1	506678	08/24/20 18:45	DLB	TAL DEN

Laboratory References:

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL PHX = Eurofins TestAmerica, Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: City of Phoenix Water Services
Job ID: 550-147735-1
Project/Site: IPP

Laboratory: Eurofins TestAmerica, Phoenix

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-08-21

Laboratory: Eurofins TestAmerica, Denver

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0713	12-20-20

Method Summary

Client: City of Phoenix Water Services
Project/Site: IPP

Job ID: 550-147735-1

Method	Method Description	Protocol	Laboratory
1664B	HEM and SGT-HEM	1664B	TAL DEN
SM 4500 P E	Phosphorus	SM	TAL PHX
1664B	HEM and SGT-HEM (SPE)	1664B	TAL DEN
SM 4500 P B	Phosphorous, Total and Ortho	SM	TAL PHX

Protocol References:

1664B = EPA-821-98-002

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

TAL PHX = Eurofins TestAmerica, Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

TestAmerica Phoenix
4625 East Cotton Center Boulevard
Suite 189
Phoenix, AZ 85040-4807
phone 602.437.3340 fax 602.454.9303

Chain of Custody Record

147735

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

9/4/2020

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☑ Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Rachel Sester	Site Contact:	Date:	COC No:
City of Phoenix	Tel/Fax:	Lab Contact:	Carrier:	1 of 1 COCs
2474 S 22nd Ave	Analysis Turnaround Time			Sampler:
Phoenix, AZ 85009	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
(602) 534-2960	TAT if different from Below ____			Walk-in Client:
	☐ 2 weeks			Lab Sampling:
Project Name: IPP	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Phosphorous	EPA 1664-HEM	Sample Specific Notes:
2020061810	8/20/20		C	Storm	1			x		-1
2020061815	8/20/20	2255	G	Storm	3				x	-2

550-147735 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☑ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

2.1°C RC

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd:	Corr'd:	Therm ID No.:	
Relinquished by:	Company: City of Phoenix	Date/Time: 8/21/20 1253	Received by: L BATEMAN DCS	Company:	Date/Time: 8/21/20 12:53	
Relinquished by: L BATEMAN DCS	Company: 8/21/20	Date/Time: 13:15	Received by:	Company:	Date/Time:	
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TALK	Date/Time: 8-21-20 1315	

Sample # Sample ID
2020061803

City of Phoenix, Water Services
Environmental Services Division
Chain of Custody Report

9/4/2020

Project ID: STORMWATER

LIMS Number (Lab Use Only)	Bill Code / Account ID	Sample Location	Test Requested	Bottle Count	Collection Date	Collection Time	Preservation
202006							
1803	Stormwater	SR045	608-STORM	1	8/20/20		ICE
1804	Stormwater	SR045	625-STORM	1			ICE
1805	Stormwater	SR045	TOTAL METALS STORMWATER	1			HNO3
1806	Stormwater	SR045	METALS DISSOLVED STORMWATER	1			HNO3/FIELD FILTERED
1807	Stormwater	SR045	NH3-WC and TKN-WC	1			H2SO4
1808	Stormwater	SR045	Group A with TDS	1			ICE
1809	Stormwater	SR045	IC300 Nitrate, Nitrite, Orthophosphate	1			ICE
1810	Stormwater	SR045	TOTAL PHOSPHOROUS	1			H2SO4

COMPOSITE SAMPLES

Sampler Print & Sign/Relinquished By	Date	Time	Received By	Condition (Lab Use Only)
Amada Hernandez / Amada Hernandez	8/20/2020	2345	Fridge	
Fridge	RECEIVED WSLAB AUG 21 2020			C

Page 1 of 2

TIME: 0707
TEMP °C: ~~16~~ 15 8/21/20

Sample # Sample ID
2020061813

City of Phoenix, Water Services
Environmental Services Division
Chain of Custody Report

9/4/2020

Project ID: STORMWATER

LIMS Number (Lab Use Only)	Bill Code / Account ID	Sample Location	Test Requested	Bottle Count	Collection Date	Collection Time	Preservation
202006							
1811	Stormwater	**SR045**	8260B-Storm 624-Storm	6	8/20/20	2255	HCL
1812	Stormwater	**SR045**	624 ACAC 624 CEVE	6	↓	↓	ICE
1813	Stormwater	**SR045**	COLILERT – MPN	1	↓	↓	NaSO4
1814	Stormwater	**SR045**	CYANIDE	1	↓	↓	NaOH
1815	Stormwater	**SR045**	1664 HEMSGT	3	↓	↓	H2SO4
1816	Stormwater	**SR045 Trip Blank**	8260B-Storm 624-Storm	2	↓	↓	HCL
1817	Stormwater	**SR045 Trip Blank**	624 ACAC 624 CEVE	2	↓	↓	ICE

GRAB SAMPLES

pH 7.42 Air Temp 28.0 Water Temp 30.3 Specific Conductance 346

Barometric Pressure 726 Dissolved Oxygen 6.56

Sample # Sample ID
2020061813 - SR045
2020061814 - SR045
2020061815 - SR045
2020061816 - SR045 Trip Blank
2020061817 - SR045 Trip Blank

Sampler Print & Sign/Relinquished By	Date	Time	Received By	Condition (Lab Use Only)
Amada Hernandez Amada Hernandez	RECEIVED 8/20/20	2345	Fridge	
Fridge	WS LAB			C
	AUG 21 2020			

Page 2 of 2

TIME: 0707
TEMP °C: 1-6

Eurofins TestAmerica, Phoenix
4625 East Cotton Ctr Blvd Suite 189
Phoenix, AZ 85040
Phone: 602-437-3340 Fax: 602-454-9303

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Sester, Rachel E	Carrier Tracking No(s):	COC No: 550-28446.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Rachel.Sester@Eurofinset.com	State of Origin: Arizona	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Arizona		Job #: 550-147735-1
Address: 4955 Yarrow Street,	Due Date Requested: 8/28/2020			
City: Arvada	TAT Requested (days):			
State, Zip: CO, 80002				
Phone: 303-736-0100(Tel) 303-431-7171(Fax)	PO #:			
Email:	WO #:			
Project Name: IPP	Project #: 55002151			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1664B/1664B_SPE 1664B - HEM	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
2020061815 (550-147735-2)	8/20/20	22:55 Arizona		Water			X	3	Run MS/MSD with batch if there is enough volume

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by: [illegible] 8-21-20	14:45	TA-PHX	Received by: Fedex		
Relinquished by:	Date/Time:	Company	Received by: [illegible]	Date/Time: 8-22-20 0930	Company: ETADen
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 3.8, IR11, -0.2, DS 8-22-20

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: City of Phoenix Water Services

Job Number: 550-147735-1

Login Number: 147735
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins TestAmerica, Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.

Login Sample Receipt Checklist

Client: City of Phoenix Water Services

Job Number: 550-147735-1

Login Number: 147735
List Number: 2
Creator: Schade, Daniel B

List Source: Eurofins TestAmerica, Denver
List Creation: 08/22/20 12:01 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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City of Phoenix
Water Services Laboratory
ADHS Lic. # AZ0088
2474 S. 22nd Ave
(602) 534-2960

AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004626**

Sample ID : SR045
Sampling Date/Time: 01/24/2021 07:17
Approval Date : 02/26/2021 11:39
Received Date/Time: 01/24/2021 12:31
Sample Type : COMPOS

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
608.3-STORM	EPA 608.3							JG	
alpha-BHC		<0.0031	ug/L	1	E8	0.0031	0.005		02/01/2021 22:53
gamma-BHC		<0.0034	ug/L	1	E8	0.0034	0.005		02/01/2021 22:53
beta-BHC		<0.1802	ug/L	1	E8;N1	0.1802	0.5		02/01/2021 22:53
d-BHC		<0.0155	ug/L	1	E8	0.0155	0.02		02/01/2021 22:53
Heptachlor		<0.0297	ug/L	1	E8	0.0297	0.05		02/01/2021 22:53
Aldrin		<0.0038	ug/L	1	E8	0.0038	0.005		02/01/2021 22:53
Heptachlor Epoxide		<0.0015	ug/L	1	E8	0.0015	0.005		02/01/2021 22:53
4,4'-DDE		<0.0034	ug/L	1	E8	0.0034	0.005		02/01/2021 22:53
Endosulfan I		<0.0058	ug/L	1	E8	0.0058	0.020		02/01/2021 22:53
Dieldrin		<0.0037	ug/L	1	E8	0.0037	0.005		02/01/2021 22:53
Endrin		<0.0082	ug/L	1	E8	0.0082	0.02		02/01/2021 22:53
4,4'-DDD		<0.0022	ug/L	1	E8	0.0022	0.005		02/01/2021 22:53
Endosulfan II		<0.0021	ug/L	1	E8	0.0021	0.005		02/01/2021 22:53
4,4'-DDT		<0.0014	ug/L	1	E8;N1	0.0014	0.005		02/01/2021 22:53
Endrin Aldehyde		<0.003	ug/L	1	E8	0.003	0.005		02/01/2021 22:53
Endosulfan Sulfate		<0.0018	ug/L	1	E8	0.0018	0.005		02/01/2021 22:53
Chlordane		<0.19	ug/L	1	E8	0.19	0.5		02/01/2021 22:53
Toxaphene		<0.467	ug/L	1	E8	0.467	1.0		02/01/2021 22:53
Arochlor-1016		<0.0831	ug/L	1	E8	0.0831	0.1		02/01/2021 22:53
Arochlor-1221		<0.0831	ug/L	1	E8	0.0831	0.1		02/01/2021 22:53
Arochlor-1232		<0.0831	ug/L	1	E8	0.0831	0.1		02/01/2021 22:53
Arochlor-1242		<0.0831	ug/L	1	E8	0.0831	0.1		02/01/2021 22:53
Arochlor-1248		<0.0831	ug/L	1	E8	0.0831	0.1		02/01/2021 22:53
Arochlor-1254		<0.0831	ug/L	1	E8	0.0831	0.1		02/01/2021 22:53
Arochlor-1260		<0.0831	ug/L	1	E8	0.0831	0.1		02/01/2021 22:53

* SM20 = Standard Methods 20th Edition SM21 = Standard Methods 21st Edition SM22 = Standard Methods 22nd Edition § = Not licensed by ADHS ¤ = Non NELAP accredited

/S/K. McFarlin

City of Phoenix
Water Services Laboratory
ADHS Lic. # AZ0088
2474 S. 22nd Ave
(602) 534-2960

AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004626**

Sample ID : SR045
Sampling Date/Time: 01/24/2021 07:17
Approval Date : 02/26/2021 11:39
Received Date/Time: 01/24/2021 12:31
Sample Type : COMPOS

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
608.3-STORM	EPA 608.3							JG	
Decachlorobiphenyl		52	% Recovery	1					02/01/2021 22:53
Total Endosulfan		<0.0021	ug/L	1	E8	0.0021	0.005		02/01/2021 22:53
TOTAL PCB		<0.0831	ug/L	1	E8	0.0831	0.1		02/01/2021 22:53
Aldrin/Dieldrin		<0.0037	ug/L	1	E8	0.0037	0.005		02/01/2021 22:53

608.3-STORM Case Narrative: Batch QC did not meet laboratory acceptance criteria in sample 2021004502LFM/LFMD for Endrin Aldehyde (29%)/(43%), control limits: 60-140%. In sample 2021004502LFMD for the following compound's RPD: Endrin Aldehyde (41%), control limit: <30%. The closing CCV did not meet laboratory acceptance criteria for beta-BHC (73%) and 4,4'-DDT (50%), control limits: 75-125%.

Extraction - 608.3	EPA 608.3	COMPLETE	JG	01/25/2021 00:00

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals are intact on either the shipping container or bottles. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004627**

Sample ID : SR045
Sampling Date/Time: 01/24/2021 07:17
Approval Date : 02/11/2021 10:49
Received Date/Time: 01/24/2021 12:31
Sample Type : COMPOS

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
	Acenaphthene	<0.65	ug/L	1	E8	0.65	10		01/28/2021 18:03
	Acenaphthylene	<0.56	ug/L	1	E8	0.56	10		01/28/2021 18:03
	Anthracene	<0.52	ug/L	1	E8	0.52	10		01/28/2021 18:03
	Benzo(a)anthracene	<0.77	ug/L	1	E8	0.77	10		01/28/2021 18:03
	Benzo(a)pyrene	<1.50	ug/L	1	E8	1.50	10		01/28/2021 18:03
	Benzo(b)fluoranthene	<2.36	ug/L	1	E8	2.36	10		01/28/2021 18:03
	Benzo(ghi)perylene	<1.83	ug/L	1	E8	1.83	10		01/28/2021 18:03
	Benzo(k)fluoranthene	<1.83	ug/L	1	E8	1.83	10		01/28/2021 18:03
	Chrysene	<0.77	ug/L	1	E8	0.77	10		01/28/2021 18:03
	Dibenzo(a,h)anthracene	<1.58	ug/L	1	E8	1.58	10		01/28/2021 18:03
	1,2-Dichlorobenzene	<0.85	ug/L	1	E8	0.85	10		01/28/2021 18:03
	1,3-Dichlorobenzene	<0.87	ug/L	1	E8	0.87	10		01/28/2021 18:03
	1,4-Dichlorobenzene	<0.93	ug/L	1	E8	0.93	10		01/28/2021 18:03
	3,3'-Dichlorobenzidine	<5.94	ug/L	1	E8;M2;N1	5.94	50		01/28/2021 18:03
	Diethyl phthalate	<7.57	ug/L	1	E8	7.57	10		01/28/2021 18:03
	Dimethyl phthalate	<0.46	ug/L	1	E8	0.46	20		01/28/2021 18:03
	Di-n-butyl phthalate	1.3	ug/L	1	E4	0.95	10		01/28/2021 18:03
	2,4-Dinitrotoluene	<0.80	ug/L	1	E8	0.80	10		01/28/2021 18:03
	2,6-Dinitrotoluene	<0.62	ug/L	1	E8	0.62	10		01/28/2021 18:03
	Di-n-octyl phthalate	<2.32	ug/L	1	E8	2.32	10		01/28/2021 18:03
	1,2-Diphenyl hydrazine (as azobenzene)	<1.10	ug/L	1	E8	1.10	10		01/28/2021 18:03
	Fluoranthene	<0.48	ug/L	1	E8	0.48	10		01/28/2021 18:03
	Fluorene	<0.48	ug/L	1	E8	0.48	10		01/28/2021 18:03
	Hexachlorobenzene	<0.35	ug/L	1	E8	0.35	10		01/28/2021 18:03
	Hexachlorobutadiene	<0.44	ug/L	1	E8	0.44	10		01/28/2021 18:03

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004627**

Sample ID : SR045
Sampling Date/Time: 01/24/2021 07:17
Approval Date : 02/11/2021 10:49
Received Date/Time: 01/24/2021 12:31
Sample Type : COMPOS

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
	Hexachlorocyclopentadiene	<1.26	ug/L	1	E8	1.26	10		01/28/2021 18:03
	Hexachloroethane	<0.34	ug/L	1	E8	0.34	10		01/28/2021 18:03
	Indeno(1,2,3-cd)pyrene	<2.27	ug/L	1	E8	2.27	10		01/28/2021 18:03
	Isophorone	<1.38	ug/L	1	E8	1.38	10		01/28/2021 18:03
	Naphthalene	<0.35	ug/L	1	E8	0.35	10		01/28/2021 18:03
	Nitrobenzene	<0.86	ug/L	1	E8	0.86	10		01/28/2021 18:03
	N-Nitrosodimethylamine	<0.67	ug/L	1	E8	0.67	10		01/28/2021 18:03
	N-Nitrosodi-n-propylamine	<2.38	ug/L	1	E8	2.38	10		01/28/2021 18:03
	N-Nitrosodiphenylamine	<0.84	ug/L	1	E8;M2	0.84	10		01/28/2021 18:03
	Phenanthrene	<0.30	ug/L	1	E8	0.30	10		01/28/2021 18:03
	Pyrene	<0.21	ug/L	1	E8	0.21	10.0		01/28/2021 18:03
	1,2,4-Trichlorobenzene	<1.00	ug/L	1	E8	1.00	10		01/28/2021 18:03
	2-Chlorophenol	<1.01	ug/L	1	E8	1.01	10		01/28/2021 18:03
	2,4-Dichlorophenol	<1.37	ug/L	1	E8	1.37	10		01/28/2021 18:03
	2,4-Dimethylphenol	<2.57	ug/L	1	E8	2.57	10		01/28/2021 18:03
	2-Methyl-4,6-dinitrophenol	<1.27	ug/L	1	E8	1.27	10		01/28/2021 18:03
	2,4-Dinitrophenol	<0.92	ug/L	1	E8	0.92	10		01/28/2021 18:03
	2-Nitrophenol	<0.94	ug/L	1	E8	0.94	10		01/28/2021 18:03
	4-Nitrophenol	<1.70	ug/L	1	E8	1.70	10		01/28/2021 18:03
	4-Chloro-3-methylphenol	<1.34	ug/L	1	E8	1.34	10		01/28/2021 18:03
	Pentachlorophenol	<1.92	ug/L	1	E8	1.92	10		01/28/2021 18:03
	Phenol	<1.27	ug/L	1	E8	1.27	10		01/28/2021 18:03
	2,4,6-Trichlorophenol	<1.61	ug/L	1	E8	1.61	10		01/28/2021 18:03
	2,4,6-Tribromophenol	122	% Recovery	1					01/28/2021 18:03
	Dibromooctafluorobiphenyl	82	% Recovery	1					01/28/2021 18:03

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(602) 534-2960

AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004627**

Sample ID	: SR045	Project Link Code	: Stormwater
Sampling Date/Time	: 01/24/2021 07:17	Account Number	: Stormwater
Approval Date	: 02/11/2021 10:49	Sampled by	: USGS
Received Date/Time	: 01/24/2021 12:31	Delivered	: USGS
Sample Type	: COMPOS	Receipt Temperature (°C)	: 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
4,4-Dibromobiphenyl		79	% Recovery	1					01/28/2021 18:03

625.1-STORM Case Narrative: Batch QC did not meet laboratory acceptance criteria in sample 2021004627 LFM/LFMD for 3,3-Dichlorobenzidine (0%/0%); Control Limits: 1-262% and n-Nitrosodiphenylamine (43%/46%); Control Limits: 47-96%. The LFMD RPD could not be calculated for 3,3-Dichlorobenzidine due to the results being zero.

Extraction - 625.1	EPA 625.1	COMPLETE	AG	01/25/2021 00:00

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals are intact on either the shipping container or bottles. Temperature Blank also received.

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(602) 534-2960

AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004628**

Sample ID : SR045
Sampling Date/Time: 01/24/2021 07:17
Approval Date : 02/09/2021 07:24
Received Date/Time: 01/24/2021 12:31
Sample Type : COMPOS

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Silver - Total Recoverable	EPA 200.8	<0.00410	mg/L	5	D1;E8	0.00410	0.0050	SS	02/01/2021 00:00
Arsenic - Total Recoverable	EPA 200.8	0.0038	mg/L	5	D1;E4	0.00245	0.0050	SS	02/01/2021 00:00
Barium - Total Recoverable	EPA 200.8	0.109	mg/L	5	D1	0.00340	0.0050	SS	02/02/2021 00:00
Beryllium - Total Recoverable	EPA 200.8	<0.00180	mg/L	5	D1;E8	0.00180	0.0050	SS	02/02/2021 00:00
Cadmium - Total Recoverable	EPA 200.8	<0.00210	mg/L	5	D1;E8	0.00210	0.0050	SS	02/01/2021 00:00
Chromium - Total Recoverable	EPA 200.8	<0.0125	mg/L	5	D1;E8	0.0125	0.025	SS	02/02/2021 00:00
Copper - Total Recoverable	EPA 200.8	0.0882	mg/L	5	D1	0.00455	0.0050	SS	02/02/2021 00:00
Nickel - Total Recoverable	EPA 200.8	0.0164	mg/L	5	D1	0.00315	0.0050	SS	02/02/2021 00:00
Lead - Total Recoverable	EPA 200.8	0.0124	mg/L	5	D1	0.00220	0.0050	SS	02/01/2021 00:00
Antimony - Total Recoverable	EPA 200.8	0.0044	mg/L	5	D1;E4	0.00200	0.0050	SS	02/01/2021 00:00
Selenium - Total Recoverable	EPA 200.8	<0.00405	mg/L	5	D1;E8	0.00405	0.0050	SS	02/01/2021 00:00
Thallium - Total Recoverable	EPA 200.8	<0.00275	mg/L	5	D1;E8	0.00275	0.0050	SS	02/01/2021 00:00
Zinc - Total Recoverable	EPA 200.8	0.273	mg/L	5	D1	0.0380	0.050	SS	02/02/2021 00:00

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2474 S. 22nd Ave
(602) 534-2960

AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004628**

Sample ID : SR045
Sampling Date/Time : 01/24/2021 07:17
Approval Date : 02/09/2021 07:24
Received Date/Time : 01/24/2021 12:31
Sample Type : COMPOS

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Metals Prep - TR	SM22 3030 F ¤	COMPLETE						CG	01/28/2021 18:20
Mercury - Total	EPA 245.1	<0.000118	mg/L	2	D1;E8	0.000118	0.0002	GA	02/05/2021 12:59
pH<2Verification	pH <2 Verification	COMPLETE						RC	01/26/2021 17:09

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals are intact on either the shipping container or bottles. Temperature Blank also received.

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2474 S. 22nd Ave
(602) 534-2960

AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004629**

Sample ID : SR045
Sampling Date/Time: 01/24/2021 07:17
Approval Date : 02/11/2021 12:45
Received Date/Time: 01/24/2021 12:31
Sample Type : COMPOS

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Filtration Prep Dissolved Metals	SM22 3030 B	COMPLETE						CG	01/28/2021 18:20
Hardness - Total	SM22 2340 B							GA	
Hardness - Total		160	mg/L	1		1.31	16.6		01/29/2021 12:52
Calcium Hardness		132	mg/L	1		1.00	12.5		01/29/2021 12:52
Calcium - Total Recoverable	EPA 200.7	53.0	mg/L	1		0.40	5.00	GA	01/29/2021 12:52
Magnesium - Total Recoverable	EPA 200.7	6.78	mg/L	1		0.076	1.00	GA	01/29/2021 12:52
Silver - Dissolved	EPA 200.8	<0.0050	mg/L	5	D1	0.00410	0.0050	SS	02/01/2021 00:00
Arsenic - Dissolved	EPA 200.8	0.0021	mg/L	2	D1	0.00098	0.0020	SS	01/28/2021 00:00
Barium - Dissolved	EPA 200.8	0.031	mg/L	2	D1	0.00136	0.0020	SS	01/28/2021 00:00
Beryllium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00072	0.0020	SS	01/28/2021 00:00
Cadmium - Dissolved	EPA 200.8	<0.0010	mg/L	1		0.00042	0.0010	SS	01/28/2021 00:00
Chromium - Dissolved	EPA 200.8	<0.010	mg/L	2	D1	0.0050	0.010	SS	01/28/2021 00:00
Copper - Dissolved	EPA 200.8	0.0611	mg/L	1		0.00091	0.0010	SS	01/28/2021 00:00
Nickel - Dissolved	EPA 200.8	0.0109	mg/L	2	D1	0.00126	0.0020	SS	01/28/2021 00:00

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004629**

Sample ID : SR045
Sampling Date/Time: 01/24/2021 07:17
Approval Date : 02/11/2021 12:45
Received Date/Time: 01/24/2021 12:31
Sample Type : COMPOS

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Lead - Dissolved	EPA 200.8	0.0013	mg/L	1		0.00044	0.0010	SS	01/28/2021 00:00
Antimony - Dissolved	EPA 200.8	0.0028	mg/L	2	D1	0.00080	0.0020	SS	01/28/2021 00:00
Selenium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00162	0.0020	SS	01/28/2021 00:00
Thallium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00110	0.0020	SS	01/28/2021 00:00
Zinc - Dissolved	EPA 200.8	0.111	mg/L	1	D1	0.0076	0.010	SS	01/28/2021 00:00
Metals Prep - TR	SM22 3030 F ¤	COMPLETE						CG	01/28/2021 18:20
Mercury - Diss	EPA 245.1	<0.0002	mg/L	2	D1	0.000118	0.0002	GA	02/05/2021 13:01
pH<2Verification	pH <2 Verification	COMPLETE						RC	01/26/2021 17:09

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals are intact on either the shipping container or bottles. Temperature Blank also received.

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02/20/2021 00:31

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004630**

Sample ID : SR045
Sampling Date/Time: 01/24/2021 07:17
Approval Date : 02/19/2021 08:02
Received Date/Time: 01/24/2021 12:31
Sample Type : COMPOS

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Ammonia	EPA 350.1	1.9	mg/L	1	N1	0.08	0.20	CA	02/09/2021 09:59
	Ammonia Case Narrative: Accidentally spiked LFM/LFMD at 0.40ppm instead of 4ppm.								
Total Kjeldahl Nitrogen	EPA 351.2	10	mg/L	1	N1	0.16	0.25	CA	02/11/2021 10:48
	Total Kjeldahl Nitrogen Case Narrative: MRL Failure; %Rec= 29% (0.0713) and 39% (0.0979) for repeat. Repeat value reported in LIMS. All data reported based on wastewater requirements (MRL not required).								

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals are intact on either the shipping container or bottles. Temperature Blank also received.

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AZ1000002

02/09/2021 00:29

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004631**

Sample ID	: SR045	Project Link Code	: Stormwater
Sampling Date/Time	: 01/24/2021 07:17	Account Number	: Stormwater
Approval Date	: 02/08/2021 11:19	Sampled by	: USGS
Received Date/Time	: 01/24/2021 12:31	Delivered	: USGS
Sample Type	: COMPOS	Receipt Temperature (°C)	: 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
BOD, 5 Day	SM22 5210 B	150	mg/L	1		2	2	DT	01/25/2021 10:13
COD	HACH-8000	510	mg/L	1		11.69	50	DL	01/25/2021 10:05
Suspended Solids	SM22 2540 D	103	mg/L	10	R1	25	25	DL	01/25/2021 10:27
Suspended Solids Case Narrative: RPD = 11.87 %; C.L. </= 5%									
Total Dissolved Solids	SM22 2540 C	480	mg/L	1		10	10	LA	01/25/2021 16:35

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals are intact on either the shipping container or bottles. Temperature Blank also received.

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AZ1000002

02/03/2021 00:33

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004632**

Sample ID : SR045
Sampling Date/Time: 01/24/2021 07:17
Approval Date : 02/02/2021 09:51
Received Date/Time: 01/24/2021 12:31
Sample Type : COMPOS

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
O-Phosphate-P	EPA 300.0	0.4	mg/L	1		0.024	0.1	CG	01/25/2021 18:51
Nitrate-N	EPA 300.0	3.1	mg/L	1		0.014	0.1	CG	01/25/2021 18:51
Nitrite-N	EPA 300.0	0.2	mg/L	1		0.014	0.1	CG	01/25/2021 18:51

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals are intact on either the shipping container or bottles. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004633**

Sample ID : SR045
Sampling Date/Time: 01/24/2021 07:17
Approval Date : 02/17/2021 09:49
Received Date/Time: 01/24/2021 12:31
Sample Type : COMPOS

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Phosphorus - Total	SM 4500 P E	1.3	mg/L	10			0.20	TAM	02/03/2021 16:21

Phosphorus - Total Case Narrative: No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

non-NELAC Outside Lab: Test America - ADHS Lic. # AZ0728

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals are intact on either the shipping container or bottles. Temperature Blank also received.

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City of Phoenix
Water Services Laboratory
ADHS Lic. # AZ0088
2474 S. 22nd Ave
(602) 534-2960

AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004634**

Sample ID : SR045
Sampling Date/Time: 01/24/2021 11:30
Approval Date : 02/25/2021 13:49
Received Date/Time: 01/24/2021 12:31
Sample Type : GRAB

Temperature : 17.5 Deg. C
pH : 7.67

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
	Chloromethane	<5.7	ug/L	10	E8;D1	5.7	10		02/04/2021 13:14
	Vinyl Chloride	<4.7	ug/L	10	E8;D1	4.7	10		02/04/2021 13:14
	Bromomethane	<3.9	ug/L	10	E8;D1	3.9	10		02/04/2021 13:14
	Chloroethane	<3.6	ug/L	10	E8;D1	3.6	10		02/04/2021 13:14
	Trichlorofluoromethane	<4.3	ug/L	10	E8;D1	4.3	10		02/04/2021 13:14
	1,1-Dichloroethylene	<4.1	ug/L	10	E8;D1	4.1	10		02/04/2021 13:14
	Methylene chloride	<8.7	ug/L	10	E8;D1	8.7	10		02/04/2021 13:14
	trans-1,2-Dichloroethene	<3.2	ug/L	10	E8;D1	3.2	10		02/04/2021 13:14
	1,1-Dichloroethane	<3.0	ug/L	10	E8;D1	3.0	10		02/04/2021 13:14
	Chloroform	<3.1	ug/L	10	E8;D1	3.1	10		02/04/2021 13:14
	1,2-Dichloroethane	<2.8	ug/L	10	E8;D1	2.8	10		02/04/2021 13:14
	1,1,1-Trichloroethane	<3.2	ug/L	10	E8;D1	3.2	10		02/04/2021 13:14
	Carbon Tetrachloride	<3.2	ug/L	10	E8;D1	3.2	10		02/04/2021 13:14
	Benzene	<3.1	ug/L	10	E8;D1	3.1	10		02/04/2021 13:14
	1,2-Dichloropropane	<3.3	ug/L	10	E8;D1	3.3	10		02/04/2021 13:14
	Trichloroethene	<3.8	ug/L	10	E8;D1	3.8	10		02/04/2021 13:14
	Bromodichloromethane	<2.1	ug/L	10	E8;D1	2.1	10		02/04/2021 13:14
	cis-1,3-Dichloropropene	<3.1	ug/L	10	E8;D1	3.1	10		02/04/2021 13:14
	trans-1,3-Dichloropropene	<3.5	ug/L	10	E8;D1	3.5	10		02/04/2021 13:14
	1,1,2-Trichloroethane	<3.7	ug/L	10	E8;D1	3.7	10		02/04/2021 13:14
	Toluene	<3.5	ug/L	10	E8;D1	3.5	10		02/04/2021 13:14
	Dibromochloromethane	<3.9	ug/L	10	E8;D1	3.9	10		02/04/2021 13:14
	Tetrachloroethylene	<3.8	ug/L	10	E8;D1	3.8	10		02/04/2021 13:14
	Chlorobenzene	<4.2	ug/L	10	E8;D1	4.2	10		02/04/2021 13:14
	Ethylbenzene	<4.2	ug/L	10	E8;D1	4.2	10		02/04/2021 13:14

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City of Phoenix
Water Services Laboratory
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2474 S. 22nd Ave
(602) 534-2960
AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004634**

Sample ID : SR045
Sampling Date/Time: 01/24/2021 11:30
Approval Date : 02/25/2021 13:49
Received Date/Time: 01/24/2021 12:31
Sample Type : GRAB

Temperature : 17.5 Deg. C
pH : 7.67

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
m- & p-Xylene		<8.4	ug/L	10	E8;D1	8.4	20		02/04/2021 13:14
Bromoform		<3.7	ug/L	10	E8;D1	3.7	10		02/04/2021 13:14
o-Xylene		<3.3	ug/L	10	E8;D1	3.3	10		02/04/2021 13:14
1,1,2,2-Tetrachloroethane		<4.6	ug/L	10	E8;D1	4.6	10		02/04/2021 13:14
1,3-Dichlorobenzene		<5.6	ug/L	10	E8;D1	5.6	10		02/04/2021 13:14
1,2-Dichlorobenzene		<5.7	ug/L	10	E8;D1	5.7	10		02/04/2021 13:14
1,4-Dichlorobenzene		<5.0	ug/L	10	E8;D1	5.0	10		02/04/2021 13:14
Pentafluorobenzene (Surrogate1)		96	% Recovery	10					02/04/2021 13:14
Fluorobenzene (Surrogate2)		100	% Recovery	10					02/04/2021 13:14
4-Bromofluorobenzene (Surrogate)		96	% Recovery	10					02/04/2021 13:14
1,3-Dichloropropene (cis & trans)		<3.1	ug/L	10	E8;D1	3.1	10		02/04/2021 13:14
Total Xylene		<3.3	ug/L	10	E8;D1	3.3	10		02/04/2021 13:14
624.1-STORM Case Narrative: DF=10									
Method 8260B Stormwater	EPA 8260B							TH	
1,3,5-Trimethylbenzene		<10	ug/L	10	D1	1.8	10		02/04/2021 13:14
1,2,4-Trimethylbenzene		<10	ug/L	10	D1	2.0	10		02/04/2021 13:14
Pentafluorobenzene (Surrogate1)		96	% Recovery	10					02/04/2021 13:14
Fluorobenzene (Surrogate2)		100	% Recovery	10					02/04/2021 13:14
4-Bromofluorobenzene (Surrogate)		96	% Recovery	10					02/04/2021 13:14
Method 8260B Stormwater Analysis Case Narrative: Batch QC did not meet acceptance criteria in sample 2021008306 LFMD for 1,3,5- Trimethylbenzene (56%), control limits 70-130% and 1,3,5-Trimethylbenzene LFM/LFMD RPD (47%), control limits </=20%. DF=10									

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals are intact on either the shipping container or bottles. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004635**

Sample ID : SR045
Sampling Date/Time: 01/24/2021 11:30
Approval Date : 02/17/2021 16:41
Received Date/Time: 01/24/2021 12:31
Sample Type : GRAB

Temperature : 17.5 Deg. C
pH : 7.67

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
GC/MS-Method 624-for Acrolein	EPA 624.1 ¤							TH	
Acrolein		<9.50	ug/L	10	E8;D1	9.50	10		01/27/2021 09:32
Acrylonitrile		<5.24	ug/L	10	E8;D1	5.24	10		01/27/2021 09:32
Pentafluorobenzene (Surrogate1)		103	% Recovery	10					01/27/2021 09:32
Fluorobenzene (Surrogate2)		101	% Recovery	10					01/27/2021 09:32
4-Bromofluorobenzene (Surrogate)		103	% Recovery	10					01/27/2021 09:32
GC/MS-Method 624-for Acrolein and Acrylonitrile Samples Case Narrative: DF=10									
GC/MS-Method 624.1for 2-	EPA 624.1 ¤							TH	
2-Chloroethyl vinyl ether		<3.33	ug/L	10	E8;D1	3.33	10		01/27/2021 09:32
Pentafluorobenzene (Surrogate1)		103	% Recovery	10					01/27/2021 09:32
Fluorobenzene (Surrogate2)		101	% Recovery	10					01/27/2021 09:32
4-Bromofluorobenzene (Surrogate)		103	% Recovery	10					01/27/2021 09:32
GC/MS-Method 624.1for 2-Chloroethyl vinyl ether samples Case Narrative: DF=10									

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals are intact on either the shipping container or bottles. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004636**

Sample ID	: SR045			Project Link Code	: Stormwater
Sampling Date/Time	: 01/24/2021 11:30	Temperature	: 17.5 Deg. C	Account Number	: Stormwater
Approval Date	: 01/29/2021 08:27	pH	: 7.67	Sampled by	: USGS
Received Date/Time	: 01/24/2021 12:31			Delivered	: USGS
Sample Type	: GRAB			Receipt Temperature (°C)	: 2.7

Test		Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Coliform - E. Coli		SM22 9223 B							CA	
	Total Coliform		>2419.6	MPN/100mL	1		1	1		01/24/2021 13:05
	E. coli		2419.6	MPN/100mL	1		1	1		01/24/2021 13:05

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals are intact on either the shipping container or bottles. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004637**

Sample ID	: SR045			Project Link Code	: Stormwater
Sampling Date/Time	: 01/24/2021 11:30	Temperature	: 17.5 Deg. C	Account Number	: Stormwater
Approval Date	: 02/01/2021 13:24	pH	: 7.67	Sampled by	: USGS
Received Date/Time	: 01/24/2021 12:31			Delivered	: USGS
Sample Type	: GRAB			Receipt Temperature (°C)	: 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Cyanide	EPA 335.4	<0.005	mg/L	1	N1	0.0019	0.005	DL	01/27/2021 10:49

Cyanide Case Narrative: 2021004571 batch LFM = 85% CL = 90 - 110%
Cal blanks (0.0019 and 0.0020 mg/L) >/= MDL, but < RL

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals are intact on either the shipping container or bottles. Temperature Blank also received.

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AZ1000002

02/18/2021 00:30

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004638**

Sample ID	: SR045			Project Link Code	: Stormwater
Sampling Date/Time	: 01/24/2021 11:30	Temperature	: 17.5 Deg. C	Account Number	: Stormwater
Approval Date	: 02/17/2021 09:49	pH	: 7.67	Sampled by	: USGS
Received Date/Time	: 01/24/2021 12:31			Delivered	: USGS
Sample Type	: GRAB			Receipt Temperature (°C)	: 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
EPA 1664 With Silica Gel	EPA 1664B							TAMD	
Hexane Extractable Material		<5.6	mg/L	1			5.6		02/11/2021 17:01
Hexane Extractable Material - Silica Gel		<6.7	mg/L	1			6.7		02/11/2021 17:01

EPA 1664 With Silica Gel Treatment Case Narrative: General Chemistry
Method 1664B: Analysis for Hexane Extractable Material (HEM) was performed for the following sample: 2021004638 (550-157220-2). Since the HEM result(s) was below the reporting limit (RL), the result(s) for Silica Gel Treated - Hexane Extractable Material (SGT-HEM) was reported as a non-detect. All HEM quality control criteria were met.
Method 1664B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 280-526119 and analytical batch 280-526185.
No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

non-NELAC Outside Lab: Test America - ADHS Lic. # AZ0713

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals are intact on either the shipping container or bottles. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004639**

Sample ID	: SR045 Trip Blank			Project Link Code	: Stormwater
Sampling Date/Time	: 01/24/2021 11:30	Temperature	: 17.5 Deg. C	Account Number	: Stormwater
Approval Date	: 02/25/2021 13:49	pH	: 7.67	Sampled by	: USGS
Received Date/Time	: 01/24/2021 12:31			Delivered	: USGS
Sample Type	: TIME			Receipt Temperature (°C)	: 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
	Chloromethane	<0.57	ug/L	1	E8	0.57	1.0		02/04/2021 12:45
	Vinyl Chloride	<0.47	ug/L	1	E8	0.47	1.0		02/04/2021 12:45
	Bromomethane	<0.39	ug/L	1	E8	0.39	1.0		02/04/2021 12:45
	Chloroethane	<0.36	ug/L	1	E8	0.36	1.0		02/04/2021 12:45
	Trichlorofluoromethane	<0.43	ug/L	1	E8	0.43	1.0		02/04/2021 12:45
	1,1-Dichloroethylene	<0.41	ug/L	1	E8	0.41	1.0		02/04/2021 12:45
	Methylene chloride	<0.87	ug/L	1	E8	0.87	1.0		02/04/2021 12:45
	trans-1,2-Dichloroethene	<0.32	ug/L	1	E8	0.32	1.0		02/04/2021 12:45
	1,1-Dichloroethane	<0.30	ug/L	1	E8	0.30	1.0		02/04/2021 12:45
	Chloroform	<0.31	ug/L	1	E8	0.31	1.0		02/04/2021 12:45
	1,2-Dichloroethane	<0.28	ug/L	1	E8	0.28	1.0		02/04/2021 12:45
	1,1,1-Trichloroethane	<0.32	ug/L	1	E8	0.32	1.0		02/04/2021 12:45
	Carbon Tetrachloride	<0.32	ug/L	1	E8	0.32	1.0		02/04/2021 12:45
	Benzene	<0.31	ug/L	1	E8	0.31	1.0		02/04/2021 12:45
	1,2-Dichloropropane	<0.33	ug/L	1	E8	0.33	1.0		02/04/2021 12:45
	Trichloroethene	<0.38	ug/L	1	E8	0.38	1.0		02/04/2021 12:45
	Bromodichloromethane	<0.21	ug/L	1	E8	0.21	1.0		02/04/2021 12:45
	cis-1,3-Dichloropropene	<0.31	ug/L	1	E8	0.31	1.0		02/04/2021 12:45
	trans-1,3-Dichloropropene	<0.35	ug/L	1	E8	0.35	1.0		02/04/2021 12:45
	1,1,2-Trichloroethane	<0.37	ug/L	1	E8	0.37	1.0		02/04/2021 12:45
	Toluene	<0.35	ug/L	1	E8	0.35	1.0		02/04/2021 12:45
	Dibromochloromethane	<0.39	ug/L	1	E8	0.39	1.0		02/04/2021 12:45
	Tetrachloroethylene	<0.38	ug/L	1	E8	0.38	1.0		02/04/2021 12:45
	Chlorobenzene	<0.42	ug/L	1	E8	0.42	1.0		02/04/2021 12:45
	Ethylbenzene	<0.42	ug/L	1	E8	0.42	1.0		02/04/2021 12:45

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(602) 534-2960
AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004639**

Sample ID : SR045 Trip Blank
Sampling Date/Time: 01/24/2021 11:30
Approval Date : 02/25/2021 13:49
Received Date/Time: 01/24/2021 12:31
Sample Type : TIME

Temperature : 17.5 Deg. C
pH : 7.67

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
m- & p-Xylene		<0.84	ug/L	1	E8	0.84	2.0		02/04/2021 12:45
Bromoform		<0.37	ug/L	1	E8	0.37	1.0		02/04/2021 12:45
o-Xylene		<0.33	ug/L	1	E8	0.33	1.0		02/04/2021 12:45
1,1,2,2-Tetrachloroethane		<0.46	ug/L	1	E8	0.46	1.0		02/04/2021 12:45
1,3-Dichlorobenzene		<0.56	ug/L	1	E8	0.56	1.0		02/04/2021 12:45
1,2-Dichlorobenzene		<0.57	ug/L	1	E8	0.57	1.0		02/04/2021 12:45
1,4-Dichlorobenzene		<0.50	ug/L	1	E8	0.50	1.0		02/04/2021 12:45
Pentafluorobenzene (Surrogate1)		96	% Recovery	1					02/04/2021 12:45
Fluorobenzene (Surrogate2)		100	% Recovery	1					02/04/2021 12:45
4-Bromofluorobenzene (Surrogate)		96	% Recovery	1					02/04/2021 12:45
1,3-Dichloropropene (cis & trans)		<0.31	ug/L	1	E8	0.31	1.0		02/04/2021 12:45
Total Xylene		<0.33	ug/L	1	E8	0.33	1.0		02/04/2021 12:45
Method 8260B Stormwater	EPA 8260B							TH	
1,3,5-Trimethylbenzene		<1.0	ug/L	1		0.18	1.0		02/04/2021 12:45
1,2,4-Trimethylbenzene		<1.0	ug/L	1		0.20	1.0		02/04/2021 12:45
Pentafluorobenzene (Surrogate1)		96	% Recovery	1					02/04/2021 12:45
Fluorobenzene (Surrogate2)		100	% Recovery	1					02/04/2021 12:45
4-Bromofluorobenzene (Surrogate)		96	% Recovery	1					02/04/2021 12:45

Method 8260B Stormwater Analysis Case Narrative: Batch QC did not meet acceptance criteria in sample 2021008306 LFMD for 1,3,5- Trimethylbenzene (56%), control limits 70-130% and 1,3,5-Trimethylbenzene LFM/LFMD RPD (47%), control limits </=20%.

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals are intact on either the shipping container or bottles. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2021004640**

Sample ID : SR045 Trip Blank
Sampling Date/Time: 01/24/2021 11:30
Approval Date : 02/17/2021 16:41
Received Date/Time: 01/24/2021 12:31
Sample Type : TIME

Temperature : 17.5 Deg. C
pH : 7.67

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : USGS
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
GC/MS-Method 624-for Acrolein	EPA 624.1 ¤							TH	
Acrolein		<0.950	ug/L	1	E8	0.950	1.0		01/27/2021 10:42
Acrylonitrile		<0.524	ug/L	1	E8	0.524	1.0		01/27/2021 10:42
Pentafluorobenzene (Surrogate1)		103	% Recovery	1					01/27/2021 10:42
Fluorobenzene (Surrogate2)		101	% Recovery	1					01/27/2021 10:42
4-Bromofluorobenzene (Surrogate)		103	% Recovery	1					01/27/2021 10:42
GC/MS-Method 624.1for 2-	EPA 624.1 ¤							TH	
2-Chloroethyl vinyl ether		<0.333	ug/L	1	E8	0.333	1.0		01/27/2021 10:42
Pentafluorobenzene (Surrogate1)		103	% Recovery	1					01/27/2021 10:42
Fluorobenzene (Surrogate2)		101	% Recovery	1					01/27/2021 10:42
4-Bromofluorobenzene (Surrogate)		103	% Recovery	1					01/27/2021 10:42

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals are intact on either the shipping container or bottles. Temperature Blank also received.

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SR049

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(602) 534-2960
AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089752**

Sample ID : SR049
Sampling Date/Time: 12/10/2020 08:57
Approval Date : 01/22/2021 14:21
Received Date/Time: 12/10/2020 15:22
Sample Type : COMPOS

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Ken Fossum
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
608.3-STORM	EPA 608.3							JG	
	alpha-BHC	<0.0031	ug/L	1	E8;N1	0.0031	0.005		01/15/2021 02:54
	gamma-BHC	<0.0034	ug/L	1	E8;N1	0.0034	0.005		01/15/2021 02:54
	beta-BHC	<0.1802	ug/L	1	E8;N1;V9	0.1802	0.5		01/15/2021 02:54
	d-BHC	<0.0155	ug/L	1	E8;N1;V9	0.0155	0.02		01/15/2021 02:54
	Heptachlor	<0.0297	ug/L	1	E8;N1;V9	0.0297	0.05		01/15/2021 02:54
	Aldrin	<0.0038	ug/L	1	E8;N1;V9	0.0038	0.005		01/15/2021 02:54
	Heptachlor Epoxide	<0.0015	ug/L	1	E8;N1;V9	0.0015	0.005		01/15/2021 02:54
	4,4'-DDE	<0.0034	ug/L	1	E8;N1;V9	0.0034	0.005		01/15/2021 02:54
	Endosulfan I	<0.0058	ug/L	1	E8;N1;V9	0.0058	0.020		01/15/2021 02:54
	Dieldrin	<0.0037	ug/L	1	E8;N1	0.0037	0.005		01/15/2021 02:54
	Endrin	<0.0082	ug/L	1	E8;N1	0.0082	0.02		01/15/2021 02:54
	4,4'-DDD	<0.0022	ug/L	1	E8;N1;V9	0.0022	0.005		01/15/2021 02:54
	Endosulfan II	<0.0021	ug/L	1	E8;N1;V9	0.0021	0.005		01/15/2021 02:54
	4,4'-DDT	<0.0014	ug/L	1	E8;N1;V9	0.0014	0.005		01/15/2021 02:54
	Endrin Aldehyde	<0.003	ug/L	1	E8;N1	0.003	0.005		01/15/2021 02:54
	Endosulfan Sulfate	<0.0018	ug/L	1	E8;N1	0.0018	0.005		01/15/2021 02:54
	Chlordane	<0.19	ug/L	1	E8;N1	0.19	0.5		01/15/2021 02:54
	Toxaphene	<0.467	ug/L	1	E8;N1	0.467	1.0		01/15/2021 02:54
	Arochlor-1016	<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:54
	Arochlor-1221	<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:54
	Arochlor-1232	<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:54
	Arochlor-1242	<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:54
	Arochlor-1248	<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:54
	Arochlor-1254	<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:54
	Arochlor-1260	<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:54

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089752**

Sample ID : SR049
Sampling Date/Time: 12/10/2020 08:57
Approval Date : 01/22/2021 14:21
Received Date/Time: 12/10/2020 15:22
Sample Type : COMPOS

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Ken Fossum
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
608.3-STORM	EPA 608.3							JG	
Decachlorobiphenyl		50	% Recovery	1					01/15/2021 02:54
Total Endosulfan		<0.0021	ug/L	1	E8;N1	0.0021	0.005		01/15/2021 02:54
TOTAL PCB		<0.0831	ug/L	1	E8;N1	0.0831	0.1		01/15/2021 02:54
Aldrin/Dieldrin		<0.0037	ug/L	1	E8;N1	0.0037	0.005		01/15/2021 02:54

608.3-STORM Case Narrative: Batch QC did not meet laboratory acceptance criteria in sample 2020089497LFM/LFMD for multiple analytes percent recovery. The closing CCV did not meet laboratory acceptance criteria for multiple analytes percent recovery. The sample pH was not checked within 72 hours of receipt.

Extraction - 608.3	EPA 608.3	COMPLETE						JG	12/15/2020 00:00

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089753**

Sample ID : SR049
Sampling Date/Time: 12/10/2020 08:57
Approval Date : 01/06/2021 10:50
Received Date/Time: 12/10/2020 15:22
Sample Type : COMPOS

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Ken Fossum
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
	Acenaphthene	<0.65	ug/L	1	E8	0.65	10		12/18/2020 21:09
	Acenaphthylene	<0.56	ug/L	1	E8	0.56	10		12/18/2020 21:09
	Anthracene	<0.52	ug/L	1	E8	0.52	10		12/18/2020 21:09
	Benzo(a)anthracene	<0.77	ug/L	1	E8	0.77	10		12/18/2020 21:09
	Benzo(a)pyrene	<1.50	ug/L	1	E8	1.50	10		12/18/2020 21:09
	Benzo(b)fluoranthene	<2.36	ug/L	1	E8	2.36	10		12/18/2020 21:09
	Benzo(ghi)perylene	<1.83	ug/L	1	E8	1.83	10		12/18/2020 21:09
	Benzo(k)fluoranthene	<1.83	ug/L	1	E8	1.83	10		12/18/2020 21:09
	Chrysene	<0.77	ug/L	1	E8	0.77	10		12/18/2020 21:09
	Dibenzo(a,h)anthracene	<1.58	ug/L	1	E8	1.58	10		12/18/2020 21:09
	1,2-Dichlorobenzene	<0.85	ug/L	1	E8;T2	0.85	10		12/18/2020 21:09
	1,3-Dichlorobenzene	<0.87	ug/L	1	E8;T2	0.87	10		12/18/2020 21:09
	1,4-Dichlorobenzene	<0.93	ug/L	1	E8;T2	0.93	10		12/18/2020 21:09
	3,3'-Dichlorobenzidine	<5.94	ug/L	1	E8	5.94	50		12/18/2020 21:09
	Diethyl phthalate	<7.57	ug/L	1	E8	7.57	10		12/18/2020 21:09
	Dimethyl phthalate	<0.46	ug/L	1	E8	0.46	20		12/18/2020 21:09
	Di-n-butyl phthalate	<0.95	ug/L	1	E8	0.95	10		12/18/2020 21:09
	2,4-Dinitrotoluene	<0.80	ug/L	1	E8	0.80	10		12/18/2020 21:09
	2,6-Dinitrotoluene	<0.62	ug/L	1	E8	0.62	10		12/18/2020 21:09
	Di-n-octyl phthalate	<2.32	ug/L	1	E8	2.32	10		12/18/2020 21:09
	1,2-Diphenyl hydrazine (as azobenzene)	<1.10	ug/L	1	E8;T2	1.10	10		12/18/2020 21:09
	Fluoranthene	<0.48	ug/L	1	E8	0.48	10		12/18/2020 21:09
	Fluorene	<0.48	ug/L	1	E8	0.48	10		12/18/2020 21:09
	Hexachlorobenzene	<0.35	ug/L	1	E8	0.35	10		12/18/2020 21:09
	Hexachlorobutadiene	<0.44	ug/L	1	E8	0.44	10		12/18/2020 21:09

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089753**

Sample ID	: SR049	Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:57	Account Number	: Stormwater
Approval Date	: 01/06/2021 10:50	Sampled by	: USGS
Received Date/Time	: 12/10/2020 15:22	Delivered	: Ken Fossum
Sample Type	: COMPOS	Receipt Temperature (°C)	: 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
	Hexachlorocyclopentadiene	<1.26	ug/L	1	E8;T2	1.26	10		12/18/2020 21:09
	Hexachloroethane	<0.34	ug/L	1	E8	0.34	10		12/18/2020 21:09
	Indeno(1,2,3-cd)pyrene	<2.27	ug/L	1	E8	2.27	10		12/18/2020 21:09
	Isophorone	<1.38	ug/L	1	E8	1.38	10		12/18/2020 21:09
	Naphthalene	<0.35	ug/L	1	E8	0.35	10		12/18/2020 21:09
	Nitrobenzene	<0.86	ug/L	1	E8	0.86	10		12/18/2020 21:09
	N-Nitrosodimethylamine	<0.67	ug/L	1	E8;T2	0.67	10		12/18/2020 21:09
	N-Nitrosodi-n-propylamine	<2.38	ug/L	1	E8	2.38	10		12/18/2020 21:09
	N-Nitrosodiphenylamine	<0.84	ug/L	1	E8;T2	0.84	10		12/18/2020 21:09
	Phenanthrene	<0.30	ug/L	1	E8	0.30	10		12/18/2020 21:09
	Pyrene	<0.21	ug/L	1	E8	0.21	10.0		12/18/2020 21:09
	1,2,4-Trichlorobenzene	<1.00	ug/L	1	E8	1.00	10		12/18/2020 21:09
	2-Chlorophenol	<1.01	ug/L	1	E8	1.01	10		12/18/2020 21:09
	2,4-Dichlorophenol	<1.37	ug/L	1	E8	1.37	10		12/18/2020 21:09
	2,4-Dimethylphenol	<2.57	ug/L	1	E8	2.57	10		12/18/2020 21:09
	2-Methyl-4,6-dinitrophenol	<1.27	ug/L	1	E8	1.27	10		12/18/2020 21:09
	2,4-Dinitrophenol	<0.92	ug/L	1	E8	0.92	10		12/18/2020 21:09
	2-Nitrophenol	<0.94	ug/L	1	E8	0.94	10		12/18/2020 21:09
	4-Nitrophenol	5.6	ug/L	1	E4;N1	1.70	10		12/18/2020 21:09
	4-Nitrophenol Case Narrative: Matrix causing elevated value.								
	4-Chloro-3-methylphenol	<1.34	ug/L	1	E8	1.34	10		12/18/2020 21:09
	Pentachlorophenol	<1.92	ug/L	1	E8	1.92	10		12/18/2020 21:09
	Phenol	1.5	ug/L	1	E4	1.27	10		12/18/2020 21:09
	2,4,6-Trichlorophenol	<1.61	ug/L	1	E8	1.61	10		12/18/2020 21:09
	2,4,6-Tribromophenol	124	% Recovery	1					12/18/2020 21:09

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089753**

Sample ID : SR049
Sampling Date/Time : 12/10/2020 08:57
Approval Date : 01/06/2021 10:50
Received Date/Time : 12/10/2020 15:22
Sample Type : COMPOS

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Ken Fossum
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
625.1-STORM	EPA 625.1							AM	
	Dibromooctafluorobiphenyl	59	% Recovery	1					12/18/2020 21:09
	4,4-Dibromobiphenyl	60	% Recovery	1					12/18/2020 21:09

625.1-STORM Case Narrative: Batch QC did not meet laboratory acceptance criteria in the 2020089498 LFM/LFMD for multiple compounds. The LFMD RPD could not be calculated for 3,3-Dichlorobenzidine due to the results being zero.

Extraction - 625.1	EPA 625.1	COMPLETE	CC	12/16/2020 00:00

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089754**

Sample ID : SR049
Sampling Date/Time: 12/10/2020 08:57
Approval Date : 12/31/2020 07:13
Received Date/Time: 12/10/2020 15:22
Sample Type : COMPOS

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Ken Fossum
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Silver - Total Recoverable	EPA 200.8	<0.00125	mg/L	5	D1;E8	0.00125	0.0050	SS	12/28/2020 00:00
Arsenic - Total Recoverable	EPA 200.8	0.0034	mg/L	5	D1;E4	0.00245	0.0050	SS	12/28/2020 00:00
Barium - Total Recoverable	EPA 200.8	0.111	mg/L	5	D1	0.00340	0.0050	SS	12/29/2020 00:00
Beryllium - Total Recoverable	EPA 200.8	<0.00180	mg/L	5	D1;E8	0.00180	0.0050	SS	12/29/2020 00:00
Cadmium - Total Recoverable	EPA 200.8	<0.00210	mg/L	5	D1;E8	0.00210	0.0050	SS	12/28/2020 00:00
Chromium - Total Recoverable	EPA 200.8	<0.0125	mg/L	5	D1;E8	0.0125	0.025	SS	12/29/2020 00:00
Copper - Total Recoverable	EPA 200.8	0.0412	mg/L	5	D1	0.00455	0.0050	SS	12/29/2020 00:00
Nickel - Total Recoverable	EPA 200.8	0.0122	mg/L	5	D1	0.00315	0.0050	SS	12/29/2020 00:00
Lead - Total Recoverable	EPA 200.8	0.0102	mg/L	5	D1	0.00170	0.0050	SS	12/28/2020 00:00
Antimony - Total Recoverable	EPA 200.8	0.0026	mg/L	5	D1;E4	0.00200	0.0050	SS	12/28/2020 00:00
Selenium - Total Recoverable	EPA 200.8	<0.00405	mg/L	5	D1;E8	0.00405	0.0050	SS	12/28/2020 00:00
Thallium - Total Recoverable	EPA 200.8	<0.00275	mg/L	5	D1;E8	0.00275	0.0050	SS	12/28/2020 00:00
Zinc - Total Recoverable	EPA 200.8	0.156	mg/L	5	D1	0.0380	0.050	SS	12/29/2020 00:00

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089754**

Sample ID	: SR049	Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:57	Account Number	: Stormwater
Approval Date	: 12/31/2020 07:13	Sampled by	: USGS
Received Date/Time	: 12/10/2020 15:22	Delivered	: Ken Fossum
Sample Type	: COMPOS	Receipt Temperature (°C)	: 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Metals Prep - TR	SM22 3030 F ¤	COMPLETE						CG	12/21/2020 17:06
Mercury - Total	EPA 245.1	<0.000118	mg/L	2	D1;E8	0.000118	0.0002	GA	12/23/2020 09:59
pH<2Verification	pH <2 Verification	COMPLETE						CG	12/14/2020 13:01

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089755**

Sample ID : SR049
Sampling Date/Time: 12/10/2020 08:57
Approval Date : 12/30/2020 11:58
Received Date/Time: 12/10/2020 15:22
Sample Type : COMPOS

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Ken Fossum
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Filtration Prep Dissolved Metals	SM22 3030 B	COMPLETE						SS	12/16/2020 11:30
Filtration Prep Dissolved Metals Case Narrative: COC states that the sample is field-filtered.									
Hardness - Total	SM22 2340 B							CG	
Hardness - Total		64.0	mg/L	1		1.31	16.6		12/22/2020 18:56
Calcium Hardness		47.9	mg/L	1		1.00	12.5		12/22/2020 18:56
Calcium - Total Recoverable	EPA 200.7	19.2	mg/L	1		0.40	5.00	CG	12/22/2020 18:56
Magnesium - Total Recoverable	EPA 200.7	3.90	mg/L	1		0.076	1.00	CG	12/22/2020 18:56
Silver - Dissolved	EPA 200.8	<0.0050	mg/L	5	D1	0.00125	0.0050	SS	12/28/2020 00:00
Arsenic - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00098	0.0020	SS	12/17/2020 00:00
Barium - Dissolved	EPA 200.8	0.030	mg/L	2	D1	0.00136	0.0020	SS	12/17/2020 00:00
Beryllium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00072	0.0020	SS	12/17/2020 00:00
Cadmium - Dissolved	EPA 200.8	<0.0010	mg/L	1		0.00042	0.0010	SS	12/17/2020 00:00
Chromium - Dissolved	EPA 200.8	<0.010	mg/L	2	D1	0.0028	0.010	SS	12/17/2020 00:00
Copper - Dissolved	EPA 200.8	0.0293	mg/L	1		0.00091	0.0010	SS	12/17/2020 00:00

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089755**

Sample ID : SR049
Sampling Date/Time: 12/10/2020 08:57
Approval Date : 12/30/2020 11:58
Received Date/Time: 12/10/2020 15:22
Sample Type : COMPOS

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Ken Fossum
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Nickel - Dissolved	EPA 200.8	0.0030	mg/L	2	D1	0.00126	0.0020	SS	12/17/2020 00:00
Lead - Dissolved	EPA 200.8	<0.0010	mg/L	1		0.00034	0.0010	SS	12/17/2020 00:00
Antimony - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00080	0.0020	SS	12/17/2020 00:00
Selenium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00162	0.0020	SS	12/17/2020 00:00
Thallium - Dissolved	EPA 200.8	<0.0020	mg/L	2	D1	0.00110	0.0020	SS	12/17/2020 00:00
Zinc - Dissolved	EPA 200.8	0.0309	mg/L	1		0.0076	0.010	SS	12/17/2020 00:00
Metals Prep - TR	SM22 3030 F ¤	COMPLETE						CG	12/21/2020 17:06
Mercury - Diss	EPA 245.1	<0.0002	mg/L	2	D1	0.000118	0.0002	GA	12/23/2020 10:01
pH<2Verification	pH <2 Verification	COMPLETE						CG	12/14/2020 13:01

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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12/23/2020 00:34

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089756**

Sample ID : SR049
Sampling Date/Time: 12/10/2020 08:57
Approval Date : 12/22/2020 13:40
Received Date/Time: 12/10/2020 15:22
Sample Type : COMPOS

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Ken Fossum
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Ammonia	EPA 350.1	1.5	mg/L	1	N1	0.08	0.20	CA	12/15/2020 10:03
Ammonia Case Narrative: Batch LFM (LIMS # 2020089561) %R=113% (Acceptance Range =90-110)									
Total Kjeldahl Nitrogen	EPA 351.2	4.3	mg/L	1		0.16	0.25	CA	12/21/2020 10:46

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089757**

Sample ID	: SR049	Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:57	Account Number	: Stormwater
Approval Date	: 12/22/2020 12:40	Sampled by	: USGS
Received Date/Time	: 12/10/2020 15:22	Delivered	: Ken Fossum
Sample Type	: COMPOS	Receipt Temperature (°C)	: 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
BOD, 5 Day	SM22 5210 B	27	mg/L	1		2	2	DT	12/11/2020 08:25
COD	HACH-8000	150	mg/L	1		11.69	50	LA	12/11/2020 14:15
Suspended Solids	SM22 2540 D	126	mg/L	10		25	25	BM	12/11/2020 12:57
Total Dissolved Solids	SM22 2540 C	186	mg/L	1		10	10	BM	12/11/2020 15:05

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089758**

Sample ID	: SR049	Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 08:57	Account Number	: Stormwater
Approval Date	: 12/31/2020 12:58	Sampled by	: USGS
Received Date/Time	: 12/10/2020 15:22	Delivered	: Ken Fossum
Sample Type	: COMPOS	Receipt Temperature (°C)	: 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
O-Phosphate-P	EPA 300.0	0.4	mg/L	1		0.024	0.1	SS	12/10/2020 23:53
Nitrate-N	EPA 300.0	1.2	mg/L	1		0.014	0.1	SS	12/10/2020 23:53
Nitrite-N	EPA 300.0	<0.1	mg/L	1		0.014	0.1	SS	12/10/2020 23:53

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089759**

Sample ID : SR049
Sampling Date/Time: 12/10/2020 08:57
Approval Date : 01/12/2021 10:23
Received Date/Time: 12/10/2020 15:22
Sample Type : COMPOS

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Ken Fossum
Receipt Temperature (°C) : 2.7

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Phosphorus - Total	SM 4500 P E	0.51	mg/L	1			0.020	TAM	12/22/2020 12:53

Phosphorus - Total Case Narrative: No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

non-NELAC Outside Lab: Test America - ADHS Lic. # AZ0728

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089475**

Sample ID	: SR049			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 10:30	Temperature	: 14.0 Deg. C	Account Number	: Stormwater
Approval Date	: 12/29/2020 15:46	pH	: 7.67	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: Christopher Molina
Sample Type	: GRAB			Receipt Temperature (°C)	: 3.1

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
	Chloromethane	<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 11:21
	Vinyl Chloride	<0.47	ug/L	1	E8	0.47	1.0		12/16/2020 11:21
	Bromomethane	<0.39	ug/L	1	E8	0.39	1.0		12/16/2020 11:21
	Chloroethane	<0.66	ug/L	1	E8	0.66	1.0		12/16/2020 11:21
	Trichlorofluoromethane	<0.43	ug/L	1	E8	0.43	1.0		12/16/2020 11:21
	1,1-Dichloroethylene	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 11:21
	Methylene chloride	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 11:21
	trans-1,2-Dichloroethene	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 11:21
	1,1-Dichloroethane	<0.30	ug/L	1	E8	0.30	1.0		12/16/2020 11:21
	Chloroform	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 11:21
	1,2-Dichloroethane	<0.28	ug/L	1	E8	0.28	1.0		12/16/2020 11:21
	1,1,1-Trichloroethane	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 11:21
	Carbon Tetrachloride	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 11:21
	Benzene	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 11:21
	1,2-Dichloropropane	<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 11:21
	Trichloroethene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 11:21
	Bromodichloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 11:21
	cis-1,3-Dichloropropene	<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 11:21
	trans-1,3-Dichloropropene	<0.19	ug/L	1	E8	0.19	1.0		12/16/2020 11:21
	1,1,2-Trichloroethane	<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 11:21
	Toluene	<0.35	ug/L	1	E8	0.35	1.0		12/16/2020 11:21
	Dibromochloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 11:21
	Tetrachloroethylene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 11:21
	Chlorobenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 11:21
	Ethylbenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 11:21

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089475**

Sample ID	: SR049			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 10:30	Temperature	: 14.0 Deg. C	Account Number	: Stormwater
Approval Date	: 12/29/2020 15:46	pH	: 7.67	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: Christopher Molina
Sample Type	: GRAB			Receipt Temperature (°C)	: 3.1

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
m- & p-Xylene		<0.84	ug/L	1	E8	0.84	2.0		12/16/2020 11:21
Bromoform		<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 11:21
o-Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 11:21
1,1,2,2-Tetrachloroethane		<0.46	ug/L	1	E8	0.46	1.0		12/16/2020 11:21
1,3-Dichlorobenzene		<0.56	ug/L	1	E8	0.56	1.0		12/16/2020 11:21
1,2-Dichlorobenzene		<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 11:21
1,4-Dichlorobenzene		<0.50	ug/L	1	E8	0.50	1.0		12/16/2020 11:21
Pentafluorobenzene (Surrogate1)		97	% Recovery	1					12/16/2020 11:21
Fluorobenzene (Surrogate2)		98	% Recovery	1					12/16/2020 11:21
4-Bromofluorobenzene (Surrogate)		95	% Recovery	1					12/16/2020 11:21
1,3-Dichloropropene (cis & trans)		<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 11:21
Total Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 11:21
Method 8260B Stormwater	EPA 8260B							TH	
1,3,5-Trimethylbenzene		<1.0	ug/L	1		0.18	1.0		12/16/2020 11:21
1,2,4-Trimethylbenzene		<1.0	ug/L	1		0.20	1.0		12/16/2020 11:21
Pentafluorobenzene (Surrogate1)		97	% Recovery	1					12/16/2020 11:21
Fluorobenzene (Surrogate2)		98	% Recovery	1					12/16/2020 11:21
4-Bromofluorobenzene (Surrogate)		95	% Recovery	1					12/16/2020 11:21

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089476**

Sample ID	: SR049			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 10:30	Temperature	: 14.0 Deg. C	Account Number	: Stormwater
Approval Date	: 12/31/2020 14:24	pH	: 7.67	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: Christopher Molina
Sample Type	: GRAB			Receipt Temperature (°C)	: 3.1

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
GC/MS-Method 624-for Acrolein	EPA 624.1 ¤							AL	
Acrolein		<0.950	ug/L	1	E8	0.950	1.0		12/11/2020 13:19
Acrylonitrile		<0.524	ug/L	1	E8	0.524	1.0		12/11/2020 13:19
Pentafluorobenzene (Surrogate1)		92	% Recovery	1					12/11/2020 13:19
Fluorobenzene (Surrogate2)		96	% Recovery	1					12/11/2020 13:19
4-Bromofluorobenzene (Surrogate)		93	% Recovery	1					12/11/2020 13:19

GC/MS-Method 624-for Acrolein and Acrylonitrile Samples Case Narrative: The batch QC did not meet acceptance criteria in 2020089566 LFM/LFMD for acrolein (27%,33%) and acrylonitrile (24%,30%); control limits: 40-160%.

GC/MS-Method 624.1for 2-	EPA 624.1 ¤							AL	
2-Chloroethyl vinyl ether		<0.333	ug/L	1	E8	0.333	1.0		12/11/2020 13:19
Pentafluorobenzene (Surrogate1)		92	% Recovery	1					12/11/2020 13:19
Fluorobenzene (Surrogate2)		96	% Recovery	1					12/11/2020 13:19
4-Bromofluorobenzene (Surrogate)		93	% Recovery	1					12/11/2020 13:19

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089477**

Sample ID	: SR049			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 10:30	Temperature	: 14.0 Deg. C	Account Number	: Stormwater
Approval Date	: 12/18/2020 09:45	pH	: 7.67	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: Christopher Molina
Sample Type	: GRAB			Receipt Temperature (°C)	: 3.1

Test		Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Coliform - E. Coli		SM22 9223 B							DC	
	Total Coliform		241960	MPN/100mL	1		1	1		12/10/2020 15:09
	E. coli		4350	MPN/100mL	1		1	1		12/10/2020 15:09

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089478**

Sample ID	: SR049			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 10:30	Temperature	: 14.0 Deg. C	Account Number	: Stormwater
Approval Date	: 12/22/2020 12:42	pH	: 7.67	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: Christopher Molina
Sample Type	: GRAB			Receipt Temperature (°C)	: 3.1

Test	Method* ~	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
Cyanide	EPA 335.4	<0.005	mg/L	1	N1	0.0019	0.005	DL	12/16/2020 10:47

Cyanide Case Narrative: 2020089733 spike recovery = 84%, CL = 90-110%

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089479**

Sample ID	: SR049			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 10:30	Temperature	: 14.0 Deg. C	Account Number	: Stormwater
Approval Date	: 12/24/2020 10:06	pH	: 7.67	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: Christopher Molina
Sample Type	: GRAB			Receipt Temperature (°C)	: 3.1

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
EPA 1664 With Silica Gel	EPA 1664B							TAMD	
Hexane Extractable Material		<5.5	mg/L	1			5.5		12/17/2020 14:44
Hexane Extractable Material - Silica Gel		<6.5	mg/L	1	L4		6.5		12/17/2020 14:44

EPA 1664 With Silica Gel Treatment Case Narrative: General Chemistry
Method 1664B: Analysis for Hexane Extractable Material (HEM) was performed for the following samples: 2020089479 (550-154496-1), 2020089494 (550-154496-2), 2020089509 (550-154496-4), (550-154496-B-1-A MS) and (550-154496-A-1-A MSD). Since the HEM result(s) was below the reporting limit (RL), the result(s) for Silica Gel Treated - Hexane Extractable Material (SGT-HEM) was reported as a non-detect. All HEM quality control criteria were met.

non-NELAC Outside Lab: Test America - ADHS Lic. # AZ0713

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089480**

Sample ID	: SR049 Trip Blank			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 10:30	Temperature	: 14.0 Deg. C	Account Number	: Stormwater
Approval Date	: 12/29/2020 15:46	pH	: 7.67	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: Christopher Molina
Sample Type	: TIME			Receipt Temperature (°C)	: 3.1

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
	Chloromethane	<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 12:48
	Vinyl Chloride	<0.47	ug/L	1	E8	0.47	1.0		12/16/2020 12:48
	Bromomethane	<0.39	ug/L	1	E8	0.39	1.0		12/16/2020 12:48
	Chloroethane	<0.66	ug/L	1	E8	0.66	1.0		12/16/2020 12:48
	Trichlorofluoromethane	<0.43	ug/L	1	E8	0.43	1.0		12/16/2020 12:48
	1,1-Dichloroethylene	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 12:48
	Methylene chloride	<0.41	ug/L	1	E8	0.41	1.0		12/16/2020 12:48
	trans-1,2-Dichloroethene	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 12:48
	1,1-Dichloroethane	<0.30	ug/L	1	E8	0.30	1.0		12/16/2020 12:48
	Chloroform	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 12:48
	1,2-Dichloroethane	<0.28	ug/L	1	E8	0.28	1.0		12/16/2020 12:48
	1,1,1-Trichloroethane	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 12:48
	Carbon Tetrachloride	<0.32	ug/L	1	E8	0.32	1.0		12/16/2020 12:48
	Benzene	<0.31	ug/L	1	E8	0.31	1.0		12/16/2020 12:48
	1,2-Dichloropropane	<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 12:48
	Trichloroethene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 12:48
	Bromodichloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 12:48
	cis-1,3-Dichloropropene	<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 12:48
	trans-1,3-Dichloropropene	<0.19	ug/L	1	E8	0.19	1.0		12/16/2020 12:48
	1,1,2-Trichloroethane	<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 12:48
	Toluene	<0.35	ug/L	1	E8	0.35	1.0		12/16/2020 12:48
	Dibromochloromethane	<0.21	ug/L	1	E8	0.21	1.0		12/16/2020 12:48
	Tetrachloroethylene	<0.38	ug/L	1	E8	0.38	1.0		12/16/2020 12:48
	Chlorobenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 12:48
	Ethylbenzene	<0.42	ug/L	1	E8	0.42	1.0		12/16/2020 12:48

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AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089480**

Sample ID	: SR049 Trip Blank			Project Link Code	: Stormwater
Sampling Date/Time	: 12/10/2020 10:30	Temperature	: 14.0 Deg. C	Account Number	: Stormwater
Approval Date	: 12/29/2020 15:46	pH	: 7.67	Sampled by	: USGS
Received Date/Time	: 12/10/2020 11:12			Delivered	: Christopher Molina
Sample Type	: TIME			Receipt Temperature (°C)	: 3.1

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
624.1-STORM	EPA 624.1							TH	
m- & p-Xylene		<0.84	ug/L	1	E8	0.84	2.0		12/16/2020 12:48
Bromoform		<0.37	ug/L	1	E8	0.37	1.0		12/16/2020 12:48
o-Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 12:48
1,1,2,2-Tetrachloroethane		<0.46	ug/L	1	E8	0.46	1.0		12/16/2020 12:48
1,3-Dichlorobenzene		<0.56	ug/L	1	E8	0.56	1.0		12/16/2020 12:48
1,2-Dichlorobenzene		<0.57	ug/L	1	E8	0.57	1.0		12/16/2020 12:48
1,4-Dichlorobenzene		<0.50	ug/L	1	E8	0.50	1.0		12/16/2020 12:48
Pentafluorobenzene (Surrogate1)		97	% Recovery	1					12/16/2020 12:48
Fluorobenzene (Surrogate2)		98	% Recovery	1					12/16/2020 12:48
4-Bromofluorobenzene (Surrogate)		93	% Recovery	1					12/16/2020 12:48
1,3-Dichloropropene (cis & trans)		<0.15	ug/L	1	E8	0.15	1.0		12/16/2020 12:48
Total Xylene		<0.33	ug/L	1	E8	0.33	1.0		12/16/2020 12:48
Method 8260B Stormwater	EPA 8260B							TH	
1,3,5-Trimethylbenzene		<1.0	ug/L	1		0.18	1.0		12/16/2020 12:48
1,2,4-Trimethylbenzene		<1.0	ug/L	1		0.20	1.0		12/16/2020 12:48
Pentafluorobenzene (Surrogate1)		97	% Recovery	1					12/16/2020 12:48
Fluorobenzene (Surrogate2)		98	% Recovery	1					12/16/2020 12:48
4-Bromofluorobenzene (Surrogate)		93	% Recovery	1					12/16/2020 12:48

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

* SM20 = Standard Methods 20th Edition SM21 = Standard Methods 21st Edition SM22 = Standard Methods 22nd Edition § = Not licensed by ADHS ¤ = Non NELAP accredited

/S/B. Dempster

City of Phoenix
Water Services Laboratory
ADHS Lic. # AZ0088
2474 S. 22nd Ave
(602) 534-2960

AZ1000002

Results Report

Submitter: Water Services Department
200 W. Washington
Phoenix, AZ

Type of Project: Stormwater

Lab Number: **2020089481**

Sample ID : SR049 Trip Blank
Sampling Date/Time: 12/10/2020 10:30
Approval Date : 12/31/2020 14:24
Received Date/Time: 12/10/2020 11:12
Sample Type : TIME

Temperature : 14.0 Deg. C
pH : 7.67

Project Link Code : Stormwater
Account Number : Stormwater
Sampled by : USGS
Delivered : Christopher Molina
Receipt Temperature (°C) : 3.1

Test	Method*	Result	Units	Dil. Fact.	Data Qualifiers	MDL	Report Limit	Analyst	Analysis Date
GC/MS-Method 624-for Acrolein	EPA 624.1 ¤							AL	
Acrolein		<0.950	ug/L	1	E8	0.950	1.0		12/11/2020 17:16
Acrylonitrile		<0.524	ug/L	1	E8	0.524	1.0		12/11/2020 17:16
Pentafluorobenzene (Surrogate1)		94	% Recovery	1					12/11/2020 17:16
Fluorobenzene (Surrogate2)		97	% Recovery	1					12/11/2020 17:16
4-Bromofluorobenzene (Surrogate)		93	% Recovery	1					12/11/2020 17:16
GC/MS-Method 624-for Acrolein and Acrylonitrile Samples Case Narrative: The batch QC did not meet acceptance criteria in 2020089566 LFM/LFMD for acrolein (27%,33%) and acrylonitrile (24%,30%); control limits: 40-160%.									
GC/MS-Method 624.1for 2-	EPA 624.1 ¤							AL	
2-Chloroethyl vinyl ether		<0.333	ug/L	1	E8	0.333	1.0		12/11/2020 17:16
Pentafluorobenzene (Surrogate1)		94	% Recovery	1					12/11/2020 17:16
Fluorobenzene (Surrogate2)		97	% Recovery	1					12/11/2020 17:16
4-Bromofluorobenzene (Surrogate)		93	% Recovery	1					12/11/2020 17:16

Sample Condition: Samples received on ice or blue ice in an insulated container. Custody seals were not in place. Temperature Blank also received.

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/S/B. Dempster

New or Revised
Public Outreach Documents

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WATER SERVICES

Second Annual Stormwater Awareness Week Jan. 25 -31, 2021

JANUARY 20, 2021 9:00 AM

Phoenix Water Services is kicking off 2021 with a focus on stormwater pollution prevention. The utility's second annual Stormwater Awareness Week is set for January 25 – 31, 2021. A virtual workshop is scheduled for Thursday, January 28 at noon to help spread awareness on the importance of stormwater pollution prevention.

A number of Arizona cities and organizations will join Phoenix for this regional effort to educate the public about the importance of preserving stormwater quality for the environment and future generations.

"Stormwater Awareness Week encourages communities to make smart choices when it comes to preserving the quality of stormwater in our desert city," said Mayor Gallego. “With our hotter than normal summers and the lack of rain, it is important to remember that stormwater doesn't get treated and flows directly to nearby washes and retention basins, making it imperative that we preserve our systems."

Stormwater picks up pollutants as it flows over rooftops, gutters, parking lots, driveways, and other paved surfaces. That polluted stormwater can work its way into storm drains, and eventually to surface water and retention areas.

Simple actions to reduce stormwater pollution include:

- Disposing trash, recyclables and chemicals properly like detergent, paint, medications, etc.
- Recycling motor oil and maintaining your vehicle to prevent leaks
- Cleaning up after your pet
- Using lawn-chemicals sparingly and always following manufacturer's directions
- Properly disposing leftover paint and household chemicals at a household hazardous waste event
- And please remember - only rain in the storm drain

"Stormwater Awareness Week highlights issues about stormwater pollution that we don't often think about," said Interim Water Services Director Eric Froberg. “Everyone has an important role in stormwater pollution prevention. Having the opportunity to host a virtual workshop for our residents will go a long way to help educate our community."

Phoenix Water Services is hosting a virtual workshop on Thursday, January 28 at noon. to discuss the City's Stormwater Management Program and our activities to reduce stormwater pollution. Please register here to participate.

To learn more about the City of Phoenix Water Services Department Stormwater Awareness Week and what you can do as an individual or business to prevent stormwater pollution, please visit phoenix.gov/stormwater.

Media Contact:

Victoria Welch

Public Information Specialist

602-262-5060

Related Social Media Hashtags and Handles: **PHX Water Stormwater**
Keywords: **PHXWater**, **Stormwater**, **Storm drain**, **Phoenix Water**

EARTH DAY CLEANUP WEEK

Photo: Colleen Adams Photography

Calling All Environmental Heroes

Celebrate Earth Day with Rio Reimagined and clean up the Salt River!

Join us at the Salt River in person!

Saturday, April 24th
Shift 1: 9am–11:30am
Shift 2: 1pm–3:30pm

West side of 91st Avenue & the Salt River (below the banks of the Tres Rios Wetlands). Pick a shift or come all day! Limited attendance due to COVID safety protocols—sign up now!

Sign up here: na.eventscloud.com/rioearthday
Or scan the QR code.
All volunteers will receive a small native plant or seeds to take home.

AND/OR

Join us virtually with the Litterati App!

April 17–24th
Join us all week long

Pick up litter anywhere in your neighborhood, park, or local trail.

1. Download Litterati App
2. Open app, swipe over to challenges
3. Enter challenge code “RIOEARTH”
4. Snap photos while picking up litter
5. Participate anytime during the week of April 17–24th

Want to start volunteering early?
Kick off the week of Earth Day with the City of Avondale Tres Rios river cleanup!
April 17th 7am–9am at the Base & Meridian Wildlife Area

CITY OF AVONDALE TRES RIOS CLEANUP

Special Thanks To Our RIO Partners

Ball · river NETWORK connecting people·saving rivers · ASU Arizona State University · ADEQ Arizona Department of Environmental Quality · ArizonaForward ESTABLISHED 1969 · WM · City of Phoenix · KEEP Phx BEAUTIFUL · CORAZÓN LATINO

info@rioreimagined.com | rioreimagined.org

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WATER SERVICES

Phoenix Water Debuts New Activity Book with Stormwater Hopper

NOVEMBER 6, 2020 9:30 AM

Phoenix Water's mascot, Hopper, is a friendly desert toad that represents stormwater education. In Hopper's newly released activity book, *Hopper's Stormwater Adventure*, students go on a journey to discover what happens to rainwater that flows into the storm drain. One of Hopper's most important messages is that stormwater runoff flows untreated into washes, rivers, canals and retention or detention basins and it's the community's duty to protect the water.

The activity and coloring pages throughout the ten-page book teach students how to protect stormwater and prevent pollution in the storm drain. Hopper takes students through a maze to learn where stormwater goes on page three. On page six, students fill in the blank using a secret code teaching them how to protect stormwater. Students test their knowledge on pages seven and eight by selecting which Hopper is preventing stormwater pollution. By the end, students will know that only rain belongs in the storm drain!

The activity book is available for download on Phoenix Water's digital education page, Water Education from the Cloud. In addition to Hopper's activity book, the water education page offers water conservation resources for all ages including activity books for Phoenix Water mascots Wayne Drop and Loo Poo, games, learning videos for kids and adults, and lesson plans for the educators to use at home. The new webpage, launched this summer, provides fun, learning entertainment for the whole family.

Phoenix Water continues to add new content to the page throughout the year. To download Hopper's new activity book, and check out Phoenix Water's digital education page, visit phoenix.gov/watercloud.

To learn more about stormwater in Phoenix, visit phoenix.gov/stormwater.

And remember, only rain in the storm drain!

Media Contact:
Athena Sanchez
Public Information Officer, Phoenix Water
Cell: 602-621-0507
Email: athena.sanchez@phoenix.gov

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PHX WATER SMART

STORMWATER AWARENESS WEEK

EVERYDAY ACTIONS YOU CAN TAKE TO PREVENT STORMWATER POLLUTION:

1. Put trash and recyclables in their place.
2. Clean up after your pet.
3. Apply lawn chemicals sparingly and follow manufacturers' directions.
4. Properly dispose of leftover paint and household chemicals at a household hazardous waste event.
5. Keep your vehicle leak free and properly dispose of used motor oil.
6. Take your car to a commercial car wash that recycles water.
7. Use native plants that require less maintenance and fewer chemicals.
8. Use and store yard chemicals safely.
9. Buy environmentally friendly products.
10. Report illegal dumping.
11. Clean up litter in the community.
12. Harvest rainwater.

Only Rain in the Storm Drain! phoenix.gov/stormwater

PhoenixPublic Library

Use your Phoenix Public Library card to explore our catalog, access reference resources, and discover more water conservation information with eBooks, digital magazines, online classes and more at phoenixpubliclibrary.org

PhoenixPublicLibrary

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Public Awareness Survey

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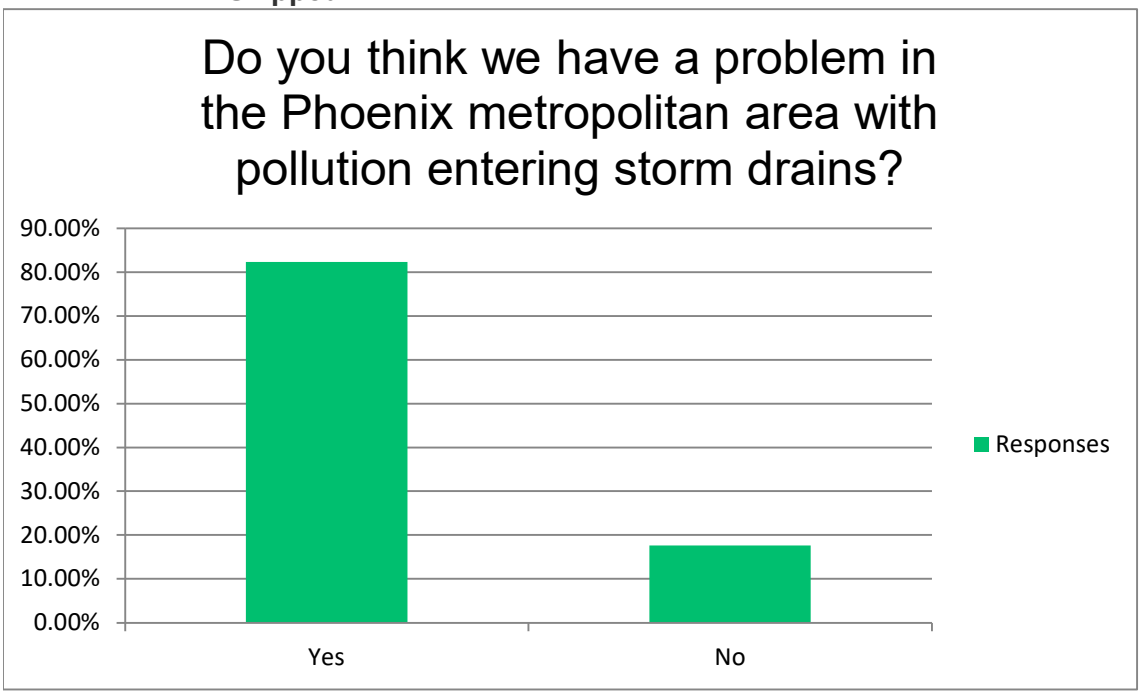
Annual Stormwater Awareness Survey (2021)

Do you think we have a problem in the Phoenix metropolitan area with pollution entering storm drains?

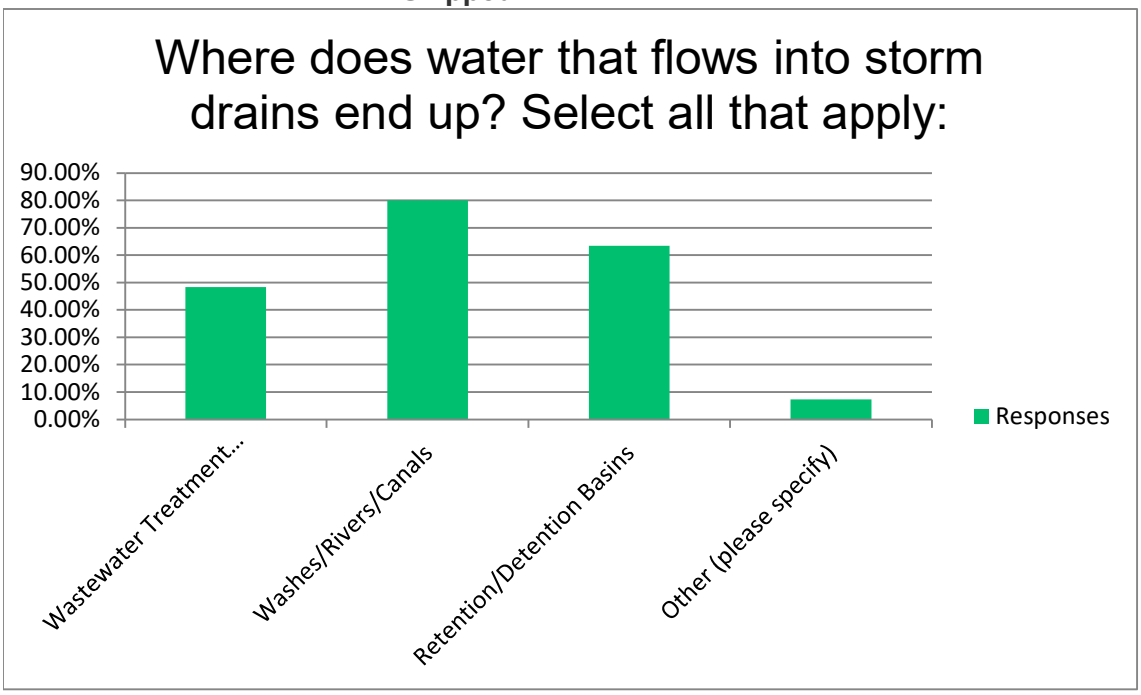
Answer Choices	Responses	
Yes	82.35%	168
No	17.65%	36
Answered		**204**
Skipped		**2**



Annual Stormwater Awareness Survey (2021)

Where does water that flows into storm drains end up? Select all that apply:

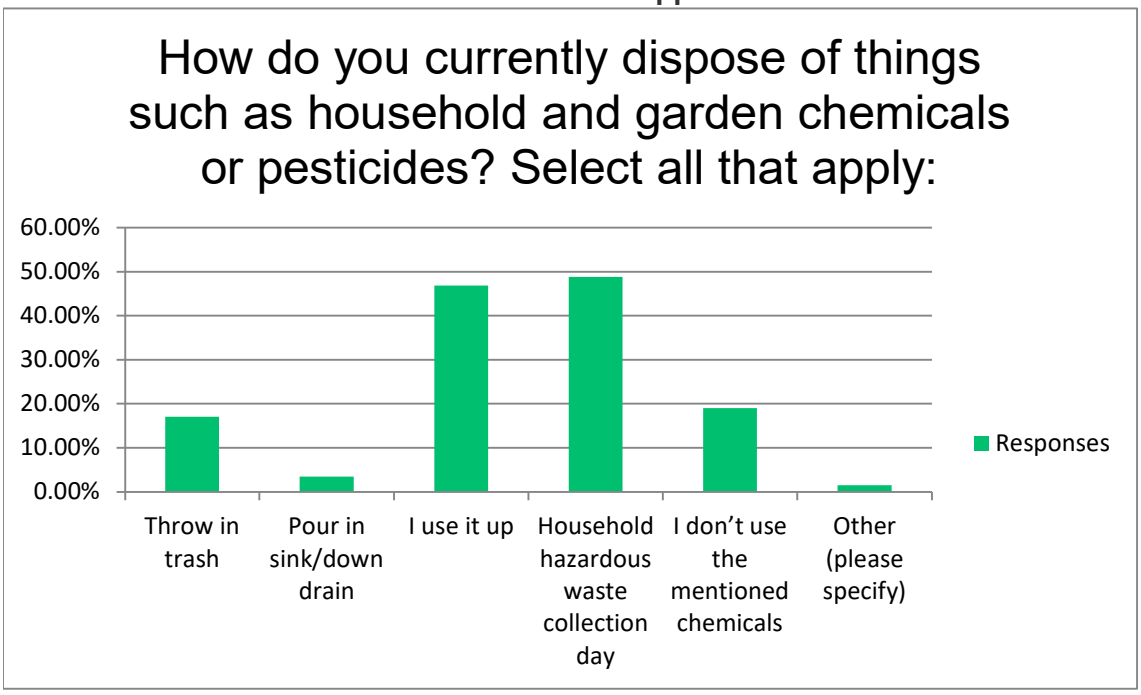
Answer Choices	Responses	
Wastewater Treatment Plant	48.29%	99
Washes/Rivers/Canals	80.00%	164
Retention/Detention Basins	63.41%	130
Other (please specify)	7.32%	15
	Answered	**205**
	Skipped	**1**



Annual Stormwater Awareness Survey (2021)

How do you currently dispose of things such as household and garden chemicals or pesticides? Select all that apply:

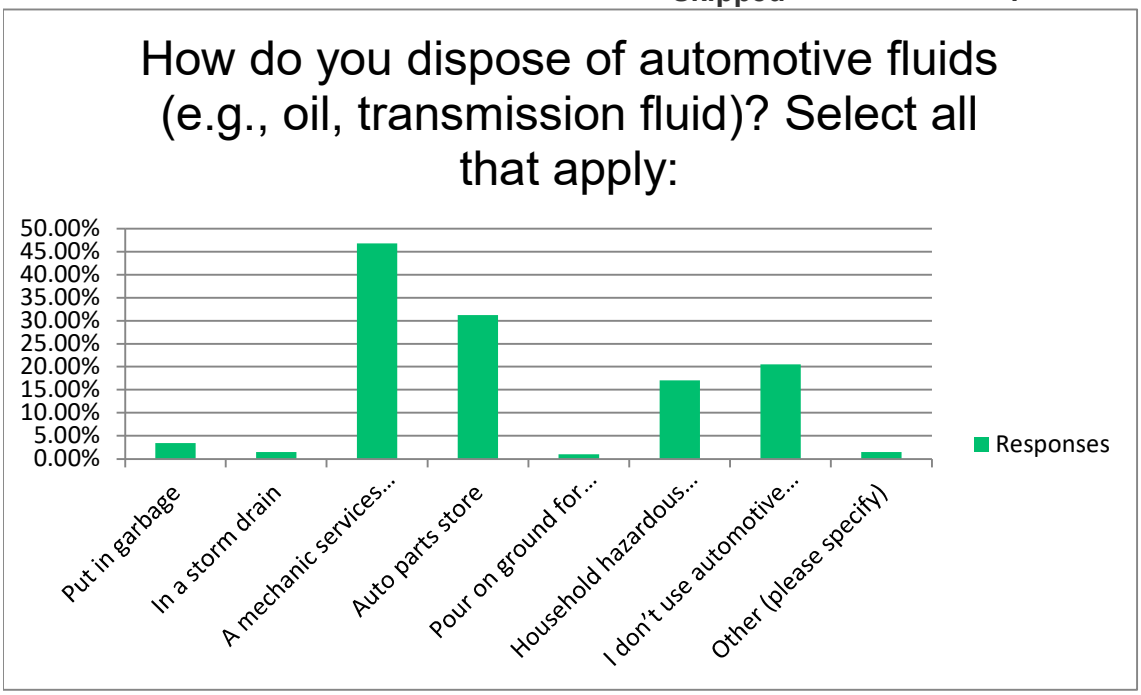
Answer Choices	Responses	
Throw in trash	17.07%	35
Pour in sink/down drain	3.41%	7
I use it up	46.83%	96
Household hazardous waste collection day	48.78%	100
I don't use the mentioned chemicals	19.02%	39
Other (please specify)	1.46%	3
	Answered	**205**
	Skipped	**1**



Annual Stormwater Awareness Survey (2021)

How do you dispose of automotive fluids (e.g., oil, transmission fluid)? Select all that apply:

Answer Choices	Responses	
Put in garbage	3.41%	7
In a storm drain	1.46%	3
A mechanic services my vehicle	46.83%	96
Auto parts store	31.22%	64
Pour on ground for weed control	0.98%	2
Household hazardous waste collection program	17.07%	35
I don’t use automotive fluids	20.49%	42
Other (please specify)	1.46%	3
	Answered	**205**
	Skipped	**1**



Annual Stormwater Awareness Survey (2021)

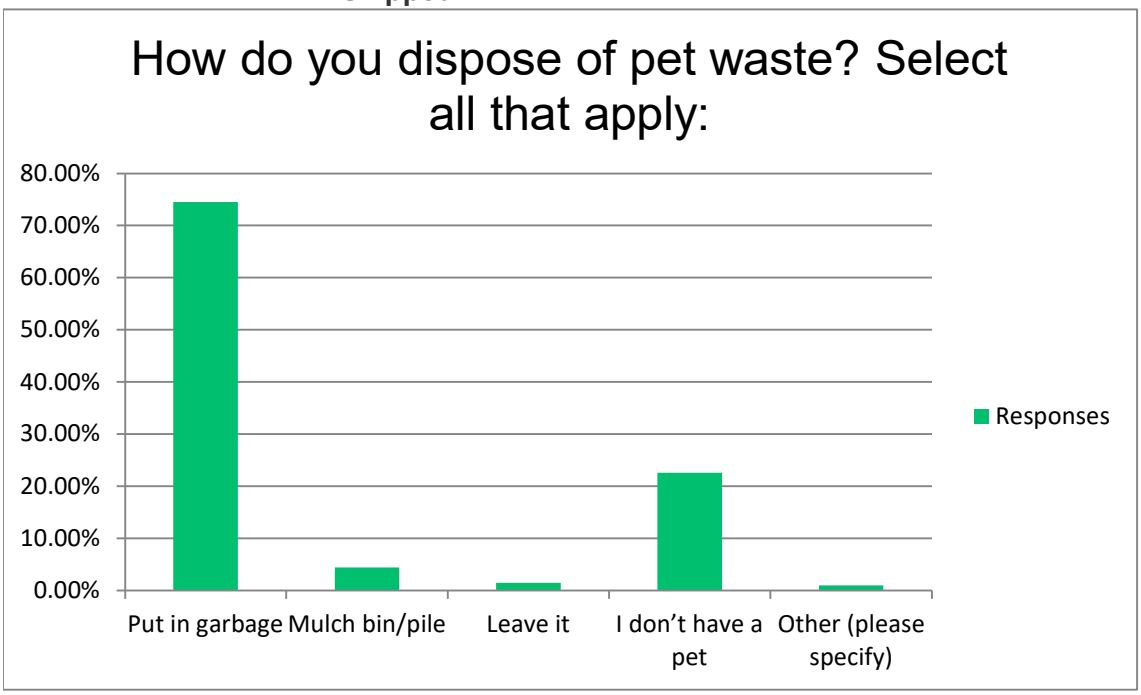
How do you dispose of yard waste? Select all that apply:

Answer Choices	Responses	
Put in garbage	61.95%	127
Mulch bin/pile	24.88%	51
Brown bin	9.27%	19
In a storm drain/street	0.98%	2
Bulk pick-up collection day	47.80%	98
Landscaping service hauls it away	25.85%	53
I don't have yard waste	6.83%	14
Other (please specify)	0.49%	1
	Answered	**205**
	Skipped	**1**

Annual Stormwater Awareness Survey (2021)

How do you dispose of pet waste? Select all that apply:

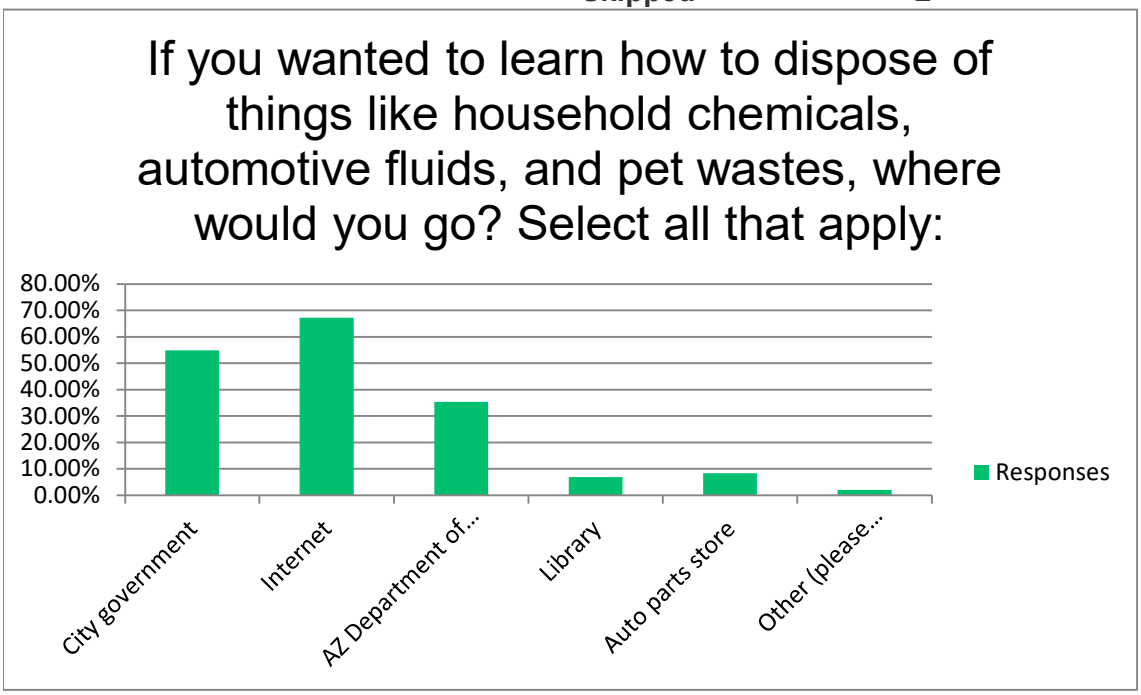
Answer Choices	Responses	
Put in garbage	74.51%	152
Mulch bin/pile	4.41%	9
Leave it	1.47%	3
I don’t have a pet	22.55%	46
Other (please specify)	0.98%	2
	Answered	**204**
	Skipped	**2**



Annual Stormwater Awareness Survey (2021)

If you wanted to learn how to dispose of things like household chemicals, automotive fluids, and pet wastes, where would you go? Select all that apply:

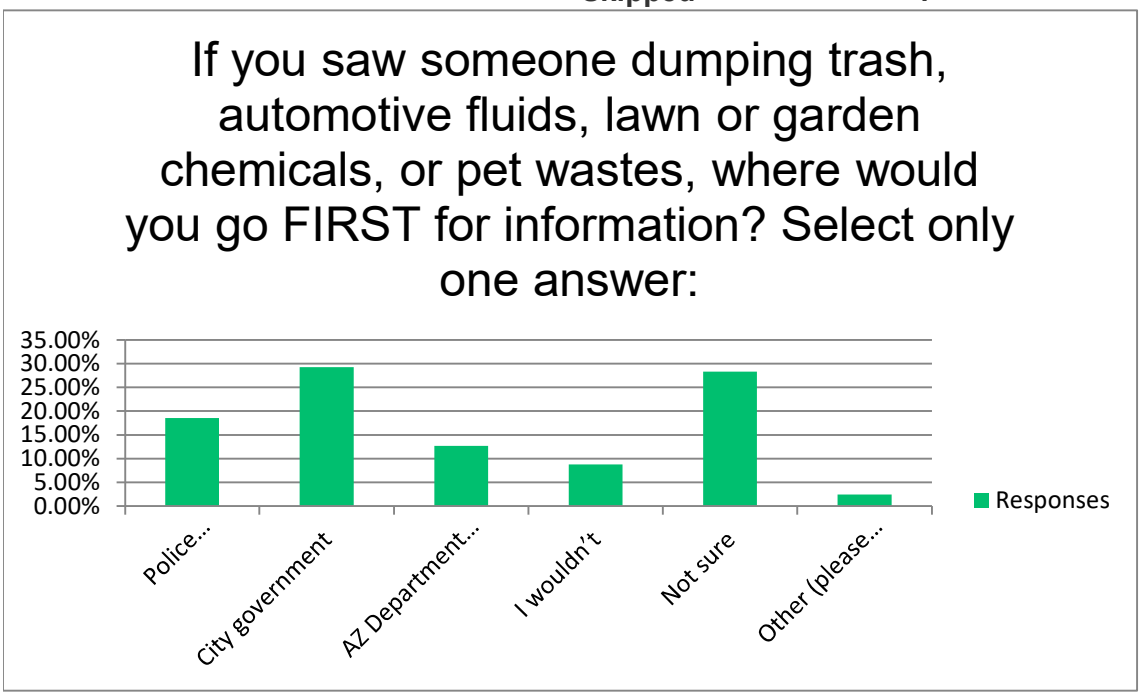
Answer Choices	Responses	
City government	54.90%	112
Internet	67.16%	137
AZ Department of Environmental Quality	35.29%	72
Library	6.86%	14
Auto parts store	8.33%	17
Other (please specify)	1.96%	4
	Answered	**204**
	Skipped	**2**



Annual Stormwater Awareness Survey (2021)

If you saw someone dumping trash, automotive fluids, lawn or garden chemicals, or pet wastes, where would you go FIRST for information? Select only one answer:

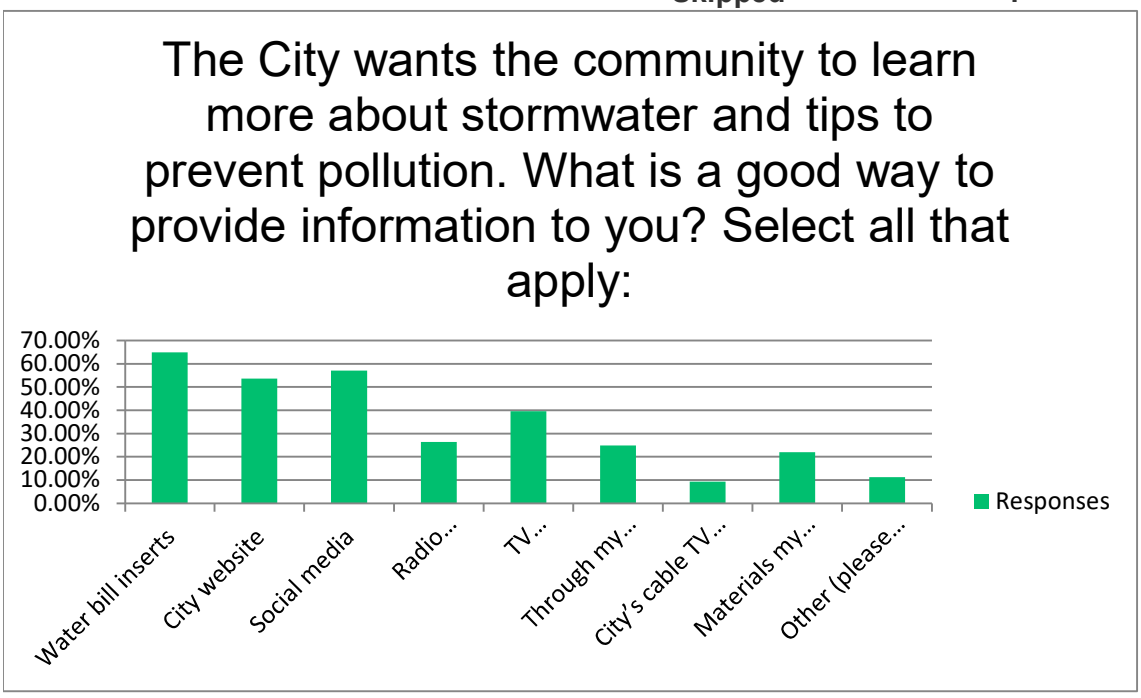
Answer Choices	Responses	
Police department	18.54%	38
City government	29.27%	60
AZ Department of Environmental Quality	12.68%	26
I wouldn't	8.78%	18
Not sure	28.29%	58
Other (please specify)	2.44%	5
	Answered	**205**
	Skipped	**1**



Annual Stormwater Awareness Survey (2021)

The City wants the community to learn more about stormwater and tips to prevent pollution. What is a good way to provide information to you? Select all that apply:

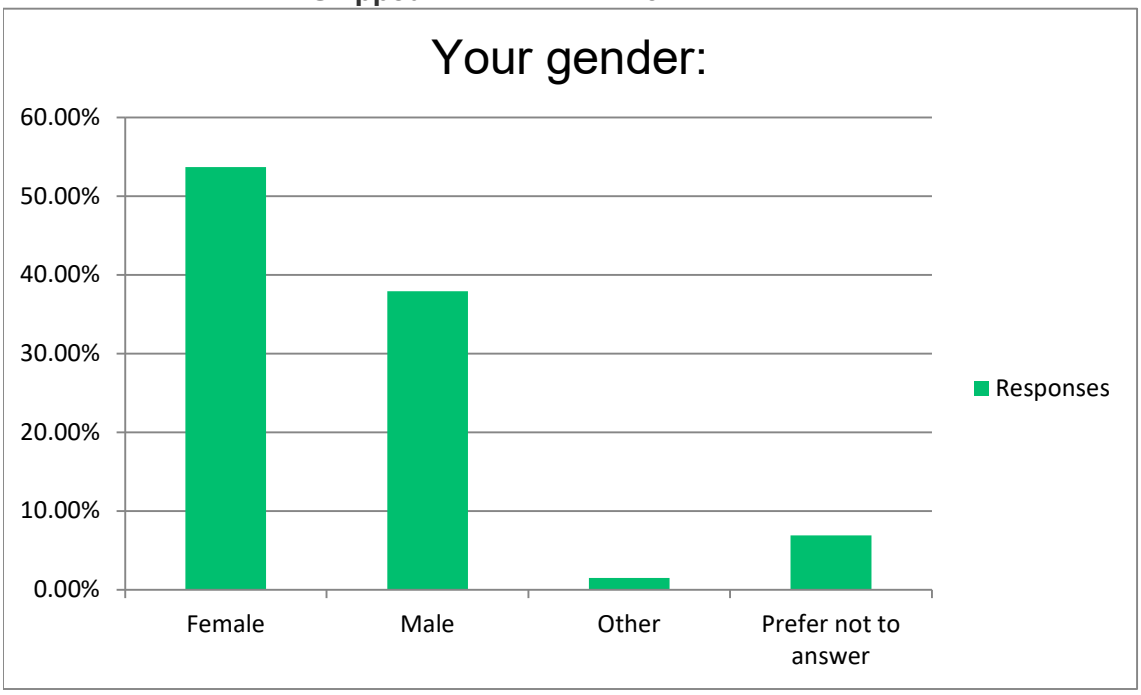
Answer Choices	Responses	
Water bill inserts	64.88%	133
City website	53.66%	110
Social media	57.07%	117
Radio announcements	26.34%	54
TV advertisements	39.51%	81
Through my homeowner's association	24.88%	51
City's cable TV channel	9.27%	19
Materials my children bring home from school	21.95%	45
Other (please specify)	11.22%	23
	Answered	**205**
	Skipped	**1**



Annual Stormwater Awareness Survey (2021)

Your gender:

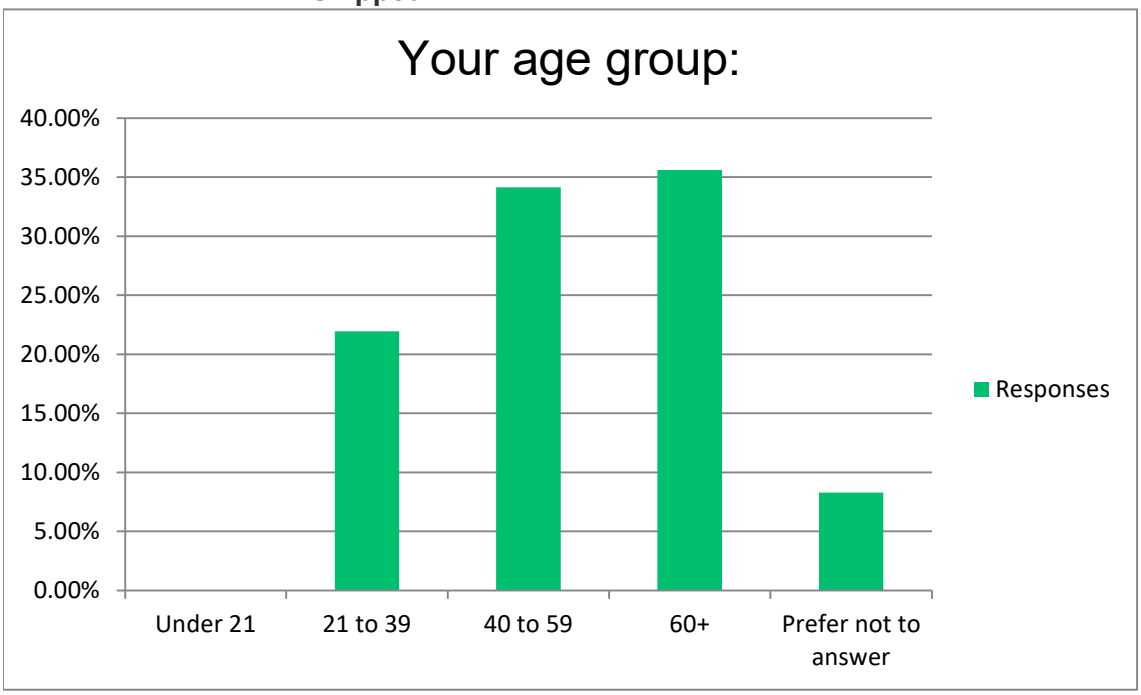
Answer Choices	Responses	
Female	53.69%	109
Male	37.93%	77
Other	1.48%	3
Prefer not to answer	6.90%	14
	Answered	**203**
	Skipped	**3**



Annual Stormwater Awareness Survey (2021)

Your age group:

Answer Choices	Responses	
Under 21	0.00%	0
21 to 39	21.95%	45
40 to 59	34.15%	70
60+	35.61%	73
Prefer not to answer	8.29%	17
	Answered	**205**
	Skipped	**1**



Annual Stormwater Awareness Survey (2021)

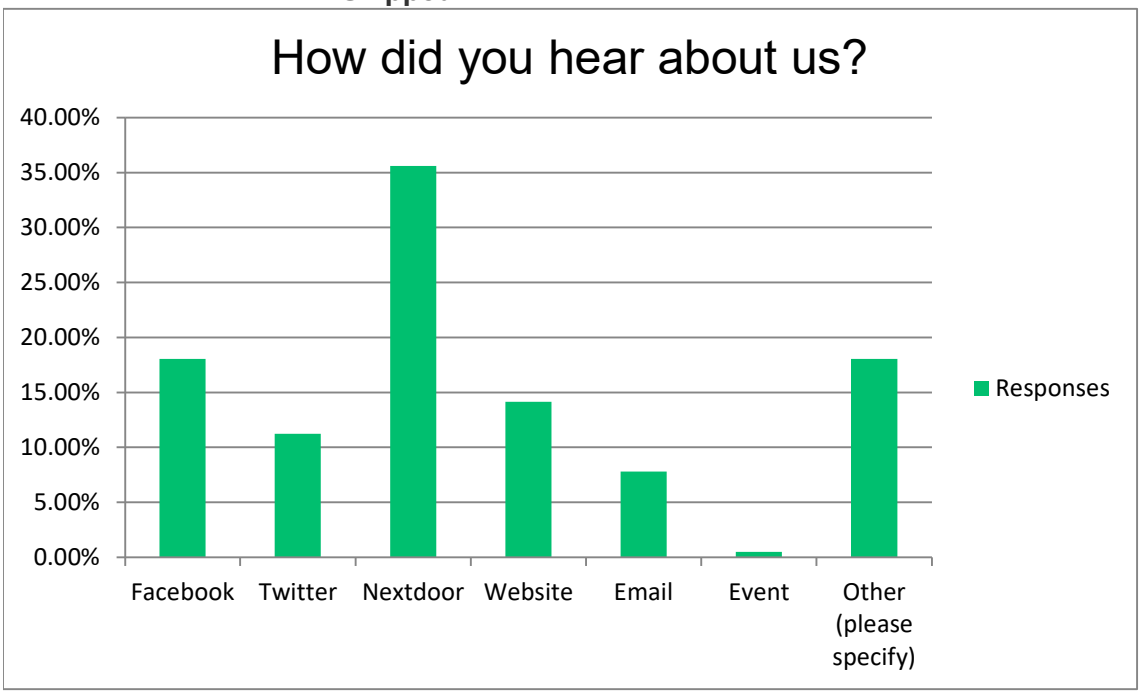
ZIP code

Answered	**202**
Skipped	**4**

Annual Stormwater Awareness Survey (2021)

How did you hear about us?

Answer Choices	Responses		
Facebook	18.05%	37	
Twitter	11.22%	23	
Nextdoor	35.61%	73	
Website	14.15%	29	
Email	7.80%	16	
Event	0.49%	1	
Other (please specify)	18.05%	37	(Note: 27 were from Water Bill Insert)
	Answered	**205**	
	Skipped	**1**	



Annual Stormwater Awareness Survey (2021)

Thank you for taking our survey!For more information please visit phoenix.gov/stormwater. Is there anything else you would like to add?

Answered	**73**
Skipped	**126**

STORM Annual Report

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FY21 ANNUAL REPORT

Arizona's Stormwater Outreach for Regional Municipalities (STORM) provides a platform for collaborative effort by municipal partners to perform educational outreach to citizens with the message of pollution prevention to help keep surface waters clean.

STORM
Only rain in the stormdrain

STORM

FY 2021 Annual Report

July 1, 2020 – June 30, 2021

SUMMARY

Arizona's Stormwater Outreach for Regional Municipalities (STORM) provides a platform for collaborative effort by municipal partners to perform educational outreach to their residents with the message of pollution prevention to help keep our waters clean. During FY21, STORM members completed outreach via web, print, traditional and social media. The unprecedented events of 2020 – 2021 presented STORM members with some exceptional challenges, but nonetheless, the coordination among the member cities, towns, and nontraditional municipal separate storm sewer system owners or affiliates, resulted in the following highlights:

This year's main focus was creating a digital presence for STORM. In addition to STORM's digital and social media pages, STORM partnered with ABC15. STORM, partnering with ABC15, was able to leverage increased media viewership during the COVID-19 pandemic to maximize our advertising budget impact for a total of ***less than a penny per view!*** STORM was able to focus on a more targeted approach by expanding its opportunities through digital media platforms.

STORM's website (www.azstorm.org) 4Q FY21 received a total of 8,093 webpage views by 4,675 users during 5,319 sessions. A session is defined as a period of time a user is engaged in the website. Data for the first three quarters of FY21 (July 1, 2020 through March 31, 2021) is not available at the time of assembling this report. When STORM boosted its own Facebook posts, an immediate return was experienced with the increase of visitation to STORM's Facebook page by over 300%.

MEMBERSHIP

ADOT, Apache Junction, Avondale, Buckeye, Casa Grande, Chandler, El Mirage, Fountain Hills, Gilbert, Glendale, Goodyear, Guadalupe, Maricopa County Environmental Services, Mesa, Paradise Valley, Peoria, Phoenix, Pinal County, Queen Creek, Scottsdale, Surprise, and Tempe. Affiliate members are Maricopa County Flood Control District and Stormwater Pros.

BUDGET

Revenue	
Beginning cash balance FY21	$68,348.46
Membership Dues Received	$72,750.00
Less Dues Received in FY20	$19,000.00
Total	$122,098.46

Expenditures	
Website	$818.61
ABC15 and iHeart Media	$39,791.00
Educational Videos	$14,850.00
Arizona Water Festival sponsorship	$2,500.00
NMSA Membership	$500.00
Graphics	$80.00
Social Media	$1,969.94
Administration/Accounting	$1,744.53
Total	$62,254.08

MEETING SUMMARY

Members met via digital meeting platforms on the fourth Tuesday at 1:30p each month (unless the meeting interfered with a national holiday). These working meetings are the primary method of sharing relevant information about regulatory issues, identifying potential outreach events, updating committee efforts, and reporting. Members track outreach events online for inclusion in this annual report, which supports a regional front, stretches municipal dollars, and coordinates consistent messages in the Middle Gila River Watershed. Members are able to individually capitalize their membership benefits by using STORM produced materials (social media posts, educational videos and materials, and promotional items) to perform outreach in their own communities and in interactions with partners in their communities such as citizens, businesses, developers, builders, and manufacturers.

As all our livelihoods continue to be impacted by the global pandemic, STORM was not spared by COVID-19. As an organization that counts on interactions between our members and the general public, especially in face-to-face contact, we experienced challenges this past fiscal year that impacted our ability to reach the general public with our message of stormwater awareness in face-to-face settings. These missed opportunities were augmented by an increase in the digital marketplace.

With the challenges of the global pandemic in mind, as stated in the summary and in the sections below, STORM was able to leverage the unique media situation to reach over 5 million more people through our ABC15 and social media campaigns (a 250% increase from FY20). We were also able to save budgeted money allotted for events, marketing materials, and educational videos and it is our goal to maximize the impact of those dollars in the next fiscal year.

In FY21, STORM sponsored the Arizona Water Festival in partnership with the University of Arizona and Project WET (Water Education for Teachers) as an outreach to elementary aged students throughout Arizona discussing the importance of water quality, problems caused by having water pollution, how to prevent pollution, stormwater quality, etc. This proved to be a very successful event and we look forward to our continued partnership! We reached 386 classrooms/teachers and a total of 9,186 students!

SOCIAL + DIGITAL MEDIA

Social Media, specifically when partnering with ABC15, campaigns were very successful. STORM contracted with ABC15, which ran regular banner ads, Facebook ads, Facebook posts, and large banner ads resulting in more than 5 million ABC15/STORM digital ad views and over 5k clicks (engagements). (See graphics below for details).

ABC15 + STORM

ABC15 partnered with STORM to provide an increase in digital media coverage throughout FY21. Three separate and targeted campaigns ran during FY21. November's messaging was focused on proper car maintenance, January's messaging focused on *Stormwater Awareness Week* and May-June's messaging was centered around monsoon season. In total, 9,382,029 total impressions were made on citizens throughout the valley!

STORM'S WEBSITE (www.azstorm.org)

Data for the website analytics is only available for the last quarter of FY21. This short period shows the website had 4,675 users who had 8,093 page views. This uptick in viewership was a result of the ABC15 Monsoon Awareness social media campaign and an increase in STORM's Facebook page post boosting.

STORM'S FACEBOOK PAGE (www.facebook.com/StormWaterOutreach)

STORM members contributed time to post and interact with the public on STORM's Facebook page (https://www.facebook.com/StormWaterOutreach). STORM's posts reached 64,316 people (a 93.1% increase from FY20) which resulted in 8,197 engagements (a 72.2% increase from FY20).

It is worthwhile to note that when Facebook posts were boosted by either ABC 15 or by STORM, the response and viewership dramatically increased. Once STORM began boosting its own posts, an overall increase of 300% was witnessed in activity on STORM's Facebook page. The next four

graphics are posts from STORM's Facebook page. Facebook posts by the digital committee have drastically increased during FY21. Given the positive response, the digital and social media committees will continue to increase STORM awareness throughout social media channels.

See Appendix for samples of data analytics and selected digital ads, graphics, digital media posts and the Arizona Water Festival success sheet.

APPENDIX

- ABC15 Fiscal Year Summary
  - Car Maintenance Quiz
  - Stormwater Awareness Week
  - Monsoon Season
- STORM Facebook Page Data and Sampling of Boosted Posts
- STORM Website Page Data (4th quarter FY21 only)
- Arizona Water Festival/Project WET Event

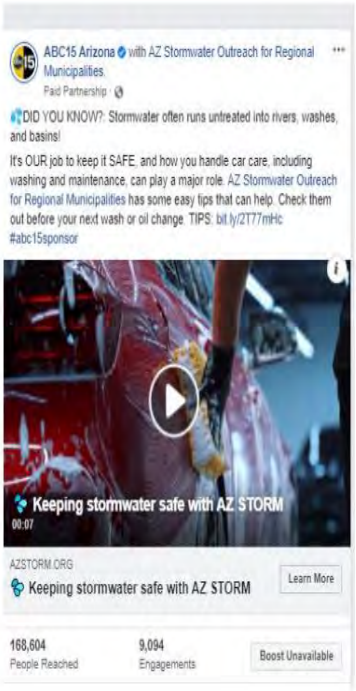
ABC15 FY21 SUMMARY

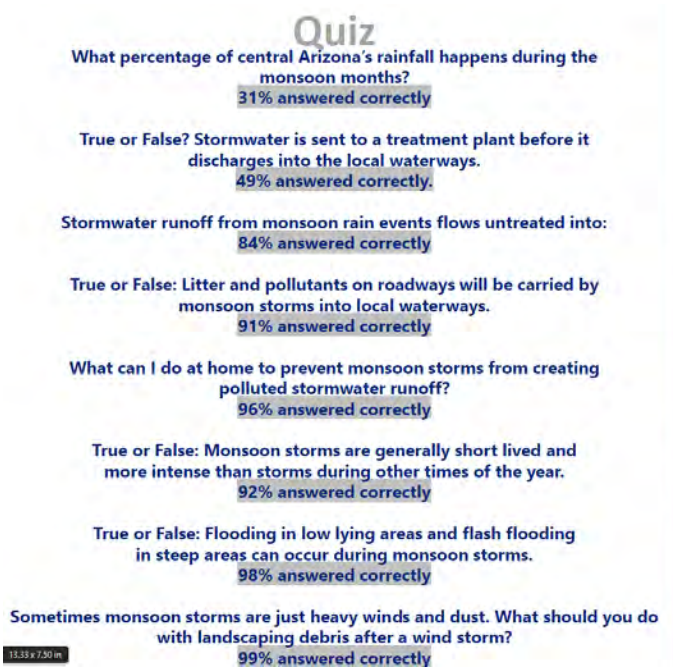
Fiscal Year Summary

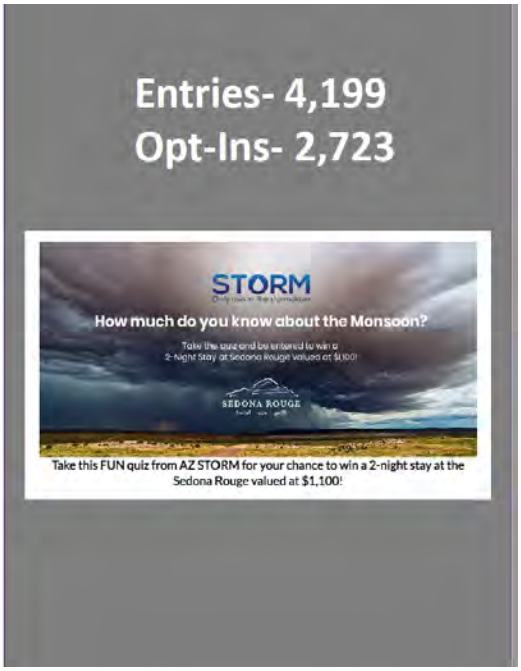
- **November:** Car Maintenance Quiz
- **January:** Stormwater awareness week
- **May-July:** Monsoon Campaign

- **Total Impressions:** 9,382,029
- **Cost Per Thousand People Reached:** $3.09
- **Total Added Value:** $15,800
- **Added Value Percentage:** 55%
- **Added Value Elements:**
    - 2x High Impact Units on ABC15.COM homepage (ran during stormwater awareness week)
    - 5x High Impact Units on ABC15.COM news section (ran during monsoon campaign)
    - 1x ABC15 Email blast (ran during car maintenance quiz)
    - Discounted pricing on ABC15 social/overall monsoon campaign

CAR MAINTENANCE QUIZ (NOVEMBER 2020)







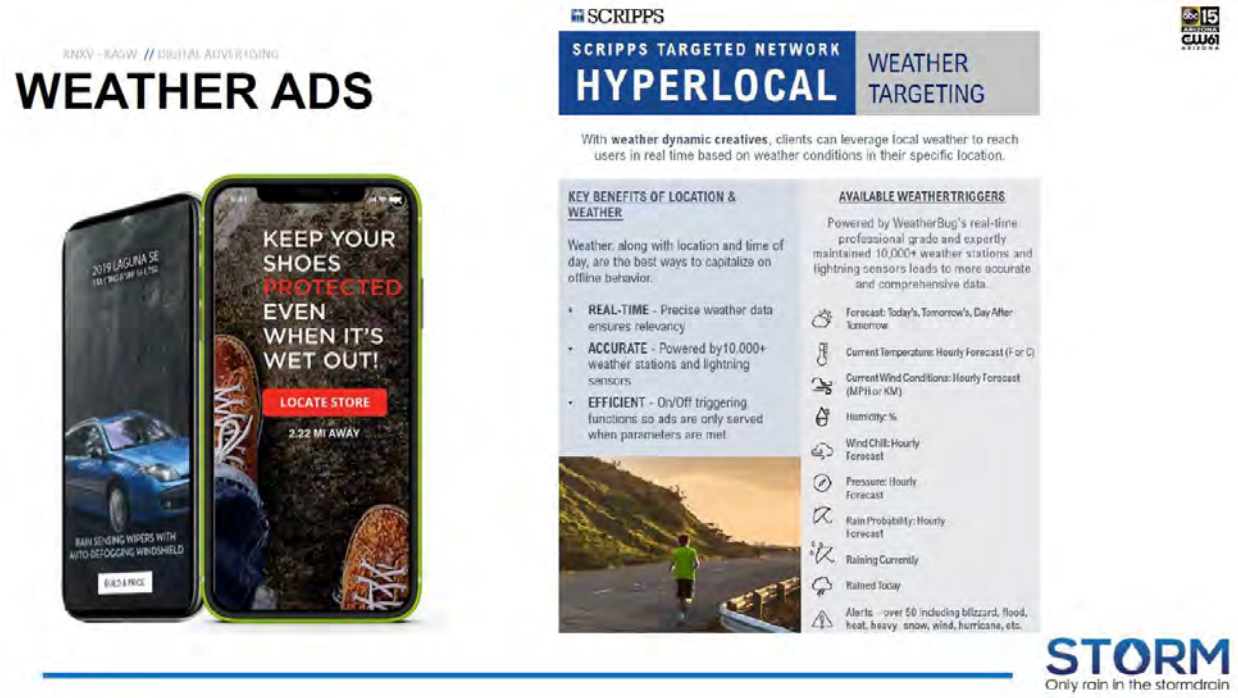
STORMWATER AWARENESS WEEK (JANUARY 2021)

	Ways we can reach them	Description	Targeting Available
HOA's & Development Community	ABC15 Facebook Content Video	How do construction sites impact Stormwater pollution?	Targeting those interested in homeowner associations, community association managers, construction foreman
	Quiz	Engaging quiz to test the knowledge of HOA's and construction workers Can you pass this 5-question stormwater quiz?	Targeting those interested in homeowner associations, community association managers, construction foreman
	ABC15 Native Articles	Articles that live on ABC15.com and your dedicated landing page for the entire fiscal year	Promoted through ABC15 Facebook Posts high impact units
	Geofencing	ABC15 can place invisible fences around HOA communities AND development communities	We would select a certain number of locations based on budget
	:60 targeted commercials	ABC15 would create targeted commercial that would serve to Construction workers, masons and bricklayers as they watch long format shows on their big screen TV (commercial production free)	Construction workers, masons and bricklayers
Stormwater Awareness Week	Sonoran Living ABC15 Content Video High Impact Unit Streaming TV Commercials	Estimated 2021 impression: 600,000 Delivered 2021 impressions: 2.4 million	Everyone

Dedicated landing page on **abc15.com/storm for entire fiscal year**

Investment: $24,000
Added Value Goal: 15%
This years added value: 55%

MONSOON AWARENESS



People Reached: 235,737

The amount of people who saw the post appear in their Facebook feed.

Reactions, Comments, Shares: 92

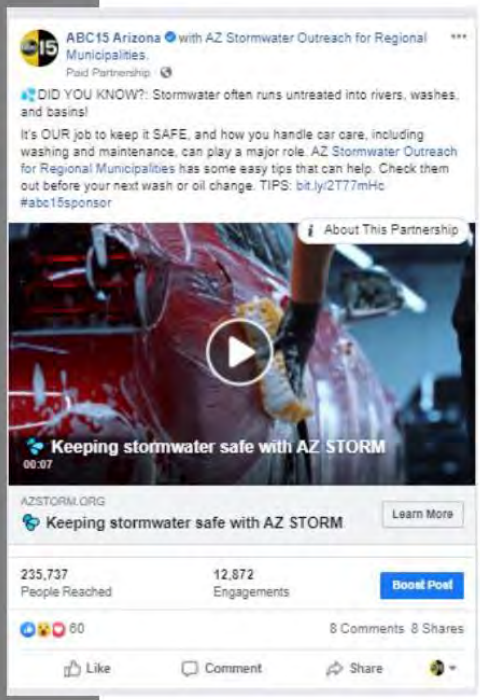
A total of the Reactions (Like, Love, Haha, etc.), Comments on your post, and people who Shared your post.

Post Clicks: 12,780

The number of clicks anywhere on your post: This includes link clicks and clicks to view a photo.

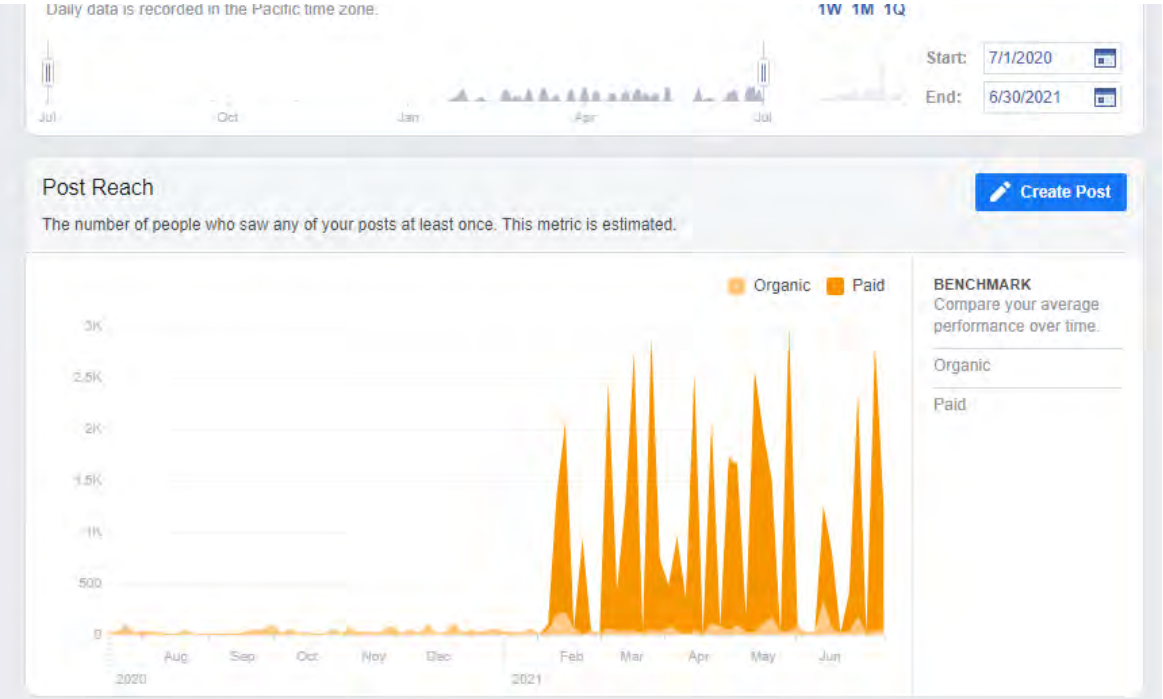
Engagements: 12,872

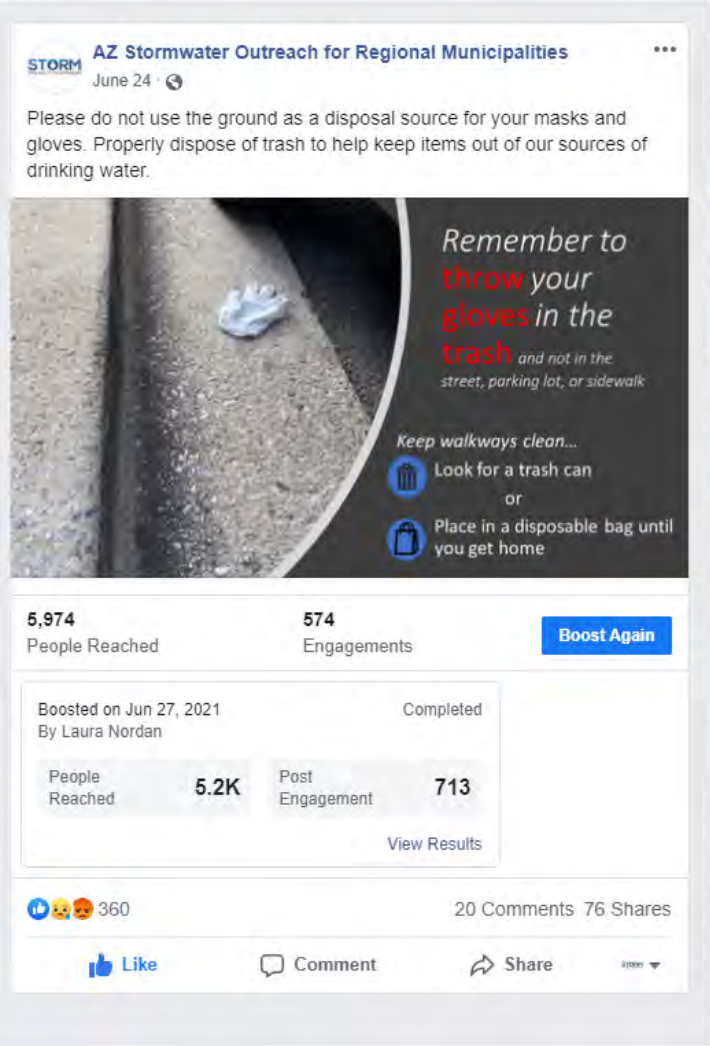
The numbers of Reactions, Comments and Shares plus the number of Post Clicks.

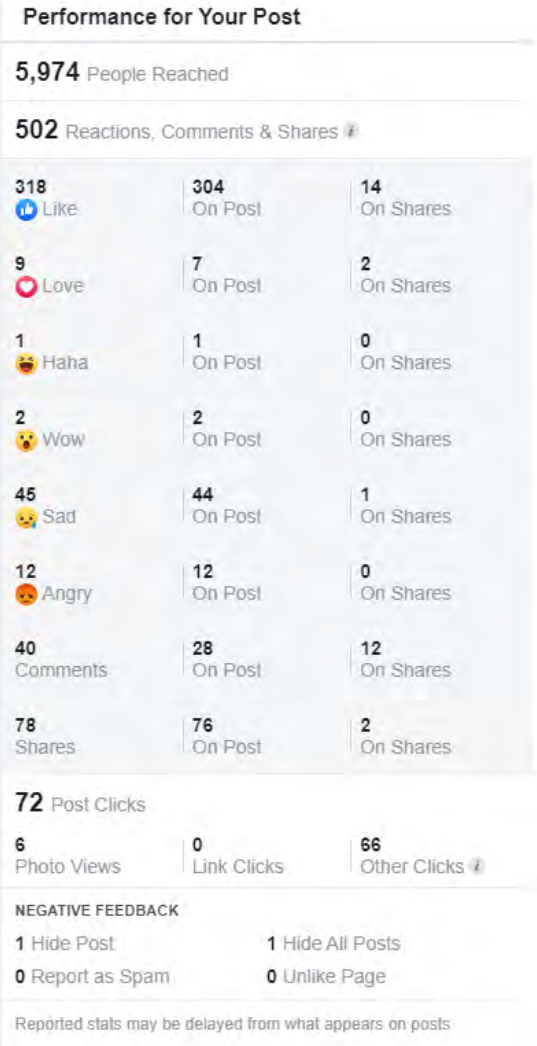


STORM FACEBOOK POSTS FY21

Post Reach Benchmarking Data




AZ Stormwater Outreach for Regional Municipalities
June 24 ·
Please do not use the ground as a disposal source for your masks and gloves. Properly dispose of trash to help keep items out of our sources of drinking water.
Remember to throw your gloves in the trash and not in the street, parking lot, or sidewalk
Keep walkways clean...
Look for a trash can
or
Place in a disposable bag until you get home
5,974
People Reached
574
Engagements
Boost Again
Boosted on Jun 27, 2021
By Laura Nordan
Completed
People Reached
5.2K
Post Engagement
713
View Results
360
20 Comments 76 Shares
Like
Comment
Share


Performance for Your Post
5,974 People Reached
502 Reactions, Comments & Shares
318 Like
304 On Post
14 On Shares
9 Love
7 On Post
2 On Shares
1 Haha
1 On Post
0 On Shares
2 Wow
2 On Post
0 On Shares
45 Sad
44 On Post
1 On Shares
12 Angry
12 On Post
0 On Shares
40 Comments
28 On Post
12 On Shares
78 Shares
76 On Post
2 On Shares
72 Post Clicks
6 Photo Views
0 Link Clicks
66 Other Clicks
NEGATIVE FEEDBACK
1 Hide Post
1 Hide All Posts
0 Report as Spam
0 Unlike Page
Reported stats may be delayed from what appears on posts

AZ Stormwater Outreach for Regional Municipalities
June 21 ·

Monsoon storms are common in the Valley of the Sun starting mid-June through mid-September. The excessive heat can build-up to give rise to powerful and often violent wind and thunderstorms. The effects can be localized.

Sometimes the heavy, quick rainfall amounts can cause flooding and saturate the soil. This accompanied by the strong winds can be problematic for our trees.

Tree shape and structure generally provide a natural wind damping effect which helps to distribute, ... See More

11,956	277	Boost Again
People Reached	Engagements	

Boosted on Jun 22, 2021 — Completed
By Laura Nordan

People	Post
11.9K	2.1K

11,956 People Reached

69 Reactions, Comments & Shares

57 Like	57 On Post	0 On Shares
2 Love	2 On Post	0 On Shares
2 Haha	2 On Post	0 On Shares
6 Wow	6 On Post	0 On Shares
0 Comments	0 On Post	0 On Shares
2 Shares	2 On Post	0 On Shares

208 Post Clicks

48 Photo Views	0 Link Clicks	160 Other Clicks

NEGATIVE FEEDBACK

0 Hide Post	0 Hide All Posts
0 Report as Spam	0 Unlike Page

Reported stats may be delayed from what appears on posts

AZ Stormwater Outreach for Regional Municipalities
June 9 ·

Remember to do your part this summer to prevent wildfires as you travel to cooler locations to avoid the heat. The aftermath of wildfires can often end up in our rivers and streams after a rain event and cause water quality issues. #AZFire #stormwater

Visit https://wildlandfire.az.gov/ for more info.

WILDLANDFIRE.AZ.GOV
Home | Arizona Interagency Wildfire Prevention
Fires ignited under these conditions, even accidentally, would...

9,328	690	Boost Again
People Reached	Engagements	

Boosted on Jun 11, 2021 — Completed
By Laura Nordan

People Reached	9.4K	Post Engagement	1.2K

View Results

367 — 2 Comments 74 Shares

Like · Comment · Share

Performance for Your Post

9,328 People Reached

463 Reactions, Comments & Shares

362 Like	346 On Post	16 On Shares
2 Love	2 On Post	0 On Shares
2 Haha	2 On Post	0 On Shares
5 Wow	4 On Post	1 On Shares
14 Sad	14 On Post	0 On Shares
2 Angry	2 On Post	0 On Shares
2 Comments	2 On Post	0 On Shares
74 Shares	74 On Post	0 On Shares

227 Post Clicks

0 Photo Views	67 Link Clicks	160 Other Clicks

NEGATIVE FEEDBACK

0 Hide Post	0 Hide All Posts
0 Report as Spam	0 Unlike Page

Reported stats may be delayed from what appears on posts

AZ Stormwater Outreach for Regional Municipalities
June 1 ·

We need the rain - let's hope this year's monsoon brings us the moisture Arizona needs.

Meanwhile, be safe during those monsoon storms!

AZ Stormwater Outreach for Regional Municipalities
Nonprofit Organization

Learn More

2,545	24
People Reached	Engagements

Boost Again

Boosted on Jun 1, 2021
By Laura Nordan

Completed

People Reached	2.5K	Post Engagement	473

2,545 People Reached

22 Reactions, Comments & Shares

18 Like	**15** On Post	**3** On Shares
1 Love	**1** On Post	**0** On Shares
1 Haha	**1** On Post	**0** On Shares
0 Comments	**0** On Post	**0** On Shares
2 Shares	**2** On Post	**0** On Shares

2 Post Clicks

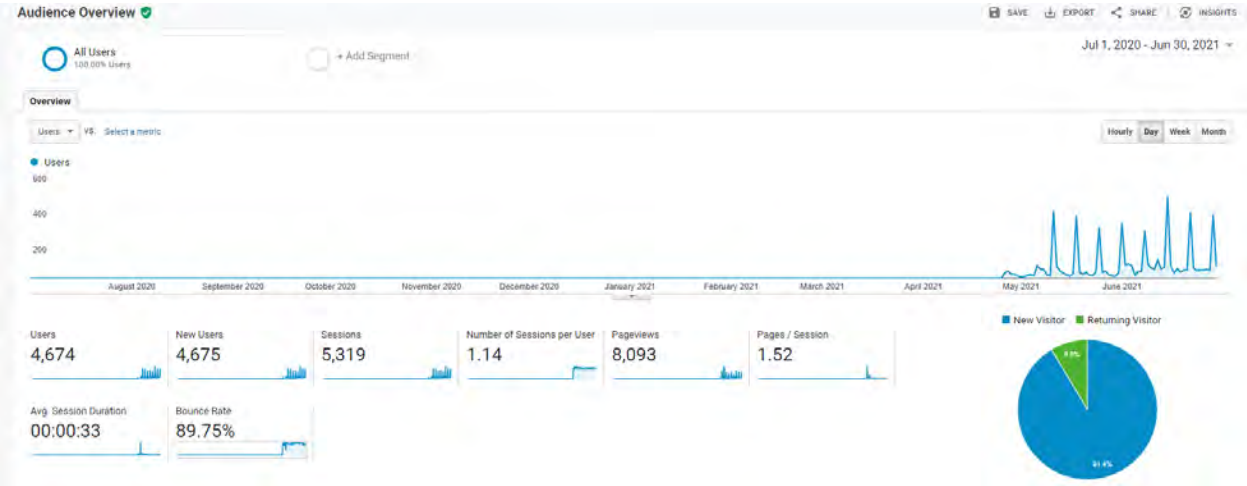
0 Photo Views	**1** Link Clicks	**1** Other Clicks

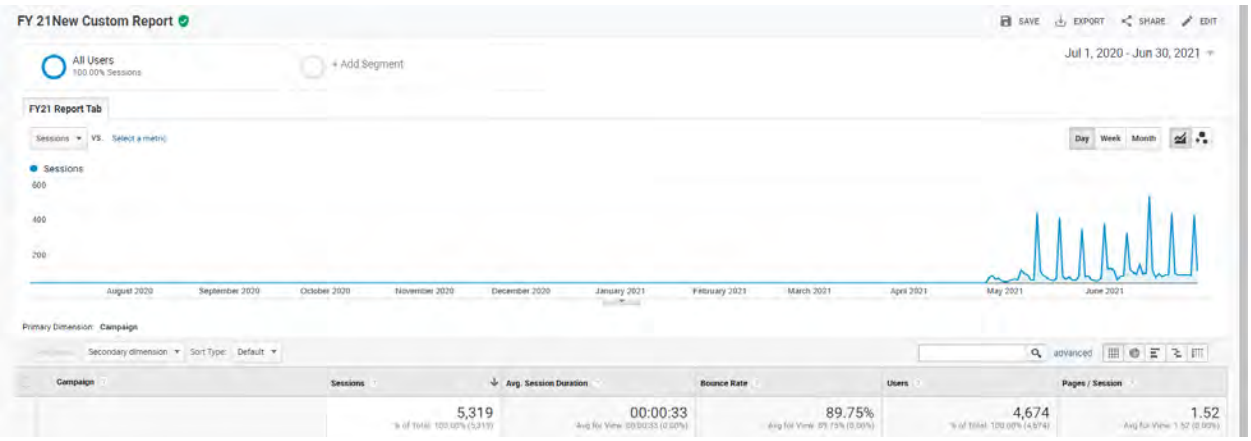
NEGATIVE FEEDBACK

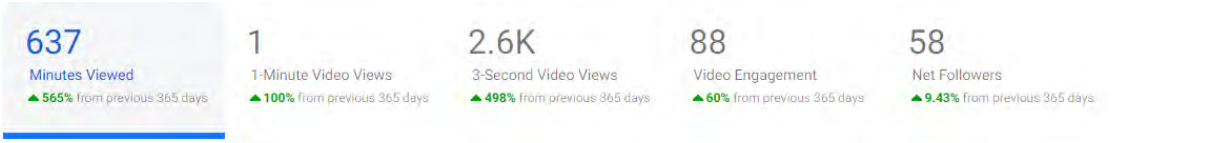
0 Hide Post	**0** Hide All Posts
0 Report as Spam	**0** Unlike Page

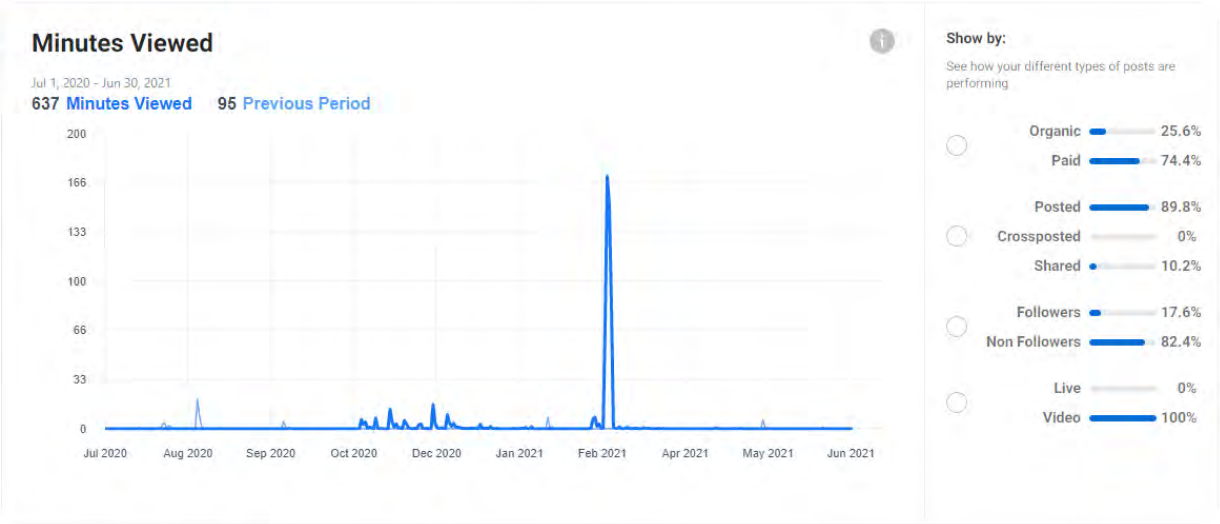
Reported stats may be delayed from what appears on posts

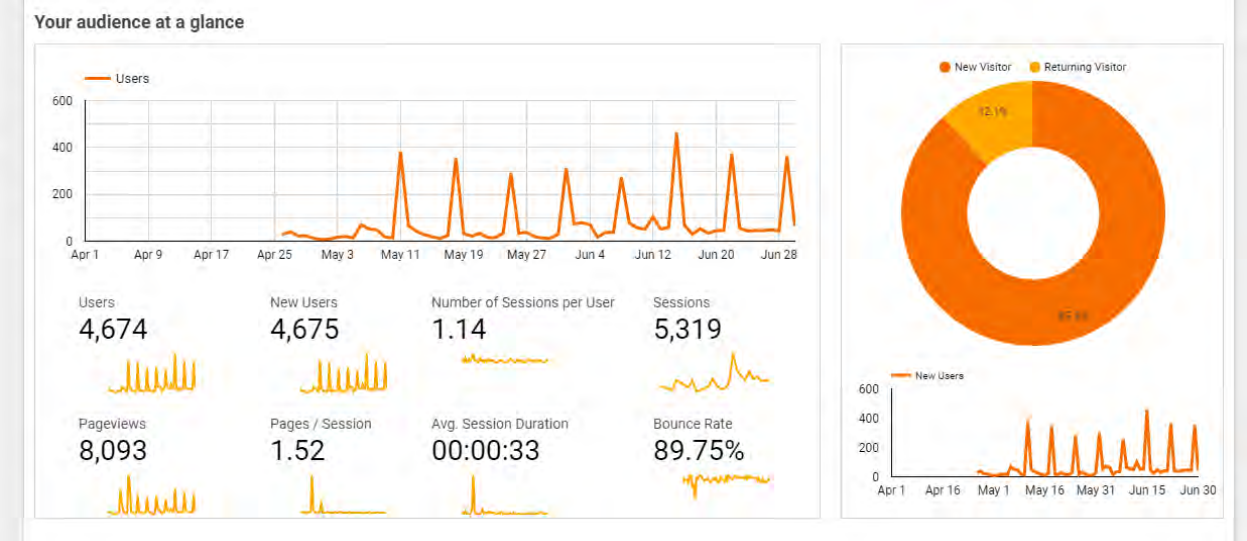
STORM'S WEBSITE PAGE










Your audience at a glance
Users
600
400
200
0
Apr 1
Apr 9
Apr 17
Apr 25
May 3
May 11
May 19
May 27
Jun 4
Jun 12
Jun 20
Jun 28
Users
4,674
New Users
4,675
Number of Sessions per User
1.14
Sessions
5,319
Pageviews
8,093
Pages / Session
1.52
Avg. Session Duration
00:00:33
Bounce Rate
89.75%
New Visitor
Returning Visitor
New Users
600
400
200
0
Apr 1
Apr 16
May 1
May 16
May 31
Jun 15
Jun 30

PROJECT WET/ARIZONA WATER FESTIVAL

COOPERATIVE EXTENSION
Arizona Project WET
Arizona Water Festival

2020-2021 Impact Report Arizona Water Festivals

The Arizona Water Festival Program instills a deeper understanding of water in the earth system and Arizona's water resources.

It was a different kind of year, but together we were able to bring real learning opportunities to Arizona 4th graders virtually.

Arizona Water Festivals are made possible by dedicated sponsors and partners across the state of Arizona.

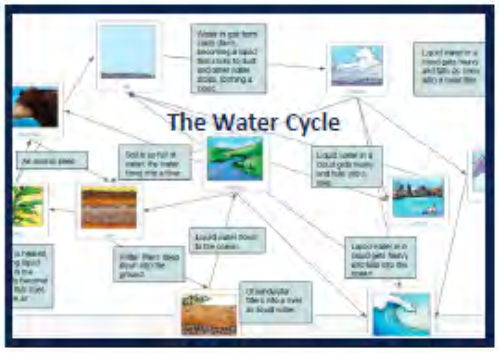
STORM
Only rain in the stormdrain

Students transitioned to remote learning and AWF lessons were modified.

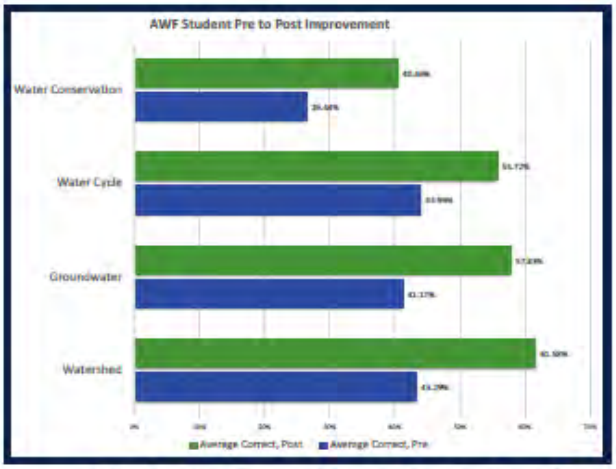
Online activation tools were launched at the start of the 2020-21 school year.

Sponsors created or shared 42 different videos teaching students about jobs in the water industry, their local water supply, and water treatment.

Arizona Water Festivals develop water stewards!



Students learned about Arizona's unique water cycle and how it impacts the availability of water!



Students showed pre- to post-unit water knowledge improvement!

Arizona Water Festival Participation Since 2000			
Students	Teachers	Parents	Volunteers
153,074	5,793	7,341	8,649

Teacher Survey Statements	Agree/ Strongly Agree
The program increased my understanding of water science, use, and conservation.	87%
The program increased my students' understanding of water science, use, and conservation.	88%
My students can identify multiple ways to save water in their homes.	95%
My students are more likely to engage in water conserving habits as a result of participating in the Water Festival program.	83%

Thank you to our sponsors, funders, and partners!

THE UNIVERSITY OF ARIZONA

STORM
Only rain in the stormdrain

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City of Phoenix

PHX WATER SMART