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RECEIVED
By Terri.Drake at 3:17 pm, Jun 30, 2022

June 30, 2022

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PPPO-02-10021423-22

Mr. Jonathan Edwards, Director
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Office of Radiation and Indoor Air
Headquarters 6608T
1200 Pennsylvania Avenue, Northwest
Washington, DC 20460

Ms. Caroline Freeman, Director
Air and Radiation Division
U.S. Environmental Protection Agency, Region 4
61 Forsythe, SW
Atlanta, Georgia 30303-3104

Ms. Duff, Mr. Edwards, and Ms. Freeman,

SUBMITTAL OF THE NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS ANNUAL REPORT FOR 2021 U.S. DEPARTMENT OF ENERGY RADIOLOGICAL EMISSIONS AT THE PADUCAH GASEOUS DIFFUSION PLANT, FRNP-RPT-0255

Enclosed is the calendar year 2021 Annual National Emissions Standards for Hazardous Air Pollutants Report, required by 40 *CFR* Part 61, Subpart H. This report summarizes airborne radionuclide emissions from the U.S. Department of Energy (DOE) Paducah Site. Please note that the Paducah Site was impacted by the COVID Pandemic during 2021, reducing the production and consequently emissions from some emission sources. The total 2021 effective dose equivalent from DOE emissions was 0.00492 millirem (mrem). This is below the annual effective dose equivalent limit of 10 mrem per year established in 40 *CFR* § 61.92.

If you have any questions or require additional information, please contact Gilbert Whitehurst at (740) 897-2948.

Sincerely,

April Ladd Digitally signed by April Ladd Date: 2022.06.30 13:18:52 -05'00'

April Ladd
Acting Paducah Site Lead
Portsmouth/Paducah Project Office

Enclosures:
1. Certification Pages
2. National Emissions Standards for Hazardous Air Pollutants Annual Report for 2021

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CERTIFICATION

Document Identification: ***National Emissions Standards for Hazardous Air Pollutants Annual Report for 2021 U.S. Department of Energy Radiological Emissions at the Paducah Gaseous Diffusion Plant*, FRNP-RPT-0255**

This certification pertains to the following emission source:

Paducah Deactivation Project

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment. (See 18 *U.S.C.* 1001)

Myrna E. Redfield Digitally signed by Myrna E. Redfield Date: 2022.06.30 08:22:21 -05'00'

Myrna E. Redfield, Program Manager
Four Rivers Nuclear Partnership, LLC

Date Signed

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April Ladd, Acting Paducah Site Lead
U.S. Department of Energy

Date Signed

CERTIFICATION

Document Identification: ***National Emissions Standards for Hazardous Air Pollutants Annual Report for 2021 U.S. Department of Energy Radiological Emissions at the Paducah Gaseous Diffusion Plant*, FRNP-RPT-0255**

This certification pertains to the following emission source:

Depleted Uranium Hexafluoride Conversion Facility (MCS)

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment. (See 18 *U.S.C.* 1001)

MARC CONRAD (Affiliate)

Digitally signed by MARC CONRAD (Affiliate)
Date: 2022.06.28 09:11:28 -04'00'

Dutch Conrad, President and Project Manager
Mid-America Conversion Services, LLC

Date Signed

FRNP-RPT-0255

National Emission Standards for Hazardous Air Pollutants Annual Report for 2021 U.S. Department of Energy Radiological Emissions at the Paducah Gaseous Diffusion Plant

FOUR RIVERS NUCLEAR PARTNERSHIP, LLC

This document is approved for public release per review by:

Jackie Thompson — FRNP Classification Support

6-28-22 — Date

FRNP-RPT-0255

National Emission Standards for Hazardous Air Pollutants Annual Report for 2021 U.S. Department of Energy Radiological Emissions at the Paducah Gaseous Diffusion Plant

Date Issued—June 2022

U.S. DEPARTMENT OF ENERGY
Office of Environmental Management

Prepared by
Four Rivers Nuclear Partnership, LLC,
managing the
Deactivation and Remediation Project at the
Paducah Gaseous Diffusion Plant
under Contract DE-EM0004895

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CONTENTS

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TABLES

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ACRONYMS

AIRDOS	Atmospheric Dispersion of Radionuclides
CAP-88 PC	Clean Air Act Assessment Package-1988 Personal Computer
CFR	*Code of Federal Regulations*
DOE	U.S. Department of Energy
EDE	effective dose equivalent
EPA	U.S. Environmental Protection Agency
EW	extraction well
HEPA	high-efficiency particulate air
KAR	*Kentucky Administrative Regulations*
NEPCS	Northeast Plume Containment System
NESHAP	National Emission Standards for Hazardous Air Pollutants
PGDP	Paducah Gaseous Diffusion Plant
SX	seal exhaust
WA	wet air

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EXECUTIVE SUMMARY

The Kentucky Division for Air Quality regulates air emissions of radionuclides, other than radon, from the U.S. Department of Energy (DOE) Paducah Site under 401 *KAR* 57:002 and 40 *CFR* Part 61, Subparts A and H. Submission of this report fulfills the annual reporting requirements of 40 *CFR* § 61.94.

Paducah Site radionuclide emissions include emissions from the depleted uranium hexafluoride (DUF_6) conversion facility, which began operation in 2011. The DUF_6 facility converts by-product that was generated by the uranium enrichment process to a more stable uranium oxide compound. Other emission sources include deactivation and remediation of the Paducah Gaseous Diffusion Plant activities, waste management facilities, inactive buildings, and environmental restoration operations.

DOE emissions were used to estimate the Paducah Site dose to the public. The dose to the public is calculated using the computer modeling program (Clean Air Act Assessment Package-1988, Version 4) specified in 40 *CFR* § 61.93. Inputs to the computer program are obtained through continuous monitoring, engineering estimates, emission factors, and other U.S. Environmental Protection Agency-approved methods. This report meets the annual reporting requirements and establishes the total annual effective dose equivalent (EDE) to the maximally exposed member of the public from the Paducah Site emissions to be 0.00492 mrem for calendar year 2021. This is below the annual EDE limit of 10 mrem per year set forth in 40 *CFR* § 61.92.

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1. FACILITY DESCRIPTION

Site Name: Paducah Site

Location: Paducah, Kentucky

Owner: U.S. Department of Energy
Portsmouth/Paducah Project Office
5501 Hobbs Road
Kevil, Kentucky 42053
April Ladd, Acting Paducah Site Lead
(270) 441-6800

Operators: Four Rivers Nuclear Partnership, LLC
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Myrna Redfield, Program Manager
(270) 441-5113

Mid-America Conversion Services, LLC (Paducah Office)
5509 Hobbs Rd
Kevil, Kentucky 42053
Dutch Conrad, President and Project Manager
(859) 685-9272

2. INTRODUCTION

The U.S. Department of Energy (DOE) owns the Paducah Site, which has radionuclide air emissions. The site was established to enrich uranium and was known as the Paducah Gaseous Diffusion Plant (PGDP). When enrichment activities ceased in 2014, DOE subsequently began deactivation and remediation of the enrichment facilities, and the entire DOE-owned area was identified as the Paducah Site.

Paducah Site emissions include emissions from deactivation and remediation activities, waste management facilities, inactive buildings, environmental restoration operations, and the depleted uranium hexafluoride (DUF_6) conversion facility. The DUF_6 facility, which began operations in 2011, converts by-products that were generated by the enrichment process to a more stable uranium oxide compound.

Emissions from all of these sources were analyzed together and used to calculate the resultant dose.

3. SITE DESCRIPTION

The Paducah Site was established to support the nation's nuclear program. The Paducah Site, consisting of approximately 3,500 acres, is located in western McCracken County, 10 miles west of Paducah, Kentucky, and 3.5 miles south of the Ohio River. Roughly 600 acres of the site are enclosed within a fenced security area. During World War II, Kentucky Ordnance Works, a trinitrotoluene production facility, was operated

in an area southwest of the plant on what is now a wildlife management area. Kentucky Ordnance Works was not located on the Paducah Site.

Construction of the PGDP facility began in 1951. The plant was fully operational by 1955, supplying enriched uranium for commercial reactors and defense uses. Enriched uranium is defined as uranium in which the concentration of the fissionable uranium-235 (U-235) isotope has been increased from its natural assay. Natural uranium is primarily uranium-238 (U-238), with about 0.71% U-235 and 0.0055% uranium-234 (U-234). Uranium mills process the ores to produce concentrated uranium oxide [triuranium octoxide (U_3O_8)], which then is converted commercially to uranium hexafluoride (UF_6). The UF_6 then was sent to PGDP for enrichment. One by-product of the enrichment process is DUF_6, which is stored at PGDP. In 2011, DOE began operation of a facility to convert the stored DUF_6 to a more stable uranium oxide, primarily U_3O_8.

The radioactive materials used at PGDP are associated with enrichment of the uranium isotope U-235 using a gaseous diffusion process. During enriching operations from 1953 to 1975, UF_6 feed material was derived from recycled uranium (called "reactor tails") from government reactors; "work for others" material also was used intermittently; and UF_6 processed from uranium ore, which typically was used. Reactor tails were the spent fuel from nuclear reactors that was depleted of U-235 content that had been reprocessed to remove most of the fission products. The reactor fuel assemblies were processed at other DOE facilities (where most of the fission products were removed). The enriched uranium and the remaining fission products were fed into the PGDP cascade system in the chemical form of UF_6. Use of the reactor tails resulted in the introduction of technetium-99 (Tc-99), a fission by-product, and transuranics, most notably neptunium-237 (Np-237) and plutonium-239 (Pu-239), into the cascade.

The West Kentucky Wildlife Management Area and lightly populated farmlands are in the immediate environs of PGDP. Based on population data from the 2010 census, the population within a 50-mile radius is approximately 534,000 persons. Of these, 89,000 live within 10 miles of the plant and 104,000 live within 20 miles of the plant. The unincorporated communities of Grahamville and Heath are 1.24 and 1.86 miles east of the plant, respectively. Portions of 28 counties—11 of which are in Kentucky, 4 in Missouri, 10 in Illinois, and 3 in Tennessee—are located within the 50-mile radius of the plant. Larger cities in the region include Paducah, Kentucky, located 10 air miles east of the plant; Cape Girardeau, Missouri, located 40 air miles to the west; and Metropolis, Illinois, located 6 air miles to the northeast. The nearest neighbor residences in each direction are observed and entered into the dose modeling software. The results of the dose modeling are presented in Section 6.

Paducah is located in the humid subtropical zone. Summers generally are dry; precipitation occurs mainly in the spring and fall. Winters are characterized by moderately cold days; the average temperature during the coldest month, January, is about 35°F. Summers are warm and humid; the average temperature in July is 79°F. Yearly precipitation averages about 49 inches. The prevailing wind direction is south to southwest.

4. PADUCAH SITE SOURCE HANDLING AND PROCESSING DESCRIPTION

Radioactive material handling and processing that occurred last year (2021) included conversion of DUF_6 to uranium oxides, clean out of the uranium enrichment processes, environmental remediation of hazardous and radioactive materials, and management of radioactive waste.

The point sources from shutdown and clean out of the enrichment processes are grouped as described in the following sections. Some of these activities will be reduced or may cease as deactivation of the enrichment facilities progresses.

4.1 DEPLETED URANIUM HEXAFLUORIDE CONVERSION FACILITY

The DUF_6 conversion facility has operated since 2011. The facility converts DUF_6 stored in cylinders to a more stable uranium oxide powder. The form of uranium oxide is primarily U_3O_8. Multiple prefilters and primary high-efficiency particulate air (HEPA) filter banks within the facility heating, ventilation, and air-conditioning system control particulate emissions of oxide powder. Prior to atmospheric venting of process off-gas through the stack, air passes through a secondary set of HEPA filter banks. The conversion building also is maintained at negative pressure to help eliminate the possibility of fugitive emissions. Radioactive emissions from the conversion operations are monitored continuously.

4.2 DEACTIVATION AND REMEDIATION OF THE PADUCAH GASEOUS DIFFUSION PLANT

The emission point sources previously analyzed during operation of PGDP also are emission sources for deactivation and remediation. These deactivation sources are grouped in the same manner as the enrichment source grouping. Groups no longer included were removed because their sources have been deactivated. The sources were grouped based on similar emissions, controls, and location.

4.2.1 Group E—C-310 Stack

The C-310 stack is located near the southwest corner of the C-310 Product Withdrawal Building. It was the primary emission point of potential radionuclide air emissions during uranium enrichment operations. The effluent is routed through alumina traps prior to being emitted via the C-310 stack. The stack was active beginning in 2021. The stack is used for wet air passivation of equipment located within the process buildings.

The wet air passivation process is not a continuous emissions process; therefore, alternate monitoring plans were requested and approved. Three gaseous samples from each piece of equipment were collected and analyzed prior to the introduction of wet air. The highest result per radionuclide was used to determine the worst-case emissions from the equipment. The stack emissions are included in the summary tables.

4.2.2 Group F—Seal Exhaust/Wet Air Group

The seal exhaust (SX) and wet air (WA) systems have been evaluated for air emissions. It was determined the alumina traps, which are designed to protect pump oil and not to control emissions, are not pollution control devices under 40 *CFR* Part 61, Subpart H. The determination was forwarded to the U.S. Environmental Protection Agency (EPA) January 28, 1994.

4.2.2.1 Seal exhaust systems

Emissions from the SX systems are routed through alumina traps and pump oil prior to venting. Seals on the UF_6 compressors are supplied with an intricate array of air pressures to minimize releases during seal failure. A seal failure allows UF_6 to enter the SX system. If UF_6 reaches the pump by virtue of trap breakthrough, it reacts with the pump oil creating a thick sludge that quickly causes pump failure. In turn, pump failure limits the amount that can be emitted. Although the pump oil serves as an excellent uranium

emission control device due to the reaction between UF_6 and pump oil, no credit is taken for it as a pollution control device.

There is one SX vent per cascade building, one on the C-310 Product Withdrawal Building, and one on the C-315 Tails Withdrawal Building. The locations of the six SX systems are as follows:

- C-310 Product Withdrawal Building
- C-315 Tails Withdrawal Building
- C-331 Cascade Building
- C-333 Cascade Building
- C-335 Cascade Building
- C-337 Cascade Building

Confirmatory measurements on a five-year basis are made on each type of SX/WA system to verify emissions. Emissions from these systems were estimated based on results from the latest measurement that was performed in September 2017. The operations from the SX/WA system have not changed since the stack test was performed. Per guidance provided in DOE-HDBK-1216-2015, Four Rivers Nuclear Partnership, LLC, used the actual results for any nondetects shown on Oak Ridge Environmental Information System report for the SX/WA Stack Test Performed in 2017 to calculate the average concentration. During this calculation, the average concentration for Pu-239/240 netted a negative value. A negative value means that the result is indistinguishable from background; therefore, the emission rate of zero was used for the calculation for Pu-239/240.

Building ventilation and cylinder valve disconnection activities are grouped in with the SX/WA group because these sources are not serviced by a stack. Radiological areas within the cascade buildings at PGDP are established under radiological protection procedures, DOE Orders, and 10 *CFR* Part 835.

4.2.2.2 Wet air exhaust systems

When maintenance is required on cascade equipment, it is evacuated to other sections of the cascade or surge drums. The equipment is swept in a series of purges with dry plant air. After maintenance, the system is closed, and the ambient WA is pumped from the system by the WA pumps. During dry air purges and WA evacuations, air is routed through alumina traps for uranium trapping to protect the WA pump oil and then to an exhaust vent. In cascade buildings C-310, C-335, and C-337, the exhaust vent is shared with the SX system for those buildings. As discussed under SX systems, emissions from the WA exhaust systems are estimated based on the most recent Method 5 stack sampling results. The following are the locations of the five WA exhaust systems.

- C-310 Product Withdrawal Building (same as SX)
- C-331 Cascade Building
- C-333 Cascade Building
- C-335 Cascade Building (same as SX)
- C-337 Cascade Building (same as SX)

4.3 ENVIRONMENTAL REMEDIATION ACTIVITIES

DOE had three point sources for environmental remediation activities, C-612 Northwest Plume Interim Remedial Action Project and units C-765 and C-765-A as part of the Northeast Plume Containment System (NEPCS).

4.3.1 Northwest Plume Interim Remedial Action Project

On August 28, 1995, DOE began operation of a treatment system designed to remove trichloroethene (TCE) and Tc-99 from contaminated groundwater at PGDP. The facility, C-612, is located at the northwest corner of the PGDP site security area. The facility consists of an air stripper to remove volatile organics.

Historical sampling has shown very little change in the concentration of Tc-99 in the water when it passes through the air stripper. Emissions of Tc-99 were estimated using 40 *CFR* Part 61, Appendix D, emission factors and the analysis of the groundwater. The total amount of source inventory in curies was calculated using the following equation:

$$Q = V * V_{cf} * Conc * R_{cf}$$

Where:

Q = Source inventory, curies
V = Volume of water treated, gal
V_{cf} = Volume Conversion Factor (3.7854 L/gal)
C_{onc} = Tc-99 concentration, pCi/L
R_{cf} = pCi to Ci conversion factor (1.00E-12 Ci/pCi)

The calculation for the emissions then utilized the following equation:

$$E = Q * P_s * C_f$$

Where:

E = Emissions (source term), curies
Q = Source inventory, curies
P_s = Physical State factor, dimensionless
C_f = Effluent Control Factor adjustment, dimensionless.

The exhaust from the air stripper is passed through a carbon adsorption unit prior to release to the atmosphere. Historical data have shown that Tc-99 is not retained in the carbon; therefore, an ion exchange resin is in place to treat for Tc-99. However, for purposes of this report, it was assumed that 100% of the Tc-99 in the groundwater was emitted. The Northwest Plume Treatment System treated 102,240,547 gal during calendar year 2021. The results of the analysis of the estimated emissions are reported in Section 6.

4.3.2 Northeast Plume Containment System

DOE began normal operation of the original NEPCS (C-614 Northeast Plume Treatment System), a second treatment system, on February 28, 1997, as an interim remedial action also to treat contaminated groundwater. The C-614 system extracted contaminated groundwater and pumped it to an air stripper for removal of TCE. Tc-99 was not identified as a contaminant of concern as part of this interim remedial action; however, low concentration Tc-99 was detected in the groundwater and, consequently, could have been emitted into the air. The original NEPCS operated two extraction wells (EWs) (EW331 and EW332), which extracted the contaminated groundwater to treatment unit C-765, and the original NEPCS was operated until August 2017.

The NEPCS underwent an optimization and was fully operational in October 2017. The optimized NEPCS consists of two new EWs (EW234 and EW235), each of which has its own treatment unit capable of

operating independently. C-765 treatment unit is operated to treat water extracted from EW234, and the C-765-A treatment unit is operated to treat water extracted from EW235. The optimized C-765 and C-765-A units treated 42,713,326 gal and 39,340,087 gal, respectively, during the 2021 calendar year.

Emissions of Tc-99 were estimated using 40 *CFR* Part 61, Appendix D, emission factors and the analysis of the groundwater. The total amount of source inventory in curies was calculated using the following equation:

$$Q = V * V_{cf} * Conc * R_{cf}$$

Where:

Q = Source inventory, curies
V = Volume of water treated, gal
V_{cf} = Volume Conversion Factor (3.7854 L/gal)
Conc = Tc-99 concentration, pCi/L
R_{cf} = pCi to Ci conversion factor (1.00E-12 Ci/pCi)

The calculation for the emissions then utilized the following equation:

$$E = Q * P_s * C_f$$

Where:

E = Emissions (source term), curies
Q = Source inventory, curies
P_s = Physical State factor, dimensionless
C_f = Effluent Control Factor adjustment, dimensionless.

The results of the analysis of the estimated emissions are reported in Section 6.

4.4 FUGITIVE AND DIFFUSE SOURCES

Diffuse/fugitive emission sources include any source that is distributed spatially, diffused in nature, or not emitted with forced air from a stack, vent, or other confined conduit. In this case, radionuclides are transported entirely by diffusion and/or thermally-driven air currents. Typical examples of diffuse/fugitive emissions include emissions from building breathing; resuspension of contaminated soils, debris, or other materials; unventilated tanks; ponds, lakes, and streams; wastewater treatment systems; outdoor storage and processing areas; and leaks in piping, valves, or other cascade equipment. DOE has identified many potential fugitive and diffuse emission sources such as inactive facilities, building roofs, scrap metal storage yards, landfills, cylinder yards, and various contamination areas. Specific activities that could generate fugitive emissions include transport and disposal of waste, demolition of contaminated facilities, and most environmental remediation. The use of ambient air monitors to evaluate emissions from fugitive and diffuse sources is described in Section 9. In 2021, the Paducah Site had no unplanned airborne releases (see Section 8). Analyses of ambient air monitoring results for 2021 were compared using the methods in the EPA-approved National Emission Standards for Hazardous Air Pollutants (NESHAP) Management Plan. The analysis indicated that plant-derived radionuclides were not detected in concentrations greater than 40 *CFR* Part 61, Appendix E, Table 2, concentrations, as depicted in the tables provided in the appendix of this report. DOE utilizes ambient air monitoring to verify insignificant levels of radionuclides in off-site

ambient air. The ambient air monitors are not included in the annual dose calculation since it is not a point source.

5. WAIVER OF CONSTRUCTION AND MODIFICATION ACTIVITIES

No construction or modification activities occurred in this reporting period that were waived under 40 *CFR* § 61.96.

6. SOURCE CHARACTERISTICS AND AIR EMISSIONS DATA

Tables 1 through 4 contain specific emission information for each Paducah Site emission point. Table 1 lists the emission points and efficiency of control devices, as required by 40 *CFR* § 61.94 (b) (4) and (5). It is assumed that control for the Northwest Plume Treatment System has 0% efficiency because no credit is taken for any Tc-99 removal as a result of carbon filtration. Table 2 lists the distances from each emission point to receptors of concern, as listed in 40 *CFR* § 61.94 (b) (6). Table 3 contains emission point information required to estimate the resulting potential exposure, as required by 40 *CFR* § 61.94 (b) (7). Table 4 contains a list of Paducah Site radioactive materials, as required by 40 *CFR* § 61.94 (b) (2), their emission rates, and total Paducah Site emissions by nuclide.

Table 1. Emission Point Effluent Controls and Efficiencies

Emission Points	Type Control	Efficiency %
Group E C-310 Stack	Alumina Traps	90.0
Group F SX/WA Group	Alumina Traps	98.60
Northwest Plume Treatment System	Carbon	0
Northeast Plume Treatment Unit C-765	None	0
Northeast Plume Treatment Unit C-765-A	None	0
DUF_6 Conversion Facility	HEPA	99.90

NOTE: The building ventilation and cylinder valve connection activities not serviced by a stack are grouped with the SX/WA group or respective building.

Table 2. Distances to Selected Receptors

Emission Points	Distances (m) to Selected Receptors			
	Nearest Farm	Nearest Business	Nearest School	Nearest Residence
Group E C-310 Stack	2,512	2,660	3,834	1,741
Group F SX/WA Group	1,798	2,412	4,200	1,571
Northwest Plume Treatment System	1,761	1,290	5,455	1,149
Northeast Plume Treatment Unit C-765	1,327	2,196	3,769	1,003
Northeast Plume Treatment Unit C-765-A	1,488	2,054	3,514	944
DUF_6 Conversion Facility	2,143	2,849	3,516	2,143

Table 3. Characteristics of Stacks, Vents, or Other Emission Points that Emit Radionuclides

Emission Points	Type	Height (m)	Diameter (m)	Gas Exit Velocity (m/s)	Gas Exit Temp. (°C)	Distance (m) & Direction to Maximally Exposed Individual for Each Source
Group E C-310 Stack	Point	60.98	0.30	7.77	Ambient	3,131 NNE
Group F SX/WA Group	Point	21.00	0.50	0.00	Ambient	1,571 SE
Northwest Plume Treatment System	Point	7.00	0.36	9.45	Ambient	1,149 NNE
Northeast Plume Treatment Unit C-765	Point	5.94	0.19	10.76	Ambient	1,003 SE
Northeast Plume Treatment Unit C-765-A	Point	5.94	0.19	10.76	Ambient	944 ESE
DUF_6 Conversion Facility	Point	52.43	1.07	16.19	20	2,143 SSW

Table 4. Radionuclide Materials and Emissions Data (Curies)

Nuclide	Group E C-310 Stack	Group F SX/WA	Northwest Plume	Northeast Plume C-765	Northeast Plume C-765-A	DUF_6 Conversion Facility	Total Site Emissions
U-234	1.08E-02	1.58E-06	0	0	0	1.18E-07	1.08E-02
U-235	4.44E-04	8.56E-08	0	0	0	5.38E-09	4.44E-04
U-238	6.39E-03	6.34E-07	0	0	0	2.89E-07	6.39E-03
Tc-99	1.03E-03	2.64E-07	8.74E-05	9.40E-06	4.10E-06	0	1.13E-03
Th-230	0	1.41E-09	0	0	0	0	1.41E-09
Th-231	0	0	0	0	0	1.24E-07	1.24E-07
Th-234	0	0	0	0	0	1.13E-05	1.13E-05
Np-237	0	6.06E-10	0	0	0	0	6.06E-10
Pu-239	0	0.00E+00	0	0	0	0	0.00E+00
Pa-234m	0	0	0	0	0	1.13E-05	1.13E-05
Total Curies/ Year	1.87E-02	2.57E-06	8.74E-05	9.40E-06	4.10E-06	2.31E-05	1.88E-02

7. DOSE ASSESSMENT

7.1 DESCRIPTION OF DOSE MODEL

The CAP-88 PC is a set of computer programs, databases, and associated utility programs for estimation of dose and risk from radionuclide emissions to air. CAP-88 PC is composed of modified versions of the Atmospheric Dispersion of Radionuclides (AIRDOS)-EPA and Dose and Risk Assessment Tabulation (i.e., DARTAB) computer codes. CAP-88 PC contains EPA's version of the AIRDOS-EPA computer code, which implements a steady-state, Gaussian plume, atmospheric dispersion model to calculate environmental concentrations of released radionuclides; and then, food chain models are used to calculate human exposures, both internal and external, to the environmental concentrations.

CAP-88 PC incorporates age-dependent dose factors from DCFPAK-2.2 combined with factors and method of Federal Guidance Report 13. The Federal Guidance Report 13 dose factors are based on the methods in 1996 Publication 72 of the International Commission on Radiological Protection. The dose factors are used to calculate effective doses. The effective dose is the weighted sum of equivalent doses to 12 specific tissues and organs, plus a general category that accounts for the remaining organs and tissues.

7.2 SUMMARY OF INPUT PARAMETERS

Default input parameters are used except for those provided in Section 6 and immediately below.

Meteorological input information is from the National Weather Service at Paducah, except for the on-site joint frequency distribution information. The 2021 annual precipitation and average air temperature from the National Climatic Data Center "Climate Data Online" database were used to account for current rainfall and air temperatures. The rainfall rate in 2021 (125.48 cm) was less than the 1971–2000 average rainfall (149.8 cm). The mixing height of 542 m is based on evaluation of 2014 National Weather Service data for the Paducah area by K. Birdwell, Oak Ridge National Laboratory meteorologist (ORNL 2015). The mixing height from 2014 was used for the 2021 CAP-88 PC runs. Typically, mixing heights do not vary much from year-to-year; however, they can vary more over a period of years.

Joint frequency distribution:	Five-year stability array (STAR) distribution from 60-m station on PGDP meteorological tower for the years 1988 through 1992.
Rainfall rate:	125.48 cm/year
Average air temperature:	15°C
Average mixing layer height:	542 m

Fraction of foodstuffs from (rural default values):

	Local Area	50-Mile Radius	Beyond 50 Miles
Vegetables and produce:	0.70	0.30	0.00
Meat:	0.40	0.60	0.00
Milk:	0.44	0.56	0.00

7.3 DOSE ESTIMATE

Effective dose equivalent (EDE) to the maximally exposed individual for each individual point source at the Paducah Site, as well as the collective EDE to the 50-mile population, is provided in Table 5.

Table 5. Dose Analysis

Emission Sources	EDE to the Maximum Exposed Individual for Each Source (mrem)	EDE to the Maximum Exposed Individual for the Plant (mrem)	Collective EDE to the 50-mile Population (person-rem)
Group E—C-310 Stack	4.90E-03	4.90E-03	5.44E-02
Group F—SX/WA Group	8.80E-07	7.10E-07	7.85E-06
Northwest Plume Treatment System	5.60E-05	2.00E-05	2.13E-04
Northeast Plume Treatment Unit C-765	4.50E-06	1.80E-06	2.27E-05
Northeast Plume Treatment Unit C-765-A	1.70E-06	7.20E-07	9.92E-06
DUF_6 Conversion Facility	1.90E-07	1.40E-07	2.47E-06
Total from All Sources		4.92E-03	5.47E-02

The maximally exposed individual from all facility emissions is located 3,131 m north-northeast of the C-310 stack. The total annual EDE to the maximally exposed member of the public from Paducah Site emissions of 0.00492 mrem for calendar year 2021 was higher than in calendar year 2020. This increase is due to the use of the C-310 stack for wet air passivation.

U.S. Census (2010) counts population at the block level. These population counts were joined to their respective Census blocks, and then incorporated into a dasymetric computer model to distribute the counts spatially within each block. A dasymetric model uses a likelihood dataset (i.e., where the people are most likely to be located) to distribute the population mathematically. This likelihood dataset incorporated such things as land cover, distance to roads, building height, etc. The result was a 3-arc second gridded population database. This grid was intersected with the sector-annuli rose to tabulate the final population counts. The resulting population data then were converted into a population data file by CAP-88 PC. Based on population data from the 2010 census, the total collective EDE to the 50-mile population (i.e., approximately 534,000 persons) was 0.0547 person-rem. The total collective EDE to the 50-mile population is calculated by summing the total collective EDE from each source as generated from CAP-88 PC.

8. UNPLANNED RELEASES

There were no DOE unplanned radioactive airborne releases in 2021.

9. AMBIENT AIR MONITORING

In accordance with the *National Emission Standards for Hazardous Air Pollutants Management Plan for Emission of Radionuclides for the U.S. Department of Energy Operations at the Paducah Site, Paducah, Kentucky*, CP2-EC-0002, October 2019, DOE used ambient air monitoring data to verify insignificant levels of radionuclides in off-site ambient air. Ambient air stations collect radionuclide samples at sites surrounding the plant. The ambient air monitors capture airborne radionuclides emitted from all sources,

including fugitive and diffuse sources. The locations of the ambient air monitoring stations are shown in Figure 1.

The ambient air monitoring stations operate continuously, drawing air through a paper filter to capture particles that may be radioactive. Filter paper is changed weekly and composited for three months. Composited filter papers are analyzed for radioactivity by a laboratory.

Analyses of ambient air monitoring results for 2021 were compared using the methods in the EPA-approved NESHAP Management Plan. The analysis indicated that plant-derived radionuclides were not detected in concentrations greater than 40 *CFR* Part 61, Appendix E, Table 2, concentrations, as depicted in the tables provided in the appendix of this report. As stated in Section 8, there were no unplanned radioactive airborne releases from the Paducah Site in 2021. The data presented in the appendix (Tables A.2 and A.3) of this report used all analytical results, positive and negative values, which is in accordance with Section 8.5.2 of DOE-HDBK-1216-2015 (DOE 2015), regarding the use of "Less-Than-Detectable-Values" for data reporting.

10. STATUS OF 40 *CFR* PART 61, SUBPART H, COMPLIANCE

DOE remains in compliance with 40 *CFR* Part 61, Subpart H. Kentucky Division for Air Quality has received a delegation of authority to administer the NESHAP program.

Ambient air monitors measure radionuclide emissions from Paducah Site point sources, fugitive air emission sources, and background levels of radionuclides. In accordance with the NESHAP Management Plan, ambient air monitors are used to confirm that radiological emissions from the site produce a dose less than the levels allowed by 40 *CFR* Part 61, Subpart H.

11. REFERENCES

DOE (U.S. Department of Energy) 2015. *Environmental Radiological Effluent Monitoring and Environmental Surveillance,* DOE-HDBK-1216-2015, U.S. Department of Energy, Washington, DC, March.

FRNP (Four Rivers Nuclear Partnership, LLC) 2019. *National Emission Standards for Hazardous Air Pollutants Management Plan for Emission of Radionuclides for the U.S. Department of Energy Operations at the Paducah Site, Paducah, Kentucky,* CP2-EC-0002, Four Rivers Nuclear Partnership, LLC, Paducah, KY, October.

ORNL (Oak Ridge National Laboratory) 2015. E-mail from P. Scofield, Oak Ridge National Laboratory, to S. Knaus, Fluor Federal Services, Inc., Paducah Deactivation Project, "2014 RadNeshaps Report and Tables," May 11.

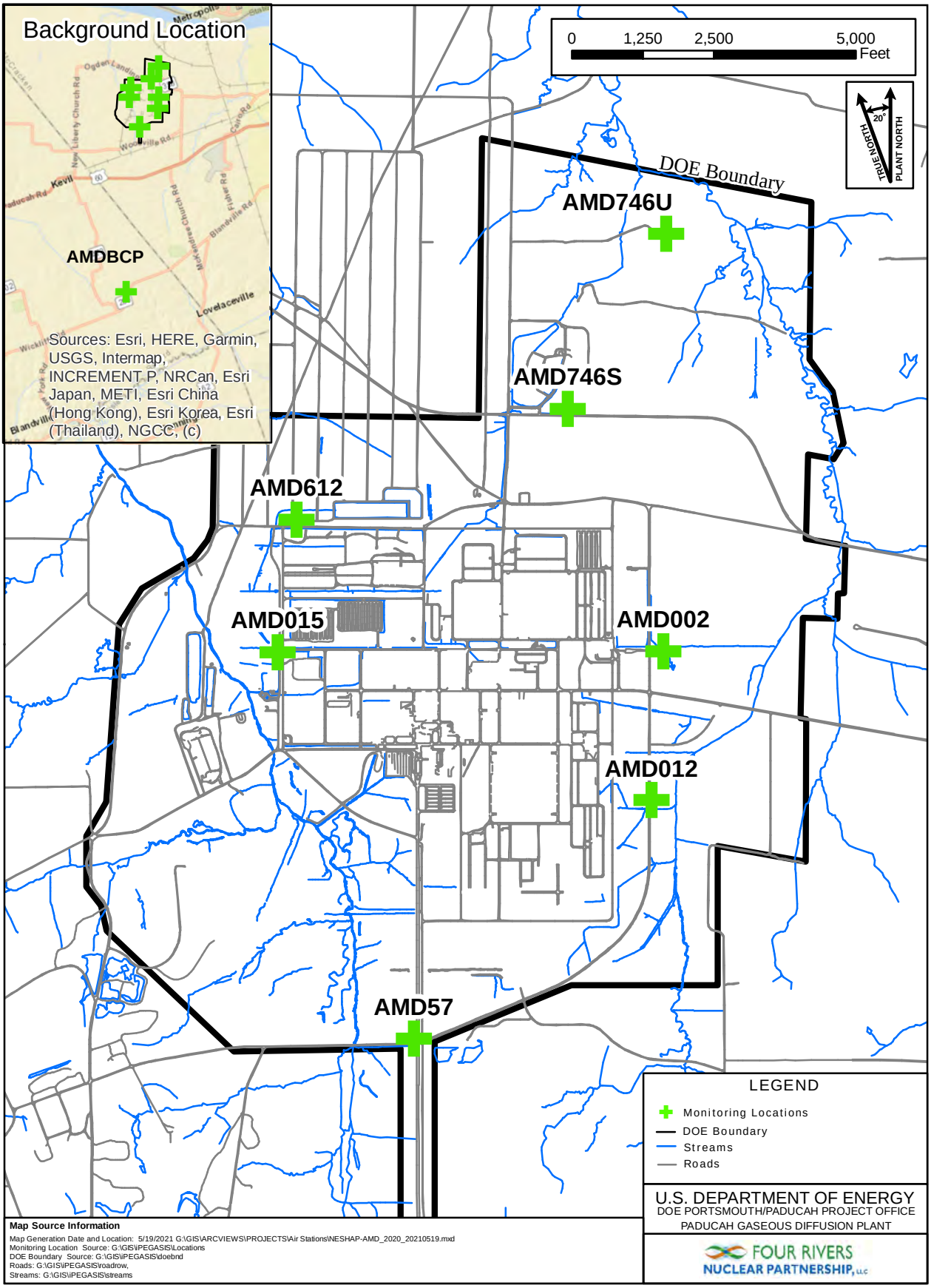

Figure 1. DOE Ambient Air Monitoring Stations

APPENDIX

AMBIENT AIR MONITORING DATA

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Table A.1. Sum of the Fractions Standard

Station	Client Sample ID	Date Collected	Analysis	Result	Units	Concentration	Concentration	Standard	Fraction of Standard	Qualifier
1st Quarter January through March										
	Quarter Air Flow	7410	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD002	Q2AMD0022-21	25-Mar-21	Americium-241	1.12	pCi/sample	1.51E-04	1.51E-16	1.90E-15	7.96E-02	U
AMD002	Q2AMD0023-21	25-Mar-21	**Cobalt-60**	**5.06**	pCi/sample	6.83E-04	6.83E-16	1.70E-14	4.02E-02	
AMD002	Q2AMD0022-21	25-Mar-21	Neptunium-237	0.298	pCi/sample	4.02E-05	4.02E-17	1.20E-15	3.35E-02	U
AMD002	Q2AMD0022-21	25-Mar-21	Plutonium-238	0.418	pCi/Sample	5.64E-05	5.64E-17	2.10E-15	2.69E-02	U
AMD002	Q2AMD0022-21	25-Mar-21	Plutonium-239/240	0.00606	pCi/Sample	8.18E-07	8.18E-19	2.00E-15	4.09E-04	U
AMD002	Q2AMD0022-21	25-Mar-21	Technetium-99	24.5	pCi/Sample	3.31E-03	3.31E-15	1.40E-13	2.36E-02	U
AMD002	Q2AMD0022-21	25-Mar-21	Thorium-234	2.94	pCi/sample	3.97E-04	3.97E-16	2.20E-12	1.80E-04	U
AMD002	Q2AMD0022-21	25-Mar-21	Uranium-234	1.34	pCi/Sample	1.81E-04	1.81E-16	7.70E-15	2.35E-02	U
AMD002	Q2AMD0022-21	25-Mar-21	Uranium-235	0.135	pCi/Sample	1.82E-05	1.82E-17	7.10E-15	2.57E-03	U
AMD002	Q2AMD0022-21	25-Mar-21	**Uranium-238**	**1.63**	pCi/Sample	2.20E-04	2.20E-16	8.30E-15	2.65E-02	
						Sum of the Fractions of the Standard			2.57E-01	
	Quarter Air Flow	7423	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD012	Q2AMD0122-21	25-Mar-21	Americium-241	0.0128	pCi/sample	1.72E-06	1.72E-18	1.90E-15	9.08E-04	U
AMD012	Q2AMD0122-21	25-Mar-21	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMD012	Q2AMD0122-21	25-Mar-21	Plutonium-238	0.0497	pCi/sample	6.70E-06	6.70E-18	2.10E-15	3.19E-03	U
AMD012	Q2AMD0122-21	25-Mar-21	Plutonium-239/240*	0	pCi/sample	0.00E+00	0.00E+00	2.00E-15	0.00E+00	U
AMD012	Q2AMD0122-21	25-Mar-21	Technetium-99	45.4	pCi/sample	6.12E-03	6.12E-15	1.40E-13	4.37E-02	U
AMD012	Q2AMD0122-21	25-Mar-21	Thorium-234*	0	pCi/sample	0.00E+00	0.00E+00	2.20E-12	0.00E+00	U
AMD012	Q2AMD0122-21	25-Mar-21	Uranium-234	0.12	pCi/sample	1.62E-05	1.62E-17	7.70E-15	2.10E-03	U
AMD012	Q2AMD0122-21	25-Mar-21	Uranium-235	0.0507	pCi/sample	6.83E-06	6.83E-18	7.10E-15	9.62E-04	U
AMD012	Q2AMD0122-21	25-Mar-21	Uranium-238	1.2	pCi/sample	1.62E-04	1.62E-16	8.30E-15	1.95E-02	U
						Sum of the Fractions of the Standard			7.03E-02	
	Quarter Air Flow	7421	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD015	Q2AMD0152-21	25-Mar-21	Americium-241	0.451	pCi/sample	6.08E-05	6.08E-17	1.90E-15	3.20E-02	U
AMD015	Q2AMD0152-21	25-Mar-21	Neptunium-237	0.208	pCi/sample	2.80E-05	2.80E-17	1.20E-15	2.34E-02	U
AMD015	Q2AMD0152-21	25-Mar-21	Plutonium-238	0.162	pCi/sample	2.18E-05	2.18E-17	2.10E-15	1.04E-02	U
AMD015	Q2AMD0152-21	25-Mar-21	Plutonium-239/240*	0	pCi/sample	0.00E+00	0.00E+00	2.00E-15	0.00E+00	U
AMD015	Q2AMD0152-21	25-Mar-21	Technetium-99	55.1	pCi/sample	7.42E-03	7.42E-15	1.40E-13	5.30E-02	U
AMD015	Q2AMD0152-21	25-Mar-21	Thorium-234	9.87	pCi/sample	1.33E-03	1.33E-15	2.20E-12	6.05E-04	U
AMD015	Q2AMD0152-21	25-Mar-21	Uranium-234	0.206	pCi/sample	2.78E-05	2.78E-17	7.70E-15	3.61E-03	U
AMD015	Q2AMD0152-21	25-Mar-21	Uranium-235*	0	pCi/sample	0.00E+00	0.00E+00	7.10E-15	0.00E+00	U
AMD015	Q2AMD0152-21	25-Mar-21	**Uranium-238**	**1.18**	pCi/sample	1.59E-04	1.59E-16	8.30E-15	1.92E-02	
						Sum of the Fractions of the Standard			1.42E-01	

Bold = Detection above MDC
* = Negative result replaced with a zero for calculation
U = Value reported is < MDA and/or TPU
T = Tracer recovery outside control limits (30-110%). Note: Data assessment determined that the data were usable as reported.

Table A.1. Sum of the Fractions Standard (Continued)

Station	Client Sample ID	Date Collected	Analysis	Result	Units	Concentration	Concentration	Standard	Fraction of Standard	Qualifier
1st Quarter January through March										
	Quarter Air Flow	7413	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD57	Q2AMD572-21	25-Mar-21	Americium-241*	0	pCi/sample	0.00E+00	0.00E+00	1.90E-15	0.00E+00	TU
AMD57	Q2AMD572-21	25-Mar-21	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMD57	Q2AMD572-21	25-Mar-21	Plutonium-238*	0	pCi/sample	0.00E+00	0.00E+00	2.10E-15	0.00E+00	U
AMD57	Q2AMD572-21	25-Mar-21	Plutonium-239/240	0.0838	pCi/sample	1.13E-05	1.13E-17	2.00E-15	5.65E-03	U
AMD57	Q2AMD572-21	25-Mar-21	Technetium-99	70.4	pCi/sample	9.50E-03	9.50E-15	1.40E-13	6.78E-02	U
AMD57	Q2AMD572-21	25-Mar-21	Thorium-234	17.2	pCi/sample	2.32E-03	2.32E-15	2.20E-12	1.05E-03	U
AMD57	Q2AMD572-21	25-Mar-21	Uranium-234	0.878	pCi/sample	1.18E-04	1.18E-16	7.70E-15	1.54E-02	U
AMD57	Q2AMD572-21	25-Mar-21	Uranium-235	0.418	pCi/sample	5.64E-05	5.64E-17	7.10E-15	7.94E-03	U
AMD57	Q2AMD572-21	25-Mar-21	**Uranium-238**	**1.49**	pCi/sample	2.01E-04	2.01E-16	8.30E-15	2.42E-02	
						Sum of the Fractions of the Standard			1.22E-01	
	Quarter Air Flow	7617	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD612	Q2AMD6122-21	25-Mar-21	Americium-241*	0	pCi/sample	0.00E+00	0.00E+00	1.90E-15	0.00E+00	U
AMD612	Q2AMD6122-21	25-Mar-21	Neptunium-237	1.92	pCi/sample	2.52E-04	2.52E-16	1.20E-15	2.10E-01	U
AMD612	Q2AMD6122-21	25-Mar-21	Plutonium-238*	0	pCi/sample	0.00E+00	0.00E+00	2.10E-15	0.00E+00	U
AMD612	Q2AMD6122-21	25-Mar-21	Plutonium-239/240	0.404	pCi/sample	5.30E-05	5.30E-17	2.00E-15	2.65E-02	U
AMD612	Q2AMD6122-21	25-Mar-21	Technetium-99	61.5	pCi/sample	8.07E-03	8.07E-15	1.40E-13	5.77E-02	U
AMD612	Q2AMD6122-21	25-Mar-21	Thorium-234*	0	pCi/sample	0.00E+00	0.00E+00	2.20E-12	0.00E+00	U
AMD612	Q2AMD6122-21	25-Mar-21	Uranium-234	0.328	pCi/sample	4.31E-05	4.31E-17	7.70E-15	5.59E-03	U
AMD612	Q2AMD6122-21	25-Mar-21	Uranium-235*	0	pCi/sample	0.00E+00	0.00E+00	7.10E-15	0.00E+00	U
AMD612	Q2AMD6122-21	25-Mar-21	Uranium-238	1.21	pCi/sample	1.59E-04	1.59E-16	8.30E-15	1.91E-02	U
						Sum of the Fractions of the Standard			3.19E-01	
	Quarter Air Flow	7442	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD746S	Q2AMD746S2-21	25-Mar-21	Americium-241*	0	pCi/sample	0.00E+00	0.00E+00	1.90E-15	0.00E+00	U
AMD746S	Q2AMD746S2-21	25-Mar-21	**Cesium-137**	**2.9**	pCi/sample	6.55E-05	6.55E-17	1.90E-14	3.45E-03	
AMD746S	Q2AMD746S2-21	25-Mar-21	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMD746S	Q2AMD746S2-21	25-Mar-21	Plutonium-238	0	pCi/sample	0.00E+00	0.00E+00	2.10E-15	0.00E+00	U
AMD746S	Q2AMD746S2-21	25-Mar-21	Plutonium-239/240	0.0797	pCi/sample	1.07E-05	1.07E-17	2.00E-15	5.35E-03	U
AMD746S	Q2AMD746S2-21	25-Mar-21	Technetium-99	61.2	pCi/sample	8.22E-03	8.22E-15	1.40E-13	5.87E-02	U
AMD746S	Q2AMD746S2-21	25-Mar-21	Thorium-234	9.1	pCi/sample	1.22E-03	1.22E-15	2.20E-12	5.56E-04	U
AMD746S	Q2AMD746S2-21	25-Mar-21	Uranium-234	0.76	pCi/sample	1.02E-04	1.02E-16	7.70E-15	1.33E-02	U
AMD746S	Q2AMD746S2-21	25-Mar-21	Uranium-235*	0	pCi/sample	0.00E+00	0.00E+00	7.10E-15	0.00E+00	U
AMD746S	Q2AMD746S2-21	25-Mar-21	Uranium-238	0.585	pCi/sample	7.86E-05	7.86E-17	8.30E-15	9.47E-03	U
						Sum of the Fractions of the Standard			9.08E-02	

Bold = Detection above MDC
* = Negative result replaced with a zero for calculation
U = Value reported is < MDA and/or TPU
T = Tracer recovery outside control limits (30-110%). Note: Data assessment determined that the data were usable as reported.

Table A.1. Sum of the Fractions Standard (Continued)

Station	Client Sample ID	Date Collected	Analysis	Result	Units	Concentration	Concentration	Standard	Fraction of Standard	Qualifier
1st Quarter January through March										
	Quarter Air Flow	7408	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD746U	Q2AMD746U2-21	25-Mar-21	Americium-241	0.331	pCi/sample	4.47E-05	4.47E-17	1.90E-15	2.35E-02	U
AMD746U	Q2AMD746U2-21	25-Mar-21	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMD746U	Q2AMD746U2-21	25-Mar-21	Plutonium-238*	0	pCi/sample	0.00E+00	0.00E+00	2.10E-15	0.00E+00	U
AMD746U	Q2AMD746U2-21	25-Mar-21	Plutonium-239/240	0.427	pCi/sample	5.76E-05	5.76E-17	2.00E-15	2.88E-02	U
AMD746U	Q2AMD746U2-21	25-Mar-21	Technetium-99	27.9	pCi/sample	3.77E-03	3.77E-15	1.40E-13	2.69E-02	U
AMD746U	Q2AMD746U2-21	25-Mar-21	Thorium-234	11.4	pCi/sample	1.54E-03	1.54E-15	2.20E-12	6.99E-04	U
AMD746U	Q2AMD746U2-21	25-Mar-21	**Uranium-234**	**1.52**	pCi/sample	2.05E-04	2.05E-16	7.70E-15	2.66E-02	
AMD746U	Q2AMD746U2-21	25-Mar-21	Uranium-235*	0	pCi/sample	0.00E+00	0.00E+00	7.10E-15	0.00E+00	U
AMD746U	Q2AMD746U2-21	25-Mar-21	**Uranium-238**	**1.65**	pCi/sample	2.23E-04	2.23E-16	8.30E-15	2.68E-02	
						Sum of the Fractions of the Standard			1.33E-01	
	Quarter Air Flow	7407	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMDBCP	Q2AMDBCP2-21	25-Mar-21	Americium-241*	0	pCi/sample	0.00E+00	0.00E+00	1.90E-15	0.00E+00	U
AMDBCP	Q2AMDBCP2-21	25-Mar-21	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMDBCP	Q2AMDBCP2-21	25-Mar-21	Plutonium-238	0.0789	pCi/sample	1.07E-05	1.07E-17	2.10E-15	5.07E-03	U
AMDBCP	Q2AMDBCP2-21	25-Mar-21	Plutonium-239/240*	0	pCi/sample	0.00E+00	0.00E+00	2.00E-15	0.00E+00	U
AMDBCP	Q2AMDBCP2-21	25-Mar-21	Technetium-99	36.9	pCi/sample	4.98E-03	4.98E-15	1.40E-13	3.56E-02	U
AMDBCP	Q2AMDBCP2-21	25-Mar-21	Thorium-234*	0	pCi/sample	0.00E+00	0.00E+00	2.20E-12	0.00E+00	U
AMDBCP	Q2AMDBCP2-21	25-Mar-21	Uranium-234	1.39	pCi/sample	1.88E-04	1.88E-16	7.70E-15	2.44E-02	U
AMDBCP	Q2AMDBCP2-21	25-Mar-21	Uranium-235	0.155	pCi/sample	2.09E-05	2.09E-17	7.10E-15	2.95E-03	U
AMDBCP	Q2AMDBCP2-21	25-Mar-21	**Uranium-238**	**1.04**	pCi/sample	1.40E-04	1.40E-16	8.30E-15	1.69E-02	
						Sum of the Fractions of the Standard			8.49E-02	
	Quarter Air Flow	7407	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMDNE	Q2AMDNE2-21	25-Mar-21	Americium-241	0.419	pCi/sample	5.66E-05	5.66E-17	1.90E-15	2.98E-02	U
AMDNE	Q2AMDNE2-21	25-Mar-21	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMDNE	Q2AMDNE2-21	25-Mar-21	Plutonium-238*	0	pCi/sample	0.00E+00	0.00E+00	2.10E-15	0.00E+00	U
AMDNE	Q2AMDNE2-21	25-Mar-21	Plutonium-239/240*	0	pCi/sample	0.00E+00	0.00E+00	2.00E-15	0.00E+00	U
AMDNE	Q2AMDNE2-21	25-Mar-21	Technetium-99	43.2	pCi/sample	5.83E-03	5.83E-15	1.40E-13	4.17E-02	U
AMDNE	Q2AMDNE2-21	25-Mar-21	Thorium-234	12.5	pCi/sample	1.69E-03	1.69E-15	2.20E-12	7.67E-04	U
AMDNE	Q2AMDNE2-21	25-Mar-21	Uranium-234*	0	pCi/sample	0.00E+00	0.00E+00	7.70E-15	0.00E+00	U
AMDNE	Q2AMDNE2-21	25-Mar-21	Uranium-235	0.0526	pCi/sample	7.10E-06	7.10E-18	7.10E-15	1.00E-03	U
AMDNE	Q2AMDNE2-21	25-Mar-21	**Uranium-238**	**2.3**	pCi/sample	3.11E-04	3.11E-16	8.30E-15	3.74E-02	
						Sum of the Fractions of the Standard			1.11E-01	

Bold = Detection above MDC
* = Negative result replaced with a zero for calculation
U = Value reported is < MDA and/or TPU
T = Tracer recovery outside control limits (30-110%). Note: Data assessment determined that the data were usable as reported.

Table A.1. Sum of the Fractions Standard (Continued)

Station	Client Sample ID	Date Collected	Analysis	Result	Units	Concentration	Concentration	Standard	Fraction of Standard	Qualifier
2nd Quarter April through June										
	Quarter Air Flow	6839	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD002	Q3AMD0023-21	29-Jul-21	Americium-241*	0	pCi/sample	0.00E+00	0.00E+00	1.90E-15	0.00E+00	U
AMD002	Q3AMD0023-21	29-Jul-21	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMD002	Q3AMD0023-21	29-Jul-21	Plutonium-238	0.0149	pCi/Sample	2.18E-06	2.18E-18	2.10E-15	1.04E-03	U
AMD002	Q3AMD0023-21	29-Jul-21	Plutonium-239/240*	0	pCi/Sample	0.00E+00	0.00E+00	2.00E-15	0.00E+00	U
AMD002	Q3AMD0023-21	29-Jul-21	Technetium-99*	0	pCi/Sample	0.00E+00	0.00E+00	1.40E-13	0.00E+00	U
AMD002	Q3AMD0023-21	29-Jul-21	Thorium-234*	0	pCi/sample	0.00E+00	0.00E+00	2.20E-12	0.00E+00	U
AMD002	Q3AMD0023-21	29-Jul-21	**Uranium-234**	**1.18**	pCi/Sample	1.73E-04	1.73E-16	7.70E-15	2.24E-02	
AMD002	Q3AMD0023-21	29-Jul-21	Uranium-235	0.0785	pCi/Sample	1.15E-05	1.15E-17	7.10E-15	1.62E-03	U
AMD002	Q3AMD0023-21	29-Jul-21	**Uranium-238**	**1.17**	pCi/Sample	1.71E-04	1.71E-16	8.30E-15	2.06E-02	
						Sum of the Fractions of the Standard			4.57E-02	
	Quarter Air Flow	6849	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD012	Q3AMD0123-21	29-Jul-21	Americium-241*	0	pCi/sample	0.00E+00	0.00E+00	1.90E-15	0.00E+00	U
AMD012	Q3AMD0123-21	29-Jul-21	Neptunium-237	0.63	pCi/sample	9.20E-05	9.20E-17	1.20E-15	7.67E-02	U
AMD012	Q3AMD0123-21	29-Jul-21	Plutonium-238*	0	pCi/Sample	0.00E+00	0.00E+00	2.10E-15	0.00E+00	U
AMD012	Q3AMD0123-21	29-Jul-21	Plutonium-239/240	0.329	pCi/Sample	4.80E-05	4.80E-17	2.00E-15	2.40E-02	U
AMD012	Q3AMD0123-21	29-Jul-21	Technetium-99*	0	pCi/Sample	0.00E+00	0.00E+00	1.40E-13	0.00E+00	U
AMD012	Q3AMD0123-21	29-Jul-21	Thorium-234	14.7	pCi/sample	2.15E-03	2.15E-15	2.20E-12	9.76E-04	U
AMD012	Q3AMD0123-21	29-Jul-21	**Uranium-234**	**1.38**	pCi/Sample	2.01E-04	2.01E-16	7.70E-15	2.62E-02	
AMD012	Q3AMD0123-21	29-Jul-21	Uranium-235	0	pCi/Sample	0.00E+00	0.00E+00	7.10E-15	0.00E+00	U
AMD012	Q3AMD0123-21	29-Jul-21	**Uranium-238**	**1.36**	pCi/sample	1.99E-04	1.99E-16	8.30E-15	2.39E-02	
						Sum of the Fractions of the Standard			1.52E-01	
	Quarter Air Flow	6857	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD015	Q3AMD0153-21	29-Jul-21	Americium-241	0.0595	pCi/sample	8.68E-06	8.68E-18	1.90E-15	4.57E-03	U
AMD015	Q3AMD0153-21	29-Jul-21	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMD015	Q3AMD0153-21	29-Jul-21	Plutonium-238*	0	pCi/Sample	0.00E+00	0.00E+00	2.10E-15	0.00E+00	U
AMD015	Q3AMD0153-21	29-Jul-21	Plutonium-239/240*	0	pCi/Sample	0.00E+00	0.00E+00	2.00E-15	0.00E+00	U
AMD015	Q3AMD0153-21	29-Jul-21	Technetium-99*	0	pCi/Sample	0.00E+00	0.00E+00	1.40E-13	0.00E+00	U
AMD015	Q3AMD0153-21	29-Jul-21	Thorium-234	2.3	pCi/sample	3.35E-04	3.35E-16	2.20E-12	1.52E-04	U
AMD015	Q3AMD0153-21	29-Jul-21	Uranium-234	1.11	pCi/Sample	1.62E-04	1.62E-16	7.70E-15	2.10E-02	U
AMD015	Q3AMD0153-21	29-Jul-21	Uranium-235	0.0547	pCi/Sample	7.98E-06	7.98E-18	7.10E-15	1.12E-03	U
AMD015	Q3AMD0153-21	29-Jul-21	**Uranium-238**	**1.8**	pCi/Sample	2.63E-04	2.63E-16	8.30E-15	3.16E-02	
						Sum of the Fractions of the Standard			5.85E-02	

Bold = Detection above MDC
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U = Value reported is < MDA and/or TPU
T = Tracer recovery outside control limits (30-110%). Note: Data assessment determined that the data were usable as reported.

Table A.1. Sum of the Fractions Standard (Continued)

Station	Client Sample ID	Date Collected	Analysis	Result	Units	Concentration	Concentration	Standard	Fraction of Standard	Qualifier
2nd Quarter April through June										
	Quarter Air Flow	6844	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD57	Q3AMD573-21	29-Jul-21	Americium-241	0.0552	pCi/sample	8.07E-06	8.07E-18	1.90E-15	4.24E-03	U
AMD57	Q3AMD573-21	29-Jul-21	Neptunium-237	0.575	pCi/sample	8.40E-05	8.40E-17	1.20E-15	7.00E-02	U
AMD57	Q3AMD573-21	29-Jul-21	Plutonium-238	0.146	pCi/Sample	2.13E-05	2.13E-17	2.10E-15	1.02E-02	U
AMD57	Q3AMD573-21	29-Jul-21	Plutonium-239/240*	0	pCi/Sample	0.00E+00	0.00E+00	2.00E-15	0.00E+00	U
AMD57	Q3AMD573-21	29-Jul-21	Technetium-99*	0	pCi/Sample	0.00E+00	0.00E+00	1.40E-13	0.00E+00	U
AMD57	Q3AMD573-21	29-Jul-21	Thorium-234*	0	pCi/sample	0.00E+00	0.00E+00	2.20E-12	0.00E+00	U
AMD57	Q3AMD573-21	29-Jul-21	**Uranium-234**	**1.29**	pCi/Sample	1.88E-04	1.88E-16	7.70E-15	2.45E-02	
AMD57	Q3AMD573-21	29-Jul-21	Uranium-235	0.323	pCi/Sample	4.72E-05	4.72E-17	7.10E-15	6.65E-03	U
AMD57	Q3AMD573-21	29-Jul-21	Uranium-238	0.826	pCi/Sample	1.21E-04	1.21E-16	8.30E-15	1.45E-02	U
						Sum of the Fractions of the Standard			1.30E-01	
	Quarter Air Flow	6838	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD612	Q3AMD6123-21	29-Jul-21	Americium-241	1.27	pCi/sample	1.86E-04	1.86E-16	1.90E-15	9.78E-02	U
AMD612	Q3AMD6123-21	29-Jul-21	Neptunium-237	0.0132	pCi/sample	1.93E-06	1.93E-18	1.20E-15	1.61E-03	U
AMD612	Q3AMD6123-21	29-Jul-21	Plutonium-238*	0	pCi/Sample	0.00E+00	0.00E+00	2.10E-15	0.00E+00	U
AMD612	Q3AMD6123-21	29-Jul-21	Plutonium-239/240*	0	pCi/Sample	0.00E+00	0.00E+00	2.00E-15	0.00E+00	U
AMD612	Q3AMD6123-21	29-Jul-21	Technetium-99*	0	pCi/Sample	0.00E+00	0.00E+00	1.40E-13	0.00E+00	U
AMD612	Q3AMD6123-21	29-Jul-21	Thorium-234	12.6	pCi/sample	1.84E-03	1.84E-15	2.20E-12	8.38E-04	U
AMD612	Q3AMD6123-21	29-Jul-21	**Uranium-234**	**1.87**	pCi/Sample	2.73E-04	2.73E-16	7.70E-15	3.55E-02	
AMD612	Q3AMD6123-21	29-Jul-21	Uranium-235*	0	pCi/Sample	0.00E+00	0.00E+00	7.10E-15	0.00E+00	U
AMD612	Q3AMD6123-21	29-Jul-21	**Uranium-238**	**1.15**	pCi/Sample	1.68E-04	1.68E-16	8.30E-15	2.03E-02	
						Sum of the Fractions of the Standard			1.56E-01	
	Quarter Air Flow	6839	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD746S	Q3AMD746S3-21	29-Jul-21	Americium-241	0.519	pCi/sample	7.59E-05	7.59E-17	1.90E-15	3.99E-02	U
AMD746S	Q3AMD746S3-21	29-Jul-21	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMD746S	Q3AMD746S3-21	29-Jul-21	Plutonium-238*	0	pCi/Sample	0.00E+00	0.00E+00	2.10E-15	0.00E+00	U
AMD746S	Q3AMD746S3-21	29-Jul-21	Plutonium-239/240	0.155	pCi/Sample	2.27E-05	2.27E-17	2.00E-15	1.13E-02	U
AMD746S	Q3AMD746S3-21	29-Jul-21	Technetium-99	14.4	pCi/Sample	2.11E-03	2.11E-15	1.40E-13	1.50E-02	U
AMD746S	Q3AMD746S3-21	29-Jul-21	Thorium-234	10.5	pCi/sample	1.54E-03	1.54E-15	2.20E-12	6.98E-04	U
AMD746S	Q3AMD746S3-21	29-Jul-21	**Uranium-234**	**1.92**	pCi/Sample	2.81E-04	2.81E-16	7.70E-15	3.65E-02	
AMD746S	Q3AMD746S3-21	29-Jul-21	Uranium-235	0.162	pCi/Sample	2.37E-05	2.37E-17	7.10E-15	3.34E-03	U
AMD746S	Q3AMD746S3-21	29-Jul-21	**Uranium-238**	**1.09**	pCi/Sample	1.59E-04	1.59E-16	8.30E-15	1.92E-02	
						Sum of the Fractions of the Standard			1.26E-01	

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T = Tracer recovery outside control limits (30-110%). Note: Data assessment determined that the data were usable as reported.

Table A.1. Sum of the Fractions Standard (Continued)

Station	Client Sample ID	Date Collected	Analysis	Result	Units	Concentration	Concentration	Standard	Fraction of Standard	Qualifier
2nd Quarter April through June										
	Quarter Air Flow	6839	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD746U	Q3AMD746U3-21	29-Jul-21	Americium-241*	0	pCi/sample	0.00E+00	0.00E+00	1.90E-15	0.00E+00	U
AMD746U	Q3AMD746U3-21	29-Jul-21	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMD746U	Q3AMD746U3-21	29-Jul-21	Plutonium-238	0.244	pCi/Sample	3.57E-05	3.57E-17	2.10E-15	1.70E-02	U
AMD746U	Q3AMD746U3-21	29-Jul-21	Plutonium-239/240*	0	pCi/Sample	0.00E+00	0.00E+00	2.00E-15	0.00E+00	U
AMD746U	Q3AMD746U3-21	29-Jul-21	Technetium-99*	0	pCi/Sample	0.00E+00	0.00E+00	1.40E-13	0.00E+00	U
AMD746U	Q3AMD746U3-21	29-Jul-21	Thorium-234	1.65	pCi/sample	2.41E-04	2.41E-16	2.20E-12	1.10E-04	U
AMD746U	Q3AMD746U3-21	29-Jul-21	Uranium-234	1.2	pCi/Sample	1.75E-04	1.75E-16	7.70E-15	2.28E-02	U
AMD746U	Q3AMD746U3-21	29-Jul-21	Uranium-235	0.237	pCi/Sample	3.47E-05	3.47E-17	7.10E-15	4.88E-03	U
AMD746U	Q3AMD746U3-21	29-Jul-21	**Uranium-238**	**1.17**	pCi/Sample	1.71E-04	1.71E-16	8.30E-15	2.06E-02	
						Sum of the Fractions of the Standard			6.54E-02	
	Quarter Air Flow	6832	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMDBCP	Q3AMDBCP3-21	29-Jul-21	Americium-241*	0	pCi/sample	0.00E+00	0.00E+00	1.90E-15	0.00E+00	U
AMDBCP	Q3AMDBCP3-21	29-Jul-21	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMDBCP	Q3AMDBCP3-21	29-Jul-21	Plutonium-238	0.0958	pCi/Sample	1.40E-05	1.40E-17	2.10E-15	6.68E-03	U
AMDBCP	Q3AMDBCP3-21	29-Jul-21	Plutonium-239/240	0.067	pCi/Sample	9.81E-06	9.81E-18	2.00E-15	4.90E-03	U
AMDBCP	Q3AMDBCP3-21	29-Jul-21	Technetium-99*	0	pCi/Sample	0.00E+00	0.00E+00	1.40E-13	0.00E+00	U
AMDBCP	Q3AMDBCP3-21	29-Jul-21	Thorium-234*	0	pCi/sample	0.00E+00	0.00E+00	2.20E-12	0.00E+00	U
AMDBCP	Q3AMDBCP3-21	29-Jul-21	Uranium-234	0.929	pCi/Sample	1.36E-04	1.36E-16	7.70E-15	1.77E-02	U
AMDBCP	Q3AMDBCP3-21	29-Jul-21	Uranium-235*	0	pCi/Sample	0.00E+00	0.00E+00	7.10E-15	0.00E+00	U
AMDBCP	Q3AMDBCP3-21	29-Jul-21	**Uranium-238**	**1.35**	pCi/Sample	1.98E-04	1.98E-16	8.30E-15	2.38E-02	
						Sum of the Fractions of the Standard			5.30E-02	
	Quarter Air Flow	6839	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMDNE	Q3AMDNE3-21	29-Jul-21	Americium-241*	0	pCi/sample	0.00E+00	0.00E+00	1.90E-15	0.00E+00	U
AMDNE	Q3AMDNE3-21	29-Jul-21	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMDNE	Q3AMDNE3-21	29-Jul-21	Plutonium-238	0.0864	pCi/Sample	1.26E-05	1.26E-17	2.10E-15	6.02E-03	U
AMDNE	Q3AMDNE3-21	29-Jul-21	Plutonium-239/240	0.458	pCi/Sample	6.70E-05	6.70E-17	2.00E-15	3.35E-02	U
AMDNE	Q3AMDNE3-21	29-Jul-21	Technetium-99	12.1	pCi/Sample	1.77E-03	1.77E-15	1.40E-13	1.26E-02	U
AMDNE	Q3AMDNE3-21	29-Jul-21	Thorium-234	13.7	pCi/sample	2.00E-03	2.00E-15	2.20E-12	9.11E-04	U
AMDNE	Q3AMDNE3-21	29-Jul-21	Uranium-234	1.07	pCi/Sample	1.56E-04	1.56E-16	7.70E-15	2.03E-02	U
AMDNE	Q3AMDNE3-21	29-Jul-21	Uranium-235	0.219	pCi/Sample	3.20E-05	3.20E-17	7.10E-15	4.51E-03	U
AMDNE	Q3AMDNE3-21	29-Jul-21	**Uranium-238**	**1.25**	pCi/Sample	1.83E-04	1.83E-16	8.30E-15	2.20E-02	
						Sum of the Fractions of the Standard			9.99E-02	

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T = Tracer recovery outside control limits (30-110%). Note: Data assessment determined that the data were usable as reported.

Table A.1. Sum of the Fractions Standard (Continued)

Station	Client Sample ID	Date Collected	Analysis	Result	Units	Concentration	Concentration	Standard	Fraction of Standard	Qualifier
3rd Quarter July through September										
	Quarter Air Flow	8045	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD002	Q4AMD0024-21	28-Oct-21	Americium-241	0.177	pCi/sample	2.20E-05	2.20E-17	1.90E-15	1.16E-02	U
AMD002	Q4AMD0024-21	28-Oct-21	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMD002	Q4AMD0024-21	28-Oct-21	Plutonium-238	0.0557	pCi/Sample	6.92E-06	6.92E-18	2.10E-15	3.30E-03	U
AMD002	Q4AMD0024-21	28-Oct-21	Plutonium-239/240*	0	pCi/Sample	0.00E+00	0.00E+00	2.00E-15	0.00E+00	U
AMD002	Q4AMD0024-21	28-Oct-21	Technetium-99*	0	pCi/Sample	0.00E+00	0.00E+00	1.40E-13	0.00E+00	U
AMD002	Q4AMD0024-21	28-Oct-21	Thorium-234*	0	pCi/sample	0.00E+00	0.00E+00	2.20E-12	0.00E+00	U
AMD002	Q4AMD0024-21	28-Oct-21	Uranium-234	0.865	pCi/Sample	1.08E-04	1.08E-16	7.70E-15	1.40E-02	U
AMD002	Q4AMD0024-21	28-Oct-21	Uranium-235*	0	pCi/Sample	0.00E+00	0.00E+00	7.10E-15	0.00E+00	U
AMD002	Q4AMD0024-21	28-Oct-21	Uranium-238	1.03	pCi/Sample	1.28E-04	1.28E-16	8.30E-15	1.54E-02	U
						Sum of the Fractions of the Standard			4.43E-02	
	Quarter Air Flow	8054	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD012	Q4AMD0124-21	28-Oct-21	Americium-241	0.193	pCi/sample	2.40E-05	2.40E-17	1.90E-15	1.26E-02	U
AMD012	Q4AMD0124-21	28-Oct-21	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMD012	Q4AMD0124-21	28-Oct-21	Plutonium-238*	0	pCi/Sample	0.00E+00	0.00E+00	2.10E-15	0.00E+00	U
AMD012	Q4AMD0124-21	28-Oct-21	Plutonium-239/240*	0	pCi/Sample	0.00E+00	0.00E+00	2.00E-15	0.00E+00	U
AMD012	Q4AMD0124-21	28-Oct-21	Technetium-99	1.48	pCi/Sample	1.84E-04	1.84E-16	1.40E-13	1.31E-03	U
AMD012	Q4AMD0124-21	28-Oct-21	Thorium-234*	0	pCi/sample	0.00E+00	0.00E+00	2.20E-12	0.00E+00	U
AMD012	Q4AMD0124-21	28-Oct-21	Uranium-234	0.599	pCi/Sample	7.44E-05	7.44E-17	7.70E-15	9.66E-03	U
AMD012	Q4AMD0124-21	28-Oct-21	Uranium-235	0.315	pCi/Sample	3.91E-05	3.91E-17	7.10E-15	5.51E-03	U
AMD012	Q4AMD0124-21	28-Oct-21	**Uranium-238**	**1.85**	pCi/Sample	2.30E-04	2.30E-16	8.30E-15	2.77E-02	
						Sum of the Fractions of the Standard			5.68E-02	
	Quarter Air Flow	7474	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD015	Q4AMD0154-21	28-Oct-21	Americium-241*	0	pCi/sample	0.00E+00	0.00E+00	1.90E-15	0.00E+00	U
AMD015	Q4AMD0154-21	28-Oct-21	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMD015	Q4AMD0154-21	28-Oct-21	Plutonium-238*	0	pCi/Sample	0.00E+00	0.00E+00	2.10E-15	0.00E+00	TU
AMD015	Q4AMD0154-21	28-Oct-21	Plutonium-239/240	0.433	pCi/Sample	5.79E-05	5.79E-17	2.00E-15	2.90E-02	TU
AMD015	Q4AMD0154-21	28-Oct-21	Technetium-99*	0	pCi/Sample	0.00E+00	0.00E+00	1.40E-13	0.00E+00	U
AMD015	Q4AMD0154-21	28-Oct-21	Thorium-234	6.9	pCi/sample	9.23E-04	9.23E-16	2.20E-12	4.20E-04	U
AMD015	Q4AMD0154-21	28-Oct-21	**Uranium-234**	**2.55**	pCi/Sample	3.41E-04	3.41E-16	7.70E-15	4.43E-02	
AMD015	Q4AMD0154-21	28-Oct-21	Uranium-235	0.265	pCi/Sample	3.55E-05	3.55E-17	7.10E-15	4.99E-03	U
AMD015	Q4AMD0154-21	28-Oct-21	Uranium-238	1.24	pCi/Sample	1.66E-04	1.66E-16	8.30E-15	2.00E-02	U
						Sum of the Fractions of the Standard			9.87E-02	

Bold = Detection above MDC
* = Negative result replaced with a zero for calculation
U = Value reported is < MDA and/or TPU
T = Tracer recovery outside control limits (30-110%). Note: Data assessment determined that the data were usable as reported.

Table A.1. Sum of the Fractions Standard (Continued)

Station	Client Sample ID	Date Collected	Analysis	Result	Units	Concentration	Concentration	Standard	Fraction of Standard	Qualifier
3rd Quarter July through September										
	Quarter Air Flow	5435	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD57	Q4AMD574-21	28-Oct-21	Americium-241*	0	pCi/sample	0.00E+00	0.00E+00	1.90E-15	0.00E+00	U
AMD57	Q4AMD574-21	28-Oct-21	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMD57	Q4AMD574-21	28-Oct-21	Plutonium-238*	0	pCi/Sample	0.00E+00	0.00E+00	2.10E-15	0.00E+00	U
AMD57	Q4AMD574-21	28-Oct-21	Plutonium-239/240	0.0721	pCi/Sample	1.33E-05	1.33E-17	2.00E-15	6.63E-03	U
AMD57	Q4AMD574-21	28-Oct-21	Technetium-99*	0	pCi/Sample	0.00E+00	0.00E+00	1.40E-13	0.00E+00	U
AMD57	Q4AMD574-21	28-Oct-21	Thorium-234*	0	pCi/sample	0.00E+00	0.00E+00	2.20E-12	0.00E+00	U
AMD57	Q4AMD574-21	28-Oct-21	Uranium-234	1.13	pCi/Sample	2.08E-04	2.08E-16	7.70E-15	2.70E-02	U
AMD57	Q4AMD574-21	28-Oct-21	Uranium-235*	0	pCi/Sample	0.00E+00	0.00E+00	7.10E-15	0.00E+00	U
AMD57	Q4AMD574-21	28-Oct-21	Uranium-238	0.846	pCi/Sample	1.56E-04	1.56E-16	8.30E-15	1.88E-02	U
						Sum of the Fractions of the Standard			5.24E-02	
	Quarter Air Flow	8047	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD612	Q4AMD6124-21	28-Oct-21	Americium-241	0.0892	pCi/sample	1.11E-05	1.11E-17	1.90E-15	5.83E-03	U
AMD612	Q4AMD6124-21	28-Oct-21	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMD612	Q4AMD6124-21	28-Oct-21	Plutonium-238*	0	pCi/Sample	0.00E+00	0.00E+00	2.10E-15	0.00E+00	U
AMD612	Q4AMD6124-21	28-Oct-21	Plutonium-239/240*	0	pCi/Sample	0.00E+00	0.00E+00	2.00E-15	0.00E+00	U
AMD612	Q4AMD6124-21	28-Oct-21	Technetium-99	12.9	pCi/Sample	1.60E-03	1.60E-15	1.40E-13	1.15E-02	U
AMD612	Q4AMD6124-21	28-Oct-21	Thorium-234	2.42	pCi/sample	3.01E-04	3.01E-16	2.20E-12	1.37E-04	U
AMD612	Q4AMD6124-21	28-Oct-21	Uranium-234	0.889	pCi/Sample	1.10E-04	1.10E-16	7.70E-15	1.43E-02	U
AMD612	Q4AMD6124-21	28-Oct-21	Uranium-235	0.192	pCi/Sample	2.39E-05	2.39E-17	7.10E-15	3.36E-03	U
AMD612	Q4AMD6124-21	28-Oct-21	Uranium-238	0.873	pCi/Sample	1.08E-04	1.08E-16	8.30E-15	1.31E-02	U
						Sum of the Fractions of the Standard			4.82E-02	
	Quarter Air Flow	8036	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD746S	Q4AMD746S4-21	28-Oct-21	Americium-241*	0	pCi/sample	0.00E+00	0.00E+00	1.90E-15	0.00E+00	U
AMD746S	Q4AMD746S4-21	28-Oct-21	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMD746S	Q4AMD746S4-21	28-Oct-21	Plutonium-238*	0	pCi/Sample	0.00E+00	0.00E+00	2.10E-15	0.00E+00	U
AMD746S	Q4AMD746S4-21	28-Oct-21	Plutonium-239/240*	0	pCi/Sample	0.00E+00	0.00E+00	2.00E-15	0.00E+00	U
AMD746S	Q4AMD746S4-21	28-Oct-21	Technetium-99*	0	pCi/Sample	0.00E+00	0.00E+00	1.40E-13	0.00E+00	U
AMD746S	Q4AMD746S4-21	28-Oct-21	Thorium-234	2.58	pCi/sample	3.21E-04	3.21E-16	2.20E-12	1.46E-04	U
AMD746S	Q4AMD746S4-21	28-Oct-21	Uranium-234	0.466	pCi/Sample	5.80E-05	5.80E-17	7.70E-15	7.53E-03	U
AMD746S	Q4AMD746S4-21	28-Oct-21	Uranium-235	0.215	pCi/Sample	2.68E-05	2.68E-17	7.10E-15	3.77E-03	U
AMD746S	Q4AMD746S4-21	28-Oct-21	**Uranium-238**	**2.1**	pCi/Sample	2.61E-04	2.61E-16	8.30E-15	3.15E-02	
						Sum of the Fractions of the Standard			4.29E-02	

Bold = Detection above MDC
* = Negative result replaced with a zero for calculation
U = Value reported is < MDA and/or TPU
T = Tracer recovery outside control limits (30-110%). Note: Data assessment determined that the data were usable as reported.

Table A.1. Sum of the Fractions Standard (Continued)

Station	Client Sample ID	Date Collected	Analysis	Result	Units	Concentration	Concentration	Standard	Fraction of Standard	Qualifier
3rd Quarter July through September										
	Quarter Air Flow	8044	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD746U	Q4AMD746U4-21	28-Oct-21	Americium-241*	0	pCi/sample	0.00E+00	0.00E+00	1.90E-15	0.00E+00	U
AMD746U	Q4AMD746U4-21	28-Oct-21	Neptunium-237	0.584	pCi/sample	7.26E-05	7.26E-17	1.20E-15	6.05E-02	U
AMD746U	Q4AMD746U4-21	28-Oct-21	Plutonium-238	0.369	pCi/Sample	4.59E-05	4.59E-17	2.10E-15	2.18E-02	U
AMD746U	Q4AMD746U4-21	28-Oct-21	Plutonium-239/240	0.314	pCi/Sample	3.90E-05	3.90E-17	2.00E-15	1.95E-02	U
AMD746U	Q4AMD746U4-21	28-Oct-21	Technetium-99*	0	pCi/Sample	0.00E+00	0.00E+00	1.40E-13	0.00E+00	U
AMD746U	Q4AMD746U4-21	28-Oct-21	Thorium-234	0.0995	pCi/sample	1.24E-05	1.24E-17	2.20E-12	5.62E-06	U
AMD746U	Q4AMD746U4-21	28-Oct-21	Uranium-234	0.612	pCi/Sample	7.61E-05	7.61E-17	7.70E-15	9.88E-03	U
AMD746U	Q4AMD746U4-21	28-Oct-21	Uranium-235*	0	pCi/Sample	0.00E+00	0.00E+00	7.10E-15	0.00E+00	U
AMD746U	Q4AMD746U4-21	28-Oct-21	Uranium-238	1.09	pCi/Sample	1.36E-04	1.36E-16	8.30E-15	1.63E-02	U
						Sum of the Fractions of the Standard			1.28E-01	
	Quarter Air Flow	7298	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMDBCP	Q4AMDBCP4-21	28-Oct-21	Americium-241*	0	pCi/sample	0.00E+00	0.00E+00	1.90E-15	0.00E+00	U
AMDBCP	Q4AMDBCP4-21	28-Oct-21	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMDBCP	Q4AMDBCP4-21	28-Oct-21	Plutonium-238*	0	pCi/Sample	0.00E+00	0.00E+00	2.10E-15	0.00E+00	U
AMDBCP	Q4AMDBCP4-21	28-Oct-21	Plutonium-239/240*	0	pCi/Sample	0.00E+00	0.00E+00	2.00E-15	0.00E+00	U
AMDBCP	Q4AMDBCP4-21	28-Oct-21	Technetium-99*	0	pCi/Sample	0.00E+00	0.00E+00	1.40E-13	0.00E+00	U
AMDBCP	Q4AMDBCP4-21	28-Oct-21	Thorium-234	7.17	pCi/sample	9.82E-04	9.82E-16	2.20E-12	4.47E-04	U
AMDBCP	Q4AMDBCP4-21	28-Oct-21	Uranium-234	0.937	pCi/Sample	1.28E-04	1.28E-16	7.70E-15	1.67E-02	U
AMDBCP	Q4AMDBCP4-21	28-Oct-21	Uranium-235*	0	pCi/Sample	0.00E+00	0.00E+00	7.10E-15	0.00E+00	U
AMDBCP	Q4AMDBCP4-21	28-Oct-21	Uranium-238	0.692	pCi/Sample	9.48E-05	9.48E-17	8.30E-15	1.14E-02	U
						Sum of the Fractions of the Standard			2.85E-02	
	Quarter Air Flow	8051	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMDNE	Q4AMDNE4-21	28-Oct-21	Americium-241*	0	pCi/sample	0.00E+00	0.00E+00	1.90E-15	0.00E+00	U
AMDNE	Q4AMDNE4-21	28-Oct-21	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMDNE	Q4AMDNE4-21	28-Oct-21	Plutonium-238	0.236	pCi/Sample	2.93E-05	2.93E-17	2.10E-15	1.40E-02	U
AMDNE	Q4AMDNE4-21	28-Oct-21	Plutonium-239/240	0.439	pCi/Sample	5.45E-05	5.45E-17	2.00E-15	2.73E-02	U
AMDNE	Q4AMDNE4-21	28-Oct-21	Technetium-99*	0	pCi/Sample	0.00E+00	0.00E+00	1.40E-13	0.00E+00	U
AMDNE	Q4AMDNE4-21	28-Oct-21	Thorium-234*	0	pCi/sample	0.00E+00	0.00E+00	2.20E-12	0.00E+00	U
AMDNE	Q4AMDNE4-21	28-Oct-21	Uranium-234	0.816	pCi/Sample	1.01E-04	1.01E-16	7.70E-15	1.32E-02	U
AMDNE	Q4AMDNE4-21	28-Oct-21	Uranium-235*	0	pCi/Sample	0.00E+00	0.00E+00	7.10E-15	0.00E+00	U
AMDNE	Q4AMDNE4-21	28-Oct-21	Uranium-238	0.322	pCi/Sample	4.00E-05	4.00E-17	8.30E-15	4.82E-03	U
						Sum of the Fractions of the Standard			5.92E-02	

Bold = Detection above MDC
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U = Value reported is < MDA and/or TPU
T = Tracer recovery outside control limits (30-110%). Note: Data assessment determined that the data were usable as reported.

Table A.1. Sum of the Fractions Standard (Continued)

Station	Client Sample ID	Date Collected	Analysis	Result	Units	Concentration	Concentration	Standard	Fraction of Standard	Qualifier
4th Quarter October through December										
	Quarterly Air Flow	7329	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD002	Q1AMD0021-22	16-Feb-22	Americium-241	0.106	pCi/sample	1.45E-05	1.45E-17	1.90E-15	7.61E-03	U
AMD002	Q1AMD0021-22	16-Feb-22	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMD002	Q1AMD0021-22	16-Feb-22	Plutonium-238	0.357	pCi/sample	4.87E-05	4.87E-17	2.10E-15	2.32E-02	U
AMD002	Q1AMD0021-22	16-Feb-22	Plutonium-239/240	0.0671	pCi/sample	9.16E-06	9.16E-18	2.00E-15	4.58E-03	U
AMD002	Q1AMD0021-22	16-Feb-22	Technetium-99	13.7	pCi/sample	1.87E-03	1.87E-15	1.40E-13	1.34E-02	U
AMD002	Q1AMD0021-22	16-Feb-22	Thorium-234*	0	pCi/sample	0.00E+00	0.00E+00	2.20E-12	0.00E+00	U
AMD002	Q1AMD0021-22	16-Feb-22	Uranium-234	0.766	pCi/sample	1.05E-04	1.05E-16	7.70E-15	1.36E-02	U
AMD002	Q1AMD0021-22	16-Feb-22	Uranium-235	0.125	pCi/sample	1.71E-05	1.71E-17	7.10E-15	2.40E-03	U
AMD002	Q1AMD0021-22	16-Feb-22	Uranium-238	0.736	pCi/sample	1.00E-04	1.00E-16	8.30E-15	1.21E-02	U
						Sum of the Fractions of the Standard			7.68E-02	
	Quarterly Air Flow	7334	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD012	Q1AMD0121-22	16-Feb-22	Americium-241	0.111	pCi/sample	1.51E-05	1.51E-17	1.90E-15	7.97E-03	U
AMD012	Q1AMD0121-22	16-Feb-22	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMD012	Q1AMD0121-22	16-Feb-22	Plutonium-238	0.184	pCi/sample	2.51E-05	2.51E-17	2.10E-15	1.19E-02	U
AMD012	Q1AMD0121-22	16-Feb-22	Plutonium-239/240	0.363	pCi/sample	4.95E-05	4.95E-17	2.00E-15	2.47E-02	U
AMD012	Q1AMD0121-22	16-Feb-22	Technetium-99	19.9	pCi/sample	2.71E-03	2.71E-15	1.40E-13	1.94E-02	U
AMD012	Q1AMD0121-22	16-Feb-22	Thorium-234	7.16	pCi/sample	9.76E-04	9.76E-16	2.20E-12	4.44E-04	U
AMD012	Q1AMD0121-22	16-Feb-22	**Uranium-234**	**2.43**	pCi/sample	3.31E-04	3.31E-16	7.70E-15	4.30E-02	
AMD012	Q1AMD0121-22	16-Feb-22	Uranium-235	0.11	pCi/sample	1.50E-05	1.50E-17	7.10E-15	2.11E-03	U
AMD012	Q1AMD0121-22	16-Feb-22	**Uranium-238**	**1.73**	pCi/sample	2.36E-04	2.36E-16	8.30E-15	2.84E-02	
						Sum of the Fractions of the Standard			1.38E-01	
	Quarterly Air Flow	7351	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD015	Q1AMD0151-22	16-Feb-22	Americium-241	0.694	pCi/sample	9.44E-05	9.44E-17	1.90E-15	4.97E-02	U
AMD015	Q1AMD0151-22	16-Feb-22	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMD015	Q1AMD0151-22	16-Feb-22	Plutonium-238	0.0241	pCi/sample	3.28E-06	3.28E-18	2.10E-15	1.56E-03	U
AMD015	Q1AMD0151-22	16-Feb-22	Plutonium-239/240*	0	pCi/sample	0.00E+00	0.00E+00	2.00E-15	0.00E+00	U
AMD015	Q1AMD0151-22	16-Feb-22	Technetium-99	13.5	pCi/sample	1.84E-03	1.84E-15	1.40E-13	1.31E-02	U
AMD015	Q1AMD0151-22	16-Feb-22	Thorium-234*	0	pCi/sample	0.00E+00	0.00E+00	2.20E-12	0.00E+00	U
AMD015	Q1AMD0151-22	16-Feb-22	**Uranium-234**	**1.83**	pCi/sample	2.49E-04	2.49E-16	7.70E-15	3.23E-02	
AMD015	Q1AMD0151-22	16-Feb-22	Uranium-235	0.0389	pCi/sample	5.29E-06	5.29E-18	7.10E-15	7.45E-04	U
AMD015	Q1AMD0151-22	16-Feb-22	Uranium-238	0.763	pCi/sample	1.04E-04	1.04E-16	8.30E-15	1.25E-02	U
						Sum of the Fractions of the Standard			1.10E-01	

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T = Tracer recovery outside control limits (30-110%). Note: Data assessment determined that the data were usable as reported.

Table A.1. Sum of the Fractions Standard (Continued)

Station	Client Sample ID	Date Collected	Analysis	Result	Units	Concentration	Concentration	Standard	Fraction of Standard	Qualifier
4th Quarter October through December										
	Quarterly Air Flow	7328	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD57	Q1AMD571-22	16-Feb-22	Americium-241	0.0962	pCi/sample	1.31E-05	1.31E-17	1.90E-15	6.91E-03	U
AMD57	Q1AMD571-22	16-Feb-22	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMD57	Q1AMD571-22	16-Feb-22	Plutonium-238*	0	pCi/sample	0.00E+00	0.00E+00	2.10E-15	0.00E+00	U
AMD57	Q1AMD571-22	16-Feb-22	Plutonium-239/240	0.0156	pCi/sample	2.13E-06	2.13E-18	2.00E-15	1.06E-03	U
AMD57	Q1AMD571-22	16-Feb-22	Technetium-99*	0	pCi/sample	0.00E+00	0.00E+00	1.40E-13	0.00E+00	U
AMD57	Q1AMD571-22	16-Feb-22	Thorium-234*	0	pCi/sample	0.00E+00	0.00E+00	2.20E-12	0.00E+00	U
AMD57	Q1AMD571-22	16-Feb-22	**Uranium-234**	**13.7**	pCi/sample	1.87E-03	1.87E-15	7.70E-15	2.43E-01	
AMD57	Q1AMD571-22	16-Feb-22	Uranium-235	0.406	pCi/sample	5.54E-05	5.54E-17	7.10E-15	7.80E-03	U
AMD57	Q1AMD571-22	16-Feb-22	**Uranium-238**	**1.48**	pCi/sample	2.02E-04	2.02E-16	8.30E-15	2.43E-02	
						Sum of the Fractions of the Standard			2.83E-01	
	Quarterly Air Flow	7503	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD612	Q1AMD6121-22	16-Feb-22	Americium-241	0.113	pCi/sample	1.51E-05	1.51E-17	1.90E-15	7.93E-03	U
AMD612	Q1AMD6121-22	16-Feb-22	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	TU
AMD612	Q1AMD6121-22	16-Feb-22	Plutonium-238*	0	pCi/sample	0.00E+00	0.00E+00	2.10E-15	0.00E+00	U
AMD612	Q1AMD6121-22	16-Feb-22	Plutonium-239/240*	0	pCi/sample	0.00E+00	0.00E+00	2.00E-15	0.00E+00	U
AMD612	Q1AMD6121-22	16-Feb-22	Technetium-99*	0	pCi/sample	0.00E+00	0.00E+00	1.40E-13	0.00E+00	U
AMD612	Q1AMD6121-22	16-Feb-22	Thorium-234*	0	pCi/sample	0.00E+00	0.00E+00	2.20E-12	0.00E+00	U
AMD612	Q1AMD6121-22	16-Feb-22	Uranium-234	1.37	pCi/sample	1.83E-04	1.83E-16	7.70E-15	2.37E-02	U
AMD612	Q1AMD6121-22	16-Feb-22	Uranium-235	0.426	pCi/sample	5.68E-05	5.68E-17	7.10E-15	8.00E-03	U
AMD612	Q1AMD6121-22	16-Feb-22	**Uranium-238**	**2.46**	pCi/sample	3.28E-04	3.28E-16	8.30E-15	3.95E-02	
						Sum of the Fractions of the Standard			7.91E-02	
	Quarter Air Flow	5577	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD746S	Q1AMD746S1-22	16-Feb-22	Americium-241	0.0542	pCi/sample	9.72E-06	9.72E-18	1.90E-15	5.11E-03	U
AMD746S	Q1AMD746S1-22	16-Feb-22	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMD746S	Q1AMD746S1-22	16-Feb-22	Plutonium-238	0.0591	pCi/sample	1.06E-05	1.06E-17	2.10E-15	5.05E-03	U
AMD746S	Q1AMD746S1-22	16-Feb-22	Plutonium-239/240*	0	pCi/sample	0.00E+00	0.00E+00	2.00E-15	0.00E+00	U
AMD746S	Q1AMD746S1-22	16-Feb-22	Technetium-99	21.1	pCi/sample	3.78E-03	3.78E-15	1.40E-13	2.70E-02	U
AMD746S	Q1AMD746S1-22	16-Feb-22	Thorium-234*	0	pCi/sample	0.00E+00	0.00E+00	2.20E-12	0.00E+00	U
AMD746S	Q1AMD746S1-22	16-Feb-22	Uranium-234	0.929	pCi/sample	1.67E-04	1.67E-16	7.70E-15	2.16E-02	U
AMD746S	Q1AMD746S1-22	16-Feb-22	Uranium-235*	0	pCi/sample	0.00E+00	0.00E+00	7.10E-15	0.00E+00	U
AMD746S	Q1AMD746S1-22	16-Feb-22	**Uranium-238**	**1.36**	pCi/sample	2.44E-04	2.44E-16	8.30E-15	2.94E-02	
						Sum of the Fractions of the Standard			8.82E-02	

Bold = Detection above MDC
* = Negative result replaced with a zero for calculation
U = Value reported is < MDA and/or TPU
T = Tracer recovery outside control limits (30-110%). Note: Data assessment determined that the data were usable as reported.

Table A.1. Sum of the Fractions Standard (Continued)

Station	Client Sample ID	Date Collected	Analysis	Result	Units	Concentration	Concentration	Standard	Fraction of Standard	Qualifier
4th Quarter October through December										
	Quarterly Air Flow	7330	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMD746U	Q1AMD746U1-22	16-Feb-22	Americium-241*	0	pCi/sample	0.00E+00	0.00E+00	1.90E-15	0.00E+00	U
AMD746U	Q1AMD746U1-22	16-Feb-22	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMD746U	Q1AMD746U1-22	16-Feb-22	Plutonium-238	0.0806	pCi/sample	1.10E-05	1.10E-17	2.10E-15	5.24E-03	U
AMD746U	Q1AMD746U1-22	16-Feb-22	Plutonium-239/240	0.129	pCi/sample	1.76E-05	1.76E-17	2.00E-15	8.80E-03	U
AMD746U	Q1AMD746U1-22	16-Feb-22	Technetium-99	16.4	pCi/sample	2.24E-03	2.24E-15	1.40E-13	1.60E-02	U
AMD746U	Q1AMD746U1-22	16-Feb-22	Thorium-234*	0	pCi/sample	0.00E+00	0.00E+00	2.20E-12	0.00E+00	U
AMD746U	Q1AMD746U1-22	16-Feb-22	**Uranium-234**	**1.94**	pCi/sample	2.65E-04	2.65E-16	7.70E-15	3.44E-02	
AMD746U	Q1AMD746U1-22	16-Feb-22	Uranium-235*	0	pCi/sample	0.00E+00	0.00E+00	7.10E-15	0.00E+00	U
AMD746U	Q1AMD746U1-22	16-Feb-22	**Uranium-238**	**0.884**	pCi/sample	1.21E-04	1.21E-16	8.30E-15	1.45E-02	
						Sum of the Fractions of the Standard			7.89E-02	
	Quarterly Air Flow	6822	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMDBCP	Q1AMDBCP1-22	16-Feb-22	Americium-241	0.189	pCi/sample	2.77E-05	2.77E-17	1.90E-15	1.46E-02	U
AMDBCP	Q1AMDBCP1-22	16-Feb-22	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMDBCP	Q1AMDBCP1-22	16-Feb-22	Plutonium-238	0.151	pCi/sample	2.21E-05	2.21E-17	2.10E-15	1.05E-02	U
AMDBCP	Q1AMDBCP1-22	16-Feb-22	Plutonium-239/240	0.0047	pCi/sample	6.89E-07	6.89E-19	2.00E-15	3.44E-04	U
AMDBCP	Q1AMDBCP1-22	16-Feb-22	Technetium-99	16.5	pCi/sample	2.42E-03	2.42E-15	1.40E-13	1.73E-02	U
AMDBCP	Q1AMDBCP1-22	16-Feb-22	Thorium-234	26.3	pCi/sample	3.86E-03	3.86E-15	2.20E-12	1.75E-03	U
AMDBCP	Q1AMDBCP1-22	16-Feb-22	**Uranium-234**	**1.37**	pCi/sample	2.01E-04	2.01E-16	7.70E-15	2.61E-02	
AMDBCP	Q1AMDBCP1-22	16-Feb-22	Uranium-235*	0	pCi/sample	0.00E+00	0.00E+00	7.10E-15	0.00E+00	U
AMDBCP	Q1AMDBCP1-22	16-Feb-22	**Uranium-238**	**1.11**	pCi/sample	1.63E-04	1.63E-16	8.30E-15	1.96E-02	
						Sum of the Fractions of the Standard			9.02E-02	
	Quarterly Air Flow	7318	m3			pCi/m3	Ci/m3	Ci/m3	fraction	
AMDNE	Q1AMDNE1-22	16-Feb-22	Americium-241	0.089	pCi/sample	1.22E-05	1.22E-17	1.90E-15	6.40E-03	U
AMDNE	Q1AMDNE1-22	16-Feb-22	Neptunium-237*	0	pCi/sample	0.00E+00	0.00E+00	1.20E-15	0.00E+00	U
AMDNE	Q1AMDNE1-22	16-Feb-22	Plutonium-238	0.0609	pCi/sample	8.32E-06	8.32E-18	2.10E-15	3.96E-03	U
AMDNE	Q1AMDNE1-22	16-Feb-22	Plutonium-239/240	0.0374	pCi/sample	5.11E-06	5.11E-18	2.00E-15	2.56E-03	U
AMDNE	Q1AMDNE1-22	16-Feb-22	Technetium-99	9.44	pCi/sample	1.29E-03	1.29E-15	1.40E-13	9.21E-03	U
AMDNE	Q1AMDNE1-22	16-Feb-22	Thorium-234*	0	pCi/sample	0.00E+00	0.00E+00	2.20E-12	0.00E+00	U
AMDNE	Q1AMDNE1-22	16-Feb-22	**Uranium-234**	**1.37**	pCi/sample	1.87E-04	1.87E-16	7.70E-15	2.43E-02	
AMDNE	Q1AMDNE1-22	16-Feb-22	Uranium-235	0	pCi/sample	0.00E+00	0.00E+00	7.10E-15	0.00E+00	U
AMDNE	Q1AMDNE1-22	16-Feb-22	**Uranium-238**	**1.8**	pCi/sample	2.46E-04	2.46E-16	8.30E-15	2.96E-02	
						Sum of the Fractions of the Standard			7.61E-02	

Bold = Detection above MDC
* = Negative result replaced with a zero for calculation
U = Value reported is < MDA and/or TPU
T = Tracer recovery outside control limits (30-110%). Note: Data assessment determined that the data were usable as reported.

Table A.2. Ambient Air Data

STA_NAME	D_COLLECTED	CHEMICAL_NAME	ANA_METHOD	RESULTS	UNITS	RSLTQUAL	DETECT_LIMIT	RAD_ERR	TPU
QC	25-Mar-21	Neptunium-237	ASTM-1475-00M	0.249	pCi/sample	U	2.12	1.08	1.08
QC	25-Mar-21	Cesium-137	HASL 300, 4.5.2.3	5.65	pCi/sample		2.61	2.64	2.69
QC	25-Mar-21	Thorium-234	HASL 300, 4.5.2.3	4.57	pCi/sample	U	20.1	16.5	16.7
QC	25-Mar-21	Uranium-238	HASL 300, 4.5.2.3	4.57	pCi/sample	U	20.1	16.5	16.7
QC	25-Mar-21	Americium-241	HASL 300, Am-05-RC M	0.0941	pCi/sample	U	2.28	1.07	1.07
QC	25-Mar-21	Plutonium-238	HASL 300, Pu-11-RC M	-0.269	pCi/Sample	U	1.24	0.38	0.38
QC	25-Mar-21	Plutonium-239/240	HASL 300, Pu-11-RC M	0.0448	pCi/Sample	U	0.978	0.468	0.469
QC	25-Mar-21	Technetium-99	HASL 300, Tc-02-RC M	44.9	pCi/Sample	U	64.2	38.5	38.8
QC	25-Mar-21	Uranium-234	HASL 300, U-02-RC M	1.37	pCi/Sample	U	1.95	1.34	1.36
QC	25-Mar-21	Uranium-235	HASL 300, U-02-RC M	-0.109	pCi/Sample	U	1.25	0.48	0.481
QC	25-Mar-21	Uranium-238	HASL 300, U-02-RC M	1.24	pCi/Sample	U	1.28	1.1	1.11
AMD002	25-Mar-21	Neptunium-237	ASTM-1475-00M	0.298	pCi/sample	U	3.11	1.62	1.62
AMD002	25-Mar-21	Cobalt-60	HASL 300, 4.5.2.3	5.06	pCi/sample		3.3	3.35	3.38
AMD002	25-Mar-21	Thorium-234	HASL 300, 4.5.2.3	2.94	pCi/sample	U	19.8	10.6	10.7
AMD002	25-Mar-21	Uranium-238	HASL 300, 4.5.2.3	2.94	pCi/sample	U	19.8	10.6	10.7
AMD002	25-Mar-21	Americium-241	HASL 300, Am-05-RC M	1.12	pCi/sample	U	2.62	1.69	1.69
AMD002	25-Mar-21	Plutonium-238	HASL 300, Pu-11-RC M	0.418	pCi/Sample	U	0.727	0.603	0.606
AMD002	25-Mar-21	Plutonium-239/240	HASL 300, Pu-11-RC M	0.00606	pCi/Sample	U	0.998	0.449	0.45
AMD002	25-Mar-21	Technetium-99	HASL 300, Tc-02-RC M	24.5	pCi/Sample	U	96.2	56.6	56.6
AMD002	25-Mar-21	Uranium-234	HASL 300, U-02-RC M	1.34	pCi/Sample	U	1.56	1.13	1.15
AMD002	25-Mar-21	Uranium-235	HASL 300, U-02-RC M	0.135	pCi/Sample	U	0.854	0.508	0.508
AMD002	25-Mar-21	Uranium-238	HASL 300, U-02-RC M	1.63	pCi/Sample		0.88	1.03	1.05
AMD012	25-Mar-21	Neptunium-237	ASTM-1475-00M	-0.617	pCi/sample	U	3.5	1.08	1.09
AMD012	25-Mar-21	Thorium-234	HASL 300, 4.5.2.3	-43.9	pCi/sample	U	48.1	40.6	46.5
AMD012	25-Mar-21	Uranium-238	HASL 300, 4.5.2.3	-43.9	pCi/sample	U	48.1	40.6	46.5
AMD012	25-Mar-21	Americium-241	HASL 300, Am-05-RC M	0.0128	pCi/sample	U	2.11	0.95	0.951
AMD012	25-Mar-21	Plutonium-238	HASL 300, Pu-11-RC M	0.0497	pCi/Sample	U	1.09	0.52	0.521
AMD012	25-Mar-21	Plutonium-239/240	HASL 300, Pu-11-RC M	-0.163	pCi/Sample	U	1.43	0.552	0.553
AMD012	25-Mar-21	Technetium-99	HASL 300, Tc-02-RC M	45.4	pCi/Sample	U	69.9	41.8	42.1
AMD012	25-Mar-21	Uranium-234	HASL 300, U-02-RC M	0.12	pCi/Sample	U	1.64	0.817	0.818
AMD012	25-Mar-21	Uranium-235	HASL 300, U-02-RC M	0.0507	pCi/Sample	U	1.11	0.53	0.531
AMD012	25-Mar-21	Uranium-238	HASL 300, U-02-RC M	1.2	pCi/Sample	U	1.49	1.07	1.09
AMD015	25-Mar-21	Neptunium-237	ASTM-1475-00M	0.208	pCi/sample	U	3.47	1.66	1.66
AMD015	25-Mar-21	Thorium-234	HASL 300, 4.5.2.3	9.87	pCi/sample	U	19.6	21.9	22.4
AMD015	25-Mar-21	Uranium-238	HASL 300, 4.5.2.3	9.87	pCi/sample	U	19.6	21.9	22.4
AMD015	25-Mar-21	Americium-241	HASL 300, Am-05-RC M	0.451	pCi/sample	U	1.64	1.03	1.04
AMD015	25-Mar-21	Plutonium-238	HASL 300, Pu-11-RC M	0.162	pCi/Sample	U	0.774	0.447	0.447
AMD015	25-Mar-21	Plutonium-239/240	HASL 300, Pu-11-RC M	-0.0557	pCi/Sample	U	0.937	0.385	0.385
AMD015	25-Mar-21	Technetium-99	HASL 300, Tc-02-RC M	55.1	pCi/Sample	U	70.6	42.5	42.8
AMD015	25-Mar-21	Uranium-234	HASL 300, U-02-RC M	0.206	pCi/Sample	U	1.63	0.839	0.84
AMD015	25-Mar-21	Uranium-235	HASL 300, U-02-RC M	-0.0899	pCi/Sample	U	1.04	0.398	0.399
AMD015	25-Mar-21	Uranium-238	HASL 300, U-02-RC M	1.18	pCi/Sample		1.06	0.955	0.972
AMD57	25-Mar-21	Neptunium-237	ASTM-1475-00M	-0.682	pCi/sample	U	4.4	1.58	1.58

QC - Quality control sample (blank)
U = Value reported is < MDA and/or TPU
T = Tracer recovery outside control limits (30-110%)
X = See laboratory report

Table A.2. Ambient Air Data (Continued)

STA_NAME	D_COLLECTED	CHEMICAL_NAME	ANA_METHOD	RESULTS	UNITS	RSLTQUAL	DETECT_LIMIT	RAD_ERR	TPU
AMD57	25-Mar-21	Thorium-234	HASL 300, 4.5.2.3	17.2	pCi/sample	U	33.9	36.8	37.8
AMD57	25-Mar-21	Uranium-238	HASL 300, 4.5.2.3	17.2	pCi/sample	U	33.9	36.8	37.8
AMD57	25-Mar-21	Americium-241	HASL 300, Am-05-RC M	-0.406	pCi/sample	TU	2.37	0.77	0.771
AMD57	25-Mar-21	Plutonium-238	HASL 300, Pu-11-RC M	-0.116	pCi/Sample	U	0.985	0.351	0.352
AMD57	25-Mar-21	Plutonium-239/240	HASL 300, Pu-11-RC M	0.0838	pCi/Sample	U	0.892	0.466	0.466
AMD57	25-Mar-21	Technetium-99	HASL 300, Tc-02-RC M	70.4	pCi/Sample	U	75.7	45.9	46.4
AMD57	25-Mar-21	Uranium-234	HASL 300, U-02-RC M	0.878	pCi/Sample	U	1.85	1.15	1.16
AMD57	25-Mar-21	Uranium-235	HASL 300, U-02-RC M	0.418	pCi/Sample	U	0.628	0.717	0.72
AMD57	25-Mar-21	Uranium-238	HASL 300, U-02-RC M	1.49	pCi/Sample		1.19	1.12	1.14
AMD612	25-Mar-21	Neptunium-237	ASTM-1475-00M	1.92	pCi/sample	U	3.27	2.74	2.75
AMD612	25-Mar-21	Thorium-234	HASL 300, 4.5.2.3	-29.7	pCi/sample	U	28.4	29.1	32.8
AMD612	25-Mar-21	Uranium-238	HASL 300, 4.5.2.3	-29.7	pCi/sample	U	28.4	29.1	32.8
AMD612	25-Mar-21	Americium-241	HASL 300, Am-05-RC M	-0.148	pCi/sample	U	1.7	0.653	0.654
AMD612	25-Mar-21	Plutonium-238	HASL 300, Pu-11-RC M	-0.238	pCi/Sample	U	1.39	0.451	0.452
AMD612	25-Mar-21	Plutonium-239/240	HASL 300, Pu-11-RC M	0.404	pCi/Sample	U	1.3	0.804	0.806
AMD612	25-Mar-21	Technetium-99	HASL 300, Tc-02-RC M	61.5	pCi/Sample	U	67.6	40.9	41.4
AMD612	25-Mar-21	Uranium-234	HASL 300, U-02-RC M	0.328	pCi/Sample	U	1.41	0.778	0.78
AMD612	25-Mar-21	Uranium-235	HASL 300, U-02-RC M	-0.112	pCi/Sample	U	1.27	0.505	0.505
AMD612	25-Mar-21	Uranium-238	HASL 300, U-02-RC M	1.21	pCi/Sample	U	1.22	0.965	0.981
AMD746S	25-Mar-21	Neptunium-237	ASTM-1475-00M	-0.964	pCi/sample	U	3.77	1.04	1.04
AMD746S	25-Mar-21	Cesium-137	HASL 300, 4.5.2.3	2.9	pCi/sample		2.43	2.19	2.2
AMD746S	25-Mar-21	Thorium-234	HASL 300, 4.5.2.3	9.1	pCi/sample	U	21.2	11.2	12.1
AMD746S	25-Mar-21	Uranium-238	HASL 300, 4.5.2.3	9.1	pCi/sample	U	21.2	11.2	12.1
AMD746S	25-Mar-21	Americium-241	HASL 300, Am-05-RC M	-0.501	pCi/sample	U	2.31	0.706	0.707
AMD746S	25-Mar-21	Plutonium-238	HASL 300, Pu-11-RC M	0	pCi/Sample	U	0.46	0.309	0.31
AMD746S	25-Mar-21	Plutonium-239/240	HASL 300, Pu-11-RC M	0.0797	pCi/Sample	U	0.849	0.443	0.443
AMD746S	25-Mar-21	Technetium-99	HASL 300, Tc-02-RC M	61.2	pCi/Sample	U	64.8	39.3	39.8
AMD746S	25-Mar-21	Uranium-234	HASL 300, U-02-RC M	0.76	pCi/Sample	U	1.75	1.06	1.07
AMD746S	25-Mar-21	Uranium-235	HASL 300, U-02-RC M	-0.0421	pCi/Sample	U	0.842	0.363	0.364
AMD746S	25-Mar-21	Uranium-238	HASL 300, U-02-RC M	0.585	pCi/Sample	U	1.31	0.823	0.828
AMD746U	25-Mar-21	Neptunium-237	ASTM-1475-00M	-0.72	pCi/sample	U	3.07	0.869	0.87
AMD746U	25-Mar-21	Thorium-234	HASL 300, 4.5.2.3	11.4	pCi/sample	U	33.4	56.9	57
AMD746U	25-Mar-21	Uranium-238	HASL 300, 4.5.2.3	11.4	pCi/sample	U	33.4	56.9	57
AMD746U	25-Mar-21	Americium-241	HASL 300, Am-05-RC M	0.331	pCi/sample	U	2.09	1.13	1.13
AMD746U	25-Mar-21	Plutonium-238	HASL 300, Pu-11-RC M	-0.0407	pCi/Sample	U	0.813	0.351	0.352
AMD746U	25-Mar-21	Plutonium-239/240	HASL 300, Pu-11-RC M	0.427	pCi/Sample	U	0.938	0.678	0.681
AMD746U	25-Mar-21	Technetium-99	HASL 300, Tc-02-RC M	27.9	pCi/Sample	U	77.9	46	46.1
AMD746U	25-Mar-21	Uranium-234	HASL 300, U-02-RC M	1.52	pCi/Sample		1.36	1.08	1.1
AMD746U	25-Mar-21	Uranium-235	HASL 300, U-02-RC M	-0.0773	pCi/Sample	U	0.892	0.342	0.343
AMD746U	25-Mar-21	Uranium-238	HASL 300, U-02-RC M	1.65	pCi/Sample		1.27	1.08	1.1
AMDBCP	25-Mar-21	Neptunium-237	ASTM-1475-00M	-0.764	pCi/sample	U	3.6	1.05	1.05
AMDBCP	25-Mar-21	Thorium-234	HASL 300, 4.5.2.3	-47.7	pCi/sample	U	50	40.9	47.7
AMDBCP	25-Mar-21	Uranium-238	HASL 300, 4.5.2.3	-47.7	pCi/sample	U	50	40.9	47.7

QC - Quality control sample (blank)
U = Value reported is < MDA and/or TPU
T = Tracer recovery outside control limits (30-110%)
X = See laboratory report

Table A.2. Ambient Air Data (Continued)

STA_NAME	D_COLLECTED	CHEMICAL_NAME	ANA_METHOD	RESULTS	UNITS	RSLTQUAL	DETECT_LIMIT	RAD_ERR	TPU
AMDBCP	25-Mar-21	Americium-241	HASL 300, Am-05-RC M	-0.355	pCi/sample	U	2.07	0.672	0.673
AMDBCP	25-Mar-21	Plutonium-238	HASL 300, Pu-11-RC M	0.0789	pCi/Sample	U	0.841	0.439	0.439
AMDBCP	25-Mar-21	Plutonium-239/240	HASL 300, Pu-11-RC M	-0.0728	pCi/Sample	U	0.84	0.322	0.323
AMDBCP	25-Mar-21	Technetium-99	HASL 300, Tc-02-RC M	36.9	pCi/Sample	U	75.5	44.9	45
AMDBCP	25-Mar-21	Uranium-234	HASL 300, U-02-RC M	1.39	pCi/Sample	U	1.77	1.25	1.27
AMDBCP	25-Mar-21	Uranium-235	HASL 300, U-02-RC M	0.155	pCi/Sample	U	0.977	0.581	0.582
AMDBCP	25-Mar-21	Uranium-238	HASL 300, U-02-RC M	1.04	pCi/Sample		1.01	0.927	0.941
AMDNE	25-Mar-21	Neptunium-237	ASTM-1475-00M	-0.469	pCi/sample	U	2.49	0.754	0.755
AMDNE	25-Mar-21	Thorium-234	HASL 300, 4.5.2.3	12.5	pCi/sample	U	33.2	32.3	32.9
AMDNE	25-Mar-21	Uranium-238	HASL 300, 4.5.2.3	12.5	pCi/sample	U	33.2	32.3	32.9
AMDNE	25-Mar-21	Americium-241	HASL 300, Am-05-RC M	0.419	pCi/sample	U	1.53	0.962	0.963
AMDNE	25-Mar-21	Plutonium-238	HASL 300, Pu-11-RC M	-0.0778	pCi/Sample	U	0.897	0.344	0.345
AMDNE	25-Mar-21	Plutonium-239/240	HASL 300, Pu-11-RC M	-0.0324	pCi/Sample	U	1.14	0.486	0.487
AMDNE	25-Mar-21	Technetium-99	HASL 300, Tc-02-RC M	43.2	pCi/Sample	U	72.8	43.5	43.7
AMDNE	25-Mar-21	Uranium-234	HASL 300, U-02-RC M	-0.0195	pCi/Sample	U	1.7	0.793	0.793
AMDNE	25-Mar-21	Uranium-235	HASL 300, U-02-RC M	0.0526	pCi/Sample	U	1.15	0.549	0.55
AMDNE	25-Mar-21	Uranium-238	HASL 300, U-02-RC M	2.3	pCi/Sample		1.55	1.36	1.41
QC	29-Jul-21	Neptunium-237	ASTM-1475-00M	-0.512	pCi/sample	U	2.18	0.619	0.62
QC	29-Jul-21	Thorium-234	HASL 300, 4.5.2.3	10.6	pCi/sample	U	29	32.7	33.2
QC	29-Jul-21	Uranium-238	HASL 300, 4.5.2.3	10.6	pCi/sample	U	29	32.7	33.2
QC	29-Jul-21	Americium-241	HASL 300, Am-05-RC M	-0.501	pCi/sample	U	4.59	1.63	1.64
QC	29-Jul-21	Plutonium-238	HASL 300, Pu-11-RC M	0.168	pCi/Sample	U	0.8	0.461	0.462
QC	29-Jul-21	Plutonium-239/240	HASL 300, Pu-11-RC M	0.167	pCi/Sample	U	0.799	0.461	0.461
QC	29-Jul-21	Technetium-99	HASL 300, Tc-02-RC M	-23.5	pCi/Sample	U	76.1	41.7	41.7
QC	29-Jul-21	Uranium-234	HASL 300, U-02-RC M	0.875	pCi/Sample	U	1.15	0.894	0.907
QC	29-Jul-21	Uranium-235	HASL 300, U-02-RC M	-0.0943	pCi/Sample	U	1.09	0.417	0.418
QC	29-Jul-21	Uranium-238	HASL 300, U-02-RC M	1.51	pCi/Sample		0.88	1.04	1.07
AMD002	29-Jul-21	Neptunium-237	ASTM-1475-00M	-0.166	pCi/sample	U	2.18	0.861	0.862
AMD002	29-Jul-21	Thorium-234	HASL 300, 4.5.2.3	-15.5	pCi/sample	U	33.8	32.1	33.1
AMD002	29-Jul-21	Uranium-238	HASL 300, 4.5.2.3	-15.5	pCi/sample	U	33.8	32.1	33.1
AMD002	29-Jul-21	Americium-241	HASL 300, Am-05-RC M	-1.19	pCi/sample	U	6.43	1.96	1.96
AMD002	29-Jul-21	Plutonium-238	HASL 300, Pu-11-RC M	0.0149	pCi/Sample	U	1.15	0.532	0.532
AMD002	29-Jul-21	Plutonium-239/240	HASL 300, Pu-11-RC M	-0.0498	pCi/Sample	U	1.08	0.465	0.465
AMD002	29-Jul-21	Technetium-99	HASL 300, Tc-02-RC M	-30.6	pCi/Sample	U	83.6	45.6	45.6
AMD002	29-Jul-21	Uranium-234	HASL 300, U-02-RC M	1.18	pCi/Sample		1.17	0.916	0.934
AMD002	29-Jul-21	Uranium-235	HASL 300, U-02-RC M	0.0785	pCi/Sample	U	0.836	0.436	0.437
AMD002	29-Jul-21	Uranium-238	HASL 300, U-02-RC M	1.17	pCi/Sample		0.904	0.843	0.859
AMD012	29-Jul-21	Neptunium-237	ASTM-1475-00M	0.63	pCi/sample	U	2.17	1.31	1.31
AMD012	29-Jul-21	Thorium-234	HASL 300, 4.5.2.3	14.7	pCi/sample	U	18.9	18.5	18.8
AMD012	29-Jul-21	Uranium-238	HASL 300, 4.5.2.3	14.7	pCi/sample	U	18.9	18.5	18.8
AMD012	29-Jul-21	Americium-241	HASL 300, Am-05-RC M	-0.0468	pCi/sample	U	5.5	2.4	2.4
AMD012	29-Jul-21	Plutonium-238	HASL 300, Pu-11-RC M	-0.168	pCi/Sample	U	1.21	0.455	0.455
AMD012	29-Jul-21	Plutonium-239/240	HASL 300, Pu-11-RC M	0.329	pCi/Sample	U	0.882	0.582	0.584

QC - Quality control sample (blank)
U = Value reported is < MDA and/or TPU
T = Tracer recovery outside control limits (30-110%)
X = See laboratory report

Table A.2. Ambient Air Data (Continued)

STA_NAME	D_COLLECTED	CHEMICAL_NAME	ANA_METHOD	RESULTS	UNITS	RSLTQUAL	DETECT_LIMIT	RAD_ERR	TPU
AMD012	29-Jul-21	Technetium-99	HASL 300, Tc-02-RC M	-3.04	pCi/Sample	U	85.6	48.3	48.3
AMD012	29-Jul-21	Uranium-234	HASL 300, U-02-RC M	1.38	pCi/Sample		1.05	0.969	0.994
AMD012	29-Jul-21	Uranium-235	HASL 300, U-02-RC M	0	pCi/Sample	U	0.503	0.338	0.339
AMD012	29-Jul-21	Uranium-238	HASL 300, U-02-RC M	1.36	pCi/Sample		0.894	0.932	0.953
AMD015	29-Jul-21	Neptunium-237	ASTM-1475-00M	-0.228	pCi/sample	U	2.99	1.18	1.18
AMD015	29-Jul-21	Thorium-234	HASL 300, 4.5.2.3	2.3	pCi/sample	U	19.7	10.6	10.7
AMD015	29-Jul-21	Uranium-238	HASL 300, 4.5.2.3	2.3	pCi/sample	U	19.7	10.6	10.7
AMD015	29-Jul-21	Americium-241	HASL 300, Am-05-RC M	0.0595	pCi/sample	U	6.22	2.79	2.79
AMD015	29-Jul-21	Plutonium-238	HASL 300, Pu-11-RC M	-0.0188	pCi/Sample	U	0.983	0.434	0.435
AMD015	29-Jul-21	Plutonium-239/240	HASL 300, Pu-11-RC M	-0.0749	pCi/Sample	U	1.05	0.441	0.441
AMD015	29-Jul-21	Technetium-99	HASL 300, Tc-02-RC M	-4.1	pCi/Sample	U	81.1	45.7	45.7
AMD015	29-Jul-21	Uranium-234	HASL 300, U-02-RC M	1.11	pCi/Sample	U	1.26	0.997	1.02
AMD015	29-Jul-21	Uranium-235	HASL 300, U-02-RC M	0.0547	pCi/Sample	U	1.19	0.572	0.573
AMD015	29-Jul-21	Uranium-238	HASL 300, U-02-RC M	1.8	pCi/Sample		1.42	1.23	1.26
AMD57	29-Jul-21	Neptunium-237	ASTM-1475-00M	0.575	pCi/sample	U	2.93	1.6	1.61
AMD57	29-Jul-21	Thorium-234	HASL 300, 4.5.2.3	-2.63	pCi/sample	U	28.9	27	27.1
AMD57	29-Jul-21	Uranium-238	HASL 300, 4.5.2.3	-2.63	pCi/sample	U	28.9	27	27.1
AMD57	29-Jul-21	Americium-241	HASL 300, Am-05-RC M	0.0552	pCi/sample	U	5.83	2.61	2.62
AMD57	29-Jul-21	Plutonium-238	HASL 300, Pu-11-RC M	0.146	pCi/Sample	U	0.928	0.501	0.501
AMD57	29-Jul-21	Plutonium-239/240	HASL 300, Pu-11-RC M	-0.129	pCi/Sample	U	1.14	0.438	0.438
AMD57	29-Jul-21	Technetium-99	HASL 300, Tc-02-RC M	-8.99	pCi/Sample	U	81.5	45.6	45.6
AMD57	29-Jul-21	Uranium-234	HASL 300, U-02-RC M	1.29	pCi/Sample		1.21	0.978	0.999
AMD57	29-Jul-21	Uranium-235	HASL 300, U-02-RC M	0.323	pCi/Sample	U	0.485	0.554	0.556
AMD57	29-Jul-21	Uranium-238	HASL 300, U-02-RC M	0.826	pCi/Sample	U	1.01	0.788	0.797
AMD612	29-Jul-21	Neptunium-237	ASTM-1475-00M	0.0132	pCi/sample	U	2.11	0.942	0.943
AMD612	29-Jul-21	Thorium-234	HASL 300, 4.5.2.3	12.6	pCi/sample	U	28.9	35.7	36.3
AMD612	29-Jul-21	Uranium-238	HASL 300, 4.5.2.3	12.6	pCi/sample	U	28.9	35.7	36.3
AMD612	29-Jul-21	Americium-241	HASL 300, Am-05-RC M	1.27	pCi/sample	U	4.47	2.85	2.86
AMD612	29-Jul-21	Plutonium-238	HASL 300, Pu-11-RC M	-0.103	pCi/Sample	U	0.708	0.239	0.239
AMD612	29-Jul-21	Plutonium-239/240	HASL 300, Pu-11-RC M	-0.0987	pCi/Sample	U	0.866	0.334	0.334
AMD612	29-Jul-21	Technetium-99	HASL 300, Tc-02-RC M	-28.9	pCi/Sample	U	80.4	43.9	43.9
AMD612	29-Jul-21	Uranium-234	HASL 300, U-02-RC M	1.87	pCi/Sample		1.05	1.02	1.05
AMD612	29-Jul-21	Uranium-235	HASL 300, U-02-RC M	-0.0331	pCi/Sample	U	0.662	0.286	0.286
AMD612	29-Jul-21	Uranium-238	HASL 300, U-02-RC M	1.15	pCi/Sample		0.865	0.803	0.818
AMD746S	29-Jul-21	Neptunium-237	ASTM-1475-00M	-0.524	pCi/sample	U	2.98	0.921	0.923
AMD746S	29-Jul-21	Thorium-234	HASL 300, 4.5.2.3	10.5	pCi/sample	U	22.8	35.1	35.2
AMD746S	29-Jul-21	Uranium-238	HASL 300, 4.5.2.3	10.5	pCi/sample	U	22.8	35.1	35.2
AMD746S	29-Jul-21	Americium-241	HASL 300, Am-05-RC M	0.519	pCi/sample	U	4.07	2.26	2.26
AMD746S	29-Jul-21	Plutonium-238	HASL 300, Pu-11-RC M	-0.0581	pCi/Sample	U	0.671	0.257	0.258
AMD746S	29-Jul-21	Plutonium-239/240	HASL 300, Pu-11-RC M	0.155	pCi/Sample	U	0.739	0.426	0.427
AMD746S	29-Jul-21	Technetium-99	HASL 300, Tc-02-RC M	14.4	pCi/Sample	U	79.7	46	46
AMD746S	29-Jul-21	Uranium-234	HASL 300, U-02-RC M	1.92	pCi/Sample		1.11	1.1	1.14
AMD746S	29-Jul-21	Uranium-235	HASL 300, U-02-RC M	0.162	pCi/Sample	U	0.487	0.456	0.457

QC - Quality control sample (blank)
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Table A.2. Ambient Air Data (Continued)

STA_NAME	D_COLLECTED	CHEMICAL_NAME	ANA_METHOD	RESULTS	UNITS	RSLTQUAL	DETECT_LIMIT	RAD_ERR	TPU
AMD746S	29-Jul-21	Uranium-238	HASL 300, U-02-RC M	1.09	pCi/Sample		0.802	0.823	0.838
AMD746U	29-Jul-21	Neptunium-237	ASTM-1475-00M	-0.501	pCi/sample	U	2.24	0.644	0.645
AMD746U	29-Jul-21	Thorium-234	HASL 300, 4.5.2.3	1.65	pCi/sample	U	18.8	10.1	10.2
AMD746U	29-Jul-21	Uranium-238	HASL 300, 4.5.2.3	1.65	pCi/sample	U	18.8	10.1	10.2
AMD746U	29-Jul-21	Americium-241	HASL 300, Am-05-RC M	-0.435	pCi/sample	U	4.73	1.76	1.76
AMD746U	29-Jul-21	Plutonium-238	HASL 300, Pu-11-RC M	0.244	pCi/Sample	U	1.11	0.614	0.615
AMD746U	29-Jul-21	Plutonium-239/240	HASL 300, Pu-11-RC M	-0.0583	pCi/Sample	U	0.981	0.403	0.403
AMD746U	29-Jul-21	Technetium-99	HASL 300, Tc-02-RC M	-16.7	pCi/Sample	U	77.3	42.9	42.9
AMD746U	29-Jul-21	Uranium-234	HASL 300, U-02-RC M	1.2	pCi/Sample	U	1.37	1.04	1.06
AMD746U	29-Jul-21	Uranium-235	HASL 300, U-02-RC M	0.237	pCi/Sample	U	1.13	0.652	0.653
AMD746U	29-Jul-21	Uranium-238	HASL 300, U-02-RC M	1.17	pCi/Sample		1.05	0.944	0.96
AMDBCP	29-Jul-21	Neptunium-237	ASTM-1475-00M	-0.672	pCi/sample	U	2.63	0.724	0.726
AMDBCP	29-Jul-21	Thorium-234	HASL 300, 4.5.2.3	-9.24	pCi/sample	U	18.9	11.5	12.4
AMDBCP	29-Jul-21	Uranium-238	HASL 300, 4.5.2.3	-9.24	pCi/sample	U	18.9	11.5	12.4
AMDBCP	29-Jul-21	Americium-241	HASL 300, Am-05-RC M	-0.949	pCi/sample	U	7.58	2.59	2.61
AMDBCP	29-Jul-21	Plutonium-238	HASL 300, Pu-11-RC M	0.0958	pCi/Sample	U	0.84	0.429	0.43
AMDBCP	29-Jul-21	Plutonium-239/240	HASL 300, Pu-11-RC M	0.067	pCi/Sample	U	0.885	0.433	0.433
AMDBCP	29-Jul-21	Technetium-99	HASL 300, Tc-02-RC M	-11.4	pCi/Sample	U	93.7	52.4	52.4
AMDBCP	29-Jul-21	Uranium-234	HASL 300, U-02-RC M	0.929	pCi/Sample	U	1.4	1.05	1.07
AMDBCP	29-Jul-21	Uranium-235	HASL 300, U-02-RC M	-0.0591	pCi/Sample	U	1.18	0.51	0.512
AMDBCP	29-Jul-21	Uranium-238	HASL 300, U-02-RC M	1.35	pCi/Sample		0.956	1.11	1.14
AMDNE	29-Jul-21	Neptunium-237	ASTM-1475-00M	-0.595	pCi/sample	U	2.32	0.641	0.642
AMDNE	29-Jul-21	Thorium-234	HASL 300, 4.5.2.3	13.7	pCi/sample	U	19.7	10.2	12.3
AMDNE	29-Jul-21	Uranium-238	HASL 300, 4.5.2.3	13.7	pCi/sample	U	19.7	10.2	12.3
AMDNE	29-Jul-21	Americium-241	HASL 300, Am-05-RC M	-0.208	pCi/sample	U	3.92	1.65	1.66
AMDNE	29-Jul-21	Plutonium-238	HASL 300, Pu-11-RC M	0.0864	pCi/Sample	U	0.921	0.48	0.481
AMDNE	29-Jul-21	Plutonium-239/240	HASL 300, Pu-11-RC M	0.458	pCi/Sample	U	0.796	0.66	0.664
AMDNE	29-Jul-21	Technetium-99	HASL 300, Tc-02-RC M	12.1	pCi/Sample	U	82.3	47.3	47.3
AMDNE	29-Jul-21	Uranium-234	HASL 300, U-02-RC M	1.07	pCi/Sample	U	1.11	0.988	1.01
AMDNE	29-Jul-21	Uranium-235	HASL 300, U-02-RC M	0.219	pCi/Sample	U	0.656	0.615	0.616
AMDNE	29-Jul-21	Uranium-238	HASL 300, U-02-RC M	1.25	pCi/Sample		1.17	1.06	1.08
QC	28-Oct-21	Neptunium-237	ASTM-1475-00M	-0.466	pCi/sample	U	2.32	0.794	0.795
QC	28-Oct-21	Thorium-234	HASL 300, 4.5.2.3	24.9	pCi/sample	U	29.1	59.6	59.8
QC	28-Oct-21	Uranium-238	HASL 300, 4.5.2.3	24.9	pCi/sample	U	29.1	59.6	59.8
QC	28-Oct-21	Americium-241	HASL 300, Am-05-RC M	-0.0482	pCi/sample	U	1.64	0.693	0.695
QC	28-Oct-21	Plutonium-238	HASL 300, Pu-11-RC M	0.156	pCi/Sample	U	0.963	0.574	0.575
QC	28-Oct-21	Plutonium-239/240	HASL 300, Pu-11-RC M	0.335	pCi/Sample	U	1.04	0.701	0.703
QC	28-Oct-21	Technetium-99	HASL 300, Tc-02-RC M	-20.8	pCi/Sample	U	35.4	19.5	19.5
QC	28-Oct-21	Uranium-234	HASL 300, U-02-RC M	1.59	pCi/Sample	U	2.46	1.77	1.8
QC	28-Oct-21	Uranium-235	HASL 300, U-02-RC M	-0.0467	pCi/Sample	U	1.64	0.774	0.778
QC	28-Oct-21	Uranium-238	HASL 300, U-02-RC M	0.403	pCi/Sample	U	1.87	1.09	1.09
AMD002	28-Oct-21	Neptunium-237	ASTM-1475-00M	-0.73	pCi/sample	U	2.32	0.602	0.602
AMD002	28-Oct-21	Thorium-234	HASL 300, 4.5.2.3	-13	pCi/sample	U	45.6	41.6	42.1

QC - Quality control sample (blank)
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Table A.2. Ambient Air Data (Continued)

STA_NAME	D_COLLECTED	CHEMICAL_NAME	ANA_METHOD	RESULTS	UNITS	RSLTQUAL	DETECT_LIMIT	RAD_ERR	TPU
AMD002	28-Oct-21	Uranium-238	HASL 300, 4.5.2.3	-13	pCi/sample	U	45.6	41.6	42.1
AMD002	28-Oct-21	Americium-241	HASL 300, Am-05-RC M	0.177	pCi/sample	U	1.41	0.779	0.78
AMD002	28-Oct-21	Plutonium-238	HASL 300, Pu-11-RC M	0.0557	pCi/Sample	U	1.18	0.565	0.566
AMD002	28-Oct-21	Plutonium-239/240	HASL 300, Pu-11-RC M	-0.167	pCi/Sample	U	1.23	0.411	0.413
AMD002	28-Oct-21	Technetium-99	HASL 300, Tc-02-RC M	-13.7	pCi/Sample	U	67.5	38.2	38.2
AMD002	28-Oct-21	Uranium-234	HASL 300, U-02-RC M	0.865	pCi/Sample	U	1.93	1.23	1.25
AMD002	28-Oct-21	Uranium-235	HASL 300, U-02-RC M	-0.0348	pCi/Sample	U	1.22	0.576	0.578
AMD002	28-Oct-21	Uranium-238	HASL 300, U-02-RC M	1.03	pCi/Sample	U	1.33	1.13	1.15
AMD012	28-Oct-21	Neptunium-237	ASTM-1475-00M	-0.221	pCi/sample	U	2.12	0.807	0.808
AMD012	28-Oct-21	Thorium-234	HASL 300, 4.5.2.3	-8	pCi/sample	U	21.7	21.4	21.8
AMD012	28-Oct-21	Uranium-238	HASL 300, 4.5.2.3	-8	pCi/sample	U	21.7	21.4	21.8
AMD012	28-Oct-21	Americium-241	HASL 300, Am-05-RC M	0.193	pCi/sample	U	1.19	0.711	0.713
AMD012	28-Oct-21	Plutonium-238	HASL 300, Pu-11-RC M	-0.219	pCi/Sample	U	1.34	0.425	0.426
AMD012	28-Oct-21	Plutonium-239/240	HASL 300, Pu-11-RC M	-0.17	pCi/Sample	U	1.25	0.419	0.42
AMD012	28-Oct-21	Technetium-99	HASL 300, Tc-02-RC M	1.48	pCi/Sample	U	35.1	20.2	20.2
AMD012	28-Oct-21	Uranium-234	HASL 300, U-02-RC M	0.599	pCi/Sample	U	2.27	1.33	1.34
AMD012	28-Oct-21	Uranium-235	HASL 300, U-02-RC M	0.315	pCi/Sample	U	1.95	1.16	1.16
AMD012	28-Oct-21	Uranium-238	HASL 300, U-02-RC M	1.85	pCi/Sample		1.81	1.75	1.79
AMD015	28-Oct-21	Neptunium-237	ASTM-1475-00M	-0.407	pCi/sample	U	2.44	0.865	0.866
AMD015	28-Oct-21	Thorium-234	HASL 300, 4.5.2.3	6.9	pCi/sample	U	21.3	11.7	12.2
AMD015	28-Oct-21	Uranium-238	HASL 300, 4.5.2.3	6.9	pCi/sample	U	21.3	11.7	12.2
AMD015	28-Oct-21	Americium-241	HASL 300, Am-05-RC M	-0.166	pCi/sample	U	2.17	0.86	0.862
AMD015	28-Oct-21	Plutonium-238	HASL 300, Pu-11-RC M	-0.13	pCi/Sample	TU	1.08	0.371	0.372
AMD015	28-Oct-21	Plutonium-239/240	HASL 300, Pu-11-RC M	0.433	pCi/Sample	TU	1.03	0.715	0.718
AMD015	28-Oct-21	Technetium-99	HASL 300, Tc-02-RC M	-5.8	pCi/Sample	U	59.1	33.7	33.7
AMD015	28-Oct-21	Uranium-234	HASL 300, U-02-RC M	2.55	pCi/Sample		2.22	1.93	2
AMD015	28-Oct-21	Uranium-235	HASL 300, U-02-RC M	0.265	pCi/Sample	U	1.64	0.979	0.981
AMD015	28-Oct-21	Uranium-238	HASL 300, U-02-RC M	1.24	pCi/Sample	U	1.61	1.37	1.39
AMD57	28-Oct-21	Neptunium-237	ASTM-1475-00M	-0.147	pCi/sample	U	1.93	0.764	0.765
AMD57	28-Oct-21	Thorium-234	HASL 300, 4.5.2.3	-4.68	pCi/sample	U	20	20.2	20.3
AMD57	28-Oct-21	Uranium-238	HASL 300, 4.5.2.3	-4.68	pCi/sample	U	20	20.2	20.3
AMD57	28-Oct-21	Americium-241	HASL 300, Am-05-RC M	-0.132	pCi/sample	U	1.49	0.559	0.561
AMD57	28-Oct-21	Plutonium-238	HASL 300, Pu-11-RC M	-0.0928	pCi/Sample	U	1.31	0.52	0.522
AMD57	28-Oct-21	Plutonium-239/240	HASL 300, Pu-11-RC M	0.0721	pCi/Sample	U	1.53	0.732	0.733
AMD57	28-Oct-21	Technetium-99	HASL 300, Tc-02-RC M	-18	pCi/Sample	U	59.4	33.4	33.4
AMD57	28-Oct-21	Uranium-234	HASL 300, U-02-RC M	1.13	pCi/Sample	U	1.53	1.21	1.23
AMD57	28-Oct-21	Uranium-235	HASL 300, U-02-RC M	-0.0345	pCi/Sample	U	1.21	0.571	0.573
AMD57	28-Oct-21	Uranium-238	HASL 300, U-02-RC M	0.846	pCi/Sample	U	1.18	1.02	1.04
AMD612	28-Oct-21	Neptunium-237	ASTM-1475-00M	-0.219	pCi/sample	U	1.61	0.539	0.54
AMD612	28-Oct-21	Thorium-234	HASL 300, 4.5.2.3	2.42	pCi/sample	U	25.9	49	49
AMD612	28-Oct-21	Uranium-238	HASL 300, 4.5.2.3	2.42	pCi/sample	U	25.9	49	49
AMD612	28-Oct-21	Americium-241	HASL 300, Am-05-RC M	0.0892	pCi/sample	U	1.9	0.905	0.907
AMD612	28-Oct-21	Plutonium-238	HASL 300, Pu-11-RC M	-0.0924	pCi/Sample	U	1.31	0.517	0.52

QC - Quality control sample (blank)
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Table A.2. Ambient Air Data (Continued)

STA_NAME	D_COLLECTED	CHEMICAL_NAME	ANA_METHOD	RESULTS	UNITS	RSLTQUAL	DETECT_LIMIT	RAD_ERR	TPU
AMD612	28-Oct-21	Plutonium-239/240	HASL 300, Pu-11-RC M	-0.0615	pCi/Sample	U	1.21	0.513	0.516
AMD612	28-Oct-21	Technetium-99	HASL 300, Tc-02-RC M	12.9	pCi/Sample	U	51.6	30.1	30.2
AMD612	28-Oct-21	Uranium-234	HASL 300, U-02-RC M	0.889	pCi/Sample	U	1.75	1.15	1.16
AMD612	28-Oct-21	Uranium-235	HASL 300, U-02-RC M	0.192	pCi/Sample	U	1.19	0.706	0.707
AMD612	28-Oct-21	Uranium-238	HASL 300, U-02-RC M	0.873	pCi/Sample	U	1.21	0.987	0.998
AMD746S	28-Oct-21	Neptunium-237	ASTM-1475-00M	-0.0286	pCi/sample	U	2.36	1.03	1.03
AMD746S	28-Oct-21	Thorium-234	HASL 300, 4.5.2.3	2.58	pCi/sample	U	21.8	31.9	32
AMD746S	28-Oct-21	Uranium-238	HASL 300, 4.5.2.3	2.58	pCi/sample	U	21.8	31.9	32
AMD746S	28-Oct-21	Americium-241	HASL 300, Am-05-RC M	-0.0685	pCi/sample	U	1.34	0.571	0.574
AMD746S	28-Oct-21	Plutonium-238	HASL 300, Pu-11-RC M	-0.164	pCi/Sample	U	1.35	0.468	0.469
AMD746S	28-Oct-21	Plutonium-239/240	HASL 300, Pu-11-RC M	-0.164	pCi/Sample	U	1.35	0.467	0.469
AMD746S	28-Oct-21	Technetium-99	HASL 300, Tc-02-RC M	-3.32	pCi/Sample	U	56.2	32.1	32.1
AMD746S	28-Oct-21	Uranium-234	HASL 300, U-02-RC M	0.466	pCi/Sample	U	1.79	1.02	1.03
AMD746S	28-Oct-21	Uranium-235	HASL 300, U-02-RC M	0.215	pCi/Sample	U	1.33	0.794	0.796
AMD746S	28-Oct-21	Uranium-238	HASL 300, U-02-RC M	2.1	pCi/Sample		1.42	1.5	1.54
AMD746U	28-Oct-21	Neptunium-237	ASTM-1475-00M	0.584	pCi/sample	U	1.52	1.02	1.02
AMD746U	28-Oct-21	Thorium-234	HASL 300, 4.5.2.3	0.0995	pCi/sample	U	26.1	50.1	50.1
AMD746U	28-Oct-21	Uranium-238	HASL 300, 4.5.2.3	0.0995	pCi/sample	U	26.1	50.1	50.1
AMD746U	28-Oct-21	Americium-241	HASL 300, Am-05-RC M	-0.0985	pCi/sample	U	1.39	0.552	0.554
AMD746U	28-Oct-21	Plutonium-238	HASL 300, Pu-11-RC M	0.369	pCi/Sample	U	1.14	0.771	0.773
AMD746U	28-Oct-21	Plutonium-239/240	HASL 300, Pu-11-RC M	0.314	pCi/Sample	U	1.28	0.773	0.775
AMD746U	28-Oct-21	Technetium-99	HASL 300, Tc-02-RC M	-20.6	pCi/Sample	U	66.3	37.2	37.2
AMD746U	28-Oct-21	Uranium-234	HASL 300, U-02-RC M	0.612	pCi/Sample	U	1.94	1.17	1.17
AMD746U	28-Oct-21	Uranium-235	HASL 300, U-02-RC M	-0.0777	pCi/Sample	U	1.52	0.648	0.651
AMD746U	28-Oct-21	Uranium-238	HASL 300, U-02-RC M	1.09	pCi/Sample	U	1.62	1.27	1.28
AMDBCP	28-Oct-21	Neptunium-237	ASTM-1475-00M	-0.326	pCi/sample	U	2.11	0.756	0.757
AMDBCP	28-Oct-21	Thorium-234	HASL 300, 4.5.2.3	7.17	pCi/sample	U	20.4	33.1	33.2
AMDBCP	28-Oct-21	Uranium-238	HASL 300, 4.5.2.3	7.17	pCi/sample	U	20.4	33.1	33.2
AMDBCP	28-Oct-21	Americium-241	HASL 300, Am-05-RC M	-0.21	pCi/sample	U	1.28	0.407	0.408
AMDBCP	28-Oct-21	Plutonium-238	HASL 300, Pu-11-RC M	-0.0533	pCi/Sample	U	1.05	0.445	0.446
AMDBCP	28-Oct-21	Plutonium-239/240	HASL 300, Pu-11-RC M	-0.346	pCi/Sample	U	1.63	0.477	0.478
AMDBCP	28-Oct-21	Technetium-99	HASL 300, Tc-02-RC M	-24.2	pCi/Sample	U	51.1	28.3	28.3
AMDBCP	28-Oct-21	Uranium-234	HASL 300, U-02-RC M	0.937	pCi/Sample	U	1.96	1.31	1.33
AMDBCP	28-Oct-21	Uranium-235	HASL 300, U-02-RC M	-0.0401	pCi/Sample	U	1.41	0.664	0.667
AMDBCP	28-Oct-21	Uranium-238	HASL 300, U-02-RC M	0.692	pCi/Sample	U	1.94	1.21	1.21
AMDNE	28-Oct-21	Neptunium-237	ASTM-1475-00M	-0.468	pCi/sample	U	2.09	0.602	0.603
AMDNE	28-Oct-21	Thorium-234	HASL 300, 4.5.2.3	-7.36	pCi/sample	U	22.1	21.7	22
AMDNE	28-Oct-21	Uranium-238	HASL 300, 4.5.2.3	-7.36	pCi/sample	U	22.1	21.7	22
AMDNE	28-Oct-21	Americium-241	HASL 300, Am-05-RC M	-0.0544	pCi/sample	U	1.07	0.454	0.456
AMDNE	28-Oct-21	Plutonium-238	HASL 300, Pu-11-RC M	0.236	pCi/Sample	U	1.13	0.748	0.749
AMDNE	28-Oct-21	Plutonium-239/240	HASL 300, Pu-11-RC M	0.439	pCi/Sample	U	1.36	0.917	0.92
AMDNE	28-Oct-21	Technetium-99	HASL 300, Tc-02-RC M	-18.4	pCi/Sample	U	60.3	33.9	33.9
AMDNE	28-Oct-21	Uranium-234	HASL 300, U-02-RC M	0.816	pCi/Sample	U	1.81	1.23	1.24

QC - Quality control sample (blank)
U = Value reported is < MDA and/or TPU
T = Tracer recovery outside control limits (30-110%)
X = See laboratory report

Table A.2. Ambient Air Data (Continued)

STA_NAME	D_COLLECTED	CHEMICAL_NAME	ANA_METHOD	RESULTS	UNITS	RSLTQUAL	DETECT_LIMIT	RAD_ERR	TPU
AMDNE	28-Oct-21	Uranium-235	HASL 300, U-02-RC M	-0.124	pCi/Sample	U	1.75	0.692	0.695
AMDNE	28-Oct-21	Uranium-238	HASL 300, U-02-RC M	0.322	pCi/Sample	U	1.72	0.961	0.962
QC	16-Feb-22	Neptunium-237	ASTM-1475-00M	-0.25	pCi/sample	U	1.67	0.543	0.544
QC	16-Feb-22	Thorium-234	HASL 300, 4.5.2.3	5.21	pCi/sample	U	59.1	55.1	55.2
QC	16-Feb-22	Uranium-238	HASL 300, 4.5.2.3	5.21	pCi/sample	U	59.1	55.1	55.2
QC	16-Feb-22	Americium-241	HASL 300, Am-05-RC M	-0.0522	pCi/sample	U	1.04	0.45	0.452
QC	16-Feb-22	Plutonium-238	HASL 300, Pu-11-RC M	-0.0239	pCi/Sample	U	0.838	0.359	0.359
QC	16-Feb-22	Plutonium-239/240	HASL 300, Pu-11-RC M	0.215	pCi/Sample	U	0.837	0.488	0.489
QC	16-Feb-22	Technetium-99	HASL 300, Tc-02-RC M	-5.74	pCi/Sample	U	48.9	27.5	27.5
QC	16-Feb-22	Uranium-234	HASL 300, U-02-RC M	2.09	pCi/Sample		0.866	1.01	1.06
QC	16-Feb-22	Uranium-235	HASL 300, U-02-RC M	-0.0651	pCi/Sample	U	0.751	0.288	0.288
QC	16-Feb-22	Uranium-238	HASL 300, U-02-RC M	1.05	pCi/Sample		0.811	0.757	0.771
AMD002	16-Feb-22	Neptunium-237	ASTM-1475-00M	-0.215	pCi/sample	U	1.43	0.466	0.466
AMD002	16-Feb-22	Thorium-234	HASL 300, 4.5.2.3	-31.5	pCi/sample	U	48.7	38.1	41.3
AMD002	16-Feb-22	Uranium-238	HASL 300, 4.5.2.3	-31.5	pCi/sample	U	48.7	38.1	41.3
AMD002	16-Feb-22	Americium-241	HASL 300, Am-05-RC M	0.106	pCi/sample	U	0.317	0.297	0.298
AMD002	16-Feb-22	Plutonium-238	HASL 300, Pu-11-RC M	0.357	pCi/Sample	U	0.62	0.514	0.516
AMD002	16-Feb-22	Plutonium-239/240	HASL 300, Pu-11-RC M	0.0671	pCi/Sample	U	0.715	0.373	0.373
AMD002	16-Feb-22	Technetium-99	HASL 300, Tc-02-RC M	13.7	pCi/Sample	U	46.3	27	27.1
AMD002	16-Feb-22	Uranium-234	HASL 300, U-02-RC M	0.766	pCi/Sample	U	1.39	0.9	0.909
AMD002	16-Feb-22	Uranium-235	HASL 300, U-02-RC M	0.125	pCi/Sample	U	0.79	0.47	0.47
AMD002	16-Feb-22	Uranium-238	HASL 300, U-02-RC M	0.736	pCi/Sample	U	0.738	0.699	0.708
AMD012	16-Feb-22	Neptunium-237	ASTM-1475-00M	-0.367	pCi/sample	U	1.64	0.472	0.472
AMD012	16-Feb-22	Thorium-234	HASL 300, 4.5.2.3	7.16	pCi/sample	U	21.1	11.6	12.1
AMD012	16-Feb-22	Uranium-238	HASL 300, 4.5.2.3	7.16	pCi/sample	U	21.1	11.6	12.1
AMD012	16-Feb-22	Americium-241	HASL 300, Am-05-RC M	0.111	pCi/sample	U	0.976	0.499	0.499
AMD012	16-Feb-22	Plutonium-238	HASL 300, Pu-11-RC M	0.184	pCi/Sample	U	0.717	0.418	0.418
AMD012	16-Feb-22	Plutonium-239/240	HASL 300, Pu-11-RC M	0.363	pCi/Sample	U	0.755	0.506	0.509
AMD012	16-Feb-22	Technetium-99	HASL 300, Tc-02-RC M	19.9	pCi/Sample	U	81.1	47.2	47.2
AMD012	16-Feb-22	Uranium-234	HASL 300, U-02-RC M	2.43	pCi/Sample		1.55	1.45	1.51
AMD012	16-Feb-22	Uranium-235	HASL 300, U-02-RC M	0.11	pCi/Sample	U	1.17	0.613	0.614
AMD012	16-Feb-22	Uranium-238	HASL 300, U-02-RC M	1.73	pCi/Sample		1.39	1.24	1.27
AMD015	16-Feb-22	Neptunium-237	ASTM-1475-00M	-0.333	pCi/sample	U	1.42	0.402	0.402
AMD015	16-Feb-22	Thorium-234	HASL 300, 4.5.2.3	-16.6	pCi/sample	U	28.5	28	29.2
AMD015	16-Feb-22	Uranium-238	HASL 300, 4.5.2.3	-16.6	pCi/sample	U	28.5	28	29.2
AMD015	16-Feb-22	Americium-241	HASL 300, Am-05-RC M	0.694	pCi/sample	U	0.85	0.647	0.653
AMD015	16-Feb-22	Plutonium-238	HASL 300, Pu-11-RC M	0.0241	pCi/Sample	U	1.85	0.859	0.859
AMD015	16-Feb-22	Plutonium-239/240	HASL 300, Pu-11-RC M	-0.225	pCi/Sample	U	1.9	0.768	0.768
AMD015	16-Feb-22	Technetium-99	HASL 300, Tc-02-RC M	13.5	pCi/Sample	U	83.4	48.1	48.2
AMD015	16-Feb-22	Uranium-234	HASL 300, U-02-RC M	1.83	pCi/Sample		1.1	1.02	1.06
AMD015	16-Feb-22	Uranium-235	HASL 300, U-02-RC M	0.0389	pCi/Sample	U	0.848	0.406	0.407
AMD015	16-Feb-22	Uranium-238	HASL 300, U-02-RC M	0.763	pCi/Sample	U	0.787	0.673	0.681
AMD57	16-Feb-22	Neptunium-237	ASTM-1475-00M	-0.32	pCi/sample	U	1.81	0.562	0.563

QC - Quality control sample (blank)
U = Value reported is < MDA and/or TPU
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X = See laboratory report

Table A.2. Ambient Air Data (Continued)

STA_NAME	D_COLLECTED	CHEMICAL_NAME	ANA_METHOD	RESULTS	UNITS	RSLTQUAL	DETECT_LIMIT	RAD_ERR	TPU
AMD57	16-Feb-22	Thorium-234	HASL 300, 4.5.2.3	-7.54	pCi/sample	U	34.2	33.7	33.9
AMD57	16-Feb-22	Uranium-238	HASL 300, 4.5.2.3	-7.54	pCi/sample	U	34.2	33.7	33.9
AMD57	16-Feb-22	Americium-241	HASL 300, Am-05-RC M	0.0962	pCi/sample	U	0.843	0.431	0.431
AMD57	16-Feb-22	Plutonium-238	HASL 300, Pu-11-RC M	-0.0574	pCi/Sample	U	0.964	0.396	0.397
AMD57	16-Feb-22	Plutonium-239/240	HASL 300, Pu-11-RC M	0.0156	pCi/Sample	U	1.2	0.556	0.556
AMD57	16-Feb-22	Technetium-99	HASL 300, Tc-02-RC M	-6.75	pCi/Sample	U	63.2	35.6	35.6
AMD57	16-Feb-22	Uranium-234	HASL 300, U-02-RC M	13.7	pCi/Sample		1.41	2.7	3.39
AMD57	16-Feb-22	Uranium-235	HASL 300, U-02-RC M	0.406	pCi/Sample	U	0.892	0.645	0.648
AMD57	16-Feb-22	Uranium-238	HASL 300, U-02-RC M	1.48	pCi/Sample		1.01	0.972	0.996
AMD612	16-Feb-22	Neptunium-237	ASTM-1475-00M	-0.743	pCi/sample	TU	4.96	1.61	1.62
AMD612	16-Feb-22	Thorium-234	HASL 300, 4.5.2.3	-15	pCi/sample	U	33.1	28.8	29.8
AMD612	16-Feb-22	Uranium-238	HASL 300, 4.5.2.3	-15	pCi/sample	U	33.1	28.8	29.8
AMD612	16-Feb-22	Americium-241	HASL 300, Am-05-RC M	0.113	pCi/sample	U	0.716	0.386	0.386
AMD612	16-Feb-22	Plutonium-238	HASL 300, Pu-11-RC M	-0.112	pCi/Sample	U	0.767	0.259	0.26
AMD612	16-Feb-22	Plutonium-239/240	HASL 300, Pu-11-RC M	-0.135	pCi/Sample	U	0.975	0.366	0.366
AMD612	16-Feb-22	Technetium-99	HASL 300, Tc-02-RC M	-4.52	pCi/Sample	U	57.5	32.5	32.5
AMD612	16-Feb-22	Uranium-234	HASL 300, U-02-RC M	1.37	pCi/Sample	U	1.76	1.26	1.28
AMD612	16-Feb-22	Uranium-235	HASL 300, U-02-RC M	0.426	pCi/Sample	U	0.639	0.73	0.733
AMD612	16-Feb-22	Uranium-238	HASL 300, U-02-RC M	2.46	pCi/Sample		1.05	1.36	1.42
AMD746S	16-Feb-22	Neptunium-237	ASTM-1475-00M	-0.238	pCi/sample	U	1.18	0.353	0.353
AMD746S	16-Feb-22	Thorium-234	HASL 300, 4.5.2.3	-21.9	pCi/sample	U	59.9	47.4	48.7
AMD746S	16-Feb-22	Uranium-238	HASL 300, 4.5.2.3	-21.9	pCi/sample	U	59.9	47.4	48.7
AMD746S	16-Feb-22	Americium-241	HASL 300, Am-05-RC M	0.0542	pCi/sample	U	0.577	0.301	0.301
AMD746S	16-Feb-22	Plutonium-238	HASL 300, Pu-11-RC M	0.0591	pCi/Sample	U	0.63	0.329	0.329
AMD746S	16-Feb-22	Plutonium-239/240	HASL 300, Pu-11-RC M	-0.0227	pCi/Sample	U	0.796	0.341	0.341
AMD746S	16-Feb-22	Technetium-99	HASL 300, Tc-02-RC M	21.1	pCi/Sample	U	63.1	37	37
AMD746S	16-Feb-22	Uranium-234	HASL 300, U-02-RC M	0.929	pCi/Sample	U	1.22	0.903	0.917
AMD746S	16-Feb-22	Uranium-235	HASL 300, U-02-RC M	-0.0423	pCi/Sample	U	0.844	0.364	0.365
AMD746S	16-Feb-22	Uranium-238	HASL 300, U-02-RC M	1.36	pCi/Sample		0.789	0.933	0.956
AMD746U	16-Feb-22	Neptunium-237	ASTM-1475-00M	-0.0585	pCi/sample	U	1.15	0.488	0.489
AMD746U	16-Feb-22	Thorium-234	HASL 300, 4.5.2.3	-33.7	pCi/sample	U	44.9	33.1	37.3
AMD746U	16-Feb-22	Uranium-238	HASL 300, 4.5.2.3	-33.7	pCi/sample	U	44.9	33.1	37.3
AMD746U	16-Feb-22	Americium-241	HASL 300, Am-05-RC M	-0.0229	pCi/sample	U	0.804	0.344	0.345
AMD746U	16-Feb-22	Plutonium-238	HASL 300, Pu-11-RC M	0.0806	pCi/Sample	U	0.707	0.361	0.361
AMD746U	16-Feb-22	Plutonium-239/240	HASL 300, Pu-11-RC M	0.129	pCi/Sample	U	0.615	0.354	0.355
AMD746U	16-Feb-22	Technetium-99	HASL 300, Tc-02-RC M	16.4	pCi/Sample	U	48.7	28.5	28.6
AMD746U	16-Feb-22	Uranium-234	HASL 300, U-02-RC M	1.94	pCi/Sample		1.12	1.07	1.1
AMD746U	16-Feb-22	Uranium-235	HASL 300, U-02-RC M	-0.104	pCi/Sample	U	0.883	0.314	0.315
AMD746U	16-Feb-22	Uranium-238	HASL 300, U-02-RC M	0.884	pCi/Sample		0.865	0.739	0.749
AMDBCP	16-Feb-22	Neptunium-237	ASTM-1475-00M	-0.0837	pCi/sample	U	1.36	0.551	0.552
AMDBCP	16-Feb-22	Thorium-234	HASL 300, 4.5.2.3	26.3	pCi/sample	U	47.3	55.4	57
AMDBCP	16-Feb-22	Uranium-238	HASL 300, 4.5.2.3	26.3	pCi/sample	U	47.3	55.4	57
AMDBCP	16-Feb-22	Americium-241	HASL 300, Am-05-RC M	0.189	pCi/sample	U	0.902	0.52	0.521

QC - Quality control sample (blank)
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Table A.2. Ambient Air Data (Continued)

STA_NAME	D_COLLECTED	CHEMICAL_NAME	ANA_METHOD	RESULTS	UNITS	RSLTQUAL	DETECT_LIMIT	RAD_ERR	TPU
AMDBCP	16-Feb-22	Plutonium-238	HASL 300, Pu-11-RC M	0.151	pCi/Sample	U	0.718	0.414	0.415
AMDBCP	16-Feb-22	Plutonium-239/240	HASL 300, Pu-11-RC M	0.0047	pCi/Sample	U	0.774	0.348	0.349
AMDBCP	16-Feb-22	Technetium-99	HASL 300, Tc-02-RC M	16.5	pCi/Sample	U	67.1	39	39.1
AMDBCP	16-Feb-22	Uranium-234	HASL 300, U-02-RC M	1.37	pCi/Sample		1.14	0.934	0.957
AMDBCP	16-Feb-22	Uranium-235	HASL 300, U-02-RC M	-0.0335	pCi/Sample	U	0.67	0.289	0.29
AMDBCP	16-Feb-22	Uranium-238	HASL 300, U-02-RC M	1.11	pCi/Sample		0.793	0.779	0.794
AMDNE	16-Feb-22	Neptunium-237	ASTM-1475-00M	-0.432	pCi/sample	U	4.11	1.47	1.48
AMDNE	16-Feb-22	Thorium-234	HASL 300, 4.5.2.3	-23.2	pCi/sample	U	45.5	32.9	34.9
AMDNE	16-Feb-22	Uranium-238	HASL 300, 4.5.2.3	-23.2	pCi/sample	U	45.5	32.9	34.9
AMDNE	16-Feb-22	Americium-241	HASL 300, Am-05-RC M	0.089	pCi/sample	U	0.561	0.334	0.334
AMDNE	16-Feb-22	Plutonium-238	HASL 300, Pu-11-RC M	0.0609	pCi/Sample	U	0.648	0.338	0.339
AMDNE	16-Feb-22	Plutonium-239/240	HASL 300, Pu-11-RC M	0.0374	pCi/Sample	U	0.906	0.426	0.427
AMDNE	16-Feb-22	Technetium-99	HASL 300, Tc-02-RC M	9.44	pCi/Sample	U	73.9	42.6	42.6
AMDNE	16-Feb-22	Uranium-234	HASL 300, U-02-RC M	1.37	pCi/Sample		0.753	0.792	0.816
AMDNE	16-Feb-22	Uranium-235	HASL 300, U-02-RC M	0	pCi/Sample	U	0.361	0.242	0.243
AMDNE	16-Feb-22	Uranium-238	HASL 300, U-02-RC M	1.8	pCi/Sample		0.539	0.857	0.89

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Table A.3. Weekly Flow Data

QUARTER	RESULTS	CHEMICAL_NAME	STA_NAME	UNITS	D_COLLECTED	PROJ_SAMPLE_ID
1	22957	Flow-total	AMD002	ft3	07-Jan-21	W01AMD0022-21
1	20073	Flow-total	AMD002	ft3	14-Jan-21	W02AMD0022-21
1	20110	Flow-total	AMD002	ft3	21-Jan-21	W03AMD0022-21
1	20373	Flow-total	AMD002	ft3	28-Jan-21	W04AMD0022-21
1	19885	Flow-total	AMD002	ft3	04-Feb-21	W05AMD0022-21
1	31618	Flow-total	AMD002	ft3	15-Feb-21	W06AMD0022-21
1	8792	Flow-total	AMD002	ft3	18-Feb-21	W07AMD0022-21
1	19950	Flow-total	AMD002	ft3	25-Feb-21	W08AMD0022-21
1	20047	Flow-total	AMD002	ft3	04-Mar-21	W09AMD0022-21
1	20260	Flow-total	AMD002	ft3	11-Mar-21	W10AMD0022-21
1	19832	Flow-total	AMD002	ft3	18-Mar-21	W11AMD0022-21
1	20344	Flow-total	AMD002	ft3	25-Mar-21	W12AMD0022-21
1	17231	Flow-total	AMD002	ft3	31-Mar-21	W01AMD0023-21
Total	**261472**	**7410**	m^3			
1	23018	Flow-total	AMD012	ft3	07-Jan-21	W01AMD0122-21
1	20130	Flow-total	AMD012	ft3	14-Jan-21	W02AMD0122-21
1	20169	Flow-total	AMD012	ft3	21-Jan-21	W03AMD0122-21
1	20419	Flow-total	AMD012	ft3	28-Jan-21	W04AMD0122-21
1	19942	Flow-total	AMD012	ft3	04-Feb-21	W05AMD0122-21
1	31633	Flow-total	AMD012	ft3	15-Feb-21	W06AMD0122-21
1	8607	Flow-total	AMD012	ft3	18-Feb-21	W07AMD0122-21
1	20029	Flow-total	AMD012	ft3	25-Feb-21	W08AMD0122-21
1	20110	Flow-total	AMD012	ft3	04-Mar-21	W09AMD0122-21
1	20315	Flow-total	AMD012	ft3	11-Mar-21	W10AMD0122-21
1	19896	Flow-total	AMD012	ft3	18-Mar-21	W11AMD0122-21
1	20404	Flow-total	AMD012	ft3	25-Mar-21	W12AMD0122-21
1	17281	Flow-total	AMD012	ft3	31-Mar-21	W01AMD0123-21
Total	**261953**	**7423**	m^3			
1	22962	Flow-total	AMD015	ft3	07-Jan-21	W01AMD0152-21
1	20072	Flow-total	AMD015	ft3	14-Jan-21	W02AMD0152-21
1	20115	Flow-total	AMD015	ft3	21-Jan-21	W03AMD0152-21
1	20361	Flow-total	AMD015	ft3	28-Jan-21	W04AMD0152-21
1	19873	Flow-total	AMD015	ft3	04-Feb-21	W05AMD0152-21
1	31682	Flow-total	AMD015	ft3	15-Feb-21	W06AMD0152-21
1	8637	Flow-total	AMD015	ft3	18-Feb-21	W07AMD0152-21
1	20197	Flow-total	AMD015	ft3	25-Feb-21	W08AMD0152-21
1	20104	Flow-total	AMD015	ft3	04-Mar-21	W09AMD0152-21
1	20306	Flow-total	AMD015	ft3	11-Mar-21	W10AMD0152-21
1	19881	Flow-total	AMD015	ft3	18-Mar-21	W11AMD0152-21
1	20397	Flow-total	AMD015	ft3	25-Mar-21	W12AMD0152-21
1	17286	Flow-total	AMD015	ft3	31-Mar-21	W01AMD0153-21
Total	**261873**	**7421**	m^3			
1	22958	Flow-total	AMD57	ft3	07-Jan-21	W01AMD572-21
1	20083	Flow-total	AMD57	ft3	14-Jan-21	W02AMD572-21
1	20124	Flow-total	AMD57	ft3	21-Jan-21	W03AMD572-21
1	20371	Flow-total	AMD57	ft3	28-Jan-21	W04AMD572-21
1	19896	Flow-total	AMD57	ft3	04-Feb-21	W05AMD572-21
1	31611	Flow-total	AMD57	ft3	15-Feb-21	W06AMD572-21
1	8617	Flow-total	AMD57	ft3	18-Feb-21	W07AMD572-21
1	20143	Flow-total	AMD57	ft3	25-Feb-21	W08AMD572-21
1	20063	Flow-total	AMD57	ft3	04-Mar-21	W09AMD572-21
1	20261	Flow-total	AMD57	ft3	11-Mar-21	W10AMD572-21
1	19845	Flow-total	AMD57	ft3	18-Mar-21	W11AMD572-21
1	20347	Flow-total	AMD57	ft3	25-Mar-21	W12AMD572-21
1	17270	Flow-total	AMD57	ft3	31-Mar-21	W01AMD573-21
Total	**261589**	**7413**	m^3			
1	24082	Flow-total	AMD612	ft3	07-Jan-21	W01AMD6122-21

Table A.3. Weekly Flow Data (Continued)

QUARTER	RESULTS	CHEMICAL_NAME	STA_NAME	UNITS	D_COLLECTED	PROJ_SAMPLE_ID
1	21074	Flow-total	AMD612	ft3	14-Jan-21	W02AMD6122-21
1	21125	Flow-total	AMD612	ft3	21-Jan-21	W03AMD6122-21
1	21090	Flow-total	AMD612	ft3	28-Jan-21	W04AMD6122-21
1	20862	Flow-total	AMD612	ft3	04-Feb-21	W05AMD6122-21
1	31652	Flow-total	AMD612	ft3	15-Feb-21	W06AMD6122-21
1	9047	Flow-total	AMD612	ft3	18-Feb-21	W07AMD6122-21
1	21158	Flow-total	AMD612	ft3	25-Feb-21	W08AMD6122-21
1	21045	Flow-total	AMD612	ft3	04-Mar-21	W09AMD6122-21
1	20256	Flow-total	AMD612	ft3	11-Mar-21	W10AMD6122-21
1	19832	Flow-total	AMD612	ft3	18-Mar-21	W11AMD6122-21
1	20330	Flow-total	AMD612	ft3	25-Mar-21	W12AMD6122-21
1	17237	Flow-total	AMD612	ft3	31-Mar-21	W01AMD6123-21
Total	**268790**	**7617**	m^3			
1	22941	Flow-total	AMD746S	ft3	07-Jan-21	W01AMD746S2-21
1	21507	Flow-total	AMD746S	ft3	14-Jan-21	W02AMD746S2-21
1	20093	Flow-total	AMD746S	ft3	21-Jan-21	W03AMD746S2-21
1	20148	Flow-total	AMD746S	ft3	28-Jan-21	W04AMD746S2-21
1	19911	Flow-total	AMD746S	ft3	04-Feb-21	W05AMD746S2-21
1	31584	Flow-total	AMD746S	ft3	15-Feb-21	W06AMD746S2-21
1	8744	Flow-total	AMD746S	ft3	18-Feb-21	W07AMD746S2-21
1	19943	Flow-total	AMD746S	ft3	25-Feb-21	W08AMD746S2-21
1	20138	Flow-total	AMD746S	ft3	04-Mar-21	W09AMD746S2-21
1	20199	Flow-total	AMD746S	ft3	11-Mar-21	W10AMD746S2-21
1	19806	Flow-total	AMD746S	ft3	18-Mar-21	W11AMD746S2-21
1	20178	Flow-total	AMD746S	ft3	25-Mar-21	W12AMD746S2-21
1	17401	Flow-total	AMD746S	ft3	31-Mar-21	W01AMD746S3-21
Total	**262593**	**7442**	m^3			
1	22930	Flow-total	AMD746U	ft3	07-Jan-21	W01AMD746U2-21
1	20079	Flow-total	AMD746U	ft3	14-Jan-21	W02AMD746U2-21
1	20108	Flow-total	AMD746U	ft3	21-Jan-21	W03AMD746U2-21
1	20415	Flow-total	AMD746U	ft3	28-Jan-21	W04AMD746U2-21
1	19909	Flow-total	AMD746U	ft3	04-Feb-21	W05AMD746U2-21
1	31590	Flow-total	AMD746U	ft3	15-Feb-21	W06AMD746U2-21
1	8734	Flow-total	AMD746U	ft3	18-Feb-21	W07AMD746U2-21
1	19947	Flow-total	AMD746U	ft3	25-Feb-21	W08AMD746U2-21
1	20113	Flow-total	AMD746U	ft3	04-Mar-21	W09AMD746U2-21
1	20195	Flow-total	AMD746U	ft3	11-Mar-21	W10AMD746U2-21
1	19799	Flow-total	AMD746U	ft3	18-Mar-21	W11AMD746U2-21
1	20183	Flow-total	AMD746U	ft3	25-Mar-21	W12AMD746U2-21
1	17399	Flow-total	AMD746U	ft3	31-Mar-21	W01AMD746U3-21
Total	**261401**	**7408**	m^3			
1	22935	Flow-total	AMDBCP	ft3	07-Jan-21	W01AMDBCP2-21
1	20070	Flow-total	AMDBCP	ft3	14-Jan-21	W02AMDBCP2-21
1	20107	Flow-total	AMDBCP	ft3	21-Jan-21	W03AMDBCP2-21
1	20278	Flow-total	AMDBCP	ft3	28-Jan-21	W04AMDBCP2-21
1	19888	Flow-total	AMDBCP	ft3	04-Feb-21	W05AMDBCP2-21
1	31529	Flow-total	AMDBCP	ft3	15-Feb-21	W06AMDBCP2-21
1	8658	Flow-total	AMDBCP	ft3	18-Feb-21	W07AMDBCP2-21
1	20236	Flow-total	AMDBCP	ft3	25-Feb-21	W08AMDBCP2-21
1	19963	Flow-total	AMDBCP	ft3	04-Mar-21	W09AMDBCP2-21
1	20354	Flow-total	AMDBCP	ft3	11-Mar-21	W10AMDBCP2-21
1	19784	Flow-total	AMDBCP	ft3	18-Mar-21	W11AMDBCP2-21
1	20036	Flow-total	AMDBCP	ft3	25-Mar-21	W12AMDBCP2-21
1	17536	Flow-total	AMDBCP	ft3	31-Mar-21	W01AMDBCP3-21
Total	**261374**	**7407**	m^3			
1	22936	Flow-total	AMDNE	ft3	07-Jan-21	W01AMDNE2-21
1	20076	Flow-total	AMDNE	ft3	14-Jan-21	W02AMDNE2-21
1	20095	Flow-total	AMDNE	ft3	21-Jan-21	W03AMDNE2-21

Table A.3. Weekly Flow Data (Continued)

QUARTER	RESULTS	CHEMICAL_NAME	STA_NAME	UNITS	D_COLLECTED	PROJ_SAMPLE_ID
1	20418	Flow-total	AMDNE	ft3	28-Jan-21	W04AMDNE2-21
1	19849	Flow-total	AMDNE	ft3	04-Feb-21	W05AMDNE2-21
1	31563	Flow-total	AMDNE	ft3	15-Feb-21	W06AMDNE2-21
1	8826	Flow-total	AMDNE	ft3	18-Feb-21	W07AMDNE2-21
1	19935	Flow-total	AMDNE	ft3	25-Feb-21	W08AMDNE2-21
1	20122	Flow-total	AMDNE	ft3	04-Mar-21	W09AMDNE2-21
1	20142	Flow-total	AMDNE	ft3	11-Mar-21	W10AMDNE2-21
1	19854	Flow-total	AMDNE	ft3	18-Mar-21	W11AMDNE2-21
1	20174	Flow-total	AMDNE	ft3	25-Mar-21	W12AMDNE2-21
1	17389	Flow-total	AMDNE	ft3	31-Mar-21	W01AMDNE3-21
Total	**261379**	**7407**	m^3			
2	23061	Flow-total	AMD002	ft3	08-Apr-21	W02AMD0023-21
2	19761	Flow-total	AMD002	ft3	15-Apr-21	W03AMD0023-21
2	20135	Flow-total	AMD002	ft3	22-Apr-21	W04AMD0023-21
2	20161	Flow-total	AMD002	ft3	29-Apr-21	W05AMD0023-21
2	20029	Flow-total	AMD002	ft3	06-May-21	W06AMD0023-21
2	20641	Flow-total	AMD002	ft3	13-May-21	W07AMD0023-21
2	20242	Flow-total	AMD002	ft3	20-May-21	W08AMD0023-21
2	19361	Flow-total	AMD002	ft3	27-May-21	W09AMD0023-21
2	20182	Flow-total	AMD002	ft3	03-Jun-21	W10AMD0023-21
2	20111	Flow-total	AMD002	ft3	10-Jun-21	W11AMD0023-21
2	20014	Flow-total	AMD002	ft3	17-Jun-21	W12AMD0023-21
2	17632	Flow-total	AMD002	ft3	23-Jun-21	W13AMD0023-21
Total	**241330**	**6839**	m^3			
2	23131	Flow-total	AMD012	ft3	08-Apr-21	W02AMD0123-21
2	19817	Flow-total	AMD012	ft3	15-Apr-21	W03AMD0123-21
2	20190	Flow-total	AMD012	ft3	22-Apr-21	W04AMD0123-21
2	20213	Flow-total	AMD012	ft3	29-Apr-21	W05AMD0123-21
2	20091	Flow-total	AMD012	ft3	06-May-21	W06AMD0123-21
2	20650	Flow-total	AMD012	ft3	13-May-21	W07AMD0123-21
2	20248	Flow-total	AMD012	ft3	20-May-21	W08AMD0123-21
2	19371	Flow-total	AMD012	ft3	27-May-21	W09AMD0123-21
2	20187	Flow-total	AMD012	ft3	03-Jun-21	W10AMD0123-21
2	20122	Flow-total	AMD012	ft3	10-Jun-21	W11AMD0123-21
2	20025	Flow-total	AMD012	ft3	17-Jun-21	W12AMD0123-21
2	17638	Flow-total	AMD012	ft3	23-Jun-21	W13AMD0123-21
Total	**241683**	**6849**	m^3			
2	23124	Flow-total	AMD015	ft3	08-Apr-21	W02AMD0153-21
2	19812	Flow-total	AMD015	ft3	15-Apr-21	W03AMD0153-21
2	20177	Flow-total	AMD015	ft3	22-Apr-21	W04AMD0153-21
2	20205	Flow-total	AMD015	ft3	29-Apr-21	W05AMD0153-21
2	20077	Flow-total	AMD015	ft3	06-May-21	W06AMD0153-21
2	20721	Flow-total	AMD015	ft3	13-May-21	W07AMD0153-21
2	20293	Flow-total	AMD015	ft3	20-May-21	W08AMD0153-21
2	19418	Flow-total	AMD015	ft3	27-May-21	W09AMD0153-21
2	20216	Flow-total	AMD015	ft3	03-Jun-21	W10AMD0153-21
2	20175	Flow-total	AMD015	ft3	10-Jun-21	W11AMD0153-21
2	20060	Flow-total	AMD015	ft3	17-Jun-21	W12AMD0153-21
2	17686	Flow-total	AMD015	ft3	23-Jun-21	W13AMD0153-21
Total	**241964**	**6857**	m^3			
2	23063	Flow-total	AMD57	ft3	08-Apr-21	W02AMD573-21
2	19775	Flow-total	AMD57	ft3	15-Apr-21	W03AMD573-21
2	20138	Flow-total	AMD57	ft3	22-Apr-21	W04AMD573-21
2	20191	Flow-total	AMD57	ft3	29-Apr-21	W05AMD573-21
2	20043	Flow-total	AMD57	ft3	06-May-21	W06AMD573-21
2	20651	Flow-total	AMD57	ft3	13-May-21	W07AMD573-21
2	20243	Flow-total	AMD57	ft3	20-May-21	W08AMD573-21
2	19364	Flow-total	AMD57	ft3	27-May-21	W09AMD573-21

Table A.3. Weekly Flow Data (Continued)

QUARTER	RESULTS	CHEMICAL_NAME	STA_NAME	UNITS	D_COLLECTED	PROJ_SAMPLE_ID
2	20205	Flow-total	AMD57	ft3	03-Jun-21	W10AMD573-21
2	20112	Flow-total	AMD57	ft3	10-Jun-21	W11AMD573-21
2	20054	Flow-total	AMD57	ft3	17-Jun-21	W12AMD573-21
2	17680	Flow-total	AMD57	ft3	23-Jun-21	W13AMD573-21
Total	**241519**	**6844**	m^3			
2	23060	Flow-total	AMD612	ft3	08-Apr-21	W02AMD6123-21
2	19751	Flow-total	AMD612	ft3	15-Apr-21	W03AMD6123-21
2	20120	Flow-total	AMD612	ft3	22-Apr-21	W04AMD6123-21
2	20150	Flow-total	AMD612	ft3	29-Apr-21	W05AMD6123-21
2	20030	Flow-total	AMD612	ft3	06-May-21	W06AMD6123-21
2	20661	Flow-Total	AMD612	ft3	13-May-21	W07AMD6123-21
2	20239	Flow-total	AMD612	ft3	20-May-21	W08AMD6123-21
2	19360	Flow-total	AMD612	ft3	27-May-21	W09AMD6123-21
2	20151	Flow-total	AMD612	ft3	03-Jun-21	W10AMD6123-21
2	20134	Flow-total	AMD612	ft3	10-Jun-21	W11AMD6123-21
2	20007	Flow-total	AMD612	ft3	17-Jun-21	W12AMD6123-21
2	17631	Flow-total	AMD612	ft3	23-Jun-21	W13AMD6123-21
Total	**241294**	**6838**	m^3			
2	23058	Flow-total	AMD746S	ft3	08-Apr-21	W02AMD746S3-21
2	19755	Flow-total	AMD746S	ft3	15-Apr-21	W03AMD746S3-21
2	20144	Flow-total	AMD746S	ft3	22-Apr-21	W04AMD746S3-21
2	20169	Flow-total	AMD746S	ft3	29-Apr-21	W05AMD746S3-21
2	20051	Flow-total	AMD746S	ft3	06-May-21	W06AMD746S3-21
2	20614	Flow-total	AMD746S	ft3	13-May-21	W07AMD746S3-21
2	20265	Flow-total	AMD746S	ft3	20-May-21	W08AMD746S3-21
2	19333	Flow-total	AMD746S	ft3	27-May-21	W09AMD746S3-21
2	20327	Flow-total	AMD746S	ft3	03-Jun-21	W10AMD746S3-21
2	20018	Flow-total	AMD746S	ft3	10-Jun-21	W11AMD746S3-21
2	19956	Flow-total	AMD746S	ft3	17-Jun-21	W12AMD746S3-21
2	17637	Flow-total	AMD746S	ft3	23-Jun-21	W13AMD746S3-21
Total	**241327**	**6839**	m^3			
2	23065	Flow-total	AMD746U	ft3	08-Apr-21	W02AMD746U3-21
2	19762	Flow-total	AMD746U	ft3	15-Apr-21	W03AMD746U3-21
2	20137	Flow-total	AMD746U	ft3	22-Apr-21	W04AMD746U3-21
2	20164	Flow-total	AMD746U	ft3	29-Apr-21	W05AMD746U3-21
2	20054	Flow-total	AMD746U	ft3	06-May-21	W06AMD746U3-21
2	20612	Flow-total	AMD746U	ft3	13-May-21	W07AMD746U3-21
2	20249	Flow-total	AMD746U	ft3	20-May-21	W08AMD746U3-21
2	19353	Flow-total	AMD746U	ft3	27-May-21	W09AMD746U3-21
2	20322	Flow-total	AMD746U	ft3	03-Jun-21	W10AMD746U3-21
2	20022	Flow-total	AMD746U	ft3	10-Jun-21	W11AMD746U3-21
2	19971	Flow-total	AMD746U	ft3	17-Jun-21	W12AMD746U3-21
2	17635	Flow-total	AMD746U	ft3	23-Jun-21	W13AMD746U3-21
Total	**241346**	**6839**	m^3			
2	23118	Flow-total	AMDBCP	ft3	08-Apr-21	W02AMDBCP3-21
2	19693	Flow-total	AMDBCP	ft3	15-Apr-21	W03AMDBCP3-21
2	20153	Flow-total	AMDBCP	ft3	22-Apr-21	W04AMDBCP3-21
2	19963	Flow-total	AMDBCP	ft3	29-Apr-21	W05AMDBCP3-21
2	20035	Flow-total	AMDBCP	ft3	06-May-21	W06AMDBCP3-21
2	20625	Flow-total	AMDBCP	ft3	13-May-21	W07AMDBCP3-21
2	20231	Flow-total	AMDBCP	ft3	20-May-21	W08AMDBCP3-21
2	19349	Flow-total	AMDBCP	ft3	27-May-21	W09AMDBCP3-21
2	20130	Flow-toal	AMDBCP	ft3	03-Jun-21	W10AMDBCP3-21
2	20184	Flow-total	AMDBCP	ft3	10-Jun-21	W11AMDBCP3-21
2	19986	Flow-total	AMDBCP	ft3	17-Jun-21	W12AMDBCP3-21
2	17619	Flow-total	AMDBCP	ft3	23-Jun-21	W13AMDBCP3-21
Total	**241086**	**6832**	m^3			

Table A.3. Weekly Flow Data (Continued)

QUARTER	RESULTS	CHEMICAL_NAME	STA_NAME	UNITS	D_COLLECTED	PROJ_SAMPLE_ID
2	23065	Flow-total	AMDNE	ft3	08-Apr-21	W02AMDNE3-21
2	19760	Flow-total	AMDNE	ft3	15-Apr-21	W03AMDNE3-21
2	20138	Flow-total	AMDNE	ft3	22-Apr-21	W04AMDNE3-21
2	20163	Flow-total	AMDNE	ft3	29-Apr-21	W05AMDNE3-21
2	20050	Flow-total	AMDNE	ft3	06-May-21	W06AMDNE3-21
2	20604	Flow-total	AMDNE	ft3	13-May-21	W07AMDNE3-21
2	20265	Flow-total	AMDNE	ft3	20-May-21	W08AMDNE3-21
2	19343	Flow-total	AMDNE	ft3	27-May-21	W09AMDNE3-21
2	20262	Flow-total	AMDNE	ft3	03-Jun-21	W10AMDNE3-21
2	20016	Flow-total	AMDNE	ft3	10-Jun-21	W11AMDNE3-21
2	20040	Flow-total	AMDNE	ft3	17-Jun-21	W12AMDNE3-21
2	17636	Flow-total	AMDNE	ft3	23-Jun-21	W13AMDNE3-21
Total	**241342**	**6839**	m^3			
3	22636	Flow-total	AMD002	ft3	01-Jul-21	W01AMD0024-21
3	20024	Flow-total	AMD002	ft3	08-Jul-21	W02AMD0024-21
3	20195	Flow-total	AMD002	ft3	15-Jul-21	W03AMD0024-21
3	20112	Flow-total	AMD002	ft3	22-Jul-21	W04AMD0024-21
3	20022	Flow-total	AMD002	ft3	29-Jul-21	W05AMD0024-21
3	19976	Flow-total	AMD002	ft3	05-Aug-21	W06AMD0024-21
3	20134	Flow-total	AMD002	ft3	12-Aug-21	W07AMD0024-21
3	20075	Flow-total	AMD002	ft3	19-Aug-21	W08AMD0024-21
3	20181	Flow-total	AMD002	ft3	26-Aug-21	W09AMD0024-21
3	20031	Flow-total	AMD002	ft3	02-Sep-21	W10AMD0024-21
3	20148	Flow-total	AMD002	ft3	09-Sep-21	W11AMD0024-21
3	20314	Flow-total	AMD002	ft3	16-Sep-21	W12AMD0024-21
3	19877	Flow-total	AMD002	ft3	23-Sep-21	W13AMD0024-21
3	20148	Flow-total	AMD002	ft3	30-Sep-21	W14AMD0024-21
Total	**283873**	**8045**	m^3			
3	22648	Flow-total	AMD012	ft3	01-Jul-21	W01AMD0124-21
3	20035	Flow-total	AMD012	ft3	08-Jul-21	W02AMD0124-21
3	20204	Flow-total	AMD012	ft3	15-Jul-21	W03AMD0124-21
3	20123	Flow-total	AMD012	ft3	22-Jul-21	W04AMD0124-21
3	20034	Flow-total	AMD012	ft3	29-Jul-21	W05AMD0124-21
3	20152	Flow-total	AMD012	ft3	05-Aug-21	W06AMD0124-21
3	20146	Flow-total	AMD012	ft3	12-Aug-21	W07AMD0124-21
3	20084	Flow-total	AMD012	ft3	19-Aug-21	W08AMD0124-21
3	20191	Flow-total	AMD012	ft3	26-Aug-21	W09AMD0124-21
3	20045	Flow-total	AMD012	ft3	02-Sep-21	W10AMD0124-21
3	20155	Flow-total	AMD012	ft3	09-Sep-21	W11AMD0124-21
3	20324	Flow-total	AMD012	ft3	16-Sep-21	W12AMD0124-21
3	19894	Flow-total	AMD012	ft3	23-Sep-21	W13AMD0124-21
3	20155	Flow-total	AMD012	ft3	30-Sep-21	W14AMD0124-21
Total	**284190**	**8054**	m^3			
3	22693	Flow-total	AMD015	ft3	01-Jul-21	W01AMD0154-21
3	20082	Flow-total	AMD015	ft3	08-Jul-21	W02AMD0154-21
3	20241	Flow-total	AMD015	ft3	15-Jul-21	W03AMD0154-21
3	20168	Flow-total	AMD015	ft3	22-Jul-21	W04AMD0154-21
3	20082	Flow-total	AMD015	ft3	29-Jul-21	W05AMD0154-21
3	20186	Flow-total	AMD015	ft3	05-Aug-21	W06AMD0154-21
3	11682	Flow-total	AMD015	ft3	12-Aug-21	W07AMD0154-21
3	7626	Flow-total	AMD015	ft3	19-Aug-21	W08AMD0154-21
3	20222	Flow-total	AMD015	ft3	26-Aug-21	W09AMD0154-21
3	20063	Flow-total	AMD015	ft3	02-Sep-21	W10AMD0154-21
3	20228	Flow-total	AMD015	ft3	09-Sep-21	W11AMD0154-21
3	20358.39	Flow-total	AMD015	ft3	16-Sep-21	W12AMD0154-21
3	19929	Flow-total	AMD015	ft3	23-Sep-21	W13AMD0154-21
3	20168	Flow-total	AMD015	ft3	30-Sep-21	W14AMD0154-21
Total	**263728.39**	**7474**	m^3			

Table A.3. Weekly Flow Data (Continued)

QUARTER	RESULTS	CHEMICAL_NAME	STA_NAME	UNITS	D_COLLECTED	PROJ_SAMPLE_ID
3	22663	Flow-total	AMD57	ft3	01-Jul-21	W01AMD574-21
3	20051	Flow-total	AMD57	ft3	08-Jul-21	W02AMD574-21
3	20235	Flow-total	AMD57	ft3	15-Jul-21	W03AMD574-21
3	20153	Flow-total	AMD57	ft3	22-Jul-21	W04AMD574-21
3	20044	Flow-total	AMD57	ft3	29-Jul-21	W05AMD574-21
3	20169	Flow-total	AMD57	ft3	05-Aug-21	W06AMD574-21
3	20184	Flow-total	AMD57	ft3	12-Aug-21	W07AMD574-21
3	20103	Flow-total	AMD57	ft3	19-Aug-21	W08AMD574-21
3	20207	Flow-total	AMD57	ft3	26-Aug-21	W09AMD574-21
3	2949	Flow-total	AMD57	ft3	02-Sep-21	W10AMD574-21
3	0	Flow-total	AMD57	ft3	09-Sep-21	W11AMD574-21
3	0	Flow-total	AMD57	ft3	16-Sep-21	W12AMD574-21
3	0	Flow-total	AMD57	ft3	23-Sep-21	W13AMD574-21
3	5013	Flow-total	AMD57	ft3	30-Sep-21	W14AMD574-21
Total	**191771**	**5435**	m^3			
3	22635	Flow-total	AMD612	ft3	01-Jul-21	W01AMD6124-21
3	20026	Flow-total	AMD612	ft3	08-Jul-21	W02AMD6124-21
3	20174	Flow-total	AMD612	ft3	15-Jul-21	W03AMD6124-21
3	20112	Flow-total	AMD612	ft3	22-Jul-21	W04AMD6124-21
3	20042	Flow-total	AMD612	ft3	29-Jul-21	W05AMD6124-21
3	20132	Flow-total	AMD612	ft3	05-Aug-21	W06AMD6124-21
3	20104	Flow-total	AMD612	ft3	12-Aug-21	W07AMD6124-21
3	20106	Flow-Total	AMD612	ft3	19-Aug-21	W08AMD6124-21
3	20167	Flow-total	AMD612	ft3	26-Aug-21	W09AMD6124-21
3	20009	Flow-total	AMD612	ft3	02-Sep-21	W10AMD6124-21
3	20168	Flow-total	AMD612	ft3	09-Sep-21	W11AMD6124-21
3	20298	Flow-total	AMD612	ft3	16-Sep-21	W12AMD6124-21
3	19878	Flow-total	AMD612	ft3	23-Sep-21	W13AMD6124-21
3	20113	Flow-total	AMD612	ft3	30-Sep-21	W14AMD6124-21
Total	**283964**	**8047**	m^3			
3	22630	Flow-total	AMD746S	ft3	01-Jul-21	W01AMD746S4-21
3	20025	Flow-total	AMD746S	ft3	08-Jul-21	W02AMD746S4-21
3	20197	Flow-total	AMD746S	ft3	15-Jul-21	W03AMD746S4-21
3	20118	Flow-total	AMD746S	ft3	22-Jul-21	W04AMD746S4-21
3	20129	Flow-total	AMD746S	ft3	29-Jul-21	W05AMD746S4-21
3	20016	Flow-total	AMD746S	ft3	05-Aug-21	W06AMD746S4-21
3	20208	Flow-total	AMD746S	ft3	12-Aug-21	W07AMD746S4-21
3	19984	Flow-total	AMD746S	ft3	19-Aug-21	W08AMD746S4-21
3	20366	Flow-total	AMD746S	ft3	26-Aug-21	W09AMD756S4-21
3	19832	Flow-total	AMD746S	ft3	02-Sep-21	W10AMD746S4-21
3	20144	Flow-total	AMD746S	ft3	09-Sep-21	W11AMD746S4-21
3	20311	Flow-total	AMD746S	ft3	16-Sep-21	W12AMD746S4-21
3	19442	Flow-total	AMD746S	ft3	23-Sep-21	W13AMD746S4-21
3	20183	Flow-total	AMD746S	ft3	30-Sep-21	W14AMD746S4-21
Total	**283585**	**8036**	m^3			
3	22637	Flow-total	AMD746U	ft3	01-Jul-21	W01AMD746U4-21
3	20028	Flow-total	AMD746U	ft3	08-Jul-21	W02AMD746U4-21
3	20196	Flow-total	AMD746U	ft3	15-Jul-21	W03AMD746U4-21
3	20122	Flow-total	AMD746U	ft3	22-Jul-21	W04AMD746U4-21
3	20122	Flow-total	AMD746U	ft3	29-Jul-21	W05AMD746U4-21
3	20026	Flow-total	AMD746U	ft3	05-Aug-21	W06AMD746U4-21
3	20216	Flow-total	AMD746U	ft3	12-Aug-21	W07AMD746U4-21
3	19987	Flow-total	AMD746U	ft3	19-Aug-21	W08AMD746U4-21
3	20280	Flow-total	AMD746U	ft3	26-Aug-21	W09AMD746U4-21
3	19931	Flow-total	AMD746U	ft3	02-Sep-21	W10AMD746U4-21
3	20147	Flow-total	AMD746U	ft3	09-Sep-21	W11AMD746U4-21
3	20134	Flow-total	AMD746U	ft3	16-Sep-21	W12AMD746U4-21
3	19879	Flow-total	AMD746U	ft3	23-Sep-21	W13AMD746U4-21

Table A.3. Weekly Flow Data (Continued)

QUARTER	RESULTS	CHEMICAL_NAME	STA_NAME	UNITS	D_COLLECTED	PROJ_SAMPLE_ID
3	20152	Flow-total	AMD746U	ft3	30-Sep-21	W14AMD746U4-21
Total	**283857**	**8044**	m^3			
3	22635	Flow-total	AMDBCP	ft3	01-Jul-21	W01AMDBCP4-21
3	19122	Flow-total	AMDBCP	ft3	08-Jul-21	W02AMDBCP4-21
3	0	Flow-total	AMDBCP	ft3	15-Jul-21	W03AMDBCP4-21
3	19971	Flow-total	AMDBCP	ft3	22-Jul-21	W04AMDBCP4-21
3	19955	Flow-total	AMDBCP	ft3	29-Jul-21	W05AMDBCP4-21
3	20184	Flow-total	AMDBCP	ft3	05-Aug-21	W06AMDBCP4-21
3	20203	Flow-total	AMDBCP	ft3	12-Aug-21	W07AMDBCP4-21
3	19992	Flow-total	AMDBCP	ft3	19-Aug-21	W08AMDBCP4-21
3	20136	Flow-total	AMDBCP	ft3	26-Aug-21	W09AMDBCP4-21
3	20130	Flow-total	AMDBCP	ft3	02-Sep-21	W10AMDBCP4-21
3	20094	Flow-toal	AMDBCP	ft3	09-Sep-21	W11AMDBCP4-21
3	20328	Flow-total	AMDBCP	ft3	16-Sep-21	W12AMDBCP4-21
3	19851	Flow-total	AMDBCP	ft3	23-Sep-21	W13AMDBCP4-21
3	14944	Flow-total	AMDBCP	ft3	30-Sep-21	W14AMDBCP4-21
Total	**257545**	**7298**	m^3			
3	22639	Flow-total	AMDNE	ft3	01-Jul-21	W01AMDNE4-21
3	20028	Flow-total	AMDNE	ft3	08-Jul-21	W02AMDNE4-21
3	20204	Flow-total	AMDNE	ft3	15-Jul-21	W03AMDNE4-21
3	20118	Flow-total	AMDNE	ft3	22-Jul-21	W04AMDNE4-21
3	20068	Flow-total	AMDNE	ft3	29-Jul-21	W05AMDNE4-21
3	20096	Flow-total	AMDNE	ft3	05-Aug-21	W06AMDNE4-21
3	20213	Flow-total	AMDNE	ft3	12-Aug-21	W07AMDNE4-21
3	19992	Flow-total	AMDNE	ft3	19-Aug-21	W08AMDNE4-21
3	20272	Flow-total	AMDNE	ft3	26-Aug-21	W09AMDNE4-21
3	19946	Flow-total	AMDNE	ft3	02-Sep-21	W10AMDNE4-21
3	20157	Flow-total	AMDNE	ft3	09-Sep-21	W11AMDNE4-21
3	20321	Flow-total	AMDNE	ft3	16-Sep-21	W12AMDNE4-21
3	19872	Flow-total	AMDNE	ft3	23-Sep-21	W13AMDNE4-21
3	20187	Flow-total	AMDNE	ft3	30-Sep-21	W14AMDNE4-21
Total	**284113**	**8051**	m^3			
4	20052	Flow-total	AMD002	ft3	07-Oct-21	W01AMD0021-22
4	20124	Flow-total	AMD002	ft3	14-Oct-21	W02AMD0021-22
4	20089	Flow-total	AMD002	ft3	21-Oct-21	W03AMD0021-22
4	20131	Flow-total	AMD002	ft3	28-Oct-21	W04AMD0021-22
4	20710	Flow-total	AMD002	ft3	04-Nov-21	W05AMD0021-22
4	20191	Flow-total	AMD002	ft3	11-Nov-21	W06AMD0021-22
4	19777	Flow-total	AMD002	ft3	18-Nov-21	W07AMD0021-22
4	14510	Flow-total	AMD002	ft3	23-Nov-21	W08AMD0021-22
4	25460	Flow-total	AMD002	ft3	02-Dec-21	W09AMD0021-22
4	20161	Flow-total	AMD002	ft3	09-Dec-21	W10AMD0021-22
4	20006	Flow-total	AMD002	ft3	16-Dec-21	W11AMD0021-22
4	14304	Flow-total	AMD002	ft3	21-Dec-21	W12AMD0021-22
4	23110	Flow-total	AMD002	ft3	29-Dec-21	W13AMD0021-22
Total	**258625**	**7329**	m^3			
4	20074	Flow-total	AMD012	ft3	07-Oct-21	W01AMD0121-22
4	20137	Flow-total	AMD012	ft3	14-Oct-21	W02AMD0121-22
4	20107	Flow-total	AMD012	ft3	21-Oct-21	W03AMD0121-22
4	20140	Flow-total	AMD012	ft3	28-Oct-21	W04AMD0121-22
4	20726	Flow-total	AMD012	ft3	04-Nov-21	W05AMD0121-22
4	20206	Flow-total	AMD012	ft3	11-Nov-21	W06AMD0121-22
4	19771	Flow-total	AMD012	ft3	18-Nov-21	W07AMD0121-22
4	14536	Flow-total	AMD012	ft3	23-Nov-21	W08AMD0121-22
4	25476	Flow-total	AMD012	ft3	02-Dec-21	W09AMD0121-22
4	20138	Flow-total	AMD012	ft3	09-Dec-21	W10AMD0121-22
4	20063	Flow-total	AMD012	ft3	16-Dec-21	W11AMD0121-22
4	14311	Flow-total	AMD012	ft3	21-Dec-21	W12AMD0121-22

Table A.3. Weekly Flow Data (Continued)

QUARTER	RESULTS	CHEMICAL_NAME	STA_NAME	UNITS	D_COLLECTED	PROJ_SAMPLE_ID
4	23127	Flow-total	AMD012	ft3	29-Dec-21	W13AMD0121-22
Total	**258812**	**7334**	m^3			
4	20148	Flow-total	AMD015	ft3	07-Oct-21	W01AMD0151-22
4	20169	Flow-total	AMD015	ft3	14-Oct-21	W02AMD0151-22
4	20156	Flow-total	AMD015	ft3	21-Oct-21	W03AMD0151-22
4	20184	Flow-total	AMD015	ft3	28-Oct-21	W04AMD0151-22
4	20770	Flow-total	AMD015	ft3	04-Nov-21	W05AMD0151-22
4	20249	Flow-total	AMD015	ft3	11-Nov-21	W06AMD0151-22
4	19781	Flow-total	AMD015	ft3	18-Nov-21	W07AMD0151-22
4	14602	Flow-total	AMD015	ft3	23-Nov-21	W08AMD0151-22
4	25530	Flow-total	AMD015	ft3	02-Dec-21	W09AMD0151-22
4	20146	Flow-total	AMD015	ft3	09-Dec-21	W10AMD0151-22
4	20149	Flow-total	AMD015	ft3	16-Dec-21	W11AMD0151-22
4	14339	Flow-total	AMD015	ft3	21-Dec-21	W12AMD0151-22
4	23176	Flow-total	AMD015	ft3	29-Dec-21	W13AMD0151-22
Total	**259399**	**7351**	m^3			
4	20066	Flow-total	AMD57	ft3	07-Oct-21	W01AMD571-22
4	20117	Flow-total	AMD57	ft3	14-Oct-21	W02AMD571-22
4	20092	Flow-total	AMD57	ft3	21-Oct-21	W03AMD571-22
4	20121	Flow-total	AMD57	ft3	28-Oct-21	W04AMD571-22
4	20710	Flow-total	AMD57	ft3	04-Nov-21	W05AMD571-22
4	20187	Flow-total	AMD57	ft3	11-Nov-21	W06AMD571-22
4	19730	Flow-total	AMD57	ft3	18-Nov-21	W07AMD571-22
4	14547	Flow-total	AMD57	ft3	23-Nov-21	W08AMD571-22
4	25453	Flow-total	AMD57	ft3	02-Dec-21	W09AMD571-22
4	20122	Flow-total	AMD57	ft3	09-Dec-21	W10AMD571-22
4	20048	Flow-total	AMD57	ft3	16-Dec-21	W11AMD571-22
4	14299	Flow-total	AMD57	ft3	21-Dec-21	W12AMD571-22
4	23108	Flow-total	AMD57	ft3	29-Dec-21	W13AMD571-22
Total	**258600**	**7328**	m^3			
4	20108	Flow-total	AMD612	ft3	07-Oct-21	W01AMD6121-22
4	22125	Flow-total	AMD612	ft3	14-Oct-21	W02AMD6121-22
4	22111	Flow-total	AMD612	ft3	21-Oct-21	W03AMD6121-22
4	22145	Flow-total	AMD612	ft3	28-Oct-21	W04AMD6121-22
4	20718	Flow-total	AMD612	ft3	04-Nov-21	W05AMD6121-22
4	20191	Flow-total	AMD612	ft3	11-Nov-21	W06AMD6121-22
4	19702	Flow-Total	AMD612	ft3	18-Nov-21	W07AMD6121-22
4	14577	Flow-total	AMD612	ft3	23-Nov-21	W08AMD6121-22
4	25459	Flow-total	AMD612	ft3	02-Dec-21	W09AMD6121-22
4	20161	Flow-total	AMD612	ft3	09-Dec-21	W10AMD6121-22
4	20056	Flow-total	AMD612	ft3	16-Dec-21	W11AMD6121-22
4	14291	Flow-total	AMD612	ft3	21-Dec-21	W12AMD6121-22
4	23103	Flow-total	AMD612	ft3	29-Dec-21	W13AMD6121-22
Total	**264747**	**7503**	m^3			
4	19160	Flow-total	AMD746S	ft3	07-Oct-21	W01AMD746S1-22
4	0	Flow-total	AMD746S	ft3	14-Oct-21	W02AMD746S1-22
4	0	Flow-total	AMD746S	ft3	21-Oct-21	W03AMD746S1-22
4	0	Flow-total	AMD746S	ft3	28-Oct-21	W04AMD746S1-22
4	20181	Flow-total	AMD746S	ft3	04-Nov-21	W05AMD746S1-22
4	20259	Flow-total	AMD746S	ft3	11-Nov-21	W06AMD746S1-22
4	19738	Flow-total	AMD746S	ft3	18-Nov-21	W07AMD746S1-22
4	14462	Flow-total	AMD746S	ft3	23-Nov-21	W08AMD746S1-22
4	25452	Flow-total	AMD746S	ft3	02-Dec-21	W09AMD746S1-22
4	20160	Flow-total	AMD746S	ft3	09-Dec-21	W10AMD746S1-22
4	19994	Flow-total	AMD746S	ft3	16-Dec-21	W11AMD746S1-22
4	14308	Flow-total	AMD746S	ft3	21-Dec-21	W12AMD746S1-22
4	23102	Flow-total	AMD746S	ft3	29-Dec-21	W13AMD746S1-22

Table A.3. Weekly Flow Data (Continued)

QUARTER	RESULTS	CHEMICAL_NAME	STA_NAME	UNITS	D_COLLECTED	PROJ_SAMPLE_ID
Total	**196816**	**5577**	m^3			
4	20055	Flow-total	AMD746U	ft3	07-Oct-21	W01AMD746U1-22
4	20134	Flow-total	AMD746U	ft3	14-Oct-21	W02AMD746U1-22
4	20094	Flow-total	AMD746U	ft3	21-Oct-21	W03AMD746U1-22
4	20200	Flow-total	AMD746U	ft3	28-Oct-21	W04AMD746U1-22
4	20632	Flow-total	AMD746U	ft3	04-Nov-21	W05AMD746U1-22
4	20269	Flow-total	AMD746U	ft3	11-Nov-21	W06AMD746U1-22
4	19716	Flow-total	AMD746U	ft3	18-Nov-21	W07AMD746U1-22
4	14495	Flow-total	AMD746U	ft3	23-Nov-21	W08AMD746U1-22
4	25462	Flow-total	AMD746U	ft3	02-Dec-21	W09AMD746U1-22
4	20170	Flow-total	AMD746U	ft3	09-Dec-21	W10AMD746U1-22
4	20007	Flow-total	AMD746U	ft3	16-Dec-21	W11AMD746U1-22
4	14308	Flow-total	AMD746U	ft3	21-Dec-21	W12AMD746U1-22
4	23108	Flow-total	AMD746U	ft3	29-Dec-21	W13AMD746U1-22
Total	**258650**	**7330**	m^3			
4	22450	Flow-total	AMDBCP	ft3	07-Oct-21	W01AMDBCP1-22
4	20125	Flow-total	AMDBCP	ft3	14-Oct-21	W02AMDBCP1-22
4	20078	Flow-total	AMDBCP	ft3	21-Oct-21	W03AMDBCP1-22
4	20051	Flow-total	AMDBCP	ft3	28-Oct-21	W04AMDBCP1-22
4	0	Flow-total	AMDBCP	ft3	04-Nov-21	W05AMDBCP1-22
4	20199	Flow-total	AMDBCP	ft3	11-Nov-21	W06AMDBCP1-22
4	19980	Flow-total	AMDBCP	ft3	18-Nov-21	W07AMDBCP1-22
4	14510	Flow-total	AMDBCP	ft3	23-Nov-21	W08AMDBCP1-22
4	25498	Flow-total	AMDBCP	ft3	02-Dec-21	W09AMDBCP1-22
4	20233	Flow-toal	AMDBCP	ft3	09-Dec-21	W10AMDBCP1-22
4	20063	Flow-total	AMDBCP	ft3	16-Dec-21	W11AMDBCP1-22
4	14374	Flow-total	AMDBCP	ft3	21-Dec-21	W12AMDBCP1-23
4	23170	Flow-total	AMDBCP	ft3	29-Dec-21	W13AMDBCP1-22
Total	**240731**	**6822**	m^3			
4	20016	Flow-total	AMDNE	ft3	07-Oct-21	W01AMDNE1-22
4	20129	Flow-total	AMDNE	ft3	14-Oct-21	W02AMDNE1-22
4	20070	Flow-total	AMDNE	ft3	21-Oct-21	W03AMDNE1-22
4	20018	Flow-total	AMDNE	ft3	28-Oct-21	W04AMDNE1-22
4	20433	Flow-total	AMDNE	ft3	04-Nov-21	W05AMDNE1-22
4	20271	Flow-total	AMDNE	ft3	11-Nov-21	W06AMDNE1-22
4	19770	Flow-total	AMDNE	ft3	18-Nov-21	W07AMDNE1-22
4	14452	Flow-total	AMDNE	ft3	23-Nov-21	W08AMDNE1-22
4	25463	Flow-total	AMDNE	ft3	02-Dec-21	W09AMDNE1-22
4	20171	Flow-total	AMDNE	ft3	09-Dec-21	W10AMDNE1-22
4	20004	Flow-total	AMDNE	ft3	16-Dec-21	W11AMDNE1-22
4	14320	Flow-total	AMDNE	ft3	21-Dec-21	W12AMDNE1-22
4	23115	Flow-total	AMDNE	ft3	29-Dec-21	W13AMDNE1-22
Total	**258232**	**7318**	m^3			

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