REVISION 0

NORTH ST. LOUIS COUNTY SITES ANNUAL ENVIRONMENTAL MONITORING DATA AND ANALYSIS REPORT FOR CALENDAR YEAR 2022

ST. LOUIS, MISSOURI

JUNE 23, 2023

U.S. Army Corps of Engineers
St. Louis District Office
Formerly Utilized Sites Remedial Action Program

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prepared by
U.S. Army Corps of Engineers St. Louis District Office
Formerly Utilized Sites Remedial Action Program

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BACK COVER

The primary distribution format for this document is electronic files. If printed copies are distributed, the following portions will be included on a CD-ROM on the back cover of the report instead of being printed: Appendices C, D, E, F, and H.

ACRONYMS AND ABBREVIATIONS

Ac	actinium
AEC	Atomic Energy Commission
Am	americium
amsl	above mean sea level
ARAR	applicable or relevant and appropriate requirement
ATD	alpha track detector
bgs	below ground surface
BMP	best management practice
BOD	biological oxygen demand
BTOC	below top of casing
CEDE	committed effective dose equivalent
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CFR	*Code of Federal Regulations*
COC	contaminant of concern
COD	chemical oxygen demand
Cs	cesium
CSR	*Code of State Regulations*
CWC	Coldwater Creek
CY	calendar year
DCF	dose conversion factor
DHSS	Department of Health and Senior Services
DL	detection limit
DO	dissolved oxygen
DoD	U.S. Department of Defense
DOE	U.S. Department of Energy
DQO	data quality objective
EDE	effective dose equivalent
EE/CA	engineering evaluation/cost analysis
ELAP	Environmental Laboratory Accreditation Program
EM	Engineer Manual
EMDAR	Environmental Monitoring Data and Analysis Report
EMG	*Environmental Monitoring Guide for the St. Louis Sites*
EMICY22	*Environmental Monitoring Implementation Plan for the North St. Louis County Sites for CY 2022*
EMP	Environmental Monitoring Program
FUSRAP	Formerly Utilized Sites Remedial Action Program
Futura	Futura Coatings Company
HISS	Hazelwood Interim Storage Site
HZ	hydrostratigraphic zone
I	Interstate
IA	investigation area
ICP	inductively coupled plasma
ICRP	International Commission on Radiation Protection
K	potassium

ACRONYMS AND ABBREVIATIONS (Continued)

KPA	kinetic phosphorescence analysis
LCS	laboratory control sample
LCL_{95}	95 percent lower confidence limit
MARSSIM	*Multi-Agency Radiation Survey and Site Investigation Manual*
MDA	minimum detectable activity
MDC	minimum detectable concentration
MDL	method detection limit
MDNR	Missouri Department of Natural Resources
MED	Manhattan Engineer District
MSD	Metropolitan St. Louis Sewer District
NAD	normalized absolute difference (unitless)
NARA	National Archives and Records Administration
NC	North St. Louis County
NCRP	National Council on Radiation Protection and Measurement
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRC	U.S. Nuclear Regulatory Commission
ORNL	Oak Ridge National Laboratory
ORP	oxidation reduction potential
Pa	protactinium
PCB	polychlorinated biphenyl
PDI	pre-design investigation
QA	quality assurance
QAPP	quality assurance program plan
QC	quality control
QSM	*Department of Defense (DoD)/Department of Energy (DOE) Consolidated Quality Systems Manual (QSM) for Environmental Laboratories*
Ra	radium
RA	remedial action
RCRA	Resource Conservation and Recovery Act
RG	remediation goal
RL	reporting limit
RME	reasonably maximally exposed
Rn	radon
ROD	*Record of Decision for the North St. Louis County Sites*
RPD	relative percent difference
S	test statistic
SAG	*Sampling and Analysis Guide for the St. Louis Sites*
SLAPS	St. Louis Airport Site
SLS	St. Louis Sites
SOP	standard operating procedure
SOR	sum of ratios (unitless)
SS	settleable solid
SU	survey unit
TEDE	total effective dose equivalent
Th	thorium

ACRONYMS AND ABBREVIATIONS (Continued)

TLD	thermoluminescent dosimeter
TPH	total petroleum hydrocarbon
TSS	total suspended solid
U	uranium
UCL	upper confidence limit
UCL_{95}	95 percent upper confidence limit
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
VQ	validation qualifier
VP	vicinity property
WRS	Wilcoxon Rank Sum

UNIT ABBREVIATIONS

Both English and metric units are used in this report. The units used in a specific situation are based on common unit usage or regulatory language (e.g., depths are given in feet, and areas are given in square meters). Units included in the following list are not defined at first use in this report.

°C	degree(s) Celsius (centigrade)
µCi/mL	microcurie(s) per milliliter
µg/L	microgram(s) per liter
µR	microRoentgen(s)
Ci	curie(s)
ft	foot/feet
g	gram(s)
L	liter(s)
m	meter(s)
m^2	square meter(s)
mg	milligram(s)
mg/kg	milligram(s) per kilogram
mg/L	milligram(s) per liter
MGD	million gallons per day
mL	milliliter(s)
mL/L/hour	milliliter(s) per liter per hour
mrem	millirem
mrem/pCi	millirem per picocurie
mS/cm	microSievert(s) per centimeter
mV	millivolt(s)
NTU	nephelometric turbidity unit
pCi/µg	picocurie(s) per microgram
pCi/g	picocurie(s) per gram
pCi/L	picocurie(s) per liter
s.u.	standard unit
WL	working level
WLM	working level month
yd^3	cubic yard(s)

EXECUTIVE SUMMARY

This annual Environmental Monitoring Data and Analysis Report (EMDAR) for calendar year (CY) 2022 applies to the North St. Louis County (NC) Sites, which are within the St. Louis Sites (SLS) (Figure 1-1) and under the scope of the Formerly Utilized Sites Remedial Action Program (FUSRAP). This EMDAR provides an evaluation of the data collected as part of the implementation of the Environmental Monitoring Program (EMP) for the NC Sites. The NC Sites consist of the St. Louis Airport Site (SLAPS), the SLAPS vicinity properties (VPs) (Figure 1-2), and the Latty Avenue Properties (i.e., the Hazelwood Interim Storage Site [HISS], the Futura Coatings Company [Futura], and eight Latty Avenue VPs) (Figure 1-3). Additional environmental data were collected along Coldwater Creek (CWC), which flows adjacent to the SLAPS, near the HISS, and north of U.S. Interstate (I)-270 to the Missouri River. Environmental monitoring of various media at each of the NC Sites is required in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the commitments in the *Record of Decision for the North St. Louis County Sites* (ROD) (USACE 2005).

The purpose of this EMDAR is to document the environmental monitoring activities and to assess whether remedial actions (RAs) at the NC Sites had a measurable environmental impact. In addition, this EMDAR serves to report the current condition of the NC Sites, summarize the data collection efforts for CY 2022, and provide analysis of the CY 2022 environmental monitoring data results.

The U.S. Army Corps of Engineers (USACE) St. Louis District collects comprehensive environmental data for decision-making and planning purposes. Environmental monitoring, performed as a best management practice (BMP) or as a component of RAs, serves as a critical component in the evaluation of the current status and potential future migration of residual contaminants.

The environmental monitoring described in the *Environmental Monitoring Implementation Plan for the North St. Louis County Sites for CY 2022* (EMICY22) (USACE 2021) was conducted as planned, and the results are documented in this EMDAR. The evaluation of environmental monitoring data for all NC Sites demonstrates compliance with ROD (USACE 2005) goals and applicable or relevant and appropriate requirements (ARARs).

RADIOLOGICAL AIR MONITORING

Radiological air data were collected and evaluated at the NC Sites through airborne radioactive particulate, radon (indoor and outdoor), and gamma radiation monitoring, as required in the EMICY22 (USACE 2021). In addition to being used for environmental monitoring purposes, radiological air data were also used as inputs to calculate the total effective dose equivalent (TEDE) to the reasonably maximally exposed (RME) member of the public for the NC Sites.

Each TEDE calculated for the RME individual at each NC Site was 7.3 mrem or less per year. The calculated TEDEs are compliant with the 100 mrem per year limit provided in 10 *Code of Federal Regulations (CFR)* 20.1301.

The radiological air monitoring results conducted at the NC Sites demonstrate compliance with all ARARs for the NC Sites. The ARARs are described in Tables 2-1 through 2-4 of the EMICY22 (USACE 2021).

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM MONITORING

Discharge requirements for the NC Sites are currently set by the Missouri Department of Natural Resources (MDNR) National Pollutant Discharge Elimination System (NPDES) ARARs (permit-equivalent) document dated October 2, 1998 (MDNR 1998), and amended in a letter from the MDNR dated February 19, 2002 (MDNR 2002).

The stormwater sampling results for the NC Sites demonstrate compliance with the discharge limits described in Section 2.2.2 of the EMICY22 (USACE 2021).

EXCAVATION WATER DISCHARGE MONITORING

CY 2022 was the 21st year that excavation water was monitored, treated, discharged from the NC Sites, and reported. Excavation water discharged from the NC Sites to the sanitary sewer system is subject to the requirements stated in the July 23, 2001, Metropolitan St. Louis Sewer District (MSD) authorization letter (MSD 2001) and the selenium discharge variance letter for the SLAPS dated February 10, 2005 (MSD 2005). This authorization was extended for 2 years through the issuance of a letter dated June 7, 2022, from Mr. Steve Grace to Mr. David Evans. This authorization expires on July 23, 2024 (MSD 2022a). The selenium discharge variance for the SLAPS was not utilized in CY 2022 (MSD 2005, 2012). There is no longer a requirement to analyze for barium, lead, or selenium after the first two batches from new investigative areas (MSD 2012). On July 29, 2022, the MSD approved an increase in discharge requirements from 100,000 gallons of water to 250,000 gallons of water (MSD 2022b).

Wastewater from the FUSRAP St. Louis Radioanalytical Laboratory was discharged in accordance with the MSD discharge authorization letter dated June 7, 2022. This MSD special discharge approval expires on July 23, 2024 (MSD 2022a).

The data collected at the NC Sites were compared to discharge limits described in Section 2.2.2 of the EMICY22 (USACE 2021). During CY 2022, no exceedances of the discharge limits occurred at the project laboratory or the NC Sites.

COLDWATER CREEK MONITORING

The CY 2022 CWC surface water and sediment sampling events, which were completed in April and October of 2022, evaluated the physical, radiological, and chemical conditions in the creek. During the April and October sampling events, samples were collected at each of the 10 surface water and sediment sampling locations (C002 through C011). These sampling locations are shown on Figure 3-3.

As planned, two surface water sampling events were conducted from CWC during high-flow conditions as a BMP to determine if the creek is being measurably affected by COC migration. An additional high-flow surface water sampling event was completed due to a historic precipitation event that occurred in July of 2022.

The data collected were compared to the monitoring guidelines and/or remediation goals (RGs) described in Section 2.2.3 of the EMICY22 (USACE 2021). The results of the surface water and sediment sampling conducted in CWC demonstrate compliance with ARARs for the NC Sites.

GROUNDWATER MONITORING

Groundwater was sampled during CY 2022 at the NC Sites following a protocol for individual wells and analytes. Groundwater was analyzed for various radiological constituents and for inorganic parameters. Static groundwater elevations for all NC Site wells were measured quarterly.

The environmental sampling requirements and groundwater monitoring guidelines for each analyte are consistent with the EMICY22 (USACE 2021) and were used for comparison and discussion purposes. The ROD groundwater monitoring guidelines (henceforth referred to as ROD guidelines) for assessing groundwater sampling data at the NC Sites (the Latty Avenue Properties and the SLAPS and SLAPS VPs) are presented in Section 2.2.4 of the EMICY22 (USACE 2021) and in Section 4.0 and Appendix F of this EMDAR. For those wells at which an analyte exceeded the ROD guidelines at least once during CY 2022 and sufficient data were available to evaluate trends, Mann-Kendall Trend Tests were completed to assess whether analyte concentrations were increasing or decreasing through time.

LATTY AVENUE PROPERTIES

Groundwater sampling was conducted at five hydrostratigraphic zone (HZ)-A groundwater monitoring wells at the Latty Avenue Properties during CY 2022. Contaminant of concern (COC) concentrations in two wells (molybdenum, nickel, and selenium in HISS-10 and uranium [U]-234 and U-238 in HW22) exceeded the ROD guideline in HZ-A groundwater at the Latty Avenue Properties during CY 2022. Because a significant degradation of CWC surface water has not occurred and is not anticipated, no findings currently indicate significantly degraded groundwater conditions in HZ-A groundwater, as defined by the ROD.

Groundwater samples were collected from one HZ-C well during CY 2022. Concentrations of all inorganic and radiological soil COCs were below the ROD groundwater guidelines in CY 2022 groundwater samples from the HZ-C well HW23. Therefore, a trend analysis was not conducted for HZ-C groundwater.

The Mann-Kendall Trend Test was performed for three COCs in two HZ-A wells (molybdenum and selenium in HISS-10, and total U in HW22) during CY 2022. A statistically significant increasing trend was identified for molybdenum and selenium concentrations in HISS-10 and total U in HW22. For the purposes of this trend analysis, a statistically significant trend in concentration is defined as a trend with a confidence level greater than 95 percent. The confidence level denotes the probability that the indicated trend is an actual trend in the data, rather than a result of the random nature of environmental data.

The potentiometric data indicate some mounding of HZ-A groundwater at the HISS and Futura. Potentiometric mounding is an area with a higher potentiometric elevation surrounded by areas of lower potentiometric elevations. Wells HISS-01, HISS-06A, HISS-10, and HISS-17S have the highest potentiometric surface elevations, with lower groundwater elevations measured in the surrounding wells. At the western edge of the HISS and Futura, groundwater in HZ-A flows to the west toward CWC.

The potentiometric surface of the HZ-C groundwater at the Latty Avenue Properties is not well defined due to the limited data available for the deeper HZs. Based on measured groundwater elevations in the HZ-C monitoring well HW23 at the Latty Avenue Properties and several HZ-C wells located to the southwest at the SLAPS and SLAPS VPs, the flow direction in HZ-C groundwater beneath the Latty Avenue Properties is generally toward the east.

ST. LOUIS AIRPORT SITE AND ST. LOUIS AIRPORT SITE VICINITY PROPERTIES

At the SLAPS and SLAPS VPs, 11 groundwater wells were sampled for various parameters during CY 2022. Seven wells, screened in HZ-A, were sampled at the SLAPS and the adjacent SLAPS VP Ballfields. Two inorganic analytes (barium and chromium) and one radiological contaminant (total U) were detected in HZ-A groundwater at concentrations in excess of the ROD guidelines. A comparison of the data indicates that only total U concentrations in PW46 exceeded the ROD guidelines for a period of at least 12 months or when measurement error is taken into account. Because a significant degradation of CWC surface water has not occurred and is not anticipated to occur, no findings currently indicate significantly degraded groundwater conditions in HZ-A groundwater, as defined by the ROD. However, because total U levels exceeded the ROD guidelines for a period of at least 12 months, monitoring will continue subject to subsequent CERCLA 5-year reviews.

During CY 2022, four wells screened across the deeper HZs (HZ-C through HZ-E) were sampled at the SLAPS and SLAPS VPs. Concentrations of cadmium exceeded ROD groundwater criteria in PW35 in CY 2022. Cadmium has not exceeded the ROD guideline when measurement error was taken into account. Because no soil COCs have statistically increased in groundwater (relative to the well's historical data and accounting for uncertainty) for more than a 12-month period, no findings currently indicate significantly degraded groundwater conditions in HZ-C through HZ-E groundwater at the SLAPS and SLAPS VPs.

The Mann-Kendall Trend Test was performed for barium in B53W06S, chromium in B53W09S, and total U in PW46. Statistically significant increasing trends were observed for barium concentrations in B53W06S and chromium concentrations in B53W09S. A statistically significant decreasing trend was observed for total U in PW46.

Potentiometric surface maps were created from groundwater elevations measured in May and November to illustrate groundwater flow conditions in wet and dry seasons. The potentiometric data indicate groundwater flow northwesterly toward CWC in the HZ-A at the SLAPS. The flow direction in the HZ-C groundwater at the SLAPS is generally southeast.

1.0 HISTORICAL SITE BACKGROUND AND CURRENT SITE STATUS

1.1 INTRODUCTION

This annual Environmental Monitoring Data and Analysis Report (EMDAR) for calendar year (CY) 2022 applies to the North St. Louis County (NC) Sites, which are within the St. Louis Sites (SLS) (Figure 1-1), and under the scope of the Formerly Utilized Sites Remedial Action Program (FUSRAP). This EMDAR provides an evaluation of the data collected as part of the implementation of the Environmental Monitoring Program (EMP) for the NC Sites. The NC Sites consist of the St. Louis Airport Site (SLAPS), the SLAPS vicinity properties (VPs) (Figure 1-2), and the Latty Avenue Properties (i.e., the Hazelwood Interim Storage Site [HISS], the Futura Coatings Company [Futura], and eight Latty Avenue VPs) (Figure 1-3). Additional environmental data were collected along Coldwater Creek (CWC), which flows adjacent to the SLAPS, near the HISS, and north of U.S. Interstate (I)-270 to the Missouri River. Environmental monitoring of various media at each of the NC Sites is required in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the *Record of Decision for the North St. Louis County Sites* (ROD) (USACE 2005).

1.2 PURPOSE

The purpose of this EMDAR is to document the environmental monitoring activities and to assess whether remedial actions (RAs) at the NC Sites had a measurable environmental impact. In addition, this EMDAR serves to report the current condition of the NC Sites, summarize the data collection efforts for CY 2022, and provide analysis of the CY 2022 environmental monitoring data results. This EMDAR presents the following information:

- Sample collection data for various media at each site and interpretation of CY 2022 EMP results;
- The compliance status of each site with federal and state applicable or relevant and appropriate requirements (ARARs) or other benchmarks (e.g., *Environmental Monitoring Implementation Plan for the North St. Louis County Sites for CY 2022* [EMICY22] [USACE 2021]);
- Dose assessments for radiological contaminants as appropriate;
- A summary of trends based on changes in contaminant concentration, to support RAs, ensure public safety, and maintain surveillance monitoring requirements at each site; and
- The identification of data gaps and future EMP needs.

1.3 ST. LOUIS SITE PROGRAM AND SITE BACKGROUND

The FUSRAP was executed by the U.S. Atomic Energy Commission (AEC) in 1974 to identify, remediate, or otherwise control sites at which residual radioactivity remains from operations conducted for the Manhattan Engineer District (MED) and AEC during the early years of the nation's atomic energy program. The FUSRAP was continued by the follow-on agencies to the AEC until 1997, when the U.S. Congress transferred responsibility for the FUSRAP to the U.S. Army Corps of Engineers (USACE).

On October 4, 1989, the SLAPS, the HISS, and Futura were placed on the U.S. Environmental Protection Agency (USEPA) National Priorities List (NPL) under the site name "St. Louis

Airport/Hazelwood Interim Storage/Futura Coatings Co." (Comprehensive Environmental Response, Compensation, and Liability Information System [CERCLIS] No. MOD980633176). The three NPL sites have been involved with the following: refinement of uranium ores, production of uranium metal and compounds, uranium recovery from residues and scrap, and the storage and disposal of associated process byproducts.

Detailed descriptions and histories for each site can be found in the *Remedial Investigation Report for the St. Louis Site* (U.S. Department of Energy [DOE] 1994), *Remedial Investigation Addendum for the St. Louis Site* (DOE 1995), *St. Louis Airport Site (SLAPS) Interim Action Engineering Evaluation/Cost Analysis (EE/CA)* (DOE 1997), *Engineering Evaluation/Cost Analysis (EE/CA) and Responsiveness Summary for the St. Louis Airport Site (SLAPS)* (USACE 1998a), *Environmental Evaluation/Cost Analysis (EE/CA) for the Hazelwood Interim Storage Site (HISS)* (USACE 1998b), the *Environmental Monitoring Guide for the St. Louis Sites* (EMG) (USACE 1999a), and the ROD (USACE 2005).

USACE NC Sites documents finalized in CY 2022 are listed in Appendix A.

1.3.1 Latty Avenue Properties Calendar Year 2022 Remedial Actions

In CY 2022, no RAs were performed at the Latty Avenue Properties (Figure 1-2).

During CY 2022, no *Multi-Agency Radiation Survey and Site Investigation Manual* (MARSSIM) (U.S. Department of Defense [DoD] 2000) Class 1, Class 2, or Class 3 verifications were performed at the Latty Avenue Properties. Verifications are performed to confirm the ROD remediation goals (RGs) were achieved. Characterizations/pre-design investigations (PDIs) were performed at the following Latty Avenue Properties in CY 2022: Futura (Inside Building 1).

1.3.2 St. Louis Airport Site and St. Louis Airport Site Vicinity Properties Calendar Year 2022 Remedial Actions

In CY 2022, RAs were performed at the following SLAPS-related VPs and investigation areas (IAs) (Figure 1-2): the IA-09 Ballfields; VP-56; and Pershall Road. RAs at the IA-09 Ballfields and VP-56 continued through the fourth quarter. RAs at Pershall Road started in the third quarter and continued through the fourth quarter. During these RAs, 35,067 yd^3 of contaminated material were shipped from the SLAPS IAs and VPs via railcar to U.S. Ecology, Inc., in Idaho. Additionally, loadout activities were performed at the SLAPS.

During CY 2022, MARSSIM Class 1 verifications were performed at the IA-09 Ballfields (In-Situ Overburden Lift 1 through Lift 5 and at survey unit (SU)-27, SU-28 and SU-29), VP-56 (In-Situ Overburden Lift 1 through Lift 4 and at SU-1, SU-2, and SU-3), and Pershall Road (SU-1 and SU-2). MARSSIM Class 2 final status surveys were performed at VP-56, Pershall Road, I-270, and CWC in CY 2022. No MARSSIM Class 3 final status surveys were performed in CY 2022.

Characterizations/PDIs were performed at the following SLAPS IAs and VPs in CY 2022: Jana School, CWC, and 45 adjacent CWC-floodplain properties. Based on final status survey evaluations performed in CY 2022, Class 2 sample results did not exceed RGs for 81 properties.

In CY 2022, no Resource Conservation and Recovery Act (RCRA) hazardous waste was generated or shipped.

No monitoring wells were decommissioned in CY 2022.

In accordance with the Metropolitan St. Louis Sewer District (MSD) authorization letter, 5,790,046 gallons of excavation water were discharged from the NC Sites in CY 2022. Since the beginning of the project, 47,929,541 gallons have been treated and released to the MSD from the NC Sites.

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2.0 EVALUATION OF RADIOLOGICAL AIR MONITORING DATA

This section documents environmental monitoring activities related to radiological air data. The radiological air monitoring conducted at the NC Sites is part of the EMP. Radiological air data are collected to evaluate the compliance status of each site with ARARs, to evaluate trends, and to perform dose assessments for radiological contaminants as appropriate at each site. Section 2.1 includes a description of the types of radiological air monitoring conducted at the NC Sites, potential sources of the contaminants to be measured (including natural background), and measurement techniques employed during CY 2022.

All radiological air monitoring required through implementation of the EMICY22 (USACE 2021) was conducted as planned in CY 2022. The evaluations of radiological air monitoring data for all NC Sites demonstrate compliance with ARARs.

A total effective dose equivalent (TEDE) for the reasonably maximally exposed (RME) member of the public at each of the NC Sites was calculated by summing the dose due to gamma radiation, radiological air particulates, and radon, as applicable. The TEDE calculated for the RME individual at each of the NC Sites was less than or equal to 7.3 mrem per year. The calculated TEDE is compliant with the 100 mrem per year limit prescribed in 10 *Code of Federal Regulations (CFR)* 20.1301. Details of the radiological dose assessment (TEDE calculation) are presented in Section 6.0.

2.1 RADIOLOGICAL AIR MEASUREMENTS

The three types of radiological air monitoring conducted at the NC Sites in CY 2022 were gamma radiation, airborne radioactive particulates, and airborne radon. Sections 2.2 and 2.3 provide details of the air monitoring conducted at the Latty Avenue Properties and the SLAPS and SLAPS VPs.

2.1.1 Gamma Radiation

Gamma radiation is emitted from natural, cosmic, and manmade sources. The earth naturally contains gamma radiation-emitting substances, such as the uranium decay series, the thorium decay series, and potassium (K)-40. Cosmic radiation originates in outer space and filters through the atmosphere to the earth. Together, these two sources comprise the majority of natural gamma background radiation. The National Council on Radiation Protection and Measurements (NCRP) estimates that the total naturally occurring background radiation dose equivalent due to gamma exposure is 51 mrem per year, 20 mrem per year of which originates from sources on earth and 31 mrem per year of which originates from cosmic sources (NCRP 2009). The background monitoring location for the NC Sites (Figure 2-1) is reasonably representative of background gamma radiation for the St. Louis metropolitan area (Appendix C, Table C-3).

Gamma radiation was measured at the NC Sites in CY 2022 using thermoluminescent dosimeters (TLDs). TLDs were placed at site boundaries or at locations representative of areas accessible to the public (Figures 2-2 and 2-3) in order to provide input for calculation of TEDE.

The TLDs were placed at the monitoring location approximately 3 to 5 ft above the ground surface inside a housing shelter to represent whole body exposure. The TLDs were collected quarterly and sent to a properly certified, off-site laboratory for analysis (Appendix C, Table C-3).

2.1.2 Airborne Radioactive Particulates

2.1.2.1 Air Sampling

Airborne radioactive particulates result from radionuclides in soil that becomes suspended in the air. The radionuclides in soil normally become airborne as a result of wind erosion of the surface soil or as a result of soil disturbance (e.g., excavation). This airborne radioactive material includes naturally occurring background concentrations (Appendix C, Table C-1), as well as above-background concentrations of radioactive materials present at the NC Sites.

Airborne radioactive particulates were measured at the NC Sites by drawing air through a filter membrane with an air sampling pump placed approximately 3 to 5 ft above the ground (to represent the breathing zone) and then analyzing the material contained on the filter. The results of the analysis, when compared to the amount of air drawn through the filter, were reported as radioactive contaminant concentrations (i.e., µCi/mL). Particulate air monitors were located at excavation and loadout area perimeter locations (Figures 2-2 and 2-3), as appropriate, to provide input for the National Emissions Standards for Hazardous Air Pollutants (NESHAP) Report and calculation of TEDE to the critical receptor. Air particulate samples were typically collected daily or the first working day after a weekend.

2.1.2.2 Estimation of Emissions in Accordance with the National Emission Standard for Hazardous Air Pollutants

The NC Sites CY 2022 NESHAP report (Appendix B) presents calculation of the effective dose equivalent (EDE) from radionuclide emissions to critical receptors in accordance with the NESHAP. The report is prepared in accordance with the requirements and procedures contained in 40 *CFR* 61, Subpart I.

Emission rates calculated using air sampling data, activity fractions, and other site-specific information were used as inputs to the USEPA CAP88-PC Version 4.1 computer code (USEPA 2020) to demonstrate compliance with the 10 mrem per year ARAR prescribed in 40 *CFR* 61, Subpart I.

CY 2022 monitoring results for the NC Sites demonstrate compliance with the 10 mrem per year ARAR prescribed in 40 *CFR* 61, Subpart I. See Appendix I for further details.

2.1.3 Airborne Radon

Uranium (U)-238 is a naturally occurring radionuclide commonly found in soil and rock. Radon (Rn)-222 is a naturally occurring radioactive gas found in the uranium decay series. A fraction of the radon produced from the radioactive decay of naturally occurring U-238 diffuses from soil and rock into the atmosphere, accounting for natural background airborne radon concentrations. The NCRP estimates the total naturally occurring background radiation dose equivalent due to radon exposure is 230 mrem per year (NCRP 2009). In addition to this natural source, radon is produced from the above-background concentrations of radioactive materials present at the NC Sites.

Outdoor airborne radon concentration is governed by the emission rate and dilution factors, both of which are strongly affected by meteorological conditions. Surface soil is the largest source of radon. Secondary contributors include oceans, natural gas, geothermal fluids, volcanic gases, ventilation from caves and mines, and coal combustion. Radon levels in the atmosphere have been observed to vary with height above the ground, season, time of day, and location. The primary meteorological parameter governing airborne radon concentration is atmospheric stability; however, the largest variations in atmospheric radon occur spatially (USEPA 1987).

Radon alpha track detectors (ATDs) were used at the NC Sites to measure alpha particles emitted from radon and its associated decay products. The background monitoring location for the SLS (Figure 2-1) is reasonably representative of background radon concentrations for the St. Louis metropolitan area. Radon ATDs were co-located with environmental TLDs approximately 3 to 5 ft above the ground surface (to represent the breathing zone) in housing shelters at the site boundaries or at locations representative of areas accessible to the public (Figures 2-2 and 2-3). Outdoor ATDs were collected approximately every 6 months and sent to a properly certified off-site laboratory for analysis (Appendix C, Table C-2). Recorded radon concentrations are listed in pCi/L and are used to provide input for calculation of TEDE.

At the NC Sites, ATDs were also placed in locations within applicable structures to monitor for indoor radon exposure. The ATDs were placed in areas that represent the highest likely exposure from indoor radon. ATD locations were chosen with consideration given to known radium (Ra)-226 concentrations under applicable buildings and occupancy time at any one location within each building (Figure 2-2). Annual average indoor radon data in each applicable building were compared to the 40 *CFR* 192.12(b)(1) ARAR value of 0.02 WL. In accordance with 40 *CFR* 192.12(b)(1), reasonable effort shall be made to achieve, in each habitable or occupied building, an annual average (or equivalent) radon decay product concentration (including background) not to exceed 0.02 WL. In any case, the radon decay product concentration shall not exceed 0.03 WL. Background indoor radon monitors were not necessary, because the regulatory standard of 0.02 WL includes background. Indoor ATDs were also collected approximately every 6 months and sent to a properly certified off-site laboratory for analysis (Appendix C, Table C-2).

CY 2022 monitoring results for the NC Sites demonstrate compliance with the 0.02 WL ARAR prescribed by 40 *CFR* 192.12(b)(1). See Section 2.2.3 for further details.

2.2 LATTY AVENUE PROPERTIES

Radiological air particulate monitoring was not conducted at Latty Avenue Properties in CY 2022.

2.2.1 Evaluation of Gamma Radiation Data

External gamma radiation exposure from Latty Avenue Properties other than Futura/VP-40A is considered negligible; therefore, environmental TLD monitoring was not conducted at Latty Avenue Properties other than VP-40A in 2022. Gamma radiation monitoring was performed at two locations along the railroad tracks on VP-40A (see Figure 2-2) and at the background location to compare on-site/off-site exposure and to provide input for calculation of TEDE to the critical receptor (Section 6.0) in CY 2022. A summary of TLD monitoring data for CY 2022 at VP-40A is shown in Table 2-1. TLD data are contained in Appendix C, Table C-3, of this EMDAR.

Table 2-1. Summary of Futura/VP-40A Gamma Radiation Data for CY 2022

Monitoring Location	Monitoring Station	First Quarter TLD Data		Second Quarter TLD Data		Third Quarter TLD Data		Fourth Quarter TLD Data		CY 2022 Net TLD Data (mrem/year)
		(mrem/quarter)								
		Rpt.	Cor.[a,b]	Rpt.	Cor.[a,b]	Rpt.	Cor.[a,b]	Rpt.	Cor.[a,b]	
Futura/VP-40A	FA-2	19.8	0.0	19.1	2.0	17.6	0.0	18.4	1.0	2.9
	FA-3	19.5	0.0	18.7	1.6	7.4	0.0	17.4	0.0	1.6
Background	BA-1	20.4	---	17.2	---	18.6	---	17.5	---	---

[a] All quarterly data reported from the vendor have been normalized to exactly one quarter's exposure above background.
[b] CY 2022 net TLD data are corrected for background, shelter absorption (s/a = 1.075), and fade.
--- Result calculation not required for background data.
Cor. – Corrected
Rpt. – Reported

2.2.2 Evaluation of Airborne Radioactive Particulate Data

No RA excavations near the Latty Avenue Properties were performed in CY 2022, and potentially contaminated soil is covered by asphalt, concrete, gravel, railroad ballast, and vegetative ground cover; therefore, dose due to air particulate emissions was assumed to be negligible.

2.2.3 Evaluation of Outdoor Airborne Radon Data

Outdoor exposure from Rn-222 from Latty Avenue Properties other than Futura/VP-40A is considered negligible. Therefore, outdoor environmental Rn-222 monitoring was not conducted at Latty Avenue Properties other than Futura/VP-40A in 2022. For the Latty Avenue Properties, outdoor airborne radon monitoring was performed using ATDs placed along the railroad tracks on VP-40A. Two detectors were co-located with TLDs and an additional ATD was located just north of the other two ATDs, as identified on Figure 2-2. Background ATDs were used to compare on-site exposure and off-site background exposure. Outdoor airborne radon data was used as an input for calculation of TEDE to the critical receptor (Section 6). A summary of CY 2022 outdoor radon data at Futura/VP-40A is shown in Table 2-2. Outdoor ATD data are contained in Appendix C, Table C-2 of this EMDAR.

Table 2-2. Summary of Futura/VP-40A Outdoor Airborne Radon (Rn-222) Data for CY 2022

Monitoring Location	Monitoring Station	Average Annual Concentration (pCi/L)		
		01/05/22 to 07/05/22[a] (Uncorrected)	07/05/22 to 01/04/23[a] (Uncorrected)	Average Annual Concentration[b]
Futura/VP-40A	FA-1	0.16	0.27	0.11
	FA-2	0.11	0.27	0.08
	FA-3	0.11	0.27	0.10
Background	BA-1	0.08	0.14	---

[a] Detectors were installed and removed on the dates listed. Data are as reported from the vendor (gross data including background).
[b] Results reported from the vendor are typically time-weighted and averaged to estimate an annual average radon above-background concentration (in pCi/L).
--- Average annual concentration calculation not required for background.

2.2.4 Evaluation of Indoor Airborne Radon Data

Indoor radon monitoring was performed at Futura buildings using ATDs placed at several locations in each Futura building at a height of approximately 3 to 5 ft (to represent breathing zone conditions) to measure radon concentrations. The detectors were located as shown on Figure 2-2. The ATDs were installed in January of CY 2022 at each monitoring location, collected for analysis after approximately 6 months of exposure, and replaced with another set that represents radon exposure for the remainder of the year. Recorded radon concentrations (in pCi/L) were converted to a radon WL, and an indoor radon equilibrium factor of 0.4 (NCRP 1988) was applied.

The results (including background) were evaluated based on the criteria contained in 40 *CFR* 192.12(b)(1). The average annual radon concentration was less than the 40 *CFR* 192.12(b)(1) criterion of 0.02 WL in each building (Leidos 2022a). Table 2-3 includes additional details of the data and calculation methodology used to determine the indoor radon WL in the Futura buildings. Indoor ATD data are contained in Appendix C, Table C-2, of this EMDAR.

Table 2-3. Summary of Futura Indoor Airborne Radon (Rn-222) Data for CY 2022

Monitoring Location	Monitoring Station	Average Annual Concentration (pCi/L)				WL[d]
		01/05/22 to 07/05/22[a]	07/05/22 to 01/04/23[a]	Annual Average[b]	Building/Area Average[c]	
Futura Building 1						
Building 1 Lab	HF-1	2.8	2.7	2.75	2.75	0.011
Building 1 Offices and Display Room	HF-2	4.9	4.3	4.60	4.85	0.019
	HF-11	5.6	4.6	5.10		
Building 1 South Storage	HF-3	0.11	0.35	0.23	0.23	0.001
Futura Building 2/3						
North Room	HF-4	0.76	1.1	0.93	1.00	0.004
Paint Room North	HF-5	1.1	1.1	1.10		
Paint Room South	HF-6	0.7	0.97	0.84		
South Room	HF-7	1.0	1.3	1.15		
Futura Building 4						
North Area	HF-8	0.78	0.81	0.80	0.82	0.003
Middle Area	HF-9	0.95	0.76	0.86		
South Area	HF-10	0.86	0.76	0.81		

[a] Detectors were installed and removed on the dates listed. Data are as reported from the vendor.
[b] Results reported from the vendor for two periods are averaged to estimate an annual average radon above-background concentration (in pCi/L).
[c] In each building or area, the average annual result for each monitoring station within the building was used to calculate a building or area average.
[d] The average annual WL is calculated by dividing the average pCi/L by 100 pCi/L per WL and multiplying by 0.4. The average annual WL must be less than 0.02 (40 *CFR* 192.12(b)).

Indoor radon monitoring has been performed inside the Futura buildings since CY 2006. Monitoring stations HF-1 and HF-2, both in Building 1, had been inadvertently renamed during several years of monitoring. One monitoring station was located in the lab area and the other was located in the front office/display room area. Because both stations were in Building 1, the average radon concentration for the building was correctly reported. Table 2-4 provides the historical reported data associated with each monitoring station.

Table 2-4. Futura Building 1 Indoor Airborne Radon (Rn-222) Historical Data

Monitoring Station	Concentration (pCi/L)					
Sample Date	**07/12/06**	**01/08/07**	**07/27/07**	**01/07/08**	**07/02/08**	**01/07/09**
HF-1: Lab Area	2.1	2.9	2	3.2	1.5	2.3
HF-2: Offices/Display Room	5.6	6.1	5	6.1	---	5.1
Sample Date	**07/07/09**	**01/11/10**	**07/07/10**	**01/04/11**	**07/06/11**	**01/10/12**
HF-1: Lab Area	1.4	1.6	1.2	1.8	1.5	1.6
HF-2: Offices/Display Room	4.7	4.3	3.5	3.6	3.1	3.7
Sample Date	**07/09/12**	**01/07/13**	**07/09/13**	**01/10/14**	**07/01/14**	**01/08/15**
HF-1: Lab Area	1.9	1.9	1.6	1.3	1.2	1.4
HF-2: Offices/Display Room	3.9	4.2	4.4	4.5	4.1	4.6
Sample Date	**07/02/15**	**01/04/16**	**07/07/16**	**01/04/17**	**07/05/17**	**01/09/18**
HF-1: Lab Area	1	1.5	1.1	2.2	1.5	2.4
HF-2: Offices/Display Room	4.8	4.8	4.1	6	6	6.2
Sample Date	**07/03/18**	**01/03/19**	**07/01/19**	**01/06/20**	**07/08/20**	**01/06/21**
HF-1: Lab Area	2.2	2.7	2.38	3.1	2.6	2.7
HF-2: Offices/Display Room	5.8	6.8	6.49	5.2	4.9	6.3
Sample Date	**07/07/21**	**01/05/22**	**07/05/22**	**01/04/23**		
HF-1: Lab Area	2.1	3.2	2.8	2.7		
HF-2: Offices/Display Room	4.2	5.4	4.9	4.3		

2.3 ST. LOUIS AIRPORT SITE AND ST. LOUIS AIRPORT SITE VICINITY PROPERTIES

Radiological air monitoring was conducted at the excavation and loadout area perimeters at the IA-09 Ballfields, Pershall Road, VP-56, and the Loadout Area at the SLAPS and SLAPS VPs in CY 2022.

2.3.1 Evaluation of Gamma Radiation Data

External gamma radiation exposure from the SLAPS VPs is considered negligible; therefore, environmental TLD monitoring was not conducted. Gamma radiation monitoring was performed at the SLAPS in CY 2022 at four site locations surrounding the SLAPS Loadout area (Figure 2-3) and at the background location (Figure 2-1) to compare on-site/off-site exposure and to provide input for calculation of TEDE to the critical receptor (Section 6.0). The EMP uses two TLDs at monitoring station PA-2 (for each monitoring period) to provide additional quality control (QC) of the monitoring data.

A summary of TLD monitoring results for CY 2022 at the SLAPS is shown in Table 2-5. TLD data are contained in Appendix C, Table C-3, of this EMDAR.

Table 2-5. Summary of SLAPS Gamma Radiation Data for CY 2022

Monitoring Location	Monitoring Station	First Quarter TLD Data		Second Quarter TLD Data		Third Quarter TLD Data		Fourth Quarter TLD Data		CY 2022 Net TLD Data (mrem/year)
		(mrem/quarter)								
		Rpt.	Cor.[a,b]	Rpt.	Cor.[a,b]	Rpt.	Cor.[a,b]	Rpt.	Cor.[a,b]	
SLAPS Perimeter	PA-1	21.6	1.4	20.4	3.3	20.2	1.8	17.9	0.4	6.9
	PA-2	23.4	3.4	23.5	6.6	21.7	3.4	23.6	6.6	20.0
	PA-2 dup[c]	22.9	2.8	23.2	6.2	22.2	4.0	22.9	5.8	---
	PA-3	17.3	0.0	18.0	0.8	17.5	0.0	17.4	0.0	0.8
	PA-4	25.5	5.8	25.1	8.2	25.3	7.4	24.6	7.6	29.1
Background	BA-1	20.4	---	17.2	---	18.6	---	17.5	---	---

[a] All quarterly data reported from the vendor have been normalized to exactly one quarter's exposure.
[b] CY 2022 net TLD data are corrected for background, shelter absorption (s/a = 1.075), and fade.
[c] A QC duplicate is collected at the same time and location, and is analyzed by the same method for evaluating precision in sampling and analysis. Duplicate sample results were not included in calculations.
--- Result calculations are not required.
Cor. – Corrected
Rpt. – Reported

2.3.2 Evaluation of Airborne Radioactive Particulate Data

For the SLAPS and SLAPS VPs, air sampling for particulate radionuclides was conducted at the perimeter of each active excavation and loadout area throughout CY 2022. Air particulate data were used as inputs to the NESHAP report (Appendix B) and calculation of TEDE to the critical receptor (Section 6.0).

A summary of air particulate monitoring data for the SLAPS and SLAPS VPs is shown in Table 2-6. Airborne radioactive particulate data are contained in Appendix C, Table C-4, of this EMDAR.

Table 2-6. Summary of SLAPS Airborne Radioactive Particulate Data for CY 2022

Monitoring Location	Average Concentration (µCi/mL)[a]	
	Gross Alpha	Gross Beta
IA-09 Ballfields	4.61E-15	3.02E-14
Pershall Road	5.44E-15	3.48E-14
VP-56	5.16E-15	3.08E-14
SLAPS Loadout	5.30E-15	3.06E-14
Background Concentration[b]	4.69E-15	2.47E-14

[a] Average concentration values for the sampling period by location.
[b] These concentrations are provided for informational purposes only.

2.3.3 Evaluation of Outdoor Airborne Radon Data

Exposure to Rn-222 from the SLAPS VPs is considered negligible; therefore, outdoor environmental Rn-222 monitoring was not conducted. Outdoor airborne radon monitoring was performed at the SLAPS using ATDs placed around the loadout area to measure radon emissions from the site. Four detectors were co-located with TLDs, as identified on Figure 2-3. One additional detector was located at monitoring station PA-2 as a QC duplicate. A background ATD was used to compare on-site exposure and off-site background exposure. Outdoor airborne radon data were used as inputs for calculation of TEDE to the critical receptor (Section 6.0).

A summary of CY 2022 outdoor radon data at the SLAPS is shown in Table 2-7. Outdoor ATD data are contained in Appendix C, Table C-2, of this EMDAR.

Table 2-7. Summary of SLAPS Outdoor Airborne Radon (Rn-222) Data for CY 2022

Monitoring Location	Monitoring Station	Average Annual Concentration (pCi/L)		
		01/05/22 to 07/05/22[a] (Uncorrected)	07/05/22 to 01/04/23[a] (Uncorrected)	Average Annual Concentration[b]
SLAPS Perimeter	PA-1	0.08	0.27	0.07
	PA-2	0.08	0.24	0.05
	PA-2[c]	0.11	0.27	---
	PA-3	0.11	0.24	0.07
	PA-4	0.11	0.27	0.08
Background	BA-1	0.08	0.14	---

[a] Detectors were installed and removed on the dates listed. Data are as reported from the vendor (gross data including background).
[b] Results reported from vendor for two periods are time-weighted and averaged to estimate an annual average radon above-background concentration (in pCi/L).
[c] A QC duplicate is collected at the same time and location, and is analyzed by the same method for evaluating precision in sampling and analysis.
--- Result calculations are not required.

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3.0 EVALUATION OF EXCAVATION WATER, STORMWATER, SURFACE WATER, AND SEDIMENT MONITORING DATA

This section provides a description of the excavation water, stormwater, surface water, and sediment monitoring activities conducted at the NC Sites, including the monitoring of CWC, in CY 2022. The results obtained from these monitoring activities are presented and evaluated with respect to historical data and the appropriate discharge limits as described in the EMICY22 (USACE 2021).

Section 2.2.2 of the EMICY22 outlines the discharge limits for the stormwater and excavation water discharged at the NC Sites (USACE 2021). The MSD has issued discharge authorization letters for the NC Sites that established discharge-limit-based criteria (MSD 1998, 2001, 2006, 2008, 2010, 2012, 2014, 2016, 2018, 2020, 2022). The pollutants addressed for all NC Sites are identified in Table 2-5 of the EMICY22 (USACE 2021). The pollutants addressed in the National Pollutant Discharge Elimination System (NPDES) permit equivalent for the SLAPS will be applied at all NC Sites and are identified in Table 2-6 of the EMICY22 (USACE 2021). For cases in which the regulatory authorities have not provided radiological contaminant of concern (COC) discharge limits, the 10 *CFR* 20, Appendix B, water effluent values are used to calculate the sum of ratios (SOR) value for each discharge. Additionally, the SOR aids in the establishment of water management protocols. The Missouri Department of Natural Resources (MDNR) has also issued an ARAR document outlining limits for the stormwater outfalls at the SLAPS (MDNR 1998).

3.1 LABORATORY DISCHARGE, EXCAVATION WATER, AND STORMWATER DISCHARGE MONITORING

This section provides a description of the laboratory discharge water, excavation water, and stormwater monitoring activities conducted at the NC Sites in CY 2022. The monitoring results obtained from these activities are presented and compared with the various authorization letters or permit-equivalent limits as presented in the EMICY22 (USACE 2021). The purpose of discharge monitoring at the NC Sites is to maintain compliance with the specific discharge requirements for each respective site.

3.1.1 Metropolitan St. Louis Sewer District Special Discharge Approval for the On-Site FUSRAP St. Louis Radioanalytical Laboratory

In CY 2022, the USACE operated the on-site project laboratory, the FUSRAP St. Louis Radioanalytical Laboratory, located at 112 James S McDonnell Boulevard, Hazelwood, Missouri. The project laboratory wastewater (i.e., glassware cleanup wastewater, decontamination water, and neutralized isotopic separations waste) discharge point is co-located with the primary SLAPS treated wastewater (i.e., accumulated excavation and groundwater) discharge point at MSD manhole 10L3-043S (Figure 3-1). The laboratory operated in accordance with the combined MSD special discharge approval for SLAPS and project laboratory discharges. The MSD special discharge approval expires on July 23, 2024 (MSD 2022a).

3.1.2 Evaluation of Stormwater Discharge Monitoring Results

In CY 2022, stormwater monitoring at the SLAPS was conducted to verify compliance with NPDES permit-equivalent requirements. There is one NPDES outfall located at the SLAPS. This outfall has been assigned the station identification PN02 for Outfall 002. PN02 is located at the

termination of a drainage feature that conveys stormwater along the north side of James S McDonnell Boulevard to CWC (Figure 3-1).

In conjunction with the construction of a sedimentation basin during CY 1998, the MDNR issued discharge sampling requirements for three outfalls (PN01 [now terminated], PN02, and PN03 [now terminated]). The ARAR permit-equivalent document (MDNR 1998) requires monthly monitoring for flow, oil and grease, total petroleum hydrocarbons (TPHs), pH, settleable solids (SSs), and polychlorinated biphenyls (PCBs), as well as total recoverable arsenic, chromium, and cadmium. In addition, effluent monitoring for gross alpha, gross beta, protactinium (Pa)-231, actinium (Ac)-227, total Ra, total thorium (Th), and total U is required for each discharge event. Effluent monitoring for radon is required twice per year, but no monitoring events were performed in CY 2022. As outlined in a letter from the USACE to the MDNR dated November 18, 2003, chemical oxygen demand (COD) monitoring has been modified from quarterly to annually (USACE 2003).

On February 19, 2002, the MDNR issued a letter to the USACE conditionally agreeing with a request to reduce the sampling frequency at PN02 to once per year, effective February of 2002 until the drainage area becomes affected by soil disturbance such as excavation (MDNR 2002). The condition of the agreement is that the MDNR be notified prior to the soil in the area being disturbed. Sampling frequency at PN02 was temporarily reduced to annually, per USACE email on February 8, 2018. On April 19, 2018, USACE notified MDNR that the sampling frequency at PN02 was increased from annually (MDNR 2002) to monthly because remediation resumed at the IA-09 (Ballfields). On July 29, 2022, the MSD approved an increase in discharge requirements from 100,000 gallons of water to 250,000 gallons of water (MSD 2022b). These emails are contained in Appendix D.

During 2021, Un-Named Outfall VP-56, VP-57, VP-58, Pershall Road, and I-270, a moving pumping outfall utilized for the management of stormwater with regard to sediment control and pumped excavation water, was established but never utilized in CY 2022. Moving outfalls are necessary to pump excess excavation water, which cannot be contained due to geographic conditions, to CWC. The excess excavation water is pumped to CWC in accordance with agreements made during a March 12, 2007, meeting with Mr. Tom Siegel of the MDNR, and as described in a subsequent letter from the USACE dated April 20, 2007 (USACE 2007). Excavation water sampling is conducted to verify compliance with the NPDES permit-equivalent requirements. The discharge parameters for the un-named outfalls follow the same NPDES parameters as Outfall 002.

Analytical results for the NC Sites are contained in Appendix D, Table D-1. Quarterly summaries of the CY 2022 stormwater monitoring events for the NC Sites are presented in the following subsections. NC Site stormwater monitoring results for CY 2022 are contained in Table 3-1.

During CY 2022, rainfall data were obtained for the National Weather Service Lambert – St. Louis International Weather Station (Weather Underground, Inc. 2022), which is located adjacent to the NC Sites. Daily flow and rainfall data are contained in Appendix D, Table D-2.

First Quarter

During the first quarter (January, February, and March) of CY 2022, all NPDES sample results were in compliance with permit-equivalent requirements (Table 3-1). During the first quarter, four sampling events were conducted at Outfall PN02.

Second Quarter

During the second quarter (April, May, and June) of CY 2022, all NPDES sample results were in compliance with permit-equivalent requirements (Table 3-2). During the second quarter, six sampling events were conducted at Outfall PN02.

Third Quarter

During the third quarter (July, August, and September) of CY 2022, all NPDES sample results were in compliance with permit-equivalent requirements (Table 3-3). During the third quarter, two sampling events were conducted at Outfall PN02.

Fourth Quarter

During the fourth quarter (October, November, and December) of CY 2022, all NPDES sample results were in compliance with permit-equivalent requirements (Table 3-4). During the fourth quarter, two sampling events were conducted at Outfall PN02.

3.1.3 Evaluation of Excavation Water Monitoring Results

On July 23, 2001, the MSD conditionally approved the discharge of treated excavation water to an MSD sanitary sewer manhole located at the SLAPS (MSD 2001). The current extension to the special discharge approval expires on July 23, 2024 (MSD 2022a). The primary condition of the approval requires a treatment system be installed, maintained, and operated to produce an effluent meeting the following standards: MSD ordinances 8472, 10177, and 10082 (MSD 1991, 1994, 1997); the U.S. Nuclear Regulatory Commission (NRC) requirements prescribed in 10 *CFR* 20, Appendix B; and the Missouri Department of Health and Senior Services (DHSS) requirements prescribed in 19 *Code of State Regulations (CSR)* 20-10. In addition, the MSD limits the annual allocation for radioactivity from the NC Sites to the MSD CWC treatment plant. The MSD establishes the maximum volume of excavation water discharge allowed in a 24-hour period and requires that the analytical results of the treated excavation water comply with applicable standards and limits prior to discharge. The evaluation of monitoring data demonstrates that all ARARs have been met. The selenium discharge variance for the SLAPS was not utilized in CY 2022 (MSD 2005, 2008, 2010, 2012, 2014, 2016, 2018, 2020, 2022). There is no longer a requirement to analyze for barium, lead, or selenium after the first two batches from new investigative areas (MSD 2012). Analytical results of the treated water are contained in Appendix D, Table D-3.

In CY 2022, approximately 5,790,046 gallons of treated excavation water from 17 treatment batches were released to MSD manholes 10L3-043S and 09K4-018S (Table 3-5). The discharge location is illustrated on Figure 3-1. Batches of treated excavation water were sampled and analyzed for MSD effluent criteria (Appendix D, Table D-3).

Table 3-1. First Quarter CY 2022 NPDES Sampling Event[a]

Monitoring Parameter	Final Effluent Limitations		Units	Analytical Results			
				Outfall 002			
				Chemical Parameters			
	Daily Maximum	Monthly Average		January	February	March	
Flow	Monitor only	Monitor only	MGD	[e]	[f]	[f]	
Oil and Grease	15	10	mg/L	[e]	[f]	[f]	
TPHs	10	10	mg/L	[e]	[f]	[f]	
pH-Units	6.0-9.0	NA	s.u.	[e]	[f]	[f]	
COD[b]	120	90	mg/L	[e]	[f]	[f]	
SSs[c]	1.5	1.0	mL/L/hour	[e]	[f]	[f]	
Arsenic, Total Recoverable	100	100	µg/L	[e]	[f]	[f]	
Lead, Total Recoverable[d]	190	190	µg/L	[e]	[f]	[f]	
Chromium, Total Recoverable	280	280	µg/L	[e]	[f]	[f]	
Copper, Total Recoverable[d]	84	84	µg/L	[e]	[f]	[f]	
Cadmium, Total Recoverable	94	94	µg/L	[e]	[f]	[f]	
PCBs	No release	No release	µg/L	[e]	[f]	[f]	
Event Sampling Date				Radiological Parameters[g,h,i]			
				Event 1	Event 2	Event 3	Event 4
				02/09/22	02/17/22	03/06/22	03/30/22
Total U[j,k]	Monitor only	Monitor only	µg/L	8.E-01	1.E+00	3.E+00	3.E-01
Total Ra[j,k]	Monitor only	Monitor only	µg/L	3.E-07	4.E-07	3.E-07	2.E-09
Total Th[j,k]	Monitor only	Monitor only	µg/L	6.E-01	2.E+00	1.E+00	-5.E-01
Gross Alpha[j]	Monitor only	Monitor only	pCi/L	-2.E+00	-4.E+00	3.E+00	5.E+00
Gross Beta[j]	Monitor only	Monitor only	pCi/L	-6.E-01	1.E+01	3.E+00	6.E+00
Pa-231[j]	Monitor only	Monitor only	pCi/L	-9.E+00	2.E+01	-1.E+01	4.E+01
Ac-227[j]	Monitor only	Monitor only	pCi/L	3.E+00	4.E+00	-5.E-01	-3.E+00
Radon (semi-annual monitoring)	Monitor only	Monitor only	pCi/L	[l]	[l]	[l]	[l]

[a] A rainfall event is defined as a measurable increase in discharge rate from precipitation producing 0.1 inch or more of liquid in a 24-hour period that may also exceed the duration of 24 hours; two events experienced within 48 hours may be reported together.
[b] Per the USACE letter dated November 18, 2003, the COD sampling requirement has been reduced from quarterly to annual sampling (USACE 2003).
[c] Detection limit (DL) = 0.1 mL/L/hour.
[d] Lead and copper sampling are no longer necessary per the ROD.
[e] No sample is required, because no rain events producing measurable flow offsite occurred, and no pumping activities were performed.
[f] No pumping activities occurred, so only radiological samples were collected during natural flow.
[g] Value reported is based on a volume-weighted average of analyte activity concentrations for samples collected during the defined event. Corresponding radiological samples were collected on the same date as chemical samples; however, the radiological results are incorporated into the volume-weighted average for the specified event.
[h] Negative results are less than the laboratory system's background level.
[I] Ra-228 and Th-228 are assumed to be in secular equilibrium with Th-232; therefore, Th-232 results are used to estimate Ra-228 and Th-228 values.
[j] As specified in the permit-equivalent, radionuclides require monitoring only, and limits are not permit-specified.
[k] Total nuclide values (in µg/L) were calculated using the activity concentration values reported by the laboratory and values for specific activity listed in Table 8.4.1 of *The Health Physics and Radiological Health Handbook* (Shleien 1992).
[l] Semi-annual reporting requirement only.
NA – not applicable

Table 3-2. Second Quarter CY 2022 NPDES Sampling Event[a]

Monitoring Parameter	Final Effluent Limitations		Units	Analytical Results		
				Outfall 002		
				Chemical Parameters		
	Daily Maximum	Monthly Average		April	May	June
Flow	Monitor only	Monitor only	MGD	[e]	[e]	[f]
Oil and Grease	15	10	mg/L	[e]	[e]	[f]
TPHs	10	10	mg/L	[e]	[e]	[f]
pH-Units	6.0-9.0	NA	s.u.	[e]	[e]	[f]
COD[b]	120	90	mg/L	[e]	[e]	[f]
SSs[c]	1.5	1.0	mL/L/hour	[e]	[e]	[f]
Arsenic, Total Recoverable	100	100	µg/L	[e]	[e]	[f]
Lead, Total Recoverable[d]	190	190	µg/L	[e]	[e]	[f]
Chromium, Total Recoverable	280	280	µg/L	[e]	[e]	[f]
Copper, Total Recoverable[d]	84	84	µg/L	[e]	[e]	[f]
Cadmium, Total Recoverable	94	94	µg/L	[e]	[e]	[f]
PCBs	No release	No release	µg/L	[e]	[e]	[f]
				Radiological Parameters[g,h,i]		
Event Sampling Date				Event 1	Event 2	Event 3
				04/06/22	04/13/22	04/24/22
Total U[j,k]	Monitor only	Monitor only	µg/L	-4.E-01	2.E-01	2.E+00
Total Ra[j,k]	Monitor only	Monitor only	µg/L	3.E-07	1.E-07	1.E-09
Total Th[j,k]	Monitor only	Monitor only	µg/L	1.E+00	7.E-01	4.E-01
Gross Alpha[j]	Monitor only	Monitor only	pCi/L	7.E+00	-1.E+00	2.E+00
Gross Beta[j]	Monitor only	Monitor only	pCi/L	3.E+00	7.E-01	-3.E+00
Pa-231[j]	Monitor only	Monitor only	pCi/L	-7.E+00	8.E+00	-2.E+01
Ac-227[j]	Monitor only	Monitor only	pCi/L	4.E+00	3.E-01	-9.E-01
Radon (semi-annual monitoring)	Monitor only	Monitor only	pCi/L	[l]	[l]	[l]
Event Sampling Date				Event 4	Event 5	Event 6
				05/05/22-05/06/22	05/18/22	05/21/22
Total U[j,k]	Monitor only	2.E-07	4.E-07	2.E+00	7.E-01	1.E+00
Total Ra[j,k]	Monitor only	2.E+00	5.E+00	2.E-07	8.E-08	4.E-08
Total Th[j,k]	Monitor only	8.E-01	5.E+00	3.E+00	5.E-05	2.E+00
Gross Alpha[j]	Monitor only	7.E+00	1.E+01	-4.E+00	-3.E+00	3.E+00
Gross Beta[j]	Monitor only	2.E+01	-5.E+00	-9.E-01	6.E-01	3.E+00
Pa-231[j]	Monitor only	-4.E+00	2.E+00	2.E+01	2.E+01	1.E+01
Ac-227[j]	Monitor only	Monitor only	pCi/L	3.E+00	2.E+00	-4.E-01
Radon (semi-annual monitoring)	Monitor only	Monitor only	pCi/L	[l]	[l]	[l]

[a] A rainfall event is defined as a measurable increase in discharge rate from precipitation producing 0.1 inch or more of liquid in a 24-hour period that may also exceed the duration of 24 hours; two events experienced within 48 hours may be reported together.
[b] Per the USACE letter dated November 18, 2003, the COD sampling requirement has been reduced from quarterly to annual sampling (USACE 2003).
[c] DL = 0.1 mL/L/hour.
[d] Lead and copper sampling are no longer necessary per the ROD.
[e] No pumping activities occurred, so only radiological samples were collected during natural flow.
[f] No sample is required, because no rain events producing measurable flow offsite occurred, and no pumping activities were performed.
[g] Value reported is based on a volume-weighted average of analyte activity concentrations for samples collected during the defined event. Corresponding radiological samples were collected on the same date as chemical samples; however, the radiological results are incorporated into the volume-weighted average for the specified event.
[h] Negative results are less than the laboratory system's background level.
[i] Ra-228 and Th-228 are assumed to be in secular equilibrium with Th-232; therefore, Th-232 results are used to estimate Ra-228 and Th-228 values.
[j] As specified in the permit-equivalent, radionuclides require monitoring only, and limits are not permit-specified.
[k] Total nuclide values (in µg/L) were calculated using the activity concentration values reported by the laboratory and values for specific activity listed in Table 8.4.1 of *The Health Physics and Radiological Health Handbook* (Shleien 1992).
[l] Semi-annual reporting requirement only.
NA – not applicable

Table 3-3. Third Quarter CY 2022 NPDES Sampling Event[a]

Monitoring Parameter	Final Effluent Limitations		Units	Analytical Results		
				Outfall 002		
				Chemical Parameters		
	Daily Maximum	Monthly Average		July	August	September
Flow	Monitor only	Monitor only	MGD	[e]	[e]	[f]
Oil and Grease	15	10	mg/L	[e]	[e]	[f]
TPHs	10	10	mg/L	[e]	[e]	[f]
pH-Units	6.0-9.0	NA	s.u.	[e]	[e]	[f]
COD[b]	120	90	mg/L	[e]	[e]	[f]
SSs[c]	1.5	1.0	mL/L/hour	[e]	[e]	[f]
Arsenic, Total Recoverable	100	100	µg/L	[e]	[e]	[f]
Lead, Total Recoverable[d]	190	190	µg/L	[e]	[e]	[f]
Chromium, Total Recoverable	280	280	µg/L	[e]	[e]	[f]
Copper, Total Recoverable[d]	84	84	µg/L	[e]	[e]	[f]
Cadmium, Total Recoverable	94	94	µg/L	[e]	[e]	[f]
PCBs	No release	No release	µg/L	[e]	[e]	[f]
				Radiological Parameters[g,h,i]		
Event Sampling Date				Event 1	Event 2	
				07/27/22	08/04/22	
Total U[j,k]	Monitor only	Monitor only	µg/L	2.E-01	4.E-02	
Total Ra[j,k]	Monitor only	Monitor only	µg/L	4.E-07	3.E-08	
Total Th[j,k]	Monitor only	Monitor only	µg/L	3.E-01	3.E-05	
Gross Alpha[j]	Monitor only	Monitor only	pCi/L	2.E+00	-3.E+00	
Gross Beta[j]	Monitor only	Monitor only	pCi/L	-9.E-02	9.E-01	
Pa-231[j]	Monitor only	Monitor only	pCi/L	-5.E+00	-2.E+01	
Ac-227[j]	Monitor only	Monitor only	pCi/L	-3.E+00	8.E+00	
Radon (semi-annual monitoring)	Monitor only	Monitor only	pCi/L	[l]	[l]	

[a] A rainfall event is defined as a measurable increase in discharge rate from precipitation producing 0.1 inch or more of liquid in a 24-hour period that may also exceed the duration of 24 hours; two events experienced within 48 hours may be reported together.
[b] Per the USACE letter dated November 18, 2003, the COD sampling requirement has been reduced from quarterly to annual sampling (USACE 2003).
[c] DL = 0.1 mL/L/hour.
[d] Lead and copper sampling are no longer necessary per the ROD.
[e] No pumping activities occurred, so only radiological samples were collected during natural flow.
[f] No sample is required, because no rain events producing measurable flow offsite occurred, and no pumping activities were performed.
[g] Value reported is based on a volume-weighted average of analyte activity concentrations for samples collected during the defined event. Corresponding radiological samples were collected on the same date as chemical samples; however, the radiological results are incorporated into the volume-weighted average for the specified event.
[h] Negative results are less than the laboratory system's background level.
[i] Ra-228 and Th-228 are assumed to be in secular equilibrium with Th-232; therefore, Th-232 results are used to estimate Ra-228 and Th-228 values.
[j] As specified in the permit-equivalent, radionuclides require monitoring only, and limits are not permit-specified.
[k] Total nuclide values (in µg/L) were calculated using the activity concentration values reported by the laboratory and values for specific activity listed in Table 8.4.1 of *The Health Physics and Radiological Health Handbook* (Shleien 1992).
[l] Semi-annual reporting requirement only.
NA – not applicable

Table 3-4. Fourth Quarter CY 2022 NPDES Sampling Event[a]

Monitoring Parameter	Final Effluent Limitations		Units	Analytical Results		
				Outfall 002		
				Chemical Parameters		
	Daily Maximum	Monthly Average		October	November	December
Flow	Monitor only	Monitor only	MGD	e	e	f
Oil and Grease	15	10	mg/L	e	e	f
TPHs	10	10	mg/L	e	e	f
pH-Units	6.0-9.0	NA	s.u.	e	e	f
COD[b]	120	90	mg/L	e	e	f
SSs[c]	1.5	1.0	mL/L/hour	e	e	f
Arsenic, Total Recoverable	100	100	µg/L	e	e	f
Lead, Total Recoverable[d]	190	190	µg/L	e	e	f
Chromium, Total Recoverable	280	280	µg/L	e	e	f
Copper, Total Recoverable[d]	84	84	µg/L	e	e	f
Cadmium, Total Recoverable	94	94	µg/L	e	e	f
PCBs	No release	No release	µg/L	e	e	f
				Radiological Parameters[g,h,i]		
Event Sampling Date				Event 1	Event 2	
				10/25/22	11/05/22	
Total U[j,k]	Monitor only	Monitor only	µg/L	1.E+00	1.E+00	
Total Ra[j,k]	Monitor only	Monitor only	µg/L	-7.E-08	-2.E-07	
Total Th[j,k]	Monitor only	Monitor only	µg/L	3.E-01	4.E-05	
Gross Alpha[j]	Monitor only	Monitor only	pCi/L	1.E+00	-3.E+00	
Gross Beta[j]	Monitor only	Monitor only	pCi/L	8.E-01	5.E+00	
Pa-231[j]	Monitor only	Monitor only	pCi/L	-3.E+00	1.E-01	
Ac-227[j]	Monitor only	Monitor only	pCi/L	4.E+00	-5.E+00	
Radon (semi-annual monitoring)	Monitor only	Monitor only	pCi/L	l	l	

[a] A rainfall event is defined as a measurable increase in discharge rate from precipitation producing 0.1 inch or more of liquid in a 24-hour period that may also exceed the duration of 24 hours; two events experienced within 48 hours may be reported together.
[b] Per the USACE letter dated November 18, 2003, the COD sampling requirement has been reduced from quarterly to annual sampling (USACE 2003).
[c] DL = 0.1 mL/L/hour.
[d] Lead and copper sampling are no longer necessary per the ROD.
[e] No pumping activities occurred, so only radiological samples were collected during natural flow.
[f] No sample is required, because no rain events producing measurable flow offsite occurred, and no pumping activities were performed.
[g] Value reported is based on a volume-weighted average of analyte activity concentrations for samples collected during the defined event. Corresponding radiological samples were collected on the same date as chemical samples; however, the radiological results are incorporated into the volume-weighted average for the specified event.
[h] Negative results are less than the laboratory system's background level.
[i] Ra-228 and Th-228 are assumed to be in secular equilibrium with Th-232; therefore, Th-232 results are used to estimate Ra-228 and Th-228 values.
[j] As specified in the permit-equivalent, radionuclides require monitoring only, and limits are not permit-specified.
[k] Total nuclide values (in µg/L) were calculated using the activity concentration values reported by the laboratory and values for specific activity listed in Table 8.4.1 of *The Health Physics and Radiological Health Handbook* (Shleien 1992).
[l] Semi-annual reporting requirement only.
NA – not applicable

Table 3-5. Excavation Water Discharged in CY 2022

Quarter	Number of Discharges	Number of Gallons Discharged[a]	Total Activity (Ci)		
			Thorium[b]	Uranium (KPA)[c]	Radium[d]
1	4	871,069	8.87E-06	7.48E-06	2.90E-06
2	5	693,508	6.08E-06	6.63E-06	2.92E-06
3	5	3,695,600	3.78E-05	1.62E-04	1.54E-05
4	3	529,869	3.41E-06	1.75E-05	1.44E-06
Total	17	5,790,046	5.62E-05	1.94E-04	2.26E-05

[a] Quantities based on actual quarterly discharges from NC Sites.
[b] Calculated value based on the addition of isotopic analyses for Th-228 and Th-230.
[c] Value based on total U results (kinetic phosphorescence analysis [KPA]).
[d] Calculated value based on the addition of isotopic analyses for Ra-226 and Ra-228.

3.2 COLDWATER CREEK MONITORING

RA monitoring of surface water and sediment in CWC is required until the creek has been remediated. The purpose of the monitoring is to document that RAs are having a positive effect on the creek and to provide additional data to assess whether CWC is being measurably affected by COC migration from hydrostratigraphic zone (HZ)-A.

The EMP for CWC evaluates the water quality and the radiological and chemical parameters present in surface water and sediment. Surface water and sediment are monitored for the radiological and chemical parameters specified as List 2 of Table 3-3 of the EMICY22 (USACE 2021). The water quality parameters are measured for surface water only.

The water quality parameters measured include pH, temperature, dissolved oxygen (DO), specific conductivity, oxidation reduction potential (ORP), and turbidity. The objectives of the EMP are as follows:

- To assess the quality of surface water and sediment in CWC;
- To compare the results with monitoring guidelines and/or ROD RGs as established for these media in the EMICY22 (USACE 2021); and
- To evaluate/determine if runoff from the SLAPS, the HISS, the SLAPS VPs, and the Latty Avenue Properties affects the quality of surface water and sediment in CWC.

The MDNR has designated CWC as a metropolitan no-discharge stream. Therefore, discharges are prohibited, except as specifically permitted under the water quality standard (10 *CSR* 20-7.031) and non-contaminated stormwater flows (10 *CSR* 20-7.015.1.A.4). CWC, from its crossing of U.S. Highway 67 (i.e., Lindbergh Boulevard) to its mouth at the Missouri River (a distance of roughly 5.5 miles), is a Class C stream. Class C streams may cease flow during dry periods but maintain permanent pools that support aquatic life (10 *CSR* 20-7.031.1.F.6). The upper reach of CWC south of U.S. Highway 67, which includes the SLAPS/HISS reach, is an unclassified water of the state.

Surface water and sediment samples are collected from CWC on a semi-annual basis as part of the EMP (USACE 2021). The routine base-flow elevation sampling events are conducted at 10 CWC monitoring stations (C002 through C011). Locations of the 10 monitoring stations are shown on Figure 3-2. Monitoring station C004, located between the SLAPS and the HISS, is used to monitor the potential water quality impacts from the SLAPS to CWC. Monitoring station C005 is used to monitor water quality downstream from the HISS and the Latty Avenue VPs. Monitoring station C011, located at Schaefer Bend Park, is the farthest downstream monitoring station on CWC.

Starting in CY 2019, additional surface water samples were collected from CWC on a semi-annual basis during high-flow conditions as a BMP to determine if the creek is being measurably affected by COC migration. These high-flow surface water sampling events are conducted at upstream (C002), midstream (C007), and downstream (C009) locations (Figure 3-2). This sampling is conducted soon after a precipitation event resulting in high-flow conditions when the surface of CWC measures less than 22.75 ft below the top of the concrete on the north side of the McDonnell Boulevard Bridge. High-flow surface water samples are typically collected twice per year over a 1- to 2-day period. An additional third sample was collected in 2022 due to a historic flood event along CWC.

Note that other non-FUSRAP industrial discharges are relatively common along the sampled reaches of CWC; therefore, sample parameters could be influenced by existing industrial sources other than former MED/AEC operations.

3.2.1 Coldwater Creek Surface Water Monitoring Results

Base-flow elevation sampling of surface water at CWC was conducted at or below base flow elevation during the months of April and October in CY 2022. The base flow elevation for CWC at the McDonnell Boulevard Bridge is 508.2 ft above mean sea level (amsl). The base flow also may be approximated by a depth measurement of 3.2 ft or less at an "average cross section." No surface water sample was collected at C007 during the April sampling period because of remediation along CWC at that location.

In addition to the routine base-flow elevation sampling, CWC surface water samples were collected during high-flow conditions in May, July, and October of CY 2022. High-flow condition surface water sampling was conducted soon after precipitation events resulted in high-flow conditions as previously described.

CWC surface water monitoring included obtaining water quality parameters, as well as obtaining samples for metals and radionuclides listed in Table 3-3 of the EMICY22 (USACE 2021). Grab samples were collected and analyzed according to the protocol defined in the *Sampling and Analysis Guide for the St. Louis Sites* (SAG) (USACE 2000). In addition, isotopic U results were used to evaluate total U concentrations in surface water for comparison to the 30 µg/L monitoring guideline described in the ROD (USACE 2005).

With the exception of the lack of sample at C007 in April, all surface water monitoring required through implementation of the EMICY22 was conducted as planned during CY 2022 (USACE 2021). The evaluation of monitoring data demonstrates that all applicable ARARs have been met. The sample results are contained in Appendix E, Table E-1, of this EMDAR.

Water Quality Parameters

Water quality data are collected as part of the routine performance of surface water sampling and are used as part of the overall evaluation of water quality. The water quality results for each surface water monitoring station are summarized in Table 3-6. The average surface water temperatures during the April and October sampling events were 13.35 and 16.0 °C, respectively. The average surface water pH values were 7.73 and 7.53, respectively. The average pH values for both the April and October sampling events were within the acceptance range (6.0 to 9.0) and thus provide suitable conditions for aquatic life.

Average DO levels in April were 9.25 mg/L and in October were 11.15 mg/L. The average specific conductivity for the April sampling event was 1.15 mS/cm, and the average specific conductivity for the October sampling event was 0.579 mS/cm. The average ORP value during the April sampling event (222 mV) was lower than that of the October sampling event (277 mV). The average turbidity value during April was 8.0 NTU and during the October sampling event was 35 NTU. Water quality data collected for the high-flow surface water sampling events were comparable to the data collected from base flow events.

Table 3-6. Water Quality Results for CY 2022 CWC Surface Water Sampling

Monitoring Parameter	Unit	Monitoring Station										Average
		C002	C003	C004	C005	C006	C007	C008	C009	C010	C011	
First Sampling Event (04/12/22)												
Temperature	°C	12.75	13.33	14.71	13.89	13.38	NS1	13.54	12.67	12.78	13.12	13.35
pH	s.u.	7.85	7.94	7.84	7.85	7.59	NS1	7.69	7.71	7.82	7.29	7.73
DO	mg/L	3.15	5.40	13.72	13.25	7.11	NS1	7.98	8.55	12.52	11.60	9.25
Specific Conductivity	mS/cm	1.07	1.08	1.19	1.14	1.13	NS1	1.16	1.05	1.27	1.22	1.15
ORP	mV	178	204	241	236	253	NS1	245	225	193	223	222
Turbidity	NTU	13.3	5.2	13.0	10.3	10.6	NS1	8.3	9.8	1.1	0	8.0
Second Sampling Event (10/10/22 to 10/12/22)												
Temperature	°C	17.49	17.51	17.83	17.97	17.67	15.47	14.94	14.15	13.76	13.10	16.0
pH	s.u.	7.57	7.60	7.43	7.37	6.67	7.99	8.11	7.85	7.67	7.47	7.53
DO	mg/L	11.19	8.61	9.30	11.67	12.62	10.70	13.50	12.62	12.73	8.10	11.15
Specific Conductivity	mS/cm	0.64	0.542	0.334	0.530	0.613	1.28	1.28	1.33	1.10	1.11	0.876
ORP	mV	261	286	285	292	333	258	260	249	278	269	277
Turbidity	NTU	35.4	39.3	78.6	55.8	27.1	22.7	5.6	19.6	32.7	29.6	35
First High-Flow Water Sampling Event (05/05/22)												
Temperature	°C	13.73	NA	NA	NA	NA	13.87	NA	NA	13.49	NA	NA
pH	s.u.	7.65	NA	NA	NA	NA	7.08	NA	NA	6.91	NA	NA
DO	mg/L	9.78	NA	NA	NA	NA	9.41	NA	NA	13.31	NA	NA
Specific Conductivity	mS/cm	0.303	NA	NA	NA	NA	0.270	NA	NA	0.278	NA	NA
ORP	mV	192	NA	NA	NA	NA	218	NA	NA	278	NA	NA
Turbidity	NTU	44.6	NA	NA	NA	NA	80.4	NA	NA	92.2	NA	NA
Second High-Flow Water Sampling Event (07/27/22)												
Temperature	°C	22.72	NA	NA	NA	NA	22.72	NA	NA	22.56	NA	NA
pH	s.u.	7.64	NA	NA	NA	NA	7.64	NA	NA	7.34	NA	NA
DO	mg/L	9.95	NA	NA	NA	NA	9.95	NA	NA	9.39	NA	NA
Specific Conductivity	mS/cm	0.543	NA	NA	NA	NA	0.543	NA	NA	0.388	NA	NA
ORP	mV	245	NA	NA	NA	NA	245	NA	NA	271	NA	NA
Turbidity	NTU	45.6	NA	NA	NA	NA	45.6	NA	NA	52.1	NA	NA
Third High-Flow Water Sampling Event (10/26/22)												
Temperature	°C	14.71	NA	NA	NA	NA	12.98	NA	NA	12.14	NA	NA
pH	s.u.	8.88	NA	NA	NA	NA	8.79	NA	NA	7.52	NA	NA
DO	mg/L	11.99	NA	NA	NA	NA	12.13	NA	NA	8.98	NA	NA
Specific Conductivity	mS/cm	0.526	NA	NA	NA	NA	0.442	NA	NA	0.320	NA	NA
ORP	mV	218	NA	NA	NA	NA	242	NA	NA	302	NA	NA
Turbidity	NTU	56.9	NA	NA	NA	NA	53.9	NA	NA	64.4	NA	NA

Note: Water quality data are used as part of the overall evaluation of water quality, but no ROD-defined monitoring criteria exist.
NS1 – no sample, remediation activities at this location prevented sampling.
NA – not applicable (High-flow water samples are collected only for stations C002, C007, and C009).

Radiological Parameters

The radiological monitoring results for the CY 2022 CWC surface water sampling events are summarized in Table 3-7. Historically, FUSRAP surface water analysis has included unfiltered water samples for the following radiological parameters: Ra-226, Ra-228, Th-228, Th-230, Th-232, U-234, U-235, and U-238. Unfiltered surface water samples from CWC were not analyzed for Ra-228 during CY 2022, because Ra-228 rapidly achieves equilibrium with Th-228, such that their concentrations are equal.

Table 3-7. Radiological Results for CY 2022 CWC Surface Water Sampling

Monitoring Parameter	Monitoring Stations									
	C002	C003	C004	C005	C006	C007	C008	C009	C010	C011
Radionuclide Concentration (pCi/L)										
First Sampling Event (04/12/22)										
Ra-226	<0.77[a]	<0.59[a]	<0.97[a]	<0.47[a]	<0.82[a]	NS1	<0.64[a]	<0.74[a]	<0.83[a]	<0.45[a]
Th-228[b]	<0.72[a]	<0.79[a]	<1.05[a]	<0.96[a]	<0.89[a]	NS1	<0.92[a]	<0.97[a]	<0.74[a]	1.45
Th-230	<0.72[a]	0.80	<0.66[a]	0.69	0.87	NS1	<0.92[a]	1.20	0.75	<0.76[a]
Th-232	<0.63[a]	<0.64[a]	<0.61[a]	<0.52[a]	<0.56[a]	NS1	<0.80[a]	<0.73[a]	<0.65[a]	<0.75[a]
U-234	<0.85[a]	0.99	<0.72[a]	<0.82[a]	0.85	NS1	0.66	<0.81[a]	0.69	<0.57[a]
U-235	<0.84[a]	<1.00[a]	<0.89[a]	<1.02[a]	<0.91[a]	NS1	<0.73[a]	<1.00[a]	<0.76[a]	<0.77[a]
U-238	<0.74[a]	0.99	<0.72[a]	<0.82[a]	<0.84[a]	NS1	<0.65[a]	<0.65[a]	0.82	<0.71[a]
Total U[c] (µg/L)	1.49	2.92	1.44	0.82	1.99	NS1	1.58	0.92	2.64	1.96
Second Sampling Event (10/10/22 and 10/12/22)										
Ra-226	<0.72[a]	<0.78[a]	<0.74[a]	<0.82[a]	<0.53[a]	<0.56[a]	<0.58[a]	<0.57[a]	<0.66[a]	<0.95[a]
Th-228[b]	<0.71[a]	<0.62[a]	<0.50[a]	<0.70[a]	0.50	<0.50[a]	<0.52[a]	<0.63[a]	<0.83[a]	<0.87[a]
Th-230	0.57	1.17	<0.88[a]	0.96	0.98	1.09	0.89	1.78	0.84	0.96
Th-232	<0.39[a]	<0.39[a]	<0.47[a]	<0.34[a]	<0.33[a]	<0.51[a]	<0.49[a]	<0.35[a]	<0.52[a]	<0.45[a]
U-234	<0.57[a]	<0.58[a]	<0.63[a]	<0.56[a]	<0.37[a]	0.80	0.91	1.00	0.85	0.61
U-235	<0.61[a]	<0.48[a]	<0.68[a]	<0.67[a]	<0.46[a]	<0.54[a]	<0.70[a]	<0.73[a]	<0.66[a]	0.83
U-238	<0.57[a]	<0.39[a]	<0.62[a]	<0.40[a]	<0.44[a]	0.61	0.44	0.88	<0.53[a]	0.70
Total U[c] (µg/L)	1.33	0.75	0.74	0	0.64	2.08	2.13	2.78	1.47	1.94
First High-Flow Water Sampling Event (05/05/22)										
Ra-226	<0.62[a]	NA	NA	NA	NA	<.070[a]	NA	<0.52[a]	NA	NA
Th-228[b]	<0.45[a]	NA	NA	NA	NA	<0.79[a]	NA	<0.76[a]	NA	NA
Th-230	<0.37[a]	NA	NA	NA	NA	1.12	NA	1.17	NA	NA
Th-232	<0.37[a]	NA	NA	NA	NA	<0.38[a]	NA	<0.40[a]	NA	NA
U-234	<0.35[a]	NA	NA	NA	NA	0.37	NA	<0.36[a]	NA	NA
U-235	<0.60[a]	NA	NA	NA	NA	<0.58[a]	NA	<0.45[a]	NA	NA
U-238	<0.49[a]	NA	NA	NA	NA	<0.34[a]	NA	<0.50[a]	NA	NA
Total U[c] (µg/L)	0.37	NA	NA	NA	NA	0.80	NA	0.77	NA	NA
Second High-Flow Water Sampling Event (07/27/22)										
Ra-226	<0.41[a]	NA	NA	NA	NA	<0.52[a]	NA	<0.85[a]	NA	NA
Th-228[b]	<0.45[a]	NA	NA	NA	NA	<0.53[a]	NA	<0.48[a]	NA	NA
Th-230	<0.45[a]	NA	NA	NA	NA	0.51	NA	0.66	NA	NA
Th-232	<0.45[a]	NA	NA	NA	NA	<0.33[a]	NA	<0.36[a]	NA	NA
U-234	<0.35[a]	NA	NA	NA	NA	<0.46[a]	NA	<0.54[a]	NA	NA
U-235	<0.60[a]	NA	NA	NA	NA	<0.41[a]	NA	<0.54[a]	NA	NA
U-238	<0.42[a]	NA	NA	NA	NA	<0.46[a]	NA	<0.36[a]	NA	NA
Total U[c] (µg/L)	0.41	NA	NA	NA	NA	0.99	NA	0.64	NA	NA

Table 3-7. Radiological Results for CY 2022 CWC Surface Water Sampling (Continued)

Monitoring Parameter	Monitoring Stations									
	C002	C003	C004	C005	C006	C007	C008	C009	C010	C011
Radionuclide Concentration (pCi/L)										
Third High-Flow Water Sampling Event (10/26/22)										
Ra-226	<1.18[a]	NA	NA	NA	NA	<0.64[a]	NA	<0.50[a]	NA	NA
Th-228[b]	<0.79[a]	NA	NA	NA	NA	<0.72[a]	NA	0.74	NA	NA
Th-230	1.4	NA	NA	NA	NA	1.08	NA	0.64	NA	NA
Th-232	<0.79[a]	NA	NA	NA	NA	<0.52[a]	NA	<0.44[a]	NA	NA
U-234	0.77	NA	NA	NA	NA	<0.36[a]	NA	<0.49[a]	NA	NA
U-235	<0.43[a]	NA	NA	NA	NA	<0.45[a]	NA	<0.40[a]	NA	NA
U-238	<0.42[a]	NA	NA	NA	NA	<0.50[a]	NA	<0.32[a]	NA	NA
Total U[c] (µg/L)	1.66	NA	NA	NA	NA	0.75	NA	0.67	NA	NA

[a] Reported result is less than the minimum detectable concentration (MDC) and is therefore set equal to the MDC.
[b] Ra-228 rapidly achieves equilibrium with Th-228, such that their concentrations are equal.
[c] Total U is equal to the sum of the concentrations of uranium isotopes (in pCi/L) divided by 0.677, where 0.677 picocuries per microgramis the specific activity for total U, assuming secular equilibrium.
Note: Total U (30 µg/L) is the only ROD monitoring guideline for surface water. Radiological monitoring parameter data are collected to monitor COC migration and to calculate total U.
NA – not applicable (High-flow water samples are collected for only stations C002, C007, and C009).
NS1 – no sample, remediation activities at this location prevented sampling.

Surface water data for U-234, U-235, and U-238 (reported in pCi/L) were converted to µg/L and compared to the 30 µg/L criterion for total U described in the ROD. The total U concentrations in surface water were significantly less than the 30 µg/L ROD criterion. A summary of the surface water radiological data collected from CWC since March of 2012 is presented in Table 3-8. The radiological data collected for the high-flow surface water sampling events was comparable to the data collected from base-flow events.

Table 3-8. Comparison of Historical Radiological Surface Water Results for CWC

Stations	Radionuclide	Units	03/12	10/12	04/13	10/13	03/14	10/14	03/15	10/15	03/16	10/16	03/17	10/17	04/18	10/18	04/19	10/19	04/20	10/20	03/21	10/21	04/22	10/22
C002	Total U[a]	µg/L	1.9	2.0	2.43	2.64	4.11	1.53	3.33	2.04	3.15	3.96	3.23	2.40	1.70	1.14	1.94	2.26	4.44	3.91	1.31	2.23	1.49	1.33
	Ra-226	pCi/L	<1.47[b]	<1.44[b]	2.15	<2.50[b]	<2.04[b]	<1.30[b]	<1.21[b]	<1.11[b]	<1.35[b]	<1. 25[b]	<1.84[b]	1.33	<1.12[a]	<1.59[a]	<1.34[a]	<1.30[a]	<0.74[a]	<0.78[a]	<0.24[a]	<0.31[a]	<0.77[a]	<0.72[a]
	Th-228[c]	pCi/L	<0.59[b]	<0.45[b]	<0.87[b]	<0.53[b]	<0.55[b]	0.25	<0. 46[b]	<0.51[b]	<0.55[b]	<0.45[b]	<0. 30[b]	<0.42[b]	<0.54[a]	<0.46[a]	<0.36[a]	<0.58[a]	<0.58[a]	0.53	<0.48[a]	<0.47[a]	<0.72[a]	<0.71[a]
	Th-230	pCi/L	0.46	<0.45[b]	1.19	<0.65[b]	0.40	<0.38[b]	<0.46[b]	0.63	0.45	0.37	0.42	<0.42[b]	<0.40[a]	0.45	<0.39[a]	<0.41[a]	<0.60[a]	<0.81[a]	0.57	1.07	<0.72[a]	0.57
	Th-232	pCi/L	<0.42[b]	<0.20[b]	<0.32[b]	<0.24[b]	<0.18[b]	<0.17[b]	<0.21[b]	<0.19[b]	<0.20[b]	<0.20[b]	<0.13[b]	<0.19[b]	<0.45[a]	<0.38[a]	<0.33[a]	<0.46[a]	<0.43[a]	<0.81[a]	<0.27[a]	<0.24[a]	<0.63[a]	<0.39[a]
C003	Total U[a]	µg/L	2.8	2.8	4.09	1.97	2.49	1.68	1.80	2.95	4.91	1.82	2.91	1.71	2.52	1.87	4.35	2.42	2.70	2.35	3.76	1.10	2.92	0.75
	Ra-226	pCi/L	<1.09[b]	<1.50[b]	1.62	<1.41[b]	<2.03[b]	<0.89[b]	<1.23[b]	<1.63[b]	<1.48[b]	<1.55[b]	<0.38[b]	<0.38[b]	<1.12[a]	<0.96[a]	<1.08[a]	<1.33[a]	<0.90[a]	<0.62[a]	<0.17[a]	<0.51[a]	<0.59[a]	<0.78[a]
	Th-228[c]	pCi/L	0.43	<0.54[b]	<0.38[b]	<0.44[b]	<0.26[b]	<0.56[b]	0.43	<0.41[b]	<0.73[b]	<0.54[b]	<0.41[b]	<0.19[b]	<0.61[a]	<0.48[a]	<0.49[a]	<0.46[a]	<0.46[a]	0.97	<0.27[a]	<0.50[a]	<0.79[a]	<0.62[a]
	Th-230	pCi/L	<0.23[b]	0.70	<0.38[b]	0.70	0.85	0.50	0.36	<0.18[b]	0.39	0.44	<0.29[b]	<0.19[b]	<0.38[a]	<0.36[a]	<0.33[a]	0.29	<0.33[a]	<0.44[a]	0.73	1.21	0.80	1.17
	Th-232	pCi/L	<0.51[b]	<0.20[b]	<0.38[b]	<0.54[b]	<0.26[b]	<0.18[b]	<0.53[b]	<0.50[b]	<0.58[b]	<0.20[b]	<0.29[b]	<0.19[b]	<0.53[a]	<0.30[a]	<0.36[a]	<0.27[a]	<0.33[a]	<0.63[a]	<0.19[a]	<0.26[a]	<0.64[a]	<0.39[a]
C004	Total U[a]	µg/L	3.4	2.2	1.17	2.48	3.13	1.19	2.48	2.58	2.81	2.61	3.26	1.88	3.32	1.35	2.20	1.94	2.39	2.88	3.29	1.03	1.44	0.74
	Ra-226	pCi/L	<1.59[b]	<1.98[b]	<1.93[b]	<1.93[b]	1.52	<1.46[b]	<1.22[b]	<1.47[b]	1.7	<1.34[b]	<1.09 [b]	<0.40[b]	<1.17[a]	<1.12[a]	<1.54[a]	<1.28[a]	<1.08[a]	<0.49[a]	0.72	<0.30[a]	<0.97[a]	<0.74[a]
	Th-228[c]	pCi/L	0.65	<0.18[b]	<0.65[b]	<0.18[b]	<0.97[b]	<0.52[b]	<0.55[b]	<0.64[b]	<0.22[b]	<0.62[b]	<0.32[b]	<0.60[b]	<0.63[a]	<0.42[a]	<0.56[a]	<0.48[a]	<0.53[a]	0.47	<0.39[a]	<0.42[a]	<1.05[a]	<0.50[a]
	Th-230	pCi/L	0.65	0.67	<0.65[b]	0.33	0.68	<0.42[b]	<0.48[b]	0.76	0.91	<0.44[b]	0.69	0.50	<0.36[a]	<0.42[a]	0.52	<0.35[a]	0.63	0.75	0.51	0.72	<0.66[a]	<0.88[a]
	Th-232	pCi/L	<0.49[b]	<0.18[b]	<0.29[b]	<0.39[b]	<0.63[b]	<0.42[b]	<0.18[b]	<0.46[b]	<0.49[b]	<0.44[b]	<0.32[b]	<0.15[b]	<0.43[a]	<0.39[a]	<0.35[a]	<0.35[a]	<0.35[a]	<0.31[a]	<0.30[a]	<0.20[a]	<0.61[a]	<0.47[a]
C005	Total U[a]	µg/L	1.7	1.8	2.31	1.42	2.51	1.14	3.15	2.23	2.99	1.71	3.56	1.83	4.14	2.44	4.27	1.54	2.64	1.74	3.23	1.47	0.82	0.00
	Ra-226	pCi/L	<1.48[b]	<2.39[b]	<1.60[b]	<1.76[b]	<1.84[b]	<1.19[b]	<1.05[b]	<0.74[b]	<1.81[b]	<1.18[b]	<1.23[b]	<1.32[b]	<1.91[a]	<1.09[a]	<1.27[a]	<1.36[a]	<0.54[a]	<0.77[a]	<0.28[a]	<0.30[a]	<0.47[a]	<0.82[a]
	Th-228[c]	pCi/L	<0.44[b]	<0.41[b]	<0.69[b]	<0.42[b]	<0.72[b]	0.37	<0.64[b]	<0.64[b]	<0.79[b]	<0.44[b]	<0.53[b]	<0.64[b]	<0.56[a]	<0.45[a]	<0.43[a]	<0.53[a]	<0.57[a]	0.77	0.47	<0.52[a]	<0.96[a]	<0.70[a]
	Th-230	pCi/L	0.44	0.76	0.69	0.63	0.65	<0.55[b]	<0.64[b]	0.69	<0.58[b]	<0.54[b]	<0.53[b]	<0.57[b]	0.56	<0.31[a]	<0.34[a]	<0.40[a]	0.57	0.42	<0.40[a]	0.99	0.69	0.96
	Th-232	pCi/L	<0.20[b]	<0.41[b]	<0.31[b]	<0.42[b]	<0.23[b]	<0.25[b]	<0.45[b]	<0.38[b]	<0.66[b]	<0.44[b]	<0.48[b]	<0.21[b]	<0.51[a]	<0.34[a]	<0.29[a]	<0.27[a]	<0.49[a]	<0.33[a]	<0.16[a]	<0.25[a]	<0.52[a]	<0.34[a]
C006	Total U[a]	µg/L	2.8	1.2	1.29	3.11	2.09	1.44	2.77	1.73	4.65	1.68	2.85	1.46[b]	2.29	0.91	1.74	1.48	2.68	1.60	2.29	1.34	1.99	0.64
	Ra-226	pCi/L	<2.00[b]	<0.57[b]	<1.20[b]	<1.44[b]	0.95	<1.39[b]	<1.09[b]	<1.67[b]	<0.80[b]	0.98	<1.11[b]	<0.94[b]	<1.21[a]	<0.33[a]	<1.02[a]	<1.00[a]	<0.97[a]	<0.66[a]	<0.21[a]	<0.26[a]	<0.82[a]	<0.53[a]
	Th-228[c]	pCi/L	<0.24[b]	<0.46[b]	<0.25[b]	<0.17[b]	<0.70[b]	<0.41[b]	<0.20[b]	<0.84[b]	<0.53[b]	<0.45[b]	<0.34[b]	<0.36[b]	<0.50[a]	<0.46[a]	<0.59[a]	<0.47[a]	<0.58[a]	<0.43[a]	<0.35[a]	<0.30[a]	<0.89[a]	0.50
	Th-230	pCi/L	<0.54[b]	<0.53[b]	0.74	<0.17[b]	0.53	<0.33[b]	<0.67[b]	<0.62[b]	0.65	0.48	0.26	<0.16[b]	<0.33[a]	0.41	<0.51[a]	<0.40[a]	<0.50[a]	0.91	<0.39[a]	0.48	0.87	0.98
	Th-232	pCi/L	<0.24[b]	<0.17[b]	<0.25[b]	<0.17[b]	<0.45[b]	<0.15[b]	<0.43[b]	<0.20[b]	<0.43[b]	<0.20[b]	<0.14[b]	<0.36 [b]	<0.46[a]	<0.28[a]	<0.44[a]	<0.44[a]	<0.36[a]	<0.43[a]	<0.24[a]	<0.21[a]	<0.56[a]	<0.33[a]
C007	Total U[a]	µg/L	1.9	1.3	2.15	5.65	2.06	1.84	4.29	1.69	2.39	2.25	3.25	1.59	3.09	0.89	2.24	1.60	1.85	NS1	3.16	NS1	NS1	2.08
	Ra-226	pCi/L	<1.53[b]	<1.61[b]	1.42	<2.01[b]	<1.54[b]	<0.98[b]	<1.35[b]	0.61	<1.52[b]	<1.06[b]	<0.85[b]	<1.50[b]	<1.50[a]	<1.13[a]	<1.22[a]	<1.01[a]	<0.76[a]	NS1	<0.25[a]	NS1	NS1	<0.56[a]
	Th-228[c]	pCi/L	<0.20[b]	<0.37[b]	<0.80[b]	<0.19[b]	<0.42[b]	<0.89[b]	<0.63[b]	<0.42[b]	<0.49[b]	<0.55[b]	<0.35[b]	<0.50[b]	<0.66[a]	<0.65[a]	<0.49[a]	<0.47[a]	<0.61[a]	NS1	<0.26[a]	NS1	NS1	<0.50[a]
	Th-230	pCi/L	0.59	0.59	<0.29[b]	0.90	0.67	<0.57[b]	<0.20[b]	<0.42[b]	<0.49[b]	<0.16[b]	<0.44[b]	<0.61[b]	<0.54[a]	<0.40[a]	<0.46[a]	<0.34[a]	<0.41[a]	NS1	<0.67[a]	NS1	NS1	1.09
	Th-232	pCi/L	<0.19[b]	<0.37[b]	<0.29[b]	<0.51[b]	<0.19[b]	<0.26[b]	<0.45[b]	<0.34[b]	<0.49[b]	<0.16[b]	<0.15[b]	<0.23[b]	<0.44[a]	<0.37[a]	<0.31[a]	<0.32[a]	<0.47[a]	NS1	<0.25[a]	NS1	NS1	<0.51[a]

Table 3-8. Comparison of Historical Radiological Surface Water Results for CWC (Continued)

Stations	Radionuclide	Units	03/12	10/12	04/13	10/13	03/14	10/14	03/15	10/15	03/16	10/16	03/17	10/17	04/18	10/18	04/19	10/19	04/20	10/20	03/21	10/21	04/22	10/22
C008[d]	Total U[a]	µg/L	NA	NA	NA	NA	NA	1.32	2.82	1.79	3.07	1.71	3.02	1.82	3.60	0.46	1.88	1.50	3.00	1.95	3.06	0.67	1.58	2.13
	Ra-226	pCi/L						<0.83[b]	<1.28[b]	0.61	<0.95[b]	<2.15[b]	<0.95[b]	<1.06[b]	<1.48[a]	<1.21[a]	<1.43[a]	<1.26[a]	<0.69[a]	<0.70[a]	<0.22[a]	<0.21[a]	<0.64[a]	<0.58[a]
	Th-228[c]	pCi/L						<0.54[b]	0.64	<0.42[b]	0.50	<0.17[b]	<0.45[b]	<0.58[b]	<0.34[a]	0.37	<0.38[a]	0.46	<0.48[a]	<0.39[a]	0.75	0.46	<0.92[a]	<0.52[a]
	Th-230	pCi/L						0.22	<0.50[b]	<0.42[b]	0.47	0.53	<0.39[b]	0.50	0.69	<0.26[a]	<0.43[a]	<0.42[a]	0.98	1.12	0.67	0.89	<0.92[a]	0.89
	Th-232	pCi/L						<0.20[b]	<0.40[b]	<0.36[b]	<0.46[b]	<0.48[b]	<0.13[b]	<0.17[b]	<0.47[a]	<0.38[a]	<0.35[a]	<0.37[a]	<0.35[a]	<0.30[a]	<0.17[a]	<0.23[a]	<0.80[a]	<0.49[a]
C009[d]	Total U[a]	µg/L	NA	NA	NA	NA	NA	1.92	3.53	2.47	1.16	2.17	1.60	1.13	2.05	0.88	1.77	1.57	2.83	1.94	2.56	0.89	0.92	2.78
	Ra-226	pCi/L						<0.90[b]	<1.04[b]	0.81	<1.4[b]	<1.27[b]	<1.02[b]	<1.02[b]	<1.47[a]	<1.05[a]	<1.02[a]	<1.47[a]	<0.64[a]	<0.71[a]	<0.23[a]	<0.20[a]	<0.74[a]	<0.57[a]
	Th-228[c]	pCi/L						<0.40[b]	<0.45[b]	<0.46[b]	<0.44[b]	<0.53[b]	0.32	<0.51[b]	<0.51[a]	<0.53[a]	<0.34[a]	<0.43[a]	<0.32[a]	0.74	<0.33[a]	0.88	<0.97[a]	<0.63[a]
	Th-230	pCi/L						<0.49[b]	<0.45[b]	<0.51[b]	<0.36[b]	0.86	0.51	0.87	<0.48[a]	<0.40[a]	<0.37[a]	<0.34[a]	<0.39[a]	0.85	0.99	1.12	1.20	1.78
	Th-232	pCi/L						<0.18[b]	3.33	2.04	3.15	3.96	<0.34[b]	<0.18[b]	<0.48[a]	<0.45[a]	<0.26[a]	<0.31[a]	<0.32[a]	<0.70[a]	<0.23[a]	<0.24[a]	<0.73[a]	<0.35[a]
C010[e]	Total U[a]	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.93	1.19	2.31	0.27	2.64	1.47
	Ra-226	pCi/L																	<1.74[a]	<0.62[a]	<0.17[a]	<0.28[a]	<0.83[a]	<0.66[a]
	Th-228[c]	pCi/L																	<0.44[a]	<0.36[a]	<0.42[a]	0.61	<0.74[a]	<0.83[a]
	Th-230	pCi/L																	<0.48[a]	1.01	0.63	0.88	0.75	0.84
	Th-232	pCi/L																	<0.32[a]	<0.31[a]	<0.16[a]	<0.15[a]	<0.65[a]	<0.52[a]
C011[e]	Total U[a]	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.90	1.13	1.91	0.48	1.96	1.94
	Ra-226	pCi/L																	<0.98[a]	<0.68[a]	<0.32[a]	<0.31[a]	<0.45[a]	<0.95[a]
	Th-228[c]	pCi/L																	<0.38[a]	<0.37[a]	0.86	<0.40[a]	1.45	<0.87[a]
	Th-230	pCi/L																	0.47	0.72	0.76	0.88	<0.76[a]	0.96
	Th-232	pCi/L																	<0.53[a]	<0.53[a]	<0.27[a]	<0.17[a]	<0.75[a]	<0.45[a]

[a] Total U is equal to the sum of the concentrations of U isotopes (in pCi/L) divided by 0.677, where 0.677 picocuries per microgramis the specific activity for total U, assuming secular equilibrium.
[b] Reported result is less than the MDC and is therefore set equal to the MDC.
[c] Ra-228 rapidly achieves equilibrium with Th-228, such that their concentrations are equal.
[d] Stations C008 and C009 were established and initially sampled during the second semi-annual event of CY 2014.
[e] Stations C010 and C011 were established and initially sampled during the first semi-annual event of CY 2021.
Note: Total U (30 µg/L) is the only ROD monitoring guideline for surface water. The other radiological monitoring parameter data are collected to monitor potential COC migration.
NA – not applicable (No sample was collected during this event, because this station was established in 2014 or later.)
NS1 – no sample, remediation activities at this location prevented sampling.

Chemical Parameters

No chemical-specific ROD monitoring guidelines exist for surface water. Chemical monitoring parameter data are collected to monitor COC migration. The chemical monitoring results for the CY 2022 CWC surface water sampling events are presented in Table 3-9. The chemical data collected for the high-flow surface water sampling event was comparable to the data collected from base-flow events.

Table 3-9. Chemical Results for CY 2022 CWC Surface Water Sampling

Monitoring Parameter[a]	Monitoring Stations									
	C002	C003	C004	C005	C006	C007	C008	C009	C010	C011
Target Analyte List Metals Concentration (µg/L)										
First Sampling Event (04/12/22)										
Antimony	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]	NS	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]
Arsenic	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]	NS	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]
Barium	100	100	110	100	96	NS	96	92	120	120
Cadmium	<0.2[b]	<0.2[b]	<0.2[b]	<0.2[b]	<0.2[b]	NS	<0.2[b]	<0.2[b]	<0.2[b]	<0.2[b]
Chromium	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]	NS	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]
Molybdenum	8.1	8.1	7.8	7.4	8.3	NS	6.2	5.7	5.6	5.2
Nickel	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]	NS	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]
Selenium	<2.0[b]	<2.0[b]	<2.0[b]	2.1	<2.0[b]	NS	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]
Thallium	<0.9[b]	<0.9[b]	<0.9[b]	<0.9[b]	<0.9[b]	NS	<0.9[b]	<0.9[b]	<0.9[b]	<0.9[b]
Vanadium	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]	NS	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]
Second Sampling Event (10/10/22 and 10/12/22)										
Antimony	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]
Arsenic	2.7	2.5	1.6	2.1	2.3	2.9	2.6	2.6	2.8	2.8
Barium	72	62	45	58	75	120	120	140	110	120
Cadmium	<0.2[b]	<0.2[b]	<0.2[b]	<0.2[b]	<0.2[b]	<0.2[b]	<0.2[b]	<0.2[b]	<0.2[b]	<0.2[b]
Chromium	<4.0[b]	<4.0[b]	4.5	4.8	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]
Molybdenum	7.6	6.3	4.0	6.0	6.3	7.4	6.5	7.2	5.8	5.3
Nickel	2.7	2.7	2.6	2.9	2.9	2.6	2.2	2.5	2.6	2.6
Selenium	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]
Thallium	<0.1[b]	<0.1[b]	<0.1[b]	<0.1[b]	<0.1[b]	<0.1[b]	<0.1[b]	<0.1[b]	<0.1[b]	<0.1[b]
Vanadium	<4.0[b]	<4.0[b]	4.1	4.3	4.9	4.0	4.4	5.0	6.6	5.9
First High-Flow Water Sampling Event (05/05/22)										
Antimony	<2.0[b]	NA	NA	NA	NA	<2.0[b]	NA	<2.0[b]	NA	NA
Arsenic	<4.0[b]	NA	NA	NA	NA	<4.0[b]	NA	<4.0[b]	NA	NA
Barium	51	NA	NA	NA	NA	49	NA	49	NA	NA
Cadmium	<0.2[b]	NA	NA	NA	NA	<0.2[b]	NA	<0.2[b]	NA	NA
Chromium	<4.0[b]	NA	NA	NA	NA	<4.0[b]	NA	<4.0[b]	NA	NA
Molybdenum	5.9	NA	NA	NA	NA	5.3	NA	2.6	NA	NA
Nickel	2.4	NA	NA	NA	NA	3.6	NA	3.7	NA	NA
Selenium	<2.0[b]	NA	NA	NA	NA	<2.0[b]	NA	<2.0[b]	NA	NA
Thallium	<0.9[b]	NA	NA	NA	NA	<0.9[b]	NA	<0.9[b]	NA	NA
Vanadium	5.5	NA	NA	NA	NA	5.0	NA	5.5	NA	NA

Table 3-9. Chemical Results for CY 2022 CWC Surface Water Sampling (Continued)

Monitoring Parameter[a]	Monitoring Stations									
	C002	C003	C004	C005	C006	C007	C008	C009	C010	C011
Target Analyte List Metals Concentration (µg/L)										
Second High-Flow Water Sampling Event (07/27/22)										
Antimony	0.46	NA	NA	NA	NA	0.57	NA	0.65	NA	NA
Arsenic	2.4	NA	NA	NA	NA	2.2	NA	2.3	NA	NA
Barium	70	NA	NA	NA	NA	75	NA	66	NA	NA
Cadmium	<0.27[b]	NA	NA	NA	NA	<0.27[b]	NA	<0.27[b]	NA	NA
Chromium	3.5	NA	NA	NA	NA	3.8	NA	3.0	NA	NA
Molybdenum	18	NA	NA	NA	NA	14	NA	8.2	NA	NA
Nickel	2.4	NA	NA	NA	NA	3.0	NA	3.2	NA	NA
Selenium	2.9	NA	NA	NA	NA	5.1	NA	2.1	NA	NA
Thallium	<0.9[b]	NA	NA	NA	NA	<0.9[b]	NA	<0.9[b]	NA	NA
Vanadium	3.2	NA	NA	NA	NA	3.9	NA	3.8	NA	NA
Third High-Flow Water Sampling Event (10/26/22)										
Antimony	<2.0[b]	NA	NA	NA	NA	<2.0[b]	NA	<2.0[b]	NA	NA
Arsenic	1.9	NA	NA	NA	NA	1.8	NA	1.6	NA	NA
Barium	57	NA	NA	NA	NA	49	NA	39	NA	NA
Cadmium	<0.2[b]	NA	NA	NA	NA	<0.2[b]	NA	<0.2[b]	NA	NA
Chromium	<4.0[b]	NA	NA	NA	NA	<4.0[b]	NA	<4.0[b]	NA	NA
Molybdenum	16	NA	NA	NA	NA	13	NA	7.8	NA	NA
Nickel	<2.0[b]	NA	NA	NA	NA	<2.0[b]	NA	<2.0[b]	NA	NA
Selenium	2.7	NA	NA	NA	NA	5.4	NA	2.1	NA	NA
Thallium	<0.1[b]	NA	NA	NA	NA	<0.1[b]	NA	<0.1[b]	NA	NA
Vanadium	<4.0[b]	NA	NA	NA	NA	4.5	NA	<4.0[b]	NA	NA

[a] No chemical-specific ROD monitoring guidelines exist for surface water.
[b] Reported result is less than the MDC and is therefore set equal to the MDC.
NS – no sample, remediation activities at this location prevented sampling.
NA – not applicable (High-flow water samples are collected for only stations C002, C007, and C009).

3.2.2 Coldwater Creek Sediment Monitoring Results

CY 2022 sediment sampling at CWC was conducted during the months of April and October as part of the EMP. Sediment samples were collected in depositional environments near each of the 10 previously described surface water locations (C002 through C011) (Figure 3-2) and analyzed according to the methods described in the SAG (USACE 2000). Sediment samples collected for the EMP were evaluated for the radiological and metal constituents listed in Table 3-3 of the EMICY22 (USACE 2021). A sediment sample from C007 was not collected during the April sampling period because of remediation along CWC at that location.

With the exception of the April sediment sample at C007, all sediment monitoring required through implementation of the EMICY22 was conducted as planned during CY 2022 (USACE 2021). The evaluation of monitoring data demonstrates that all applicable ARARs have been met. The analytical results from these monitoring activities are contained in Appendix E, Table E-2, of this EMDAR.

Radiological Parameters

The radiological results for CY 2022 CWC sediment sampling events are presented in Table 3-10. The ROD established sediment RGs for Ra-226, Th-230, and U-238 at the NC Sites (USACE 2005). Therefore, sediment sampling results for those radionuclides were compared against their corresponding RGs. Sediment samples from CWC were not analyzed for U-234 during CY 2022, because U-234 is assumed to be in equilibrium with U-238.

Table 3-10. Radiological Results for CY 2022 CWC Sediment Sampling

Monitoring Parameter	RGs[a]	Monitoring Stations									
		C002	C003	C004	C005	C006	C007	C008	C009	C010	C011
Radionuclide Concentration (pCi/g)											
First Sampling Event (04/12/22)											
Ac-227	No RG	<0.09[b]	<0.18[b]	<0.22[b]	<0.23[b]	<0.22[b]	NS	<0.38[b]	<0.20[b]	<0.22[b]	0.17
Pa-231	No RG	<0.72[b]	<0.66[b]	<0.84[b]	<0.84[b]	<0.80[b]	NS	<1.43[b]	<0.70[b]	<0.77[b]	<0.79[b]
Ra-226	15	0.95	0.85	1.05	1.10	0.98	NS	1.10	0.80	0.94	1.11
Ra-228	No RG	0.36	0.25	0.87	0.71	0.86	NS	0.90	0.59	0.66	0.62
Th-228[c]	No RG	0.58	0.40	1.27	0.82	1.12	NS	1.08	1.09	0.98	1.40
Th-230[c]	43	1.12	1.01	2.35	1.86	2.54	NS	2.98	1.62	2.05	13.1
Th-232[c]	No RG	0.24	0.53	1.03	0.73	1.07	NS	1.25	1.04	0.71	1.01
U-235	No RG	<0.25[b]	<0.22[b]	<0.28[b]	<0.28[b]	<0.27[b]	NS	<0.42[b]	<0.24[b]	<0.26[b]	<0.25[b]
U-238[d]	150	1.46	0.63	1.30	1.11	1.08	NS	1.13	0.55	0.81	0.70
Second Sampling Event (10/10/22 and 10/12/22)											
Ac-227	No RG	<0.17[b]	<0.18[b]	<0.20[b]	<0.22[b]	<0.23[b]	<0.20[b]	<0.11[b]	<0.23[b]	<0.20[b]	0.11
Pa-231	No RG	<0.64[b]	<0.69[b]	<0.79[b]	<0.77[b]	<0.78[b]	<0.70[b]	<0.79[b]	<0.85[b]	<0.72[b]	<0.80[b]
Ra-226	15	0.81	0.85	0.95	0.98	0.95	1.14	1.01	1.10	1.08	1.21
Ra-228	No RG	0.26	0.35	0.67	0.63	0.80	0.38	0.79	0.81	0.43	0.75
Th-228[c]	No RG	0.23	0.62	0.63	1.08	1.01	0.94	1.00	1.05	0.79	0.99
Th-230[c]	43	0.99	0.97	1.74	6.09	1.96	4.80	2.40	2.95	3.76	5.01
Th-232[c]	No RG	0.35	0.63	0.94	0.83	0.98	0.56	1.03	0.87	0.44	0.95
U-235	No RG	<0.21[b]	<0.22[b]	<0.25[b]	<0.25[b]	<0.27[b]	<0.25[b]	<0.26[b]	<0.27[b]	<0.24[b]	<0.27[b]
U-238[d]	150	0.55	0.57	0.93	0.85	1.05	0.83	0.99	1.02	0.53	1.09

[a] RGs presented in the ROD (USACE 2005).
[b] Reported result is less than the MDC and is therefore set equal to the MDC.
[c] Both gamma spectroscopy and alpha spectroscopy results are produced; alpha spectroscopy results are reported.
[d] U-238 and U-234 are assumed to be in equilibrium.
NS – no sample, remediation activities at this location prevented sampling.

All sediment data results were below the RGs established by the ROD. The historical radiological sediment sampling data for all monitoring stations since March of 2012 are summarized in Table 3-11.

Table 3-11. Comparison of Historical Radiological Sediment Results for CWC

Station	Radionuclide	Units	03/12	10/12	04/13	10/13	03/14	10/14	03/15	10/15	03/16	10/16	03/17	10/17	04/18	10/18	04/19	10/19	04/20	10/20	03/21	10/21	04/22	10/22
C002	Total U[a]	pCi/g	0.84	1.21	1.49	1.02	0.75	0.90	1.35	1.89	3.89	5.74	5.50	1.55	1.35	1.70	1.98	1.34	1.13	1.13	1.34	1.23	3.05	1.11
	Ra-226	pCi/g	0.89	0.911	0.91	1.01	0.94	0.88	0.78	1.26	1.34	2.01	1.30	1.22	0.98	1.24	1.36	0.81	0.92	0.99	0.83	0.97	0.95	0.81
	Ra-228	pCi/g	0.24	0.372	0.30	0.28	0.26	0.36	0.18	1.01	1.11	1.08	0.89	0.51	0.34	0.61	0.57	0.38	0.32	0.20	0.34	0.31	0.36	0.26
	Th-228	pCi/g	0.37	0.37	0.30	<0.16[b]	<0.26[b]	0.69	<0.18[c]	1.52	1.74	1.61	0.52	0.53	0.32	0.92	0.60	0.33	0.50	1.01	0.33	0.50	0.58	0.23
	Th-230	pCi/g	0.52	0.64	1.06	1.20	0.69	0.55	0.56	1.53	1.99	2.10	2.26	1.26	0.65	1.30	1.28	1.68	2.17	2.90	1.35	0.92	1.12	0.99
	Th-232	pCi/g	0.35	0.47	0.36	<0.44[b]	0.26	0.55	0.26	1.36	1.39	0.57	0.89	0.41	<0.16[c]	0.62	0.75	0.34	0.41	0.56	<0.20[c]	0.52	0.24	0.35
C003	Total U[a]	pCi/g	1.20	1.78	1.80	1.01	0.90	2.04	2.68	0.99	1.22	2.27	1.90	1.44	1.60	1.94	2.20	2.23	2.12	2.35	2.57	1.54	1.27	1.15
	Ra-226	pCi/g	1.07	1.33	1.41	1.03	1.42	1.22	1.00	0.92	1.11	1.41	1.10	1.29	1.04	1.47	1.44	1.40	1.34	1.06	1.06	1.02	0.85	0.85
	Ra-228	pCi/g	0.81	0.78	0.91	0.36	0.91	0.63	0.82	0.22	0.66	0.98	0.76	0.64	0.66	0.81	0.74	0.86	0.79	0.85	0.84	0.55	0.25	0.35
	Th-228	pCi/g	1.69	1.23	1.01	0.94	1.21	0.68	0.84	0.44	1.28	1.35	1.33	1.01	1.14	1.05	0.65	1.00	1.46	2.00	1.13	0.76	0.40	0.62
	Th-230	pCi/g	1.81	1.19	3.92	1.90	1.67	1.04	2.57	0.57	2.55	3.71	2.85	1.29	2.70	1.48	1.54	3.26	2.51	2.35	1.61	1.75	1.01	0.97
	Th-232	pCi/g	1.28	1.18	0.99	<0.35[b]	0.95	0.89	0.84	0.25	0.87	1.14	1.11	0.68	0.95	0.86	0.70	0.69	1.00	1.30	1.05	0.91	0.53	0.63
C004	Total U[a]	pCi/g	2.84	3.09	1.97	2.14	1.84	1.20	1.67	2.14	2.71	2.00	1.74	1.87	1.72	2.07	1.96	2.31	2.08	2.12	1.79	2.18	2.62	1.86
	Ra-226	pCi/g	1.13	1.28	1.16	1.25	1.62	1.36	1.00	1.21	1.39	1.44	1.12	1.14	1.17	1.33	1.21	1.35	1.42	1.15	1.10	1.14	1.05	0.95
	Ra-228	pCi/g	0.85	0.86	0.72	0.62	0.80	0.89	0.90	1.01	0.95	1.03	0.87	0.85	0.71	0.79	0.50	0.78	0.80	0.87	0.75	0.79	0.87	0.67
	Th-228	pCi/g	1.72	1.24	0.74	1.09	0.94	0.73	1.81	1.31	1.64	1.17	1.14	1.19	0.92	0.91	0.72	0.92	1.91	0.84	1.72	1.15	1.27	0.63
	Th-230	pCi/g	2.41	1.28	2.37	2.15	3.11	1.82	1.7	3.02	2.77	2.11	3.27	2.30	1.83	1.50	1.45	1.73	4.84	2.24	2.06	1.69	2.35	1.74
	Th-232	pCi/g	1.45	1.13	0.84	1.42	0.57	1.50	1.32	0.81	1.30	0.94	1.24	1.05	0.86	0.94	0.72	1.18	1.11	1.49	1.14	0.75	1.03	0.94
C005	Total U[a]	pCi/g	4.36	2.5	1.86	1.20	2.10	1.55	1.58	2.44	2.58	2.50	0.98	1.62	2.05	2.10	1.61	2.72	2.14	2.38	2.09	2.57	2.28	1.71
	Ra-226	pCi/g	1.47	1.33	1.28	1.01	1.59	1.62	1.12	1.05	1.44	1.74	1.08	1.60	1.78	1.68	2.20	1.68	1.62	1.22	1.07	1.14	1.10	0.98
	Ra-228	pCi/g	0.92	0.90	0.87	0.47	1.00	0.99	0.94	0.81	1.06	0.99	0.91	0.99	0.92	0.87	0.91	1.00	0.94	0.96	0.94	0.86	0.71	0.63
	Th-228	pCi/g	1.05	1.30	0.64	0.82	1.35	1.19	1.27	1.50	1.70	1.26	1.31	1.25	1.24	1.04	1.79	1.02	1.13	1.32	1.29	1.24	0.82	1.08
	Th-230	pCi/g	4.3	5.42	4.65	3.26	1.53	1.58	2.13	2.28	2.23	1.83	2.48	2.24	1.61	3.50	2.94	1.70	2.69	2.56	2.10	1.99	1.86	6.09
	Th-232	pCi/g	1.01	1.23	1.08	0.49	1.16	0.69	0.88	0.97	1.30	1.43	1.22	0.78	1.10	0.89	1.08	1.57	0.72	0.89	1.08	1.33	0.73	0.83
C006	Total U[a]	pCi/g	2.35	1.97	1.53	1.87	0.19	2.60	2.77	1.70	1.85	2.33	2.80	1.78	2.02	1.49	2.05	2.69	2.28	2.36	2.39	2.45	2.32	2.28
	Ra-226	pCi/g	1.16	1.02	1.13	1.37	1.38	1.36	1.06	1.28	1.27	1.47	1.21	1.19	1.23	1.59	1.50	1.32	1.38	1.12	1.12	1.08	0.98	0.95
	Ra-228	pCi/g	1.06	0.94	0.99	0.91	1.01	1.05	0.85	0.90	0.85	1.14	0.87	0.85	0.79	0.81	0.84	0.88	0.96	0.79	0.92	0.87	0.86	0.80
	Th-228	pCi/g	1.38	1.03	0.97	1.07	0.60	1.18	1.20	0.88	1.49	1.23	1.84	1.21	1.11	1.27	1.27	1.30	2.27	1.30	1.24	1.09	1.12	1.01
	Th-230	pCi/g	3.39	1.78	2.18	1.57	2.30	2.39	1.52	2.12	3.89	2.31	6.62	3.84	2.71	4.52	2.71	4.42	3.15	4.99	2.17	1.87	2.54	1.96
	Th-232	pCi/g	1.00	1.30	1.31	0.88	0.85	1.04	0.74	1.27	0.95	1.45	1.38	1.33	1.06	1.18	1.13	1.14	1.11	1.16	1.02	1.23	1.07	0.98

Table 3-11. Comparison of Historical Radiological Sediment Results for CWC (Continued)

Station	Radionuclide	Units	03/12	10/12	04/13	10/13	03/14	10/14	03/15	10/15	03/16	10/16	03/17	10/17	04/18	10/18	04/19	10/19	04/20	10/20	03/21	10/21	04/22	10/22
C007	Total U[a]	pCi/g	2.45	3.08	2.13	1.79	0.49	3.35	1.55	1.32	1.91	1.49	1.52	1.41	1.66	1.91	2.22	1.74	1.67	NS1	2.32	NS1	NS1	1.78
	Ra-226	pCi/g	1.23	1.06	1.32	1.20	1.55	2.12	1.10	1.08	1.14	1.28	0.95	1.33	1.14	1.39	1.55	1.19	1.33	NS1	1.20	NS1	NS1	1.14
	Ra-228	pCi/g	0.89	0.80	0.85	0.54	0.77	1.01	0.87	0.64	0.67	0.59	0.66	0.63	0.69	0.64	0.74	0.54	0.58	NS1	0.75	NS1	NS1	0.38
	Th-228	pCi/g	2.07	0.96	0.86	0.94	0.74	0.80	1.06	1.24	0.47	0.62	1.18	1.29	0.95	1.01	1.57	0.82	1.09	NS1	1.02	NS1	NS1	0.94
	Th-230	pCi/g	3.51	2.73	3.25	4.50	3.19	6.81	3.89	3.91	3.77	4.75	5.79	2.98	3.79	3.29	3.11	2.77	6.02	NS1	7.30	NS1	NS1	4.80
	Th-232	pCi/g	1.14	0.70	0.62	0.69	1.21	0.85	0.66	0.87	1.04	0.87	1.02	0.88	1.01	0.73	1.08	0.65	0.92	NS1	0.85	NS1	NS1	0.56
C008[d]	Total U[a]	pCi/g	NA	NA	NA	NA	NA	2.60	1.81	1.37	3.24	3.11	1.93	1.73	0.91	-0.17	2.40	2.10	2.35	2.20	2.29	2.39	2.30	1.98
	Ra-226	pCi/g						1.22	1.17	1.23	1.27	1.71	1.13	1.30	1.20	1.70	1.53	1.70	1.59	1.26	1.07	1.17	1.10	1.01
	Ra-228	pCi/g						0.72	0.81	0.76	0.90	1.27	1.06	0.94	0.74	0.88	0.89	0.98	0.95	0.87	0.92	0.87	0.90	0.79
	Th-228	pCi/g						0.82	1.18	0.86	1.16	1.26	1.22	0.99	1.12	1.01	1.02	1.28	0.85	0.99	1.74	1.17	1.08	1.00
	Th-230	pCi/g						2.80	2.48	3.36	2.30	1.93	2.68	1.82	2.11	2.23	2.06	2.79	2.98	1.94	2.70	2.53	2.98	2.40
	Th-232	pCi/g						0.56	1.19	0.55	1.19	1.06	1.26	0.80	0.90	1.18	0.80	0.60	0.82	0.84	1.00	1.12	1.25	1.03
C009[d]	Total U[a]	pCi/g	NA	NA	NA	NA	NA	1.79	1.72	1.63	1.10	1.45	1.76	1.89	1.43	1.76	2.15	1.50	1.96	2.32	2.97	1.84	1.23	2.04
	Ra-226	pCi/g						1.43	1.26	1.19	1.43	1.48	1.10	1.27	1.25	1.67	1.52	1.22	1.43	1.09	1.13	1.15	0.80	1.10
	Ra-228	pCi/g						0.80	0.94	0.81	0.83	0.88	0.86	0.64	0.73	0.88	0.71	0.46	0.66	0.64	0.80	0.78	0.59	0.81
	Th-228	pCi/g						0.86	1.16	1.06	1.30	1.26	0.82	0.86	1.25	0.87	0.87	0.57	1.51	1.12	1.18	1.00	1.09	1.05
	Th-230	pCi/g						3.96	2.27	2.99	2.46	3.54	2.95	2.28	2.21	4.60	2.15	6.25	4.81	3.16	4.43	3.44	1.62	2.95
	Th-232	pCi/g						1.06	1.22	0.63	1.26	0.98	0.88	0.53	0.86	0.72	0.66	0.55	0.83	0.70	1.01	0.80	1.04	0.87
C010[e]	Total U[a]	pCi/g	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.56	2.14	1.87	1.64	1.64	1.09
	Ra-226	pCi/g																	1.48	1.14	1.19	1.13	0.94	1.08
	Ra-228	pCi/g																	0.70	0.85	0.65	0.39	0.66	0.43
	Th-228	pCi/g																	0.91	1.62	0.86	0.61	0.98	0.79
	Th-230	pCi/g																	2.63	2.52	1.63	3.52	2.05	3.76
	Th-232	pCi/g																	0.99	0.89	0.94	0.37	0.71	0.44

Table 3-11. Comparison of Historical Radiological Sediment Results for CWC (Continued)

Station	Radionuclide	Units	03/12	10/12	04/13	10/13	03/14	10/14	03/15	10/15	03/16	10/16	03/17	10/17	04/18	10/18	04/19	10/19	04/20	10/20	03/21	10/21	04/22	10/22
C011[e]	Total U[a]	pCi/g	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.62	2.32	2.40	1.56	1.39	2.18
	Ra-226	pCi/g																	1.63	1.27	1.16	1.09	1.11	1.21
	Ra-228	pCi/g																	0.88	0.89	0.84	0.60	0.62	0.75
	Th-228	pCi/g																	1.48	1.3	1.15	0.92	1.40	0.99
	Th-230	pCi/g																	4.22	3.48	3.86	12.1	13.1	5.01
	Th-232	pCi/g																	1.57	1.22	1.51	1.07	1.01	0.95

[a] Total U is equal to the sum of the concentrations of U isotopes (Office of the Federal Register, NARA 1998).
[b] Reported result is less than the MDC and is therefore set equal to the MDC.
[c] Both gamma spectroscopy and alpha spectroscopy results were produced; gamma spectroscopy results are reported.
Note: The sediment RGs for Ra-226, Th-230, and U-238 are 15 pCi/g, 43 pCi/g, and 150 pCi/g, respectively. The other radiological monitoring parameter data are collected to monitor COC migration.
NA – not applicable (No sample was collected during this event, because this station was established in 2014 or later.)
NS1 – no sample, remediation activities at this location prevented sampling.

Chemical Parameters

Chemical monitoring results for CY 2022 CWC sediment sampling events are presented in Table 3-12.

Table 3-12. Chemical Results for CY 2022 CWC Sediment Sampling

Monitoring Parameter	Monitoring Stations									
	C002	C003	C004	C005	C006	C007	C008	C009	C010	C011
Target Analyte List Metals Concentration (mg/kg)										
First Sampling Event (04/12/22)										
Antimony	<2.2[a]	<2.2[a]	0.86	1.0	0.5	NS1	1.3	0.39	0.69	0.57
Arsenic	4.7	4.7	5.5	8.7	4.2	NS1	7.4	10	7.2	9.2
Barium	54	230	120	180	130	NS1	180	140	180	250
Cadmium	0.48	0.51	0.50	2.7	0.17	NS1	0.64	0.18	0.58	1.2
Chromium	17	19	22	29	14	NS1	28	19	34	54
Molybdenum	<2.2[a]	<2.2[a]	0.65	1.6	0.31	NS1	2.0	0.28	0.82	0.73
Nickel	7.9	12	14	18	13	NS1	23	13	20	25
Selenium	<3.5[a]	<3.5[a]	0.74	<1.3[a]	1.4	NS1	1.7	1.5	1.5	1.7
Thallium	<2.2[a]	<2.2[a]	<0.31[a]	<0.8[a]	<0.25[a]	NS1	<0.69[a]	<0.26[a]	<0.65[a]	<0.24[a]
Vanadium	15	24	23	25	21	NS1	31	32	28	27
Second Sampling Event (10/10/22 and 10/12/22)										
Antimony	<0.06[a]	0.08	0.24	0.67	0.19	0.2	0.2	0.14	0.26	0.17
Arsenic	1.1	1.2	4.5	4.9	4.6	3.1	4.5	2.9	9	5.8
Barium	14	20	100	110	120	80	100	77	160	130
Cadmium	0.30	0.20	0.40	0.46	0.3	0.30	0.32	0.25	0.55	0.51
Chromium	3.9	2.4	15	21	11	8.7	10	19	19	25
Molybdenum	0.68	0.18	0.63	1.6	0.37	0.60	0.40	0.37	0.82	0.35
Nickel	2.4	2.2	11	17	12	8.0	11	8	14	14
Selenium	0.40	0.19	0.92	0.76	0.86	0.63	0.77	0.61	0.85	0.72
Thallium	<0.02[a]	<0.02[a]	0.10	0.10	0.15	0.07	0.09	0.07	0.09	0.12
Vanadium	2.9	3.2	13	13	16	9.8	14	9.6	16	15

[a] Reported result is less than the DL and is therefore set equal to the DL.

Note: There are no chemical-specific ROD RGs or monitoring guidelines for sediment. Chemical monitoring parameter data are collected to monitor COC migration.

NS1 – no sample, remediation activities at this location prevented sampling.

3.2.3 Impact of FUSRAP Coldwater Creek Remedial Action on Total Uranium Concentrations in Coldwater Creek Surface Water and Sediment

As part of the FUSRAP RA at the SLAPS, sediment and soil were removed from the bed and banks of CWC near monitoring stations C002 and C003 during August of 2004. An evaluation was conducted to determine if the SLAPS RA resulted in increased levels of uranium in CWC. The concentrations of radionuclides in sediment and surface water samples from various stations along CWC were assessed. Radionuclide data from surface water and sediment samples collected from March of 2000 to March of 2004 were used to create a baseline for comparison with sample results collected after the RA.

Methodology

Total U results from CY 2022 surface water and sediment samples from six monitoring stations (C002 through C007) were compared to the 2000 to 2004 dataset for this evaluation. Total U was selected for this evaluation because it is among the most mobile of all the radionuclide COCs present at the SLAPS.

The total U concentration statistics for surface water and sediment at monitoring stations C002 through C007 for 2000 through 2004 are presented in Table 3-13.

Table 3-13. Total Uranium Concentration Statistics for CWC (2000-2004)

Stations[a]	Statistics for Total U in Surface Water March 2000 to March 2004 Data (pCi/L)			Statistics for Total U in Sediment March 2000 to March 2004 Data (pCi/g)		
	UCL_{95}	Mean	LCL_{95}	UCL_{95}	Mean	LCL_{95}
C002	4.2	3.1	1.9	1.7	1.4	1.1
C003	3.8	3.3	2.7	1.9	1.5	1.0
C004	4.5	3.4	2.3	2.3	1.7	1.2
C005	4.1	3.0	1.9	2.8	2.4	2.0
C006	8.2[b]	5.0	[c]	3.0	2.4	1.8
C007	4.7	3.4	0.75	2.5	1.9	1.3

[a] Monitoring stations C008 and C009 were established in 2014 and C010 and C011 were established in 2021.
[b] March 2000 to March 2004 data are gamma distributed. Therefore, approximate gamma upper confidence limit (UCL) is used.
[c] The 95 percent lower confidence limit (LCL_{95}) is not calculated due to gamma-distributed data. ProUCL, the USEPA-approved statistical software, does not compute lower confidence limits of the mean for gamma-distributed data (USEPA 2013).

Qualitative trend line graphs of total U results from surface water and sediment samples collected at monitoring stations C002 through C007 from March of 2000 to October of 2022 are presented on Figures 3-3 and 3-4. The mean, 95 percent upper confidence limit (UCL_{95}), and 95 percent lower confidence limit (LCL_{95}) concentrations of total U calculated from the March 2000 to March 2004 dataset are also shown on Figures 3-3 and 3-4. Surface water and sediment data for total U from monitoring stations C008 to C011 are also included on Figures 3-3 and 3-4.

Conclusion

The data fit two hypothetical scenarios. First, the post-RA sampling results were not significantly different than the pre-RA sampling results for downstream stations at the SLAPS (C003 through C007), so it is unlikely that total U from the SLAPS RA is causing a significant contribution to CWC. The RA over time should markedly reduce the total U load in CWC if the SLAPS were a significant contributor. While a time lag in the fate downstream could occur, the current total U concentrations are already low. Second, the RA within CWC did not adversely impact concentrations of total U in CWC surface water or sediment. Had the RA contributed adversely, a notable short-term increase in total U concentrations would have been observed.

4.0 EVALUATION OF GROUNDWATER MONITORING DATA

During CY 2022, 17 groundwater monitoring wells were sampled at the NC Sites. Groundwater was sampled following protocol for individual wells and analytes, and was analyzed for various radiological constituents and/or inorganic analytes. Static water levels were measured quarterly at the monitoring wells. In addition, field parameters were measured during purging of the wells before sampling. The static water levels and other groundwater field parameter results for CY 2022 sampling are contained in Appendix F, Tables F-1 and F-2. Summary tables providing the NC Sites groundwater analytical sampling results for CY 2022 are contained in Appendix F, Tables F-3 and F-4.

Groundwater Guidelines

The CY 2022 groundwater monitoring data for the NC Sites are compared to the ROD groundwater monitoring guidelines (henceforth referred to as ROD guidelines) listed in Tables G-1 and G-2 in Appendix G of this EMDAR. The ROD guidelines for the NC Sites are based on requirements specified in the ROD (USACE 2005) and are further explained in Sections 4.1.1 and 4.2.1.

Stratigraphy

The stratigraphic units present at the NC sites are shown in the stratigraphic column presented on Figure 4-1. Fill and topsoil (Unit 1) overlie Pleistocene loess (Unit 2) and glaciolacustrine deposits. The glaciolacustrine sediments consist of Subunit 3T (silty clay), Subunit 3M (moderately to highly plastic clay), Subunit 3B (silty clay), and Unit 4 (clayey and sandy gravel). Beneath these unconsolidated deposits, the bedrock is composed of Mississippian limestone (Unit 6). Stratigraphic Unit 5, Pennsylvanian shale bedrock, is not present at the HISS or Futura, but is found directly overlying Unit 6 under portions of the SLAPS.

4.1 LATTY AVENUE PROPERTIES

The Latty Avenue Properties include the HISS, Futura, and 10 Latty Avenue VPs (VPs 01[L] through 06[L]; VP-40A East;, and Parcels 10K530065, 10K530076, and 10K530087). The groundwater monitoring wells at the Latty Avenue Properties are located on or adjacent to the HISS and Futura.

Stratigraphy at the Latty Avenue Properties

Four HZs (HZ-A through HZ-C, and HZ-E) have been identified at the Latty Avenue Properties. The shallow groundwater zone, HZ-A, consists of the fine-grained silts and clays of Unit 1, Unit 2, and Subunit 3T. Underlying HZ-A is HZ-B, which consists of a highly impermeable clay (Subunit 3M). HZ-C consists of silty clay, clayey silt, and clayey gravel deposits that comprise the stratigraphic Subunit 3B and Unit 4. The Mississippian limestone bedrock is defined as HZ-E. HZ-E is the protected aquifer for the site. As a result of their very low permeability, Subunits 3M and 3B limit vertical groundwater movement between HZ-A and the deep groundwater zones (HZ-C and HZ-E) at the Latty Avenue Properties.

Summary of Calendar Year 2022 Groundwater Monitoring Results at the Latty Avenue Properties

Based on an evaluation of the groundwater data at the Latty Avenue Properties, three inorganic soil COCs (molybdenum, nickel, and selenium) and two radiological COCs (U-234 and U-238) were detected at concentrations in excess of the ROD guidelines in HZ-A groundwater at the Latty Avenue Properties in CY 2022. Molybdenum, nickel, and selenium were detected above the

corresponding ROD guidelines in HZ-A well HISS-10 during the second-quarter sampling event. Molybdenum and selenium were also above the ROD guideline in a sample collected from HISS-10 during the fourth-quarter sampling event. However, selenium concentrations did not exceed the ROD guideline at HISS-10 in the sample collected during the previous sampling event performed in the fourth quarter of CY 2021. Nickel exceeded the ROD guideline at HISS-10 in the samples collected from the fourth quarter of CY 2021 and the second quarter of CY 2022. However, nickel concentrations did not exceed the ROD guideline at HISS-10 in the samples collected in the second quarter of CY 2021 or the fourth quarter of CY 2022. Therefore, nickel and selenium concentrations in HISS-10 have not exceeded the ROD guideline for more than 12 months.

Molybdenum was detected above the ROD guideline at HISS-10 in the samples collected during the second-quarter and fourth-quarter sampling events. Molybdenum was above the ROD guideline in the previous sampling events conducted in CY 2021. Therefore, molybdenum concentrations in HISS-10 have exceeded the ROD guideline for more than 12 months. The Mann-Kendall Trend Test results indicate a statistically significant increasing trend for molybdenum in HISS-10.

The U-234 and U-238 concentrations in the sample collected at HW22 during the second-quarter sampling event exceeded the ROD guideline. However, U-234 and U-238 do not exceed the ROD guideline when measurement error is taken into account. In addition, U-234 and U-238 were not detected above the ROD guideline at HW22 in the sample collected during the previous sampling event in the fourth quarter of CY 2019. Therefore, U-234 and U-238 have not exceeded the ROD guideline for more than 12 months in HW22.

Because a significant degradation of CWC surface water has not occurred and is not anticipated, no finding currently indicates significantly degraded groundwater conditions in HZ-A groundwater, as defined by the ROD. However, because molybdenum levels in HISS-10 have exceeded the ROD guideline for a period of at least 12 months, groundwater monitoring will continue subject to subsequent CERCLA 5-year reviews.

Based on the CY 2022 results for HW23, concentrations of all inorganic and radiological soil COCs were below the ROD groundwater guidelines in HZ-C during CY 2022. Therefore, no findings currently indicate significantly degraded groundwater conditions in HZ-C groundwater. An evaluation of potential response actions is therefore not required.

4.1.1 Evaluation of Groundwater Monitoring Data at the Latty Avenue Properties

The groundwater monitoring data for the Latty Avenue Properties are evaluated against the requirements for groundwater monitoring identified in the ROD (USACE 2005). The ROD specifies two types of groundwater monitoring guidelines: (1) response-action monitoring guidelines and (2) a total U monitoring guideline (which is used for both response-action and long-term monitoring). Response-action monitoring of HZ-A and HZ-C is being conducted to ensure that the RA does not degrade current groundwater conditions. Another purpose of the response-action groundwater monitoring of HZ-C is to document protection of the limestone aquifer (HZ-E) during the RA.

The response-action monitoring guideline is two times the UCL_{95}, based on historical concentrations of the analyte in a particular well before RAs were initiated under the ROD. The response-action monitoring guidelines have been developed for the ROD soil COCs for each of the wells at the Latty Avenue Properties. The methodology for the development of the response-action monitoring guidelines is detailed in Appendix G of this EMDAR. The total U guideline is defined

in the ROD to be equal to the total U maximum contaminant level of 30 µg/L (USACE 2005). If total U levels exceed 30 µg/L, monitoring would continue subject to a CERCLA 5-year review.

In addition to the previous requirements, an evaluation of concentration trends over time is conducted for the COCs detected above the ROD guidelines in groundwater to support assessment of the effectiveness of the RA in the CERCLA 5-year reviews.

Monitoring Well Network at the Latty Avenue Properties

The CY 2022 EMP well network for the Latty Avenue Properties is shown on Figure 4-2. With the exception of monitoring well HW23, which is screened in HZ-C, the monitoring wells are screened in HZ-A. The screened HZs for the groundwater monitoring wells at the Latty Avenue Properties are identified in Table 4-1. Appendix H provides the well maintenance checklists for the annual inspection of the groundwater monitoring wells at the Latty Avenue Properties, conducted on April 4 and April 6, 2022.

Table 4-1. Screened HZs for Groundwater Monitoring Wells at the Latty Avenue Properties in CY 2022

Well ID	Screened HZs
HISS-01[a]	HZ-A
HISS-06A[a]	HZ-A
HISS-10[a]	HZ-A
HISS-11A[a]	HZ-A
HISS-17S	HZ-A
HISS-19S	HZ-A
HW22[a]	HZ-A
HW23[a]	HZ-C

[a] Wells sampled in CY 2022.

Groundwater sampling was conducted at six groundwater monitoring wells at the Latty Avenue Properties in CY 2022. First-quarter sampling was conducted on February 15, 2022; second-quarter sampling was conducted on May 18, 2022; third-quarter sampling was conducted on August 24, 2022; and fourth-quarter sampling was conducted on November 14, 2022.

HZ-A Groundwater

Groundwater samples were collected from five HZ-A wells in CY 2022. A summary table presenting the CY 2022 analytical data for all analytes is included in Appendix F (Table F-3).

For response-action monitoring, the CY 2022 groundwater data were evaluated to determine if groundwater conditions have significantly degraded. Continued monitoring of HZ-A could be required long term if significantly degraded groundwater conditions are found. Based on the ROD, a significantly degraded groundwater condition requires all of the following:

1. That soil COC concentrations have statistically increased in groundwater (relative to the well's historical data and accounting for uncertainty) for more than a 12-month period. Significantly increased concentrations are defined as doubling of an individual COC concentration above the upper confidence limit (UCL) of the mean (based on the historical concentration before RA) for a period of 12 months;
2. That the degraded well is close enough to impact CWC; and
3. That a significant degradation of CWC surface water is anticipated.

The CY 2022 results were compared to the guidelines for the soil COCs identified in the ROD (i.e., antimony, arsenic, barium, cadmium, chromium, molybdenum, nickel, selenium, thallium, total U, vanadium, Ra-226, Ra-228, Th-228, Th-230, Th-232, U-234, U-235, and U-238). The ROD guideline for total U (30 µg/L) is used for both response-action and long-term monitoring of groundwater at the Latty Avenue Properties. Total U concentrations were compared to the 30 µg/L monitoring guideline. Total U concentrations (in µg/L) were calculated as follows from the isotopic results (in pCi/L) and the specific activities (in pCi/µg) for each radionuclide.

$$TotalU\left(\mu g/L\right) = \left[\frac{U^{234}\left(pCi/L\right)}{6240\left(pCi/\mu g\right)}\right] + \left[\frac{U^{235}\left(pCi/L\right)}{2.16\left(pCi/\mu g\right)}\right] + \left[\frac{U^{238}\left(pCi/L\right)}{0.335\left(pCi/\mu g\right)}\right]$$

Those soil COCs with concentrations above the ROD guidelines in HZ-A groundwater samples at the Latty Avenue Properties during CY 2022 are listed in Table 4-2. Because no groundwater sampling data are available for HISS-06A and HISS-11A prior to CY 2011, the ROD guidelines for HISS-06A and HISS-11A were developed using the pre-2006 data from the wells previously at these locations (HISS-06 and HISS-11).

Table 4-2. Analytes Exceeding ROD Guidelines in HZ-A Groundwater at the Latty Avenue Properties in CY 2022

Analyte	Units	Station	ROD Guidelines[a]	Minimum Detected	Maximum Detected	Mean Detected	Detects above ROD Guidelines[a]	Frequency of Detection
Molybdenum	µg/L	HISS-10	5.6	46	49	48	2	2/2
Nickel	µg/L	HISS-10	3.8	3.5	5.0	4.3	1	2/2
Selenium	µg/L	HISS-10	7.6	49	54	52	2	2/2
U-234[b]	pCi/L	HW22	6.4	6.8	6.8	6.8	1	1/1
U-238[b]	pCi/L	HW22	5.4	7.1	7.1	7.1	1	1/1
Total U[c,d]	µg/L	HW22	30	21.6	21.6	21.6	0	1/1

[a] ROD guidelines include the response-action monitoring guidelines and the total U monitoring guideline of 30 µg/L. Response-action monitoring guideline = 2 x UCL_{95}, based on historical concentrations before RAs were initiated (USACE 2005). Results are reported to two significant digits.

[b] The concentrations of U-234 and U-238 detected in HW22 are not above the ROD guideline when measurement error is taken into account.

[c] The results for total U do not exceed the monitoring guideline. The results are provided because U-234 and U-238 exceeded the ROD guideline and are used in the total U calculation.

[d] Total U values were calculated from isotopic concentrations in pCi/L and converted to µg/L using radionuclide-specific activities with the following formula: total U (µg/L) = U-234 (pCi/L)/6240 + U-235 (pCi/L)/2.16 + U-238 (pCi/L)/0.335.

Three inorganic COCs (molybdenum, nickel, and selenium) were detected above their ROD guidelines in HZ-A groundwater at the Latty Avenue Properties in CY 2022. Molybdenum was detected in HISS-10 at levels above the ROD guideline of 5.6 µg/L in the second-quarter and fourth-quarter samples (46 µg/L and 49 µg/L, respectively). Molybdenum was above the ROD guideline in the previous sampling events conducted in CY 2021. Therefore, molybdenum concentrations in HISS-10 have exceeded the ROD guideline for more than 12 months. The nickel concentration exceeded the ROD guideline (3.8 µg/L) in HISS-10 in the second-quarter sample (5 µg/L). The nickel concentration did not exceed the ROD guideline in the fourth-quarter sample or the sample collected in the fourth quarter of CY 2021. Therefore, nickel concentrations in HISS-10 have not exceeded the ROD guideline for more than 12 months. The selenium concentration exceeded the ROD guideline (7.6 µg/L) in HISS-10 in the second-quarter and the fourth-quarter samples (49 µg/L and 54 µg/L, respectively). Selenium was below the ROD guideline in the previous sampling event conducted in the fourth quarter of CY 2021. Therefore, selenium concentrations in HISS-10 have not exceeded the ROD guideline for more than 12 months.

Two radiological COCs (U-234 and U-238) were detected above their ROD guidelines in HZ-A well HW22 at the Latty Avenue Properties in CY 2022. However, the concentrations of U-234 and U-238 detected in HW22 during the second-quarter sampling event are not above the ROD guideline when measurement error is taken into account. The total U concentration in HW22 (21.6 µg/L) does not exceed the total U monitoring guideline of 30 µg/L.

In summary, comparison of the data to the ROD guidelines indicates that three inorganic COCs (molybdenum, nickel, and selenium) and two radiological COCs (U-234 and U-238) exceeded the ROD guidelines in HZ-A groundwater in CY 2022. However, the U-234 and U-238 concentrations in HW22 do not exceed the ROD guideline when measurement error is taken into account. Because a significant degradation of CWC surface water has not occurred and is not anticipated, no findings currently indicate significantly degraded groundwater conditions in HZ-A groundwater, as defined by the ROD. However, because molybdenum levels in HISS-10 have exceeded the ROD guideline for a period of at least 12 months, groundwater monitoring will continue subject to subsequent CERCLA 5-year reviews.

HZ-C Groundwater

Groundwater samples were collected from one HZ-C well (HW23) in CY 2022. This well was sampled for both radionuclides and inorganics during the second quarter. Concentrations of all inorganic and radiological soil COCs were below the ROD groundwater guidelines in HW23 during CY 2022.

In summary, the CY 2022 HZ-C groundwater data from the Latty Avenue Properties indicate that no analytes were detected at concentrations above ROD groundwater criteria. Therefore, there is currently no finding of significantly degraded groundwater conditions in HZ-C groundwater.

4.1.2 Comparison of Historical Groundwater Data at the Latty Avenue Properties

Groundwater sampling has been conducted at the Latty Avenue Properties from CY 1984 to the present. The most comprehensive groundwater monitoring program, involving sampling from 18 monitoring wells, was conducted at the site in the summer of CY 1997. Results from subsequent sampling events were used to evaluate contaminant trends at the Latty Avenue Properties during the period from the first quarter of CY 1999 to the fourth quarter of CY 2022. Statistical analysis was used to assist with identifying trends for those contaminants that exceeded the ROD guidelines in CY 2022.

Statistical Method and Trend Analysis

Several statistical methods are available to evaluate contaminant trends in groundwater. These include the Mann-Kendall Trend Test, the Wilcoxon Rank Sum (WRS) Test, and the Seasonal Kendall Test (USEPA 2000). The latter two tests are applicable to data that may or may not exhibit seasonal behavior, but generally require larger sample sizes than the Mann-Kendall Trend Test. The Mann-Kendall Trend Test was selected for this project because this test can be used with small sample sizes (as few as four data points), and because a seasonal variation in concentrations was not indicated by the time-versus-concentration plots at the NC Sites. The Mann-Kendall Trend Test is a non-parametric test and, as such, is not dependent upon assumptions of distribution, missing data, or irregularly spaced monitoring periods. In addition, data reported as being less than the detection limit (DL) can be used (Gibbons 1994). The test can assess whether a time-ordered dataset exhibits an increasing or decreasing trend, within a predetermined level of significance. While the Mann-Kendall Trend Test can use as few as four data points, often this is not enough data to detect

a trend. Therefore, the test was performed only at those monitoring stations at the NC Sites for which data have been collected for at least six sampling events.

A customized Microsoft Excel® spreadsheet was used to perform the Mann-Kendall Trend Test. The test involves listing the sampling results in chronological order and computing all differences that may be formed between current measurements and earlier measurements. The value of the test statistic (S) is the difference between the number of strictly positive differences and the number of strictly negative differences. If S is a large positive value, then evidence indicates an increasing trend in the data. If S is a large negative value, then evidence indicates a decreasing trend in the data. If no trend exists and all observations are independent, then all rank orderings of the annual statistics are equally likely (USEPA 2000). The results of the Mann-Kendall Trend Test are reported in terms of a p-value or Z-score, depending on sample size, N. If the sample size is less than or equal to 10, then the p-value is computed. If the p value is less than or equal to 0.05, the test concludes that the trend is statistically significant. If the p value is greater than 0.05, the test concludes no evidence of a significant trend exists. For dataset sizes larger than 10, the Z-score is compared to ±1.65, which is the comparison level at a 95 percent confidence level. If the Z-score is greater than 1.65, the test concludes that a significant upward trend exists. If the Z-score is less than –1.65, the test concludes that a significant downward trend exists. For Z-scores between –1.65 and 1.65, no evidence of a significant trend exists.

The results of the Mann-Kendall Trend Test are less reliable for datasets containing a high number of non-detect values, particularly if the DL changes over time. For that reason, for datasets in which more than 50 percent of the time-series data are non-detect results, the Mann-Kendall Trend Test was not conducted. No general consensus exists regarding the percentage of non-detect results that can be handled by the Mann-Kendall Trend Test.

Only unfiltered data were used, and split and QC sample results were not included in the database for the Mann-Kendall Trend Test. The Mann-Kendall Trend Test is used to evaluate the radiological data and to determine trends without regard to isotopic analysis. In addition, for monitoring wells for which the Mann-Kendall Trend Test has indicated a trend (either upward or downward), another analysis is performed to determine whether the trend is due to inherent error associated with the analytical test method for each sample analysis. This analysis involves graphing the data and the associated error-bar for the specific constituent. The time-versus-concentration plots for molybdenum and selenium in HISS-10 and for total U in HW22 are provided on Figure 4-3.

Results of Trend Analysis for Groundwater at the Latty Avenue Properties

For those stations at which an analyte exceeded the ROD guideline at least once during the year and for which sufficient historical data were available to evaluate trends (i.e., at least six samples), statistical trend analysis is conducted to assess whether concentrations of the analyte are increasing (upward trending) or decreasing (downward trending) over time. For the purposes of this trend analysis, a statistically significant trend in concentration is defined as a trend with a confidence level greater than 95 percent. The confidence level denotes the probability that the indicated trend is an actual trend in the data, rather than a result of the random nature of environmental data.

HZ-A Groundwater

The Mann-Kendall Trend Test was performed for those wells in which analytes exceeded the ROD guidelines at least once during CY 2022, for which sufficient data were available (i.e., at least six samples were collected during the period from the first quarter of CY 1999 to the fourth quarter of CY 2022), and at which the percentage of non-detect results is less than or equal to 50 percent.

Inorganics

The concentration of three inorganic soil COCs (molybdenum, nickel, and selenium) were above the ROD groundwater criteria in the CY 2022 groundwater samples from HZ-A well HISS-10. Because the historical dataset for nickel in HISS-10 does not have a detection frequency greater than 50 percent, a Mann-Kendall Trend Test was not performed for this COC. Therefore, a trend analysis was conducted for molybdenum and selenium in HISS-10. For molybdenum and selenium in HISS-10, the dataset was restricted to the time period of CY 2002 through CY 2022 to meet the Mann-Kendall Trend Test requirement that the dataset have a detection frequency greater than 50 percent. As shown in Table 4-3 and on the time-versus-concentration plots on Figure 4-3, a statistically significant increasing trend in molybdenum and selenium concentrations (i.e., a trend with a confidence level greater than 95 percent) was observed for HISS-10 for the CY 2002 through CY 2022 dataset.

Table 4-3. Results of the Mann-Kendall Trend Test for Analytes Exceeding the ROD Guidelines at the Latty Avenue Properties in CY 2022

Analyte	Station	N[a]	Test Statistics[b]		Trend[d]
			S[c]	Z[c]	
Molybdenum	HISS-10	24	181	4.49	Upward Trend
Selenium	HISS-10	24	107	2.65	Upward Trend
Total U	HW22	20	118	3.80	Upward Trend

[a] N is the number of unfiltered groundwater sample results for a particular analyte. For HISS-10, the dataset was not restricted and covers the period from April 2002 to November 2022 to meet the Mann Kendall Trend Test requirement that the dataset have a detection frequency greater than 50 percent. For HW22, the dataset was restricted to September 2000 to May 2022 to meet the Mann-Kendall Trend Test requirement that the dataset have a detection frequency greater than 50 percent.

[b] Test Statistics: S – the S-Statistic; Z – Z-score, or normalized test statistic (for datasets having N greater than 10).

[c] One-tailed Mann-Kendall Trend Tests were performed at a UCL_{95}.

[d] Trend: If N is greater than 10, the Z-score is compared to ±1.65 to determine trend significance.

Radionuclides

The concentrations of two radiological COCs (U-234 and U-238) were above the ROD groundwater criteria in the CY 2022 groundwater sample from HZ-A well HW22. However, the concentrations of U-234 and U-238 detected in HW22 during the second-quarter sampling event are not above the ROD guideline when measurement error is taken into account. A trend analysis was conducted for total U concentrations for HW22. Because the total U values are calculated using the U-234 and U-238 values, the trend in their values should be similar to the total U trend results. Therefore, performance of separate trend analyses for U-234 and U-238 were unnecessary.

For total U in HW22, the dataset was restricted and covers the time period of CY 2000 through CY 2022. As shown in Table 4-3 and on the time-versus-concentration plot on Figure 4-3, a statistically significant increasing trend in total U concentrations (i.e., a trend with a confidence level greater than 95 percent) was observed for HW22 for the CY 2002 through CY 2022 dataset. The time-versus-concentration plot for total U in HW22 on Figure 4-3 shows the trend in concentrations has been increasing since August 2001. The total U concentrations in HW22 have not exceeded the 30 µg/L monitoring guideline during any of the sampling events.

The time-versus-concentration plots shown on Figure 4-4 provide an overview of the temporal and spatial variability in the concentrations of total U in groundwater at the Latty Avenue Properties. Total U concentrations were calculated using the isotopic U results measured in pCi/L and converted to µg/L using radionuclide-specific activities. The reported values were used for detected and non-detected isotopic values, except when the value was negative. If the reported value was negative, a value equal to zero was substituted for the result prior to calculating the total U concentration.

HZ-C Groundwater

The Mann-Kendall Trend Test is performed for those wells in which analytes exceeded the ROD guidelines at least once during CY 2022. Concentrations of all soil COCs were below the ROD groundwater criteria in CY 2022 groundwater samples from the HZ-C well HW23 when measurement error was taken into account. Therefore, a trend analysis was not conducted for HZ-C groundwater for the Latty Avenue monitoring well.

4.1.3 Evaluation of the Potentiometric Surface at the Latty Avenue Properties

Groundwater surface elevations were measured at the Latty Avenue Properties in February, May, August, and November of CY 2022. Groundwater elevation contours were drawn using the May 16, 2022, and November 14, 2022, measurements to illustrate groundwater flow conditions in wet and dry seasons, respectively. The potentiometric surface maps, shown on Figures 4-5 through 4-8, were developed for both HZ-A and HZ-C groundwater zones. The groundwater flow direction is interpreted to be perpendicular to the groundwater equipotential contours. The groundwater surface elevations at the Latty Avenue Properties and the SLAPS and SLAPS VPs were mapped on the same figures because these areas are located in the same groundwater flow regime.

The top of the saturated zone occurs in the low hydraulic conductivity silts and clays of stratigraphic Units 2 and 3T at the Latty Avenue Properties. The potentiometric data indicate some mounding of the HZ-A groundwater at the HISS and Futura. Wells HISS-01, HISS-06A, HISS-10, and HISS-17S have the highest potentiometric surface elevations, with lower groundwater elevations measured in the surrounding wells. At the western edge of the HISS and Futura, groundwater in the HZ-A zone flows to the west toward CWC. The local horizontal gradient for HZ-A groundwater at the HISS and Futura ranged from 0.009 ft/ft (November) to 0.01 ft/ft (May) in CY 2022. Based on the CY 2022 water-level measurements, the position of the HZ-A groundwater surface averages approximately 1 ft higher in the corresponding shallow wells at the HISS in the wet season (May) than in the dry season (November).

The potentiometric surface of the HZ-C groundwater at the Latty Avenue Properties is not well defined due to the limited data available for the deeper HZs. Based on measured groundwater elevations in the HZ-C monitoring well HW23 at the Latty Avenue Properties and several HZ-C wells located to the southwest at the SLAPS and SLAPS VPs, the flow direction in the HZ-C groundwater beneath the Latty Avenue Properties was generally toward the southeast at an average horizontal gradient of 0.0007 ft/ft (May) and 0.0008 ft/ft (November) in CY 2022.

4.2 ST. LOUIS AIRPORT SITE AND ST. LOUIS AIRPORT SITE VICINITY PROPERTIES

Groundwater monitoring wells have been installed at the SLAPS and SLAPS VPs to characterize the site stratigraphy, groundwater chemistry, and groundwater migration pathways.

Stratigraphy at the St. Louis Airport Site and St. Louis Airport Site Vicinity Properties

In the vicinity of the SLAPS and the adjacent SLAPS VP Ballfields, surficial deposits (Unit 1) include topsoil and anthropogenic fill (rubble, scrap metal, gravel, glass, slag, and concrete) generally less than 14 ft thick (Figures 4-1, 4-9, and 4-10). Unit 2 is comprised of loess and has a thickness of 11 to 30 ft. Unit 3, which is subdivided into Subunits 3T, 3M, and 3B, primarily consists of clay and silt lakebed deposits. Each of these clayey subunits has a thickness of up to 30 ft. Unit 4 consists of clayey gravel with fine to very-fine sand and sandy gravel. This unit is

interpreted to be approximately 5 to 15 ft thick and thins eastward and westward of the SLAPS. This unit is absent beneath the eastern part of the SLAPS, where Subunits 3M and 3B drape, or onlap, onto shale bedrock. Below Units 3 and 4 are Units 5 and 6, which consist of Pennsylvanian shale/siltstone and Mississippian limestone, respectively. Depth to bedrock ranges from approximately 55 ft on the eastern part of the SLAPS to a maximum of 90 ft toward CWC to the west. The hydrogeologic and geologic setting at the SLAPS and SLAPS VPs is similar to that at the HISS, with one exception. The Pennsylvanian shale bedrock unit (Unit 5), present beneath portions of the SLAPS and SLAPS VPs, is absent beneath the HISS.

Five HZs (HZ-A through HZ-E) are recognized beneath the SLAPS and SLAPS VPs. HZ-A consists of fill (Unit 1) and the Pleistocene, glacially related sediments of stratigraphic Unit 2, and Subunit 3T. Underlying HZ-A is HZ-B, which consists of highly impermeable clay (Subunit 3M). HZ-C consists of the stratigraphic Subunit 3B and Unit 4. The shale (Unit 5) and limestone (Unit 6) bedrock are recognized as HZ-D and HZ-E, respectively. HZ-E is the protected aquifer for the site.

The shallow (HZ-A) groundwater flow is toward CWC under normal flow conditions. The shallow groundwater flow at the SLAPS and IA-09 is to the northwest toward CWC, and the shallow groundwater flow at IA-10 is to the southeast toward CWC. Average depths to the groundwater surface at the site range from approximately 9 ft below ground surface during the spring months to approximately 11 ft below ground surface (bgs) during the fall months. The dominant flow in HZ-A is through the more permeable Unit 2. Each of the subunits in Unit 3 has lower hydraulic conductivity than Units 1, 2, and 4. Units HZ-B and the Pennsylvanian shale HZ-D limit the passage of groundwater vertically beneath the SLAPS and SLAPS VPs. Subunit 3M of HZ-B acts as a vertical barrier to groundwater movement under the western portion of the site. Subunit 3M is a clayey aquitard (unit resisting water passage) that effectively separates the HZ-A groundwater system from the underlying HZ-C and HZ-E. The dominant unit to obtain water in the lower horizon is the sandy, clayey gravel of Unit 4. Unit 4 of HZ-C is used as a surrogate for HZ-E, because water movement within the Mississippian limestone is dependent upon the limestone's joint and solutioned system. In addition, the limestone has exhibited massive characteristics and is very slow to recharge.

Summary of Calendar Year 2022 Groundwater Monitoring Results at the St. Louis Airport Site and St. Louis Airport Site Vicinity Properties

Three soil COCs (barium, chromium, and total U) exceeded the ROD guidelines in HZ-A groundwater at the SLAPS and SLAPS VPs in CY 2022 when measurement error was taken into account. Total U has exceeded the ROD guideline in PW46 for a period of at least 12 months. A statistically significant decreasing trend was observed for total U concentrations in PW46. Barium concentrations in B53W06S and chromium concentrations in B53W09S have not exceeded the ROD guidelines for a period of at least 12 months. A statistically significant increasing trend was observed for barium concentrations in B53W06S and chromium concentrations in B53W09S. Because a significant degradation of CWC surface water has not occurred and is not anticipated, no findings currently indicate significantly degraded groundwater conditions in HZ-A groundwater, as defined by the ROD. However, because total U levels have exceeded the ROD guidelines for a period of at least 12 months, groundwater monitoring in PW46 will continue subject to subsequent CERCLA 5-year reviews.

One inorganic soil COC (cadmium) exceeded the ROD guidelines in HZ-E groundwater at the SLAPS and SLAPS VPs in CY 2022 when measurement error was taken into account. Cadmium has exceeded the ROD guideline in PW35 for a period of at least 12 months. A Mann-Kendall Trend Test could not be performed for the cadmium results in PW35 because less than

50 percent of the time-series data were above the detection limit. Because a significant degradation of CWC surface water has not occurred and is not anticipated, no findings currently indicate significantly degraded groundwater conditions in HZ-E groundwater, as defined by the ROD. No inorganic or radiological soil COCs exceeded the ROD groundwater guidelines in HZ-C groundwater during CY 2022 when measurement error was taken into account.

4.2.1 Evaluation of Groundwater Monitoring Data at the St. Louis Airport Site and St. Louis Airport Site Vicinity Properties

The purpose of the groundwater monitoring conducted at the SLAPS and SLAPS VPs is specified in the ROD (USACE 2005). Response-action monitoring is currently being conducted in HZ-A and HZ-C to assess the improvement of water quality due to source removals, and to document the protection of the limestone aquifer (HZ-E) during the RA.

The groundwater monitoring data at the SLAPS and SLAPS VPs are evaluated against the requirements for groundwater monitoring identified in the ROD (USACE 2005).

In addition to the previously described monitoring, an evaluation of concentration trends is conducted for the COCs detected in excess of the ROD guidelines in groundwater to support assessment of the effectiveness of the RA in the CERCLA 5-year reviews.

Monitoring Well Network at the St. Louis Airport Site and St. Louis Airport Site Vicinity Properties

The current EMP well network for the SLAPS and SLAPS VPs is shown on Figure 4-11. A summary of the HZ information for the groundwater monitoring wells located at the SLAPS and SLAPS VPs is provided in Table 4-4. HZ-A is considered the upper (or shallow) zone, while HZ-C, HZ-D, and HZ-E have been considered the lower (or deep) zone. This designation of upper and lower zones is separated at Subunit 3M of HZ-B. A total of 11 wells are screened exclusively across the shallow zone (HZ-A). A total of 4 wells are screened exclusively in the lower zone across HZ-C, HZ-D, and/or HZ-E. The remaining well (PW36) is screened across both HZ-B and HZ-C. Appendix H provides the well maintenance checklists for the annual inspection of the groundwater monitoring wells at the SLAPS and SLAPS VPs, conducted in April 2022.

Table 4-4. Groundwater Monitoring Well Network at the SLAPS and SLAPS VPs in CY 2022

Well ID	Screened HZs			
	HZ-A	HZ-B	HZ-C	HZ-E
B53W01D[a]			X	
B53W01S[a]	X			
B53W06S[a]	X			
B53W07D[a]			X	
B53W07S[a]	X			
B53W09S[a]	X			
B53W17S[a]	X			
MW31-98	X			
MW32-98	X			
PW35[a]				X
PW36[a]		X	X	
PW42			X	
PW43[a]	X			
PW44	X			
PW45	X			
PW46[a]	X			

[a] Wells sampled in CY 2022.

During CY 2022, 11 groundwater wells were sampled for various parameters at the SLAPS and SLAPS VPs. Groundwater samples collected from these wells were analyzed for radiological and/or inorganic constituents. Historically, radiological parameters (Ra-226, Ra-228, Th-228, Th-230, Th-232, U-234, U-235, and U-238) and inorganic constituents have been the main focus of the groundwater sampling. The analytical data for the CY 2022 groundwater sampling at the SLAPS and SLAPS VPs are contained in Appendix F, Table F-4.

In CY 2022, groundwater sampling was conducted on February 15 (first quarter); May 16 and 17 (second quarter); August 22, 23, and 24 (third quarter); and November 15 and 17 (fourth quarter). The CY 2022 results were compared to ROD guidelines for the soil COCs identified in the ROD (i.e., antimony, arsenic, barium, cadmium, chromium, molybdenum, nickel, selenium, thallium, total U, vanadium, Ra-226, Ra-228, Th-228, Th-230, Th-232, U-234, U-235, and U-238).

HZ-A Groundwater

Seven HZ-A wells (B53W01S, B53W06S, B53W07S, B53W09S, B53W17S, PW43, and PW46) were sampled at the SLAPS and SLAPS VPs during CY 2022. Table 4-5 lists those soil COCs exceeding the ROD guidelines in CY 2022 groundwater samples from HZ-A wells at the SLAPS and SLAPS VPs.

Table 4-5. Analytes Exceeding ROD Guidelines in HZ-A Groundwater at the SLAPS and SLAPS VPs in CY 2022

Analyte	Units	Station	ROD Guidelines[a]	Minimum Detected	Maximum Detected	Mean Detected	Detects above ROD Guidelines[a]	Frequency of Detection
Barium	µg/L	B53W06S	190	260	290	275	2	2/2
Chromium	µg/L	B53W09S	9.6	27	27	27	1	1/1
U-234	pCi/L	PW46	5,500	44.1[b]	51.4[b]	47.8[b]	0	2/2
U-235	pCi/L	PW46	290	1.6[b]	2.7[b]	2.1[b]	0	2/2
U-238	pCi/L	PW46	5,600	44.4[b]	51.5[b]	48.0[b]	0	2/2
Total U[c]	µg/L	PW46	30	133	155	144	2	2/2

[a] ROD guidelines = response-action monitoring guideline and total U monitoring guideline. Response-action monitoring guideline = 2 x UCL_{95} (based on historical concentrations before RAs were initiated). Total U monitoring guideline = 30 µg/L (USACE 2005).

[b] The results for U-234, U-235, and U-238 do not exceed the ROD guidelines. The results are provided because they were used in the total U calculation.

[c] Total U values were calculated from isotopic concentrations in pCi/L and converted to µg/L using radionuclide-specific activities with the following formula: total U (µg/L) = U-234 (pCi/L)/6240 + U-235 (pCi/L)/2.16 + U-238 (pCi/L)/0.335.

Two inorganic soil COCs (barium and chromium) were detected in HZ-A groundwater at concentrations in excess of the ROD guidelines at the SLAPS and SLAPS VPs during CY 2022. Barium was detected at a concentrations in excess of the ROD guideline in the HZ-A well B53W06S during first-quarter and third-quarter CY 2022 sampling events. The barium concentration did not exceed the ROD guideline in the sample collected from B53W06S in CY 2021 (Figure 4-12). Therefore, barium concentrations in PW46 did not exceed the ROD guideline for more than 12 months.

Chromium was detected at concentrations in excess of the ROD guideline in HZ-A well B53W09S during CY 2022. The chromium concentration did not exceed the ROD guideline in the sample collected from B53W09S in CY 2021 (Figure 4-12). Therefore, the chromium concentration at B53W09S has not exceeded the ROD guideline for a period of at least 12 months.

One radiological soil COC (total U) exceeded the ROD guideline of 30 µg/L in HZ-A groundwater at the SLAPS and SLAPS VPs. The total U concentration in PW46 (calculated from the isotopic concentrations) exceeded the 30 µg/L guideline during the first-quarter and third-quarter CY 2022 sampling events. The total U concentration during CY 2022 in PW46 ranged from 133 µg/L

(first-quarter sample) to 155 µg/L (third-quarter sample). PW46 is an RA evaluation well that was installed at the western edge of the SLAPS in April of 2006. Although no groundwater sampling data are available for PW46 prior to May 18, 2006, data are available for PW38, the previous well at this location. The ROD guidelines for PW46 were developed using pre-2004 data from PW38. The CY 2022 total U concentration at PW46 is lower than the historical concentrations reported at PW38 prior to its decommissioning in November of 2003 (Figure 4-13). Based on the statistical evaluation of trends presented in Section 4.2.2, a statistically significant downward trend in the concentrations of total U was observed in PW46 during CY 2022.

In summary, two inorganic soil COCs (barium in B53W06S and chromium in B53W09S) exceeded the ROD guidelines in HZ-A groundwater at the SLAPS and SLAPS VPs in CY 2022 when measurement error was taken into account. However, these inorganics did not exceed the ROD guidelines for a period of at least 12 months. In addition, the concentration of total U exceeded the guideline of 30 µg/L in one HZ-A well (PW46) located at the western edge of the SLAPS and has exceeded the ROD guideline for a period of at least 12 months. However, comparison of the CY 2022 concentration with historical well data did not indicate that significant degradation of HZ-A groundwater is occurring. Because a significant degradation of CWC surface water has not occurred and is not anticipated, no findings currently indicate significantly degraded groundwater conditions in HZ-A groundwater, as defined by the ROD. However, because total U levels have exceeded the ROD guidelines for a period of at least 12 months in PW46, monitoring will continue subject to subsequent CERCLA 5-year reviews.

Lower Groundwater (HZ-C Through HZ-E)

Table 4-6 lists those soil COCs exceeding the ROD guidelines in groundwater samples collected from HZ-C wells at the SLAPS and SLAPS VPs in CY 2022. Groundwater samples were collected from three HZ-C wells (B53W01D, B53W07D, and PW36) and one HZ-E well (PW35) in CY 2022. Monitoring wells B53W01D and B53W07D were sampled in the third quarter for inorganics. Monitoring wells PW35 and PW36 were sampled in the fourth quarter for inorganics and radionuclides.

One inorganic soil COC (cadmium) was detected at a concentration in excess of the ROD groundwater guideline in HZ-E groundwater in CY 2022. Cadmium was detected in PW35 at 1.2 µg/L, as compared to the ROD groundwater guideline of 0.6 µg/L. The cadmium concentration also exceeded the ROD groundwater guideline in the sample collected from PW35 during CY 2021 when measurement error was taken into account. Therefore, cadmium has exceeded the ROD guideline in PW35 for a period of at least 12 months. A Mann-Kendall Trend Test could not be performed for the cadmium results in PW35 because less than 50 percent of the time-series data were above the detection limit. Because a significant degradation of CWC surface water has not occurred and is not anticipated, no findings currently indicate significantly degraded groundwater conditions in HZ-E groundwater, as defined by the ROD.

Inorganic and radionuclide concentrations did not exceed the ROD guidelines in the samples collected from HZ-C groundwater during CY 2022.

Table 4-6. Analytes Exceeding ROD Guidelines in HZ-C Groundwater at the SLAPS and SLAPS VPs in CY 2022

Analyte	Units	Station	ROD Guidelines[a]	Minimum Detected	Maximum Detected	Mean Detected	Detects above ROD Guidelines[a]	Frequency of Detection
Cadmium	µg/L	PW35	0.6	1.2	1.2	1.2	1	1/1

[a] ROD guidelines = response-action monitoring guideline. Response-action monitoring guideline = 2 x UCL_{95} (based on historical concentrations before RAs were initiated).

4.2.2 Comparison of Historical Groundwater Data at the St. Louis Airport Site and St. Louis Airport Site Vicinity Properties

Results of groundwater sampling conducted from CY 1998 though CY 2022 indicate that various inorganics and radionuclides have been detected at concentrations in excess of the ROD guidelines in HZ-A groundwater at the SLAPS and SLAPS VPs. Statistical analysis was used to identify trends for those contaminants that exceeded these guidelines during CY 2022. As described in Section 4.1.2, the Mann-Kendall Trend Test is the statistical method used to evaluate contaminant trend in groundwater. Filtered data, split samples, and field duplicates were not included in the analysis. For datasets in which 50 percent or more of the time-series data are non-detect values, the Mann-Kendall Trend Test was not performed.

Results of Trend Analysis at the St. Louis Airport Site and St. Louis Airport Site Vicinity Properties

The evaluation of historical trends for groundwater at the SLAPS and SLAPS VPs focuses on those contaminants that exceeded the ROD guidelines in samples collected during CY 2022. For those monitoring wells at which an analyte exceeded these guidelines in one or more samples during CY 2022 and the historical dataset had a detection frequency greater than 50 percent and a sample size of at least six, a statistical trend analysis was conducted to assess whether concentrations of the analyte are increasing (upward trending) or decreasing (downward trending) over time. For the purposes of this EMDAR, a statistically significant trend in concentration is defined as a trend with a confidence level greater than 95 percent. Because the Mann-Kendall Trend Test does not consider the effects of measurement error and does not provide any information concerning the magnitude of trends, time-versus-concentration plots were used to evaluate these factors.

Based on the CY 2022 groundwater monitoring data for the SLAPS and SLAPS VPs, three soil COCs (barium, chromium, and total U) exceeded the ROD guidelines in HZ-A groundwater in CY 2022 when measurement error was taken into account. The Mann-Kendall Trend Test was performed for barium in B53W06S, for chromium in B53W09S, and for total U in PW46. To aid in the evaluation of trends, time-versus-concentration plots for barium in B53W06S and for chromium in B53W09S are provided on Figure 4-12. A time-versus-concentration plot for total U in PW46 is provided on Figure 4-13.

When measurement error was taken into account, one soil COC exceeded the ROD guideline in lower groundwater (HZ-C through HZ-E) during CY 2022 at the SLAPS and SLAPS VPs. The cadmium concentration in HZ-E well PW35 exceeded the ROD guideline when measurement error was taken into account. Because the historical dataset for cadmium in PW35 does not have a detection frequency greater than 50 percent, a Mann-Kendall Trend Test was not performed for this constituent.

Inorganics

The results of the Mann-Kendall Trend Tests are provided in Table 4-7. As shown in Table 4-7, statistically significant increasing trends were observed for barium concentrations in B53W06S and chromium concentrations in B53W09S. Because the Mann-Kendall Trend Test does not consider the effects of measurement error and does not provide any information concerning the magnitude of the trend, time-versus-concentration plots for those soil COCs having statistically significant increasing or decreasing trends in groundwater (provided on Figure 4-12) were used to evaluate these factors. The best-fit trend lines based on the data scatter are also shown on the graphs on these figures.

Table 4-7. Results of Mann-Kendall Trend Test for Analytes with Concentrations Exceeding ROD Guidelines in Groundwater at the SLAPS and SLAPS VPs in CY 2022

Analyte	Station	N[a]	Test Statistics[b]		Trend[d]
			S[c]	Z[c]	
Barium	B53W06S	29	107	1.99	Upward Trend
Chromium	B53W09S	35	256	3.63	Upward Trend
Total U	PW46	28	-92	-1.80	Downward Trend

[a] N is the number of unfiltered groundwater sample results for a particular analyte for the period between January of 1999 and December of 2022. With the exception of total U at PW46, the time period is between January of 1999 and December of 2022. For PW46, which was installed in April of 2006, the dataset covers the period between May of 2006 and December of 2022.
[b] Test Statistics: S – the S-Statistic; Z – Z-score, or normalized test statistic (used if N greater than 10).
[c] One-tailed Mann-Kendall Trend Tests were performed at a 95-percent level of confidence.
[d] Trend: If N is greater than 10, the Z-score is compared to ±1.64 to determine trend significance.

Radionuclides

A statistical evaluation of historical uranium concentrations has been conducted using total U concentrations. Total U values were calculated from isotopic concentrations in pCi/L and converted to µg/L using radionuclide-specific activities. The Mann-Kendall Trend Test was performed for total U in the HZ-A well with concentrations in excess of the 30 µg/L ROD guideline in CY 2022 (PW46). The results of the Mann-Kendall Trend Test are provided in Table 4-7. The Mann-Kendall Trend Test results indicate a downward trend for total U concentrations in PW46. A graph of time-versus-total-U concentrations for PW46 is shown on Figure 4-13. PW46 was installed in April of 2006 near the former location of PW38 and is screened across the same interval. For comparison purposes, the PW38 data collected between March of 2000 and November of 2003 are also shown on the graph of PW46 data on Figure 4-13. As indicated on the graph, total U concentrations in PW46 have decreased from the levels reported at PW38 prior to installation of PW46. Time-versus-concentration graphs for total U for the wells sampled in CY 2022 at the SLAPS and SLAPS VPs are provided on Figure 4-14. These graphs provide an overview of the temporal and spatial variability in the concentrations of total U in groundwater at the SLAPS and SLAPS VPs.

4.2.3 Evaluation of the Potentiometric Surface at the St. Louis Airport Site and St. Louis Airport Site Vicinity Properties

Groundwater surface elevations were measured from wells at the SLAPS and SLAPS VPs in February, May, August, and November of CY 2022. Groundwater elevation contours were drawn using the May 16, 2022, and November 14, 2022, measurements to provide a comparison of the groundwater flow conditions during periods of high and low groundwater elevations, respectively. The potentiometric surface maps, shown on Figures 4-5 through 4-8, were developed for both HZ-A and HZ-C groundwater zones. The groundwater flow direction is interpreted to be perpendicular to the groundwater equipotential contours.

In May and November of CY 2022, the groundwater flow direction in the HZ-A groundwater at the SLAPS and adjacent SLAPS VP Ballfields was northwesterly toward CWC (Figures 4-5 and 4-7). The groundwater flow direction in the HZ-A groundwater at SLAPS VP IA-10 is to the southeast toward CWC. In the eastern portion of the SLAPS, the average horizontal hydraulic gradient in HZ-A groundwater was 0.012 ft/ft in the wet season (May 16, 2022) and the dry season (November 14, 2022). The hydraulic gradient in HZ-A groundwater increases near CWC, where the average horizontal gradient ranges from 0.036 ft/ft (November 14, 2022) to 0.045 ft/ft (May 16, 2022). The unconfined HZ-A groundwater is interpreted to discharge into CWC, which divides the HZ-A groundwater system south and east of the creek from areas north and west of CWC. Groundwater recharge comes from three primary sources: precipitation, off-site inflow of

groundwater, and creek bed infiltration during high creek stage. Groundwater discharge could occur by seepage into CWC during low creek stage (DOE 1994). The vertical gradient varies beneath the site and is influenced by stratigraphic heterogeneity and seasonal fluctuations in recharge and evapotranspiration. Based on the CY 2022 water-level measurements, the elevation of the HZ-A groundwater surface averaged approximately 2.97 ft higher in the corresponding shallow wells at the SLAPS and SLAPS VPs in the wet season (May) than in the dry season (November).

A review of the screened intervals in the deep wells (both active and abandoned wells) indicates that many wells were screened across multiple lithologic units and HZs. Based on this review, the HZ-C (Units 3B and 4) potentiometric surface was determined to be a proper representation of the lower groundwater system. This review reduces the number of data points used to develop the potentiometric surface contours but results in a higher level of confidence in contouring the HZ-C potentiometric surface.

The potentiometric surface contours for the HZ-C groundwater in CY 2022 are illustrated on Figures 4-6 and 4-8. The flow direction in HZ-C is generally southeast beneath the SLAPS and SLAPS VPs, at an average horizontal gradient of 0.0007 ft/ft in May to 0.0008 ft/ft in November of 2022. A comparison of the groundwater elevations from monitoring well pairs indicates that the wells completed in HZ-A exhibit different hydraulic heads from the wells completed in HZ-C. Near CWC, the potentiometric surface of the “confined” aquifer HZ-C averages approximately 8.4 ft higher than the potentiometric surface of the unconfined HZ-A, indicating an upward vertical gradient. The large difference in hydraulic head demonstrates that the HZ-A and HZ-C groundwater zones are distinct groundwater systems with limited hydraulic connection. This is supported by the lithologic data, which indicate that a highly impermeable clay (Subunit 3M of HZ-B) and silty clay (Subunit 3B of HZ-C) separates the HZ-A groundwater system from the underlying groundwater zones. The HZ-C potentiometric surfaces do not appear to be influenced by CWC (the creek’s thalweg is approximately 500 ft amsl) or by seasonal changes. These features are likely a result of the overlying clay layers limiting vertical groundwater movement.

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5.0 ENVIRONMENTAL QUALITY ASSURANCE PROGRAM

5.1 PROGRAM OVERVIEW

The environmental quality assurance (QA) program includes management of the QA/QC programs, plans, and procedures governing environmental monitoring activities at all SLS and at subcontracted vendor laboratories. This section discusses the environmental monitoring standards of the FUSRAP and the goals for these programs, plans, and procedures.

The environmental QA program provides the FUSRAP with reliable, accurate, and precise monitoring data. The program furnishes guidance and directives to detect and prevent problems from the time a sample identification number is issued until the associated data are evaluated and reported.

Key elements in achieving the goals of this program are maintaining compliance with the QA program; personnel training; compliance assessments; use of QC samples; documentation of field activities and laboratory analyses; and a review of data to document precision, accuracy, and completeness.

General objectives are as follows:

- To provide data of sufficient quality and quantity to support ongoing remedial efforts, aid in defining potential COCs, meet the requirements of the EMG and the SAG, and support the ROD (USACE 1999a, 2000, 2005);
- To provide data of sufficient quality to meet applicable State of Missouri and federal concerns (e.g., reporting requirements); and
- To ensure samples were collected using approved techniques and are representative of existing site conditions.

5.2 QUALITY ASSURANCE PROGRAM PLAN

The quality assurance program plan (QAPP) for activities performed at the NC Sites is described in Section 3.0 of the SAG. The QAPP provides the organization, objectives, functional activities, and specific QA/QC activities associated with investigations and sampling activities at the NC Sites.

QA/QC procedures are performed in accordance with applicable professional technical standards, USEPA requirements, government regulations and guidelines, and specific project goals and requirements. The QAPP was prepared in accordance with USEPA and USACE guidance documents, including *Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans* (USEPA 1991), *EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations* (USEPA 1994), and Engineer Manual (EM) 200-1-3, *Requirements for the Preparation of Sampling and Analysis Plans* (USACE 2001).

5.3 SAMPLING AND ANALYSIS GUIDE

The SAG summarizes standard operating procedures (SOPs) and data quality requirements for collecting and analyzing environmental data. The SAG integrates protocols and methodologies identified under various USACE and regulatory guidance. It describes administrative procedures for managing environmental data and governs sampling plan preparation, data review, evaluation and validation, database administration, and data archiving. The identified sampling and monitoring

structures are delineated in programmatic documents such as the EMG (USACE 1999a) for the NC Sites, which is an upper-tier companion document to the SAG (USACE 2000). The EMICY22 outlines the analyses to be performed at the NC Sites for various media (USACE 2021).

Flexibility to address non-periodic environmental sampling (e.g., specific studies regarding environmental impacts, well installations, and/or in-situ waste characterizations) was accomplished by the issuance of work descriptions. Environmental monitoring data obtained during these sampling activities were reported to the USEPA Region 7 on a quarterly basis in the Federal Facilities Agreement Progress Reports.

5.4 FIELD SAMPLE COLLECTION AND MEASUREMENT

Prior to beginning field sampling, field personnel were trained, as necessary, and participated in a project-specific readiness review. These activities ensured that standard procedures were followed in sample collection and completion of field logbooks, chain-of-custody forms, labels, and custody seals. Documentation of training and readiness were submitted to the project file.

The master field investigation documents are the site field logbooks. The primary purpose of these documents is to record daily field activities; personnel on each sampling team; and any administrative occurrences, conditions, or activities that may have affected the fieldwork or data quality of any environmental samples for a given day. Guidance for documenting specific types of field sampling activities in field logbooks or log sheets is provided in Appendix C of EM 200-1-3, *Requirements for the Preparation of Sampling and Analysis Plans* (USACE 2001).

At any point in the process of sample collection or data and document review, a non-conformance report may be initiated if non-conformances are identified (Leidos 2015a). Data entered into the St. Louis FUSRAP database may be flagged accordingly.

5.5 PERFORMANCE AND SYSTEM AUDITS

Performance and system audits of both field and laboratory activities were conducted to verify that sampling and analysis activities were performed in accordance with the procedures established in the SAG and activity-specific work description or the EMICY22 (USACE 2021).

5.5.1 Field Assessments

Internal assessments (audit or surveillance) of field activities (sampling and measurements) are conducted periodically by the QA/QC Officer (or designee). Assessments could include an examination of field sampling records; field instrument operating records; sample collection, handling, and packaging procedures; and maintenance of QA procedures and chain-of-custody forms. These assessments occurred at the onset of the project to verify that all established procedures were followed (systems audit).

Performance assessments followed the system audits to ensure that deficiencies had been corrected and to verify that QA practices/procedures were being maintained throughout the duration of the project. These assessments involved reviewing field measurement records, instrumentation calibration records, and sample documentation.

External assessments may be conducted at the discretion of the USACE, USEPA Region 7, or the State of Missouri.

5.5.2 Laboratory Audits

The on-site project laboratory locations are subject to periodic review(s) by the local USACE Chemist to demonstrate compliance with the *Department of Defense/Department of Energy Consolidated Quality Systems Manual for Environmental Laboratories* (QSM) (DoD and DOE 2017). Accordingly, the on-site laboratories participate in blind, third-party performance evaluation studies (performance audits) at least twice per year, with results reported to the local USACE point(s) of contact. In addition, contract laboratories are required to be accredited under the DoD Environmental Laboratory Accreditation Program (ELAP). The DoD ELAP requires an annual audit and re-accreditation every 3 years. The annual ELAP audit was performed on August 22 through 24, 2022.

These system audits include examining laboratory documentation of sample receipt, sample log-in, sample storage, chain-of-custody procedures, sample preparation and analysis, and instrument operating records. Performance audits consist of USACE laboratories receiving performance evaluation samples from an outside vendor for an ongoing assessment of laboratory precision and accuracy. The analytical results of the analysis of performance evaluation samples are evaluated by the local USACE Chemist to ensure that laboratories maintain acceptable performance.

Internal performance and system audits of laboratories were conducted by the Laboratory QA Manager as directed in the *Laboratory Quality Assurance Plan for the FUSRAP St. Louis Radioanalytical Laboratory* (USACE 2018). System audits included an examination of laboratory documentation of sample receipt, sample log-in, sample storage, chain-of-custody procedures, sample preparation and analysis, and instrument operating records against the requirements of the laboratory's SOPs. Internal performance audits were also conducted on a regular basis. Single-blind performance samples were prepared and submitted along with project samples to the laboratory for analysis. The Laboratory QA Manager evaluated the analytical results of these single-blind performance samples to ensure that the laboratory maintained acceptable performance. Quarterly QA/QC reports were generated and provided to the local USACE authority; these reports document the ongoing QC elements and allow further monitoring of quality processes/status. In addition, QA plans and methodology follow the guidance presented in the QSM (DoD and DOE 2017).

5.6 SUBCONTRACTED LABORATORY PROGRAMS

All samples collected during environmental monitoring activities were analyzed by USACE-approved subcontractor laboratories. QA samples collected for groundwater and sediment were analyzed by the designated USACE QA laboratory. Each laboratory supporting this work maintained statements of qualifications including organizational structure, QA manual, and SOPs. Additionally, subcontracted laboratories were also required to be an accredited laboratory under the DoD ELAP.

Samples collected during these investigations were analyzed by the USEPA methods contained in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW-846* (USEPA 1993) and by other documented USEPA or nationally recognized methods. Laboratory SOPs are based on the QSM) (DoD and DOE 2017).

5.7 QUALITY ASSURANCE AND QUALITY CONTROL SAMPLES

The QA and QC samples were analyzed for the purpose of assessing the quality of the sampling effort and the reported analytical data. The QA and QC samples include duplicate samples (–1)

and split samples (–2). The equations utilized for accuracy and precision can be found in Section 5.9.

5.7.1 Duplicate Samples

These samples, which measure precision, were collected by the sampling teams and were submitted for analysis to the on-site project laboratory or contract laboratories. The purpose of these samples is to provide activity-specific, field-originated information regarding the homogeneity of the sampled matrix and the consistency of the sampling effort. These samples were collected concurrently with the primary environmental samples and equally represent the medium at a given time and location. Duplicate samples were collected from groundwater, surface water, and sediment and were submitted to the contracted laboratories for analysis. One duplicate sample was collected for approximately every 20 field samples of each matrix and analyte across the SLS. Precision is measured by the relative percent difference (RPD) for radiological and by non-radiological analyses or the normalized absolute difference (NAD) for radiological analyses.

The RPDs for non-radiological analyses are presented in Tables 5-1 and 5-2. The RPDs and NADs for radiological analyses are presented in Tables 5-3 through 5-5. The overall precision for CY 2022 environmental monitoring activities was acceptable. See Section 5.9 for the evaluation process.

Table 5-1. Non-Radiological Duplicate Sample Analysis for CY 2022 – Surface Water and Groundwater

Water Sample Name[a]	Antimony	Arsenic	Barium	Cadmium	Chromium
	RPD (%)[b]				
CWC255793 / CWC255793-1	NC	NC	0.00	NC	NC
CWC261526 / CWC261526-1	NC	6.90	8.00	NC	NC
SLA254841 / SLA254841-1	NC	NC	0.00	NC	NC
Water Sample Name[a]	**Molybdenum**	**Nickel**	**Selenium**	**Thallium**	**Vanadium**
	RPD (%)[b]				
CWC255793 / CWC255793-1	1.36	NC	NC	NC	NC
CWC261526 / CWC261526-1	0.00	**44.78**	NC	NC	11.20
SLA254841 / SLA254841-1	NC	0.00	0.00	NC	NC

[a] Surface/groundwater samples ending in "-1" are duplicate surface/groundwater samples.
[b] RPD criterion for liquid samples is less than or equal to 30 percent.
NC – not calculated (due to one or both concentrations being below DLs)
Bold values exceed the control limits. Values not in bold are within control limits.

Table 5-2. Non-Radiological Duplicate Sample Analysis for CY 2022 – Sediment

Soil Sample Name[a]	Antimony	Arsenic	Barium	Cadmium	Chromium
	RPD (%)[b]				
CWC255794 / CWC255794-1	9.42	8.79	10.53	**84.21**	0.00
CWC261527 / CWC261527-1	21.76	0.71	7.29	11.79	16.68
Soil Sample Name[a]	**Molybdenum**	**Nickel**	**Selenium**	**Thallium**	**Vanadium**
	RPD (%)[b]				
CWC255794 / CWC255794-1	6.06	24.39	NC	NC	24.56
CWC261527 / CWC261527-1	21.22	14.67	33.25	0.71	6.18

[a] Sediment samples ending in "-1" are duplicate sediment samples.
[b] RPD criterion for solid matrix samples is less than or equal to 50 percent.
Bold values exceed the control limits. Values not in bold are within control limits.
NC – not calculated (due to one or both concentrations being below DLs)

Table 5-3. Radiological Duplicate Sample Analysis for CY 2022 – Surface Water and Groundwater

Water Sample Name[a]	Ra-226		Ra-228		Th-228		Th-230	
	RPD (%)[b]	NAD[b]	RPD (%)[b]	NAD[b]	RPD (%)[b]	NAD[b]	RPD (%)[b]	NAD[b]
CWC255793 / CWC255793-1	NC	NA	*	*	NC	NA	29.94	NA
CWC261526 / CWC261526-1	NC	NA	*	*	NC	NA	4.58	NA
SLA254841 / SLA254841-1	NC	NA	*	*	NC	NA	NC	NA
Water Sample Name[a]	**Th-232**		**U-234**		**U-235**		**U-238**	
	RPD (%)[b]	**NAD[b]**	**RPD (%)[b]**	**NAD[b]**	**RPD (%)[b]**	**NAD[b]**	**RPD (%)[b]**	**NAD[b]**
CWC255793 / CWC255793-1	NC	NA	NC	NA	NC	NA	NC	NA
CWC261526 / CWC261526-1	NC	NA	NC	NA	NC	NA	NC	NA
SLA254841 / SLA254841-1	NC	NA	**55.05**	**2.42**	0.61	NA	**52.49**	**2.31**

[a] Surface/groundwater samples ending in "-1" are duplicate surface/groundwater samples.
[b] RPD criterion for liquid samples is less than or equal to 30 percent. If the RPD is greater than 30 percent, then the NAD shall be less than or equal to 1.96 to remain within the control limits.
Bold values exceed the control limits. Values not in bold are within control limits.
* Not calculated, because either parent or duplicate sample was not analyzed.
NA – not applicable (see RPD)
NC – not calculated (due to one or both concentrations being below MDCs)

Table 5-4. Radiological Duplicate Sample Alpha Analysis for CY 2022 – Sediment

Soil Sample Name[a]	Th-228		Th-230		Th-232	
	RPD (%)[b]	NAD[b]	RPD (%)[b]	NAD[b]	RPD (%)[b]	NAD[b]
CWC255794 / CWC255794-1	21.68	NA	49.66	NA	9.42	NA
CWC261527 / CWC261527-1	0.40	NA	**156.25**	**9.44**	22.01	NA

[a] Sediment samples ending in "-1" are duplicate sediment samples.
[b] RPD criterion for solid matrix samples is less than or equal to 50 percent. If the RPD is greater than 50 percent, then the NAD shall be less than or equal to 1.96 to remain within the control limits.
Bold values exceed the control limits. Values not in bold are within control limits.
NA – not applicable (see RPD)

Table 5-5. Radiological Duplicate Sample Gamma Analysis for CY 2022 – Sediment

Soil Sample Name[a]	Ac-227		Am-241		Cs-137		K-40	
	RPD (%)[b]	NAD[b]	RPD (%)[b]	NAD[b]	RPD (%)[b]	NAD[b]	RPD (%)[b]	NAD[b]
CWC255794 / CWC255794-1	NC	NA	NC	NA	NC	NA	3.95	NA
CWC261527 / CWC261527-1	68.60	1.70	NC	NA	**82.14**	**2.54**	9.67	NA
Soil Sample Name[a]	**Pa-231**		**Ra-226**		**Ra-228**		**Th-228**	
	RPD (%)[b]	**NAD[b]**	**RPD (%)[b]**	**NAD[b]**	**RPD (%)[b]**	**NAD[b]**	**RPD (%)[b]**	**NAD[b]**
CWC255794 / CWC255794-1	NC	NA	7.55	NA	0.84	NA	0.84	NA
CWC261527 / CWC261527-1	NC	NA	31.94	NA	20.16	NA	20.16	NA
Soil Sample Name[a]	**Th-230**		**Th-232**		**U-235**		**U-238**	
	RPD (%)[b]	**NAD[b]**	**RPD (%)[b]**	**NAD[b]**	**RPD (%)[b]**	**NAD[b]**	**RPD (%)[b]**	**NAD[b]**
CWC255794 / CWC255794-1	NC	NA	0.84	NA	NC	NA	0.90	NA
CWC261527 / CWC261527-1	**98.45**	**2.10**	20.16	NA	NC	NA	1.85	NA

[a] Sediment samples ending in "-1" are duplicate sediment samples.
[b] RPD criterion for solid matrix samples is less than or equal to 50 percent. If the RPD is greater than 50 percent, then the NAD shall be less than or equal to 1.96 to remain within the control limits.
Am – americium, Cs – cesium
Bold values exceed the control limits. Values not in bold are within control limits.
NA – not applicable (see RPD)
NC – not calculated (due to one or both concentrations being below MDCs)

5.7.2 Split Samples

Split samples measure accuracy and were collected by the sampling team and sent to a USACE QA laboratory for analysis to provide an independent assessment of contractor and subcontractor laboratory performance. One split sample was collected for approximately every 20 groundwater, surface water, and sediment samples for non-radiological and for radiological analytes at the NC Sites.

The RPDs for non-radiological analyses are presented in Tables 5-6 and 5-7. The RPDs and NADs for radiological analyses are presented in Tables 5-8 through 5-10. With the exception of a few outliers, which can be attributed to matrix interference and were qualified accordingly, the overall accuracy for the CY 2022 environmental monitoring activities was acceptable. See Section 5.9 for the evaluation process.

Table 5-6. Non-Radiological Split Sample Analysis for CY 2022 – Surface Water and Groundwater

Water Sample Name[a]	Antimony	Arsenic	Barium	Cadmium	Chromium
	RPD (%)[b]				
CWC255793 / CWC255793-2	NC	NC	9.52	NC	NC
CWC261526 / CWC261526-2	NC	19.61	15.38	NC	NC
SLA254841 / SLA254841-2	NC	NC	7.72	NC	NC
Water Sample Name[a]	**Molybdenum**	**Nickel**	**Selenium**	**Thallium**	**Vanadium**
	RPD (%)[b]				
CWC255793 / CWC255793-2	**52.00**	NC	1.42	NC	NC
CWC261526 / CWC261526-2	10.71	21.28	NC	NC	**77.65**
SLA254841 / SLA254841-2	NC	15.24	18.38	NC	NC

[a] Surface/groundwater samples ending in "-2" are split surface/groundwater samples.
[b] RPD criterion for liquid samples is less than or equal to 30 percent.
Bold values exceed the control limits. Values not in bold are within control limits.
NC – not calculated (due to one or both concentrations being below DLs)

Table 5-7. Non-Radiological Split Sample Analysis for CY 2022 – Sediment

Soil Sample Name[a]	Antimony	Arsenic	Barium	Cadmium	Chromium
	RPD (%)[b]				
CWC255794 / CWC255794-2	**67.99**	26.12	9.30	**105.95**	21.37
CWC261527 / CWC261527-2	**161.93**	**94.37**	**109.48**	**97.57**	**106.68**
Soil Sample Name[a]	**Molybdenum**	**Nickel**	**Selenium**	**Thallium**	**Vanadium**
	RPD (%)[b]				
CWC255794 / CWC255794-2	10.09	0.56	NC	NC	11.86
CWC261527 / CWC261527-2	**123.57**	**97.07**	9.86	**97.92**	**120.65**

[a] Sediment samples ending in "-2" are split sediment samples.
[b] RPD criterion for solid matrix samples is less than or equal to 50 percent.
Bold values exceed the control limits. Values not in bold are within control limits.
NC – not calculated (due to one or both concentrations being below DLs)

Table 5-8. Radiological Split Sample Analysis for CY 2022 – Surface Water and Groundwater

Water Sample Name[a]	Ra-226		Ra-228		Th-228		Th-230	
	RPD (%)[b]	NAD[b]	RPD (%)[b]	NAD[b]	RPD (%)[b]	NAD[b]	RPD (%)[b]	NAD[b]
CWC255793 / CWC255793-2	NC	NA	*	*	NC	NA	NC	NA
CWC261526 / CWC261526-2	NC	NA	*	*	NC	NA	NC	NA
SLA254841 / SLA254841-2	NC	NA	*	*	NC	NA	NC	NA
Water Sample Name[a]	**Th-232**		**U-234**		**U-235**		**U-238**	
	RPD (%)[b]	**NAD[b]**	**RPD (%)[b]**	**NAD[b]**	**RPD (%)[b]**	**NAD[b]**	**RPD (%)[b]**	**NAD[b]**
CWC255793 / CWC255793-2	NC	NA	NC	NA	NC	NA	NC	NA
CWC261526 / CWC261526-2	NC	NA	11.38	NA	NC	NA	28.15	NA
SLA254841 / SLA254841-2	NC	NA	**101.51**	**6.61**	**118.41**	**3.01**	**105.73**	**6.87**

[a] Surface/groundwater samples ending in "-2" are split surface/groundwater samples.
[b] RPD criterion for liquid samples is less than or equal to 30 percent. If the RPD is greater than 30 percent, then the NAD shall be less than or equal to 1.96 to remain within the control limits.
Bold values exceed the control limits. Values not in bold are within control limits.
* Not calculated, because either parent or split sample was not analyzed.
NA – not applicable (see RPD)
NC – not calculated (due to one or both concentrations being below MDCs)

Table 5-9. Radiological Split Sample Alpha Analysis for CY 2022 – Sediment

Soil Sample Name[a]	Th-228		Th-230		Th-232	
	RPD (%)[b]	NAD[b]	RPD (%)[b]	NAD[b]	RPD (%)[b]	NAD[b]
CWC255794 / CWC255794-2	21.68	NA	49.66	NA	9.42	NA
CWC261527 / CWC261527-2	0.40	NA	**156.25**	**9.44**	22.01	NA

[a] Sediment samples ending in "-2" are split sediment samples.
[b] RPD criterion for solid matrix sample is less than or equal to 50 percent. If the RPD is greater than 50 percent, then the NAD shall be less than or equal to 1.96 to remain within the control limits.
Bold values exceed the control limits. Values not in bold are within control limits.
NA – not applicable (see RPD)

Table 5-10. Radiological Split Sample Gamma Analysis for CY 2022 – Sediment

Soil Sample Name[a]	Ac-227		Am-241		Cs-137		K-40	
	RPD (%)[b]	NAD[b]	RPD (%)[b]	NAD[b]	RPD (%)[b]	NAD[b]	RPD (%)[b]	NAD[b]
CWC255794 / CWC255794-2	NC	NA	NC	NA	NC	NA	12.35	NA
CWC261527 / CWC261527-2	NC	NA	NC	NA	NC	NA	3.17	NA
Soil Sample Name[a]	**Pa-231**		**Ra-226**		**Ra-228**		**Th-228**	
	RPD (%)[b]	**NAD[b]**	**RPD (%)[b]**	**NAD[b]**	**RPD (%)[b]**	**NAD[b]**	**RPD (%)[b]**	**NAD[b]**
CWC255794 / CWC255794-2	NC	NA	3.70	NA	30.00	NA	30.00	NA
CWC261527 / CWC261527-2	NC	NA	**88.48**	**3.56**	44.86	NA	44.86	NA
Soil Sample Name[a]	**Th-230**		**Th-232**		**U-235**		**U-238**	
	RPD (%)[b]	**NAD[b]**	**RPD (%)[b]**	**NAD[b]**	**RPD (%)[b]**	**NAD[b]**	**RPD (%)[b]**	**NAD[b]**
CWC255794 / CWC255794-2	*	*	30.00	NA	NC	NA	NC	NA
CWC261527 / CWC261527-2	*	*	44.86	NA	NC	NA	47.02	NA

[a] Sediment samples ending in "-2" are split sediment samples.
[b] RPD criterion for solid matrix samples is less than or equal to 50 percent. If the RPD is greater than 50 percent, then the NAD shall be less than or equal to 1.96 to remain within the control limits.
* Not calculated, because either parent or split sample was not analyzed.
Bold values exceed the control limits. Values not in bold are within control limits.
NA – not applicable (see RPD)
NC – not calculated (due to one or both concentrations being below MDCs)

5.7.3 Equipment Rinsate Blanks

Equipment rinsate blank samples are typically taken from the rinsate water collected from equipment decontamination activities. These samples consist of analyte-free water that has been rinsed over sampling equipment for the purposes of evaluating the effectiveness of equipment decontamination. All of the monitoring wells have dedicated sampling equipment, rendering decontamination unnecessary. Because decontamination does not apply, equipment rinsate blanks were not employed.

Sediment samples from CWC are collected from each station using a clean sampling spoon. These spoons are segregated after use and decontaminated at the SLAPS field trailer according to Field Technical Procedure 400, "Equipment Decontamination" (Leidos 2015b). Because the process of collecting sediment occurs below the surface of the water, a rinsate blank would not represent the wetted surface of the sampling spoon at the time of sample collection and would therefore not apply. The CWC surface water samples are collected using new nitrile gloves and new laboratory sample containers. Equipment rinsate blanks for these samples are also not required, because no potential for contamination exists.

5.8 DATA REVIEW, EVALUATION, AND VALIDATION

All data packages received from the analytical laboratory were reviewed and either evaluated or validated by data management personnel. Data validation is the systematic process of ensuring that the precision and accuracy of the analytical data are adequate for their intended use. Validation was performed in accordance with *Data Verification and Validation* (Leidos 2015c), and/or with project-specific guidelines. General chemical data quality management guidance found in Engineer Regulation 1110-1-263 (USACE 1998c) was also used when planning for chemical data management and evaluation. Additional details of data review, evaluation, and validation are provided in the *FUSRAP Laboratory Data Management Process for the St. Louis Site* (USACE 1999b). Data assessment guidance to determine the usability of data from hazardous, toxic, and radioactive waste projects is provided in EM 200-1-6 (USACE 1997).

One hundred (100) percent of the data generated from all analytical laboratories was independently reviewed and either evaluated and/or validated. The data review process documents the possible effects on the data from various QC failures; it does not determine data usability, nor does it include assignment of data validation qualifier (VQ) flags. The data evaluation process uses the results of the data review to determine the usability of the data. The process of data evaluation summarizes the potential effects of QA/QC failures on the data, and the USACE Chemist or USACE Health Physicist assesses their impact on the attainment of the project-specific data quality objectives (DQOs). Consistent with the data quality requirements, as defined in the DQOs, approximately 10 percent of all project data were validated.

5.9 PRECISION, ACCURACY, REPRESENTATIVENESS, COMPARABILITY, COMPLETENESS, AND SENSITIVITY

The data evaluation process considers precision, accuracy, representativeness, completeness, comparability, and sensitivity. This section provides detail to the particular parameters and how the data were evaluated for each, with discussion and tables to present the associated data. An evaluation of the overall precision, accuracy, representativeness, completeness, comparability, and sensitivity of the CY 2022 environmental monitoring activities was acceptable and complete.

Accuracy and precision can be measured by the RPD or the NAD using the following equations:

$$RPD = \left(\frac{[S - D]}{\frac{S+D}{2}} \right) x\ 100$$

$$NAD = \frac{|S - D|}{\sqrt{U_S^2 + U_D^2}}$$

where:

S = parent sample result
D = duplicate/split sample result
U_S = parent sample uncertainty
U_D = duplicate/split sample uncertainty
RPD has units of percent (%); NAD is unitless

The RPD is calculated for all samples for which a detectable result is reported for both the parent and the QA field split or field duplicate. For surface and groundwater radiological samples, when the RPD is greater than 30 percent, the NAD is used to determine the accuracy or precision of the method. NAD accounts for uncertainty in the results; RPD does not. The NAD should be equal to or less than a value of 1.96. The RPD criterion for sediment samples is equal to 50 percent. Neither equation is used when the analyte in one or both of the samples is not detected. In cases in which neither equation can be used, the comparison is counted as acceptable in the overall number of comparisons.

Precision is a measure of mutual agreement among individual measurements performed under the same laboratory controls. To evaluate for precision, a field duplicate is submitted to the same laboratory as the original sample to be analyzed under the same laboratory conditions.

The RPD and NAD between the two results was calculated and used as an indication of the precision of the analyses performed (Tables 5-1 through 5-5). Sample collection precision was measured in the laboratory by the analyses of duplicates. The overall precision for the CY 2022 environmental monitoring activities was acceptable.

Accuracy provides a gauge or measure of the agreement between an observed result and the true value for an analysis. The RPD and NAD between the two results was calculated and used as an indication of the accuracy of the analyses performed (Tables 5-6 through 5-10). For this EMDAR, accuracy is measured through the use of the field split samples through a comparison of the prime laboratory results versus the results of an independent laboratory. With the exception of a few outliers, which were qualified accordingly, the overall accuracy for CY 2022 environmental monitoring activities was acceptable. The laboratory control sample (LCS) is also an indicator of accuracy, and all LCS recoveries were within the 25 percent criteria.

Representativeness expresses the degree to which data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition. Representativeness is a qualitative parameter that depends upon the proper design of the sampling program and proper laboratory protocols. Representativeness is satisfied through proper design of the sampling network, use of proper sampling techniques, following proper analytical procedures, and not exceeding holding times of the samples.

Representativeness was determined by assessing the combined aspects of the QA program, QC measures, and data evaluations. The network design was developed from the EMICY22, the sampling protocol from the SAG has been followed, and analytical procedures were conducted

within the bounds of the QAPP. The overall representativeness of the CY 2022 environmental monitoring activities was acceptable.

Comparability expresses the confidence with which one dataset can be compared with another. The extent to which analytical data will be comparable depends upon the similarity of sampling and analytical methods, as well as sample-to-sample and historical comparability. Standardized and consistent procedures used to obtain analytical data are expected to provide comparable results. For example, post-CY 1997 analytical data may not be directly comparable to data collected before CY 1997, because of differences in DQOs. Additionally, some sample media (e.g., stormwater and radiological monitoring) have values that are primarily useful in the present, thus the comparison to historical data is not as relevant. However, the overall comparability of the applicable environmental monitoring data met the project DQOs.

Completeness is a measure of the amount of valid data obtained from a measurement system compared to the amount expected to be obtained under normal conditions. Laboratories are expected to provide data meeting QC acceptance criteria for all samples tested. For the CY 2022 environmental monitoring activities, the data completeness was 100 percent (St. Louis FUSRAP DQO for completeness is 90 percent).

Sensitivity is the determination of minimum detectable concentration (MDC) values that allows the investigation to assess the relative confidence that can be placed in an analytical result in comparison to the magnitude or level of analyte concentration observed. For this EMDAR, MDC is a term generically used to represent both the method detection limit (MDL) for non-radiologicals and the minimum detectable activity (MDA) for radiological analytes. The closer a measured value to the MDC, the less confidence and more variation the measurement will have. Project sensitivity goals were expressed as quantitation level goals in the SAG. These levels were achieved or exceeded throughout the analytical process.

The MDC is reported for each result obtained by laboratory analysis. These very low MDCs are achieved through the use of gamma spectroscopy for all radionuclides of concern, with additional analyses from alpha spectroscopy for thorium and from inductively coupled plasma (ICP) for metals. Variations in MDCs for the same radiological analyte reflect variability in the detection efficiencies and conversion factors due to factors such as individual sample aliquot, sample density, and variations in analyte background radioactivity for gamma and alpha spectroscopy at the laboratory. Variations in MDLs for the same non-radiological analyte reflect variability in calibrations between laboratories, dilutions, and analytical methods. In order to complete the data evaluation (i.e., precision, accuracy, representativeness, and comparability), analytical results that exceed the MDC of the analyte are desired.

5.10 DATA QUALITY ASSESSMENT SUMMARY

The overall quality of the data meets the established project objectives. Through proper implementation of the project data review, evaluation, validation, and assessment process, project information has been determined to be acceptable for use.

Data, as presented, have been qualified as usable, but estimated when necessary. Data that have been estimated have concentrations/activities that are below the quantitation limit or are indicative of accuracy, precision, or sensitivity less than desired but adequate for interpretation.

These data can withstand scientific scrutiny, are appropriate for the intended purpose, and are technically defensible. The environmental information presented has an established confidence, which allows utilization for the project objectives and provides data for future needs.

5.11 RESULTS FOR PARENT SAMPLES AND THE ASSOCIATED DUPLICATE AND SPLIT SAMPLES

Summaries of the QA parent sample results and associated duplicate and/or split sample results are presented in Tables 5-11 through 5-14.

Table 5-11. Non-Radiological Parent Samples and Associated Duplicate and Split Samples (Surface Water and Groundwater) for CY 2022

Water Sample Name[a]	Antimony			Arsenic			Barium			Cadmium			Chromium		
	Result (µg/L)	DL (µg/L)	VQ	Result (µg/L)	DL (µg/L)	VQ	Result (µg/L)	DL (µg/L)	VQ	Result (µg/L)	DL (µg/L)	VQ	Result (µg/L)	DL (µg/L)	VQ
CWC255793	2.00	2.00	U	4.00	4.00	U	100.00	0.90	=	0.20	0.20	U	4.00	4.00	U
CWC255793-1	2.00	2.00	U	4.00	4.00	U	100.00	0.90	=	0.20	0.20	U	4.00	4.00	U
CWC255793-2	2.50	2.50	U	1.80	0.50	=	110.00	1.50	=	0.30	0.30	U	2.00	2.00	U
CWC261526	2.00	2.00	U	2.80	1.60	=	120.00	0.69	=	0.20	0.20	U	4.00	4.00	U
CWC261526-1	2.00	2.00	U	3.00	1.60	=	130.00	0.69	=	0.20	0.20	U	4.00	4.00	U
CWC261526-2	0.59	0.40	=	2.30	0.50	=	140.00	0.38	=	0.19	0.19	U	0.96	0.50	=
SLA254841	2.00	2.00	U	4.00	4.00	U	61.00	0.90	=	0.20	0.20	U	4.00	4.00	U
SLA254841-1	2.00	2.00	U	4.00	4.00	U	61.00	0.90	=	0.20	0.20	U	4.00	4.00	U
SLA254841-2	2.50	2.50	U	0.50	0.50	U	65.90	1.50	=	0.30	0.30	U	2.00	2.00	U

Water Sample Name[a]	Molybdenum			Nickel			Selenium			Thallium			Vanadium		
	Result (µg/L)	DL (µg/L)	VQ	Result (µg/L)	DL (µg/L)	VQ	Result (µg/L)	DL (µg/L)	VQ	Result (µg/L)	DL (µg/L)	VQ	Result (µg/L)	DL (µg/L)	VQ
CWC255793	7.40	2.00	=	2.00	2.00	U	2.10	2.00	=	0.90	0.90	U	4.00	4.00	U
CWC255793-1	7.30	2.00	=	2.00	2.00	U	2.00	2.00	U	0.90	0.90	U	4.00	4.00	U
CWC255793-2	12.60	5.00	=	2.00	2.00	U	2.13	0.50	=	0.10	0.10	U	2.00	2.00	U
CWC261526	5.30	2.00	=	2.60	2.00	=	2.00	2.00	U	0.13	0.13	U	5.90	4.00	=
CWC261526-1	5.30	2.00	=	4.10	2.00	=	2.00	2.00	U	0.13	0.13	U	6.60	4.00	=
CWC261526-2	5.90	0.37	=	2.10	0.83	=	1.00	1.00	U	0.21	0.21	U	2.60	1.10	=
SLA254841	2.00	2.00	U	2.00	2.00	=	42.00	2.00	=	0.90	0.90	U	4.10	4.00	=
SLA254841-1	2.00	2.00	U	2.00	2.00	=	42.00	2.00	=	0.90	0.90	U	4.00	4.00	U
SLA254841-2	5.00	5.00	U	2.33	2.00	=	50.50	0.50	=	0.10	0.10	U	2.00	2.00	U

[a] Samples ending in "-1" are duplicate samples. Samples ending in "-2" are split samples.
VQ symbols indicate: "=" for positively identified results and "U" for not detected.

Table 5-12. Non-Radiological Parent Samples and Associated Duplicate and Split Samples (Sediment) for CY 2022

Soil Sample Name[a]	Antimony			Arsenic			Barium			Cadmium			Chromium		
	Result (mg/kg)	DL (mg/kg)	VQ	Result (mg/kg)	DL (mg/kg)	VQ	Result (mg/kg)	DL (mg/kg)	VQ	Result (mg/kg)	DL (mg/kg)	VQ	Result (mg/kg)	DL (mg/kg)	VQ
CWC255794	1.00	0.80	=	8.70	1.60	=	180.00	2.00	=	2.70	0.10	J	29.00	1.80	=
CWC255794-1	0.91	0.70	=	9.50	1.40	=	200.00	1.80	=	1.10	0.08	J	29.00	1.60	=
CWC255794-2	2.03	0.30	=	6.69	0.30	=	164.00	2.26	=	0.83	0.08	=	23.40	0.30	=
CWC261527	0.13	0.04	=	4.31	0.06	=	96.52	0.09	=	0.38	0.01	J	18.56	0.29	=
CWC261527-1	0.16	0.04	J	4.34	0.06	=	89.73	0.09	J	0.34	0.01	J	15.70	0.29	=
CWC261527-2	1.20	0.04	=	12.00	0.06	J	330.00	0.08	=	1.10	0.02	=	61.00	0.11	J

Soil Sample Name[a]	Molybdenum			Nickel			Selenium			Thallium			Vanadium		
	Result (mg/kg)	DL (mg/kg)	VQ	Result (mg/kg)	DL (mg/kg)	VQ	Result (mg/kg)	DL (mg/kg)	VQ	Result (mg/kg)	DL (mg/kg)	VQ	Result (mg/kg)	DL (mg/kg)	VQ
CWC255794	1.60	0.80	=	18.00	0.80	=	1.30	1.30	U	0.80	0.80	U	25.00	1.60	=
CWC255794-1	1.70	0.70	=	23.00	0.70	=	2.10	1.10	=	0.70	0.70	U	32.00	1.40	=
CWC255794-2	1.77	1.66	=	17.90	0.60	=	1.48	0.15	=	0.08	0.03	=	22.20	0.75	=
CWC261527	0.26	0.08	=	10.39	0.10	=	0.53	0.13	=	0.09	0.01	=	11.14	0.26	=
CWC261527-1	0.32	0.08	=	8.97	0.09	=	0.75	0.12	=	0.09	0.01	=	10.47	0.25	=
CWC261527-2	1.10	0.07	=	30.00	0.19	J	0.59	0.04	=	0.26	0.02	=	45.00	0.11	J

[a] Samples ending in "-1" are duplicate samples. Samples ending in "-2" are split samples.
VQ symbols indicate: "=" for positively identified results, "J" analyte was identified as estimated quantity, and "U" for not detected.

Table 5-13. Radiological Parent Samples and Associated Duplicate and Split Samples (Surface Water and Groundwater) for CY 2022

Water Sample Name[a]	Ra-226[b]				Ra-228[b]				Th-228[b]				Th-230[b]			
	Result	Error	MDC	VQ	Result	Error	MDC	VQ	Result	Error	MDC	VQ	Result	Error	MDC	VQ
	(pCi/L)				(pCi/L)				(pCi/L)				(pCi/L)			
CWC255793	0.19	0.25	0.47	UJ	*	*	*	*	0.08	0.36	0.96	UJ	0.69	0.50	0.64	J
CWC255793-1	0.18	0.32	0.73	UJ	*	*	*	*	0.75	0.75	1.34	UJ	0.93	0.73	0.84	J
CWC255793-2	0.28	0.18	0.26	J	*	*	*	*	0.12	0.19	0.31	UJ	0.12	0.23	0.31	UJ
CWC261526	0.00	0.33	0.95	UJ	*	*	*	*	0.45	0.46	0.87	UJ	0.96	0.56	0.60	J
CWC261526-1	-0.06	0.32	0.97	UJ	*	*	*	*	0.29	0.34	0.64	UJ	0.92	0.50	0.45	J
CWC261526-2	0.20	0.13	0.16	J	*	*	*	*	0.02	0.16	0.30	UJ	0.14	0.23	0.32	UJ
SLA254841	-0.30	0.37	1.30	UJ	*	*	*	*	0.29	0.39	0.72	UJ	0.29	0.39	0.72	UJ
SLA254841-1	-0.08	0.30	1.02	UJ	*	*	*	*	0.26	0.45	0.95	UJ	0.93	0.75	0.93	J
SLA254841-2	0.35	0.22	0.26	J	*	*	*	*	0.10	0.18	0.30	UJ	0.22	0.24	0.30	UJ

Water Sample Name[a]	Th-232[b]				U-234[b]				U-235[b]				U-238[b]			
	Result	Error	MDC	VQ	Result	Error	MDC	VQ	Result	Error	MDC	VQ	Result	Error	MDC	VQ
	(pCi/L)				(pCi/L)				(pCi/L)				(pCi/L)			
CWC255793	-0.04	0.17	0.52	UJ	0.22	0.39	0.82	UJ	0.00	0.39	1.02	UJ	0.33	0.45	0.82	UJ
CWC255793-1	0.25	0.43	0.91	UJ	0.34	0.63	1.43	UJ	0.21	0.42	0.95	UJ	0.28	0.50	1.10	UJ
CWC255793-2	0.10	0.11	0.14	UJ	0.53	0.24	0.17	=	0.03	0.06	0.14	UJ	0.65	0.27	0.13	=
CWC261526	0.24	0.28	0.45	UJ	0.61	0.49	0.48	J	0.00	0.32	0.83	UJ	0.70	0.52	0.48	J
CWC261526-1	0.14	0.22	0.44	UJ	0.29	0.33	0.52	UJ	-0.15	0.24	0.92	UJ	0.41	0.40	0.60	UJ
CWC261526-2	0.04	0.08	0.14	UJ	0.55	0.23	0.14	=	0.11	0.11	0.13	UJ	0.53	0.23	0.13	=
SLA254841	0.34	0.40	0.62	UJ	44.10	5.96	0.42	J	1.64	0.83	0.52	J	44.40	5.99	0.42	J
SLA254841-1	0.13	0.36	0.95	UJ	77.60	12.50	1.09	=	1.63	1.14	0.99	J	76.00	12.30	0.80	=
SLA254841-2	0.02	0.08	0.18	UJ	135.00	12.40	0.32	=	6.40	1.35	0.18	=	144.00	13.20	0.23	=

[a] Samples ending in "-1" are duplicate samples. Samples ending in "-2" are split samples.
[b] Negative results are less than the laboratory system's background level.
* Not available, because sample was not analyzed.
VQ symbols indicate: "=" for positively identified results, "J" analyte was identified as estimated quantity, and "UJ" analyte was not detected and had QC deficiencies.

Table 5-14. Radiological Parent Samples and Associated Duplicate and Split Samples (Sediment) for CY 2022

Soil Sample Name[a]	Th-228[b]				Th-230[b]				Th-232[b]			
	Result	Error	MDC	VQ	Result	Error	MDC	VQ	Result	Error	MDC	VQ
	(pCi/g)				(pCi/g)				(pCi/g)			
CWC255794	0.82	0.30	0.11	=	1.86	0.48	0.17	=	0.73	0.28	0.17	=
CWC255794-1	1.05	0.38	0.14	=	2.02	0.56	0.14	=	0.91	0.35	0.22	=
CWC255794-2	0.66	0.19	0.13	=	1.12	0.25	0.14	=	0.80	0.20	0.06	=
CWC261527	0.99	0.31	0.19	=	5.01	0.87	0.15	J	0.95	0.30	0.13	=
CWC261527-1	1.18	0.34	0.14	=	16.00	2.17	0.11	=	0.93	0.30	0.15	=
CWC261527-2	1.00	0.24	0.14	=	40.80	3.69	0.15	=	1.19	0.26	0.07	=
Soil Sample Name[a]	Ac-227				Am-241				Cs-137			
	Result	Error	MDC	VQ	Result	Error	MDC	VQ	Result	Error	MDC	VQ
	(pCi/g)				(pCi/g)				(pCi/g)			
CWC255794	0.04	0.14	0.23	UJ	-0.01	0.03	0.05	UJ	0.02	0.01	0.01	=
CWC255794-1	0.04	0.14	0.23	UJ	0.01	0.03	0.05	UJ	0.01	0.01	0.01	UJ
CWC255794-2	-0.02	0.72	0.92	UJ	-0.11	0.21	0.35	UJ	0.03	0.07	0.12	UJ
CWC261527	0.11	0.04	0.11	=	-0.01	0.03	0.04	UJ	0.03	0.01	0.01	J
CWC261527-1	0.23	0.05	0.14	=	-0.02	0.03	0.05	UJ	0.06	0.01	0.02	=
CWC261527-2	0.41	0.34	1.33	UJ	0.01	0.39	0.65	UJ	-0.01	0.18	0.18	UJ
Soil Sample Name[a]	K-40				Pa-231				Ra-226			
	Result	Error	MDC	VQ	Result	Error	MDC	VQ	Result	Error	MDC	VQ
	(pCi/g)				(pCi/g)				(pCi/g)			
CWC255794	12.90	1.70	0.21	=	-0.37	0.52	0.84	UJ	1.10	0.28	0.05	=
CWC255794-1	12.40	1.64	0.21	=	-0.44	0.49	0.80	UJ	1.02	0.26	0.06	=
CWC255794-2	11.40	1.99	0.42	J	0.00	0.68	6.00	UJ	1.06	0.23	0.13	J
CWC261527	12.80	1.67	0.20	=	0.44	0.46	0.80	UJ	1.21	0.31	0.05	=
CWC261527-1	14.10	1.84	0.21	=	-0.16	0.52	0.86	UJ	1.67	0.41	0.05	=
CWC261527-2	12.40	2.11	0.85	=	0.00	1.39	8.79	UJ	3.13	0.45	0.15	=
Soil Sample Name[a]	Ra-228				Th-228				Th-230			
	Result	Error	MDC	VQ	Result	Error	MDC	VQ	Result	Error	MDC	VQ
	(pCi/g)				(pCi/g)				(pCi/g)			
CWC255794	0.71	0.09	0.06	=	0.71	0.09	0.06	=	2.30	2.76	4.66	UJ
CWC255794-1	0.71	0.09	0.05	=	0.71	0.09	0.05	=	1.72	2.72	4.60	UJ
CWC255794-2	0.97	0.26	0.11	J	0.97	0.26	0.11	J	*	*	*	*
CWC261527	0.75	0.10	0.05	=	0.75	0.10	0.05	=	5.07	2.73	4.24	J
CWC261527-1	0.92	0.11	0.05	=	0.92	0.11	0.05	=	14.90	3.81	5.02	=
CWC261527-2	1.19	0.32	0.29	=	1.19	0.32	0.29	=	*	*	*	*
Soil Sample Name[a]	Th-232				U-235				U-238			
	Result	Error	MDC	VQ	Result	Error	MDC	VQ	Result	Error	MDC	VQ
	(pCi/g)				(pCi/g)				(pCi/g)			
CWC255794	0.71	0.09	0.06	=	0.06	0.16	0.28	UJ	1.11	0.19	0.29	=
CWC255794-1	0.71	0.09	0.05	=	0.03	0.16	0.27	UJ	1.12	0.19	0.29	=
CWC255794-2	0.97	0.26	0.11	J	-0.04	0.06	1.32	UJ	0.68	0.83	1.10	UJ
CWC261527	0.75	0.10	0.05	=	-0.07	0.16	0.27	UJ	1.09	0.18	0.29	=
CWC261527-1	0.92	0.11	0.05	=	-0.17	0.18	0.28	UJ	1.07	0.19	0.33	=
CWC261527-2	1.19	0.32	0.29	=	0.34	0.28	0.45	UJ	1.76	0.83	1.33	=

[a] Samples ending in "-1" are duplicate samples. Samples ending in "-2" are split samples.
[b] Results from alpha spectroscopy.
* Not available, because sample was not analyzed.
VQ symbols indicate: "=" for positively identified results, "J" analyte was identified as estimated quantity, and "UJ" analyte was not detected and had QC deficiencies

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6.0 RADIOLOGICAL DOSE ASSESSMENT

This section evaluates the cumulative dose to a hypothetically impacted individual from exposure to radiological contaminants at the NC Sites and documents dose trends. The regulatory dose limit for members of the public is 100 mrem per year, as stated in 10 *CFR* 20.1301. Although 10 *CFR* 20.1301 is not an ARAR for the NC Sites, the USACE has provided this evaluation to assess public exposures from St. Louis FUSRAP cleanup operations. Compliance with the dose limit in §20.1301 can be demonstrated in one of the two following methods (§20.1302(b)(1) and (2)):

1. Demonstrating by measurement or calculation that the TEDE to the individual likely to receive the highest dose from FUSRAP cleanup operations at the NC Sites does not exceed the annual dose limit (i.e., 100 mrem per year); or
2. Demonstrating that: (*i*) the annual average concentration of radioactive material released in gaseous and liquid effluents at the boundary of the unrestricted area does not exceed the values specified in Table 2 of Appendix B to 10 *CFR* 20; and (*ii*) if an individual were continuously present in an unrestricted area, the dose from external sources would not exceed 2 mrem per hour.

The USACE has elected to demonstrate compliance by calculation of the TEDE to a hypothetical individual likely to receive the highest dose from FUSRAP cleanup operations at the NC Sites (method 1). This section describes the methodology employed for this evaluation.

Dose calculations are presented for hypothetical maximally exposed individuals at the Latty Avenue Properties, the SLAPS, the SLAPS VPs, and CWC. The monitoring data used in the dose calculations are reported in the respective environmental monitoring sections of this EMDAR.

Dose calculations related to airborne emissions, as required by 40 *CFR* 61, Subpart I, *National Emission Standards for Emissions of Radionuclides Other Than Radon From Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered By Subpart H*, are presented in Appendix B (the "North St. Louis County FUSRAP Sites 2022 Radionuclide Emissions NESHAP Report Submitted in Accordance with Requirements of 40 *CFR* 61, Subpart I").

6.1 SUMMARY OF ASSESSMENT RESULTS AND DOSE TRENDS

In 2017, a small area was identified along the railroad tracks on VP-40A where the external radiation levels are slightly above background levels. This area is currently classified as inaccessible and is known to have radiological contamination in excess of ROD RGs. However, the average external gamma radiation levels at this location do not exceed the ROD monitoring threshold of 20 µR per hour. As a best management practice (BMP), air monitoring at this location was initiated.

The TEDE from Latty Avenue Properties to a hypothetical maximally exposed individual from all complete/applicable pathways combined was calculated to be approximately 7.3 mrem per year, estimated for an individual who works full time at a location approximately 50 m east of VP-40A on the Futura property.

The TEDE from the SLAPS to a hypothetical maximally exposed individual from all complete/applicable pathways combined was 1.0 mrem per year, estimated for an individual who works full time at a location approximately 200 m west-northwest from the center of the SLAPS Loadout area. Because of the proximity of the IA-09 Ballfields excavation area, the dose from

airborne particulates modeled from the IA-09 Ballfields excavation area is included for the business receptor located 200 m east-southeast of the IA-09 Ballfields excavation area.

The TEDE from the SLAPS VPs to a hypothetical maximally exposed individual from all complete/applicable pathways combined was 0.4 mrem per year, estimated for a resident who lives full time at a location approximately 200 m northeast, 330 m northwest, and 2,000 m north from the center of the Pershall Road, VP-56, and the IA-09 Ballfields excavation areas, respectively.

The TEDE from CWC to a hypothetical maximally exposed individual from all complete/applicable pathways combined was less than 0.3 mrem per year, estimated for a resident youth (10-year-old child) spending time as a recreational user of CWC.

Annual dose trends from CY 2000 to CY 2022 at applicable NC Sites are documented on Figure 6-1. A comparison of the maximum annual dose from CY 2000 to CY 2022 at each of the applicable NC Sites to the annual average natural background dose of approximately 620 mrem per year is provided on Figure 6-2.

6.2 PATHWAY ANALYSIS

The six complete pathways for exposure to NC Site radiological contaminants evaluated by the St. Louis FUSRAP EMP are listed in Table 6-1. These pathways are used to identify data gaps in the EMP and to estimate potential radiological exposures from the site. Of the six complete pathways, four were applicable in CY 2022 and were thus incorporated into radiological dose estimates.

Table 6-1. Complete Radiological Exposure Pathways

Exposure Pathway	Pathway Description	Applicable to CY 2022 Dose Estimate	
		NC Sites	CWC
Liquid A	Ingestion of groundwater from local wells down-gradient from the site.	NA	NA
Liquid B	Ingestion of fish inhabiting CWC.	NC	NA
Liquid C	Ingestion of surface water[a] and sediments.	NC	Y[b]
Airborne A	Inhalation of particulates dispersed through wind erosion and RAs.	Y	NC
Airborne B	Inhalation of Rn-222 and decay products emitted from contaminated soils/wastes.	Y	NC
External	Direct gamma radiation from contaminated soils/wastes.	Y	NA

[a] Surface water includes stormwater run-off from NC Sites, MSD discharges, and the water in CWC.

[b] The pathway is only applicable to a recreational receptor (youth) exposed to contaminants present in CWC water and sediments. Data from NC Sites stormwater discharges and MSD discharges are not applicable to the hypothetical recreational receptor; therefore, those data are not evaluated in this section.

NA – not applicable for the site

NC – not a complete pathway for the respective site

Y – applicable for the site

In developing specific elements of the St. Louis FUSRAP EMP, potential exposure pathways of the radioactive materials present on site are reviewed to determine which pathways are complete. Evaluation of each exposure pathway is based on hypothetical sources, release mechanisms, types, probable environmental fates of contaminants, and the locations and activities of potential receptors. Pathways are then reviewed to determine whether a link exists between one or more radiological contaminant sources, or between one or more environmental transport processes, to an exposure point at which human receptors are present. If a link exists, the pathway is termed complete. Each complete pathway was reviewed to determine if a potential for exposure was

present in CY 2022. If a potential for exposure was possible, the pathway is termed applicable. Only applicable pathways are considered in estimates of dose.

The pathways applicable to the CY 2022 dose estimates for NC Sites, including CWC, are shown in Table 6-1. The incomplete pathways were not considered in the dose assessment and are only listed in Table 6-1 because they were complete for at least one receptor location. The pathways listed as not applicable were listed as such in CY 2022 for the following reasons:

- Liquid A is not applicable, because the aquifer is of naturally low quality and is not known to be used for any domestic purpose in the vicinity of the NC Sites (DOE 1994).
- Liquid B is not applicable at CWC or for the SLAPS transient receptor, because the receptor would be unlikely to catch and eat a game fish. A survey was conducted, and 97 percent of the fish collected at CWC during the survey were fathead minnows (Parker and Szlemp 1987).
- The dose equivalent from CWC to the receptor from contaminants in the water/sediment was estimated using the Microshield Version 5.03 computer-modeling program. The scenario used was a youth playing in the creek bed (1 ft of water shielding and dry) for 52 hours per year. The highest estimated whole body dose to the youth was 0.3 microrem per year. The gamma dose rate emitted from the contaminants is indistinguishable from background gamma radiation. Therefore, the external gamma pathway (from contaminants in the creek water/sediment) is not applicable for the CWC receptor.

6.3 EXPOSURE SCENARIOS

Dose calculations were performed for maximally exposed individuals at critical receptor locations for applicable exposure pathways (see Table 6-1) to assess dose due to radiological releases from the NC Sites. First, conditions were set to determine the TEDE to a maximally exposed individual at each of the main site locations on which excavation and loadout activities occurred (i.e., the Latty Avenue Properties, the SLAPS, and the SLAPS VPs). A second dose equivalent for CWC was calculated. A third set of dose equivalent calculations was performed to meet NESHAP requirements (Appendix B). These dose equivalent calculations were also used for purposes of TEDE calculation.

The scenarios and models used to evaluate these radiological exposures are conservative but appropriate. Although radiation doses can be calculated or measured for individuals, it is not appropriate to predict the health risk to a single individual using the methods prescribed herein. Dose equivalents to a single individual are estimated by hypothesizing a maximally exposed individual and placing this individual in a reasonable but conservative scenario. This method is acceptable when the magnitude of the dose to a hypothetical maximally exposed individual is small, as is the case for the NC Sites. This methodology provides for reasonable estimates of potential exposure to the public and maintains a conservative approach. The scenarios and resulting estimated doses are outlined in Section 6.4.

All ingestion calculations were performed using the methodology described in International Commission on Radiation Protection (ICRP) Reports 26 and 30 for a 50-year committed effective dose equivalent (CEDE). The 50-year CEDE conversion factors were obtained from *Federal Guidance Report 11: Limiting Values of Radionuclide Intake and Air Concentration and Dose Conversion Factors for Inhalation, Submersion and Ingestion* (USEPA 1989a) and *Calculation of Slope Factors and Dose Coefficients* (ORNL 2014).

6.4 DETERMINATION OF TOTAL EFFECTIVE DOSE EQUIVALENT FOR EXPOSURE SCENARIOS

The TEDE for the exposure scenarios was calculated using CY 2022 monitoring data. Calculations for dose scenarios are provided in Appendix I. Dose equivalent estimates are well below the standards set by the NRC for annual public exposure and the USEPA NESHAP limits.

The CY 2022 TEDE for a hypothetical maximally exposed individual near the Latty Avenue Properties, the SLAPS, the SLAPS VPs, and CWC is 7.3 mrem per year, 1.0 mrem per year, 0.4 mrem per year, and 0.3 mrem per year, respectively. In comparison, the annual average exposure to natural background radiation in the United States results in a TEDE of approximately 620 mrem per year (NCRP 2009). Assumptions are detailed in the following sections.

6.4.1 Radiation Dose Equivalent from the Latty Avenue Properties to a Maximally Exposed Individual

The Latty Avenue Properties contributing to dose include the monitored area on Futura/VP-40A in CY 2022. This section discusses the estimated TEDE to a hypothetical maximally exposed individual assumed to be located approximately 50 m east from the area identified as having the highest external gamma radiation level on Futura/VP-40A. No private residences are adjacent to the site. Therefore, all calculations of dose equivalent due to the applicable pathway assume a realistic residence time that is less than 100 percent. A full-time-employee business receptor was considered the maximally exposed individual for the Latty Avenue Properties.

The exposure scenario assumptions are as follows:

- Exposure to external gamma radiation and radon from Futura/VP-40A sources occurs to the maximally exposed individual while working full time outside at the receptor location (i.e., Futura) located approximately 50 m east from the area identified as having the highest external gamma level on Futura/VP-40A Exposure time is 2,000 hours per year (Leidos 2023a).
- Exposure from external gamma radiation was calculated using environmental TLD monitoring data at the perimeter between the source and the receptor. The site is assumed to represent a line-source to the receptor (Leidos 2023a).
- Exposure from airborne radioactive particulates from Futura/VP-40A was calculated by using soil concentration data and air particulate monitoring data to determine a source term and then running the CAP88-PC computer code to calculate dose to the receptor from active excavations (Leidos 2023a).
- Exposure from Rn-222 (and decay chain isotopes) was calculated using a dispersion factor and Rn-222 (ATD) monitoring data at the site perimeter between the source and the receptor (Leidos 2023a).

Based on the exposure scenario and assumptions described previously, a maximally exposed individual working outside at the Futura facility located 50 m east from the monitored area on Futura/VP-40A identified as having the highest external gamma level would have received less than 0.1 mrem per year from external gamma, negligible dose from airborne radioactive particulates, and 7.3 mrem per year from Rn-222, for a TEDE of 7.3 mrem per year (Leidos 2023a).

6.4.2 Radiation Dose Equivalent from the St. Louis Airport Site to a Maximally Exposed Individual

The SLAPS area contributing to dose (i.e., those areas at which waste handling activities occurred in CY 2022) is the SLAPS Loadout area. This section discusses the estimated TEDE to a hypothetical maximally exposed individual assumed to be located approximately 200 m west-northwest from the center of the SLAPS Loadout area and to receive a radiation dose by the exposure pathways identified previously. Because of the proximity of the IA-09 Ballfields excavation area, the dose from airborne particulates modeled from the IA-09 Ballfields excavation area is included for the business receptor. The hypothetical maximally exposed is assumed to be located 200 m east-southeast from the IA-09 Ballfields excavation area. No private residences are adjacent to the site. Therefore, all calculations of dose equivalence due to the applicable pathways assume a realistic residence time that is less than 100 percent. A full-time-employee business receptor was considered the maximally exposed individual for the SLAPS.

The exposure scenario assumptions are as follows:

- Exposure to radiation from all SLAPS sources occurs to the maximally exposed individual while working full time outside at the receptor location facility located approximately 200 m west-northwest from the center of the SLAPS Loadout area and 200 m east-southeast of the IA-09 Ballfields. Exposure time is 2,000 hours per year (Leidos 2023b).
- Exposure from external gamma radiation was calculated using environmental TLD monitoring data at the perimeter between the source and the receptor. The site is assumed to represent a line-source to the receptor (Leidos 2023b).
- Exposure from airborne radioactive particulates was calculated using soil concentration data and air particulate monitoring data to determine a source term and then running the CAP88-PC computer code to calculate dose to the receptor (Leidos 2023b).
- Exposure from Rn-222 (and decay chain isotopes) was calculated using ATD monitoring data at the site locations representative of areas accessible to the public between the source and the receptor (Leidos 2023b).

Based on the exposure scenario and assumptions described previously, a maximally exposed individual working outside at the receptor facility 200 m west-northwest from the center of the SLAPS Loadout area and 200 m east-southeast of the IA-09 Ballfields excavation area would have received less than 0.1 mrem per year from external gamma, an 0.7 mrem per year from airborne radioactive particulates, and 0.3 mrem per year from Rn-222, for a TEDE of 1.0 mrem per year (Leidos 2023b).

6.4.3 Radiation Dose Equivalent from the St. Louis Airport Site Vicinity Properties to a Maximally Exposed Individual

The SLAPS VPs contributing to dose (i.e., those properties at which RA occurred in CY 2022) include the following: Pershall Road, VP-56, and the IA-09 Ballfields. This section discusses the estimated TEDE to a hypothetical maximally exposed individual assumed to frequent the perimeter of the SLAPS VPs and to receive a radiation dose by the exposure pathways identified previously. Because radiation dose due to radon and external gamma radiation are considered negligible at the SLAPS VPs, the estimated TEDE only includes dose from exposure to airborne radioactive particulates that are assumed to be released during active excavations. A private residence is located approximately 200 m northeast, 330 m northwest, and 2,000 m north of the

Pershall Road, VP-56, and the IA-09 Ballfields excavations, respectively; therefore, a residential receptor was considered the maximally exposed individual for the SLAPS VPs.

The exposure scenario assumptions are as follows:

- Exposure to radiation from all SLAPS VP sources occurs to the maximally exposed individual while living full time at the residence receptor location located approximately 200 m northeast, 330 m northwest, and 2,000 m north of the Pershall Road, VP-56, and the IA-09 Ballfields excavations, respectively. Exposure time is 8,760 hours per year (Leidos 2023b).
- Exposure from airborne radioactive particulates was calculated using soil concentration data and air particulate monitoring data to determine a source term and then running the CAP88-PC modeling code to calculate dose to the receptor (Leidos 2023b).

Based on the exposure scenario and assumptions described previously, a maximally exposed individual living at the residence receptor location 200 m northeast, 330 m northwest, and 2,000 m north of the Pershall Road, VP-56, and the IA-09 Ballfields excavations, respectively, would have received 0.4 mrem per year from airborne radioactive particulates for a TEDE of 0.4 mrem per year (Leidos 2023b).

6.4.4 Radiation Dose Equivalent from Coldwater Creek to a Maximally Exposed Individual

This section describes the estimated TEDE to a hypothetical maximally exposed individual assumed to frequent CWC and receive a radiation dose by the exposure pathways identified previously. The assumed scenario is for a recreational user. Therefore, all calculations of dose equivalent due to the applicable pathway assume a realistic residence time that is less than 100 percent. A youth spending time as a recreational user of CWC is considered the maximally exposed individual for CWC.

The exposure scenario assumptions are as follows:

- The youth spends 2 hours at CWC during each visit, and visits once every 2 weeks. It is likely that this activity would be greater in summer and less in winter, but the yearly average is 26 visits (Leidos 2023c).
- The soil/sediment ingestion rate is 50 mg per day, and the water ingestion rate is 2 L per day (USEPA 1989b; Leidos 2023c).
- The UCL_{95} of the mean radionuclide concentrations in CWC surface water/sediment samples collected in CY 2022 were assumed to be present in the water/sediment ingested by the maximally exposed individual (Leidos 2023c).
- Dose equivalent conversion factors for ingestion (for a 10-year-old child) are as follows: total U, 2.63E-04 mrem/pCi; Ra-226, 2.97E-03 mrem/pCi; Ra-228, 1.45E-02 mrem/pCi; Th-228, 5.07E-04 mrem/pCi; Th-230, 9.10E-04 mrem/pCi; and Th-232, 1.07E-03 mrem/pCi (ORNL 2014; Leidos 2023c).

Based on the exposure scenario and assumptions described herein, a maximally exposed individual using CWC for recreational purposes would have received less than 0.1 mrem per year from soil/sediment ingestion and 0.3 mrem per year from water ingestion, for a TEDE of approximately 0.3 mrem per year (Leidos 2023c).

7.0 REFERENCES

Cember, H. 1996. *Introduction to Health Physics*. McGraw-Hill, New York, NY. 1996.

DoD 2000. U.S. Department of Defense, U.S. Department of Energy, U.S. Environmental Protection Agency, and U.S. Nuclear Regulatory Commission. *Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM).* NUREG-1575. EPA 402-R-97-016. Revision 1. August 2000.

DoD and DOE 2017. U.S. Department of Defense and U.S. Department of Energy. *Department of Defense (DoD)/Department of Energy (DOE) Consolidated Quality Systems Manual (QSM) for Environmental Laboratories*. DoD Quality Systems Manual Version 5.1 and DOE Quality Systems for Analytical Services Version 3.1. 2017.

DOE 1994. U.S. Department of Energy, Oak Ridge National Laboratory. *Remedial Investigation Report for the St. Louis Site.* St. Louis, Missouri. DOE/OR/21949-280. January 1994.

DOE 1995. U.S. Department of Energy, Oak Ridge Operations Office. *Remedial Investigation Addendum for the St. Louis Site.* St. Louis, Missouri. DOE/OR/21950-132. Final. September 1995.

DOE 1997. U.S. Department of Energy. *St. Louis Airport Site (SLAPS) Interim Action Engineering Evaluation/Cost Analysis (EE/CA).* St. Louis, Missouri. DOE/OR/21950-12026. September 1997.

Gibbons, Robert D. 1994. *Statistical Methods for Groundwater Monitoring.* John Wiley and Sons, Inc., New York. 1994.

Leidos 2015a. Leidos, Inc. Environmental Science & Engineering Operation, Standard Operating Procedure. "Control of Nonconforming Items." ESE A15.1. Revision 0. January 31, 2015.

Leidos 2015b. Leidos, Inc. Environmental Science & Engineering Operation, Standard Operating Procedure. "Equipment Decontamination." FTP-400. Revision 0. January 31, 2015.

Leidos 2015c. Leidos, Inc. *Data Verification and Validation.* Environmental Science & Engineering Operation. Standard Operating Procedure. ESE DM-05. Revision 0. January 31, 2015.

Leidos 2023a. Leidos, Inc. *Total Effective Dose Equivalent (TEDE) to the Hypothetically Maximally Exposed Individual at Latty Avenue Properties.* March 2023.

Leidos 2023b. Leidos, Inc. *Total Effective Dose Equivalent (TEDE) to the Hypothetically Maximally Exposed Individual at SLAPS/SLAPS VPs.* Calculations Package. March 2023.

Leidos 2023c. Leidos, Inc. *Total Effective Dose Equivalent (TEDE) to the Hypothetically Maximally Exposed Individual at Coldwater Creek.* Calculations Package. March 2023.

MDNR 1998. Missouri Department of Natural Resources. Letter dated October 2, 1998. From Philip A. Schroeder, Permit Section Chief, to Sharon Cotner, USACE FUSRAP Project Manager. Subject: St. Louis Airport Site (SLAPS), St. Louis, Missouri.

MDNR 2002. Missouri Department of Natural Resources. Letter dated February 19, 2002. From Matthew Sikes to Sharon Cotner, USACE FUSRAP Project Manager. Subject: Reduce Sampling at SLAPS Outfall 002.

MSD 1991. Metropolitan St. Louis Sewer District. Ordinance No. 8472. Adopted August 14, 1991.

MSD 1994. Metropolitan St. Louis Sewer District. Ordinance No. 10177. Adopted November 9, 1994.

MSD 1997. Metropolitan St. Louis Sewer District. Ordinance No. 10082. Adopted May 8, 1997.

MSD 1998. Metropolitan St. Louis Sewer District. Letter dated October 30, 1998. From Bruce H. Litzsinger, Civil Engineer, to Ken Axetel, International Technology Corporation.

MSD 2001. Metropolitan St. Louis Sewer District. Letter dated July 23, 2001. From Bruce H. Litzsinger, Civil Engineer, to Sharon Cotner, USACE FUSRAP Project Manager. Subject: St. Louis Airport Site, File: SD – St. Louis Airport FUSRAP Site, 110 McDonnell.

MSD 2005. Metropolitan St. Louis Sewer District. Letter dated February 10, 2005. From Roland Biehl, Environmental Assistant Engineer, to Sharon Cotner, USACE FUSRAP Project Manager. Subject: St. Louis Airport Site File: SD, St. Louis Airport FUSRAP Site, 110 McDonnell.

MSD 2006. Metropolitan St. Louis Sewer District. Letter dated June 19, 2006. From Roland A. Biehl, Environmental Assistant Engineer, to Sharon Cotner, USACE FUSRAP Project Manager. Subject: FUSRAP St. Louis Airport Site, File: SD, St. Louis Airport FUSRAP Site, 9012138501, SP801.

MSD 2008. Metropolitan St. Louis Sewer District. Letter dated May 22, 2008. From Steve Grace, Environmental Assistant Engineer, to Sharon Cotner, USACE FUSRAP Project Manager. Subject: FUSRAP St. Louis Airport Site, File: SD, St. Louis Airport FUSRAP Site, 9012138501, SP801.

MSD 2010. Metropolitan St. Louis Sewer District. Letter dated May 10, 2010. From Steve Grace, Environmental Assistant Engineer, to Sharon Cotner, USACE FUSRAP Project Manager. Subject: FUSRAP St. Louis Airport Site, File: SD, St. Louis Airport FUSRAP Site, 9012138501, SP801.

MSD 2012. Metropolitan St. Louis Sewer District. Letter dated May 24, 2012. From Steve Grace, Environmental Assistant Engineer, to Sharon Cotner, USACE FUSRAP Project Manager. Subject: FUSRAP St. Louis Airport Site, File: SD, St. Louis Airport FUSRAP Site, 9012138501, SP801.

MSD 2014. Metropolitan St. Louis Sewer District. Letter dated June 23, 2014. From Steve Grace, Environmental Assistant Engineer, to Sharon Cotner, USACE FUSRAP Project Manager. Subject: FUSRAP St. Louis Airport Site, File: SD, St. Louis Airport FUSRAP Site, 9012138501, SP801.

MSD 2016. Metropolitan St. Louis Sewer District. Letter dated June 18, 2016. From Steve Grace, Environmental Assistant Engineer, to Bruce Munholand, USACE FUSRAP Project Manager. Subject: FUSRAP St. Louis Airport Site, File: SD, St. Louis Airport FUSRAP Site, 9012138501, SP801.

MSD 2018. Metropolitan St. Louis Sewer District. Letter dated June 11, 2018. From Steve Grace, Environmental Assistant Engineer, to Bruce Munholand, USACE FUSRAP Project Manager. Subject: FUSRAP St. Louis Airport Site, File: SD, St. Louis Airport FUSRAP Site, 9012138501, SP801.

MSD 2020. Metropolitan St. Louis Sewer District. Letter dated July 16, 2020. From Steve Grace, Environmental Assistant Engineer, to Bruce Munholand, USACE FUSRAP Project Manager. Subject: FUSRAP St. Louis Airport Site, File: SD, St. Louis Airport FUSRAP Site, 1048495000, SP801.

MSD 2022a. Metropolitan St. Louis Sewer District. Letter dated June 7, 2022. From Steve Grace, Environmental Assistant Engineer, to David Evans. Subject: FUSRAP St. Louis Airport Site, File: SD – St. Louis Airport FUSRAP Site, 1048495000, SP801.

MSD 2022b. Metropolitan St. Louis Sewer District. Email dated July 29, 2022. From Steve Grace, Environmental Assistant Engineer, to Gwenan Skoba. Subject: SLDS Discharge: Approval to increase discharge requirements from 100,000 to 250,000 gallons of excavation water from SLAPS.

NCRP 1988. National Council on Radiation Protection and Measurements. *Measurement of Radon and Radon Daughters in Air.* NCRP Report No. 97. November 1988.

NCRP 2009. National Council on Radiation Protection and Measurements. *Ionizing Radiation Exposure of the Population of the United States.* NCRP Report No. 160. March 3, 2009.

Office of the Federal Register, NARA 1998. National Archives and Records Administration. "National Primary Drinking Water Regulations: Disinfectants and Disinfection Byproducts; Final Rule." *Federal Register.* Volume 63, No. 241, 40 *CFR* 9, 141, and 142. December 16, 1998.

ORNL 2014. Oak Ridge National Laboratory. *Calculation of Slope Factors and Dose Coefficients.* Prepared by Michael Bellamy, Lauren Finklea, Fred Dolislager, and Keith Eckerman, published July 2014, Oak Ridge National Laboratory, Center for Radiation Protection Knowledge. ORNL/TM-2013/00. September 2014.

Parker, M. A., and R. Szlemp 1987. *Final Fish and Wildlife Coordination Act Report,* Coldwater Creek Flood Control Project, St. Louis County, Missouri, Final, May 1987. Published as Appendix D of *Coldwater Creek, Missouri, Feasibility Report and Environmental Impact Statement,* U.S. Army Corps of Engineers, St. Louis District, Lower Mississippi Valley Division, May 1987.

Shleien, Bernard, ed. 1992. *The Health Physics and Radiological Health Handbook.* Silver Spring, MD: Scinta Inc. 1992.

USACE 1997. U.S. Army Corps of Engineers, Environmental Quality. *Chemical Quality Assurance for HTRW Projects.* Engineer Manual. EM-200-1-6. October 10, 1997.

USACE 1998a. U.S. Army Corps of Engineers. *Engineering Evaluation/Cost Analysis (EE/CA) and Responsiveness Summary for the St. Louis Airport Site (SLAPS).* St. Louis, Missouri. Final. May 1998.

USACE 1998b. U.S. Army Corps of Engineers. *Engineering Evaluation/Cost Analysis (EE/CA) for the Hazelwood Interim Storage Site (HISS).* St. Louis, Missouri. Final. October 1998.

USACE 1998c. U.S. Army Corps of Engineers, Engineering and Design. *Chemical Data Quality Management for Hazardous, Toxic, Radioactive Waste Remedial Activities.* Engineer Regulation. ER-1110-1-263. April 30, 1998.

USACE 1999a. U.S. Army Corps of Engineers. *Environmental Monitoring Guide for the St. Louis Sites.* St. Louis, Missouri. Final. December 1999.

USACE 1999b. U.S. Army Corps of Engineers. *FUSRAP Laboratory Data Management Process for the St. Louis Site.* St. Louis, Missouri. June 1999.

USACE 2000. U.S. Army Corps of Engineers, St. Louis District. *Sampling and Analysis Guide for the St. Louis Site.* Final. October 1999.

USACE 2001. U.S. Army Corps of Engineers, Environmental Quality. *Requirements for the Preparation of Sampling and Analysis Plans.* Engineer Manual. EM 200-1-3. February 1, 2001.

USACE 2003. U.S. Army Corps of Engineers. Letter dated November 18, 2003. From Sharon Cotner, USACE FUSRAP Project Manager, to Phillip A. Schroeder, Permit Section Chief, MDNR.

USACE 2005. U.S. Army Corps of Engineers, St. Louis District. *Record of Decision for the North St. Louis County Sites.* St. Louis, Missouri. Final. September 2, 2005.

USACE 2007. U.S. Army Corps of Engineers. Letter dated April 20, 2007. From Sharon Cotner, USACE FUSRAP Project Manager, to Thomas Siegel, Permit and Engineering Chief, MDNR. Subject: Sediment Control and Pumped Excavation Water Outfall Vicinity Properties 08(c) and 40A.

USACE 2018. U.S. Army Corps of Engineers. *Laboratory Quality Assurance Plan for the FUSRAP St. Louis Radioanalytical Laboratory.* St. Louis, Missouri. Revision 11. February 2018.

USACE 2021. U.S. Army Corps of Engineers. *Environmental Monitoring Implementation Plan for the North St. Louis County Sites for Calendar Year 2022.* St. Louis, Missouri. Revision 0. December 23, 2021.

USEPA 1987. U.S. Environmental Protection Agency. *Environmental Radon.* Volume 35. New York. 1987.

USEPA 1989a. U.S. Environmental Protection Agency. *Federal Guidance Report No. 11: Limiting Values of Radionuclide Intake and Air Concentration and Dose Conversion Factors for Inhalation, Submersion and Ingestion.* September 1989.

USEPA 1989b. U.S. Environmental Protection Agency, Office of Health and Environmental Assessment, Washington D.C. *Exposure Factor Handbook.* EPA/600/8-89/043. July 1989.

USEPA 1989c. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. *Risk Assessment Guidance for Superfund Volume 1 Human Health Evaluation Manual* (*Part A).*USEPA/5401/1-89/002. December 1989.

USEPA 1991. U.S. Environmental Protection Agency. *Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans.* QAMS-005/80. 1991.

USEPA 1992. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Washington, D.C. *Supplemental Guidance to RAGS: Calculating the Concentration Term.* OSWER Directive 9285.7-081. May 1992.

USEPA 1993. U.S. Environmental Protection Agency. *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods/* SW-846. Third Edition. Final Update III-A. EPASW-846.3-3a. March 1993.

USEPA 1994. U.S. Environmental Protection Agency. *EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations.* EPA QA/R-5. January 1994.

USEPA 2000. U.S. Environmental Protection Agency. *Guidance for Data Quality Assessment - Practical Methods for Data Analysis.* EPA QA/G-9. QA00 Update. July 2000.

USEPA 2013. U.S. Environmental Protection Agency. ProUCL Version 5.0, Developed by Lockheed Martin for National Exposure Research Laboratory, April. Available online: www.epa.gov/nerlesd1/tsc/software.htm. September 19, 2013.

USEPA 2020. U.S. Environmental Protection Agency. CAP88-PC Version 4.1 Computer Code, March 2020.

Weather Underground, Inc. 2022. Weather, National Weather Service, Lambert – St. Louis International Weather Station, Precipitation. Available online: http://www.wunderground.com. Accessed as needed in CY 2022.

10 *CFR* 20, *Standards for Protection Against Radiation.*

10 *CFR* 20.1301, *Dose Limits For Individual Members Of The Public*.

10 *CFR* 20.1302, *Compliance With Dose Limits For Individual Members Of The Public*.

10 *CSR* 20-7.015, *Effluent Regulations.*

10 *CSR* 20-7.031, *Water Quality Standards.*

19 *CSR* 20-10, *Protection Against Ionizing Radiation.*

40 *CFR* 61, Subpart I, *National Emission Standards for Radionuclide Emissions from Federal Facilities Other than Nuclear Regulatory Commission Licenses and Not Covered by Subpart H.*

40 *CFR* 192, *Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings.*

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FIGURES

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Figure 1-1. Location Map of the St. Louis Sites

Path: U:\GPS\EMDAR\NCO Projects\CY2022\Rev0\Figure 1-2 Plan View of the SLAPS and SLAPS VPs.mxd

LEGEND:

- General Location of SLAPS and Latty Avenue Properties
- Road
- Airfield
- Investigation Areas
- Parcel Boundary
- River/Stream
- ROD Boundary

N
W E
S

MO-East State Plane
(NAD 83, Feet)

0 1,000 2,000 Feet

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Figure 1-2. Plan View of the SLAPS, SLAPS VPs, and Latty Avenue Properties

Path: U:\GPS\EMDAR\NCO Projects\CY2022\Rev0\Figure 1-3 Plan View Latty Ave Properties.mxd

LEGEND:

- Latty Avenue Property
- Road
- Railroad
- Parcel Boundary
- Coldwater Creek
- ROD Boundary
- Building

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MO-East State Plane
(NAD 83, Feet)

0 250 500 Feet

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Figure 1-3. Plan View of the Latty Avenue Propeties including HISS and Futura

Figure 2-1. Gamma Radiation, Radon, and Particulate Air Monitoring at the St. Louis Background Location - USACE Service Base

Path: U:\GPS\EMDAR\NCO Projects\CY2022\Rev0\Figure 2-2 Gamma Radiation, Rn, and Particulate Air Monitoring Locations at the Latty Avenue Properties.mxd

Figure 2-2. Gamma Radiation and Radon Monitoring Locations at the Latty Avenue Properties

Path: U:\GPS\EMDAR\NCO Projects\CY2022\Rev0\Figure 2-3_Gamma Radiation and Radon Monitoring Locations at the SLAPS.mxd

Figure 2-3. Gamma Radiation and Radon Monitoring Locations at the SLAPS

Path: U:\GPS\EMDAR\NCO Projects\CY2022\Rev0\Figure 3-1 Storm-Water Outfall and MSD Excavation-Water Discharge Points at the SLAPS.mxd

LEGEND:

- MSD Manholes (Discharge Points)
- NPDES Stormwater Outfall Location
- Road
- Coldwater Creek
- ROD Boundary
- Fence
- Vicinity Property
- Building

N
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MO-East State Plane
(NAD 83, Feet)

0 500 1,000 Feet

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Leidos	0	6/20/2023

Figure 3-1. Stormwater Outfall and MSD Excavation Water Discharge Points at the SLAPS

LEGEND:

- Surface Water and Sediment Sampling Location
- General Location of SLAPS and Latty Avenue Properties
- Road
- Railroad
- Educational Institution
- Golf Course
- Cemetery
- Park
- River/Stream

N W E S

MO-East State Plane (NAD 83, Feet)

0 1,000 2,000 Feet

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Path: U:\GPS\EMDAR\NCO Projects\CY2022\Rev0\Figure 3-2 Surface-Water and Sediment Sampling Locations at Coldwater Creek.mxd

Figure 3-2. Surface Water and Sediment Sampling Locations at Coldwater Creek

Note:
The error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238.

Figure 3-3. Total U Concentrations in Surface Water Versus Sampling Date

Note:
The error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238.

Figure 3-3. Total U Concentrations in Surface Water Versus Sampling Date (Continued)

Note:
The error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238.

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Figure 3-3. Total U Concentrations in Surface Water Versus Sampling Date (Continued)

Note:
The error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238.

Figure 3-3. Total U Concentrations in Surface Water Versus Sampling Date (Continued)

Note:
The error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238.

Figure 3-3. Total U Concentrations in Surface Water Versus Sampling Date (Continued)

Note:
The error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238.

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Figure 3-3. Total U Concentrations in Surface Water Versus Sampling Date (Continued)

Note:
The error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238.

Figure 3-3. Total U Concentrations in Surface Water Versus Sampling Date (Continued)

Note:
The error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238.

Figure 3-3. Total U Concentrations in Surface Water Versus Sampling Date (Continued)

Note:
The error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238.

Figure 3-3. Total U Concentrations in Surface Water Versus Sampling Date (Continued)

Note:
The error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238.

Figure 3-3. Total U Concentrations in Surface Water Versus Sampling Date (Continued)

Notes:
The error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238.
* The October 2007 value was incorrectly graphed in previous reports due to the alpha and gamma results being added together, artificially increasing the value. The charts in this figure have been corrected.

Figure 3-4. Total U Concentrations in Sediment Versus Sampling Date

Notes:
The error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238.
* The October 2007 value was incorrectly graphed in previous reports due to the alpha and gamma results being added together, artificially increasing the value. The charts in this figure have been corrected.

Figure 3-4. Total U Concentrations in Sediment Versus Sampling Date (Continued)

Notes:
The error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238.
* The October 2007 value was incorrectly graphed in previous reports due to the alpha and gamma results being added together, artificially increasing the value. The charts in this figure have been corrected.

Figure 3-4. Total U Concentrations in Sediment Versus Sampling Date (Continued)

Notes:
The error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238.
* The October 2007 value was incorrectly graphed in previous reports due to the alpha and gamma results being added together, artificially increasing the value. The charts in this figure have been corrected.

Figure 3-4. Total U Concentrations in Sediment Versus Sampling Date (Continued)

Notes:
The error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238.
* The October 2007 value was incorrectly graphed in previous reports due to the alpha and gamma results being added together, artificially increasing the value. The charts in this figure have been corrected.

Figure 3-4. Total U Concentrations in Sediment Versus Sampling Date (Continued)

Notes:
The error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238.
* The October 2007 value was incorrectly graphed in previous reports due to the alpha and gamma results being added together, artificially increasing the value. The charts in this figure have been corrected.

Figure 3-4. Total U Concentrations in Sediment Versus Sampling Date (Continued)

Note:
The error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238.

Figure 3-4. Total U Concentrations in Sediment Versus Sampling Date (Continued)

Note:
The error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238.

Figure 3-4. Total U Concentrations in Sediment Versus Sampling Date (Continued)

Note:
The error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238.

Figure 3-4. Total U Concentrations in Sediment Versus Sampling Date (Continued)

Note:
The error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238.

Figure 3-4. Total U Concentrations in Sediment Versus Sampling Date (Continued)

Zone	Period	Epoch	Stratigraphy	Thickness (ft.)	Description
Hydrostratigraphic zone (HZ)-A	Quaternary	Holocene	FILL/TOPSOIL	0-14	**UNIT 1** Fill - Sand, silt, clay, concrete, rubble. Topsoil - Organic silts, clayey silts, wood, fine sand.
		Pleistocene	LOESS (CLAYEY SILT)	11-32	**UNIT 2** Clayey silts, fine sands, commonly mottled with iron oxide staining. Scattered roots and organic material, and a few fossils.
			GLACIOLACUSTRINE SERIES: SILTY CLAY	19-75 (3) 9-27 (3T)	**UNIT 3** Silty clay with scattered organic blebs and peat stringers. Moderate plasticity. Moist to saturated (3T).
Hydrostratigraphic zone (HZ)-B			VARVED CLAY	0-8	Alternating layers of dark and light clay as much as 1/16 inch thick (3M).
			CLAY	0-26	Dense, stiff, moist, highly plastic clay (3M).
Hydrostratigraphic zone (HZ)-C			SILTY CLAY	10-29	Similar to upper silty clay. Probable unconformable contact with highly plastic clay (3B).
			BASAL CLAYEY AND SANDY GRAVEL	0-6	**UNIT 4** Glacial clayey gravels, sands, and sandy gravels. Mostly chert.
Hydrostratigraphic zone (HZ)-D	Pennsylvanian		CHEROKEE (?) GROUP (UNDIFFERENTIATED)	0-35	**UNIT 5** BEDROCK: Interbedded silty clay/shale, lignite/coal, sandstone, and siltstone. Erosionally truncated by glaciolacustrine sequences. (Absent at the HISS).
Hydrostratigraphic zone (HZ)-E	Mississippian		STE. GENEVIEVE ST. LOUIS LIMESTONES	10+	**UNIT 6** BEDROCK: Hard, white to olive, well cemented, sandy limestone with interbedded shale laminations.

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North St. Louis County Sites
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AUTHOR	REVISION	DATE	
Leidos	0	05-24-2023	NOT TO SCALE

Figure 4-1. Generalized Stratigraphic Column

Path: U:\GPS\EMDAR\NCO Projects\CY2022\Rev0\Figure 4-2_Existing Monitoring Well Locations at the Latty Avenue Properties2.mxd

Figure 4-2. Existing Monitoring Well Locations at the Latty Avenue Properties

Notes:
For molybdenum results less than 3 times the reporting limit (RL), the error bar represents ± RL. The RL for molybdenum changed from 40 µg/L to 5 µg/L in CY 2011.
For selenium results less than 3 times the RL, the error bar represents ± RL of 5 µg/L.
For molybdenum and selenium results exceeding 3 times the RL, the error bar represents the upper and lower control limits on the control spike samples.
Molybdenum and selenium error bars for 2003 and earlier are based on laboratory control limits for 2003. Error bars for 2004 and later are based on laboratory control limits reported for the respective years.
For total U, the error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238, converted to µg/L.

Figure 4-3. Time-Versus-Concentration Plots for Molybdenum and Selenium in HISS-10 and Total U in HW22 at the HISS

Notes:
For molybdenum results less than 3 times the RL, the error bar represents ± RL. The RL for molybdenum changed from 40 µg/L to 5 µg/L in CY 2011.
For selenium results less than 3 times the RL, the error bar represents ± RL of 5 µg/L.
For molybdenum and selenium results exceeding 3 times the RL, the error bar represents the upper and lower control limits on the control spike samples.
Molybdenum and selenium error bars for 2003 and earlier are based on laboratory control limits for 2003. Error bars for 2004 and later are based on laboratory control limits reported for the respective years.
For total U, the error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238, converted to µg/L.

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Figure 4-3. Time-Versus-Concentration Plots for Molybdenum and Selenium in HISS-10 and Total U in HW22 at the HISS (Continued)

Notes:
For molybdenum results less than 3 times the RL, the error bar represents ± RL. The RL for molybdenum changed from 40 µg/L to 5 µg/L in CY 2011.
For selenium results less than 3 times the RL, the error bar represents ± RL of 5 µg/L.
For molybdenum and selenium results exceeding 3 times the RL, the error bar represents the upper and lower control limits on the control spike samples.
Molybdenum and selenium error bars for 2003 and earlier are based on laboratory control limits for 2003. Error bars for 2004 and later are based on laboratory control limits reported for the respective years.
For total U, the error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238, converted to µg/L.

Figure 4-3. Time-Versus-Concentration Plots for Molybdenum and Selenium in HISS-10 and Total U in HW22 at the HISS (Continued)

Path: U:\GPS\EMDAR\NCO Projects\CY2022\Rev0\Figure 4-4 Total U Concentrations in Unfiltered HZ-A Ground Water at the Latty Avenue Properties.mxd

Figure 4-4. Total U Concentrations in Unfiltered Groundwater at the Latty Avenue Properties

Figure 4-5. HZ-A Potentiometric Surface at the Latty Avenue Properties and the SLAPS and SLAPS VPs (May 16, 2022)

Figure 4-6. HZ-C Potentiometric Surface at the Latty Avenue Properties and the SLAPS and SLAPS VPs (May 16, 2022)

Path: U:\GPS\EMDAR\NCO Projects\CY2022\Rev0\Figure 4-7 HZ-A Potentiometric Surface at Latty and SLAPS.mxd

Figure 4-7. HZ-A Potentiometric Surface at the Latty Avenue Properties and the SLAPS and SLAPS VPs (November 14, 2022)

Figure 4-8. HZ-C Potentiometric Surface at the Latty Avenue Properties and the SLAPS and SLAPS VPs (November 14, 2022)

Notes

Geologic data used in the cross section collected through 2000.

Legend

Borehole pick

Well screen

Cross Section Location Map

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North St. Louis County Sites
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Author: Leidos

Date: 08/29/2000, revised 03/17/2023

File: SLAPSGlg05ExtendedAAS.sho

Figure 4-9. Geologic Cross-Section A-A' at the SLAPS

Notes

Geologic data used in the cross section collected through 2000.

Legend

Borehole pick

Well screen

Cross Section Location Map

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Drawn By: N. Voorhies

Date: 8/29/2000, revised 03/17/2023

File: SLAPSGlg05ExtendedBBS.sho

Figure 4-10. Geologic Cross-Section B-B' at the SLAPS and SLAPS VPs

Figure 4-11. Existing Groundwater Monitoring Locations at the SLAPS and SLAPS VPs

Notes:
For results less than 3 times the RL, the error bar represents ± RL. For results exceeding 3 times the RL, the error bar represents the upper and lower control limits on the control spike samples.
For results reported below the DL (non-detect), the value plotted is half the DL.

Figure 4-12. Time-Versus-Concentration Graphs for Barium in Groundwater at B53W06S and Chromium in Groundwater at B53W09S

Notes:
For results less than 3 times the RL, the error bar represents ± RL. For results exceeding 3 times the RL, the error bar represents the upper and lower control limits on the control spike samples.
For results reported below the DL (non-detect), the value plotted is half the DL.

FUSRAP	North St. Louis County Sites Annual Environmental Monitoring Data and Analysis Report for Calendar Year 2022	
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Figure 4-12. Time-Versus-Concentration Graphs for Barium in Groundwater at B53W06S and Chromium in Groundwater at B53W09S (Continued)

Note:
For total U, the error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238, converted to µg/L.

Figure 4-13. Time-Versus-Concentration Graphs for Total U in Groundwater at PW46

Path: U:\GPS\EMDAR\NCO Projects\CY2022\Rev0\Figure 4-14 Total U Concentrations in Ground Water at the SLAPS and SLAPS VPs.mxd

Figure 4-14. Total U Concentrations in Unfiltered Groundwater at the SLAPS and SLAPS VPs

Note:
The 10 *CFR* 20.1301 annual dose limit for members of the public is 100 mrem per year.

Figure 6-1. Dose Trends

Figure 6-2. Maximum Dose Versus Background Dose

APPENDIX A

DOCUMENTS FINALIZED IN CALENDAR YEAR 2022

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- *Pre-Design Investigation Summary Report and Final Status Survey Evaluation for Coldwater Creek (CWC)-Floodplain Properties CWC-155, CWC-157, CWC-159, CWC-262, Rue St. Denis Street (Partial), and North Highway 67 (Partial)* (March 14).
- *Addendum to the Pre-Design Investigation Work Plan for Coldwater Creek North of St. Denis Bridge: Old Jamestown Road to Fox Manor Drive* (April 6).
- *Pre-Design Investigation Summary Report and Final Status Survey Evaluation for Coldwater Creek (CWC)-Floodplain Properties CWC-130, CWC-131, CWC-172 through CWC-177, CWC-259, CWC-260, and CWC-410* (April 6).
- *Pre-Design Investigation Summary Report and Final Status Survey Evaluation for Coldwater Creek (CWC)-Floodplain Properties CWC-235 through CWC-251, CWC-286 through CWC-303, and Humes Lane* (May 31).
- *Pre-Design Investigation Summary Report and Final Status Survey Evaluation for Coldwater Creek (CWC)-Floodplain Properties CWC-263 through CWC-285, Paddock Creek, and East Humes Lane* (June 13).
- *Addendum to the Pre-Design Investigation Work Plan for Coldwater Creek North of St. Denis Bridge: Fox Manor Drive to Highway 367* (June 23).
- *North St. Louis County Sites Annual Environmental Monitoring Data and Analysis Report for CY 2021* (July 8).
- *Remedial Design/Remedial Action Work Description McDonnell Boulevard Bridge Area* (August 3).
- *Remedial Design/Remedial Action Work Description Pershall Road Area, Supplement No. 12 to the Remedial Action Work Plan Coldwater Creek Properties* (August 4).
- *Pre-Design Investigation Summary Report Coldwater Creek Group 1* (September 7).
- *Pre-Design Investigation Summary Report Latty Avenue* (October 4).
- *Addendum to the Pre-Design Investigation Work Plan for Coldwater Creek North of St. Denis Bridge: Highway 367 to Missouri River* (November 11).
- *Environmental Monitoring Implementation Plan for the North St. Louis Sites for Calendar Year 2023* (December 30).

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APPENDIX B

NORTH ST. LOUIS COUNTY FUSRAP SITES
2022 RADIONUCLIDE EMISSIONS NESHAP REPORT
SUBMITTED IN ACCORDANCE WITH REQUIREMENTS OF 40 *CFR* 61, SUBPART I

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ACRONYMS AND ABBREVIATIONS

Ac	actinium
AEC	Atomic Energy Commission
BNI	Bechtel National Inc.
CFR	*Code of Federal Regulations*
CWC	Coldwater Creek
CY	calendar year
DOE	U.S. Department of Energy
EDE	effective dose equivalent
FUSRAP	Formerly Utilized Sites Remedial Action Program
Futura	Futura Coatings Company
GIS	geographic information system
HEPA	high efficiency particulate air
HISS	Hazelwood Interim Storage Site
IA	investigation area
IAAAP	Iowa Army Ammunition Plant
MED	Manhattan Engineer District
NC	North St. Louis County
NESHAP	National Emission Standard for Hazardous Air Pollutants
Pa	protactinium
Ra	radium
RA	remedial action
SLAPS	St. Louis Airport Site
SLDS	St. Louis Downtown Site
STLAA	St. Louis Airport Authority
SU	survey unit
Th	thorium
U	uranium
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
VP	vicinity property

UNIT ABBREVIATIONS

Both English and metric units are used in this report. The units used in a specific situation are based on common unit usage or regulatory language (e.g., depths are given in feet, and areas are given in square meters). Units included in the following list are not defined at first use in this report.

°C	degrees Celsius (centigrade)
µCi/cm^3	microcurie(s) per cubic centimeter
µCi/mL	microcurie(s) per milliliter
Ci	curie(s)
Ci/pCi	curie(s) per picocurie
cm	centimeter(s)
cm^3	cubic centimeter(s)
g	gram(s)
kg	kilogram(s)
m	meter(s)
m^2	square meter(s)
m^3	cubic meter(s)
mL	milliliter(s)
mrem	millirem
pCi/g	picocurie(s) per gram
yd^3	cubic yard(s)

EXECUTIVE SUMMARY AND DECLARATION STATEMENT

This report presents the results of National Emission Standard for Hazardous Air Pollutants (NESHAP) calculations for the St. Louis Formerly Utilized Sites Remedial Action Program (FUSRAP) North St. Louis County (NC) Sites for calendar year (CY) 2022. The NESHAP requires the calculation of the effective dose equivalent (EDE) from radionuclide emissions to critical receptors. The report follows the requirements and procedures contained in 40 *Code of Federal Regulations (CFR)* 61, Subpart I, *National Emission Standards for Radionuclide Emissions from Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H*.

This report describes evaluations of sites at which a reasonable potential exists for radionuclide emissions due to St. Louis FUSRAP activities. These sites include the following: the investigation area (IA)-09 Ballfields; Pershall Road; vicinity property (VP)-56; and the St. Louis Airport Site (SLAPS) Loadout area. No remedial action (RA) excavations near the Latty Avenue Properties were performed in CY 2022, and potentially contaminated soil is covered by asphalt/concrete, gravel/railroad ballast, and vegetative ground cover; therefore, dose due to air particulate emissions was assumed to be negligible. This report also evaluates radionuclide emissions from the FUSRAP St. Louis Radioanalytical Laboratory operations. Emissions from the sites and project laboratory were evaluated for the entire CY 2022 to provide a conservative estimate of total emissions.

The NESHAP standard of EDE to a critical receptor from radionuclide emissions is 10 mrem per year. None of the sites exceeded this standard. The EDEs from radionuclide emissions at the sites were calculated using soil characterization data, air particulate monitoring data, and the U.S. Environmental Protection Agency (USEPA) CAP88-PC modeling code, which resulted in an EDE of 0.7 mrem per year from the SLAPS, and of 0.4 mrem per year from the SLAPS VPs. The EDE from the project laboratory emissions was calculated using the methodology prescribed in 40 *CFR* 61, Appendix D, *Methods for Estimating Radionuclide Emissions,* soil characterization data, and the USEPA CAP88-PC modeling code (USEPA 2020), resulting in an EDE of less than 0.1 mrem per year.

Evaluations for the SLAPS, the SLAPS VPs, and the project laboratory resulted in an EDE of less than 10 percent of the dose standard prescribed in 40 *CFR* 61.102. These sites are exempt from the reporting requirements of 40 *CFR* 61.104(a).

DECLARATION STATEMENT – 40 *CFR* 61.104(a)(xvi)

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 the submitted information is true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment. See 18 *U.S. Code* 1001.

_____ _____

Signature Date

Office: U.S. Army Corps of Engineers, St. Louis District Office
Address: 114 James S McDonnell Boulevard
Hazelwood, MO 63042
Contact: Jon Rankins

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1.0 PURPOSE

This NESHAP report contains the EDE calculations from radionuclide emissions (exclusive of radon) to critical receptors from the NC Sites at which a reasonable potential existed for radionuclide emissions due to St. Louis FUSRAP activities. These sites include the following: IA-09 Ballfields, Pershall Road, VP-56, the SLAPS Loadout area, and the project laboratory. The air emissions from the laboratory include fume hood stack releases of particulate radionuclides from sample preparation and separation activities. The air emissions from the other sites are ground releases of particulate radionuclides in soil as a result of windblown action and RA in the form of excavation and off-site disposal of soil.

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2.0 METHOD

Emission rates for the NC Sites were modeled using guidance documents (i.e., *A Guide for Determining Compliance with the Clean Air Act Standards for Radionuclide Emissions from NRC-Licensed and Non-DOE Federal Facilities* [USEPA 1989]) referenced in 40 *CFR* 61, Appendix E, *Compliance Procedures Methods for Determining Compliance with Subpart I*, and were measured by collection of environmental air samples. Emission rates for the laboratory were modeled using guidance in 40 *CFR* 61, Appendix D, *Methods for Estimating Radionuclide Emissions.* Emission rates were input into the USEPA computer code CAP88-PC, along with appropriate meteorological data and distances to critical receptors[1], to obtain the EDE from the air emissions.

Although 40 *CFR* 61.103 requires the use of the USEPA computer code COMPLY, USEPA no longer supplies technical support for COMPLY. However, the USEPA lists both COMPLY and CAP88-PC as atmospheric models for assessing dose and risk from radioactive air emissions (USEPA 2020). The USEPA continues to maintain and update the CAP88-PC modeling program and has updated it as recently as March 2020. In previous FUSRAP NESHAP reports, both COMPLY and CAP88-PC results have been compared. This comparison indicated that CAP88-PC is a comparable and conservative method of demonstrating compliance with 40 *CFR* 61, Subpart I. For these reasons, CAP88-PC was used in this report to demonstrate compliance with the NESHAP.

2.1 EMISSION RATE

Two methods were used to determine particulate radionuclide emission rates from the sites: (1) 40 *CFR* 61 Appendix D, *Methods for Estimating Radionuclide Emissions,* and (2) environmental air samples collected from the perimeter of a site.

For method one, emissions from laboratory fume hood exhaust during soil sample grinding operations and the dissolution of soil and water samples were evaluated using data from soil samples analyzed during CY 2022.

For method two, emissions during excavations and waste loadout were evaluated using air sampling data at the excavation and waste loadout perimeters.

2.2 EFFECTIVE DOSE EQUIVALENT

The EDE to critical receptors[1] is obtained using USEPA computer code CAP88-PC, Version 4.1 (USEPA 2020). CAP88-PC uses a Gaussian plume equation to estimate the dispersion of radionuclides and is referenced by the USEPA to demonstrate compliance with the NESHAP emissions criterion in 40 *CFR* 61. An area ground release at a height of 1 m is modeled for the sites, and a stack release at a height of 6 m is modeled for the laboratory.

The EDE is calculated by combining doses from ingestion, inhalation, air immersion, and external ground surface. CAP88-PC contains historical weather data libraries for major airports across the country, and the results can be modeled for receptors at multiple distances from the emissions source.

[1] "Critical receptors," as used in this report, are the locations for the nearest residence, farm, business, and school.

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3.0 METEOROLOGICAL DATA

Meteorological data were obtained from the CAP88-PC code for the Lambert – St. Louis International Airport (wind file 13994.WND). Data in the file were accumulated from 1988 through 1992.

- Average Annual Wind Velocity: 4.446 m per second
- Average Annual Precipitation Rate: 111 cm per year
- Average Annual Air Temperature: 14.18 °C

Wind speed frequency data were obtained from Lambert – St. Louis International Airport (see Table B-1).

Table B-1. St. Louis Wind Speed Frequency

Wind Speed Group (Knots)	Frequency (Percent)
0 – 3	10
4 – 7	29
8 – 12	36
13 – 18	21
19 – 24	3
25 – 31	1

Note: Knot = 1.151 miles per hour

Wind direction frequency data were obtained from the CAP88-PC wind file, 13994.WND (see Table B-2).

Table B-2. St. Louis Wind Rose Frequency

Wind Direction		Wind Frequency (Percent)	Wind Direction		Wind Frequency (Percent)
Wind Toward	Wind From		Wind Toward	Wind From	
North	South	13.1	South	North	5.6
North-Northwest	South-Southeast	7.4	South-Southeast	North-Northwest	4.3
Northwest	Southeast	6.8	Southeast	Northwest	6.1
West-Northwest	East-Southeast	6.9	East-Southeast	West-Northwest	8.7
West	East	5.5	East	West	9.0
West-Southwest	East-Northeast	2.8	East-Northeast	West-Southwest	6.8
Southwest	Northeast	3.1	Northeast	Southwest	5.4
South-Southwest	North-Northeast	3.7	North-Northeast	South-Southwest	5.0

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4.0 LATTY AVENUE PROPERTIES UNDER ACTIVE REMEDIATION

4.1 SITE HISTORY

In 1966, Continental Mining and Milling Company of Chicago, Illinois, purchased the wastes stored at the SLAPS and began moving them to a property at 9200 Latty Avenue (known as the Futura Coatings Company [Futura] since 1979) for storage. In 1967, the Commercial Discount Corporation of Chicago, Illinois, purchased the residues, dried the materials, and shipped much of the material to Canon City, Colorado. Cotter Corporation purchased the remaining residues in 1969 and dried and shipped more material to Canon City during 1970. In 1973, the remaining undried material was shipped to Canon City, and leached barium sulfate was mixed with soil and transported to a St. Louis County landfill. During these activities, improper storage, handling, and transportation of materials caused the spread of materials along haul routes and to the adjacent VPs.

In 1979, the owner of the 9200 Latty Avenue property excavated approximately 13,000 yd^3 from the western half of the property prior to constructing a manufacturing facility. The material excavated at this time was stockpiled on the eastern half of the property at 9170 Latty Avenue, which has been known as the Hazelwood Interim Storage Site (HISS) since 1979. In 1984, Bechtel National Inc. (BNI) performed removal actions, including clearing, cleanup, and excavation of the property at 9200 Latty Avenue and the surrounding VPs. This action created approximately 14,000 yd^3 of additional contaminated soil, which was stockpiled at the HISS.

In 1986, the U.S. Department of Energy (DOE) provided radiological support to the cities of Hazelwood and Berkeley, Missouri, for a drainage and road improvement project. Soil with constituents in excess of DOE RA guidelines was excavated and stored at the HISS. This action resulted in an additional 4,600 yd^3 of material being placed at the HISS in a supplemental storage pile.

In 1996, the owner of the property to the east of the HISS, General Investment Funds Real Estate Holding Company, in consultation with the DOE, made commercial parking and drainage improvements on the property. This action resulted in the stockpiling of approximately 8,000 yd^3 of soil and debris in two interim storage piles located in the southwestern portion of the Latty Avenue VP-02(L). These piles were referred to as the Eastern Piles.

In 2000 and 2001, the U.S. Army Corps of Engineers (USACE) removed the Main, Supplemental, and Eastern Piles and shipped the material by rail to properly permitted disposal facilities. The ground surface on which the piles were previously located was covered by a layer of plastic and approximately 6 inches of gravel.

Beginning in 2001, pre-design investigation surveys and sampling were performed on the Latty Avenue Properties to determine soil areas and building surfaces requiring remediation or decontamination. The USACE remediated contaminated areas, decontaminated building surfaces, and performed final status surveys between 2007 and 2021.

4.2 MATERIAL HANDLING AND PROCESSING FOR CALENDAR YEAR 2022

No RA excavations near the Latty Avenue properties were performed in CY 2022, and potentially contaminated soil is covered by asphalt/concrete, gravel/railroad ballast, and vegetative ground cover; therefore, dose due to air particulate emissions was assumed to be negligible.

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5.0 ST. LOUIS AIRPORT SITE AND ST. LOUIS AIRPORT SITE VICINITY PROPERTIES UNDER ACTIVE REMEDIATION

5.1 SITE HISTORY

The Manhattan Engineer District (MED) acquired the SLAPS in 1946 to store uranium-bearing residuals generated at the St. Louis Downtown Site (SLDS) from 1946 through 1966. In 1966, these residuals were purchased by Continental Mining and Milling Company of Chicago, removed from the SLAPS, and placed in storage at 9200 Latty Avenue (known as Futura since 1979) under an Atomic Energy Commission (AEC) license. After most of the residuals were removed, site structures were demolished and buried on the property, along with approximately 60 truckloads of scrap metal and a vehicle that had become contaminated. In 1973, the U.S. Congress and the City of St. Louis agreed to transfer ownership from the AEC to the St. Louis Airport Authority (STLAA). The USACE conducted cleanup operations on the SLAPS from 1998 through 2007. Although remediation concluded at the SLAPS in 2007, a small portion of the site is still used to conduct waste storage and loadout activities. The SLAPS Loadout area was expanded in August of 2020.

5.2 MATERIAL HANDING AND PROCESSING FOR CALENDAR YEAR 2022

During CY 2022, excavations were conducted on the IA-09 Ballfields, Pershall Road, and VP-56 and, waste loadout activities were conducted at the SLAPS Loadout facility. Air particulate samples were collected around excavation perimeters during active excavation on the SLAPS VPs and around the SLAPS Loadout area throughout CY 2022. Analytical results of air particulate samples were used to determine windblown in situ emissions.

5.3 SOURCE DESCRIPTION – RADIONUCLIDE SOIL CONCENTRATIONS

The radionuclide-specific concentrations on the IA-09 Ballfields, Pershall Road, VP-56, and the SLAPS Loadout facility were determined by using air particulate data and radionuclide-specific activity fractions estimated from 2022 railcar waste characterization data collected by the remedial action contractor. Attachment B-1 of this NESHAP report contains Table B-1-1, a summary table of the radionuclide concentrations used to calculate the emission rate from each site.

5.4 LIST OF ASSUMED AIR RELEASES FOR CALENDAR YEAR 2022

Ground releases of particulate radionuclides in soil, as a result of windblown action and RA in the form of excavation of soil for the IA-09 Ballfields, Pershall Road, and VP-56 are assumed for the particulate radionuclide emission determinations from the SLAPS VPs at which excavations occurred in CY 2022. Other SLAPS VPs do not contribute to the emission determinations for periods of inactivity due to the low activity and vegetative cover.

Ground releases of particulate radionuclides as a result of windblown action during waste loadout activities are assumed for the particulate radionuclide emission determinations from the SLAPS Loadout facility.

Emissions from the project laboratory operations are also assumed for the particulate radionuclide emission determinations from the laboratory site, which is now located at the SLAPS. The specific information related to this evaluation is located in Section 6.0.

5.5 DISTANCES TO CRITICAL RECEPTORS

The distances to critical receptors are shown on Figures B-1 and B-2 and presented in Table B-3. Distances and directions to critical receptors are determined using tools in a geographic information system (GIS).

Table B-3. SLAPS and SLAPS VPs Critical Receptors for CY 2022

Sources	Nearest Residence		Farm		Business		School	
	Distance (m)	Direction	Distance (m)	Direction	Distance (m)[a]	Direction	Distance (m)	Direction
IA-09 Ballfields[b]	1,300	Northwest	1,700	Northeast	200	East-Southeast	2,300	Northeast
Pershall Road	200	Northeast	1,200	East-Southeast	60	Southeast	1,000	East
VP-56	330	Northwest	1,000	Southeast	100	South	700	East
SLAPS Loadout	1,500	East	1,700	Northeast	200	West-Northwest	2,300	Northeast

[a] Distance from business receptor to center of source from the SLAPS Loadout is 200 m for emissions determination.
[b] The residence associated with Pershall Road and VP-56 was also evaluated for the IA-09 Ballfields. That residence is 2,000 m north of the IA-09 Ballfield excavations.

5.6 EMISSIONS DETERMINATION

5.6.1 Measured Airborne Radioactive Particulate Emissions

Particulate air samples were collected from around the perimeter of active excavations and the SLAPS Loadout area to measure the radionuclide emissions. The sample results provide the basis for determining the radionuclide emission rates during all of CY 2022. The average gross alpha and gross beta concentrations (in μCi/mL) were determined for each monitoring location for CY 2022. The site average concentrations are presented in Table B-4.

Table B-4. SLAPS and SLAPS VPs Average Gross Alpha and Beta Airborne Particulate Emissions for CY 2022

Monitoring Location	Average Concentration (μCi/mL)[a]	
	Gross Alpha	Gross Beta
IA-09 Ballfields	4.61E-15	3.02E-14
Pershall Road	5.44E-15	3.48E-14
VP-56	5.16E-15	3.08E-14
SLAPS Loadout	5.30E-15	3.06E-14
Background Concentration[b]	4.69E-15	2.47E-14

[a] Average concentration values for the sampling period by location.
[b] These concentrations are provided for informational purposes only. As a conservative approach, background values were not subtracted from the gross average concentration during the determination of EDE.

Radionuclide-specific activity fractions are determined from the average radionuclide concentration data established using 2022 railcar data from the excavated areas for the SLAPS VPs and for the SLAPS Loadout facility. The product of each radionuclide activity fraction and the gross concentration provide the radionuclide emission concentration as measured in μCi/cm^3. The gross average concentration (in μCi/cm^3) is converted to a release (emission) rate (in Ci per year) using Equations 1 and 2.

A Guide for Determining Compliance with the Clean Air Act Standards for Radionuclide Emissions from NRC-Licensed and Non-DOE Federal Facilities (USEPA 1989) includes Equation 1 for determination of the effective diameter of a non-circular stack or vent.

$$D = (1.3\ A)^{1/2} \qquad \textit{Equation 1}$$

where:

D = the effective diameter of the release (in m)
A = the area of the stack, vent, or release point (in m^2)

Table B-5 provides the effective surface area available for release of airborne radionuclides normalized to 1 year and the effective diameter for the SLAPS and excavated SLAPS VPs. Calculation of the effective surface area is contained in Attachment B-1 of this NESHAP report.

Table B-5. SLAPS and SLAPS VPs Excavation Effective Areas and Effective Diameters for CY 2022

Location	Effective Area (m^2)	Effective Diameters (m)
IA-09 Ballfields	1,668	47
Pershall Road	184	15
VP-56	822	33
SLAPS Loadout	5,000	81

The average annual wind speed for the Lambert – St. Louis International Airport is provided in CAP88-PC as 4.446 m per second. Conversion of this wind speed to a flow rate through stacks with the listed effective diameters for each area is completed using Equation 2.

$$F = V\ \pi\ (D)^2 / 4 \qquad \textit{Equation 2}$$

where:

V = the wind velocity (in m per minute) = 266.76 m per minute
F = the flow rate (in m^3 per minute)
π = a mathematical constant
D = the effective diameter of the release (in m) determined using Equation 13 from *A Guide for Determining Compliance with the Clean Air Act Standards for Radionuclide Emissions from NRC-Licensed and Non-DOE Federal Facilities* (USEPA 1989)

Converting the velocity of emissions from the sites to an effective flow rate results in the following site release flow rates for the SLAPS and SLAPS VPs, as listed in Table B-6. The product of the flow rate, the activity fraction associated with each radionuclide, and the appropriate conversion factors provide the site emission rate for each radionuclide, as contained in Table B-7. Attachment B-1 of this NESHAP report contains flow rate and average radionuclide concentration data.

Table B-6. SLAPS and SLAPS VPs Site Release Flow Rates for CY 2022

Location	Site Release Flow Rate (m^3/minute)
IA-09 Ballfields	4.5E+05
Pershall Road	5.0E+04
VP-56	2.2E+05
SLAPS Loadout	1.4E+06

5.6.2 St. Louis Airport Site and St. Louis Airport Site Vicinity Properties Total Airborne Radioactive Particulate Emission Rates

The total CY 2022 emission/release rates input into the USEPA codes for the SLAPS and SLAPS VPs are shown in Table B-7 and are based on the measured emission rates from the air samples collected from the perimeter of the excavation or loadout area as appropriate.

Table B-7. SLAPS and SLAPS VPs Total Airborne Radioactive Particulate Emission Rates for CY 2022

Radionuclide	Emission (Ci/year)[a]			
	IA-09 Ballfields	Pershall Road	VP-56	SLAPS Loadout
Uranium (U)-238	5.4E-05	1.5E-05	4.4E-05	2.3E-04
U-235	2.7E-06	6.4E-07	1.7E-06	1.0E-05
U-234	5.4E-05	1.5E-05	4.4E-05	2.3E-04
Radium (Ra)-226	8.0E-05	2.0E-05	5.5E-05	3.1E-04
Thorium (Th)-232	4.1E-05	1.2E-05	3.6E-05	1.8E-04
Th-230	7.7E-04	5.4E-05	3.5E-04	2.4E-03
Th-228	4.1E-05	1.2E-05	3.6E-05	1.8E-04
Ra-224	4.1E-05	1.2E-05	3.6E-05	1.8E-04
Th-234	2.0E-03	2.5E-04	9.9E-04	6.1E-03
Protactinium (Pa)-234m	2.0E-03	2.5E-04	9.9E-04	6.1E-03
Th-231	1.0E-04	1.1E-05	3.8E-05	2.7E-04
Ra-228	1.5E-03	2.0E-04	8.0E-04	4.8E-03
Actinium (Ac)-228	1.5E-03	2.0E-04	8.0E-04	4.8E-03
Pa-231	4.2E-06	0.0E+00	0.0E+00	5.2E-06
Ac-227	1.1E-05	1.3E-06	3.8E-06	3.3E-05

[a] Release rate based on a 365-day period at a respective flow rate (as presented in Table B-6) as determined from the average annual wind speed (4.446 m per second) and the effective site area (as presented in Table B-5) for each location.

5.7 CAP88-PC RESULTS

The CAP88-PC report is contained in Attachment B-2 of this NESHAP report. The effective area factor input was taken from Table B-5. Results show compliance with the 10 mrem per year criterion for all critical receptors. The results are summarized in Table B-8.

Table B-8. SLAPS and SLAPS VPs CAP88-PC Results for Critical Receptors for CY 2022

Source	Dose (mrem/year)			
	Nearest Residence[a]	Farm[a]	Business[b]	School[b]
IA-09 Ballfields	0.1	<0.1	0.2	<0.1
Pershall Road[c]	0.1	<0.1	<0.1	<0.1
VP-56	0.2	0.1	0.2	0.2
SLAPS Loadout[d]	0.2	0.2	0.5	0.2

[a] Occupancy factor is 100 percent for the nearest residence and farm.
[b] Corrected for the 23 percent occupancy factor (40 hours per week for 50 weeks per year).
[c] The dose from the IA-09 Ballfield excavations to the residence 2,000 m north of the IA-09 Ballfields (i.e., the same residence associated with Pershall Road and VP-56 excavations) was <0.1 mrem/year.
[d] Distance from the business receptor to the center of the source is 200 m for emissions determination.

6.0 FUSRAP ST. LOUIS RADIOANALYTICAL LABORATORY

6.1 SITE DESCRIPTION

The project laboratory is located on the SLAPS. The laboratory site covers approximately 490 m^2.

6.2 LIST OF ASSUMED AIR RELEASES FOR CALENDAR YEAR 2022

Emissions from the project laboratory operations are assumed for the particulate radionuclide emission determinations from the laboratory site.

6.3 EFFLUENT CONTROLS

The effluent controls at the project laboratory during operations include performing all radioanalytical activities in fume hoods that exhaust to the outside air after passing through a high efficiency particulate air (HEPA) filter.

6.4 DISTANCES TO CRITICAL RECEPTORS

The distances to critical receptors are shown on Figure B-1 and listed in Table B-9. Distances and directions to critical receptors are determined using tools in a GIS.

Table B-9. Laboratory Critical Receptors for CY 2022

Receptor	Distance (m)	Direction from Site
Nearest Residence	1,600	Northwest
Farm	1,700	Northeast
Business	50	Northwest
School	2,300	Northeast

6.5 EMISSIONS DETERMINATIONS

6.5.1 Stack Emissions from FUSRAP St. Louis Radioanalytical Laboratory Operations

Two potential sources of emissions from laboratory operations exist:

1. The drying and grinding operations for soil samples, and
2. The dissolution of soil and water samples.

To obtain an estimate of the emissions these operations can cause, the methodology in 40 *CFR* 61, Appendix D, *Methods for Estimating Radionuclide Emissions*, was utilized. For the drying and grinding operations, a factor of 0.001 (applicable to liquids and powders) was applied to the entire annual laboratory inventory to determine the emissions for the year. For the dissolution operation; however, only 5 g of any sample are used. Because the dissolution involved heating samples to near boiling temperatures, no adjustment was made to the dissolution inventory to determine the emissions (a factor of 1.0, as specified in 40 *CFR* 61, Appendix D). To account for the small aliquot utilized, the annual inventory was adjusted by a factor of 0.005 (the ratio of the 5-g aliquot to the 1-kg sample mass) to estimate emissions. The two emission sources were then summed to determine the total laboratory source term.

Note that no credit is taken for emission controls during the drying and grinding operations, although 40 *CFR* 61, Appendix D, allows for credit to be taken for the HEPA filters installed on

the grinder equipment. The calculated source term therefore provides a conservative basis on which to determine compliance with USEPA guidance in 40 *CFR* 61.

To determine whether the laboratory complies with the 10 mrem per year limit specified in 40 *CFR* 61, Subpart I, the annual inventory handled by the laboratory had to be determined. The actual number of samples handled by the laboratory was reported as shown in Table B-10. With these data, the following equation was used to calculate laboratory emissions from the operations conducted in CY 2022.

$$\text{Emission Rate (Ci/year)} = C * [(N_1 * F_1) + (N_2 * F_2)] * 1{,}000 \text{ g/sample} * 1E\text{-}12 \text{ (Ci/pCi)}$$

where:

C = the concentration of a radionuclide of concern in a sample type (in pCi/g)
N_1 = the number of samples involved in a drying and grinding operation
N_2 = the number of samples involved in a separations operation
F = the appropriate correction factor (i.e., 0.001 for drying and grinding [F_1] or 0.005 for dissolution [F_2])

Table B-10. Laboratory Annual Sample Inventory for CY 2022

Site	Type	Gamma Spectroscopy[a]	Isotopic Ra[a,b]	Isotopic Th[a,b]	Isotopic U[a,b]	Total Drying and Grinding[a,c]	Total Separations[a,d]
Latty Avenue Properties	Soil	22	22	---	---	22	22
Latty Avenue Properties	Water	---	6	6	6	---	18
Iowa Army Ammunitions Plant (IAAAP)	Soil	557	26	---	534	557	560
IAAAP	Water	8	---	---	28	---	28
SLAPS	Soil	---	---	---	---	---	---
SLAPS	Water	---	7	7	7	---	21
SLAPS VPs	Soil	3,387	3,407	---	---	3,407	3,407
SLAPS VPs	Water	15	89	89	11	---	189
Coldwater Creek (CWC)	Sediment (soil)	4,724	4,728	18	18	4,728	4,764
CWC	Water	---	30	30	30	---	90
SLDS	Soil	855	858	---	---	858	858
SLDS	Water	---	80	80	10	---	170
		HISS and Latty Avenue VPs Total				22	40
		IAAAP Total				557	588
		SLAPS, SLAPS VPs, and CWC Total				8,135	8,471
		SLDS Total				858	1,028
		Grand Total				**9,572**	**10,127**

[a] Data obtained from St. Louis FUSRAP database for samples analyzed in 2022.
[b] Assumes isotopic Ra, Th, and U occur in separate and distinct processes.
[c] Assumes all soil samples went through a drying and grinding process.
[d] Assumes all soil and water samples for isotopic Ra, Th, and U went through a separations process.
Notes: CWC samples use SLAPS characterization data to determine release rates.
--- not applicable

6.5.2 Laboratory Total Airborne Radioactive Particulate Emission Rates

The project laboratory total CY 2022 emission rate was input into the USEPA CAP88-PC code. The total emission rates are shown in Table B-11 as the calculated emissions from laboratory operations. The result was then used to calculate total dose to the hypothetical maximally exposed receptor. Calculation of emission rates is contained in Attachment B-1 of this NESHAP report.

Table B-11. Laboratory Total Airborne Radioactive Particulate Emission Rates for CY 2022

Radionuclide	Emission (Ci/year)[a]
U-238	1.1E-07
U-235	4.9E-09
U-234	8.6E-08
Ra-226	8.3E-08
Th-232	6.2E-08
Th-230	3.6E-07
Th-228	7.0E-08
Ra-224	6.2E-08
Th-234	1.1E-07
Pa-234m	1.1E-07
Th-231	4.9E-09
Ra-228	4.9E-08
Ac-228	4.9E-08
Pa-231	3.9E-09
Ac-227	5.7E-09

[a] Total emission rate is the sum of individual emission rates determined using the calculation in Section 6.5.1 of this NESHAP report.

6.6 CAP88-PC RESULTS

The CAP88-PC report is contained in Attachment B-2 of this NESHAP report. The stack factor input was 6 m high and 0.3 m in diameter. This evaluation demonstrates that all project laboratory critical receptors receive less than 10 percent of the dose standard prescribed in 40 *CFR* 61.102; therefore, the laboratory is exempt from the reporting requirement of 40 *CFR* 61.104(a). The results are summarized in Table B-12.

Table B-12. Laboratory CAP88-PC Results for Critical Receptors for CY 2022

Receptor	Distance (m)	Direction from Site	Dose (mrem/year)
Nearest Residence[a]	1,600	Northwest	<0.1
Farm[a]	1,700	Northeast	<0.1
Business[b]	50	Northwest	<0.1
School[b]	2,300	Northeast	<0.1

[a] Occupancy factor is 100 percent for the nearest residence and farm.
[b] Corrected for the 23 percent occupancy factor (40 hours per week for 50 weeks per year).

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7.0 REFERENCES

USEPA 1989. U.S. Environmental Protection Agency, Office of Radiation Programs, Washington, D.C. *A Guide for Determining Compliance with the Clean Air Act Standards for Radionuclide Emissions from NRC-Licensed and Non-DOE Federal Facilities*. EPA 520/1-89-002. October 1989.

USEPA 2020. U.S. Environmental Protection Agency. CAP88-PC Version 4.1 Computer Code, U.S. Environmental Protection Agency. March 2020.

18 *U.S. Code* 1001. *U.S. Code*, Title 18, Crimes and Criminal Procedure; Part I, Crimes; Chapter 47, Fraud and False Statements; Section 1001, Statements or entries generally.

40 *CFR* 61, Subpart I. *National Emission Standards for Radionuclide Emissions From Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H*.

40 *CFR* 61, Appendix D. *Methods for Estimating Radionuclide Emissions.*

40 *CFR* 61, Appendix E. *Compliance Procedures Methods for Determining Compliance with Subpart I.*

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APPENDIX B

FIGURES

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Path: U:\GPS\EMDAR\NCO Projects\CY2022\Rev0\Figure B-1 Laboratory SLAPS and SLAPS VPs Critical Receptors South.mxd

Figure B-1. FUSRAP St. Louis Radioanalytical Laboratory, SLAPS, and SLAPS VPs Critical Receptors - South

Path: U:\GPS\EMDAR\NCO Projects\CY2022\Rev0\Figure B-2 SLAPS and SLAPS VPs Critical Receptors North.mxd

Figure B-2. SLAPS and SLAPS VPs Critical Receptors - North

ATTACHMENT B-1

CALCULATED EMISSION RATES

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Table B-1-1. SLAPS and SLAPS VPs Soil Radionuclide Concentrations for CY 2022

Property	IA-09 Ballfields[a]	Pershall Road[a]	VP-56[a]	SLAPS Loadout[a]
Radionuclide	**Average Concentration (pCi/g)**			
U-238	0.83	0.68	0.79	0.80
U-235	0.04	0.03	0.03	0.04
U-234	0.83	0.68	0.79	0.80
Ra-226	1.24	0.90	0.98	1.10
Ra-228	0.64	0.55	0.64	0.63
Th-232	0.64	0.55	0.64	0.63
Th-230	12.04	2.45	6.24	8.67
Th-228	0.64	0.55	0.64	0.63
Pa-231	0.07	0	0	0.02
Ac-227	0.17	0.06	0.07	0.12

[a] Soil radionuclide concentrations derived from the average soil radionuclide concentrations from the 2022 railcar concentrations.

Table B-1-2. SLAPS and SLAPS VPs Average Gross Alpha and Beta Airborne Particulate Emissions for CY 2022

Location	Average Concentration (µCi/mL) for Location[a]	
	Gross Alpha	Gross Beta
IA-09 Ballfields	4.61E-15	3.02E-14
Pershall Road	5.44E-15	3.48E-14
SLAPS Loadout	5.30E-15	3.06E-14
VP-56	5.16E-15	3.08E-14
Background Concentration[b]	4.69E-15	2.47E-14

[a] Average concentration values for the sampling period by location.
[b] These concentrations are provided for informational purposes only.

Table B-1-3. SLAPS and SLAPS VPs Excavation Data for CY 2022

Location	Area (m^2)	Excavation Start Date[a]	Excavation End Date[a]
Ballfields Phase 3, Survey Unit (SU)-28A	1,507	02/01/22	03/23/22
Ballfields Phase 3, SU-29A	2,687	03/28/22	10/11/22
Pershall Road Area, SU-1A	378	09/19/22	10/19/22
Pershall Road Area, SU-1B	558	09/22/22	11/08/22
Pershall Road Area, SU-2A	398	11/09/22	12/31/22
Pershall Road Area, SU-2B	411	12/14/22	12/31/22
VP-56, SU-2A	1,083	02/28/22	05/26/22
VP-56, SU-2B	844	05/09/22	06/29/22
VP-56, SU-3A	435	06/06/22	09/19/22
VP-56, SU-3B (partial)	1,242	07/11/22	10/03/22
VP-56, SU-3C	117	10/03/22	10/26/22
VP-56, SU-3D	241	12/06/22	12/31/22
SLAPS Loadout	5,000	01/01/22	12/31/22

[a] Open/close dates set to start or stop at CY boundary.

Table B-1-4. SLAPS and SLAPS VPs Average Surface Area and Flow Rate per Location for CY 2022

Location	Total Days	Surface Area × Total Days	Average Surface Area/Year (A) (m^2)	Diameter of Stack D = $(1.3\ A)^{1/2}$ (m)	Flow Rate $F = V\ \pi\ [(D)^2/4]*60$ (m^3/minute)
IA-09 Ballfields					
Ballfields Phase 3, SU-28A	51	76,861	---	---	---
Ballfields Phase 3, SU-29A	198	532,051	---	---	---
	Total	**608,912**	**1,668**	**47**	**4.5E+05**
Pershall Road					
Pershall Road Area, SU-1A	31	11,716	---	---	---
Pershall Road Area, SU-1B	48	26,778	---	---	---
Pershall Road Area, SU-2A	53	21,109	---	---	---
Pershall Road Area, SU-2B	18	7,393	---	---	---
	Total	**66,996**	**184**	**15**	**5.0E+04**
VP-56					
VP-56, SU-2A	88	95,334	---	---	---
VP-56, SU-2B	52	43,884	---	---	---
VP-56, SU-3A	106	46,156	---	---	---
VP-56, SU-3B (partial)	85	105,556	---	---	---
VP-56, SU-3C	24	2,805	---	---	---
VP-56, SU-3D	26	6,273	---	---	---
	Total	**300,009**	**822**	**33**	**2.2E+05**
SLAPS Loadout					
SLAPS Loadout	365	1,825,000	---	---	---
	Total	**1,825,000**	**5,000**	**81**	**1.4E+06**

Note: --- not applicable

Table B-1-5. SLAPS and SLAPS VPs Airborne Radioactive Particulate Emissions Based on Site Perimeter Air Samples for CY 2022

Property	IA-09 Ballfields			Pershall Road			VP-56			SLAPS Loadout		
Radionuclide	Activity Fraction[a]	Emission Concentration (µCi/cm^3)[b]	Release Rate (Ci/year)[c]	Activity Fraction[a]	Emission Concentration (µCi/cm^3)[b]	Release Rate (Ci/year)[c]	Activity Fraction[a]	Emission Concentration (µCi/cm^3)[b]	Release Rate (Ci/year)[c]	Activity Fraction[a]	Emission Concentration (µCi/cm^3)[b]	Release Rate (Ci/year)[c]
U-238[a]	0.05	2.2E-16	5.4E-05	0.11	5.7E-16	1.5E-05	0.07	3.8E-16	4.4E-05	0.06	3.2E-16	2.3E-04
U-235[a]	0.002	1.1E-17	2.7E-06	0.004	2.4E-17	6.4E-07	0.003	1.5E-17	1.7E-06	0.003	1.4E-17	1.0E-05
U-234	0.05	2.2E-16	5.4E-05	0.11	5.7E-16	1.5E-05	0.07	3.8E-16	4.4E-05	0.06	3.2E-16	2.3E-04
Ra-226[a]	0.07	3.3E-16	8.0E-05	0.14	7.6E-16	2.0E-05	0.09	4.7E-16	5.5E-05	0.08	4.4E-16	3.1E-04
Th-232[a]	0.04	1.7E-16	4.1E-05	0.09	4.6E-16	1.2E-05	0.06	3.1E-16	3.6E-05	0.05	2.5E-16	1.8E-04
Th-230[a]	0.70	3.2E-15	7.7E-04	0.38	2.1E-15	5.4E-05	0.58	3.0E-15	3.5E-04	0.65	3.4E-15	2.4E-03
Th-228[a]	0.04	1.7E-16	4.1E-05	0.09	4.6E-16	1.2E-05	0.06	3.1E-16	3.6E-05	0.05	2.5E-16	1.8E-04
Ra-224[d]	0.04	1.7E-16	4.1E-05	0.09	4.6E-16	1.2E-05	0.06	3.1E-16	3.6E-05	0.05	2.5E-16	1.8E-04
Th-234[d]	0.28	8.4E-15	2.0E-03	0.27	9.5E-15	2.5E-04	0.27	8.4E-15	9.9E-04	0.28	8.5E-15	6.1E-03
Pa-234m[d]	0.28	8.4E-15	2.0E-03	0.27	9.5E-15	2.5E-04	0.27	8.4E-15	9.9E-04	0.28	8.5E-15	6.1E-03
Th-231[d]	0.01	4.3E-16	1.0E-04	0.01	4.0E-16	1.1E-05	0.01	3.3E-16	3.8E-05	0.01	3.8E-16	2.7E-04
Ra-228[a]	0.21	6.4E-15	1.5E-03	0.22	7.7E-15	2.0E-04	0.22	6.8E-15	8.0E-04	0.22	6.6E-15	4.8E-03
Ac-228[d]	0.21	6.4E-15	1.5E-03	0.22	7.7E-15	2.0E-04	0.22	6.8E-15	8.0E-04	0.22	6.6E-15	4.8E-03
Pa-231[a,d]	0.004	1.8E-17	4.2E-06	0.000	0.0E+00	0.0E+00	0.000	0.0E+00	0.0E+00	0.001	7.3E-18	5.2E-06
Ac-227[a,d]	0.010	4.5E-17	1.1E-05	0.009	4.9E-17	1.3E-06	0.01	3.3E-17	3.8E-06	0.009	4.6E-17	3.3E-05

[a] Average soil concentrations are presented in Table B-1-1.
[b] Emission concentration is equal to the activity fraction * the gross alpha or gross beta airborne particulate concentrations listed in Table B-1-2.
[c] Release rate based on 365-day period at measured flow rate (Table B-1-4) for each site as determined from the average annual wind speed (4.446 m per second) and calculated site area (Table B-1-4). (Note: 1 mL = 1 cm^3.)
[d] If sample data were not available, the radionuclide was assumed to be in secular equilibrium with the parent radionuclide.

Table B-1-6. USACE St. Louis FUSRAP Laboratory Analyses for CY 2022

Site	Type	Gamma Spectroscopy	Isotopic Ra[a]	Isotopic Th[a]	Isotopic U[a]	Total Drying and Grinding[b]	Total Separations[c]
Latty VPs	Soil	22	22	---	---	22	22
Latty VPs	Water	---	6	6	6	---	18
IAAAP	Soil	557	26	---	534	557	560
IAAAP	Water	8	---	---	28	---	28
SLAPS	Soil	---	---	---	---	---	---
SLAPS	Water	---	7	7	7	---	21
SLAPS VPs	Soil	3,387	3,407	---	---	3,407	3,407
SLAPS VPs	Water	15	89	89	11	---	189
CWC	Sediment (Soil)	4,724	4,728	18	18	4,728	4,764
CWC	Water	---	30	30	30	---	90
SLDS	Soil	855	858	---	---	858	858
SLDS	Water	---	80	80	10	---	170
		Latty Avenue Properties Total				22	40
		IAAAP Total				557	588
		SLAPS, SLAPS VPs, and CWC Total				8,135	8,471
		SLDS Total				858	1,028
		Grand Total				9,572	10,127

[a] Assumes isotopic Ra, Th, and U occur in separate and distinct processes.
[b] Assumes all soil samples went through a drying and grinding process.
[c] Assumes all soil and water samples for isotopic Ra, Th, and U went through a separations process.
Notes: Data provided by the project laboratory for CY 2022.
--- not applicable

Table B-1-7. SLDS Property Laboratory Samples for CY 2022

Radionuclide	Average (pCi/g)	No. Samples (Drying and Grinding)	No. Samples (Separations)	Emission Rate (Ci/year)[a]
U-238[b]	3.7	858	1,028	2.2E-08
U-235[b]	0.2	858	1,028	1.3E-09
U-234[b,c]	3.7	858	1,028	2.2E-08
Ra-226[b]	2.2	858	1,028	1.3E-08
Th-232[b]	1.0	858	1,028	5.9E-09
Th-230[b]	3.4	858	1,028	2.0E-08
Th-228[b]	1.2	858	1,028	6.9E-09
Ra-224[c]	1.0	858	1,028	5.9E-09
Th-234[c]	3.7	858	1,028	2.2E-08
Pa-234m[c]	3.7	858	1,028	2.2E-08
Th-231[c]	0.2	858	1,028	1.3E-09
Ra-228[b]	0.8	858	1,028	4.5E-09
Ac-228[c]	0.8	858	1,028	4.5E-09
Pa-231[c]	0.2	858	1,028	9.6E-10
Ac-227[c]	0.2	858	1,028	1.5E-09

[a] Emission Rate = (0.001 * Avg * No. Samples [drying and grinding] + 0.005 * Avg * No. Samples [separations]) * (1,000 g * 1E-12 Ci/pCi).
[b] Average soil concentration from all data analyzed at the project laboratory during 2022.
[c] When data were not available, the radionuclide was assumed to be in secular equilibrium with the parent radionuclide.

Table B-1-8. SLAPS and SLAPS VPs Laboratory Samples for CY 2022

Radionuclide	Average (pCi/g)	No. Samples (Drying and Grinding)	No. Samples (Separations)	Emission Rate (Ci/year)[a]
U-238[b]	1.1	8,135	8,471	5.7E-08
U-235[b]	0.05	8,135	8,471	2.4E-09
U-234[b,c]	1.1	8,135	8,471	5.7E-08
Ra-226[b]	1.2	8,135	8,471	5.9E-08
Th-232[b]	1.0	8,135	8,471	5.2E-08
Th-230[b]	2.6	8,135	8,471	1.3E-07
Th-228[b]	1.2	8,135	8,471	5.9E-08
Ra-224[c]	1.0	8,135	8,471	5.2E-08
Th-234[c]	1.1	8,135	8,471	5.7E-08
Pa-234m[c]	1.1	8,135	8,471	5.7E-08
Th-231[c]	0.05	8,135	8,471	2.4E-09
Ra-228[b]	0.8	8,135	8,471	4.2E-08
Ac-228[c]	0.8	8,135	8,471	4.2E-08
Pa-231[c]	0.00	8,135	8,471	0.0E+00
Ac-227[c]	0.03	8,135	8,471	1.4E-09

[a] Emission Rate = (0.001 * Avg * No. Samples [drying and grinding] + 0.005 * Avg * No. Samples [separations]) * (1,000 g * 1E-12 Ci/pCi).
[b] Average soil concentration from all data analyzed at the project laboratory during 2022.
[c] When data were not available, the radionuclide was assumed to be in secular equilibrium with the parent radionuclide.

Table B-1-9. Latty Avenue Property Laboratory Samples for CY 2022

Radionuclide	Average (pCi/g)	No. Samples (Drying and Grinding)	No. Samples[a] (Separations)	Emission Rate (Ci/year)[a]
U-238[b]	12.6	22	40	2.8E-09
U-235[b]	0.94	22	40	2.1E-10
U-234[b,c]	12.6	22	40	2.8E-09
Ra-226[b]	36.1	22	40	8.0E-09
Th-232[b]	2.1	22	40	4.6E-10
Th-230[b]	926.6	22	40	2.1E-07
Th-228[b]	1.5	22	40	3.3E-10
Ra-224[c]	2.1	22	40	4.6E-10
Th-234[c]	12.6	22	40	2.8E-09
Pa-234m[c]	12.6	22	40	2.8E-09
Th-231[c]	0.9	22	40	2.1E-10
Ra-228[b]	1.1	22	40	2.4E-10
Ac-228[c]	1.1	22	40	2.4E-10
Pa-231[b]	13.2	22	40	2.9E-09
Ac-227[b]	12.7	22	40	2.8E-09

[a] Emission Rate = (0.001 * Avg * No. Samples [drying and grinding] + 0.005 * Avg * No. Samples [separations]) * (1,000 g * 1E-12 Ci/pCi).
[b] Average soil concentration from all data analyzed at the project laboratory during 2022.
[c] When data were not available, the radionuclide was assumed to be in secular equilibrium with the parent radionuclide.

Table B-1-10. Iowa Army Ammunition Plant Laboratory Samples for CY 2022

Radionuclide	Average (pCi/g)	No. Samples (Drying and Grinding)	No. Samples (Separations)	Emission Rate (Ci/year)[a]
U-238[b]	9.3	557	588	3.3E-08
U-235[b]	0.3	557	588	9.7E-10
U-234[c]	1.2	557	588	4.3E-09
Ra-226[b]	0.9	557	588	3.1E-09
Th-232[b]	0.8	557	588	2.9E-09
Th-230[b]	0.0	557	588	0.0E+00
Th-228[b]	0.8	557	588	2.9E-09
Ra-224[c]	0.8	557	588	2.9E-09
Th-234[c]	9.3	557	588	3.3E-08
Pa-234m[c]	9.3	557	588	3.3E-08
Th-231[c]	0.3	557	588	9.7E-10
Ra-228[b]	0.8	557	588	2.9E-09
Ac-228[c]	0.8	557	588	2.9E-09
Pa-231[c]	0.0	557	588	0.0E+00
Ac-227[c]	0.01	557	588	5.0E-11

[a] Emission Rate = (0.001 * Avg * No. Samples [drying and grinding]+ 0.005 * Avg * No. Samples [separations]) * (1,000 g * 1E-12 Ci/pCi).
[b] Average soil concentration from all IAAAP data analyzed at the project laboratory during 2022.
[c] When data were not available, the radionuclide was assumed to be in secular equilibrium with the parent radionuclide.

Table B-1-11. Total Laboratory Airborne Radioactive Particulate Emission Rate for CY 2022

Radionuclide	Emission Rate (Ci/year)				
	SLDS	SLAPS and SLAPS VPs	Latty Avenue Properties	IAAAP	Total Across Laboratory[a]
U-238	2.2E-08	5.7E-08	2.8E-09	3.3E-08	1.1E-07
U-235	1.3E-09	2.4E-09	2.1E-10	9.7E-10	4.9E-09
U-234	2.2E-08	5.7E-08	2.8E-09	4.3E-09	8.6E-08
Ra-226	1.3E-08	5.9E-08	8.0E-09	3.1E-09	8.3E-08
Th-232	5.9E-09	5.2E-08	4.6E-10	2.9E-09	6.2E-08
Th-230	2.0E-08	1.3E-07	2.1E-07	0.0E+00	3.6E-07
Th-228	6.9E-09	5.9E-08	3.3E-10	2.9E-09	7.0E-08
Ra-224	5.9E-09	5.2E-08	4.6E-10	2.9E-09	6.2E-08
Th-234	2.2E-08	5.7E-08	2.8E-09	3.3E-08	1.1E-07
Pa-234m	2.2E-08	5.7E-08	2.8E-09	3.3E-08	1.1E-07
Th-231	1.3E-09	2.4E-09	2.1E-10	9.7E-10	4.9E-09
Ra-228	4.5E-09	4.2E-08	2.4E-10	2.9E-09	4.9E-08
Ac-228	4.5E-09	4.2E-08	2.4E-10	2.9E-09	4.9E-08
Pa-231	9.6E-10	0.0E+00	2.9E-09	0.0E+00	3.9E-09
Ac-227	1.5E-09	1.4E-09	2.8E-09	5.0E-11	5.7E-09

[a] Total emission rate is the sum of the SLDS, SLAPS and SLAPS VPs, and IAAAP emission rates.

ATTACHMENT B-2

CAP88-PC RUNS

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CAP88-PC RUNS FOR THE SLAPS AND SLAPS VICINITY PROPERTIES

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CAP88 OUTPUT RESULTS

IA-09 BALLFIELDS

CAP88-PC

Version 4.1

Clean Air Act Assessment Package – 1988

D O S E A N D R I S K S U M M A R I E S

Non-Radon Individual Assessment
Fri Mar 31 09:57:19 2023

```
     Facility:  IA-9 Ballfields
      Address:
         City:  St. Louis
        State:  MO          Zip:  63042


Source Category:  Area
    Source Type:  Area
  Emission Year:  2022
 DOSE Age Group:  Adult

       Comments:  Air


   Dataset Name:  2022 IA-9 Ballfi
   Dataset Date:  Mar 31, 2023 09:57 AM
      Wind File:  C:\Users\randy\OneDrive\Documents\CAP88\Wind Files\13994.WND
```

Fri Mar 31 09:57:19 2023 SUMMARY
Page 1

ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem)
Adrenals	2.07E-01
UB_Wall	2.27E-01
Bone_Sur	1.48E+01
Brain	2.17E-01
Breasts	2.35E-01
St_Wall	2.19E-01
SI_Wall	2.18E-01
ULI_Wall	2.26E-01
LLI_Wall	2.45E-01
Kidneys	4.45E-01
Liver	6.69E-01
Muscle	2.42E-01
Ovaries	3.08E-01
Pancreas	2.09E-01
R_Marrow	1.00E+00
Skin	1.48E+00
Spleen	2.20E-01
Testes	3.38E-01
Thymus	2.18E-01
Thyroid	2.25E-01
GB_Wall	2.09E-01
Ht_Wall	2.17E-01
Uterus	2.15E-01
ET_Reg	1.32E+00
Lung	3.30E+00
Effectiv	8.92E-01

PATHWAY EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem)
INGESTION	6.66E-02
INHALATION	6.22E-01
AIR IMMERSION	1.31E-05
GROUND SURFACE	2.03E-01
INTERNAL	6.88E-01
EXTERNAL	2.03E-01
TOTAL	8.92E-01

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NUCLIDE EFFECTIVE DOSE EQUIVALENT SUMMARY

Nuclide	Selected Individual (mrem)
U-238	4.26E-03
Th-234	7.05E-04
Pa-234m	1.73E-03
Pa-234	3.41E-05
U-234	5.15E-03
Th-230	3.56E-01
Ra-226	9.83E-03
Rn-222	8.89E-06
Po-218	1.59E-10
Pb-214	5.81E-03
At-218	5.98E-10
Bi-214	3.39E-02
Rn-218	3.46E-12
Po-214	1.88E-06
Tl-210	1.33E-05
Pb-210	2.82E-05
Bi-210	4.56E-04
Hg-206	3.68E-11
Po-210	1.18E-07
Tl-206	1.06E-09
U-235	3.35E-04
Th-231	1.18E-05
Pa-231	1.33E-02
Ac-227	2.64E-02
Th-227	2.17E-04
Fr-223	2.04E-06
Ra-223	2.43E-04
Rn-219	1.05E-04
At-219	0.00E+00
Bi-215	4.72E-10
Po-215	3.21E-07
Pb-211	2.06E-04
Bi-211	8.50E-05
Tl-207	1.07E-04
Po-211	4.09E-08
Th-232	3.50E-02
Ra-228	1.87E-01
Ac-228	6.31E-02
Th-228	4.74E-02
Ra-224	3.71E-03
Rn-220	4.28E-05
Po-216	1.03E-06
Pb-212	9.41E-03
Bi-212	1.10E-02
Po-212	0.00E+00
Tl-208	7.58E-02
TOTAL	8.92E-01

Fri Mar 31 09:57:19 2023 SUMMARY
Page 3

CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk
Esophagu	2.34E-09
Stomach	8.99E-09
Colon	2.47E-08
Liver	1.08E-08
LUNG	3.49E-07
Bone	1.41E-08
Skin	1.48E-09
Breast	1.04E-08
Ovary	4.18E-09
Bladder	5.59E-09
Kidneys	2.42E-09
Thyroid	7.15E-10
Leukemia	1.40E-08
Residual	3.32E-08
Total	4.82E-07
TOTAL	4.82E-07

PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	2.42E-08
INHALATION	3.51E-07
AIR IMMERSION	7.06E-12
GROUND SURFACE	1.07E-07
INTERNAL	3.75E-07
EXTERNAL	1.07E-07
TOTAL	4.82E-07

Fri Mar 31 09:57:19 2023 SUMMARY
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NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
U-238	4.46E-09
Th-234	7.22E-10
Pa-234m	3.03E-10
Pa-234	1.86E-11
U-234	5.45E-09
Th-230	1.92E-07
Ra-226	8.94E-09
Rn-222	4.85E-12
Po-218	7.10E-17
Pb-214	3.11E-09
At-218	7.36E-17
Bi-214	1.79E-08
Rn-218	1.89E-18
Po-214	1.03E-12
Tl-210	7.08E-12
Pb-210	1.26E-11
Bi-210	5.05E-11
Hg-206	1.63E-17
Po-210	6.48E-14
Tl-206	1.20E-16
U-235	2.98E-10
Th-231	6.09E-12
Pa-231	1.31E-09
Ac-227	7.29E-09
Th-227	1.18E-10
Fr-223	7.63E-13
Ra-223	1.31E-10
Rn-219	5.75E-11
At-219	0.00E+00
Bi-215	2.11E-16
Po-215	1.76E-13
Pb-211	7.37E-11
Bi-211	4.64E-11
Tl-207	1.37E-11
Po-211	2.24E-14
Th-232	1.56E-08
Ra-228	8.75E-08
Ac-228	3.37E-08
Th-228	4.81E-08
Ra-224	3.99E-09
Rn-220	2.35E-11
Po-216	5.68E-13
Pb-212	5.12E-09
Bi-212	4.23E-09
Po-212	0.00E+00
Tl-208	4.12E-08
TOTAL	4.82E-07

Fri Mar 31 09:57:19 2023 SUMMARY
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INDIVIDUAL EFFECTIVE DOSE EQUIVALENT (mrem)
(All Radionuclides and Pathways)

	Distance (m)					
Direction	200	1300	1700	2000	2300	
N	8.9E-01	7.1E-02	6.1E-02	5.7E-02	5.5E-02	Resident
NNW	4.8E-01	5.8E-02	5.3E-02	5.1E-02	4.9E-02	
NW	5.6E-01	6.0E-02	5.4E-02	5.2E-02	5.0E-02	Resident
WNW	6.7E-01	6.4E-02	5.7E-02	5.4E-02	5.2E-02	
W	5.2E-01	5.9E-02	5.3E-02	5.1E-02	5.0E-02	
WSW	2.7E-01	5.1E-02	4.8E-02	4.7E-02	4.7E-02	
SW	3.7E-01	5.4E-02	5.0E-02	4.9E-02	4.8E-02	
SSW	4.4E-01	5.6E-02	5.2E-02	5.0E-02	4.9E-02	
S	3.9E-01	5.5E-02	5.1E-02	4.9E-02	4.8E-02	
SSE	2.9E-01	5.2E-02	4.9E-02	4.8E-02	4.7E-02	
SE	4.0E-01	5.5E-02	5.1E-02	5.0E-02	4.8E-02	
ESE	6.5E-01	6.3E-02	5.6E-02	5.3E-02	5.1E-02	Business
E	8.5E-01	6.9E-02	6.0E-02	5.6E-02	5.3E-02	
ENE	7.1E-01	6.4E-02	5.7E-02	5.4E-02	5.2E-02	
NE	4.5E-01	5.7E-02	5.2E-02	5.0E-02	4.9E-02	Farm (1700); School (2300)
NNE	3.8E-01	5.5E-02	5.1E-02	4.9E-02	4.8E-02	

Note: Highlighted EDE values (mrem) are applicable to the critical receptors as defined in the 2021 Radionuclide Emissions NESHAP Report (Appendix B) taking into account the distance and direction from the applicable site to each receptor. The highlighted value assumes 100 percent occupancy.

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INDIVIDUAL LIFETIME RISK (deaths)
(All Radionuclides and Pathways)

	Distance (m)				
Direction	200	1300	1700	2000	2300
N	4.8E-07	3.1E-08	2.6E-08	2.3E-08	2.2E-08
NNW	2.5E-07	2.4E-08	2.1E-08	2.0E-08	1.9E-08
NW	3.0E-07	2.5E-08	2.2E-08	2.0E-08	2.0E-08
WNW	3.6E-07	2.7E-08	2.3E-08	2.1E-08	2.0E-08
W	2.8E-07	2.4E-08	2.1E-08	2.0E-08	1.9E-08
WSW	1.4E-07	2.0E-08	1.9E-08	1.8E-08	1.8E-08
SW	1.9E-07	2.2E-08	2.0E-08	1.9E-08	1.8E-08
SSW	2.4E-07	2.3E-08	2.0E-08	1.9E-08	1.9E-08
S	2.1E-07	2.2E-08	2.0E-08	1.9E-08	1.8E-08
SSE	1.5E-07	2.0E-08	1.9E-08	1.8E-08	1.8E-08
SE	2.1E-07	2.2E-08	2.0E-08	1.9E-08	1.9E-08
ESE	3.5E-07	2.7E-08	2.3E-08	2.1E-08	2.0E-08
E	4.6E-07	3.0E-08	2.5E-08	2.3E-08	2.1E-08
ENE	3.8E-07	2.7E-08	2.3E-08	2.2E-08	2.0E-08
NE	2.4E-07	2.3E-08	2.1E-08	1.9E-08	1.9E-08
NNE	2.0E-07	2.2E-08	2.0E-08	1.9E-08	1.8E-08

CAP88 OUTPUT RESULTS

Pershall

CAP88-PC

Version 4.1

Clean Air Act Assessment Package – 1988

D O S E A N D R I S K S U M M A R I E S

Non-Radon Individual Assessment
Thu Mar 23 13:13:49 2023

```
     Facility:  Pershall Rd
      Address:
         City:  St. Louis
        State:  MO          Zip:  63042


Source Category:  Area
    Source Type:  Area
  Emission Year:  2022
 DOSE Age Group:  Adult

       Comments:  Air


   Dataset Name:  2022 Pershall Ro
   Dataset Date:  Mar 23, 2023 01:13 PM
      Wind File:  C:\Users\randy\OneDrive\Documents\CAP88\Wind Files\13994.WND
```

Thu Mar 23 13:13:49 2023 SUMMARY
Page 1

ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem)
Adrenals	2.58E-01
UB_Wall	2.85E-01
Bone_Sur	1.22E+01
Brain	2.72E-01
Breasts	2.95E-01
St_Wall	2.75E-01
SI_Wall	2.73E-01
ULI_Wall	2.83E-01
LLI_Wall	3.05E-01
Kidneys	4.70E-01
Liver	6.97E-01
Muscle	3.04E-01
Ovaries	3.39E-01
Pancreas	2.61E-01
R_Marrow	1.01E+00
Skin	2.02E+00
Spleen	2.76E-01
Testes	3.77E-01
Thymus	2.73E-01
Thyroid	2.83E-01
GB_Wall	2.62E-01
Ht_Wall	2.72E-01
Uterus	2.70E-01
ET_Reg	1.32E+00
Lung	3.55E+00
Effectiv	9.39E-01

PATHWAY EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem)
INGESTION	8.17E-02
INHALATION	5.91E-01
AIR IMMERSION	1.39E-05
GROUND SURFACE	2.66E-01
INTERNAL	6.73E-01
EXTERNAL	2.66E-01
TOTAL	9.39E-01

Thu Mar 23 13:13:49 2023 SUMMARY
Page 2

NUCLIDE EFFECTIVE DOSE EQUIVALENT SUMMARY

Nuclide	Selected Individual (mrem)
U-238	9.45E-03
Th-234	8.51E-04
Pa-234m	3.57E-03
Pa-234	7.03E-05
U-234	1.14E-02
Th-230	1.99E-01
Ra-226	2.02E-02
Rn-222	1.56E-05
Po-218	2.80E-10
Pb-214	1.02E-02
At-218	1.05E-09
Bi-214	5.97E-02
Rn-218	6.09E-12
Po-214	3.31E-06
Tl-210	2.33E-05
Pb-210	5.02E-05
Bi-210	8.11E-04
Hg-206	6.54E-11
Po-210	2.10E-07
Tl-206	1.89E-09
U-235	6.29E-04
Th-231	2.07E-05
Pa-231	3.32E-08
Ac-227	2.48E-02
Th-227	1.34E-04
Fr-223	1.26E-06
Ra-223	1.50E-04
Rn-219	6.50E-05
At-219	0.00E+00
Bi-215	2.92E-10
Po-215	1.99E-07
Pb-211	1.28E-04
Bi-211	5.26E-05
Tl-207	6.61E-05
Po-211	2.53E-08
Th-232	8.16E-02
Ra-228	2.08E-01
Ac-228	7.45E-02
Th-228	1.10E-01
Ra-224	7.85E-03
Rn-220	5.10E-05
Po-216	1.23E-06
Pb-212	1.12E-02
Bi-212	1.31E-02
Po-212	0.00E+00
Tl-208	9.02E-02
TOTAL	9.39E-01

Thu Mar 23 13:13:49 2023 SUMMARY
Page 3

CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk
Esophagu	2.96E-09
Stomach	1.14E-08
Colon	3.14E-08
Liver	1.20E-08
LUNG	3.84E-07
Bone	1.42E-08
Skin	2.02E-09
Breast	1.34E-08
Ovary	4.86E-09
Bladder	7.06E-09
Kidneys	2.74E-09
Thyroid	9.12E-10
Leukemia	1.75E-08
Residual	4.25E-08
Total	5.47E-07
TOTAL	5.47E-07

PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	3.05E-08
INHALATION	3.78E-07
AIR IMMERSION	7.48E-12
GROUND SURFACE	1.39E-07
INTERNAL	4.08E-07
EXTERNAL	1.39E-07
TOTAL	5.47E-07

Thu Mar 23 13:13:49 2023 SUMMARY
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NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
U-238	9.86E-09
Th-234	8.11E-10
Pa-234m	6.24E-10
Pa-234	3.82E-11
U-234	1.20E-08
Th-230	1.07E-07
Ra-226	1.80E-08
Rn-222	8.54E-12
Po-218	1.25E-16
Pb-214	5.47E-09
At-218	1.30E-16
Bi-214	3.15E-08
Rn-218	3.33E-18
Po-214	1.82E-12
Tl-210	1.25E-11
Pb-210	2.25E-11
Bi-210	8.99E-11
Hg-206	2.90E-17
Po-210	1.15E-13
Tl-206	2.13E-16
U-235	5.60E-10
Th-231	1.01E-11
Pa-231	1.73E-14
Ac-227	6.85E-09
Th-227	7.27E-11
Fr-223	4.71E-13
Ra-223	8.11E-11
Rn-219	3.56E-11
At-219	0.00E+00
Bi-215	1.30E-16
Po-215	1.09E-13
Pb-211	4.56E-11
Bi-211	2.87E-11
Tl-207	8.50E-12
Po-211	1.39E-14
Th-232	3.62E-08
Ra-228	9.67E-08
Ac-228	3.98E-08
Th-228	1.12E-07
Ra-224	8.86E-09
Rn-220	2.79E-11
Po-216	6.76E-13
Pb-212	6.09E-09
Bi-212	5.04E-09
Po-212	0.00E+00
Tl-208	4.91E-08
TOTAL	5.47E-07

Thu Mar 23 13:13:49 2023 SUMMARY
Page 5

INDIVIDUAL EFFECTIVE DOSE EQUIVALENT (mrem)
(All Radionuclides and Pathways)

	Distance (m)				
Direction	60	200	1000	1200	
N	9.4E-01	1.7E-01	6.4E-02	6.3E-02	
NNW	5.1E-01	1.2E-01	6.1E-02	6.1E-02	
NW	5.8E-01	1.3E-01	6.2E-02	6.1E-02	
WNW	6.9E-01	1.4E-01	6.3E-02	6.2E-02	
W	5.4E-01	1.2E-01	6.2E-02	6.1E-02	
WSW	2.9E-01	8.8E-02	6.0E-02	6.0E-02	
SW	3.8E-01	1.0E-01	6.1E-02	6.0E-02	
SSW	4.6E-01	1.1E-01	6.1E-02	6.0E-02	
S	4.2E-01	1.0E-01	6.1E-02	6.0E-02	
SSE	3.1E-01	9.0E-02	6.0E-02	6.0E-02	
SE	4.3E-01	1.0E-01	6.1E-02	6.0E-02	Business
ESE	6.8E-01	1.4E-01	6.3E-02	6.1E-02	Farm
E	8.6E-01	1.6E-01	6.4E-02	6.2E-02	School
ENE	7.2E-01	1.5E-01	6.3E-02	6.2E-02	
NE	4.7E-01	1.1E-01	6.1E-02	6.0E-02	Resident
NNE	4.1E-01	1.0E-01	6.1E-02	6.0E-02	

Note: Highlighted EDE values (mrem) are applicable to the critical receptors as defined in the 2021 Radionuclide Emissions NESHAP Report (Appendix B) taking into account the distance and direction from the applicable site to each receptor. The highlighted value assumes 100 percent occupancy.

Thu Mar 23 13:13:49 2023 SUMMARY
Page 6

INDIVIDUAL LIFETIME RISK (deaths)
(All Radionuclides and Pathways)

	Distance (m)			
Direction	60	200	1000	1200
N	5.5E-07	8.8E-08	2.5E-08	2.4E-08
NNW	2.9E-07	5.6E-08	2.4E-08	2.3E-08
NW	3.3E-07	6.2E-08	2.4E-08	2.3E-08
WNW	4.0E-07	7.1E-08	2.4E-08	2.4E-08
W	3.1E-07	5.9E-08	2.4E-08	2.3E-08
WSW	1.6E-07	4.0E-08	2.3E-08	2.3E-08
SW	2.2E-07	4.7E-08	2.3E-08	2.3E-08
SSW	2.6E-07	5.3E-08	2.3E-08	2.3E-08
S	2.4E-07	4.9E-08	2.3E-08	2.3E-08
SSE	1.7E-07	4.1E-08	2.3E-08	2.3E-08
SE	2.4E-07	5.0E-08	2.3E-08	2.3E-08
ESE	3.9E-07	7.0E-08	2.4E-08	2.4E-08
E	5.0E-07	8.5E-08	2.5E-08	2.4E-08
ENE	4.1E-07	7.4E-08	2.4E-08	2.4E-08
NE	2.7E-07	5.3E-08	2.3E-08	2.3E-08
NNE	2.3E-07	4.8E-08	2.3E-08	2.3E-08

CAP88 OUTPUT RESULTS

SLAPS Loadout

CAP88-PC

Version 4.1

Clean Air Act Assessment Package - 1988

D O S E A N D R I S K S U M M A R I E S

Non-Radon Individual Assessment
Thu Mar 23 13:15:27 2023

```
     Facility:  SLAPS Loadout
      Address:
         City:  St. Louis
        State:  MO          Zip:  63042


Source Category:  Area
    Source Type:  Area
  Emission Year:  2022
 DOSE Age Group:  Adult

       Comments:  Air


   Dataset Name:  2022 SLAPS Loado
   Dataset Date:  Mar 23, 2023 01:15 PM
      Wind File:  C:\Users\randy\OneDrive\Documents\CAP88\Wind Files\13994.WND
```

Thu Mar 23 13:15:27 2023 SUMMARY
Page 1

ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem)
Adrenals	7.05E-01
UB_Wall	7.76E-01
Bone_Sur	4.72E+01
Brain	7.41E-01
Breasts	8.03E-01
St_Wall	7.48E-01
SI_Wall	7.43E-01
ULI_Wall	7.73E-01
LLI_Wall	8.36E-01
Kidneys	1.48E+00
Liver	2.17E+00
Muscle	8.26E-01
Ovaries	1.02E+00
Pancreas	7.12E-01
R_Marrow	3.30E+00
Skin	5.16E+00
Spleen	7.52E-01
Testes	1.13E+00
Thymus	7.43E-01
Thyroid	7.69E-01
GB_Wall	7.14E-01
Ht_Wall	7.40E-01
Uterus	7.35E-01
ET_Reg	4.45E+00
Lung	1.13E+01
Effectiv	2.99E+00

PATHWAY EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem)
INGESTION	2.46E-01
INHALATION	2.05E+00
AIR IMMERSION	4.19E-05
GROUND SURFACE	6.99E-01
INTERNAL	2.29E+00
EXTERNAL	6.99E-01
TOTAL	2.99E+00

Thu Mar 23 13:15:27 2023 SUMMARY
Page 2

NUCLIDE EFFECTIVE DOSE EQUIVALENT SUMMARY

Nuclide	Selected Individual (mrem)
U-238	1.82E-02
Th-234	2.34E-03
Pa-234m	7.22E-03
Pa-234	1.42E-04
U-234	2.20E-02
Th-230	1.11E+00
Ra-226	3.94E-02
Rn-222	3.36E-05
Po-218	6.01E-10
Pb-214	2.20E-02
At-218	2.26E-09
Bi-214	1.28E-01
Rn-218	1.31E-11
Po-214	7.11E-06
Tl-210	5.01E-05
Pb-210	1.07E-04
Bi-210	1.73E-03
Hg-206	1.39E-10
Po-210	4.48E-07
Tl-206	4.04E-09
U-235	1.25E-03
Th-231	4.27E-05
Pa-231	1.65E-02
Ac-227	7.93E-02
Th-227	5.27E-04
Fr-223	4.97E-06
Ra-223	5.90E-04
Rn-219	2.55E-04
At-219	0.00E+00
Bi-215	1.15E-09
Po-215	7.80E-07
Pb-211	5.01E-04
Bi-211	2.07E-04
Tl-207	2.60E-04
Po-211	9.94E-08
Th-232	1.54E-01
Ra-228	6.26E-01
Ac-228	2.11E-01
Th-228	2.08E-01
Ra-224	1.56E-02
Rn-220	1.44E-04
Po-216	3.47E-06
Pb-212	3.15E-02
Bi-212	3.68E-02
Po-212	0.00E+00
Tl-208	2.54E-01
TOTAL	2.99E+00

Thu Mar 23 13:15:27 2023 SUMMARY
Page 3

CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk
Esophagu	8.04E-09
Stomach	3.10E-08
Colon	8.55E-08
Liver	3.60E-08
LUNG	1.20E-06
Bone	4.75E-08
Skin	5.16E-09
Breast	3.58E-08
Ovary	1.41E-08
Bladder	1.92E-08
Kidneys	8.20E-09
Thyroid	2.46E-09
Leukemia	4.81E-08
Residual	1.15E-07
Total	1.66E-06
TOTAL	1.66E-06

PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	8.96E-08
INHALATION	1.20E-06
AIR IMMERSION	2.26E-11
GROUND SURFACE	3.66E-07
INTERNAL	1.29E-06
EXTERNAL	3.66E-07
TOTAL	1.66E-06

Thu Mar 23 13:15:27 2023 SUMMARY
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NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
U-238	1.90E-08
Th-234	2.34E-09
Pa-234m	1.26E-09
Pa-234	7.73E-11
U-234	2.32E-08
Th-230	5.99E-07
Ra-226	3.51E-08
Rn-222	1.83E-11
Po-218	2.68E-16
Pb-214	1.17E-08
At-218	2.78E-16
Bi-214	6.78E-08
Rn-218	7.16E-18
Po-214	3.90E-12
Tl-210	2.68E-11
Pb-210	4.79E-11
Bi-210	1.92E-10
Hg-206	6.19E-17
Po-210	2.46E-13
Tl-206	4.54E-16
U-235	1.11E-09
Th-231	2.14E-11
Pa-231	1.62E-09
Ac-227	2.19E-08
Th-227	2.86E-10
Fr-223	1.86E-12
Ra-223	3.18E-10
Rn-219	1.40E-10
At-219	0.00E+00
Bi-215	5.12E-16
Po-215	4.28E-13
Pb-211	1.79E-10
Bi-211	1.13E-10
Tl-207	3.34E-11
Po-211	5.45E-14
Th-232	6.83E-08
Ra-228	2.91E-07
Ac-228	1.13E-07
Th-228	2.11E-07
Ra-224	1.71E-08
Rn-220	7.86E-11
Po-216	1.90E-12
Pb-212	1.72E-08
Bi-212	1.42E-08
Po-212	0.00E+00
Tl-208	1.38E-07
TOTAL	1.66E-06

Thu Mar 23 13:15:27 2023 SUMMARY
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INDIVIDUAL EFFECTIVE DOSE EQUIVALENT (mrem)
(All Radionuclides and Pathways)

Direction	Distance (m) 200	1500	1700	2300	
N	3.0E+00	2.4E-01	2.3E-01	2.1E-01	
NNW	1.6E+00	2.1E-01	2.0E-01	1.9E-01	
NW	1.9E+00	2.2E-01	2.1E-01	1.9E-01	
WNW	2.3E+00	2.2E-01	2.1E-01	2.0E-01	Business
W	1.7E+00	2.1E-01	2.0E-01	1.9E-01	
WSW	9.3E-01	1.9E-01	1.9E-01	1.8E-01	
SW	1.2E+00	2.0E-01	1.9E-01	1.9E-01	
SSW	1.5E+00	2.1E-01	2.0E-01	1.9E-01	
S	1.3E+00	2.0E-01	2.0E-01	1.9E-01	
SSE	9.8E-01	1.9E-01	1.9E-01	1.8E-01	
SE	1.3E+00	2.0E-01	2.0E-01	1.9E-01	
ESE	2.2E+00	2.2E-01	2.1E-01	2.0E-01	
E	2.8E+00	2.4E-01	2.3E-01	2.0E-01	Resident
ENE	2.4E+00	2.3E-01	2.2E-01	2.0E-01	
NE	1.5E+00	2.1E-01	2.0E-01	1.9E-01	Farm (1700); School (2300)
NNE	1.3E+00	2.0E-01	2.0E-01	1.9E-01	

Note: Highlighted EDE values (mrem) are applicable to the critical receptors as defined in the 2021 Radionuclide Emissions NESHAP Report (Appendix B) taking into account the distance and direction from the applicable site to each receptor. The highlighted value assumes 100 percent occupancy.

Thu Mar 23 13:15:27 2023 SUMMARY
Page 6

INDIVIDUAL LIFETIME RISK (deaths)
(All Radionuclides and Pathways)

	Distance (m)			
Direction	200	1500	1700	2300
N	1.7E-06	1.0E-07	9.6E-08	8.3E-08
NNW	8.8E-07	8.4E-08	8.0E-08	7.4E-08
NW	1.0E-06	8.7E-08	8.3E-08	7.5E-08
WNW	1.2E-06	9.2E-08	8.7E-08	7.8E-08
W	9.5E-07	8.5E-08	8.1E-08	7.4E-08
WSW	4.9E-07	7.4E-08	7.2E-08	6.9E-08
SW	6.7E-07	7.8E-08	7.5E-08	7.0E-08
SSW	8.1E-07	8.2E-08	7.8E-08	7.2E-08
S	7.1E-07	8.0E-08	7.7E-08	7.1E-08
SSE	5.2E-07	7.5E-08	7.3E-08	6.9E-08
SE	7.2E-07	8.0E-08	7.7E-08	7.2E-08
ESE	1.2E-06	9.2E-08	8.7E-08	7.7E-08
E	1.6E-06	1.0E-07	9.3E-08	8.1E-08
ENE	1.3E-06	9.4E-08	8.8E-08	7.8E-08
NE	8.2E-07	8.2E-08	7.9E-08	7.3E-08
NNE	7.0E-07	7.9E-08	7.6E-08	7.1E-08

CAP88 OUTPUT RESULTS

VP-56

CAP88-PC

Version 4.1

Clean Air Act Assessment Package – 1988

D O S E A N D R I S K S U M M A R I E S

Non-Radon Individual Assessment
Thu Mar 23 13:09:13 2023

```
     Facility:  VP-56
      Address:
         City:  St. Louis
        State:  MO          Zip:  63042


Source Category:  Area
    Source Type:  Area
  Emission Year:  2022
 DOSE Age Group:  Adult

       Comments:  Air


   Dataset Name:  2022 VP-56.
   Dataset Date:  Mar 23, 2023 01:09 PM
      Wind File:  C:\Users\randy\OneDrive\Documents\CAP88\Wind Files\13994.WND
```

Thu Mar 23 13:09:13 2023 SUMMARY
Page 1

ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem)
Adrenals	4.10E-01
UB_Wall	4.51E-01
Bone_Sur	2.51E+01
Brain	4.30E-01
Breasts	4.67E-01
St_Wall	4.35E-01
SI_Wall	4.32E-01
ULI_Wall	4.49E-01
LLI_Wall	4.85E-01
Kidneys	8.31E-01
Liver	1.16E+00
Muscle	4.81E-01
Ovaries	5.75E-01
Pancreas	4.14E-01
R_Marrow	1.85E+00
Skin	3.05E+00
Spleen	4.37E-01
Testes	6.35E-01
Thymus	4.32E-01
Thyroid	4.47E-01
GB_Wall	4.15E-01
Ht_Wall	4.30E-01
Uterus	4.27E-01
ET_Reg	2.50E+00
Lung	6.47E+00
Effectiv	1.68E+00

PATHWAY EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem)
INGESTION	1.47E-01
INHALATION	1.13E+00
AIR IMMERSION	2.42E-05
GROUND SURFACE	4.10E-01
INTERNAL	1.27E+00
EXTERNAL	4.10E-01
TOTAL	1.68E+00

Thu Mar 23 13:09:13 2023 SUMMARY
Page 2

NUCLIDE EFFECTIVE DOSE EQUIVALENT SUMMARY

Nuclide	Selected Individual (mrem)
U-238	1.21E-02
Th-234	1.37E-03
Pa-234m	4.65E-03
Pa-234	9.17E-05
U-234	1.46E-02
Th-230	5.63E-01
Ra-226	2.45E-02
Rn-222	1.99E-05
Po-218	3.56E-10
Pb-214	1.30E-02
At-218	1.34E-09
Bi-214	7.60E-02
Rn-218	7.74E-12
Po-214	4.21E-06
Tl-210	2.97E-05
Pb-210	6.34E-05
Bi-210	1.03E-03
Hg-206	8.27E-11
Po-210	2.66E-07
Tl-206	2.39E-09
U-235	7.30E-04
Th-231	2.45E-05
Pa-231	3.87E-08
Ac-227	3.17E-02
Th-227	1.72E-04
Fr-223	1.62E-06
Ra-223	1.93E-04
Rn-219	8.35E-05
At-219	0.00E+00
Bi-215	3.75E-10
Po-215	2.55E-07
Pb-211	1.64E-04
Bi-211	6.75E-05
Tl-207	8.49E-05
Po-211	3.25E-08
Th-232	1.07E-01
Ra-228	3.67E-01
Ac-228	1.23E-01
Th-228	1.44E-01
Ra-224	1.05E-02
Rn-220	8.41E-05
Po-216	2.03E-06
Pb-212	1.85E-02
Bi-212	2.16E-02
Po-212	0.00E+00
Tl-208	1.49E-01
TOTAL	1.68E+00

Thu Mar 23 13:09:13 2023 SUMMARY
Page 3

CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk
Esophagu	4.69E-09
Stomach	1.81E-08
Colon	5.02E-08
Liver	2.00E-08
LUNG	6.88E-07
Bone	2.68E-08
Skin	3.05E-09
Breast	2.10E-08
Ovary	8.08E-09
Bladder	1.12E-08
Kidneys	4.72E-09
Thyroid	1.44E-09
Leukemia	2.81E-08
Residual	6.72E-08
Total	9.53E-07
TOTAL	9.53E-07

PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	5.40E-08
INHALATION	6.84E-07
AIR IMMERSION	1.30E-11
GROUND SURFACE	2.14E-07
INTERNAL	7.38E-07
EXTERNAL	2.14E-07
TOTAL	9.53E-07

Thu Mar 23 13:09:13 2023 SUMMARY
Page 4

NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
U-238	1.26E-08
Th-234	1.35E-09
Pa-234m	8.15E-10
Pa-234	4.99E-11
U-234	1.54E-08
Th-230	3.03E-07
Ra-226	2.17E-08
Rn-222	1.09E-11
Po-218	1.59E-16
Pb-214	6.95E-09
At-218	1.65E-16
Bi-214	4.01E-08
Rn-218	4.24E-18
Po-214	2.31E-12
Tl-210	1.58E-11
Pb-210	2.84E-11
Bi-210	1.14E-10
Hg-206	3.67E-17
Po-210	1.46E-13
Tl-206	2.69E-16
U-235	6.50E-10
Th-231	1.21E-11
Pa-231	2.02E-14
Ac-227	8.73E-09
Th-227	9.34E-11
Fr-223	6.06E-13
Ra-223	1.04E-10
Rn-219	4.57E-11
At-219	0.00E+00
Bi-215	1.67E-16
Po-215	1.40E-13
Pb-211	5.86E-11
Bi-211	3.69E-11
Tl-207	1.09E-11
Po-211	1.78E-14
Th-232	4.74E-08
Ra-228	1.70E-07
Ac-228	6.58E-08
Th-228	1.46E-07
Ra-224	1.17E-08
Rn-220	4.60E-11
Po-216	1.12E-12
Pb-212	1.00E-08
Bi-212	8.31E-09
Po-212	0.00E+00
Tl-208	8.10E-08
TOTAL	9.53E-07

Thu Mar 23 13:09:13 2023 SUMMARY
Page 5

INDIVIDUAL EFFECTIVE DOSE EQUIVALENT (mrem)
(All Radionuclides and Pathways)

	Distance (m)				
Direction	100	330	700	1000	
N	1.7E+00	2.9E-01	1.5E-01	1.3E-01	
NNW	9.1E-01	2.0E-01	1.3E-01	1.2E-01	
NW	1.1E+00	2.2E-01	1.3E-01	1.2E-01	Resident
WNW	1.3E+00	2.4E-01	1.4E-01	1.2E-01	
W	9.9E-01	2.1E-01	1.3E-01	1.2E-01	
WSW	5.3E-01	1.5E-01	1.2E-01	1.1E-01	
SW	7.1E-01	1.7E-01	1.2E-01	1.1E-01	
SSW	8.5E-01	1.9E-01	1.3E-01	1.2E-01	
S	7.5E-01	1.8E-01	1.2E-01	1.2E-01	Business
SSE	5.6E-01	1.6E-01	1.2E-01	1.1E-01	
SE	7.6E-01	1.8E-01	1.2E-01	1.2E-01	Farm
ESE	1.2E+00	2.4E-01	1.4E-01	1.2E-01	
E	1.6E+00	2.8E-01	1.5E-01	1.3E-01	School
ENE	1.3E+00	2.5E-01	1.4E-01	1.2E-01	
NE	8.5E-01	1.9E-01	1.3E-01	1.2E-01	
NNE	7.3E-01	1.8E-01	1.2E-01	1.2E-01	

Note: Highlighted EDE values (mrem) are applicable to the critical receptors as defined in the 2021 Radionuclide Emissions NESHAP Report (Appendix B) taking into account the distance and direction from the applicable site to each receptor. The highlighted value assumes 100 percent occupancy.

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INDIVIDUAL LIFETIME RISK (deaths)
(All Radionuclides and Pathways)

	Distance (m)			
Direction	100	330	700	1000
N	9.5E-07	1.4E-07	6.5E-08	5.2E-08
NNW	5.1E-07	9.3E-08	5.2E-08	4.6E-08
NW	5.9E-07	1.0E-07	5.5E-08	4.7E-08
WNW	7.1E-07	1.2E-07	5.8E-08	4.9E-08
W	5.5E-07	9.7E-08	5.3E-08	4.6E-08
WSW	2.8E-07	6.7E-08	4.6E-08	4.3E-08
SW	3.9E-07	7.9E-08	4.9E-08	4.4E-08
SSW	4.7E-07	8.8E-08	5.1E-08	4.5E-08
S	4.1E-07	8.2E-08	5.0E-08	4.5E-08
SSE	3.0E-07	6.9E-08	4.7E-08	4.3E-08
SE	4.2E-07	8.3E-08	5.0E-08	4.5E-08
ESE	6.9E-07	1.1E-07	5.8E-08	4.9E-08
E	9.0E-07	1.4E-07	6.3E-08	5.1E-08
ENE	7.5E-07	1.2E-07	5.9E-08	4.9E-08
NE	4.7E-07	8.9E-08	5.1E-08	4.5E-08
NNE	4.0E-07	8.1E-08	4.9E-08	4.4E-08

CAP88-PC RUNS FOR THE FUSRAP ST. LOUIS RADIOANALYTICAL LABORATORY

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CAP88 OUTPUT RESULTS

USACE Laboratory

CAP88-PC

Version 4.1

Clean Air Act Assessment Package - 1988

D O S E A N D R I S K S U M M A R I E S

Non-Radon Individual Assessment
Mon Mar 20 15:46:05 2023

```
     Facility:  USACE Laboratory
      Address:
         City:  St. Louis
        State:  MO          Zip:  63042


Source Category:  Area
    Source Type:  Stack
  Emission Year:  2022
 DOSE Age Group:  Adult

       Comments:  Air


   Dataset Name:  2022 Usace Labor
   Dataset Date:  Mar 20, 2023 03:46 PM
      Wind File:  C:\Users\randy\OneDrive\Documents\CAP88\Wind Files\13994.WND
```

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ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem)
Adrenals	8.21E-05
UB_Wall	9.07E-05
Bone_Sur	5.72E-03
Brain	8.65E-05
Breasts	9.44E-05
St_Wall	8.74E-05
SI_Wall	8.68E-05
ULI_Wall	8.93E-05
LLI_Wall	9.49E-05
Kidneys	1.72E-04
Liver	2.39E-04
Muscle	9.72E-05
Ovaries	1.25E-04
Pancreas	8.29E-05
R_Marrow	3.13E-04
Skin	8.76E-04
Spleen	8.81E-05
Testes	1.38E-04
Thymus	8.69E-05
Thyroid	9.02E-05
GB_Wall	8.33E-05
Ht_Wall	8.65E-05
Uterus	8.58E-05
ET_Reg	7.44E-04
Lung	2.14E-03
Effectiv	4.45E-04

PATHWAY EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem)
INGESTION	1.02E-05
INHALATION	3.46E-04
AIR IMMERSION	4.53E-10
GROUND SURFACE	8.85E-05
INTERNAL	3.56E-04
EXTERNAL	8.85E-05
TOTAL	4.45E-04

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NUCLIDE EFFECTIVE DOSE EQUIVALENT SUMMARY

Nuclide	Selected Individual (mrem)
U-238	8.50E-06
Th-234	3.01E-07
Pa-234m	3.67E-06
Pa-234	7.24E-08
U-234	8.03E-06
Th-230	1.63E-04
Ra-226	1.06E-05
Rn-222	9.65E-09
Po-218	1.72E-13
Pb-214	6.30E-06
At-218	6.48E-13
Bi-214	3.68E-05
Rn-218	3.76E-15
Po-214	2.04E-09
Tl-210	1.44E-08
Pb-210	3.08E-08
Bi-210	4.99E-07
Hg-206	4.02E-14
Po-210	1.29E-10
Tl-206	1.16E-12
U-235	6.24E-07
Th-231	2.22E-08
Pa-231	1.20E-05
Ac-227	1.33E-05
Th-227	1.59E-07
Fr-223	1.49E-09
Ra-223	1.77E-07
Rn-219	7.68E-08
At-219	0.00E+00
Bi-215	3.45E-13
Po-215	2.35E-10
Pb-211	1.51E-07
Bi-211	6.21E-08
Tl-207	7.81E-08
Po-211	2.99E-11
Th-232	5.16E-05
Ra-228	6.46E-06
Ac-228	1.50E-05
Th-228	7.84E-05
Ra-224	4.62E-06
Rn-220	1.08E-08
Po-216	2.61E-10
Pb-212	2.38E-06
Bi-212	2.77E-06
Po-212	0.00E+00
Tl-208	1.92E-05
TOTAL	4.45E-04

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CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk
Esophagu	8.77E-13
Stomach	3.30E-12
Colon	8.87E-12
Liver	3.05E-12
LUNG	2.28E-10
Bone	3.47E-12
Skin	8.69E-13
Breast	4.14E-12
Ovary	1.50E-12
Bladder	2.12E-12
Kidneys	7.64E-13
Thyroid	2.68E-13
Leukemia	5.15E-12
Residual	1.24E-11
Total	2.75E-10
TOTAL	2.75E-10

PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	2.62E-12
INHALATION	2.27E-10
AIR IMMERSION	2.42E-16
GROUND SURFACE	4.52E-11
INTERNAL	2.30E-10
EXTERNAL	4.52E-11
TOTAL	2.75E-10

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NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
U-238	8.85E-12
Th-234	1.76E-13
Pa-234m	6.42E-13
Pa-234	3.93E-14
U-234	8.45E-12
Th-230	8.74E-11
Ra-226	9.24E-12
Rn-222	5.26E-15
Po-218	7.70E-20
Pb-214	3.37E-12
At-218	7.99E-20
Bi-214	1.95E-11
Rn-218	2.05E-21
Po-214	1.12E-15
Tl-210	7.68E-15
Pb-210	1.38E-14
Bi-210	5.53E-14
Hg-206	1.79E-20
Po-210	7.09E-17
Tl-206	1.31E-19
U-235	5.43E-13
Th-231	1.02E-14
Pa-231	1.18E-12
Ac-227	3.67E-12
Th-227	8.59E-14
Fr-223	5.57E-16
Ra-223	9.58E-14
Rn-219	4.20E-14
At-219	0.00E+00
Bi-215	1.54E-19
Po-215	1.29E-16
Pb-211	5.39E-14
Bi-211	3.39E-14
Tl-207	1.00E-14
Po-211	1.64E-17
Th-232	2.29E-11
Ra-228	2.98E-12
Ac-228	7.97E-12
Th-228	7.97E-11
Ra-224	5.40E-12
Rn-220	5.93E-15
Po-216	1.44E-16
Pb-212	1.29E-12
Bi-212	1.07E-12
Po-212	0.00E+00
Tl-208	1.04E-11
TOTAL	2.75E-10

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INDIVIDUAL EFFECTIVE DOSE EQUIVALENT (mrem)
(All Radionuclides and Pathways)

	Distance (m)				
Direction	50	1600	1700	2300	
N	4.4E-04	1.7E-05	1.6E-05	1.2E-05	
NNW	2.6E-04	1.2E-05	1.2E-05	9.7E-06	
NW	2.4E-04	1.3E-05	1.2E-05	1.0E-05	Business (50); Resident (1600)
WNW	2.5E-04	1.4E-05	1.3E-05	1.1E-05	
W	2.5E-04	1.2E-05	1.2E-05	9.8E-06	
WSW	1.4E-04	9.5E-06	9.2E-06	8.2E-06	
SW	1.5E-04	1.1E-05	1.0E-05	8.8E-06	
SSW	1.8E-04	1.1E-05	1.1E-05	9.3E-06	
S	2.5E-04	1.1E-05	1.1E-05	9.1E-06	
SSE	1.9E-04	9.7E-06	9.4E-06	8.4E-06	
SE	2.4E-04	1.1E-05	1.1E-05	9.1E-06	
ESE	3.0E-04	1.4E-05	1.3E-05	1.1E-05	
E	3.2E-04	1.6E-05	1.5E-05	1.2E-05	
ENE	2.4E-04	1.4E-05	1.4E-05	1.1E-05	
NE	2.1E-04	1.2E-05	1.1E-05	9.4E-06	Farm (1700); School (2300)
NNE	1.9E-04	1.1E-05	1.0E-05	9.0E-06	

Note: Highlighted EDE values (mrem) are applicable to the critical receptors as defined in the 2021 Radionuclide Emissions NESHAP Report (Appendix B) taking into account the distance and direction from the applicable site to each receptor. The highlighted value assumes 100 percent occupancy.

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INDIVIDUAL LIFETIME RISK (deaths)
(All Radionuclides and Pathways)

	Distance (m)			
Direction	50	1600	1700	2300
N	2.8E-10	8.1E-12	7.5E-12	5.3E-12
NNW	1.6E-10	5.0E-12	4.7E-12	3.6E-12
NW	1.5E-10	5.6E-12	5.2E-12	3.9E-12
WNW	1.6E-10	6.4E-12	6.0E-12	4.3E-12
W	1.6E-10	5.3E-12	4.9E-12	3.7E-12
WSW	8.7E-11	3.4E-12	3.3E-12	2.7E-12
SW	9.1E-11	4.1E-12	3.9E-12	3.1E-12
SSW	1.1E-10	4.7E-12	4.4E-12	3.4E-12
S	1.5E-10	4.4E-12	4.1E-12	3.2E-12
SSE	1.2E-10	3.6E-12	3.4E-12	2.8E-12
SE	1.5E-10	4.4E-12	4.2E-12	3.2E-12
ESE	1.9E-10	6.3E-12	5.9E-12	4.2E-12
E	2.0E-10	7.6E-12	7.1E-12	5.0E-12
ENE	1.5E-10	6.6E-12	6.1E-12	4.4E-12
NE	1.3E-10	4.7E-12	4.4E-12	3.4E-12
NNE	1.2E-10	4.3E-12	4.0E-12	3.1E-12

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APPENDIX C

ENVIRONMENTAL THERMOLUMINESCENT DOSIMETER, ALPHA TRACK DETECTOR, AND PERIMETER AIR DATA

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Table C-1. Background Air Particulate Data Results for CY 2022

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
BKG237212	BAP-001	01/04/22	Gross Alpha/Beta	Gross Alpha	1.03E-14	1.73E-15	5.43E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237212	BAP-001	01/04/22	Gross Alpha/Beta	Gross Beta	3.94E-14	3.88E-15	1.11E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237213	BAP-001	01/10/22	Gross Alpha/Beta	Gross Alpha	5.99E-15	1.34E-15	6.06E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237213	BAP-001	01/10/22	Gross Alpha/Beta	Gross Beta	3.25E-14	3.44E-15	1.24E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253272	BAP-001	01/18/22	Gross Alpha/Beta	Gross Alpha	8.55E-15	1.54E-15	5.33E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253272	BAP-001	01/18/22	Gross Alpha/Beta	Gross Beta	2.76E-14	2.95E-15	1.09E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253273	BAP-001	01/24/22	Gross Alpha/Beta	Gross Alpha	4.60E-15	1.24E-15	6.91E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253273	BAP-001	01/24/22	Gross Alpha/Beta	Gross Beta	2.04E-14	2.60E-15	1.42E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253274	BAP-001	01/31/22	Gross Alpha/Beta	Gross Alpha	5.69E-15	1.27E-15	5.76E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253274	BAP-001	01/31/22	Gross Alpha/Beta	Gross Beta	2.57E-14	2.86E-15	1.18E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253275	BAP-001	02/07/22	Gross Alpha/Beta	Gross Alpha	4.74E-15	1.17E-15	5.92E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253275	BAP-001	02/07/22	Gross Alpha/Beta	Gross Beta	2.28E-14	2.65E-15	1.21E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253276	BAP-001	02/14/22	Gross Alpha/Beta	Gross Alpha	3.15E-15	9.60E-16	6.06E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253276	BAP-001	02/14/22	Gross Alpha/Beta	Gross Beta	2.00E-14	2.45E-15	1.24E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253277	BAP-001	02/22/22	Gross Alpha/Beta	Gross Alpha	2.97E-15	8.57E-16	5.11E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253277	BAP-001	02/22/22	Gross Alpha/Beta	Gross Beta	1.73E-14	2.10E-15	1.05E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253278	BAP-001	02/28/22	Gross Alpha/Beta	Gross Alpha	1.61E-15	7.48E-16	6.79E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253278	BAP-001	02/28/22	Gross Alpha/Beta	Gross Beta	1.85E-14	2.44E-15	1.39E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253279	BAP-001	03/07/22	Gross Alpha/Beta	Gross Alpha	3.83E-15	1.03E-15	5.76E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253279	BAP-001	03/07/22	Gross Alpha/Beta	Gross Beta	2.80E-14	3.04E-15	1.18E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253280	BAP-001	03/14/22	Gross Alpha/Beta	Gross Alpha	2.85E-15	9.07E-16	5.97E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253280	BAP-001	03/14/22	Gross Alpha/Beta	Gross Beta	1.79E-14	2.28E-15	1.22E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253281	BAP-001	03/21/22	Gross Alpha/Beta	Gross Alpha	1.16E-15	5.99E-16	5.91E-16	µCi/mL	J	T04, T20	Background Air (Particulate Air)-Environmental Monitoring
BKG253281	BAP-001	03/21/22	Gross Alpha/Beta	Gross Beta	1.45E-14	1.99E-15	1.21E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253282	BAP-001	03/28/22	Gross Alpha/Beta	Gross Beta	1.15E-14	1.75E-15	1.23E-15	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG253282	BAP-001	03/28/22	Gross Alpha/Beta	Gross Alpha	4.87E-16	4.38E-16	6.00E-16	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG253282	BAP-001	03/28/22	Gross Alpha/Beta	Gross Alpha	3.04E-15	9.32E-16	5.57E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253282	BAP-001	03/28/22	Gross Alpha/Beta	Gross Beta	1.09E-14	1.70E-15	1.23E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253283	BAP-001	04/04/22	Gross Alpha/Beta	Gross Alpha	4.91E-15	1.19E-15	5.64E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253283	BAP-001	04/04/22	Gross Alpha/Beta	Gross Beta	1.23E-14	1.83E-15	1.27E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253284	BAP-001	04/11/22	Gross Alpha/Beta	Gross Alpha	3.72E-15	1.03E-15	5.64E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253284	BAP-001	04/11/22	Gross Alpha/Beta	Gross Beta	1.13E-14	1.75E-15	1.27E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253285	BAP-001	04/18/22	Gross Alpha/Beta	Gross Alpha	5.09E-15	1.24E-15	5.85E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253285	BAP-001	04/18/22	Gross Alpha/Beta	Gross Beta	1.48E-14	2.07E-15	1.32E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253286	BAP-001	04/19/22	Gross Alpha/Beta	Gross Alpha	5.07E-15	2.79E-15	2.78E-15	µCi/mL	J	T04, T20	Background Air (Particulate Air)-Environmental Monitoring
BKG253286	BAP-001	04/19/22	Gross Alpha/Beta	Gross Beta	2.30E-14	5.77E-15	6.25E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253287	BAP-001	05/02/22	Gross Alpha/Beta	Gross Alpha	4.39E-15	1.12E-15	5.54E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253287	BAP-001	05/02/22	Gross Alpha/Beta	Gross Beta	1.82E-14	2.30E-15	1.25E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253288	BAP-001	05/09/22	Gross Alpha/Beta	Gross Alpha	2.19E-15	8.04E-16	5.74E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253288	BAP-001	05/09/22	Gross Alpha/Beta	Gross Beta	1.00E-14	1.66E-15	1.29E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253289	BAP-001	05/16/22	Gross Alpha/Beta	Gross Alpha	4.70E-15	1.12E-15	5.20E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253289	BAP-001	05/16/22	Gross Alpha/Beta	Gross Beta	2.08E-14	2.45E-15	1.17E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring

Table C-1. Background Air Particulate Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
BKG253290	BAP-001	05/23/22	Gross Alpha/Beta	Gross Alpha	3.09E-15	9.61E-16	5.88E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253290	BAP-001	05/23/22	Gross Alpha/Beta	Gross Beta	1.37E-14	1.98E-15	1.32E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253291	BAP-001	05/31/22	Gross Alpha/Beta	Gross Alpha	2.39E-15	7.85E-16	5.07E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253291	BAP-001	05/31/22	Gross Alpha/Beta	Gross Beta	1.42E-14	1.90E-15	1.14E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253292	BAP-001	06/06/22	Gross Alpha/Beta	Gross Alpha	4.15E-15	1.33E-15	8.43E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253292	BAP-001	06/06/22	Gross Alpha/Beta	Gross Beta	2.51E-14	3.28E-15	1.90E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253293	BAP-001	06/13/22	Gross Alpha/Beta	Gross Alpha	2.99E-15	8.76E-16	5.05E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253293	BAP-001	06/13/22	Gross Alpha/Beta	Gross Beta	1.96E-14	2.33E-15	1.14E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253294	BAP-001	06/20/22	Gross Alpha/Beta	Gross Alpha	2.81E-15	8.45E-16	5.02E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253294	BAP-001	06/20/22	Gross Alpha/Beta	Gross Beta	1.79E-14	2.19E-15	1.13E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253295	BAP-001	06/27/22	Gross Alpha/Beta	Gross Alpha	2.26E-15	8.84E-16	6.70E-16	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG253295	BAP-001	06/27/22	Gross Alpha/Beta	Gross Beta	2.42E-14	2.95E-15	1.51E-15	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG253295	BAP-001	06/27/22	Gross Alpha/Beta	Gross Alpha	2.48E-15	9.24E-16	6.70E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253295	BAP-001	06/27/22	Gross Alpha/Beta	Gross Beta	2.25E-14	2.81E-15	1.51E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253296	BAP-001	07/05/22	Gross Alpha/Beta	Gross Alpha	7.19E-15	1.46E-15	4.57E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253296	BAP-001	07/05/22	Gross Alpha/Beta	Gross Beta	2.60E-14	2.96E-15	1.25E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253297	BAP-001	07/11/22	Gross Alpha/Beta	Gross Alpha	4.74E-15	1.25E-15	5.28E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253297	BAP-001	07/11/22	Gross Alpha/Beta	Gross Beta	1.89E-14	2.53E-15	1.45E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253298	BAP-001	07/18/22	Gross Alpha/Beta	Gross Alpha	7.91E-15	1.50E-15	4.28E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253298	BAP-001	07/18/22	Gross Alpha/Beta	Gross Beta	2.51E-14	2.84E-15	1.17E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253299	BAP-001	07/25/22	Gross Alpha/Beta	Gross Alpha	7.49E-15	1.59E-15	5.22E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253299	BAP-001	07/25/22	Gross Alpha/Beta	Gross Beta	3.36E-14	3.69E-15	1.43E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253300	BAP-001	08/01/22	Gross Alpha/Beta	Gross Alpha	4.18E-15	1.05E-15	4.20E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253300	BAP-001	08/01/22	Gross Alpha/Beta	Gross Beta	1.60E-14	2.09E-15	1.15E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253301	BAP-001	08/08/22	Gross Alpha/Beta	Gross Alpha	3.38E-15	9.62E-16	4.45E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253301	BAP-001	08/08/22	Gross Alpha/Beta	Gross Beta	1.45E-14	2.02E-15	1.22E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253302	BAP-001	08/15/22	Gross Alpha/Beta	Gross Alpha	4.16E-15	1.05E-15	4.23E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253302	BAP-001	08/15/22	Gross Alpha/Beta	Gross Beta	2.14E-14	2.53E-15	1.16E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253303	BAP-001	08/22/22	Gross Alpha/Beta	Gross Alpha	4.58E-15	1.17E-15	4.80E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253303	BAP-001	08/22/22	Gross Alpha/Beta	Gross Beta	2.97E-14	3.30E-15	1.32E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253304	BAP-001	08/29/22	Gross Alpha/Beta	Gross Alpha	3.69E-15	1.01E-15	4.45E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253304	BAP-001	08/29/22	Gross Alpha/Beta	Gross Beta	3.34E-14	3.52E-15	1.22E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253305	BAP-001	09/06/22	Gross Alpha/Beta	Gross Alpha	4.74E-15	1.12E-15	4.23E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253305	BAP-001	09/06/22	Gross Alpha/Beta	Gross Beta	2.60E-14	2.90E-15	1.16E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253306	BAP-001	09/09/22	Gross Alpha/Beta	Gross Alpha	4.95E-15	1.78E-15	1.05E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253306	BAP-001	09/09/22	Gross Alpha/Beta	Gross Beta	3.55E-14	4.86E-15	2.88E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253307	BAP-001	09/19/22	Gross Alpha/Beta	Gross Alpha	3.71E-15	1.04E-15	4.71E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253307	BAP-001	09/19/22	Gross Alpha/Beta	Gross Beta	3.83E-14	3.96E-15	1.29E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253308	BAP-001	09/26/22	Gross Alpha/Beta	Gross Alpha	1.91E-15	7.07E-16	4.30E-16	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG253308	BAP-001	09/26/22	Gross Alpha/Beta	Gross Beta	2.84E-14	3.10E-15	1.18E-15	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG253308	BAP-001	09/26/22	Gross Alpha/Beta	Gross Alpha	2.02E-15	7.28E-16	4.30E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253308	BAP-001	09/26/22	Gross Alpha/Beta	Gross Beta	2.86E-14	3.12E-15	1.18E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring

Table C-1. Background Air Particulate Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
BKG253309	BAP-001	10/03/22	Gross Alpha/Beta	Gross Alpha	4.23E-15	9.97E-16	4.25E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253309	BAP-001	10/03/22	Gross Alpha/Beta	Gross Beta	1.40E-14	1.80E-15	9.63E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253310	BAP-001	10/10/22	Gross Alpha/Beta	Gross Alpha	6.74E-15	1.64E-15	7.20E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253310	BAP-001	10/10/22	Gross Alpha/Beta	Gross Beta	2.61E-14	3.24E-15	1.63E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253311	BAP-001	10/17/22	Gross Alpha/Beta	Gross Alpha	9.06E-15	1.64E-15	5.11E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253311	BAP-001	10/17/22	Gross Alpha/Beta	Gross Beta	2.78E-14	3.02E-15	1.13E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253312	BAP-001	10/25/22	Gross Alpha/Beta	Gross Alpha	7.29E-15	1.43E-15	5.00E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253312	BAP-001	10/25/22	Gross Alpha/Beta	Gross Beta	2.38E-14	2.68E-15	1.11E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253313	BAP-001	10/31/22	Gross Alpha/Beta	Gross Alpha	6.26E-15	1.35E-15	5.31E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253313	BAP-001	10/31/22	Gross Alpha/Beta	Gross Beta	2.60E-14	2.91E-15	1.18E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253314	BAP-001	11/07/22	Gross Alpha/Beta	Gross Alpha	1.07E-14	1.77E-15	4.87E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253314	BAP-001	11/07/22	Gross Alpha/Beta	Gross Beta	4.03E-14	3.95E-15	1.08E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253315	BAP-001	11/14/22	Gross Alpha/Beta	Gross Alpha	4.92E-15	1.25E-15	5.94E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253315	BAP-001	11/14/22	Gross Alpha/Beta	Gross Beta	2.06E-14	2.57E-15	1.31E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253316	BAP-001	11/21/22	Gross Alpha/Beta	Gross Alpha	6.10E-15	1.30E-15	5.02E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253316	BAP-001	11/21/22	Gross Alpha/Beta	Gross Beta	2.90E-14	3.10E-15	1.11E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253317	BAP-001	11/28/22	Gross Alpha/Beta	Gross Alpha	1.08E-14	1.91E-15	5.81E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253317	BAP-001	11/28/22	Gross Alpha/Beta	Gross Beta	5.98E-14	5.61E-15	1.29E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253318	BAP-001	12/05/22	Gross Alpha/Beta	Gross Alpha	6.02E-15	1.31E-15	5.16E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253318	BAP-001	12/05/22	Gross Alpha/Beta	Gross Beta	3.88E-14	3.88E-15	1.14E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253319	BAP-001	12/12/22	Gross Alpha/Beta	Gross Alpha	9.94E-15	1.79E-15	5.56E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253319	BAP-001	12/12/22	Gross Alpha/Beta	Gross Beta	6.78E-14	6.18E-15	1.23E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253320	BAP-001	12/19/22	Gross Alpha/Beta	Gross Alpha	3.05E-15	9.01E-16	5.02E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253320	BAP-001	12/19/22	Gross Alpha/Beta	Gross Beta	2.51E-14	2.79E-15	1.11E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253321	BAP-001	12/27/22	Gross Alpha/Beta	Gross Alpha	1.79E-15	6.41E-16	4.24E-16	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG253321	BAP-001	12/27/22	Gross Alpha/Beta	Gross Beta	2.72E-14	2.84E-15	9.61E-16	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG253321	BAP-001	12/27/22	Gross Alpha/Beta	Gross Alpha	2.18E-15	7.09E-16	4.35E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG253321	BAP-001	12/27/22	Gross Alpha/Beta	Gross Beta	2.44E-14	2.63E-15	9.61E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring

VQs:

= - Indicates that the data met all QA/QC requirements, and that the parameter has been positively identified and the associated concentration value is accurate.

J - Indicates that the parameter was positively identified; the associated numerical value is the approximate concentration of the parameter in the sample.

Validation Reason Code:

T04 - Radionuclide Quantitation: Professional judgment was used to qualify the data.

T20 - Radionuclide Quantitation: Analytical result is greater than the associated MDA, with uncertainty 50 to 100 percent of the result.

Table C-2. Ra-222 Results for CY 2022

Sample Name	Station Name	Collect Date	Method Type	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
HIS258827	BA-1	07/05/22	Radiological	Ra-222	0.08	0	0.08	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2022
HIS265490	BA-1	01/04/23	Radiological	Ra-222	0.14	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2022
HIS258839	FA-1	07/05/22	Radiological	Ra-222	0.16	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2022
HIS265502	FA-1	01/04/23	Radiological	Ra-222	0.27	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2022
HIS258840	FA-2	07/05/22	Radiological	Ra-222	0.11	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2022
HIS265503	FA-2	01/04/23	Radiological	Ra-222	0.27	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2022
HIS258841	FA-3	07/05/22	Radiological	Ra-222	0.11	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2022
HIS265504	FA-3	01/04/23	Radiological	Ra-222	0.27	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2022
HIS258829	HF-1	07/05/22	Radiological	Ra-222	2.8	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2022
HIS265491	HF-1	01/04/23	Radiological	Ra-222	2.7	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2022
HIS258830	HF-2	07/05/22	Radiological	Ra-222	4.9	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2022
HIS265492	HF-2	01/04/23	Radiological	Ra-222	4.3	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2022
HIS258831	HF-3	07/05/22	Radiological	Ra-222	0.11	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2022
HIS265493	HF-3	01/04/23	Radiological	Ra-222	0.35	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2022
HIS261469	HF-4	08/30/22	Radiological	Ra-222	0.76	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2022
HIS265494	HF-4	01/04/23	Radiological	Ra-222	1.1	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2022
HIS258833	HF-5	07/05/22	Radiological	Ra-222	1.1	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2022
HIS265495	HF-5	01/04/23	Radiological	Ra-222	1.1	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2022
HIS258834	HF-6	07/05/22	Radiological	Ra-222	0.7	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2022
HIS265496	HF-6	01/04/23	Radiological	Ra-222	0.97	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2022
HIS258835	HF-7	07/05/22	Radiological	Ra-222	1	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2022
HIS265497	HF-7	01/04/23	Radiological	Ra-222	1.3	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2022
HIS258836	HF-8	07/05/22	Radiological	Ra-222	0.78	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2022
HIS265498	HF-8	01/04/23	Radiological	Ra-222	0.81	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2022
HIS258837	HF-9	07/05/22	Radiological	Ra-222	0.95	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2022
HIS265499	HF-9	01/04/23	Radiological	Ra-222	0.76	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2022
HIS258838	HF-10	07/05/22	Radiological	Ra-222	0.86	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2022
HIS265500	HF-10	01/04/23	Radiological	Ra-222	0.76	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2022
HIS258828	HF-11	07/05/22	Radiological	Ra-222	5.6	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2022
HIS265501	HF-11	01/04/23	Radiological	Ra-222	4.6	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2022
SLA258851	PA-1	07/05/22	Radiological	Ra-222	0.08	0	0.08	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2022
SLA265477	PA-1	01/04/23	Radiological	Ra-222	0.27	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2022
SLA258852	PA-2	07/05/22	Radiological	Ra-222	0.08	0	0.08	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2022
SLA265478	PA-2	01/04/23	Radiological	Ra-222	0.24	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2022
SLA258852-1	PA-2 dup	07/05/22	Radiological	Ra-222	0.11	0	0.11	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2022
SLA265478-1	PA-2 dup	01/04/23	Radiological	Ra-222	0.27	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2022
SLA258853	PA-3	07/05/22	Radiological	Ra-222	0.11	0	0.11	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2022
SLA265479	PA-3	01/04/23	Radiological	Ra-222	0.24	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2022
SLA258854	PA-4	07/05/22	Radiological	Ra-222	0.11	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2022
SLA265480	PA-4	01/04/23	Radiological	Ra-222	0.27	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2022

VQs:

J - Indicates that the parameter was positively identified; the associated numerical value is the approximate concentration of the parameter in the sample.

UJ - Indicates that the parameter was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Validation Reason Code:

Y01 - FUSRAP Only: Not enough supporting documentation to perform validation.

Table C-3. External Gamma Results for CY 2022

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
HIS256284	BA-1	04/01/22	Radiological	External gamma radiation	20.4	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2022
HIS258812	BA-1	07/05/22	Radiological	External gamma radiation	17.2	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2022
HIS262075	BA-1	10/03/22	Radiological	External gamma radiation	18.6	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2022
HIS265466	BA-1	01/04/23	Radiological	External gamma radiation	17.5	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2022
HIS256285	FA-2	04/01/22	Radiological	External gamma radiation	19.8	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2022
HIS258813	FA-2	07/05/22	Radiological	External gamma radiation	19.1	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2022
HIS262076	FA-2	10/03/22	Radiological	External gamma radiation	17.6	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2022
HIS265467	FA-2	01/04/23	Radiological	External gamma radiation	18.4	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2022
HIS256286	FA-3	04/01/22	Radiological	External gamma radiation	19.5	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2022
HIS258814	FA-3	07/05/22	Radiological	External gamma radiation	18.7	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2022
HIS262077	FA-3	10/03/22	Radiological	External gamma radiation	7.4	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2022
HIS265468	FA-3	01/04/23	Radiological	External gamma radiation	17.4	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2022
SLA256287	PA-1	04/01/22	Radiological	External gamma radiation	21.6	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2022
SLA258815	PA-1	07/05/22	Radiological	External gamma radiation	20.4	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2022
SLA262078	PA-1	10/03/22	Radiological	External gamma radiation	20.2	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2022
SLA265462	PA-1	01/04/23	Radiological	External gamma radiation	17.9	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2022
SLA256288	PA-2	04/01/22	Radiological	External gamma radiation	23.4	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2022
SLA258816	PA-2	07/05/22	Radiological	External gamma radiation	23.5	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2022
SLA262079	PA-2	10/03/22	Radiological	External gamma radiation	21.7	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2022
SLA265463	PA-2	01/04/23	Radiological	External gamma radiation	23.6	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2022
SLA256288-1	PA-2dup	04/01/22	Radiological	External gamma radiation	22.9	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2022
SLA258816-1	PA-2dup	07/05/22	Radiological	External gamma radiation	23.2	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2022
SLA262079-1	PA-2dup	10/03/22	Radiological	External gamma radiation	22.2	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2022
SLA265463-1	PA-2dup	01/04/23	Radiological	External gamma radiation	22.9	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2022
SLA256289	PA-3	04/01/22	Radiological	External gamma radiation	17.3	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2022
SLA258817	PA-3	07/05/22	Radiological	External gamma radiation	18	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2022
SLA262080	PA-3	10/03/22	Radiological	External gamma radiation	17.5	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2022
SLA265464	PA-3	01/04/23	Radiological	External gamma radiation	17.4	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2022
SLA256290	PA-4	04/01/22	Radiological	External gamma radiation	25.5	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2022
SLA258818	PA-4	07/05/22	Radiological	External gamma radiation	25.1	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2022
SLA262081	PA-4	10/03/22	Radiological	External gamma radiation	25.3	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2022
SLA265465	PA-4	01/04/23	Radiological	External gamma radiation	24.6	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2022

VQs:

J - Indicates that the parameter was positively identified; the associated numerical value is the approximate concentration of the parameter in the sample.

Validation Reason Code:

Y01 - FUSRAP Only: Not enough supporting documentation to perform validation.

Table C-4. SLAPS Perimeter Air Data Results for CY 2022

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP243578	BALL FIELDS	01/03/22	Gross Alpha/Beta	Gross Alpha	1.04E-14	7.50E-15	8.01E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243578	BALL FIELDS	01/03/22	Gross Alpha/Beta	Gross Beta	4.48E-14	1.75E-14	2.27E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243579	BALL FIELDS	01/03/22	Gross Alpha/Beta	Gross Alpha	8.12E-15	6.78E-15	8.01E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243579	BALL FIELDS	01/03/22	Gross Alpha/Beta	Gross Beta	7.05E-14	2.00E-14	2.27E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243580	BALL FIELDS	01/03/22	Gross Alpha/Beta	Gross Alpha	1.37E-14	8.47E-15	8.01E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243580	BALL FIELDS	01/03/22	Gross Alpha/Beta	Gross Beta	6.75E-14	1.97E-14	2.27E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243581	BALL FIELDS	01/04/22	Gross Alpha/Beta	Gross Alpha	2.64E-14	1.18E-14	8.48E-15	µCi/mL			Ballfields (General Area)-Perimeter Air
SVP243581	BALL FIELDS	01/04/22	Gross Alpha/Beta	Gross Beta	8.59E-14	2.22E-14	2.40E-14	µCi/mL			Ballfields (General Area)-Perimeter Air
SVP243581	BALL FIELDS	01/04/22	Gross Alpha/Beta	Gross Beta	4.34E-14	1.81E-14	2.40E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243581	BALL FIELDS	01/04/22	Gross Alpha/Beta	Gross Alpha	3.85E-15	5.35E-15	8.48E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243582	BALL FIELDS	01/04/22	Gross Alpha/Beta	Gross Beta	6.38E-14	1.99E-14	2.35E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243582	BALL FIELDS	01/04/22	Gross Alpha/Beta	Gross Alpha	4.50E-15	5.34E-15	7.59E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243583	BALL FIELDS	01/04/22	Gross Alpha/Beta	Gross Alpha	1.04E-14	7.56E-15	7.59E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243583	BALL FIELDS	01/04/22	Gross Alpha/Beta	Gross Beta	5.10E-14	1.86E-14	2.35E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243584	BALL FIELDS	01/05/22	Gross Alpha/Beta	Gross Alpha	2.33E-14	1.07E-14	7.17E-15	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243584	BALL FIELDS	01/05/22	Gross Alpha/Beta	Gross Beta	1.24E-13	2.48E-14	2.22E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243585	BALL FIELDS	01/05/22	Gross Alpha/Beta	Gross Alpha	1.77E-14	9.35E-15	7.17E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243585	BALL FIELDS	01/05/22	Gross Alpha/Beta	Gross Beta	1.32E-13	2.55E-14	2.22E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243586	BALL FIELDS	01/05/22	Gross Alpha/Beta	Gross Alpha	7.61E-15	6.38E-15	7.17E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243586	BALL FIELDS	01/05/22	Gross Alpha/Beta	Gross Beta	5.50E-14	1.83E-14	2.22E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243587	BALL FIELDS	01/06/22	Gross Alpha/Beta	Gross Beta	2.31E-14	1.49E-14	2.22E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243587	BALL FIELDS	01/06/22	Gross Alpha/Beta	Gross Alpha	8.87E-16	3.21E-15	7.17E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243588	BALL FIELDS	01/06/22	Gross Alpha/Beta	Gross Alpha	9.85E-15	7.14E-15	7.17E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243588	BALL FIELDS	01/06/22	Gross Alpha/Beta	Gross Beta	2.31E-14	1.49E-14	2.22E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243589	BALL FIELDS	01/06/22	Gross Alpha/Beta	Gross Alpha	7.61E-15	6.38E-15	7.17E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243589	BALL FIELDS	01/06/22	Gross Alpha/Beta	Gross Beta	1.86E-14	1.44E-14	2.22E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243590	BALL FIELDS	01/10/22	Gross Alpha/Beta	Gross Alpha	7.61E-15	6.38E-15	7.17E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243590	BALL FIELDS	01/10/22	Gross Alpha/Beta	Gross Beta	7.39E-14	2.01E-14	2.22E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243591	BALL FIELDS	01/10/22	Gross Alpha/Beta	Gross Beta	4.13E-14	1.69E-14	2.22E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243591	BALL FIELDS	01/10/22	Gross Alpha/Beta	Gross Alpha	-2.33E-16	2.30E-15	7.17E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243592	BALL FIELDS	01/10/22	Gross Alpha/Beta	Gross Beta	7.32E-14	3.37E-14	4.60E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243592	BALL FIELDS	01/10/22	Gross Alpha/Beta	Gross Alpha	-4.85E-16	4.77E-15	1.49E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243593	BALL FIELDS	01/11/22	Gross Alpha/Beta	Gross Alpha	7.82E-15	6.56E-15	7.37E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243593	BALL FIELDS	01/11/22	Gross Alpha/Beta	Gross Beta	7.91E-14	2.10E-14	2.28E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243594	BALL FIELDS	01/11/22	Gross Alpha/Beta	Gross Alpha	1.01E-14	7.34E-15	7.37E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243594	BALL FIELDS	01/11/22	Gross Alpha/Beta	Gross Beta	4.64E-14	1.78E-14	2.28E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243595	BALL FIELDS	01/11/22	Gross Alpha/Beta	Gross Beta	6.82E-14	1.99E-14	2.28E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243595	BALL FIELDS	01/11/22	Gross Alpha/Beta	Gross Alpha	4.37E-15	5.19E-15	7.37E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243596	BALL FIELDS	01/12/22	Gross Alpha/Beta	Gross Beta	4.45E-14	1.77E-14	2.30E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243596	BALL FIELDS	01/12/22	Gross Alpha/Beta	Gross Alpha	3.25E-15	4.69E-15	7.44E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243597	BALL FIELDS	01/12/22	Gross Alpha/Beta	Gross Beta	3.82E-14	1.70E-14	2.30E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243597	BALL FIELDS	01/12/22	Gross Alpha/Beta	Gross Alpha	3.25E-15	4.69E-15	7.44E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243598	BALL FIELDS	01/12/22	Gross Alpha/Beta	Gross Beta	2.87E-14	1.60E-14	2.30E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243598	BALL FIELDS	01/12/22	Gross Alpha/Beta	Gross Alpha	5.57E-15	5.74E-15	7.44E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP243599	BALL FIELDS	01/13/22	Gross Alpha/Beta	Gross Alpha	-2.40E-16	2.36E-15	7.37E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243599	BALL FIELDS	01/13/22	Gross Alpha/Beta	Gross Beta	7.43E-15	1.35E-14	2.28E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243600	BALL FIELDS	01/13/22	Gross Alpha/Beta	Gross Beta	5.34E-14	1.85E-14	2.28E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243600	BALL FIELDS	01/13/22	Gross Alpha/Beta	Gross Alpha	4.37E-15	5.19E-15	7.37E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243601	BALL FIELDS	01/13/22	Gross Alpha/Beta	Gross Beta	4.72E-14	1.78E-14	2.28E-14	µCi/mL			Ballfields (General Area)-Perimeter Air
SVP243601	BALL FIELDS	01/13/22	Gross Alpha/Beta	Gross Alpha	4.37E-15	5.19E-15	7.37E-15	µCi/mL			Ballfields (General Area)-Perimeter Air
SVP243601	BALL FIELDS	01/13/22	Gross Alpha/Beta	Gross Alpha	8.98E-15	6.96E-15	7.37E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243601	BALL FIELDS	01/13/22	Gross Alpha/Beta	Gross Beta	3.47E-14	1.65E-14	2.28E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243605	BALL FIELDS	01/18/22	Gross Alpha/Beta	Gross Alpha	-1.78E-15	5.99E-16	7.92E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243605	BALL FIELDS	01/18/22	Gross Alpha/Beta	Gross Beta	1.24E-14	1.44E-14	2.34E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243606	BALL FIELDS	01/18/22	Gross Alpha/Beta	Gross Alpha	2.83E-15	4.65E-15	7.92E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243606	BALL FIELDS	01/18/22	Gross Alpha/Beta	Gross Beta	1.32E-14	1.45E-14	2.34E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243607	BALL FIELDS	01/18/22	Gross Alpha/Beta	Gross Alpha	5.28E-16	3.31E-15	7.92E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243607	BALL FIELDS	01/18/22	Gross Alpha/Beta	Gross Beta	6.95E-15	1.38E-14	2.34E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243608	BALL FIELDS	01/19/22	Gross Alpha/Beta	Gross Alpha	-6.07E-16	2.31E-15	7.70E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243608	BALL FIELDS	01/19/22	Gross Alpha/Beta	Gross Beta	6.75E-15	1.34E-14	2.27E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254215	BALL FIELDS	01/19/22	Gross Alpha/Beta	Gross Beta	3.18E-14	1.61E-14	2.27E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254215	BALL FIELDS	01/19/22	Gross Alpha/Beta	Gross Alpha	2.75E-15	4.52E-15	7.70E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254216	BALL FIELDS	01/19/22	Gross Alpha/Beta	Gross Alpha	1.63E-15	3.92E-15	7.70E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254216	BALL FIELDS	01/19/22	Gross Alpha/Beta	Gross Beta	2.27E-14	1.52E-14	2.27E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254217	BALL FIELDS	01/20/22	Gross Alpha/Beta	Gross Beta	3.10E-14	1.60E-14	2.27E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254217	BALL FIELDS	01/20/22	Gross Alpha/Beta	Gross Alpha	3.87E-15	5.05E-15	7.70E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254218	BALL FIELDS	01/20/22	Gross Alpha/Beta	Gross Beta	3.55E-14	1.65E-14	2.27E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254218	BALL FIELDS	01/20/22	Gross Alpha/Beta	Gross Alpha	6.11E-15	5.97E-15	7.70E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254219	BALL FIELDS	01/20/22	Gross Alpha/Beta	Gross Beta	2.87E-14	1.58E-14	2.27E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254219	BALL FIELDS	01/20/22	Gross Alpha/Beta	Gross Alpha	2.75E-15	4.52E-15	7.70E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254220	BALL FIELDS	01/24/22	Gross Alpha/Beta	Gross Beta	3.49E-14	1.71E-14	2.38E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254220	BALL FIELDS	01/24/22	Gross Alpha/Beta	Gross Alpha	2.89E-15	4.74E-15	8.07E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254221	BALL FIELDS	01/24/22	Gross Alpha/Beta	Gross Alpha	8.76E-15	7.10E-15	8.07E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254221	BALL FIELDS	01/24/22	Gross Alpha/Beta	Gross Beta	3.81E-14	1.74E-14	2.38E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254222	BALL FIELDS	01/24/22	Gross Alpha/Beta	Gross Beta	5.00E-14	1.86E-14	2.38E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254222	BALL FIELDS	01/24/22	Gross Alpha/Beta	Gross Alpha	4.06E-15	5.29E-15	8.07E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254223	BALL FIELDS	01/25/22	Gross Alpha/Beta	Gross Alpha	1.32E-14	8.39E-15	7.92E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254223	BALL FIELDS	01/25/22	Gross Alpha/Beta	Gross Beta	2.80E-14	1.61E-14	2.34E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254224	BALL FIELDS	01/25/22	Gross Alpha/Beta	Gross Alpha	1.68E-15	4.04E-15	7.92E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254224	BALL FIELDS	01/25/22	Gross Alpha/Beta	Gross Beta	7.73E-15	1.38E-14	2.34E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254225	BALL FIELDS	01/25/22	Gross Alpha/Beta	Gross Alpha	9.74E-15	7.35E-15	7.92E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254225	BALL FIELDS	01/25/22	Gross Alpha/Beta	Gross Beta	4.82E-14	1.82E-14	2.34E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254226	BALL FIELDS	01/26/22	Gross Alpha/Beta	Gross Alpha	1.68E-14	9.41E-15	8.00E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254226	BALL FIELDS	01/26/22	Gross Alpha/Beta	Gross Beta	4.40E-14	1.79E-14	2.36E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254227	BALL FIELDS	01/26/22	Gross Alpha/Beta	Gross Beta	5.42E-14	1.89E-14	2.36E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254227	BALL FIELDS	01/26/22	Gross Alpha/Beta	Gross Alpha	7.51E-15	6.63E-15	8.00E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP254228	BALL FIELDS	01/26/22	Gross Alpha/Beta	Gross Alpha	5.33E-16	3.34E-15	8.00E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254228	BALL FIELDS	01/26/22	Gross Alpha/Beta	Gross Beta	-6.60E-17	1.30E-14	2.36E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254229	BALL FIELDS	01/27/22	Gross Alpha/Beta	Gross Alpha	8.76E-15	7.10E-15	8.07E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254229	BALL FIELDS	01/27/22	Gross Alpha/Beta	Gross Beta	5.08E-14	1.87E-14	2.38E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254230	BALL FIELDS	01/27/22	Gross Alpha/Beta	Gross Alpha	5.23E-16	3.28E-15	7.85E-15	µCi/mL			Ballfields (General Area)-Perimeter Air
SVP254230	BALL FIELDS	01/27/22	Gross Alpha/Beta	Gross Beta	-3.15E-15	1.24E-14	2.32E-14	µCi/mL			Ballfields (General Area)-Perimeter Air
SVP254230	BALL FIELDS	01/27/22	Gross Alpha/Beta	Gross Alpha	-6.18E-16	2.36E-15	7.85E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254230	BALL FIELDS	01/27/22	Gross Alpha/Beta	Gross Beta	-2.38E-15	1.25E-14	2.32E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254231	BALL FIELDS	01/27/22	Gross Alpha/Beta	Gross Beta	3.16E-14	1.59E-14	2.24E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254231	BALL FIELDS	01/27/22	Gross Alpha/Beta	Gross Alpha	5.79E-15	6.62E-15	9.88E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254232	BALL FIELDS	01/31/22	Gross Alpha/Beta	Gross Alpha	2.34E-15	5.30E-15	9.97E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254232	BALL FIELDS	01/31/22	Gross Alpha/Beta	Gross Beta	1.82E-15	1.28E-14	2.27E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254233	BALL FIELDS	01/31/22	Gross Alpha/Beta	Gross Alpha	1.29E-14	8.85E-15	9.97E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254233	BALL FIELDS	01/31/22	Gross Alpha/Beta	Gross Beta	8.31E-14	2.11E-14	2.27E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254234	BALL FIELDS	01/31/22	Gross Alpha/Beta	Gross Beta	8.01E-14	2.09E-14	2.27E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254234	BALL FIELDS	01/31/22	Gross Alpha/Beta	Gross Alpha	3.51E-15	5.80E-15	9.97E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254235	BALL FIELDS	02/01/22	Gross Alpha/Beta	Gross Beta	3.21E-14	1.65E-14	2.33E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254235	BALL FIELDS	02/01/22	Gross Alpha/Beta	Gross Alpha	6.02E-15	6.88E-15	1.03E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254236	BALL FIELDS	02/14/22	Gross Alpha/Beta	Gross Beta	2.72E-14	1.58E-14	2.31E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254236	BALL FIELDS	02/14/22	Gross Alpha/Beta	Gross Alpha	2.39E-15	5.40E-15	1.02E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254237	BALL FIELDS	02/01/22	Gross Alpha/Beta	Gross Beta	2.98E-14	1.62E-14	2.33E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254237	BALL FIELDS	02/01/22	Gross Alpha/Beta	Gross Alpha	7.23E-15	7.30E-15	1.03E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254238	BALL FIELDS	02/01/22	Gross Alpha/Beta	Gross Alpha	-3.61E-15	8.94E-16	1.03E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254238	BALL FIELDS	02/01/22	Gross Alpha/Beta	Gross Beta	-2.78E-15	1.26E-14	2.33E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254239	BALL FIELDS	02/07/22	Gross Alpha/Beta	Gross Beta	8.04E-14	2.48E-14	2.94E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254239	BALL FIELDS	02/07/22	Gross Alpha/Beta	Gross Alpha	1.21E-14	1.02E-14	1.29E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254240	BALL FIELDS	02/07/22	Gross Alpha/Beta	Gross Alpha	-1.52E-15	4.42E-15	1.29E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254240	BALL FIELDS	02/07/22	Gross Alpha/Beta	Gross Beta	4.06E-16	1.63E-14	2.94E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254241	BALL FIELDS	02/07/22	Gross Alpha/Beta	Gross Beta	9.99E-14	2.67E-14	2.94E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254241	BALL FIELDS	02/07/22	Gross Alpha/Beta	Gross Alpha	1.21E-14	1.02E-14	1.29E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254242	BALL FIELDS	02/08/22	Gross Alpha/Beta	Gross Alpha	0	4.14E-15	9.97E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254242	BALL FIELDS	02/08/22	Gross Alpha/Beta	Gross Beta	4.83E-15	1.31E-14	2.27E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254243	BALL FIELDS	02/08/22	Gross Alpha/Beta	Gross Alpha	1.17E-15	4.75E-15	9.97E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254243	BALL FIELDS	02/08/22	Gross Alpha/Beta	Gross Beta	7.84E-15	1.35E-14	2.27E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254244	BALL FIELDS	02/08/22	Gross Alpha/Beta	Gross Alpha	3.51E-15	5.80E-15	9.97E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254244	BALL FIELDS	02/08/22	Gross Alpha/Beta	Gross Beta	2.14E-14	1.50E-14	2.27E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254245	BALL FIELDS	02/09/22	Gross Alpha/Beta	Gross Alpha	1.05E-14	8.19E-15	9.97E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254245	BALL FIELDS	02/09/22	Gross Alpha/Beta	Gross Beta	2.14E-14	1.50E-14	2.27E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254246	BALL FIELDS	02/09/22	Gross Alpha/Beta	Gross Alpha	8.19E-15	7.47E-15	9.97E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254246	BALL FIELDS	02/09/22	Gross Alpha/Beta	Gross Beta	1.31E-14	1.41E-14	2.27E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254247	BALL FIELDS	02/09/22	Gross Alpha/Beta	Gross Alpha	7.02E-15	7.09E-15	9.97E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP254247	BALL FIELDS	02/09/22	Gross Alpha/Beta	Gross Beta	1.31E-14	1.41E-14	2.27E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254248	BALL FIELDS	02/10/22	Gross Alpha/Beta	Gross Alpha	-2.34E-15	2.49E-15	9.97E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254248	BALL FIELDS	02/10/22	Gross Alpha/Beta	Gross Beta	4.08E-15	1.30E-14	2.27E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254249	BALL FIELDS	02/10/22	Gross Alpha/Beta	Gross Alpha	0	4.14E-15	9.97E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254249	BALL FIELDS	02/10/22	Gross Alpha/Beta	Gross Beta	1.24E-14	1.40E-14	2.27E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254250	BALL FIELDS	02/10/22	Gross Alpha/Beta	Gross Alpha	0	4.14E-15	9.97E-15	µCi/mL			Ballfields (General Area)-Perimeter Air
SVP254250	BALL FIELDS	02/10/22	Gross Alpha/Beta	Gross Beta	1.91E-14	1.47E-14	2.27E-14	µCi/mL			Ballfields (General Area)-Perimeter Air
SVP254250	BALL FIELDS	02/10/22	Gross Alpha/Beta	Gross Alpha	1.29E-14	8.85E-15	9.97E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254250	BALL FIELDS	02/10/22	Gross Alpha/Beta	Gross Beta	4.10E-14	1.70E-14	2.27E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254267	BALL FIELDS	02/14/22	Gross Alpha/Beta	Gross Alpha	1.26E-15	4.26E-15	8.98E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254267	BALL FIELDS	02/14/22	Gross Alpha/Beta	Gross Beta	1.33E-14	1.22E-14	1.91E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254268	BALL FIELDS	02/14/22	Gross Alpha/Beta	Gross Beta	3.31E-14	1.47E-14	1.91E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254268	BALL FIELDS	02/14/22	Gross Alpha/Beta	Gross Alpha	4.90E-15	5.99E-15	8.98E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254269	BALL FIELDS	02/15/22	Gross Alpha/Beta	Gross Alpha	4.67E-15	5.71E-15	8.56E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254269	BALL FIELDS	02/15/22	Gross Alpha/Beta	Gross Beta	1.11E-14	1.14E-14	1.82E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254270	BALL FIELDS	02/15/22	Gross Alpha/Beta	Gross Beta	2.93E-14	1.38E-14	1.82E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254270	BALL FIELDS	02/15/22	Gross Alpha/Beta	Gross Alpha	3.52E-15	5.22E-15	8.56E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254271	BALL FIELDS	02/15/22	Gross Alpha/Beta	Gross Beta	2.02E-14	1.26E-14	1.82E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254271	BALL FIELDS	02/15/22	Gross Alpha/Beta	Gross Alpha	8.14E-15	7.00E-15	8.56E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254272	BALL FIELDS	02/16/22	Gross Alpha/Beta	Gross Alpha	4.85E-15	5.93E-15	8.89E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254272	BALL FIELDS	02/16/22	Gross Alpha/Beta	Gross Beta	1.86E-14	1.28E-14	1.89E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254273	BALL FIELDS	02/16/22	Gross Alpha/Beta	Gross Beta	2.26E-14	1.33E-14	1.89E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254273	BALL FIELDS	02/16/22	Gross Alpha/Beta	Gross Alpha	3.65E-15	5.42E-15	8.89E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254274	BALL FIELDS	02/16/22	Gross Alpha/Beta	Gross Alpha	4.85E-15	5.93E-15	8.89E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254274	BALL FIELDS	02/16/22	Gross Alpha/Beta	Gross Beta	-2.29E-16	1.02E-14	1.89E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254275	BALL FIELDS	02/22/22	Gross Alpha/Beta	Gross Beta	2.55E-14	1.36E-14	1.87E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254275	BALL FIELDS	02/22/22	Gross Alpha/Beta	Gross Alpha	7.18E-15	6.78E-15	8.81E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254276	BALL FIELDS	02/22/22	Gross Alpha/Beta	Gross Alpha	2.43E-15	4.81E-15	8.81E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254276	BALL FIELDS	02/22/22	Gross Alpha/Beta	Gross Beta	1.46E-14	1.22E-14	1.87E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254277	BALL FIELDS	02/22/22	Gross Alpha/Beta	Gross Alpha	2.43E-15	4.81E-15	8.81E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254277	BALL FIELDS	02/22/22	Gross Alpha/Beta	Gross Beta	1.15E-14	1.18E-14	1.87E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254278	BALL FIELDS	02/23/22	Gross Alpha/Beta	Gross Beta	4.39E-14	1.63E-14	1.96E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254278	BALL FIELDS	02/23/22	Gross Alpha/Beta	Gross Alpha	8.79E-15	7.55E-15	9.25E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254279	BALL FIELDS	02/23/22	Gross Alpha/Beta	Gross Beta	3.57E-14	1.54E-14	1.96E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254279	BALL FIELDS	02/23/22	Gross Alpha/Beta	Gross Alpha	5.05E-15	6.17E-15	9.25E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254280	BALL FIELDS	02/23/22	Gross Alpha/Beta	Gross Beta	3.98E-14	1.59E-14	1.96E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254280	BALL FIELDS	02/23/22	Gross Alpha/Beta	Gross Alpha	5.05E-15	6.17E-15	9.25E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254281	BALL FIELDS	02/24/22	Gross Alpha/Beta	Gross Alpha	2.89E-15	9.74E-15	2.05E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254281	BALL FIELDS	02/24/22	Gross Alpha/Beta	Gross Beta	1.04E-14	2.51E-14	4.36E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254282	BALL FIELDS	02/24/22	Gross Alpha/Beta	Gross Alpha	8.44E-15	1.25E-14	2.05E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254282	BALL FIELDS	02/24/22	Gross Alpha/Beta	Gross Beta	2.31E-14	2.69E-14	4.36E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP254283	BALL FIELDS	02/24/22	Gross Alpha/Beta	Gross Alpha	8.44E-15	1.25E-14	2.05E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254283	BALL FIELDS	02/24/22	Gross Alpha/Beta	Gross Beta	2.49E-14	2.72E-14	4.36E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254284	BALL FIELDS	02/28/22	Gross Alpha/Beta	Gross Beta	6.21E-14	1.78E-14	1.87E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254284	BALL FIELDS	02/28/22	Gross Alpha/Beta	Gross Alpha	3.62E-15	5.37E-15	8.81E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254285	BALL FIELDS	02/28/22	Gross Alpha/Beta	Gross Beta	4.96E-14	1.65E-14	1.87E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254285	BALL FIELDS	02/28/22	Gross Alpha/Beta	Gross Alpha	7.18E-15	6.78E-15	8.81E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254286	BALL FIELDS	02/28/22	Gross Alpha/Beta	Gross Beta	4.10E-14	1.55E-14	1.87E-14	µCi/mL			Ballfields (General Area)-Perimeter Air
SVP254286	BALL FIELDS	02/28/22	Gross Alpha/Beta	Gross Alpha	1.24E-15	4.18E-15	8.81E-15	µCi/mL			Ballfields (General Area)-Perimeter Air
SVP254286	BALL FIELDS	02/28/22	Gross Alpha/Beta	Gross Alpha	1.43E-14	8.99E-15	8.81E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254286	BALL FIELDS	02/28/22	Gross Alpha/Beta	Gross Beta	6.21E-14	1.78E-14	1.87E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254287	BALL FIELDS	03/01/22	Gross Alpha/Beta	Gross Beta	6.58E-14	1.80E-14	1.85E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254287	BALL FIELDS	03/01/22	Gross Alpha/Beta	Gross Alpha	7.03E-15	6.59E-15	8.50E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254288	BALL FIELDS	03/01/22	Gross Alpha/Beta	Gross Alpha	1.25E-15	4.06E-15	8.50E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254288	BALL FIELDS	03/01/22	Gross Alpha/Beta	Gross Beta	1.13E-14	1.16E-14	1.85E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254289	BALL FIELDS	03/01/22	Gross Alpha/Beta	Gross Beta	4.46E-14	1.57E-14	1.85E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254289	BALL FIELDS	03/01/22	Gross Alpha/Beta	Gross Alpha	8.19E-15	6.99E-15	8.50E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254290	BALL FIELDS	03/02/22	Gross Alpha/Beta	Gross Beta	6.74E-14	1.82E-14	1.85E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254290	BALL FIELDS	03/02/22	Gross Alpha/Beta	Gross Alpha	5.88E-15	6.17E-15	8.50E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254291	BALL FIELDS	03/02/22	Gross Alpha/Beta	Gross Alpha	9.34E-15	7.37E-15	8.50E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254291	BALL FIELDS	03/02/22	Gross Alpha/Beta	Gross Beta	4.54E-14	1.58E-14	1.85E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254292	BALL FIELDS	03/02/22	Gross Alpha/Beta	Gross Beta	5.68E-14	1.71E-14	1.85E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254292	BALL FIELDS	03/02/22	Gross Alpha/Beta	Gross Alpha	7.03E-15	6.59E-15	8.50E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254293	BALL FIELDS	03/03/22	Gross Alpha/Beta	Gross Alpha	1.22E-14	8.48E-15	8.92E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254293	BALL FIELDS	03/03/22	Gross Alpha/Beta	Gross Beta	5.79E-14	1.77E-14	1.94E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254294	BALL FIELDS	03/03/22	Gross Alpha/Beta	Gross Beta	3.25E-14	1.48E-14	1.94E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254294	BALL FIELDS	03/03/22	Gross Alpha/Beta	Gross Alpha	3.74E-15	5.47E-15	8.92E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254295	BALL FIELDS	03/03/22	Gross Alpha/Beta	Gross Beta	4.05E-14	1.58E-14	1.94E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254295	BALL FIELDS	03/03/22	Gross Alpha/Beta	Gross Alpha	8.59E-15	7.33E-15	8.92E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254296	BALL FIELDS	03/07/22	Gross Alpha/Beta	Gross Beta	1.96E-14	1.31E-14	1.92E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254296	BALL FIELDS	03/07/22	Gross Alpha/Beta	Gross Alpha	-1.10E-15	2.50E-15	8.83E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254297	BALL FIELDS	03/07/22	Gross Alpha/Beta	Gross Alpha	3.70E-15	5.42E-15	8.83E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254297	BALL FIELDS	03/07/22	Gross Alpha/Beta	Gross Beta	3.90E-15	1.10E-14	1.92E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254298	BALL FIELDS	03/07/22	Gross Alpha/Beta	Gross Beta	2.51E-14	1.38E-14	1.92E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254298	BALL FIELDS	03/07/22	Gross Alpha/Beta	Gross Alpha	7.30E-15	6.85E-15	8.83E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254299	BALL FIELDS	03/08/22	Gross Alpha/Beta	Gross Beta	3.08E-14	1.43E-14	1.89E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254299	BALL FIELDS	03/08/22	Gross Alpha/Beta	Gross Alpha	9.80E-17	3.40E-15	8.66E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254300	BALL FIELDS	03/08/22	Gross Alpha/Beta	Gross Beta	2.39E-14	1.35E-14	1.89E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254300	BALL FIELDS	03/08/22	Gross Alpha/Beta	Gross Alpha	2.45E-15	4.76E-15	8.66E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254301	BALL FIELDS	03/08/22	Gross Alpha/Beta	Gross Beta	3.08E-14	1.43E-14	1.89E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254301	BALL FIELDS	03/08/22	Gross Alpha/Beta	Gross Alpha	7.17E-15	6.72E-15	8.66E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254302	BALL FIELDS	03/09/22	Gross Alpha/Beta	Gross Beta	4.09E-14	1.53E-14	1.85E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP254302	BALL FIELDS	03/09/22	Gross Alpha/Beta	Gross Alpha	5.88E-15	6.17E-15	8.50E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254303	BALL FIELDS	03/09/22	Gross Alpha/Beta	Gross Beta	5.30E-14	1.66E-14	1.85E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254303	BALL FIELDS	03/09/22	Gross Alpha/Beta	Gross Alpha	5.88E-15	6.17E-15	8.50E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254304	BALL FIELDS	03/09/22	Gross Alpha/Beta	Gross Beta	4.24E-14	1.55E-14	1.85E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254304	BALL FIELDS	03/09/22	Gross Alpha/Beta	Gross Alpha	7.03E-15	6.59E-15	8.50E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254305	BALL FIELDS	03/10/22	Gross Alpha/Beta	Gross Alpha	1.20E-14	8.32E-15	8.75E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254305	BALL FIELDS	03/10/22	Gross Alpha/Beta	Gross Beta	6.30E-14	1.80E-14	1.91E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254306	BALL FIELDS	03/10/22	Gross Alpha/Beta	Gross Beta	2.72E-14	1.40E-14	1.91E-14	µCi/mL			Ballfields (General Area)-Perimeter Air
SVP254306	BALL FIELDS	03/10/22	Gross Alpha/Beta	Gross Alpha	6.04E-15	6.34E-15	8.75E-15	µCi/mL			Ballfields (General Area)-Perimeter Air
SVP254306	BALL FIELDS	03/10/22	Gross Alpha/Beta	Gross Beta	2.57E-14	1.38E-14	1.91E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254306	BALL FIELDS	03/10/22	Gross Alpha/Beta	Gross Alpha	3.67E-15	5.37E-15	8.75E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254358	BALL FIELDS	03/10/22	Gross Alpha/Beta	Gross Alpha	1.53E-14	8.99E-15	7.45E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254358	BALL FIELDS	03/10/22	Gross Alpha/Beta	Gross Beta	5.72E-14	1.69E-14	1.77E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254359	BALL FIELDS	03/14/22	Gross Alpha/Beta	Gross Alpha	8.42E-15	6.97E-15	7.67E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254359	BALL FIELDS	03/14/22	Gross Alpha/Beta	Gross Beta	3.56E-14	1.47E-14	1.82E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254360	BALL FIELDS	03/14/22	Gross Alpha/Beta	Gross Beta	2.28E-14	1.31E-14	1.82E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254360	BALL FIELDS	03/14/22	Gross Alpha/Beta	Gross Alpha	3.52E-15	4.93E-15	7.67E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254361	BALL FIELDS	03/14/22	Gross Alpha/Beta	Gross Alpha	1.07E-15	3.50E-15	7.67E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254361	BALL FIELDS	03/14/22	Gross Alpha/Beta	Gross Beta	1.72E-14	1.23E-14	1.82E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254362	BALL FIELDS	03/15/22	Gross Alpha/Beta	Gross Alpha	8.25E-15	6.84E-15	7.52E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254362	BALL FIELDS	03/15/22	Gross Alpha/Beta	Gross Beta	2.95E-14	1.38E-14	1.79E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254363	BALL FIELDS	03/16/22	Gross Alpha/Beta	Gross Beta	3.04E-14	1.45E-14	1.90E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254363	BALL FIELDS	03/16/22	Gross Alpha/Beta	Gross Alpha	7.49E-15	6.79E-15	7.99E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254364	BALL FIELDS	03/21/22	Gross Alpha/Beta	Gross Beta	4.57E-14	3.05E-14	4.42E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254364	BALL FIELDS	03/21/22	Gross Alpha/Beta	Gross Alpha	2.60E-15	8.51E-15	1.86E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254365	BALL FIELDS	03/21/22	Gross Alpha/Beta	Gross Alpha	5.57E-15	1.04E-14	1.86E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254365	BALL FIELDS	03/21/22	Gross Alpha/Beta	Gross Beta	4.37E-14	3.02E-14	4.42E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254366	BALL FIELDS	03/23/22	Gross Alpha/Beta	Gross Alpha	3.52E-15	4.93E-15	7.67E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254366	BALL FIELDS	03/23/22	Gross Alpha/Beta	Gross Beta	1.48E-14	1.20E-14	1.82E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254367	BALL FIELDS	03/23/22	Gross Alpha/Beta	Gross Alpha	5.97E-15	6.04E-15	7.67E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254367	BALL FIELDS	03/23/22	Gross Alpha/Beta	Gross Beta	1.48E-14	1.20E-14	1.82E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254368	BALL FIELDS	03/28/22	Gross Alpha/Beta	Gross Alpha	4.48E-15	5.21E-15	7.25E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254368	BALL FIELDS	03/28/22	Gross Alpha/Beta	Gross Beta	1.40E-14	1.13E-14	1.72E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254369	BALL FIELDS	03/28/22	Gross Alpha/Beta	Gross Alpha	-1.30E-15	5.10E-16	7.25E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254369	BALL FIELDS	03/28/22	Gross Alpha/Beta	Gross Beta	1.17E-14	1.10E-14	1.72E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254370	BALL FIELDS	03/29/22	Gross Alpha/Beta	Gross Beta	3.14E-14	1.36E-14	1.72E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254370	BALL FIELDS	03/29/22	Gross Alpha/Beta	Gross Alpha	4.48E-15	5.21E-15	7.25E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254371	BALL FIELDS	03/29/22	Gross Alpha/Beta	Gross Beta	2.08E-14	1.23E-14	1.72E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254371	BALL FIELDS	03/29/22	Gross Alpha/Beta	Gross Alpha	1.01E-15	3.31E-15	7.25E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254372	BALL FIELDS	03/30/22	Gross Alpha/Beta	Gross Alpha	1.61E-14	1.87E-14	2.61E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254372	BALL FIELDS	03/30/22	Gross Alpha/Beta	Gross Beta	-4.20E-15	3.25E-14	6.19E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP254373	BALL FIELDS	03/30/22	Gross Alpha/Beta	Gross Alpha	3.64E-15	1.19E-14	2.61E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254373	BALL FIELDS	03/30/22	Gross Alpha/Beta	Gross Beta	2.85E-14	3.76E-14	6.19E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254374	BALL FIELDS	03/31/22	Gross Alpha/Beta	Gross Alpha	3.42E-15	4.79E-15	7.45E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254374	BALL FIELDS	03/31/22	Gross Alpha/Beta	Gross Beta	7.37E-15	1.06E-14	1.77E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254375	BALL FIELDS	03/31/22	Gross Alpha/Beta	Gross Alpha	6.99E-15	6.34E-15	7.45E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254375	BALL FIELDS	03/31/22	Gross Alpha/Beta	Gross Beta	1.67E-14	1.20E-14	1.77E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254376	BALL FIELDS	04/04/22	Gross Alpha/Beta	Gross Beta	3.70E-14	1.46E-14	1.77E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254376	BALL FIELDS	04/04/22	Gross Alpha/Beta	Gross Alpha	3.42E-15	4.79E-15	7.45E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254377	BALL FIELDS	04/04/22	Gross Alpha/Beta	Gross Alpha	5.80E-15	5.86E-15	7.45E-15	µCi/mL			Ballfields (General Area)-Perimeter Air
SVP254377	BALL FIELDS	04/04/22	Gross Alpha/Beta	Gross Beta	1.75E-14	1.21E-14	1.77E-14	µCi/mL			Ballfields (General Area)-Perimeter Air
SVP254377	BALL FIELDS	04/04/22	Gross Alpha/Beta	Gross Beta	3.00E-14	1.37E-14	1.77E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254377	BALL FIELDS	04/04/22	Gross Alpha/Beta	Gross Alpha	1.04E-15	3.40E-15	7.45E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254406	BALL FIELDS	04/05/22	Gross Alpha/Beta	Gross Alpha	-7.75E-16	4.41E-15	1.13E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254406	BALL FIELDS	04/05/22	Gross Alpha/Beta	Gross Beta	1.35E-14	1.50E-14	2.43E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254407	BALL FIELDS	04/05/22	Gross Alpha/Beta	Gross Beta	3.11E-14	1.69E-14	2.43E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254407	BALL FIELDS	04/05/22	Gross Alpha/Beta	Gross Alpha	6.67E-15	7.52E-15	1.13E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254408	BALL FIELDS	04/06/22	Gross Alpha/Beta	Gross Alpha	-3.07E-15	2.52E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254408	BALL FIELDS	04/06/22	Gross Alpha/Beta	Gross Beta	-3.04E-15	1.23E-14	2.29E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254409	BALL FIELDS	04/06/22	Gross Alpha/Beta	Gross Alpha	3.95E-15	6.26E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254409	BALL FIELDS	04/06/22	Gross Alpha/Beta	Gross Beta	1.88E-14	1.48E-14	2.29E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254410	BALL FIELDS	04/07/22	Gross Alpha/Beta	Gross Beta	3.01E-14	1.60E-14	2.29E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254410	BALL FIELDS	04/07/22	Gross Alpha/Beta	Gross Alpha	2.78E-15	5.81E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254411	BALL FIELDS	04/07/22	Gross Alpha/Beta	Gross Alpha	6.29E-15	7.09E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254411	BALL FIELDS	04/07/22	Gross Alpha/Beta	Gross Beta	1.88E-14	1.48E-14	2.29E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254412	BALL FIELDS	04/12/22	Gross Alpha/Beta	Gross Alpha	-3.07E-15	2.52E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254412	BALL FIELDS	04/12/22	Gross Alpha/Beta	Gross Beta	-2.29E-15	1.24E-14	2.29E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254413	BALL FIELDS	04/12/22	Gross Alpha/Beta	Gross Alpha	1.61E-15	5.31E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254413	BALL FIELDS	04/12/22	Gross Alpha/Beta	Gross Beta	1.35E-14	1.42E-14	2.29E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254414	BALL FIELDS	04/14/22	Gross Alpha/Beta	Gross Beta	3.84E-14	1.69E-14	2.29E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP254414	BALL FIELDS	04/14/22	Gross Alpha/Beta	Gross Alpha	3.95E-15	6.26E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254415	BALL FIELDS	04/14/22	Gross Alpha/Beta	Gross Alpha	-7.31E-16	4.15E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254415	BALL FIELDS	04/14/22	Gross Alpha/Beta	Gross Beta	1.05E-14	1.39E-14	2.29E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254416	BALL FIELDS	04/18/22	Gross Alpha/Beta	Gross Beta	3.76E-14	1.68E-14	2.29E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP254416	BALL FIELDS	04/18/22	Gross Alpha/Beta	Gross Alpha	-4.24E-15	9.64E-16	1.07E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254417	BALL FIELDS	04/19/22	Gross Alpha/Beta	Gross Alpha	5.12E-15	6.69E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254417	BALL FIELDS	04/19/22	Gross Alpha/Beta	Gross Beta	1.28E-14	1.41E-14	2.29E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254418	BALL FIELDS	04/21/22	Gross Alpha/Beta	Gross Alpha	-1.85E-15	3.34E-15	1.04E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254418	BALL FIELDS	04/21/22	Gross Alpha/Beta	Gross Beta	1.31E-14	1.38E-14	2.22E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254419	BALL FIELDS	04/25/22	Gross Alpha/Beta	Gross Alpha	-1.85E-15	3.34E-15	1.04E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254419	BALL FIELDS	04/25/22	Gross Alpha/Beta	Gross Beta	4.36E-15	1.28E-14	2.22E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254420	BALL FIELDS	04/26/22	Gross Alpha/Beta	Gross Alpha	2.78E-15	5.81E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP254420	BALL FIELDS	04/26/22	Gross Alpha/Beta	Gross Beta	-3.10E-17	1.27E-14	2.29E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254421	BALL FIELDS	04/27/22	Gross Alpha/Beta	Gross Beta	2.41E-14	1.54E-14	2.29E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254421	BALL FIELDS	04/27/22	Gross Alpha/Beta	Gross Alpha	1.61E-15	5.31E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254422	BALL FIELDS	04/28/22	Gross Alpha/Beta	Gross Alpha	4.27E-16	4.64E-15	1.04E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254422	BALL FIELDS	04/28/22	Gross Alpha/Beta	Gross Beta	2.05E-14	1.46E-14	2.22E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254423	BALL FIELDS	05/02/22	Gross Alpha/Beta	Gross Alpha	-7.11E-16	4.04E-15	1.04E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254423	BALL FIELDS	05/02/22	Gross Alpha/Beta	Gross Beta	1.68E-14	1.42E-14	2.22E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254424	BALL FIELDS	05/03/22	Gross Alpha/Beta	Gross Alpha	-1.85E-15	3.34E-15	1.04E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254424	BALL FIELDS	05/03/22	Gross Alpha/Beta	Gross Beta	1.31E-14	1.38E-14	2.22E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254425	BALL FIELDS	05/03/22	Gross Alpha/Beta	Gross Alpha	4.27E-16	4.64E-15	1.04E-14	µCi/mL			Ballfields (IA-09)(General Area)-Perimeter Air
SVP254425	BALL FIELDS	05/03/22	Gross Alpha/Beta	Gross Beta	-1.49E-15	1.21E-14	2.22E-14	µCi/mL			Ballfields (IA-09)(General Area)-Perimeter Air
SVP254425	BALL FIELDS	05/03/22	Gross Alpha/Beta	Gross Alpha	-2.99E-15	2.45E-15	1.04E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254425	BALL FIELDS	05/03/22	Gross Alpha/Beta	Gross Beta	-1.49E-15	1.21E-14	2.22E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254436	BALL FIELDS	05/04/22	Gross Alpha/Beta	Gross Alpha	1.40E-16	4.57E-15	1.04E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254436	BALL FIELDS	05/04/22	Gross Alpha/Beta	Gross Beta	2.90E-15	1.28E-14	2.26E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254437	BALL FIELDS	05/09/22	Gross Alpha/Beta	Gross Alpha	3.50E-15	6.00E-15	1.04E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254437	BALL FIELDS	05/09/22	Gross Alpha/Beta	Gross Beta	1.96E-14	1.47E-14	2.26E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254438	BALL FIELDS	05/09/22	Gross Alpha/Beta	Gross Beta	2.94E-14	1.58E-14	2.26E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254438	BALL FIELDS	05/09/22	Gross Alpha/Beta	Gross Alpha	1.40E-16	4.57E-15	1.04E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254439	BALL FIELDS	05/04/22	Gross Alpha/Beta	Gross Alpha	-9.80E-16	3.98E-15	1.04E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254439	BALL FIELDS	05/04/22	Gross Alpha/Beta	Gross Beta	5.93E-15	1.32E-14	2.26E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254440	BALL FIELDS	05/10/22	Gross Alpha/Beta	Gross Beta	3.10E-14	1.63E-14	2.32E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254440	BALL FIELDS	05/10/22	Gross Alpha/Beta	Gross Alpha	4.75E-15	6.59E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254441	BALL FIELDS	05/10/22	Gross Alpha/Beta	Gross Beta	4.66E-14	1.80E-14	2.32E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254441	BALL FIELDS	05/10/22	Gross Alpha/Beta	Gross Alpha	4.75E-15	6.59E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254442	BALL FIELDS	05/11/22	Gross Alpha/Beta	Gross Beta	2.79E-14	1.57E-14	2.26E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254442	BALL FIELDS	05/11/22	Gross Alpha/Beta	Gross Alpha	7.98E-15	7.51E-15	1.04E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254443	BALL FIELDS	05/11/22	Gross Alpha/Beta	Gross Beta	3.55E-14	1.65E-14	2.26E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254443	BALL FIELDS	05/11/22	Gross Alpha/Beta	Gross Alpha	3.50E-15	6.00E-15	1.04E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254444	BALL FIELDS	05/12/22	Gross Alpha/Beta	Gross Beta	5.29E-14	1.86E-14	2.32E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254444	BALL FIELDS	05/12/22	Gross Alpha/Beta	Gross Alpha	5.90E-15	6.99E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254445	BALL FIELDS	05/12/22	Gross Alpha/Beta	Gross Beta	4.82E-14	1.81E-14	2.32E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254445	BALL FIELDS	05/12/22	Gross Alpha/Beta	Gross Alpha	7.06E-15	7.36E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254446	BALL FIELDS	05/16/22	Gross Alpha/Beta	Gross Beta	3.26E-14	1.65E-14	2.32E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254446	BALL FIELDS	05/16/22	Gross Alpha/Beta	Gross Alpha	1.30E-15	5.24E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254447	BALL FIELDS	05/16/22	Gross Alpha/Beta	Gross Beta	2.95E-14	1.62E-14	2.32E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254447	BALL FIELDS	05/16/22	Gross Alpha/Beta	Gross Alpha	3.60E-15	6.17E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254448	BALL FIELDS	05/17/22	Gross Alpha/Beta	Gross Beta	2.95E-14	1.62E-14	2.32E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254448	BALL FIELDS	05/17/22	Gross Alpha/Beta	Gross Alpha	7.06E-15	7.36E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254449	BALL FIELDS	05/17/22	Gross Alpha/Beta	Gross Beta	3.42E-14	1.67E-14	2.32E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254449	BALL FIELDS	05/17/22	Gross Alpha/Beta	Gross Alpha	5.90E-15	6.99E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP254450	BALL FIELDS	05/18/22	Gross Alpha/Beta	Gross Alpha	1.48E-16	4.84E-15	1.11E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254450	BALL FIELDS	05/18/22	Gross Alpha/Beta	Gross Beta	1.99E-14	1.55E-14	2.39E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254451	BALL FIELDS	05/18/22	Gross Alpha/Beta	Gross Beta	2.79E-14	1.64E-14	2.39E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254451	BALL FIELDS	05/18/22	Gross Alpha/Beta	Gross Alpha	1.33E-15	5.39E-15	1.11E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254452	BALL FIELDS	05/19/22	Gross Alpha/Beta	Gross Alpha	4.50E-15	7.71E-15	1.34E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254452	BALL FIELDS	05/19/22	Gross Alpha/Beta	Gross Beta	1.64E-14	1.80E-14	2.90E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254453	BALL FIELDS	05/19/22	Gross Alpha/Beta	Gross Beta	4.27E-14	2.08E-14	2.90E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254453	BALL FIELDS	05/19/22	Gross Alpha/Beta	Gross Alpha	1.62E-15	6.54E-15	1.34E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254454	BALL FIELDS	05/23/22	Gross Alpha/Beta	Gross Alpha	5.74E-15	6.79E-15	1.04E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254454	BALL FIELDS	05/23/22	Gross Alpha/Beta	Gross Beta	1.65E-14	1.44E-14	2.26E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254455	BALL FIELDS	05/23/22	Gross Alpha/Beta	Gross Alpha	1.26E-15	5.09E-15	1.04E-14	µCi/mL			Ballfields (General Area)-Perimeter Air
SVP254455	BALL FIELDS	05/23/22	Gross Alpha/Beta	Gross Beta	8.96E-15	1.35E-14	2.26E-14	µCi/mL			Ballfields (General Area)-Perimeter Air
SVP254455	BALL FIELDS	05/23/22	Gross Alpha/Beta	Gross Alpha	-9.80E-16	3.98E-15	1.04E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254455	BALL FIELDS	05/23/22	Gross Alpha/Beta	Gross Beta	1.43E-14	1.42E-14	2.26E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254456	BALL FIELDS	05/24/22	Gross Alpha/Beta	Gross Alpha	1.54E-15	4.82E-15	9.79E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254456	BALL FIELDS	05/24/22	Gross Alpha/Beta	Gross Beta	1.12E-14	1.15E-14	1.84E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254457	BALL FIELDS	05/24/22	Gross Alpha/Beta	Gross Beta	2.99E-14	1.40E-14	1.84E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254457	BALL FIELDS	05/24/22	Gross Alpha/Beta	Gross Alpha	2.73E-15	5.38E-15	9.79E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254458	BALL FIELDS	05/25/22	Gross Alpha/Beta	Gross Alpha	1.54E-15	4.82E-15	9.79E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254458	BALL FIELDS	05/25/22	Gross Alpha/Beta	Gross Beta	1.82E-14	1.25E-14	1.84E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254459	BALL FIELDS	05/25/22	Gross Alpha/Beta	Gross Beta	2.83E-14	1.38E-14	1.84E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254459	BALL FIELDS	05/25/22	Gross Alpha/Beta	Gross Alpha	1.54E-15	4.82E-15	9.79E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254460	BALL FIELDS	05/26/22	Gross Alpha/Beta	Gross Beta	2.29E-14	1.31E-14	1.84E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254460	BALL FIELDS	05/26/22	Gross Alpha/Beta	Gross Alpha	1.54E-15	4.82E-15	9.79E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254461	BALL FIELDS	05/26/22	Gross Alpha/Beta	Gross Alpha	-8.42E-16	3.46E-15	9.79E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254461	BALL FIELDS	05/26/22	Gross Alpha/Beta	Gross Beta	1.35E-14	1.19E-14	1.84E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254462	BALL FIELDS	05/31/22	Gross Alpha/Beta	Gross Beta	2.52E-14	1.34E-14	1.84E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254462	BALL FIELDS	05/31/22	Gross Alpha/Beta	Gross Alpha	-2.03E-15	2.51E-15	9.79E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254463	BALL FIELDS	05/31/22	Gross Alpha/Beta	Gross Alpha	7.48E-15	7.20E-15	9.79E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254463	BALL FIELDS	05/31/22	Gross Alpha/Beta	Gross Beta	1.74E-14	1.24E-14	1.84E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254464	BALL FIELDS	06/01/22	Gross Alpha/Beta	Gross Alpha	4.05E-16	4.90E-15	1.14E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254464	BALL FIELDS	06/01/22	Gross Alpha/Beta	Gross Beta	1.85E-14	1.42E-14	2.14E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254465	BALL FIELDS	06/02/22	Gross Alpha/Beta	Gross Beta	2.05E-14	1.28E-14	1.84E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP254465	BALL FIELDS	06/02/22	Gross Alpha/Beta	Gross Alpha	-8.42E-16	3.46E-15	9.79E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254466	BALL FIELDS	06/02/22	Gross Alpha/Beta	Gross Alpha	3.47E-16	4.20E-15	9.79E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254466	BALL FIELDS	06/02/22	Gross Alpha/Beta	Gross Beta	1.74E-14	1.24E-14	1.84E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP254467	BALL FIELDS	06/06/22	Gross Alpha/Beta	Gross Beta	2.92E-14	1.42E-14	1.89E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP254467	BALL FIELDS	06/06/22	Gross Alpha/Beta	Gross Alpha	5.25E-15	6.54E-15	1.01E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254468	BALL FIELDS	06/06/22	Gross Alpha/Beta	Gross Beta	3.24E-14	1.46E-14	1.89E-14	µCi/mL			Ballfields (General Area)-Perimeter Air
SVP254468	BALL FIELDS	06/06/22	Gross Alpha/Beta	Gross Alpha	4.03E-15	6.06E-15	1.01E-14	µCi/mL			Ballfields (General Area)-Perimeter Air
SVP254468	BALL FIELDS	06/06/22	Gross Alpha/Beta	Gross Beta	4.12E-14	1.57E-14	1.89E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP254468	BALL FIELDS	06/06/22	Gross Alpha/Beta	Gross Alpha	4.03E-15	6.06E-15	1.01E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP254509	BALL FIELDS	06/07/22	Gross Alpha/Beta	Gross Beta	2.74E-14	1.60E-14	2.34E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254509	BALL FIELDS	06/07/22	Gross Alpha/Beta	Gross Alpha	3.18E-15	5.92E-15	1.05E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254510	BALL FIELDS	06/07/22	Gross Alpha/Beta	Gross Beta	2.35E-14	1.56E-14	2.34E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254510	BALL FIELDS	06/07/22	Gross Alpha/Beta	Gross Alpha	5.57E-15	6.82E-15	1.05E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254511	BALL FIELDS	06/08/22	Gross Alpha/Beta	Gross Alpha	2.13E-15	5.80E-15	1.13E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254511	BALL FIELDS	06/08/22	Gross Alpha/Beta	Gross Beta	1.54E-14	1.57E-14	2.51E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254512	BALL FIELDS	06/08/22	Gross Alpha/Beta	Gross Beta	3.84E-14	1.81E-14	2.51E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP254512	BALL FIELDS	06/08/22	Gross Alpha/Beta	Gross Alpha	8.53E-15	8.17E-15	1.13E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254513	BALL FIELDS	06/09/22	Gross Alpha/Beta	Gross Alpha	-3.94E-16	4.19E-15	1.04E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254513	BALL FIELDS	06/09/22	Gross Alpha/Beta	Gross Beta	1.42E-14	1.44E-14	2.31E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254514	BALL FIELDS	06/09/22	Gross Alpha/Beta	Gross Alpha	7.87E-15	7.55E-15	1.04E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP254514	BALL FIELDS	06/09/22	Gross Alpha/Beta	Gross Beta	1.87E-14	1.49E-14	2.31E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258502	BALL FIELDS	06/13/22	Gross Alpha/Beta	Gross Alpha	6.96E-15	7.45E-15	1.09E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258502	BALL FIELDS	06/13/22	Gross Alpha/Beta	Gross Beta	1.95E-14	1.55E-14	2.41E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258503	BALL FIELDS	06/14/22	Gross Alpha/Beta	Gross Alpha	1.13E-14	8.52E-15	1.03E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258503	BALL FIELDS	06/14/22	Gross Alpha/Beta	Gross Beta	3.74E-14	1.68E-14	2.29E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258504	BALL FIELDS	06/15/22	Gross Alpha/Beta	Gross Alpha	1.97E-15	5.36E-15	1.04E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258504	BALL FIELDS	06/15/22	Gross Alpha/Beta	Gross Beta	7.34E-15	1.37E-14	2.31E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258505	BALL FIELDS	06/16/22	Gross Alpha/Beta	Gross Alpha	3.64E-15	6.77E-15	1.21E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258505	BALL FIELDS	06/16/22	Gross Alpha/Beta	Gross Beta	2.43E-14	1.76E-14	2.67E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258506	BALL FIELDS	06/16/22	Gross Alpha/Beta	Gross Alpha	7.95E-16	4.85E-15	1.05E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258506	BALL FIELDS	06/16/22	Gross Alpha/Beta	Gross Beta	1.89E-14	1.51E-14	2.34E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258507	BALL FIELDS	06/20/22	Gross Alpha/Beta	Gross Beta	3.46E-14	1.69E-14	2.36E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258507	BALL FIELDS	06/20/22	Gross Alpha/Beta	Gross Alpha	6.82E-15	7.30E-15	1.06E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258508	BALL FIELDS	06/20/22	Gross Alpha/Beta	Gross Alpha	1.65E-14	1.01E-14	1.06E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258508	BALL FIELDS	06/20/22	Gross Alpha/Beta	Gross Beta	3.77E-14	1.72E-14	2.36E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258509	BALL FIELDS	06/21/22	Gross Alpha/Beta	Gross Alpha	1.29E-14	9.11E-15	1.06E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258509	BALL FIELDS	06/21/22	Gross Alpha/Beta	Gross Beta	6.40E-14	1.98E-14	2.36E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258510	BALL FIELDS	06/21/22	Gross Alpha/Beta	Gross Beta	3.31E-14	1.67E-14	2.36E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258510	BALL FIELDS	06/21/22	Gross Alpha/Beta	Gross Alpha	2.01E-15	5.46E-15	1.06E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258511	BALL FIELDS	06/22/22	Gross Alpha/Beta	Gross Beta	3.36E-14	1.64E-14	2.29E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258511	BALL FIELDS	06/22/22	Gross Alpha/Beta	Gross Alpha	5.46E-15	6.69E-15	1.03E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258512	BALL FIELDS	06/22/22	Gross Alpha/Beta	Gross Beta	4.87E-14	1.79E-14	2.29E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258512	BALL FIELDS	06/22/22	Gross Alpha/Beta	Gross Alpha	4.29E-15	6.26E-15	1.03E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258513	BALL FIELDS	06/23/22	Gross Alpha/Beta	Gross Alpha	-3.94E-16	4.19E-15	1.04E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258513	BALL FIELDS	06/23/22	Gross Alpha/Beta	Gross Beta	2.03E-14	1.51E-14	2.31E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258514	BALL FIELDS	06/23/22	Gross Alpha/Beta	Gross Alpha	1.97E-15	5.36E-15	1.04E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258514	BALL FIELDS	06/23/22	Gross Alpha/Beta	Gross Beta	1.80E-14	1.49E-14	2.31E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258515	BALL FIELDS	06/27/22	Gross Alpha/Beta	Gross Beta	2.76E-14	1.62E-14	2.36E-14	µCi/mL			Ballfields (IA-09)(General Area)-Perimeter Air
SVP258515	BALL FIELDS	06/27/22	Gross Alpha/Beta	Gross Alpha	-4.01E-16	4.27E-15	1.06E-14	µCi/mL			Ballfields (IA-09)(General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP258515	BALL FIELDS	06/27/22	Gross Alpha/Beta	Gross Alpha	-1.61E-15	3.53E-15	1.06E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258515	BALL FIELDS	06/27/22	Gross Alpha/Beta	Gross Beta	1.52E-14	1.48E-14	2.36E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258516	BALL FIELDS	06/27/22	Gross Alpha/Beta	Gross Beta	2.00E-14	1.31E-14	1.90E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258516	BALL FIELDS	06/27/22	Gross Alpha/Beta	Gross Alpha	2.55E-15	4.95E-15	9.00E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258517	BALL FIELDS	06/28/22	Gross Alpha/Beta	Gross Beta	3.44E-14	1.49E-14	1.90E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258517	BALL FIELDS	06/28/22	Gross Alpha/Beta	Gross Alpha	2.55E-15	4.95E-15	9.00E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258518	BALL FIELDS	06/28/22	Gross Alpha/Beta	Gross Beta	2.00E-14	1.31E-14	1.90E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258518	BALL FIELDS	06/28/22	Gross Alpha/Beta	Gross Alpha	6.22E-15	6.53E-15	9.00E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258519	BALL FIELDS	06/29/22	Gross Alpha/Beta	Gross Beta	3.52E-14	1.50E-14	1.90E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258519	BALL FIELDS	06/29/22	Gross Alpha/Beta	Gross Alpha	2.55E-15	4.95E-15	9.00E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258520	BALL FIELDS	06/29/22	Gross Alpha/Beta	Gross Beta	2.08E-14	1.32E-14	1.90E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258520	BALL FIELDS	06/29/22	Gross Alpha/Beta	Gross Alpha	3.77E-15	5.53E-15	9.00E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258521	BALL FIELDS	06/30/22	Gross Alpha/Beta	Gross Beta	3.28E-14	1.47E-14	1.90E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258521	BALL FIELDS	06/30/22	Gross Alpha/Beta	Gross Alpha	7.45E-15	6.98E-15	9.00E-15	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258522	BALL FIELDS	06/30/22	Gross Alpha/Beta	Gross Beta	2.48E-14	1.37E-14	1.90E-14	µCi/mL			Ballfields (IA-09)(General Area)-Perimeter Air
SVP258522	BALL FIELDS	06/30/22	Gross Alpha/Beta	Gross Alpha	5.00E-15	6.05E-15	9.00E-15	µCi/mL			Ballfields (IA-09)(General Area)-Perimeter Air
SVP258522	BALL FIELDS	06/30/22	Gross Alpha/Beta	Gross Beta	1.92E-14	1.30E-14	1.90E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258522	BALL FIELDS	06/30/22	Gross Alpha/Beta	Gross Alpha	1.33E-15	4.30E-15	9.00E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258551	BALL FIELDS	07/05/22	Gross Alpha/Beta	Gross Beta	2.57E-14	1.60E-14	2.35E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258551	BALL FIELDS	07/05/22	Gross Alpha/Beta	Gross Alpha	7.51E-15	6.76E-15	8.35E-15	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258552	BALL FIELDS	07/05/22	Gross Alpha/Beta	Gross Beta	3.78E-14	1.73E-14	2.35E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258552	BALL FIELDS	07/05/22	Gross Alpha/Beta	Gross Alpha	5.14E-15	5.86E-15	8.35E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258553	BALL FIELDS	07/06/22	Gross Alpha/Beta	Gross Alpha	7.30E-15	6.57E-15	8.11E-15	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258553	BALL FIELDS	07/06/22	Gross Alpha/Beta	Gross Beta	2.19E-14	1.52E-14	2.29E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258554	BALL FIELDS	07/06/22	Gross Alpha/Beta	Gross Alpha	8.45E-15	6.97E-15	8.11E-15	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258554	BALL FIELDS	07/06/22	Gross Alpha/Beta	Gross Beta	2.34E-14	1.53E-14	2.29E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258555	BALL FIELDS	07/07/22	Gross Alpha/Beta	Gross Beta	2.58E-14	1.56E-14	2.29E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258555	BALL FIELDS	07/07/22	Gross Alpha/Beta	Gross Alpha	-7.68E-16	2.38E-15	8.11E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258556	BALL FIELDS	07/07/22	Gross Alpha/Beta	Gross Alpha	2.69E-15	4.65E-15	8.11E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258556	BALL FIELDS	07/07/22	Gross Alpha/Beta	Gross Beta	2.40E-15	1.29E-14	2.29E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258557	BALL FIELDS	07/11/22	Gross Alpha/Beta	Gross Beta	2.65E-14	1.61E-14	2.35E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258557	BALL FIELDS	07/11/22	Gross Alpha/Beta	Gross Alpha	2.77E-15	4.79E-15	8.35E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258558	BALL FIELDS	07/11/22	Gross Alpha/Beta	Gross Beta	3.38E-14	1.68E-14	2.35E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258558	BALL FIELDS	07/11/22	Gross Alpha/Beta	Gross Alpha	3.95E-15	5.35E-15	8.35E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258559	BALL FIELDS	07/12/22	Gross Alpha/Beta	Gross Alpha	1.58E-15	4.16E-15	8.35E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258559	BALL FIELDS	07/12/22	Gross Alpha/Beta	Gross Beta	1.45E-14	1.47E-14	2.35E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258560	BALL FIELDS	07/12/22	Gross Alpha/Beta	Gross Alpha	3.95E-16	3.41E-15	8.35E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258560	BALL FIELDS	07/12/22	Gross Alpha/Beta	Gross Beta	2.09E-14	1.54E-14	2.35E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258561	BALL FIELDS	07/13/22	Gross Alpha/Beta	Gross Beta	2.89E-14	1.59E-14	2.29E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258561	BALL FIELDS	07/13/22	Gross Alpha/Beta	Gross Alpha	7.30E-15	6.57E-15	8.11E-15	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258562	BALL FIELDS	07/13/22	Gross Alpha/Beta	Gross Beta	2.97E-14	1.60E-14	2.29E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP258562	BALL FIELDS	07/13/22	Gross Alpha/Beta	Gross Alpha	1.54E-15	4.04E-15	8.11E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258563	BALL FIELDS	07/14/22	Gross Alpha/Beta	Gross Beta	4.82E-14	1.84E-14	2.35E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258563	BALL FIELDS	07/14/22	Gross Alpha/Beta	Gross Alpha	5.14E-15	5.86E-15	8.35E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258564	BALL FIELDS	07/14/22	Gross Alpha/Beta	Gross Beta	4.50E-14	1.80E-14	2.35E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258564	BALL FIELDS	07/14/22	Gross Alpha/Beta	Gross Alpha	6.32E-15	6.32E-15	8.35E-15	µCi/mL	U		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258565	BALL FIELDS	07/18/22	Gross Alpha/Beta	Gross Alpha	3.84E-16	3.31E-15	8.11E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258565	BALL FIELDS	07/18/22	Gross Alpha/Beta	Gross Beta	5.52E-15	1.33E-14	2.29E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258566	BALL FIELDS	07/18/22	Gross Alpha/Beta	Gross Alpha	8.45E-15	6.97E-15	8.11E-15	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258566	BALL FIELDS	07/18/22	Gross Alpha/Beta	Gross Beta	6.63E-14	1.98E-14	2.29E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258567	BALL FIELDS	07/19/22	Gross Alpha/Beta	Gross Alpha	6.14E-15	6.14E-15	8.11E-15	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258567	BALL FIELDS	07/19/22	Gross Alpha/Beta	Gross Beta	-7.14E-16	1.25E-14	2.29E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258568	BALL FIELDS	07/19/22	Gross Alpha/Beta	Gross Beta	5.93E-14	1.91E-14	2.29E-14	µCi/mL			Ballfields (IA-09)(General Area)-Perimeter Air
SVP258568	BALL FIELDS	07/19/22	Gross Alpha/Beta	Gross Alpha	4.99E-15	5.69E-15	8.11E-15	µCi/mL			Ballfields (IA-09)(General Area)-Perimeter Air
SVP258568	BALL FIELDS	07/19/22	Gross Alpha/Beta	Gross Beta	5.93E-14	1.91E-14	2.29E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258568	BALL FIELDS	07/19/22	Gross Alpha/Beta	Gross Alpha	1.54E-15	4.04E-15	8.11E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258617	BALL FIELDS	07/20/22	Gross Alpha/Beta	Gross Beta	5.55E-14	1.89E-14	2.34E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP258617	BALL FIELDS	07/20/22	Gross Alpha/Beta	Gross Alpha	7.10E-15	6.56E-15	8.35E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP258618	BALL FIELDS	07/20/22	Gross Alpha/Beta	Gross Alpha	-9.59E-16	2.39E-15	8.35E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP258618	BALL FIELDS	07/20/22	Gross Alpha/Beta	Gross Beta	8.03E-15	1.39E-14	2.34E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP258619	BALL FIELDS	07/21/22	Gross Alpha/Beta	Gross Beta	3.76E-14	1.71E-14	2.34E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP258619	BALL FIELDS	07/21/22	Gross Alpha/Beta	Gross Alpha	8.25E-15	6.96E-15	8.35E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP258620	BALL FIELDS	07/21/22	Gross Alpha/Beta	Gross Alpha	5.95E-15	6.14E-15	8.35E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP258620	BALL FIELDS	07/21/22	Gross Alpha/Beta	Gross Beta	2.20E-14	1.55E-14	2.34E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP258621	BALL FIELDS	07/25/22	Gross Alpha/Beta	Gross Alpha	3.65E-15	5.19E-15	8.35E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP258621	BALL FIELDS	07/25/22	Gross Alpha/Beta	Gross Beta	2.28E-14	1.56E-14	2.34E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP258622	BALL FIELDS	07/25/22	Gross Alpha/Beta	Gross Beta	3.45E-14	1.68E-14	2.34E-14	µCi/mL			Ballfields (General Area)-Perimeter Air
SVP258622	BALL FIELDS	07/25/22	Gross Alpha/Beta	Gross Alpha	4.80E-15	5.69E-15	8.35E-15	µCi/mL			Ballfields (General Area)-Perimeter Air
SVP258622	BALL FIELDS	07/25/22	Gross Alpha/Beta	Gross Beta	2.98E-14	1.63E-14	2.34E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP258622	BALL FIELDS	07/25/22	Gross Alpha/Beta	Gross Alpha	4.80E-15	5.69E-15	8.35E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP258654	BALL FIELDS	09/13/22	Gross Alpha/Beta	Gross Beta	3.36E-14	1.46E-14	1.86E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258654	BALL FIELDS	09/13/22	Gross Alpha/Beta	Gross Alpha	2.03E-15	4.82E-15	9.26E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258655	BALL FIELDS	09/14/22	Gross Alpha/Beta	Gross Alpha	5.60E-15	6.35E-15	9.26E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258655	BALL FIELDS	09/14/22	Gross Alpha/Beta	Gross Beta	1.02E-14	1.15E-14	1.86E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258656	BALL FIELDS	09/14/22	Gross Alpha/Beta	Gross Beta	2.65E-14	1.37E-14	1.86E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258656	BALL FIELDS	09/14/22	Gross Alpha/Beta	Gross Alpha	-2.73E-15	7.63E-16	9.26E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258657	BALL FIELDS	09/15/22	Gross Alpha/Beta	Gross Beta	3.20E-14	1.44E-14	1.86E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258657	BALL FIELDS	09/15/22	Gross Alpha/Beta	Gross Alpha	5.60E-15	6.35E-15	9.26E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258658	BALL FIELDS	09/15/22	Gross Alpha/Beta	Gross Beta	2.58E-14	1.36E-14	1.86E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258658	BALL FIELDS	09/15/22	Gross Alpha/Beta	Gross Alpha	7.98E-15	7.20E-15	9.26E-15	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258659	BALL FIELDS	09/19/22	Gross Alpha/Beta	Gross Beta	2.65E-14	1.37E-14	1.86E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258659	BALL FIELDS	09/19/22	Gross Alpha/Beta	Gross Alpha	4.41E-15	5.88E-15	9.26E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP258660	BALL FIELDS	09/19/22	Gross Alpha/Beta	Gross Alpha	1.51E-14	9.31E-15	9.26E-15	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258660	BALL FIELDS	09/19/22	Gross Alpha/Beta	Gross Beta	4.99E-14	1.65E-14	1.86E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258661	BALL FIELDS	09/20/22	Gross Alpha/Beta	Gross Beta	1.88E-14	1.27E-14	1.86E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258661	BALL FIELDS	09/20/22	Gross Alpha/Beta	Gross Alpha	3.22E-15	5.37E-15	9.26E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258662	BALL FIELDS	09/20/22	Gross Alpha/Beta	Gross Beta	3.74E-14	1.50E-14	1.86E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258662	BALL FIELDS	09/20/22	Gross Alpha/Beta	Gross Alpha	7.98E-15	7.20E-15	9.26E-15	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258663	BALL FIELDS	09/21/22	Gross Alpha/Beta	Gross Alpha	5.76E-15	6.54E-15	9.53E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258663	BALL FIELDS	09/21/22	Gross Alpha/Beta	Gross Beta	1.85E-14	1.30E-14	1.92E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258664	BALL FIELDS	09/21/22	Gross Alpha/Beta	Gross Alpha	1.56E-14	9.58E-15	9.53E-15	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258664	BALL FIELDS	09/21/22	Gross Alpha/Beta	Gross Beta	3.21E-14	1.47E-14	1.92E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258665	BALL FIELDS	09/22/22	Gross Alpha/Beta	Gross Alpha	3.32E-15	5.53E-15	9.53E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258665	BALL FIELDS	09/22/22	Gross Alpha/Beta	Gross Beta	1.61E-14	1.27E-14	1.92E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258666	BALL FIELDS	09/22/22	Gross Alpha/Beta	Gross Beta	2.33E-14	1.36E-14	1.92E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258666	BALL FIELDS	09/22/22	Gross Alpha/Beta	Gross Alpha	8.67E-16	4.31E-15	9.53E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258667	BALL FIELDS	09/26/22	Gross Alpha/Beta	Gross Alpha	6.79E-15	6.79E-15	9.26E-15	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258667	BALL FIELDS	09/26/22	Gross Alpha/Beta	Gross Beta	1.49E-14	1.22E-14	1.86E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258668	BALL FIELDS	09/26/22	Gross Alpha/Beta	Gross Alpha	5.60E-15	6.35E-15	9.26E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258668	BALL FIELDS	09/26/22	Gross Alpha/Beta	Gross Beta	1.62E-15	1.03E-14	1.86E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258669	BALL FIELDS	09/28/22	Gross Alpha/Beta	Gross Alpha	1.45E-14	9.35E-15	9.63E-15	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258669	BALL FIELDS	09/28/22	Gross Alpha/Beta	Gross Beta	2.19E-14	1.35E-14	1.94E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258670	BALL FIELDS	09/29/22	Gross Alpha/Beta	Gross Alpha	3.22E-15	5.37E-15	9.26E-15	µCi/mL			Ballfields (IA-09)(General Area)-Perimeter Air
SVP258670	BALL FIELDS	09/29/22	Gross Alpha/Beta	Gross Beta	1.02E-14	1.15E-14	1.86E-14	µCi/mL			Ballfields (IA-09)(General Area)-Perimeter Air
SVP258670	BALL FIELDS	09/29/22	Gross Alpha/Beta	Gross Beta	2.19E-14	1.31E-14	1.86E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258670	BALL FIELDS	09/29/22	Gross Alpha/Beta	Gross Alpha	4.41E-15	5.88E-15	9.26E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258736	BALL FIELDS	11/14/22	Gross Alpha/Beta	Gross Alpha	3.96E-15	5.96E-15	9.91E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258736	BALL FIELDS	11/14/22	Gross Alpha/Beta	Gross Beta	1.40E-14	1.46E-14	2.34E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258737	BALL FIELDS	11/15/22	Gross Alpha/Beta	Gross Alpha	2.93E-15	5.79E-15	1.05E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258737	BALL FIELDS	11/15/22	Gross Alpha/Beta	Gross Beta	8.27E-15	1.47E-14	2.48E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258738	BALL FIELDS	11/16/22	Gross Alpha/Beta	Gross Beta	4.76E-14	1.80E-14	2.32E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258738	BALL FIELDS	11/16/22	Gross Alpha/Beta	Gross Alpha	7.50E-15	7.22E-15	9.82E-15	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258739	BALL FIELDS	11/17/22	Gross Alpha/Beta	Gross Beta	3.15E-14	2.05E-14	3.06E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258739	BALL FIELDS	11/17/22	Gross Alpha/Beta	Gross Alpha	1.15E-14	1.01E-14	1.30E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258740	BALL FIELDS	11/21/22	Gross Alpha/Beta	Gross Alpha	1.39E-14	1.05E-14	1.23E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258740	BALL FIELDS	11/21/22	Gross Alpha/Beta	Gross Beta	5.02E-14	2.16E-14	2.91E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258741	BALL FIELDS	11/22/22	Gross Alpha/Beta	Gross Beta	6.38E-14	2.19E-14	2.71E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258741	BALL FIELDS	11/22/22	Gross Alpha/Beta	Gross Alpha	5.99E-15	7.46E-15	1.15E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258742	BALL FIELDS	11/23/22	Gross Alpha/Beta	Gross Beta	4.96E-14	1.95E-14	2.54E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258742	BALL FIELDS	11/23/22	Gross Alpha/Beta	Gross Alpha	6.92E-15	7.46E-15	1.08E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258743	BALL FIELDS	11/28/22	Gross Alpha/Beta	Gross Beta	7.73E-14	2.27E-14	2.62E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258743	BALL FIELDS	11/28/22	Gross Alpha/Beta	Gross Alpha	4.44E-15	6.68E-15	1.11E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258744	BALL FIELDS	11/29/22	Gross Alpha/Beta	Gross Alpha	7.73E-15	7.44E-15	1.01E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP258744	BALL FIELDS	11/29/22	Gross Alpha/Beta	Gross Beta	2.30E-14	1.58E-14	2.39E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258745	BALL FIELDS	11/30/22	Gross Alpha/Beta	Gross Alpha	4.08E-15	8.06E-15	1.47E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258745	BALL FIELDS	11/30/22	Gross Alpha/Beta	Gross Beta	3.21E-14	2.28E-14	3.46E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258746	BALL FIELDS	12/01/22	Gross Alpha/Beta	Gross Alpha	2.90E-15	5.73E-15	1.04E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258746	BALL FIELDS	12/01/22	Gross Alpha/Beta	Gross Beta	1.39E-14	1.52E-14	2.46E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258747	BALL FIELDS	12/05/22	Gross Alpha/Beta	Gross Beta	5.68E-14	1.99E-14	2.48E-14	µCi/mL			Ballfields (IA-09)(General Area)-Perimeter Air
SVP258747	BALL FIELDS	12/05/22	Gross Alpha/Beta	Gross Alpha	4.21E-15	6.34E-15	1.05E-14	µCi/mL			Ballfields (IA-09)(General Area)-Perimeter Air
SVP258747	BALL FIELDS	12/05/22	Gross Alpha/Beta	Gross Beta	4.53E-14	1.87E-14	2.48E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258747	BALL FIELDS	12/05/22	Gross Alpha/Beta	Gross Alpha	9.33E-15	8.17E-15	1.05E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258763	BALL FIELDS	12/06/22	Gross Alpha/Beta	Gross Beta	5.09E-14	1.67E-14	1.83E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258763	BALL FIELDS	12/06/22	Gross Alpha/Beta	Gross Alpha	7.30E-15	7.20E-15	9.71E-15	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258764	BALL FIELDS	12/07/22	Gross Alpha/Beta	Gross Beta	7.67E-14	1.92E-14	1.77E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258764	BALL FIELDS	12/07/22	Gross Alpha/Beta	Gross Alpha	8.31E-15	7.41E-15	9.42E-15	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258765	BALL FIELDS	12/08/22	Gross Alpha/Beta	Gross Beta	4.46E-14	1.56E-14	1.77E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258765	BALL FIELDS	12/08/22	Gross Alpha/Beta	Gross Alpha	5.87E-15	6.53E-15	9.42E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258766	BALL FIELDS	12/12/22	Gross Alpha/Beta	Gross Beta	2.70E-14	1.31E-14	1.72E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258766	BALL FIELDS	12/12/22	Gross Alpha/Beta	Gross Alpha	9.41E-16	4.18E-15	9.15E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258767	BALL FIELDS	12/12/22	Gross Alpha/Beta	Gross Alpha	9.41E-16	4.18E-15	9.15E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258767	BALL FIELDS	12/12/22	Gross Alpha/Beta	Gross Beta	1.22E-14	1.11E-14	1.72E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258768	BALL FIELDS	12/13/22	Gross Alpha/Beta	Gross Beta	6.07E-14	2.73E-14	3.48E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258768	BALL FIELDS	12/13/22	Gross Alpha/Beta	Gross Alpha	6.70E-15	1.09E-14	1.85E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258769	BALL FIELDS	12/13/22	Gross Alpha/Beta	Gross Alpha	4.30E-15	9.72E-15	1.85E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258769	BALL FIELDS	12/13/22	Gross Alpha/Beta	Gross Beta	2.93E-14	2.31E-14	3.48E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258770	BALL FIELDS	12/14/22	Gross Alpha/Beta	Gross Alpha	-2.70E-15	7.70E-16	9.42E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258770	BALL FIELDS	12/14/22	Gross Alpha/Beta	Gross Beta	9.32E-15	1.09E-14	1.77E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258771	BALL FIELDS	12/14/22	Gross Alpha/Beta	Gross Alpha	3.42E-15	5.53E-15	9.42E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258771	BALL FIELDS	12/14/22	Gross Alpha/Beta	Gross Beta	5.31E-15	1.03E-14	1.77E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258772	BALL FIELDS	12/15/22	Gross Alpha/Beta	Gross Beta	4.59E-14	1.61E-14	1.83E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258772	BALL FIELDS	12/15/22	Gross Alpha/Beta	Gross Alpha	7.30E-15	7.20E-15	9.71E-15	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258773	BALL FIELDS	12/15/22	Gross Alpha/Beta	Gross Beta	1.95E-14	1.27E-14	1.83E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258773	BALL FIELDS	12/15/22	Gross Alpha/Beta	Gross Alpha	4.78E-15	6.24E-15	9.71E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258774	BALL FIELDS	12/19/22	Gross Alpha/Beta	Gross Alpha	-2.48E-16	3.44E-15	9.15E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258774	BALL FIELDS	12/19/22	Gross Alpha/Beta	Gross Beta	1.30E-14	1.12E-14	1.72E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258775	BALL FIELDS	12/19/22	Gross Alpha/Beta	Gross Beta	2.15E-14	1.24E-14	1.72E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258775	BALL FIELDS	12/19/22	Gross Alpha/Beta	Gross Alpha	3.32E-15	5.37E-15	9.15E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258776	BALL FIELDS	12/20/22	Gross Alpha/Beta	Gross Beta	3.07E-14	1.38E-14	1.76E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258776	BALL FIELDS	12/20/22	Gross Alpha/Beta	Gross Alpha	3.38E-15	5.48E-15	9.33E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258777	BALL FIELDS	12/20/22	Gross Alpha/Beta	Gross Alpha	9.60E-16	4.26E-15	9.33E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258777	BALL FIELDS	12/20/22	Gross Alpha/Beta	Gross Beta	1.48E-14	1.17E-14	1.76E-14	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258778	BALL FIELDS	12/21/22	Gross Alpha/Beta	Gross Beta	4.30E-14	1.52E-14	1.74E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258778	BALL FIELDS	12/21/22	Gross Alpha/Beta	Gross Alpha	-2.50E-16	3.47E-15	9.24E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP258779	BALL FIELDS	12/21/22	Gross Alpha/Beta	Gross Beta	2.33E-14	1.27E-14	1.74E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258779	BALL FIELDS	12/21/22	Gross Alpha/Beta	Gross Alpha	-2.50E-16	3.47E-15	9.24E-15	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258780	BALL FIELDS	12/27/22	Gross Alpha/Beta	Gross Beta	4.06E-14	1.58E-14	1.88E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258780	BALL FIELDS	12/27/22	Gross Alpha/Beta	Gross Alpha	6.23E-15	6.94E-15	1.00E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258781	BALL FIELDS	12/27/22	Gross Alpha/Beta	Gross Alpha	1.01E-14	8.30E-15	1.00E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258781	BALL FIELDS	12/27/22	Gross Alpha/Beta	Gross Beta	5.25E-14	1.72E-14	1.88E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258782	BALL FIELDS	12/28/22	Gross Alpha/Beta	Gross Beta	1.81E-14	1.18E-14	1.69E-14	µCi/mL			Ballfields (IA-09)(General Area)-Perimeter Air
SVP258782	BALL FIELDS	12/28/22	Gross Alpha/Beta	Gross Alpha	2.09E-15	4.72E-15	8.98E-15	µCi/mL			Ballfields (IA-09)(General Area)-Perimeter Air
SVP258782	BALL FIELDS	12/28/22	Gross Alpha/Beta	Gross Beta	4.02E-14	1.46E-14	1.69E-14	µCi/mL	=		Ballfields (IA-09)(General Area)-Perimeter Air
SVP258782	BALL FIELDS	12/28/22	Gross Alpha/Beta	Gross Alpha	6.76E-15	6.66E-15	8.98E-15	µCi/mL	UJ	T04, T05	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258799	BALL FIELDS	12/28/22	Gross Alpha/Beta	Gross Beta	2.16E-14	1.30E-14	1.85E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258799	BALL FIELDS	12/28/22	Gross Alpha/Beta	Gross Alpha	-3.40E-16	4.13E-15	1.03E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258800	BALL FIELDS	12/29/22	Gross Alpha/Beta	Gross Beta	2.74E-14	1.42E-14	1.94E-14	µCi/mL	J	T04, T20	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258800	BALL FIELDS	12/29/22	Gross Alpha/Beta	Gross Alpha	-3.57E-16	4.34E-15	1.08E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258801	BALL FIELDS	12/29/22	Gross Alpha/Beta	Gross Alpha	-3.57E-16	4.34E-15	1.08E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP258801	BALL FIELDS	12/29/22	Gross Alpha/Beta	Gross Beta	3.37E-15	1.10E-14	1.94E-14	µCi/mL	UJ	T06	Ballfields (IA-09)(General Area)-Perimeter Air
SVP243559	Coldwater Creek	01/06/22	Gross Alpha/Beta	Gross Alpha	-6.00E-16	4.17E-15	1.14E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP243559	Coldwater Creek	01/06/22	Gross Alpha/Beta	Gross Beta	1.70E-14	1.80E-14	2.89E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP243560	Coldwater Creek	01/10/22	Gross Alpha/Beta	Gross Alpha	2.25E-14	2.30E-14	3.20E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP243560	Coldwater Creek	01/10/22	Gross Alpha/Beta	Gross Beta	2.58E-14	4.78E-14	8.09E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP243561	Coldwater Creek	01/12/22	Gross Alpha/Beta	Gross Alpha	8.40E-16	5.07E-15	1.14E-14	µCi/mL			Coldwater Creek (General Area)-Perimeter Air
SVP243561	Coldwater Creek	01/12/22	Gross Alpha/Beta	Gross Beta	1.80E-14	1.81E-14	2.89E-14	µCi/mL			Coldwater Creek (General Area)-Perimeter Air
SVP243561	Coldwater Creek	01/12/22	Gross Alpha/Beta	Gross Beta	4.43E-14	2.10E-14	2.89E-14	µCi/mL	=		Coldwater Creek (General Area)-Perimeter Air
SVP243561	Coldwater Creek	01/12/22	Gross Alpha/Beta	Gross Alpha	8.40E-16	5.07E-15	1.14E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254251	Coldwater Creek	01/05/22	Gross Alpha/Beta	Gross Alpha	8.32E-15	8.41E-15	1.18E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254251	Coldwater Creek	01/05/22	Gross Alpha/Beta	Gross Beta	1.11E-14	1.33E-14	2.17E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254252	Coldwater Creek	01/25/22	Gross Alpha/Beta	Gross Beta	4.72E-14	3.18E-14	4.65E-14	µCi/mL	J	T04, T20	Coldwater Creek (General Area)-Perimeter Air
SVP254252	Coldwater Creek	01/25/22	Gross Alpha/Beta	Gross Alpha	5.95E-15	1.35E-14	2.53E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254398	Coldwater Creek	04/04/22	Gross Alpha/Beta	Gross Alpha	8.74E-16	6.10E-15	1.34E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254398	Coldwater Creek	04/04/22	Gross Alpha/Beta	Gross Beta	2.86E-14	1.96E-14	2.95E-14	µCi/mL	UJ	T04, T05	Coldwater Creek (General Area)-Perimeter Air
SVP254399	Coldwater Creek	04/05/22	Gross Alpha/Beta	Gross Alpha	7.79E-15	8.46E-15	1.24E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254399	Coldwater Creek	04/05/22	Gross Alpha/Beta	Gross Beta	1.05E-14	1.65E-14	2.75E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254400	Coldwater Creek	04/06/22	Gross Alpha/Beta	Gross Alpha	-2.07E-15	4.28E-15	1.30E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254400	Coldwater Creek	04/06/22	Gross Alpha/Beta	Gross Beta	3.49E-15	1.64E-14	2.88E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254401	Coldwater Creek	04/07/22	Gross Alpha/Beta	Gross Beta	2.78E-14	1.75E-14	2.61E-14	µCi/mL	J	T04, T20	Coldwater Creek (General Area)-Perimeter Air
SVP254401	Coldwater Creek	04/07/22	Gross Alpha/Beta	Gross Alpha	4.73E-15	7.07E-15	1.18E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254402	Coldwater Creek	04/12/22	Gross Alpha/Beta	Gross Alpha	1.04E-14	9.15E-15	1.22E-14	µCi/mL	UJ	T04, T05	Coldwater Creek (General Area)-Perimeter Air
SVP254402	Coldwater Creek	04/12/22	Gross Alpha/Beta	Gross Beta	1.38E-14	1.65E-14	2.69E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254403	Coldwater Creek	04/14/22	Gross Alpha/Beta	Gross Alpha	-6.56E-16	5.58E-15	1.40E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254403	Coldwater Creek	04/14/22	Gross Alpha/Beta	Gross Beta	8.82E-15	1.82E-14	3.11E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254404	Coldwater Creek	04/18/22	Gross Alpha/Beta	Gross Alpha	3.78E-15	7.25E-15	1.30E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP254404	Coldwater Creek	04/18/22	Gross Alpha/Beta	Gross Beta	1.48E-14	1.77E-14	2.88E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254405	Coldwater Creek	04/19/22	Gross Alpha/Beta	Gross Alpha	1.67E-15	1.16E-14	2.55E-14	µCi/mL			Coldwater Creek (General Area)-Perimeter Air
SVP254405	Coldwater Creek	04/19/22	Gross Alpha/Beta	Gross Beta	1.42E-14	3.29E-14	5.63E-14	µCi/mL			Coldwater Creek (General Area)-Perimeter Air
SVP254405	Coldwater Creek	04/19/22	Gross Alpha/Beta	Gross Alpha	1.67E-15	1.16E-14	2.55E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254405	Coldwater Creek	04/19/22	Gross Alpha/Beta	Gross Beta	3.81E-14	3.55E-14	5.63E-14	µCi/mL	UJ	T04, T05	Coldwater Creek (General Area)-Perimeter Air
SVP254426	Coldwater Creek	05/10/22	Gross Alpha/Beta	Gross Alpha	3.56E-15	5.52E-15	9.23E-15	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254426	Coldwater Creek	05/10/22	Gross Alpha/Beta	Gross Beta	2.43E-14	1.68E-14	2.54E-14	µCi/mL	UJ	T04, T05	Coldwater Creek (General Area)-Perimeter Air
SVP254427	Coldwater Creek	05/11/22	Gross Alpha/Beta	Gross Alpha	2.58E-15	5.44E-15	1.02E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254427	Coldwater Creek	05/11/22	Gross Alpha/Beta	Gross Beta	2.49E-14	1.83E-14	2.79E-14	µCi/mL	UJ	T04, T05	Coldwater Creek (General Area)-Perimeter Air
SVP254428	Coldwater Creek	05/12/22	Gross Alpha/Beta	Gross Beta	2.79E-14	1.73E-14	2.56E-14	µCi/mL	J	T04, T20	Coldwater Creek (General Area)-Perimeter Air
SVP254428	Coldwater Creek	05/12/22	Gross Alpha/Beta	Gross Alpha	4.83E-15	6.10E-15	9.32E-15	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254429	Coldwater Creek	05/16/22	Gross Alpha/Beta	Gross Alpha	-1.41E-15	2.71E-15	9.82E-15	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254429	Coldwater Creek	05/16/22	Gross Alpha/Beta	Gross Beta	1.62E-14	1.68E-14	2.70E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254430	Coldwater Creek	05/23/22	Gross Alpha/Beta	Gross Alpha	-1.46E-15	2.80E-15	1.02E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254430	Coldwater Creek	05/23/22	Gross Alpha/Beta	Gross Beta	9.47E-15	1.66E-14	2.79E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254431	Coldwater Creek	05/24/22	Gross Alpha/Beta	Gross Beta	3.06E-14	2.00E-14	2.99E-14	µCi/mL	J	T04, T20	Coldwater Creek (General Area)-Perimeter Air
SVP254431	Coldwater Creek	05/24/22	Gross Alpha/Beta	Gross Alpha	4.20E-15	6.50E-15	1.09E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254432	Coldwater Creek	05/25/22	Gross Alpha/Beta	Gross Alpha	7.61E-15	7.34E-15	9.72E-15	µCi/mL	UJ	T04, T05	Coldwater Creek (General Area)-Perimeter Air
SVP254432	Coldwater Creek	05/25/22	Gross Alpha/Beta	Gross Beta	2.65E-14	1.78E-14	2.67E-14	µCi/mL	UJ	T04, T05	Coldwater Creek (General Area)-Perimeter Air
SVP254433	Coldwater Creek	05/26/22	Gross Alpha/Beta	Gross Alpha	5.26E-15	6.64E-15	1.02E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254433	Coldwater Creek	05/26/22	Gross Alpha/Beta	Gross Beta	1.77E-14	1.75E-14	2.79E-14	µCi/mL	UJ	T04, T05	Coldwater Creek (General Area)-Perimeter Air
SVP254434	Coldwater Creek	05/31/22	Gross Alpha/Beta	Gross Beta	3.22E-14	1.90E-14	2.79E-14	µCi/mL	J	T04, T20	Coldwater Creek (General Area)-Perimeter Air
SVP254434	Coldwater Creek	05/31/22	Gross Alpha/Beta	Gross Alpha	3.92E-15	6.07E-15	1.02E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254435	Coldwater Creek	06/01/22	Gross Alpha/Beta	Gross Alpha	-2.10E-16	7.28E-15	1.90E-14	µCi/mL			Coldwater Creek (General Area)-Perimeter Air
SVP254435	Coldwater Creek	06/01/22	Gross Alpha/Beta	Gross Beta	4.12E-15	2.95E-14	5.24E-14	µCi/mL			Coldwater Creek (General Area)-Perimeter Air
SVP254435	Coldwater Creek	06/01/22	Gross Alpha/Beta	Gross Alpha	1.24E-14	1.35E-14	1.90E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP254435	Coldwater Creek	06/01/22	Gross Alpha/Beta	Gross Beta	3.14E-14	3.26E-14	5.24E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258543	Coldwater Creek	06/27/22	Gross Alpha/Beta	Gross Alpha	7.83E-16	4.73E-15	1.06E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258543	Coldwater Creek	06/27/22	Gross Alpha/Beta	Gross Beta	8.65E-15	1.25E-14	2.09E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258544	Coldwater Creek	06/28/22	Gross Alpha/Beta	Gross Beta	3.06E-14	1.55E-14	2.09E-14	µCi/mL	J	F01, T04, T20	Coldwater Creek (General Area)-Perimeter Air
SVP258544	Coldwater Creek	06/28/22	Gross Alpha/Beta	Gross Alpha	2.13E-15	5.44E-15	1.06E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258545	Coldwater Creek	06/29/22	Gross Alpha/Beta	Gross Alpha	-5.42E-16	3.77E-15	1.03E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258545	Coldwater Creek	06/29/22	Gross Alpha/Beta	Gross Beta	8.38E-15	1.21E-14	2.02E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258546	Coldwater Creek	06/30/22	Gross Alpha/Beta	Gross Alpha	-2.03E-15	3.02E-15	1.14E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258546	Coldwater Creek	06/30/22	Gross Alpha/Beta	Gross Beta	1.30E-14	1.39E-14	2.23E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258547	Coldwater Creek	07/05/22	Gross Alpha/Beta	Gross Alpha	-6.67E-16	4.64E-15	1.27E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258547	Coldwater Creek	07/05/22	Gross Alpha/Beta	Gross Beta	9.26E-15	1.48E-14	2.49E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258548	Coldwater Creek	07/11/22	Gross Alpha/Beta	Gross Alpha	2.64E-15	6.75E-15	1.32E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258548	Coldwater Creek	07/11/22	Gross Alpha/Beta	Gross Beta	1.07E-14	1.55E-14	2.59E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258549	Coldwater Creek	07/12/22	Gross Alpha/Beta	Gross Beta	5.53E-14	2.86E-14	3.88E-14	µCi/mL	J	F01, T04, T20	Coldwater Creek (General Area)-Perimeter Air
SVP258549	Coldwater Creek	07/12/22	Gross Alpha/Beta	Gross Alpha	-3.54E-15	5.25E-15	1.98E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP258550	Coldwater Creek	07/13/22	Gross Alpha/Beta	Gross Alpha	8.99E-16	5.43E-15	1.22E-14	µCi/mL			Coldwater Creek (General Area)-Perimeter Air
SVP258550	Coldwater Creek	07/13/22	Gross Alpha/Beta	Gross Beta	2.20E-14	1.61E-14	2.39E-14	µCi/mL			Coldwater Creek (General Area)-Perimeter Air
SVP258550	Coldwater Creek	07/13/22	Gross Alpha/Beta	Gross Alpha	5.52E-15	7.63E-15	1.22E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258550	Coldwater Creek	07/13/22	Gross Alpha/Beta	Gross Beta	1.09E-14	1.45E-14	2.39E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258569	Coldwater Creek	07/25/22	Gross Alpha/Beta	Gross Alpha	-6.60E-16	2.97E-15	9.74E-15	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258569	Coldwater Creek	07/25/22	Gross Alpha/Beta	Gross Beta	3.45E-15	1.63E-14	2.87E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258570	Coldwater Creek	08/01/22	Gross Alpha/Beta	Gross Alpha	1.67E-14	1.17E-14	1.19E-14	µCi/mL	J	T04, T20	Coldwater Creek (General Area)-Perimeter Air
SVP258570	Coldwater Creek	08/01/22	Gross Alpha/Beta	Gross Beta	2.91E-14	2.27E-14	3.49E-14	µCi/mL	UJ	T04, T05	Coldwater Creek (General Area)-Perimeter Air
SVP258571	Coldwater Creek	08/02/22	Gross Alpha/Beta	Gross Beta	3.93E-14	2.30E-14	3.35E-14	µCi/mL	J	T04, T20	Coldwater Creek (General Area)-Perimeter Air
SVP258571	Coldwater Creek	08/02/22	Gross Alpha/Beta	Gross Alpha	2.59E-15	5.88E-15	1.14E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258572	Coldwater Creek	08/03/22	Gross Alpha/Beta	Gross Alpha	1.47E-14	9.72E-15	9.40E-15	µCi/mL	J	T04, T20	Coldwater Creek (General Area)-Perimeter Air
SVP258572	Coldwater Creek	08/03/22	Gross Alpha/Beta	Gross Beta	5.13E-14	2.10E-14	2.77E-14	µCi/mL	=		Coldwater Creek (General Area)-Perimeter Air
SVP258573	Coldwater Creek	08/09/22	Gross Alpha/Beta	Gross Beta	2.95E-14	1.77E-14	2.59E-14	µCi/mL	J	T04, T20	Coldwater Creek (General Area)-Perimeter Air
SVP258573	Coldwater Creek	08/09/22	Gross Alpha/Beta	Gross Alpha	3.31E-15	5.25E-15	8.79E-15	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258574	Coldwater Creek	08/10/22	Gross Alpha/Beta	Gross Alpha	1.29E-15	6.81E-15	1.60E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258574	Coldwater Creek	08/10/22	Gross Alpha/Beta	Gross Beta	5.68E-15	2.68E-14	4.73E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258575	Coldwater Creek	08/11/22	Gross Alpha/Beta	Gross Beta	3.23E-14	1.85E-14	2.68E-14	µCi/mL	J	T04, T20	Coldwater Creek (General Area)-Perimeter Air
SVP258575	Coldwater Creek	08/11/22	Gross Alpha/Beta	Gross Alpha	4.76E-15	6.06E-15	9.09E-15	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258576	Coldwater Creek	08/15/22	Gross Alpha/Beta	Gross Beta	5.70E-14	3.26E-14	4.73E-14	µCi/mL			Coldwater Creek (General Area)-Perimeter Air
SVP258576	Coldwater Creek	08/15/22	Gross Alpha/Beta	Gross Alpha	6.03E-15	9.57E-15	1.60E-14	µCi/mL			Coldwater Creek (General Area)-Perimeter Air
SVP258576	Coldwater Creek	08/15/22	Gross Alpha/Beta	Gross Beta	4.90E-14	3.18E-14	4.73E-14	µCi/mL	J	T04, T20	Coldwater Creek (General Area)-Perimeter Air
SVP258576	Coldwater Creek	08/15/22	Gross Alpha/Beta	Gross Alpha	1.08E-14	1.17E-14	1.60E-14	µCi/mL	UJ	T06	Coldwater Creek (General Area)-Perimeter Air
SVP258713	CWC	10/26/22	Gross Alpha/Beta	Gross Alpha	1.21E-14	1.04E-14	1.36E-14	µCi/mL	UJ	T04, T05	Coldwater Creek (Group 24)(General Area)-Perimeter Air
SVP258713	CWC	10/26/22	Gross Alpha/Beta	Gross Beta	2.00E-14	1.92E-14	3.06E-14	µCi/mL	UJ	T04, T05	Coldwater Creek (Group 24)(General Area)-Perimeter Air
SVP258714	CWC	10/27/22	Gross Alpha/Beta	Gross Beta	3.95E-14	2.03E-14	2.88E-14	µCi/mL	J	T04, T20	Coldwater Creek (Group 24)(General Area)-Perimeter Air
SVP258714	CWC	10/27/22	Gross Alpha/Beta	Gross Alpha	5.48E-15	7.82E-15	1.28E-14	µCi/mL	UJ	T06	Coldwater Creek (Group 24)(General Area)-Perimeter Air
SVP258715	CWC	10/28/22	Gross Alpha/Beta	Gross Beta	3.34E-14	2.09E-14	3.10E-14	µCi/mL	J	T04, T20	Coldwater Creek (Group 24)(General Area)-Perimeter Air
SVP258715	CWC	10/28/22	Gross Alpha/Beta	Gross Alpha	7.48E-15	9.00E-15	1.38E-14	µCi/mL	UJ	T06	Coldwater Creek (Group 24)(General Area)-Perimeter Air
SVP258716	CWC	10/29/22	Gross Alpha/Beta	Gross Alpha	7.39E-15	8.89E-15	1.36E-14	µCi/mL	UJ	T06	Coldwater Creek (Group 24)(General Area)-Perimeter Air
SVP258716	CWC	10/29/22	Gross Alpha/Beta	Gross Beta	3.00E-14	2.03E-14	3.06E-14	µCi/mL	UJ	T04, T05	Coldwater Creek (Group 24)(General Area)-Perimeter Air
SVP258717	CWC	10/31/22	Gross Alpha/Beta	Gross Beta	4.98E-14	2.14E-14	2.88E-14	µCi/mL	=		Coldwater Creek (Group 24)(General Area)-Perimeter Air
SVP258717	CWC	10/31/22	Gross Alpha/Beta	Gross Alpha	6.95E-15	8.36E-15	1.28E-14	µCi/mL	UJ	T06	Coldwater Creek (Group 24)(General Area)-Perimeter Air
SVP258718	CWC	11/01/22	Gross Alpha/Beta	Gross Beta	7.17E-14	2.30E-14	2.78E-14	µCi/mL	=		Coldwater Creek (Group 24)(General Area)-Perimeter Air
SVP258718	CWC	11/01/22	Gross Alpha/Beta	Gross Alpha	3.88E-15	7.00E-15	1.24E-14	µCi/mL	UJ	T06	Coldwater Creek (Group 24)(General Area)-Perimeter Air
SVP258719	CWC	11/02/22	Gross Alpha/Beta	Gross Beta	6.55E-14	2.22E-14	2.75E-14	µCi/mL	=		Coldwater Creek (Group 24)(General Area)-Perimeter Air
SVP258719	CWC	11/02/22	Gross Alpha/Beta	Gross Alpha	6.63E-15	7.98E-15	1.22E-14	µCi/mL	UJ	T06	Coldwater Creek (Group 24)(General Area)-Perimeter Air
SVP258720	CWC	11/03/22	Gross Alpha/Beta	Gross Beta	5.83E-14	2.22E-14	2.88E-14	µCi/mL	=		Coldwater Creek (Group 24)(General Area)-Perimeter Air
SVP258720	CWC	11/03/22	Gross Alpha/Beta	Gross Alpha	6.95E-15	8.36E-15	1.28E-14	µCi/mL	UJ	T06	Coldwater Creek (Group 24)(General Area)-Perimeter Air
SVP258721	CWC	11/04/22	Gross Alpha/Beta	Gross Alpha	4.26E-14	3.00E-14	3.47E-14	µCi/mL			Coldwater Creek (Group 24)(General Area)-Perimeter Air
SVP258721	CWC	11/04/22	Gross Alpha/Beta	Gross Beta	1.17E-13	5.61E-14	7.80E-14	µCi/mL			Coldwater Creek (Group 24)(General Area)-Perimeter Air
SVP258721	CWC	11/04/22	Gross Alpha/Beta	Gross Beta	9.68E-14	5.39E-14	7.80E-14	µCi/mL	J	T04, T20	Coldwater Creek (Group 24)(General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP258721	CWC	11/04/22	Gross Alpha/Beta	Gross Alpha	1.88E-14	2.27E-14	3.47E-14	µCi/mL	UJ	T06	Coldwater Creek (Group 24)(General Area)-Perimeter Air
SVP258722	CWC	11/09/22	Gross Alpha/Beta	Gross Alpha	1.36E-14	9.60E-15	9.79E-15	µCi/mL	J	T04, T20	Coldwater Creek (Group 8)(General Area)-Perimeter Air
SVP258722	CWC	11/09/22	Gross Alpha/Beta	Gross Beta	3.09E-14	1.62E-14	2.20E-14	µCi/mL	J	T04, T20	Coldwater Creek (Group 8)(General Area)-Perimeter Air
SVP258723	CWC	11/10/22	Gross Alpha/Beta	Gross Beta	8.83E-14	4.08E-14	5.32E-14	µCi/mL			Coldwater Creek (Group 8)(General Area)-Perimeter Air
SVP258723	CWC	11/10/22	Gross Alpha/Beta	Gross Alpha	1.21E-14	1.56E-14	2.37E-14	µCi/mL			Coldwater Creek (Group 8)(General Area)-Perimeter Air
SVP258723	CWC	11/10/22	Gross Alpha/Beta	Gross Beta	5.42E-14	3.65E-14	5.32E-14	µCi/mL	J	T04, T20	Coldwater Creek (Group 8)(General Area)-Perimeter Air
SVP258723	CWC	11/10/22	Gross Alpha/Beta	Gross Alpha	8.67E-15	1.40E-14	2.37E-14	µCi/mL	UJ	T06	Coldwater Creek (Group 8)(General Area)-Perimeter Air
SVP258724	CWC	11/30/22	Gross Alpha/Beta	Gross Alpha	-5.23E-15	5.45E-15	2.19E-14	µCi/mL			Coldwater Creek (Group 2)(General Area)-Perimeter Air
SVP258724	CWC	11/30/22	Gross Alpha/Beta	Gross Beta	2.09E-14	3.02E-14	5.02E-14	µCi/mL			Coldwater Creek (Group 2)(General Area)-Perimeter Air
SVP258724	CWC	11/30/22	Gross Alpha/Beta	Gross Alpha	1.01E-14	1.37E-14	2.19E-14	µCi/mL	UJ	T06	Coldwater Creek (Group 2)(General Area)-Perimeter Air
SVP258724	CWC	11/30/22	Gross Alpha/Beta	Gross Beta	6.04E-15	2.85E-14	5.02E-14	µCi/mL	UJ	T06	Coldwater Creek (Group 2)(General Area)-Perimeter Air
SVP258748	CWC	12/06/22	Gross Alpha/Beta	Gross Beta	7.24E-14	4.53E-14	6.72E-14	µCi/mL	J	T04, T20	Coldwater Creek (Group 9)(General Area)-Perimeter Air
SVP258748	CWC	12/06/22	Gross Alpha/Beta	Gross Alpha	1.28E-15	1.39E-14	3.11E-14	µCi/mL	UJ	T06	Coldwater Creek (Group 9)(General Area)-Perimeter Air
SVP258749	CWC	12/07/22	Gross Alpha/Beta	Gross Beta	5.95E-14	2.07E-14	2.60E-14	µCi/mL	=		Coldwater Creek (Group 9)(General Area)-Perimeter Air
SVP258749	CWC	12/07/22	Gross Alpha/Beta	Gross Alpha	7.10E-15	8.01E-15	1.20E-14	µCi/mL	UJ	T06	Coldwater Creek (Group 9)(General Area)-Perimeter Air
SVP258750	CWC	12/12/22	Gross Alpha/Beta	Gross Alpha	1.60E-14	1.24E-14	1.55E-14	µCi/mL	J	T04, T20	Coldwater Creek (Group 9)(General Area)-Perimeter Air
SVP258750	CWC	12/12/22	Gross Alpha/Beta	Gross Beta	8.56E-14	2.76E-14	3.36E-14	µCi/mL	=		Coldwater Creek (Group 9)(General Area)-Perimeter Air
SVP258751	CWC	12/13/22	Gross Alpha/Beta	Gross Alpha	9.87E-15	1.57E-14	2.66E-14	µCi/mL	UJ	T06	Coldwater Creek (Group 9)(General Area)-Perimeter Air
SVP258751	CWC	12/13/22	Gross Alpha/Beta	Gross Beta	5.64E-14	3.82E-14	5.76E-14	µCi/mL	UJ	T04, T05	Coldwater Creek (Group 9)(General Area)-Perimeter Air
SVP258752	CWC	12/14/22	Gross Alpha/Beta	Gross Alpha	5.53E-15	8.77E-15	1.49E-14	µCi/mL	UJ	T06	Coldwater Creek (Group 9)(General Area)-Perimeter Air
SVP258752	CWC	12/14/22	Gross Alpha/Beta	Gross Beta	2.95E-14	2.12E-14	3.22E-14	µCi/mL	UJ	T04, T05	Coldwater Creek (Group 9)(General Area)-Perimeter Air
SVP258753	CWC	12/15/22	Gross Alpha/Beta	Gross Beta	1.02E-13	6.72E-14	1.01E-13	µCi/mL			Coldwater Creek (Group 9)(General Area)-Perimeter Air
SVP258753	CWC	12/15/22	Gross Alpha/Beta	Gross Alpha	-1.34E-14	1.10E-14	4.66E-14	µCi/mL			Coldwater Creek (Group 9)(General Area)-Perimeter Air
SVP258753	CWC	12/15/22	Gross Alpha/Beta	Gross Alpha	-8.32E-15	1.50E-14	4.66E-14	µCi/mL	UJ	T06	Coldwater Creek (Group 9)(General Area)-Perimeter Air
SVP258753	CWC	12/15/22	Gross Alpha/Beta	Gross Beta	3.29E-14	5.96E-14	1.01E-13	µCi/mL	UJ	T06	Coldwater Creek (Group 9)(General Area)-Perimeter Air
SVP254307	McDonnell Blvd.	02/15/22	Gross Alpha/Beta	Gross Alpha	2.25E-15	7.31E-15	1.53E-14	µCi/mL	UJ	T06	McDonnell Blvd. (General Area)-Perimeter Air
SVP254307	McDonnell Blvd.	02/15/22	Gross Alpha/Beta	Gross Beta	6.76E-15	1.90E-14	3.34E-14	µCi/mL	UJ	T06	McDonnell Blvd. (General Area)-Perimeter Air
SVP254308	McDonnell Blvd.	02/16/22	Gross Alpha/Beta	Gross Alpha	1.51E-14	1.59E-14	2.19E-14	µCi/mL	UJ	T06	McDonnell Blvd. (General Area)-Perimeter Air
SVP254308	McDonnell Blvd.	02/16/22	Gross Alpha/Beta	Gross Beta	2.72E-14	2.97E-14	4.77E-14	µCi/mL	UJ	T06	McDonnell Blvd. (General Area)-Perimeter Air
SVP254309	McDonnell Blvd.	02/23/22	Gross Alpha/Beta	Gross Alpha	2.67E-16	9.23E-15	2.35E-14	µCi/mL	UJ	T06	McDonnell Blvd. (General Area)-Perimeter Air
SVP254309	McDonnell Blvd.	02/23/22	Gross Alpha/Beta	Gross Beta	2.93E-14	3.19E-14	5.13E-14	µCi/mL	UJ	T06	McDonnell Blvd. (General Area)-Perimeter Air
SVP254310	McDonnell Blvd.	02/28/22	Gross Alpha/Beta	Gross Alpha	1.29E-14	1.02E-14	1.18E-14	µCi/mL	J	T04, T20	McDonnell Blvd. (General Area)-Perimeter Air
SVP254310	McDonnell Blvd.	02/28/22	Gross Alpha/Beta	Gross Beta	3.25E-14	1.83E-14	2.57E-14	µCi/mL	J	T04, T20	McDonnell Blvd. (General Area)-Perimeter Air
SVP254311	McDonnell Blvd.	03/01/22	Gross Alpha/Beta	Gross Alpha	7.23E-15	1.40E-14	2.55E-14	µCi/mL	UJ	T06	McDonnell Blvd. (General Area)-Perimeter Air
SVP254311	McDonnell Blvd.	03/01/22	Gross Alpha/Beta	Gross Beta	2.94E-14	3.43E-14	5.56E-14	µCi/mL	UJ	T06	McDonnell Blvd. (General Area)-Perimeter Air
SVP254312	McDonnell Blvd.	03/09/22	Gross Alpha/Beta	Gross Alpha	3.61E-15	7.01E-15	1.28E-14	µCi/mL	UJ	T06	McDonnell Blvd. (General Area)-Perimeter Air
SVP254312	McDonnell Blvd.	03/09/22	Gross Alpha/Beta	Gross Beta	1.70E-14	1.75E-14	2.78E-14	µCi/mL	UJ	T06	McDonnell Blvd. (General Area)-Perimeter Air
SVP254313	McDonnell Blvd.	03/10/22	Gross Alpha/Beta	Gross Beta	5.97E-14	2.50E-14	3.18E-14	µCi/mL	=		McDonnell Blvd. (General Area)-Perimeter Air
SVP254313	McDonnell Blvd.	03/10/22	Gross Alpha/Beta	Gross Alpha	1.01E-14	1.06E-14	1.46E-14	µCi/mL	UJ	T06	McDonnell Blvd. (General Area)-Perimeter Air
SVP254314	McDonnell Blvd.	03/21/22	Gross Alpha/Beta	Gross Alpha	-1.59E-15	3.61E-15	1.28E-14	µCi/mL	UJ	T06	McDonnell Blvd. (General Area)-Perimeter Air
SVP254314	McDonnell Blvd.	03/21/22	Gross Alpha/Beta	Gross Beta	9.04E-15	1.64E-14	2.78E-14	µCi/mL	UJ	T06	McDonnell Blvd. (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP254315	McDonnell Blvd.	03/23/22	Gross Alpha/Beta	Gross Alpha	-3.80E-15	1.16E-15	1.46E-14	µCi/mL	UJ	T06	McDonnell Blvd. (General Area)-Perimeter Air
SVP254315	McDonnell Blvd.	03/23/22	Gross Alpha/Beta	Gross Beta	-7.84E-15	1.60E-14	3.18E-14	µCi/mL	UJ	T06	McDonnell Blvd. (General Area)-Perimeter Air
SVP254316	McDonnell Blvd.	03/28/22	Gross Alpha/Beta	Gross Beta	2.83E-14	1.78E-14	2.57E-14	µCi/mL	J	T04, T20	McDonnell Blvd. (General Area)-Perimeter Air
SVP254316	McDonnell Blvd.	03/28/22	Gross Alpha/Beta	Gross Alpha	8.14E-15	8.54E-15	1.18E-14	µCi/mL	UJ	T06	McDonnell Blvd. (General Area)-Perimeter Air
SVP254317	McDonnell Blvd.	03/29/22	Gross Alpha/Beta	Gross Alpha	-4.43E-15	1.35E-15	1.70E-14	µCi/mL			McDonnell Blvd. (General Area)-Perimeter Air
SVP254317	McDonnell Blvd.	03/29/22	Gross Alpha/Beta	Gross Beta	2.97E-15	2.05E-14	3.71E-14	µCi/mL			McDonnell Blvd. (General Area)-Perimeter Air
SVP254317	McDonnell Blvd.	03/29/22	Gross Alpha/Beta	Gross Alpha	2.51E-15	8.12E-15	1.70E-14	µCi/mL	UJ	T06	McDonnell Blvd. (General Area)-Perimeter Air
SVP254317	McDonnell Blvd.	03/29/22	Gross Alpha/Beta	Gross Beta	1.51E-14	2.22E-14	3.71E-14	µCi/mL	UJ	T06	McDonnell Blvd. (General Area)-Perimeter Air
SVP258671	PERSHALL RD.	09/19/22	Gross Alpha/Beta	Gross Beta	4.42E-14	1.61E-14	1.92E-14	µCi/mL	J	F01	Pershall Road (General Area)-Perimeter Air
SVP258671	PERSHALL RD.	09/19/22	Gross Alpha/Beta	Gross Alpha	3.32E-15	5.53E-15	9.53E-15	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258672	PERSHALL RD.	09/19/22	Gross Alpha/Beta	Gross Beta	3.61E-14	1.52E-14	1.92E-14	µCi/mL	J	F01	Pershall Road (General Area)-Perimeter Air
SVP258672	PERSHALL RD.	09/19/22	Gross Alpha/Beta	Gross Alpha	9.44E-15	7.81E-15	9.53E-15	µCi/mL	UJ	T04, T05	Pershall Road (General Area)-Perimeter Air
SVP258673	PERSHALL RD.	09/20/22	Gross Alpha/Beta	Gross Beta	4.26E-14	1.59E-14	1.92E-14	µCi/mL	J	F01	Pershall Road (General Area)-Perimeter Air
SVP258673	PERSHALL RD.	09/20/22	Gross Alpha/Beta	Gross Alpha	9.44E-15	7.81E-15	9.53E-15	µCi/mL	UJ	T04, T05	Pershall Road (General Area)-Perimeter Air
SVP258674	PERSHALL RD.	09/20/22	Gross Alpha/Beta	Gross Beta	2.81E-14	1.42E-14	1.92E-14	µCi/mL	J	F01, T04, T20	Pershall Road (General Area)-Perimeter Air
SVP258674	PERSHALL RD.	09/20/22	Gross Alpha/Beta	Gross Alpha	2.09E-15	4.96E-15	9.53E-15	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258675	PERSHALL RD.	09/21/22	Gross Alpha/Beta	Gross Beta	2.89E-14	1.43E-14	1.92E-14	µCi/mL	J	F01	Pershall Road (General Area)-Perimeter Air
SVP258675	PERSHALL RD.	09/21/22	Gross Alpha/Beta	Gross Alpha	6.99E-15	6.99E-15	9.53E-15	µCi/mL	UJ	T04, T05	Pershall Road (General Area)-Perimeter Air
SVP258676	PERSHALL RD.	09/21/22	Gross Alpha/Beta	Gross Beta	3.53E-14	1.51E-14	1.92E-14	µCi/mL	J	F01	Pershall Road (General Area)-Perimeter Air
SVP258676	PERSHALL RD.	09/21/22	Gross Alpha/Beta	Gross Alpha	2.09E-15	4.96E-15	9.53E-15	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258677	PERSHALL RD.	09/22/22	Gross Alpha/Beta	Gross Alpha	6.26E-15	1.05E-14	1.80E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258677	PERSHALL RD.	09/22/22	Gross Alpha/Beta	Gross Beta	1.68E-14	2.20E-14	3.62E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258678	PERSHALL RD.	09/22/22	Gross Alpha/Beta	Gross Alpha	2.22E-15	5.27E-15	1.01E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258678	PERSHALL RD.	09/22/22	Gross Alpha/Beta	Gross Beta	1.71E-14	1.34E-14	2.04E-14	µCi/mL	UJ	T04, T05	Pershall Road (General Area)-Perimeter Air
SVP258679	PERSHALL RD.	09/22/22	Gross Alpha/Beta	Gross Alpha	1.63E-14	1.85E-14	2.70E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258679	PERSHALL RD.	09/22/22	Gross Alpha/Beta	Gross Beta	2.06E-14	3.24E-14	5.43E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258680	PERSHALL RD.	09/26/22	Gross Alpha/Beta	Gross Beta	2.25E-14	1.35E-14	1.92E-14	µCi/mL	J	F01, T04, T20	Pershall Road (General Area)-Perimeter Air
SVP258680	PERSHALL RD.	09/26/22	Gross Alpha/Beta	Gross Alpha	-3.57E-16	3.54E-15	9.53E-15	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258681	PERSHALL RD.	09/26/22	Gross Alpha/Beta	Gross Beta	2.01E-14	1.32E-14	1.92E-14	µCi/mL	J	F01, T04, T20	Pershall Road (General Area)-Perimeter Air
SVP258681	PERSHALL RD.	09/26/22	Gross Alpha/Beta	Gross Alpha	-3.57E-16	3.54E-15	9.53E-15	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258682	PERSHALL RD.	09/27/22	Gross Alpha/Beta	Gross Beta	2.09E-14	1.33E-14	1.92E-14	µCi/mL	J	F01, T04, T20	Pershall Road (General Area)-Perimeter Air
SVP258682	PERSHALL RD.	09/27/22	Gross Alpha/Beta	Gross Alpha	3.32E-15	5.53E-15	9.53E-15	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258683	PERSHALL RD.	09/27/22	Gross Alpha/Beta	Gross Beta	1.93E-14	1.31E-14	1.92E-14	µCi/mL	J	F01, T04, T20	Pershall Road (General Area)-Perimeter Air
SVP258683	PERSHALL RD.	09/27/22	Gross Alpha/Beta	Gross Alpha	8.67E-16	4.31E-15	9.53E-15	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258684	PERSHALL RD.	09/28/22	Gross Alpha/Beta	Gross Alpha	2.09E-15	4.96E-15	9.53E-15	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258684	PERSHALL RD.	09/28/22	Gross Alpha/Beta	Gross Beta	1.69E-14	1.28E-14	1.92E-14	µCi/mL	UJ	T04, T05	Pershall Road (General Area)-Perimeter Air
SVP258685	PERSHALL RD.	09/28/22	Gross Alpha/Beta	Gross Alpha	8.67E-16	4.31E-15	9.53E-15	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258685	PERSHALL RD.	09/28/22	Gross Alpha/Beta	Gross Beta	1.21E-14	1.21E-14	1.92E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258686	PERSHALL RD.	09/29/22	Gross Alpha/Beta	Gross Beta	2.01E-14	1.32E-14	1.92E-14	µCi/mL	J	F01, T04, T20	Pershall Road (General Area)-Perimeter Air
SVP258686	PERSHALL RD.	09/29/22	Gross Alpha/Beta	Gross Alpha	-1.58E-15	2.57E-15	9.53E-15	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258687	PERSHALL RD.	09/29/22	Gross Alpha/Beta	Gross Alpha	-3.57E-16	3.54E-15	9.53E-15	µCi/mL			Pershall Road (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP258687	PERSHALL RD.	09/29/22	Gross Alpha/Beta	Gross Beta	4.88E-15	1.11E-14	1.92E-14	µCi/mL			Pershall Road (General Area)-Perimeter Air
SVP258687	PERSHALL RD.	09/29/22	Gross Alpha/Beta	Gross Alpha	-2.81E-15	7.86E-16	9.53E-15	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258687	PERSHALL RD.	09/29/22	Gross Alpha/Beta	Gross Beta	9.69E-15	1.18E-14	1.92E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258688	PERSHALL RD.	10/03/22	Gross Alpha/Beta	Gross Alpha	3.67E-15	5.53E-15	9.13E-15	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258688	PERSHALL RD.	10/03/22	Gross Alpha/Beta	Gross Beta	6.81E-15	1.11E-14	1.87E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258689	PERSHALL RD.	10/03/22	Gross Alpha/Beta	Gross Beta	4.77E-14	1.63E-14	1.87E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258689	PERSHALL RD.	10/03/22	Gross Alpha/Beta	Gross Alpha	6.12E-15	6.53E-15	9.13E-15	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258690	PERSHALL RD.	10/04/22	Gross Alpha/Beta	Gross Beta	3.57E-14	1.49E-14	1.87E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258690	PERSHALL RD.	10/04/22	Gross Alpha/Beta	Gross Alpha	6.12E-15	6.53E-15	9.13E-15	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258691	PERSHALL RD.	10/04/22	Gross Alpha/Beta	Gross Beta	2.29E-14	1.33E-14	1.87E-14	µCi/mL	J	T04, T20	Pershall Road (General Area)-Perimeter Air
SVP258691	PERSHALL RD.	10/04/22	Gross Alpha/Beta	Gross Alpha	2.45E-15	4.95E-15	9.13E-15	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258692	PERSHALL RD.	10/05/22	Gross Alpha/Beta	Gross Alpha	1.10E-14	8.19E-15	9.13E-15	µCi/mL	J	T04, T20	Pershall Road (General Area)-Perimeter Air
SVP258692	PERSHALL RD.	10/05/22	Gross Alpha/Beta	Gross Beta	5.09E-14	1.67E-14	1.87E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258693	PERSHALL RD.	10/05/22	Gross Alpha/Beta	Gross Beta	3.65E-14	1.50E-14	1.87E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258693	PERSHALL RD.	10/05/22	Gross Alpha/Beta	Gross Alpha	0	3.53E-15	9.13E-15	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258694	PERSHALL RD.	10/06/22	Gross Alpha/Beta	Gross Beta	4.37E-14	1.59E-14	1.87E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258694	PERSHALL RD.	10/06/22	Gross Alpha/Beta	Gross Alpha	7.34E-15	6.98E-15	9.13E-15	µCi/mL	UJ	T04, T05	Pershall Road (General Area)-Perimeter Air
SVP258695	PERSHALL RD.	10/06/22	Gross Alpha/Beta	Gross Alpha	1.22E-14	8.56E-15	9.13E-15	µCi/mL	J	T04, T20	Pershall Road (General Area)-Perimeter Air
SVP258695	PERSHALL RD.	10/06/22	Gross Alpha/Beta	Gross Beta	5.81E-14	1.75E-14	1.87E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258696	PERSHALL RD.	10/10/22	Gross Alpha/Beta	Gross Alpha	1.07E-14	7.96E-15	8.86E-15	µCi/mL	J	T04, T20	Pershall Road (General Area)-Perimeter Air
SVP258696	PERSHALL RD.	10/10/22	Gross Alpha/Beta	Gross Beta	7.44E-14	1.89E-14	1.81E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258697	PERSHALL RD.	10/11/22	Gross Alpha/Beta	Gross Alpha	1.04E-14	8.30E-15	9.70E-15	µCi/mL	J	T04, T20	Pershall Road (General Area)-Perimeter Air
SVP258697	PERSHALL RD.	10/11/22	Gross Alpha/Beta	Gross Beta	4.98E-14	1.72E-14	1.98E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258698	PERSHALL RD.	10/11/22	Gross Alpha/Beta	Gross Beta	8.39E-14	2.10E-14	1.98E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258698	PERSHALL RD.	10/11/22	Gross Alpha/Beta	Gross Alpha	5.20E-15	6.43E-15	9.70E-15	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258699	PERSHALL RD.	10/12/22	Gross Alpha/Beta	Gross Alpha	1.56E-14	9.83E-15	9.70E-15	µCi/mL	J	T04, T20	Pershall Road (General Area)-Perimeter Air
SVP258699	PERSHALL RD.	10/12/22	Gross Alpha/Beta	Gross Beta	5.24E-14	1.75E-14	1.98E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258700	PERSHALL RD.	10/12/22	Gross Alpha/Beta	Gross Beta	6.77E-14	1.93E-14	1.98E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258700	PERSHALL RD.	10/12/22	Gross Alpha/Beta	Gross Alpha	9.10E-15	7.87E-15	9.70E-15	µCi/mL	UJ	T04, T05	Pershall Road (General Area)-Perimeter Air
SVP258701	PERSHALL RD.	10/13/22	Gross Alpha/Beta	Gross Beta	1.88E-14	1.28E-14	1.87E-14	µCi/mL	J	T04, T20	Pershall Road (General Area)-Perimeter Air
SVP258701	PERSHALL RD.	10/13/22	Gross Alpha/Beta	Gross Alpha	8.57E-15	7.41E-15	9.13E-15	µCi/mL	UJ	T04, T05	Pershall Road (General Area)-Perimeter Air
SVP258702	PERSHALL RD.	10/13/22	Gross Alpha/Beta	Gross Beta	2.12E-14	1.31E-14	1.87E-14	µCi/mL	J	T04, T20	Pershall Road (General Area)-Perimeter Air
SVP258702	PERSHALL RD.	10/13/22	Gross Alpha/Beta	Gross Alpha	8.57E-15	7.41E-15	9.13E-15	µCi/mL	UJ	T04, T05	Pershall Road (General Area)-Perimeter Air
SVP258703	PERSHALL RD.	10/17/22	Gross Alpha/Beta	Gross Beta	2.29E-14	1.33E-14	1.87E-14	µCi/mL	J	T04, T20	Pershall Road (General Area)-Perimeter Air
SVP258703	PERSHALL RD.	10/17/22	Gross Alpha/Beta	Gross Alpha	2.45E-15	4.95E-15	9.13E-15	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258704	PERSHALL RD.	10/17/22	Gross Alpha/Beta	Gross Alpha	8.57E-15	7.41E-15	9.13E-15	µCi/mL	UJ	T04, T05	Pershall Road (General Area)-Perimeter Air
SVP258704	PERSHALL RD.	10/17/22	Gross Alpha/Beta	Gross Beta	1.80E-14	1.27E-14	1.87E-14	µCi/mL	UJ	T04, T05	Pershall Road (General Area)-Perimeter Air
SVP258705	PERSHALL RD.	10/18/22	Gross Alpha/Beta	Gross Alpha	2.45E-15	4.95E-15	9.13E-15	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258705	PERSHALL RD.	10/18/22	Gross Alpha/Beta	Gross Beta	1.32E-14	1.20E-14	1.87E-14	µCi/mL	UJ	T04, T05	Pershall Road (General Area)-Perimeter Air
SVP258706	PERSHALL RD.	10/18/22	Gross Alpha/Beta	Gross Alpha	1.22E-15	4.30E-15	9.13E-15	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258706	PERSHALL RD.	10/18/22	Gross Alpha/Beta	Gross Beta	1.32E-14	1.20E-14	1.87E-14	µCi/mL	UJ	T04, T05	Pershall Road (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP258707	PERSHALL RD.	10/19/22	Gross Alpha/Beta	Gross Beta	4.45E-14	1.60E-14	1.87E-14	µCi/mL			Pershall Road (General Area)-Perimeter Air
SVP258707	PERSHALL RD.	10/19/22	Gross Alpha/Beta	Gross Alpha	8.57E-15	7.41E-15	9.13E-15	µCi/mL			Pershall Road (General Area)-Perimeter Air
SVP258707	PERSHALL RD.	10/19/22	Gross Alpha/Beta	Gross Alpha	2.45E-15	4.95E-15	9.13E-15	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258707	PERSHALL RD.	10/19/22	Gross Alpha/Beta	Gross Beta	1.64E-14	1.24E-14	1.87E-14	µCi/mL	UJ	T04, T05	Pershall Road (General Area)-Perimeter Air
SVP258708	PERSHALL RD.	10/19/22	Gross Alpha/Beta	Gross Beta	2.63E-14	1.61E-14	2.37E-14	µCi/mL	J	T04, T20	Pershall Road (General Area)-Perimeter Air
SVP258708	PERSHALL RD.	10/19/22	Gross Alpha/Beta	Gross Alpha	2.11E-15	5.46E-15	1.06E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258709	PERSHALL RD.	10/20/22	Gross Alpha/Beta	Gross Beta	5.16E-14	1.88E-14	2.39E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258709	PERSHALL RD.	10/20/22	Gross Alpha/Beta	Gross Alpha	3.35E-15	6.03E-15	1.07E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258710	PERSHALL RD.	10/20/22	Gross Alpha/Beta	Gross Beta	3.99E-14	1.76E-14	2.39E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258710	PERSHALL RD.	10/20/22	Gross Alpha/Beta	Gross Alpha	6.99E-15	7.37E-15	1.07E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258783	PERSHALL RD.	12/14/22	Gross Alpha/Beta	Gross Alpha	-7.80E-17	6.58E-15	1.59E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258783	PERSHALL RD.	12/14/22	Gross Alpha/Beta	Gross Beta	2.47E-14	2.24E-14	3.52E-14	µCi/mL	UJ	T04, T05	Pershall Road (General Area)-Perimeter Air
SVP258784	PERSHALL RD.	12/14/22	Gross Alpha/Beta	Gross Alpha	9.63E-15	9.79E-15	1.38E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258784	PERSHALL RD.	12/14/22	Gross Alpha/Beta	Gross Beta	1.62E-14	1.88E-14	3.06E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258785	PERSHALL RD.	12/15/22	Gross Alpha/Beta	Gross Beta	4.07E-14	1.69E-14	2.24E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258785	PERSHALL RD.	12/15/22	Gross Alpha/Beta	Gross Alpha	1.13E-15	4.80E-15	1.01E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258786	PERSHALL RD.	12/15/22	Gross Alpha/Beta	Gross Beta	2.63E-14	1.54E-14	2.24E-14	µCi/mL	J	T04, T20	Pershall Road (General Area)-Perimeter Air
SVP258786	PERSHALL RD.	12/15/22	Gross Alpha/Beta	Gross Alpha	9.40E-15	7.91E-15	1.01E-14	µCi/mL	UJ	T04, T05	Pershall Road (General Area)-Perimeter Air
SVP258787	PERSHALL RD.	12/19/22	Gross Alpha/Beta	Gross Beta	4.62E-14	1.77E-14	2.28E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258787	PERSHALL RD.	12/19/22	Gross Alpha/Beta	Gross Alpha	8.38E-15	7.69E-15	1.03E-14	µCi/mL	UJ	T04, T05	Pershall Road (General Area)-Perimeter Air
SVP258788	PERSHALL RD.	12/19/22	Gross Alpha/Beta	Gross Beta	2.99E-14	1.60E-14	2.28E-14	µCi/mL	J	T04, T20	Pershall Road (General Area)-Perimeter Air
SVP258788	PERSHALL RD.	12/19/22	Gross Alpha/Beta	Gross Alpha	3.56E-15	5.97E-15	1.03E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258789	PERSHALL RD.	12/20/22	Gross Alpha/Beta	Gross Beta	3.43E-14	1.73E-14	2.42E-14	µCi/mL	J	T04, T20	Pershall Road (General Area)-Perimeter Air
SVP258789	PERSHALL RD.	12/20/22	Gross Alpha/Beta	Gross Alpha	3.79E-15	6.34E-15	1.10E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258790	PERSHALL RD.	12/20/22	Gross Alpha/Beta	Gross Beta	5.48E-14	1.94E-14	2.42E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258790	PERSHALL RD.	12/20/22	Gross Alpha/Beta	Gross Alpha	6.34E-15	7.31E-15	1.10E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258791	PERSHALL RD.	12/21/22	Gross Alpha/Beta	Gross Beta	7.19E-14	2.00E-14	2.24E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258791	PERSHALL RD.	12/21/22	Gross Alpha/Beta	Gross Alpha	4.68E-15	6.32E-15	1.01E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258792	PERSHALL RD.	12/21/22	Gross Alpha/Beta	Gross Beta	6.20E-14	1.91E-14	2.24E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258792	PERSHALL RD.	12/21/22	Gross Alpha/Beta	Gross Alpha	8.22E-15	7.54E-15	1.01E-14	µCi/mL	UJ	T04, T05	Pershall Road (General Area)-Perimeter Air
SVP258793	PERSHALL RD.	12/27/22	Gross Alpha/Beta	Gross Beta	3.30E-14	1.63E-14	2.28E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258793	PERSHALL RD.	12/27/22	Gross Alpha/Beta	Gross Alpha	9.58E-15	8.07E-15	1.03E-14	µCi/mL	UJ	T04, T05	Pershall Road (General Area)-Perimeter Air
SVP258794	PERSHALL RD.	12/27/22	Gross Alpha/Beta	Gross Beta	3.30E-14	1.63E-14	2.28E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258794	PERSHALL RD.	12/27/22	Gross Alpha/Beta	Gross Alpha	3.56E-15	5.97E-15	1.03E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258795	PERSHALL RD.	12/28/22	Gross Alpha/Beta	Gross Beta	4.00E-14	1.71E-14	2.28E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258795	PERSHALL RD.	12/28/22	Gross Alpha/Beta	Gross Alpha	8.38E-15	7.69E-15	1.03E-14	µCi/mL	UJ	T04, T05	Pershall Road (General Area)-Perimeter Air
SVP258796	PERSHALL RD.	12/28/22	Gross Alpha/Beta	Gross Beta	8.18E-14	2.12E-14	2.28E-14	µCi/mL	=		Pershall Road (General Area)-Perimeter Air
SVP258796	PERSHALL RD.	12/28/22	Gross Alpha/Beta	Gross Alpha	4.77E-15	6.44E-15	1.03E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258797	PERSHALL RD.	12/29/22	Gross Alpha/Beta	Gross Alpha	5.47E-15	1.27E-14	2.39E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258797	PERSHALL RD.	12/29/22	Gross Alpha/Beta	Gross Beta	3.70E-14	3.36E-14	5.29E-14	µCi/mL	UJ	T04, T05	Pershall Road (General Area)-Perimeter Air
SVP258798	PERSHALL RD.	12/29/22	Gross Alpha/Beta	Gross Beta	5.86E-14	3.60E-14	5.29E-14	µCi/mL			Pershall Road (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP258798	PERSHALL RD.	12/29/22	Gross Alpha/Beta	Gross Alpha	5.47E-15	1.27E-14	2.39E-14	µCi/mL			Pershall Road (General Area)-Perimeter Air
SVP258798	PERSHALL RD.	12/29/22	Gross Alpha/Beta	Gross Alpha	1.38E-14	1.60E-14	2.39E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SVP258798	PERSHALL RD.	12/29/22	Gross Alpha/Beta	Gross Beta	2.99E-14	3.27E-14	5.29E-14	µCi/mL	UJ	T06	Pershall Road (General Area)-Perimeter Air
SLA250430	SLAPS LOADOUT	01/03/22	Gross Alpha/Beta	Gross Beta	1.86E-14	1.25E-14	1.82E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250430	SLAPS LOADOUT	01/03/22	Gross Alpha/Beta	Gross Alpha	9.65E-16	4.29E-15	9.38E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250431	SLAPS LOADOUT	01/03/22	Gross Alpha/Beta	Gross Alpha	1.47E-14	9.40E-15	9.57E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250431	SLAPS LOADOUT	01/03/22	Gross Alpha/Beta	Gross Beta	5.49E-14	1.72E-14	1.86E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250432	SLAPS LOADOUT	01/03/22	Gross Alpha/Beta	Gross Beta	5.38E-14	1.72E-14	1.88E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250432	SLAPS LOADOUT	01/03/22	Gross Alpha/Beta	Gross Alpha	7.27E-15	7.16E-15	9.66E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250433	SLAPS LOADOUT	01/03/22	Gross Alpha/Beta	Gross Alpha	9.40E-15	7.70E-15	9.29E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250433	SLAPS LOADOUT	01/03/22	Gross Alpha/Beta	Gross Beta	5.41E-14	1.68E-14	1.81E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250434	SLAPS LOADOUT	01/03/22	Gross Alpha/Beta	Gross Alpha	-1.44E-15	2.50E-15	9.20E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250434	SLAPS LOADOUT	01/03/22	Gross Alpha/Beta	Gross Beta	1.51E-14	1.19E-14	1.79E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250435	SLAPS LOADOUT	01/03/22	Gross Alpha/Beta	Gross Beta	4.42E-14	1.55E-14	1.79E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250435	SLAPS LOADOUT	01/03/22	Gross Alpha/Beta	Gross Alpha	3.34E-15	5.40E-15	9.20E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250436	SLAPS LOADOUT	01/04/22	Gross Alpha/Beta	Gross Alpha	-2.40E-16	3.33E-15	8.86E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250436	SLAPS LOADOUT	01/04/22	Gross Alpha/Beta	Gross Beta	9.29E-15	1.07E-14	1.72E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250437	SLAPS LOADOUT	01/04/22	Gross Alpha/Beta	Gross Beta	4.14E-14	1.51E-14	1.77E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250437	SLAPS LOADOUT	01/04/22	Gross Alpha/Beta	Gross Alpha	8.04E-15	7.16E-15	9.11E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250438	SLAPS LOADOUT	01/04/22	Gross Alpha/Beta	Gross Beta	4.87E-14	1.59E-14	1.75E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250438	SLAPS LOADOUT	01/04/22	Gross Alpha/Beta	Gross Alpha	5.62E-15	6.26E-15	9.02E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250438	SLAPS LOADOUT	01/04/22	Gross Alpha/Beta	Gross Beta	4.34E-14	1.53E-14	1.75E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250438	SLAPS LOADOUT	01/04/22	Gross Alpha/Beta	Gross Alpha	4.45E-15	5.80E-15	9.02E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250439	SLAPS LOADOUT	01/05/22	Gross Alpha/Beta	Gross Alpha	1.86E-14	1.02E-14	8.71E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250439	SLAPS LOADOUT	01/05/22	Gross Alpha/Beta	Gross Beta	8.94E-14	2.08E-14	1.86E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250440	SLAPS LOADOUT	01/05/22	Gross Alpha/Beta	Gross Alpha	8.83E-15	7.37E-15	8.71E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250440	SLAPS LOADOUT	01/05/22	Gross Alpha/Beta	Gross Beta	8.30E-14	2.01E-14	1.86E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250441	SLAPS LOADOUT	01/05/22	Gross Alpha/Beta	Gross Alpha	2.10E-14	1.08E-14	8.71E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250441	SLAPS LOADOUT	01/05/22	Gross Alpha/Beta	Gross Beta	9.74E-14	2.16E-14	1.86E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250442	SLAPS LOADOUT	01/06/22	Gross Alpha/Beta	Gross Beta	2.93E-14	1.35E-14	1.75E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250442	SLAPS LOADOUT	01/06/22	Gross Alpha/Beta	Gross Alpha	7.19E-15	6.56E-15	8.23E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250443	SLAPS LOADOUT	01/06/22	Gross Alpha/Beta	Gross Alpha	1.07E-14	7.70E-15	8.23E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250443	SLAPS LOADOUT	01/06/22	Gross Alpha/Beta	Gross Beta	2.55E-14	1.30E-14	1.75E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250444	SLAPS LOADOUT	01/06/22	Gross Alpha/Beta	Gross Alpha	7.19E-15	6.56E-15	8.23E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250444	SLAPS LOADOUT	01/06/22	Gross Alpha/Beta	Gross Beta	1.04E-14	1.10E-14	1.75E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250445	SLAPS LOADOUT	01/06/22	Gross Alpha/Beta	Gross Beta	2.48E-14	1.29E-14	1.75E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250445	SLAPS LOADOUT	01/06/22	Gross Alpha/Beta	Gross Alpha	6.04E-15	6.14E-15	8.23E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250446	SLAPS LOADOUT	01/06/22	Gross Alpha/Beta	Gross Alpha	1.18E-14	8.05E-15	8.23E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250446	SLAPS LOADOUT	01/06/22	Gross Alpha/Beta	Gross Beta	3.16E-14	1.38E-14	1.75E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250447	SLAPS LOADOUT	01/06/22	Gross Alpha/Beta	Gross Beta	2.25E-14	1.26E-14	1.75E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250447	SLAPS LOADOUT	01/06/22	Gross Alpha/Beta	Gross Alpha	7.19E-15	6.56E-15	8.23E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA250448	SLAPS LOADOUT	01/10/22	Gross Alpha/Beta	Gross Alpha	1.21E-14	8.28E-15	8.46E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250448	SLAPS LOADOUT	01/10/22	Gross Alpha/Beta	Gross Beta	5.11E-14	1.64E-14	1.80E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250449	SLAPS LOADOUT	01/10/22	Gross Alpha/Beta	Gross Alpha	1.13E-14	8.15E-15	8.71E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250449	SLAPS LOADOUT	01/10/22	Gross Alpha/Beta	Gross Beta	3.66E-14	1.50E-14	1.86E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250450	SLAPS LOADOUT	01/10/22	Gross Alpha/Beta	Gross Beta	6.78E-14	1.92E-14	1.97E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250450	SLAPS LOADOUT	01/10/22	Gross Alpha/Beta	Gross Alpha	6.80E-15	6.91E-15	9.25E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250451	SLAPS LOADOUT	01/11/22	Gross Alpha/Beta	Gross Alpha	1.10E-14	7.92E-15	8.46E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250451	SLAPS LOADOUT	01/11/22	Gross Alpha/Beta	Gross Beta	5.89E-14	1.72E-14	1.80E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250452	SLAPS LOADOUT	01/11/22	Gross Alpha/Beta	Gross Alpha	8.58E-15	7.16E-15	8.46E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250452	SLAPS LOADOUT	01/11/22	Gross Alpha/Beta	Gross Beta	4.65E-14	1.58E-14	1.80E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250453	SLAPS LOADOUT	01/11/22	Gross Alpha/Beta	Gross Beta	4.97E-14	1.59E-14	1.75E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250453	SLAPS LOADOUT	01/11/22	Gross Alpha/Beta	Gross Alpha	3.74E-15	5.19E-15	8.23E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250454	SLAPS LOADOUT	01/12/22	Gross Alpha/Beta	Gross Beta	2.56E-14	1.40E-14	1.93E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250454	SLAPS LOADOUT	01/12/22	Gross Alpha/Beta	Gross Alpha	6.66E-15	6.77E-15	9.07E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250455	SLAPS LOADOUT	01/12/22	Gross Alpha/Beta	Gross Beta	2.99E-14	1.49E-14	1.99E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250455	SLAPS LOADOUT	01/12/22	Gross Alpha/Beta	Gross Alpha	8.18E-15	7.46E-15	9.35E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250456	SLAPS LOADOUT	01/12/22	Gross Alpha/Beta	Gross Alpha	-2.15E-15	6.84E-16	8.80E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250456	SLAPS LOADOUT	01/12/22	Gross Alpha/Beta	Gross Beta	1.35E-14	1.21E-14	1.88E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250457	SLAPS LOADOUT	01/12/22	Gross Alpha/Beta	Gross Alpha	4.21E-15	5.84E-15	9.25E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250457	SLAPS LOADOUT	01/12/22	Gross Alpha/Beta	Gross Beta	1.94E-14	1.34E-14	1.97E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250458	SLAPS LOADOUT	01/12/22	Gross Alpha/Beta	Gross Beta	2.46E-14	1.35E-14	1.86E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250458	SLAPS LOADOUT	01/12/22	Gross Alpha/Beta	Gross Alpha	5.18E-15	6.02E-15	8.71E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250458	SLAPS LOADOUT	01/12/22	Gross Alpha/Beta	Gross Alpha	1.01E-14	7.77E-15	8.71E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250458	SLAPS LOADOUT	01/12/22	Gross Alpha/Beta	Gross Beta	3.50E-14	1.48E-14	1.86E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250459	SLAPS LOADOUT	01/12/22	Gross Alpha/Beta	Gross Beta	2.56E-14	1.62E-14	2.40E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250459	SLAPS LOADOUT	01/12/22	Gross Alpha/Beta	Gross Alpha	7.88E-15	6.83E-15	8.03E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250460	SLAPS LOADOUT	01/13/22	Gross Alpha/Beta	Gross Beta	5.77E-14	1.84E-14	2.21E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250460	SLAPS LOADOUT	01/13/22	Gross Alpha/Beta	Gross Alpha	7.24E-15	6.27E-15	7.37E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250461	SLAPS LOADOUT	01/13/22	Gross Alpha/Beta	Gross Alpha	8.34E-15	6.65E-15	7.37E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250461	SLAPS LOADOUT	01/13/22	Gross Alpha/Beta	Gross Beta	5.10E-14	1.78E-14	2.21E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250462	SLAPS LOADOUT	01/13/22	Gross Alpha/Beta	Gross Alpha	1.74E-15	3.85E-15	7.37E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250462	SLAPS LOADOUT	01/13/22	Gross Alpha/Beta	Gross Beta	5.67E-15	1.29E-14	2.21E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250463	SLAPS LOADOUT	01/18/22	Gross Alpha/Beta	Gross Beta	2.78E-14	1.63E-14	2.38E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250463	SLAPS LOADOUT	01/18/22	Gross Alpha/Beta	Gross Alpha	6.92E-16	3.40E-15	7.95E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250464	SLAPS LOADOUT	01/18/22	Gross Alpha/Beta	Gross Beta	3.10E-14	1.67E-14	2.38E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250464	SLAPS LOADOUT	01/18/22	Gross Alpha/Beta	Gross Alpha	7.81E-15	6.76E-15	7.95E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250465	SLAPS LOADOUT	01/18/22	Gross Alpha/Beta	Gross Beta	3.58E-14	1.72E-14	2.38E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250465	SLAPS LOADOUT	01/18/22	Gross Alpha/Beta	Gross Alpha	6.62E-15	6.32E-15	7.95E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250466	SLAPS LOADOUT	01/19/22	Gross Alpha/Beta	Gross Alpha	6.02E-15	7.57E-15	1.13E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250466	SLAPS LOADOUT	01/19/22	Gross Alpha/Beta	Gross Beta	8.66E-15	1.97E-14	3.37E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250467	SLAPS LOADOUT	01/19/22	Gross Alpha/Beta	Gross Alpha	1.24E-14	9.88E-15	1.10E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA250467	SLAPS LOADOUT	01/19/22	Gross Alpha/Beta	Gross Beta	3.94E-14	2.26E-14	3.28E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250468	SLAPS LOADOUT	01/19/22	Gross Alpha/Beta	Gross Beta	4.82E-14	1.83E-14	2.36E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250468	SLAPS LOADOUT	01/19/22	Gross Alpha/Beta	Gross Alpha	4.21E-15	5.29E-15	7.87E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250469	SLAPS LOADOUT	01/19/22	Gross Alpha/Beta	Gross Beta	5.60E-14	2.44E-14	3.28E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250469	SLAPS LOADOUT	01/19/22	Gross Alpha/Beta	Gross Alpha	5.86E-15	7.37E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250470	SLAPS LOADOUT	01/19/22	Gross Alpha/Beta	Gross Beta	4.10E-14	1.76E-14	2.36E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250470	SLAPS LOADOUT	01/19/22	Gross Alpha/Beta	Gross Alpha	7.73E-15	6.69E-15	7.87E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250471	SLAPS LOADOUT	01/19/22	Gross Alpha/Beta	Gross Alpha	1.82E-15	4.03E-15	7.72E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250471	SLAPS LOADOUT	01/19/22	Gross Alpha/Beta	Gross Beta	2.23E-14	1.53E-14	2.31E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250472	SLAPS LOADOUT	01/19/22	Gross Alpha/Beta	Gross Alpha	2.13E-15	4.70E-15	9.01E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250472	SLAPS LOADOUT	01/19/22	Gross Alpha/Beta	Gross Beta	1.06E-14	1.62E-14	2.70E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250473	SLAPS LOADOUT	01/20/22	Gross Alpha/Beta	Gross Beta	3.75E-14	1.68E-14	2.29E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250473	SLAPS LOADOUT	01/20/22	Gross Alpha/Beta	Gross Alpha	4.09E-15	5.14E-15	7.65E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250474	SLAPS LOADOUT	01/20/22	Gross Alpha/Beta	Gross Alpha	8.82E-15	7.03E-15	7.80E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250474	SLAPS LOADOUT	01/20/22	Gross Alpha/Beta	Gross Beta	3.20E-14	1.65E-14	2.33E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250475	SLAPS LOADOUT	01/24/22	Gross Alpha/Beta	Gross Alpha	2.84E-15	4.44E-15	7.37E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250475	SLAPS LOADOUT	01/24/22	Gross Alpha/Beta	Gross Beta	2.20E-14	1.47E-14	2.21E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250476	SLAPS LOADOUT	01/24/22	Gross Alpha/Beta	Gross Beta	3.17E-14	1.58E-14	2.21E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250476	SLAPS LOADOUT	01/24/22	Gross Alpha/Beta	Gross Alpha	1.74E-15	3.85E-15	7.37E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250477	SLAPS LOADOUT	01/24/22	Gross Alpha/Beta	Gross Beta	2.70E-14	1.55E-14	2.25E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250477	SLAPS LOADOUT	01/24/22	Gross Alpha/Beta	Gross Alpha	6.25E-15	5.97E-15	7.51E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250478	SLAPS LOADOUT	01/24/22	Gross Alpha/Beta	Gross Beta	5.48E-14	1.85E-14	2.27E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250478	SLAPS LOADOUT	01/24/22	Gross Alpha/Beta	Gross Alpha	6.59E-16	3.25E-15	7.58E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250478	SLAPS LOADOUT	01/24/22	Gross Alpha/Beta	Gross Beta	4.79E-14	1.78E-14	2.27E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250478	SLAPS LOADOUT	01/24/22	Gross Alpha/Beta	Gross Alpha	6.59E-16	3.25E-15	7.58E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250479	SLAPS LOADOUT	01/24/22	Gross Alpha/Beta	Gross Alpha	0	4.02E-15	9.69E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250479	SLAPS LOADOUT	01/24/22	Gross Alpha/Beta	Gross Beta	6.89E-15	1.30E-14	2.20E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250480	SLAPS LOADOUT	01/24/22	Gross Alpha/Beta	Gross Alpha	3.41E-15	5.64E-15	9.69E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250480	SLAPS LOADOUT	01/24/22	Gross Alpha/Beta	Gross Beta	1.71E-14	1.42E-14	2.20E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250481	SLAPS LOADOUT	01/25/22	Gross Alpha/Beta	Gross Beta	2.45E-14	1.50E-14	2.20E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250481	SLAPS LOADOUT	01/25/22	Gross Alpha/Beta	Gross Alpha	3.41E-15	5.64E-15	9.69E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250482	SLAPS LOADOUT	01/25/22	Gross Alpha/Beta	Gross Alpha	3.41E-15	5.64E-15	9.69E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250482	SLAPS LOADOUT	01/25/22	Gross Alpha/Beta	Gross Beta	1.86E-14	1.43E-14	2.20E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250483	SLAPS LOADOUT	01/25/22	Gross Alpha/Beta	Gross Beta	2.69E-14	1.61E-14	2.36E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250483	SLAPS LOADOUT	01/25/22	Gross Alpha/Beta	Gross Alpha	1.22E-15	4.94E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250484	SLAPS LOADOUT	01/26/22	Gross Alpha/Beta	Gross Beta	3.94E-14	1.74E-14	2.36E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250484	SLAPS LOADOUT	01/26/22	Gross Alpha/Beta	Gross Alpha	4.87E-15	6.50E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250485	SLAPS LOADOUT	01/26/22	Gross Alpha/Beta	Gross Beta	3.28E-14	1.75E-14	2.50E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250485	SLAPS LOADOUT	01/26/22	Gross Alpha/Beta	Gross Alpha	2.59E-15	5.86E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250486	SLAPS LOADOUT	01/26/22	Gross Alpha/Beta	Gross Beta	2.98E-14	1.62E-14	2.33E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250486	SLAPS LOADOUT	01/26/22	Gross Alpha/Beta	Gross Alpha	6.02E-15	6.88E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA250487	SLAPS LOADOUT	01/26/22	Gross Alpha/Beta	Gross Alpha	1.07E-14	8.35E-15	1.02E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250487	SLAPS LOADOUT	01/26/22	Gross Alpha/Beta	Gross Beta	4.17E-14	1.74E-14	2.31E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250488	SLAPS LOADOUT	01/26/22	Gross Alpha/Beta	Gross Beta	4.45E-14	1.78E-14	2.33E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250488	SLAPS LOADOUT	01/26/22	Gross Alpha/Beta	Gross Alpha	9.63E-15	8.07E-15	1.03E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250489	SLAPS LOADOUT	01/26/22	Gross Alpha/Beta	Gross Beta	3.41E-14	1.66E-14	2.31E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250489	SLAPS LOADOUT	01/26/22	Gross Alpha/Beta	Gross Alpha	7.16E-15	7.23E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250490	SLAPS LOADOUT	01/27/22	Gross Alpha/Beta	Gross Beta	3.76E-14	1.66E-14	2.24E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250490	SLAPS LOADOUT	01/27/22	Gross Alpha/Beta	Gross Alpha	2.32E-15	5.25E-15	9.88E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250491	SLAPS LOADOUT	01/27/22	Gross Alpha/Beta	Gross Beta	3.36E-14	1.67E-14	2.33E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250491	SLAPS LOADOUT	01/27/22	Gross Alpha/Beta	Gross Alpha	0	4.26E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250492	SLAPS LOADOUT	01/27/22	Gross Alpha/Beta	Gross Beta	3.76E-14	1.66E-14	2.24E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250492	SLAPS LOADOUT	01/27/22	Gross Alpha/Beta	Gross Alpha	4.64E-15	6.20E-15	9.88E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250493	SLAPS LOADOUT	01/31/22	Gross Alpha/Beta	Gross Beta	3.68E-14	1.67E-14	2.29E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250493	SLAPS LOADOUT	01/31/22	Gross Alpha/Beta	Gross Alpha	8.27E-15	7.54E-15	1.01E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250494	SLAPS LOADOUT	01/31/22	Gross Alpha/Beta	Gross Beta	6.76E-14	2.02E-14	2.36E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250494	SLAPS LOADOUT	01/31/22	Gross Alpha/Beta	Gross Alpha	9.73E-15	8.15E-15	1.04E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250495	SLAPS LOADOUT	01/31/22	Gross Alpha/Beta	Gross Alpha	1.46E-14	9.52E-15	1.04E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250495	SLAPS LOADOUT	01/31/22	Gross Alpha/Beta	Gross Beta	8.48E-14	2.18E-14	2.36E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250496	SLAPS LOADOUT	01/31/22	Gross Alpha/Beta	Gross Alpha	1.18E-14	8.61E-15	1.01E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250496	SLAPS LOADOUT	01/31/22	Gross Alpha/Beta	Gross Beta	5.43E-14	1.85E-14	2.29E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250497	SLAPS LOADOUT	01/31/22	Gross Alpha/Beta	Gross Alpha	-1.20E-15	3.51E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250497	SLAPS LOADOUT	01/31/22	Gross Alpha/Beta	Gross Beta	1.19E-14	1.43E-14	2.33E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250498	SLAPS LOADOUT	01/31/22	Gross Alpha/Beta	Gross Alpha	1.07E-14	8.35E-15	1.02E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250498	SLAPS LOADOUT	01/31/22	Gross Alpha/Beta	Gross Beta	6.09E-14	1.93E-14	2.31E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250498	SLAPS LOADOUT	01/31/22	Gross Alpha/Beta	Gross Alpha	1.91E-14	1.05E-14	1.02E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250498	SLAPS LOADOUT	01/31/22	Gross Alpha/Beta	Gross Beta	1.00E-13	2.30E-14	2.31E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250499	SLAPS LOADOUT	02/01/22	Gross Alpha/Beta	Gross Beta	4.25E-14	1.83E-14	2.45E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250499	SLAPS LOADOUT	02/01/22	Gross Alpha/Beta	Gross Alpha	5.39E-15	5.97E-15	8.32E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250500	SLAPS LOADOUT	02/01/22	Gross Alpha/Beta	Gross Alpha	-6.36E-16	2.42E-15	8.07E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250500	SLAPS LOADOUT	02/01/22	Gross Alpha/Beta	Gross Beta	1.34E-14	1.48E-14	2.38E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250501	SLAPS LOADOUT	02/01/22	Gross Alpha/Beta	Gross Alpha	1.00E-14	7.56E-15	8.15E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250501	SLAPS LOADOUT	02/01/22	Gross Alpha/Beta	Gross Beta	2.00E-14	1.56E-14	2.41E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250502	SLAPS LOADOUT	02/07/22	Gross Alpha/Beta	Gross Alpha	1.65E-14	1.05E-14	9.90E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250502	SLAPS LOADOUT	02/07/22	Gross Alpha/Beta	Gross Beta	7.00E-14	2.37E-14	2.92E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250503	SLAPS LOADOUT	02/07/22	Gross Alpha/Beta	Gross Beta	9.63E-14	2.63E-14	2.92E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250503	SLAPS LOADOUT	02/07/22	Gross Alpha/Beta	Gross Alpha	7.86E-15	7.68E-15	9.90E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250504	SLAPS LOADOUT	02/07/22	Gross Alpha/Beta	Gross Alpha	3.54E-15	5.81E-15	9.90E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250504	SLAPS LOADOUT	02/07/22	Gross Alpha/Beta	Gross Beta	1.36E-14	1.78E-14	2.92E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250505	SLAPS LOADOUT	02/07/22	Gross Alpha/Beta	Gross Beta	6.91E-14	2.36E-14	2.92E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250505	SLAPS LOADOUT	02/07/22	Gross Alpha/Beta	Gross Alpha	3.54E-15	5.81E-15	9.90E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250506	SLAPS LOADOUT	02/07/22	Gross Alpha/Beta	Gross Alpha	1.07E-14	8.71E-15	9.90E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA250506	SLAPS LOADOUT	02/07/22	Gross Alpha/Beta	Gross Beta	7.39E-14	2.41E-14	2.92E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250507	SLAPS LOADOUT	02/07/22	Gross Alpha/Beta	Gross Beta	5.19E-14	1.98E-14	2.56E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250507	SLAPS LOADOUT	02/07/22	Gross Alpha/Beta	Gross Alpha	8.14E-15	7.18E-15	8.66E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250508	SLAPS LOADOUT	02/08/22	Gross Alpha/Beta	Gross Alpha	4.23E-15	5.51E-15	8.40E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250508	SLAPS LOADOUT	02/08/22	Gross Alpha/Beta	Gross Beta	2.47E-14	1.65E-14	2.48E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250509	SLAPS LOADOUT	02/08/22	Gross Alpha/Beta	Gross Alpha	5.54E-16	3.48E-15	8.32E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250509	SLAPS LOADOUT	02/08/22	Gross Alpha/Beta	Gross Beta	1.63E-14	1.55E-14	2.45E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250510	SLAPS LOADOUT	02/08/22	Gross Alpha/Beta	Gross Beta	3.84E-14	1.78E-14	2.45E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250510	SLAPS LOADOUT	02/08/22	Gross Alpha/Beta	Gross Alpha	5.54E-16	3.48E-15	8.32E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250511	SLAPS LOADOUT	02/08/22	Gross Alpha/Beta	Gross Alpha	-6.55E-16	2.50E-15	8.32E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250511	SLAPS LOADOUT	02/08/22	Gross Alpha/Beta	Gross Beta	-1.70E-15	1.34E-14	2.45E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250512	SLAPS LOADOUT	02/08/22	Gross Alpha/Beta	Gross Beta	2.69E-14	1.66E-14	2.45E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250512	SLAPS LOADOUT	02/08/22	Gross Alpha/Beta	Gross Alpha	4.18E-15	5.45E-15	8.32E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250513	SLAPS LOADOUT	02/09/22	Gross Alpha/Beta	Gross Alpha	1.06E-14	7.49E-15	7.70E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250513	SLAPS LOADOUT	02/09/22	Gross Alpha/Beta	Gross Beta	1.66E-14	1.45E-14	2.27E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250514	SLAPS LOADOUT	02/09/22	Gross Alpha/Beta	Gross Beta	3.22E-14	1.67E-14	2.36E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250514	SLAPS LOADOUT	02/09/22	Gross Alpha/Beta	Gross Alpha	2.86E-15	4.69E-15	8.00E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250515	SLAPS LOADOUT	02/10/22	Gross Alpha/Beta	Gross Alpha	2.92E-15	4.79E-15	8.15E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250515	SLAPS LOADOUT	02/10/22	Gross Alpha/Beta	Gross Beta	2.32E-14	1.60E-14	2.41E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250516	SLAPS LOADOUT	02/10/22	Gross Alpha/Beta	Gross Alpha	-6.42E-16	2.45E-15	8.15E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250516	SLAPS LOADOUT	02/10/22	Gross Alpha/Beta	Gross Beta	-7.29E-15	1.24E-14	2.41E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250517	SLAPS LOADOUT	02/14/22	Gross Alpha/Beta	Gross Beta	3.43E-14	1.65E-14	2.29E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250517	SLAPS LOADOUT	02/14/22	Gross Alpha/Beta	Gross Alpha	2.78E-15	4.56E-15	7.77E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250518	SLAPS LOADOUT	02/14/22	Gross Alpha/Beta	Gross Beta	3.55E-14	1.65E-14	2.27E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250518	SLAPS LOADOUT	02/14/22	Gross Alpha/Beta	Gross Alpha	3.87E-15	5.05E-15	7.70E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250518	SLAPS LOADOUT	02/14/22	Gross Alpha/Beta	Gross Beta	3.63E-14	1.66E-14	2.27E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250518	SLAPS LOADOUT	02/14/22	Gross Alpha/Beta	Gross Alpha	2.75E-15	4.52E-15	7.70E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250519	SLAPS LOADOUT	02/14/22	Gross Alpha/Beta	Gross Alpha	-2.35E-15	7.09E-16	8.89E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250519	SLAPS LOADOUT	02/14/22	Gross Alpha/Beta	Gross Beta	1.71E-14	1.26E-14	1.89E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250520	SLAPS LOADOUT	02/14/22	Gross Alpha/Beta	Gross Beta	2.57E-14	1.37E-14	1.89E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250520	SLAPS LOADOUT	02/14/22	Gross Alpha/Beta	Gross Alpha	6.05E-15	6.41E-15	8.89E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250521	SLAPS LOADOUT	02/14/22	Gross Alpha/Beta	Gross Alpha	2.52E-15	5.00E-15	9.15E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250521	SLAPS LOADOUT	02/14/22	Gross Alpha/Beta	Gross Beta	1.19E-14	1.22E-14	1.95E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250522	SLAPS LOADOUT	02/14/22	Gross Alpha/Beta	Gross Beta	2.24E-14	1.36E-14	1.95E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250522	SLAPS LOADOUT	02/14/22	Gross Alpha/Beta	Gross Alpha	5.00E-15	6.11E-15	9.15E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250523	SLAPS LOADOUT	02/15/22	Gross Alpha/Beta	Gross Beta	2.49E-14	1.39E-14	1.95E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250523	SLAPS LOADOUT	02/15/22	Gross Alpha/Beta	Gross Alpha	5.20E-17	3.57E-15	9.15E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250524	SLAPS LOADOUT	02/15/22	Gross Alpha/Beta	Gross Beta	2.70E-14	1.44E-14	1.98E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250524	SLAPS LOADOUT	02/15/22	Gross Alpha/Beta	Gross Alpha	1.31E-15	4.43E-15	9.34E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250525	SLAPS LOADOUT	02/15/22	Gross Alpha/Beta	Gross Beta	3.11E-14	1.49E-14	1.98E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250525	SLAPS LOADOUT	02/15/22	Gross Alpha/Beta	Gross Alpha	-1.21E-15	2.63E-15	9.34E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA250526	SLAPS LOADOUT	02/15/22	Gross Alpha/Beta	Gross Alpha	3.88E-15	5.75E-15	9.43E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250526	SLAPS LOADOUT	02/15/22	Gross Alpha/Beta	Gross Beta	3.09E-15	1.13E-14	2.00E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250527	SLAPS LOADOUT	02/15/22	Gross Alpha/Beta	Gross Beta	4.39E-14	1.61E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250527	SLAPS LOADOUT	02/15/22	Gross Alpha/Beta	Gross Alpha	6.17E-15	6.53E-15	9.06E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250528	SLAPS LOADOUT	02/15/22	Gross Alpha/Beta	Gross Alpha	1.26E-15	4.26E-15	8.98E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250528	SLAPS LOADOUT	02/15/22	Gross Alpha/Beta	Gross Beta	1.57E-14	1.25E-14	1.91E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250529	SLAPS LOADOUT	02/16/22	Gross Alpha/Beta	Gross Alpha	9.75E-15	7.73E-15	8.98E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250529	SLAPS LOADOUT	02/16/22	Gross Alpha/Beta	Gross Beta	1.88E-14	1.30E-14	1.91E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250530	SLAPS LOADOUT	02/16/22	Gross Alpha/Beta	Gross Alpha	4.95E-15	6.05E-15	9.06E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250530	SLAPS LOADOUT	02/16/22	Gross Alpha/Beta	Gross Beta	1.90E-14	1.31E-14	1.93E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250531	SLAPS LOADOUT	02/16/22	Gross Alpha/Beta	Gross Alpha	2.50E-15	4.95E-15	9.06E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250531	SLAPS LOADOUT	02/16/22	Gross Alpha/Beta	Gross Beta	1.74E-14	1.29E-14	1.93E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250532	SLAPS LOADOUT	02/22/22	Gross Alpha/Beta	Gross Beta	3.26E-14	1.48E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250532	SLAPS LOADOUT	02/22/22	Gross Alpha/Beta	Gross Alpha	7.40E-15	6.98E-15	9.06E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250533	SLAPS LOADOUT	02/22/22	Gross Alpha/Beta	Gross Beta	2.02E-14	1.34E-14	1.96E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250533	SLAPS LOADOUT	02/22/22	Gross Alpha/Beta	Gross Alpha	-1.20E-15	2.60E-15	9.25E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250534	SLAPS LOADOUT	02/22/22	Gross Alpha/Beta	Gross Alpha	-1.17E-15	2.55E-15	9.06E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250534	SLAPS LOADOUT	02/22/22	Gross Alpha/Beta	Gross Beta	6.18E-15	1.13E-14	1.93E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250535	SLAPS LOADOUT	02/22/22	Gross Alpha/Beta	Gross Beta	2.73E-14	1.42E-14	1.95E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250535	SLAPS LOADOUT	02/22/22	Gross Alpha/Beta	Gross Alpha	5.20E-17	3.57E-15	9.15E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250536	SLAPS LOADOUT	02/22/22	Gross Alpha/Beta	Gross Beta	2.51E-14	1.41E-14	1.96E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250536	SLAPS LOADOUT	02/22/22	Gross Alpha/Beta	Gross Alpha	5.20E-17	3.60E-15	9.25E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250537	SLAPS LOADOUT	02/22/22	Gross Alpha/Beta	Gross Beta	2.32E-14	1.37E-14	1.95E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250537	SLAPS LOADOUT	02/22/22	Gross Alpha/Beta	Gross Alpha	1.29E-15	4.34E-15	9.15E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250538	SLAPS LOADOUT	02/23/22	Gross Alpha/Beta	Gross Beta	3.91E-14	1.56E-14	1.93E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250538	SLAPS LOADOUT	02/23/22	Gross Alpha/Beta	Gross Alpha	6.17E-15	6.53E-15	9.06E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250538	SLAPS LOADOUT	02/23/22	Gross Alpha/Beta	Gross Alpha	1.72E-14	9.90E-15	9.06E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250538	SLAPS LOADOUT	02/23/22	Gross Alpha/Beta	Gross Beta	4.31E-14	1.60E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250539	SLAPS LOADOUT	02/23/22	Gross Alpha/Beta	Gross Alpha	4.52E-15	6.83E-15	1.14E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250539	SLAPS LOADOUT	02/23/22	Gross Alpha/Beta	Gross Beta	5.43E-15	1.36E-14	2.35E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250540	SLAPS LOADOUT	02/23/22	Gross Alpha/Beta	Gross Beta	4.19E-14	1.74E-14	2.32E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250540	SLAPS LOADOUT	02/23/22	Gross Alpha/Beta	Gross Alpha	5.66E-15	7.17E-15	1.13E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250541	SLAPS LOADOUT	02/24/22	Gross Alpha/Beta	Gross Alpha	-4.41E-16	8.66E-15	2.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250541	SLAPS LOADOUT	02/24/22	Gross Alpha/Beta	Gross Beta	1.92E-14	2.53E-14	4.17E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250542	SLAPS LOADOUT	02/24/22	Gross Alpha/Beta	Gross Alpha	-4.34E-16	8.51E-15	2.00E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250542	SLAPS LOADOUT	02/24/22	Gross Alpha/Beta	Gross Beta	-2.57E-15	2.24E-14	4.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250543	SLAPS LOADOUT	02/28/22	Gross Alpha/Beta	Gross Beta	4.11E-14	1.76E-14	2.37E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250543	SLAPS LOADOUT	02/28/22	Gross Alpha/Beta	Gross Alpha	4.57E-15	6.90E-15	1.16E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250544	SLAPS LOADOUT	02/28/22	Gross Alpha/Beta	Gross Beta	4.70E-14	1.83E-14	2.39E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250544	SLAPS LOADOUT	02/28/22	Gross Alpha/Beta	Gross Alpha	4.61E-15	6.96E-15	1.17E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250545	SLAPS LOADOUT	02/28/22	Gross Alpha/Beta	Gross Alpha	-1.48E-15	4.38E-15	1.18E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA250545	SLAPS LOADOUT	02/28/22	Gross Alpha/Beta	Gross Beta	1.67E-14	1.53E-14	2.42E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250546	SLAPS LOADOUT	03/01/22	Gross Alpha/Beta	Gross Beta	3.53E-14	2.01E-14	2.91E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250546	SLAPS LOADOUT	03/01/22	Gross Alpha/Beta	Gross Alpha	1.17E-15	6.73E-15	1.42E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250547	SLAPS LOADOUT	03/01/22	Gross Alpha/Beta	Gross Alpha	-3.27E-15	4.37E-15	1.42E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250547	SLAPS LOADOUT	03/01/22	Gross Alpha/Beta	Gross Beta	2.67E-14	1.91E-14	2.91E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250548	SLAPS LOADOUT	03/01/22	Gross Alpha/Beta	Gross Beta	4.90E-14	2.13E-14	2.88E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250548	SLAPS LOADOUT	03/01/22	Gross Alpha/Beta	Gross Alpha	9.93E-15	9.81E-15	1.40E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250549	SLAPS LOADOUT	03/01/22	Gross Alpha/Beta	Gross Beta	8.20E-14	2.08E-14	2.24E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250549	SLAPS LOADOUT	03/01/22	Gross Alpha/Beta	Gross Alpha	1.00E-14	8.29E-15	1.09E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250550	SLAPS LOADOUT	03/01/22	Gross Alpha/Beta	Gross Alpha	4.13E-15	7.94E-15	1.42E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250550	SLAPS LOADOUT	03/01/22	Gross Alpha/Beta	Gross Beta	2.58E-14	1.90E-14	2.91E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250551	SLAPS LOADOUT	03/01/22	Gross Alpha/Beta	Gross Beta	5.22E-14	1.82E-14	2.28E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250551	SLAPS LOADOUT	03/01/22	Gross Alpha/Beta	Gross Alpha	2.08E-15	5.76E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250552	SLAPS LOADOUT	03/02/22	Gross Alpha/Beta	Gross Alpha	1.00E-15	5.76E-15	1.22E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250552	SLAPS LOADOUT	03/02/22	Gross Alpha/Beta	Gross Beta	1.39E-14	1.54E-14	2.49E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250553	SLAPS LOADOUT	03/02/22	Gross Alpha/Beta	Gross Beta	4.32E-14	1.85E-14	2.49E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250553	SLAPS LOADOUT	03/02/22	Gross Alpha/Beta	Gross Alpha	4.80E-15	7.25E-15	1.22E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250554	SLAPS LOADOUT	03/02/22	Gross Alpha/Beta	Gross Alpha	-1.52E-15	4.47E-15	1.20E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250554	SLAPS LOADOUT	03/02/22	Gross Alpha/Beta	Gross Beta	9.74E-15	1.48E-14	2.47E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250555	SLAPS LOADOUT	03/02/22	Gross Alpha/Beta	Gross Beta	4.50E-14	1.80E-14	2.37E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250555	SLAPS LOADOUT	03/02/22	Gross Alpha/Beta	Gross Alpha	3.36E-15	6.46E-15	1.16E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250556	SLAPS LOADOUT	03/02/22	Gross Alpha/Beta	Gross Beta	5.12E-14	1.86E-14	2.37E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250556	SLAPS LOADOUT	03/02/22	Gross Alpha/Beta	Gross Alpha	5.77E-15	7.31E-15	1.16E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250557	SLAPS LOADOUT	03/02/22	Gross Alpha/Beta	Gross Alpha	1.23E-14	9.48E-15	1.20E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250557	SLAPS LOADOUT	03/02/22	Gross Alpha/Beta	Gross Beta	8.55E-14	2.25E-14	2.47E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250558	SLAPS LOADOUT	03/03/22	Gross Alpha/Beta	Gross Alpha	1.42E-14	9.75E-15	1.16E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250558	SLAPS LOADOUT	03/03/22	Gross Alpha/Beta	Gross Beta	5.12E-14	1.86E-14	2.37E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250558	SLAPS LOADOUT	03/03/22	Gross Alpha/Beta	Gross Beta	5.82E-14	1.93E-14	2.37E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250558	SLAPS LOADOUT	03/03/22	Gross Alpha/Beta	Gross Alpha	6.98E-15	7.70E-15	1.16E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250559	SLAPS LOADOUT	03/03/22	Gross Alpha/Beta	Gross Alpha	7.82E-15	6.56E-15	7.37E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250559	SLAPS LOADOUT	03/03/22	Gross Alpha/Beta	Gross Beta	3.62E-14	1.69E-14	2.33E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250560	SLAPS LOADOUT	03/07/22	Gross Alpha/Beta	Gross Alpha	-2.38E-16	2.34E-15	7.30E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250560	SLAPS LOADOUT	03/07/22	Gross Alpha/Beta	Gross Beta	1.50E-14	1.45E-14	2.31E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250561	SLAPS LOADOUT	03/07/22	Gross Alpha/Beta	Gross Alpha	2.13E-15	4.15E-15	7.59E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250561	SLAPS LOADOUT	03/07/22	Gross Alpha/Beta	Gross Beta	1.80E-14	1.53E-14	2.40E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250562	SLAPS LOADOUT	03/07/22	Gross Alpha/Beta	Gross Alpha	-2.68E-16	2.64E-15	8.23E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250562	SLAPS LOADOUT	03/07/22	Gross Alpha/Beta	Gross Beta	-6.60E-15	1.36E-14	2.60E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250563	SLAPS LOADOUT	03/07/22	Gross Alpha/Beta	Gross Alpha	-2.68E-16	2.64E-15	8.23E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250563	SLAPS LOADOUT	03/07/22	Gross Alpha/Beta	Gross Beta	2.21E-14	1.69E-14	2.60E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250564	SLAPS LOADOUT	03/07/22	Gross Alpha/Beta	Gross Alpha	4.88E-15	5.80E-15	8.23E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250564	SLAPS LOADOUT	03/07/22	Gross Alpha/Beta	Gross Beta	4.71E-15	1.50E-14	2.60E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA250565	SLAPS LOADOUT	03/07/22	Gross Alpha/Beta	Gross Alpha	-2.49E-16	2.46E-15	7.66E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250565	SLAPS LOADOUT	03/07/22	Gross Alpha/Beta	Gross Beta	1.33E-14	1.50E-14	2.42E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250566	SLAPS LOADOUT	03/08/22	Gross Alpha/Beta	Gross Alpha	9.39E-16	3.40E-15	7.59E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250566	SLAPS LOADOUT	03/08/22	Gross Alpha/Beta	Gross Beta	1.24E-14	1.47E-14	2.40E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250567	SLAPS LOADOUT	03/08/22	Gross Alpha/Beta	Gross Alpha	-1.43E-15	5.43E-16	7.59E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250567	SLAPS LOADOUT	03/08/22	Gross Alpha/Beta	Gross Beta	6.75E-15	1.41E-14	2.40E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250568	SLAPS LOADOUT	03/08/22	Gross Alpha/Beta	Gross Alpha	-2.47E-16	2.43E-15	7.59E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250568	SLAPS LOADOUT	03/08/22	Gross Alpha/Beta	Gross Beta	-1.27E-15	1.31E-14	2.40E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250569	SLAPS LOADOUT	03/09/22	Gross Alpha/Beta	Gross Alpha	9.03E-16	3.27E-15	7.30E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250569	SLAPS LOADOUT	03/09/22	Gross Alpha/Beta	Gross Beta	8.04E-15	1.37E-14	2.31E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250570	SLAPS LOADOUT	03/09/22	Gross Alpha/Beta	Gross Alpha	-2.68E-16	2.64E-15	8.23E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250570	SLAPS LOADOUT	03/09/22	Gross Alpha/Beta	Gross Beta	1.52E-14	1.62E-14	2.60E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250571	SLAPS LOADOUT	03/09/22	Gross Alpha/Beta	Gross Beta	3.43E-14	1.83E-14	2.60E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250571	SLAPS LOADOUT	03/09/22	Gross Alpha/Beta	Gross Alpha	2.31E-15	4.50E-15	8.23E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250572	SLAPS LOADOUT	03/09/22	Gross Alpha/Beta	Gross Alpha	8.74E-15	7.33E-15	8.23E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250572	SLAPS LOADOUT	03/09/22	Gross Alpha/Beta	Gross Beta	4.30E-14	1.92E-14	2.60E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250573	SLAPS LOADOUT	03/09/22	Gross Alpha/Beta	Gross Beta	2.99E-14	1.59E-14	2.27E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250573	SLAPS LOADOUT	03/09/22	Gross Alpha/Beta	Gross Alpha	6.49E-15	5.97E-15	7.17E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250574	SLAPS LOADOUT	03/09/22	Gross Alpha/Beta	Gross Beta	3.97E-14	1.69E-14	2.27E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250574	SLAPS LOADOUT	03/09/22	Gross Alpha/Beta	Gross Alpha	5.37E-15	5.53E-15	7.17E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250575	SLAPS LOADOUT	03/10/22	Gross Alpha/Beta	Gross Beta	3.82E-14	1.68E-14	2.27E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250575	SLAPS LOADOUT	03/10/22	Gross Alpha/Beta	Gross Alpha	-2.33E-16	2.30E-15	7.17E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250576	SLAPS LOADOUT	03/10/22	Gross Alpha/Beta	Gross Alpha	8.87E-16	3.21E-15	7.17E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250576	SLAPS LOADOUT	03/10/22	Gross Alpha/Beta	Gross Beta	2.00E-14	1.48E-14	2.27E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250577	SLAPS LOADOUT	03/10/22	Gross Alpha/Beta	Gross Alpha	7.61E-15	6.38E-15	7.17E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250577	SLAPS LOADOUT	03/10/22	Gross Alpha/Beta	Gross Beta	4.80E-14	1.78E-14	2.27E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250578	SLAPS LOADOUT	03/14/22	Gross Alpha/Beta	Gross Alpha	8.87E-16	3.21E-15	7.17E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250578	SLAPS LOADOUT	03/14/22	Gross Alpha/Beta	Gross Beta	5.62E-15	1.32E-14	2.27E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250578	SLAPS LOADOUT	03/14/22	Gross Alpha/Beta	Gross Alpha	-2.33E-16	2.30E-15	7.17E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250578	SLAPS LOADOUT	03/14/22	Gross Alpha/Beta	Gross Beta	1.40E-14	1.42E-14	2.27E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250579	SLAPS LOADOUT	03/14/22	Gross Alpha/Beta	Gross Beta	4.35E-14	1.73E-14	2.27E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250579	SLAPS LOADOUT	03/14/22	Gross Alpha/Beta	Gross Alpha	5.37E-15	5.53E-15	7.17E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250580	SLAPS LOADOUT	03/14/22	Gross Alpha/Beta	Gross Beta	3.86E-14	1.69E-14	2.29E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250580	SLAPS LOADOUT	03/14/22	Gross Alpha/Beta	Gross Alpha	-2.36E-16	2.32E-15	7.23E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250581	SLAPS LOADOUT	03/15/22	Gross Alpha/Beta	Gross Beta	3.32E-14	1.64E-14	2.29E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250581	SLAPS LOADOUT	03/15/22	Gross Alpha/Beta	Gross Alpha	5.42E-15	5.58E-15	7.23E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250582	SLAPS LOADOUT	03/15/22	Gross Alpha/Beta	Gross Alpha	8.81E-15	6.83E-15	7.23E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250582	SLAPS LOADOUT	03/15/22	Gross Alpha/Beta	Gross Beta	2.02E-14	1.50E-14	2.29E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250583	SLAPS LOADOUT	03/15/22	Gross Alpha/Beta	Gross Alpha	3.16E-15	4.56E-15	7.23E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250583	SLAPS LOADOUT	03/15/22	Gross Alpha/Beta	Gross Beta	1.79E-14	1.47E-14	2.29E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250584	SLAPS LOADOUT	03/16/22	Gross Alpha/Beta	Gross Alpha	9.77E-16	3.54E-15	7.90E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA250584	SLAPS LOADOUT	03/16/22	Gross Alpha/Beta	Gross Beta	2.46E-14	1.66E-14	2.50E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250585	SLAPS LOADOUT	03/16/22	Gross Alpha/Beta	Gross Alpha	3.45E-15	4.98E-15	7.90E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250585	SLAPS LOADOUT	03/16/22	Gross Alpha/Beta	Gross Beta	1.04E-14	1.50E-14	2.50E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250586	SLAPS LOADOUT	03/16/22	Gross Alpha/Beta	Gross Beta	2.96E-14	1.72E-14	2.50E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250586	SLAPS LOADOUT	03/16/22	Gross Alpha/Beta	Gross Alpha	3.45E-15	4.98E-15	7.90E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250587	SLAPS LOADOUT	03/16/22	Gross Alpha/Beta	Gross Alpha	2.19E-15	4.27E-15	7.82E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250587	SLAPS LOADOUT	03/16/22	Gross Alpha/Beta	Gross Beta	8.61E-15	1.47E-14	2.47E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250588	SLAPS LOADOUT	03/16/22	Gross Alpha/Beta	Gross Beta	4.74E-14	1.89E-14	2.47E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250588	SLAPS LOADOUT	03/16/22	Gross Alpha/Beta	Gross Alpha	7.08E-15	6.51E-15	7.82E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250589	SLAPS LOADOUT	03/16/22	Gross Alpha/Beta	Gross Alpha	8.30E-15	6.96E-15	7.82E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250589	SLAPS LOADOUT	03/16/22	Gross Alpha/Beta	Gross Beta	2.18E-14	1.62E-14	2.47E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250590	SLAPS LOADOUT	03/17/22	Gross Alpha/Beta	Gross Alpha	8.95E-16	3.24E-15	7.23E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250590	SLAPS LOADOUT	03/17/22	Gross Alpha/Beta	Gross Beta	5.67E-15	1.33E-14	2.29E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250591	SLAPS LOADOUT	03/17/22	Gross Alpha/Beta	Gross Beta	3.67E-14	1.66E-14	2.27E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250591	SLAPS LOADOUT	03/17/22	Gross Alpha/Beta	Gross Alpha	8.87E-16	3.21E-15	7.17E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250592	SLAPS LOADOUT	03/17/22	Gross Alpha/Beta	Gross Alpha	2.01E-15	3.92E-15	7.17E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250592	SLAPS LOADOUT	03/17/22	Gross Alpha/Beta	Gross Beta	2.08E-14	1.49E-14	2.27E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250593	SLAPS LOADOUT	03/21/22	Gross Alpha/Beta	Gross Alpha	5.37E-15	5.53E-15	7.17E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250593	SLAPS LOADOUT	03/21/22	Gross Alpha/Beta	Gross Beta	1.17E-14	1.39E-14	2.27E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250594	SLAPS LOADOUT	03/21/22	Gross Alpha/Beta	Gross Beta	3.36E-14	1.63E-14	2.27E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250594	SLAPS LOADOUT	03/21/22	Gross Alpha/Beta	Gross Alpha	3.13E-15	4.51E-15	7.17E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250595	SLAPS LOADOUT	03/21/22	Gross Alpha/Beta	Gross Alpha	-2.33E-16	2.30E-15	7.17E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250595	SLAPS LOADOUT	03/21/22	Gross Alpha/Beta	Gross Beta	-4.99E-15	1.19E-14	2.27E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250596	SLAPS LOADOUT	03/22/22	Gross Alpha/Beta	Gross Alpha	8.73E-15	6.77E-15	7.17E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250596	SLAPS LOADOUT	03/22/22	Gross Alpha/Beta	Gross Beta	1.32E-14	1.41E-14	2.27E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250597	SLAPS LOADOUT	03/22/22	Gross Alpha/Beta	Gross Alpha	3.60E-15	2.75E-15	3.30E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250597	SLAPS LOADOUT	03/22/22	Gross Alpha/Beta	Gross Beta	1.66E-14	7.27E-15	1.04E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250598	SLAPS LOADOUT	03/23/22	Gross Alpha/Beta	Gross Alpha	-2.33E-16	2.30E-15	7.17E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250598	SLAPS LOADOUT	03/23/22	Gross Alpha/Beta	Gross Beta	8.65E-15	1.35E-14	2.27E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250598	SLAPS LOADOUT	03/23/22	Gross Alpha/Beta	Gross Alpha	8.87E-16	3.21E-15	7.17E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250598	SLAPS LOADOUT	03/23/22	Gross Alpha/Beta	Gross Beta	1.83E-15	1.27E-14	2.27E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250619	SLAPS LOADOUT	04/04/22	Gross Alpha/Beta	Gross Beta	2.27E-14	1.51E-14	2.26E-14	µCi/mL	J	F01, T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250619	SLAPS LOADOUT	04/04/22	Gross Alpha/Beta	Gross Alpha	2.97E-15	5.70E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250620	SLAPS LOADOUT	04/04/22	Gross Alpha/Beta	Gross Alpha	-4.00E-15	9.33E-16	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250620	SLAPS LOADOUT	04/04/22	Gross Alpha/Beta	Gross Beta	8.06E-15	1.37E-14	2.31E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250621	SLAPS LOADOUT	04/04/22	Gross Alpha/Beta	Gross Alpha	4.19E-15	6.26E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250621	SLAPS LOADOUT	04/04/22	Gross Alpha/Beta	Gross Beta	7.31E-15	1.36E-14	2.31E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250622	SLAPS LOADOUT	04/05/22	Gross Alpha/Beta	Gross Beta	3.85E-14	1.74E-14	2.38E-14	µCi/mL	J	F01	SLAPS Loadout (General Area)-Perimeter Air
SLA250622	SLAPS LOADOUT	04/05/22	Gross Alpha/Beta	Gross Alpha	3.11E-15	5.97E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250623	SLAPS LOADOUT	04/05/22	Gross Alpha/Beta	Gross Alpha	1.44E-14	1.03E-14	1.22E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250623	SLAPS LOADOUT	04/05/22	Gross Alpha/Beta	Gross Beta	3.84E-14	1.91E-14	2.69E-14	µCi/mL	J	F01	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA250624	SLAPS LOADOUT	04/05/22	Gross Alpha/Beta	Gross Alpha	3.11E-15	5.97E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250624	SLAPS LOADOUT	04/05/22	Gross Alpha/Beta	Gross Beta	1.14E-14	1.45E-14	2.38E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250625	SLAPS LOADOUT	04/06/22	Gross Alpha/Beta	Gross Alpha	4.27E-15	6.38E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250625	SLAPS LOADOUT	04/06/22	Gross Alpha/Beta	Gross Beta	2.05E-14	1.53E-14	2.35E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250626	SLAPS LOADOUT	04/06/22	Gross Alpha/Beta	Gross Alpha	-2.91E-15	2.58E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250626	SLAPS LOADOUT	04/06/22	Gross Alpha/Beta	Gross Beta	-1.00E-15	1.30E-14	2.38E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250627	SLAPS LOADOUT	04/06/22	Gross Alpha/Beta	Gross Alpha	1.91E-15	5.46E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250627	SLAPS LOADOUT	04/06/22	Gross Alpha/Beta	Gross Beta	9.07E-15	1.42E-14	2.38E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250628	SLAPS LOADOUT	04/06/22	Gross Alpha/Beta	Gross Alpha	4.19E-15	6.26E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250628	SLAPS LOADOUT	04/06/22	Gross Alpha/Beta	Gross Beta	1.26E-14	1.42E-14	2.31E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250629	SLAPS LOADOUT	04/06/22	Gross Alpha/Beta	Gross Alpha	-4.87E-16	4.15E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250629	SLAPS LOADOUT	04/06/22	Gross Alpha/Beta	Gross Beta	5.05E-15	1.34E-14	2.31E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250630	SLAPS LOADOUT	04/06/22	Gross Alpha/Beta	Gross Alpha	7.63E-15	7.40E-15	1.03E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250630	SLAPS LOADOUT	04/06/22	Gross Alpha/Beta	Gross Beta	1.77E-14	1.47E-14	2.29E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250631	SLAPS LOADOUT	04/07/22	Gross Alpha/Beta	Gross Alpha	6.35E-15	6.90E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250631	SLAPS LOADOUT	04/07/22	Gross Alpha/Beta	Gross Beta	1.44E-14	1.41E-14	2.24E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250632	SLAPS LOADOUT	04/07/22	Gross Alpha/Beta	Gross Beta	2.27E-14	1.51E-14	2.26E-14	µCi/mL	J	F01, T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250632	SLAPS LOADOUT	04/07/22	Gross Alpha/Beta	Gross Alpha	6.41E-15	6.96E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250633	SLAPS LOADOUT	04/07/22	Gross Alpha/Beta	Gross Beta	3.78E-14	1.65E-14	2.24E-14	µCi/mL	J	F01	SLAPS Loadout (General Area)-Perimeter Air
SLA250633	SLAPS LOADOUT	04/07/22	Gross Alpha/Beta	Gross Alpha	2.94E-15	5.64E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250634	SLAPS LOADOUT	04/11/22	Gross Alpha/Beta	Gross Beta	3.77E-14	1.78E-14	2.47E-14	µCi/mL	J	F01	SLAPS Loadout (General Area)-Perimeter Air
SLA250634	SLAPS LOADOUT	04/11/22	Gross Alpha/Beta	Gross Alpha	3.24E-15	6.22E-15	1.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250635	SLAPS LOADOUT	04/11/22	Gross Alpha/Beta	Gross Alpha	-1.76E-15	3.64E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250635	SLAPS LOADOUT	04/11/22	Gross Alpha/Beta	Gross Beta	1.17E-14	1.49E-14	2.45E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250636	SLAPS LOADOUT	04/11/22	Gross Alpha/Beta	Gross Beta	2.56E-14	1.66E-14	2.47E-14	µCi/mL	J	F01, T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250636	SLAPS LOADOUT	04/11/22	Gross Alpha/Beta	Gross Alpha	5.75E-15	7.17E-15	1.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250637	SLAPS LOADOUT	04/11/22	Gross Alpha/Beta	Gross Alpha	1.33E-14	9.48E-15	1.12E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250637	SLAPS LOADOUT	04/11/22	Gross Alpha/Beta	Gross Beta	7.72E-14	2.17E-14	2.47E-14	µCi/mL	J	F01	SLAPS Loadout (General Area)-Perimeter Air
SLA250638	SLAPS LOADOUT	04/11/22	Gross Alpha/Beta	Gross Alpha	4.49E-15	6.71E-15	1.12E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250638	SLAPS LOADOUT	04/11/22	Gross Alpha/Beta	Gross Beta	2.18E-15	1.40E-14	2.47E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250638	SLAPS LOADOUT	04/11/22	Gross Alpha/Beta	Gross Alpha	1.45E-14	9.82E-15	1.12E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250638	SLAPS LOADOUT	04/11/22	Gross Alpha/Beta	Gross Beta	2.40E-14	1.64E-14	2.47E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250639	SLAPS LOADOUT	04/11/22	Gross Alpha/Beta	Gross Alpha	4.11E-15	5.57E-15	8.69E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250639	SLAPS LOADOUT	04/11/22	Gross Alpha/Beta	Gross Beta	2.68E-15	1.40E-14	2.48E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250640	SLAPS LOADOUT	04/12/22	Gross Alpha/Beta	Gross Alpha	3.70E-16	3.19E-15	7.81E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250640	SLAPS LOADOUT	04/12/22	Gross Alpha/Beta	Gross Beta	1.74E-14	1.44E-14	2.23E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250641	SLAPS LOADOUT	04/12/22	Gross Alpha/Beta	Gross Alpha	3.77E-16	3.25E-15	7.96E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250641	SLAPS LOADOUT	04/12/22	Gross Alpha/Beta	Gross Beta	9.24E-16	1.27E-14	2.27E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250642	SLAPS LOADOUT	04/12/22	Gross Alpha/Beta	Gross Alpha	1.49E-15	3.93E-15	7.89E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250642	SLAPS LOADOUT	04/12/22	Gross Alpha/Beta	Gross Beta	2.21E-14	1.50E-14	2.25E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250643	SLAPS LOADOUT	04/13/22	Gross Alpha/Beta	Gross Alpha	8.88E-15	1.01E-14	1.44E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA250643	SLAPS LOADOUT	04/13/22	Gross Alpha/Beta	Gross Beta	3.22E-14	2.65E-14	4.12E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250644	SLAPS LOADOUT	04/13/22	Gross Alpha/Beta	Gross Alpha	6.83E-16	5.90E-15	1.44E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250644	SLAPS LOADOUT	04/13/22	Gross Alpha/Beta	Gross Beta	1.14E-14	2.41E-14	4.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250645	SLAPS LOADOUT	04/13/22	Gross Alpha/Beta	Gross Alpha	-1.37E-15	4.24E-15	1.44E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250645	SLAPS LOADOUT	04/13/22	Gross Alpha/Beta	Gross Beta	-1.10E-15	2.27E-14	4.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250646	SLAPS LOADOUT	04/13/22	Gross Alpha/Beta	Gross Alpha	-3.42E-15	1.11E-15	1.44E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250646	SLAPS LOADOUT	04/13/22	Gross Alpha/Beta	Gross Beta	-1.10E-15	2.27E-14	4.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250647	SLAPS LOADOUT	04/13/22	Gross Alpha/Beta	Gross Alpha	6.83E-16	5.90E-15	1.44E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250647	SLAPS LOADOUT	04/13/22	Gross Alpha/Beta	Gross Beta	2.39E-14	2.56E-14	4.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250648	SLAPS LOADOUT	04/13/22	Gross Alpha/Beta	Gross Alpha	1.09E-14	1.09E-14	1.44E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250648	SLAPS LOADOUT	04/13/22	Gross Alpha/Beta	Gross Beta	4.05E-14	2.74E-14	4.12E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250649	SLAPS LOADOUT	04/14/22	Gross Alpha/Beta	Gross Alpha	-1.42E-15	4.39E-15	1.49E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250649	SLAPS LOADOUT	04/14/22	Gross Alpha/Beta	Gross Beta	7.48E-15	2.45E-14	4.27E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250650	SLAPS LOADOUT	04/14/22	Gross Alpha/Beta	Gross Alpha	-3.54E-15	1.15E-15	1.49E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250650	SLAPS LOADOUT	04/14/22	Gross Alpha/Beta	Gross Beta	1.04E-14	2.48E-14	4.27E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250651	SLAPS LOADOUT	04/14/22	Gross Alpha/Beta	Gross Alpha	7.07E-16	6.11E-15	1.49E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250651	SLAPS LOADOUT	04/14/22	Gross Alpha/Beta	Gross Beta	2.04E-14	2.60E-14	4.27E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250652	SLAPS LOADOUT	04/14/22	Gross Alpha/Beta	Gross Beta	3.20E-14	1.55E-14	2.15E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250652	SLAPS LOADOUT	04/14/22	Gross Alpha/Beta	Gross Alpha	1.43E-15	3.75E-15	7.54E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250653	SLAPS LOADOUT	04/14/22	Gross Alpha/Beta	Gross Alpha	6.72E-15	6.05E-15	7.47E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250653	SLAPS LOADOUT	04/14/22	Gross Alpha/Beta	Gross Beta	1.74E-14	1.38E-14	2.13E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250654	SLAPS LOADOUT	04/14/22	Gross Alpha/Beta	Gross Alpha	3.51E-16	3.03E-15	7.41E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250654	SLAPS LOADOUT	04/14/22	Gross Alpha/Beta	Gross Beta	7.97E-15	1.26E-14	2.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250655	SLAPS LOADOUT	04/18/22	Gross Alpha/Beta	Gross Alpha	-7.54E-16	2.34E-15	7.96E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250655	SLAPS LOADOUT	04/18/22	Gross Alpha/Beta	Gross Beta	1.85E-14	1.47E-14	2.27E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250656	SLAPS LOADOUT	04/18/22	Gross Alpha/Beta	Gross Alpha	3.77E-16	3.25E-15	7.96E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250656	SLAPS LOADOUT	04/18/22	Gross Alpha/Beta	Gross Beta	3.22E-15	1.30E-14	2.27E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250657	SLAPS LOADOUT	04/18/22	Gross Alpha/Beta	Gross Beta	2.79E-14	1.59E-14	2.30E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250657	SLAPS LOADOUT	04/18/22	Gross Alpha/Beta	Gross Alpha	2.66E-15	4.61E-15	8.03E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250658	SLAPS LOADOUT	04/19/22	Gross Alpha/Beta	Gross Alpha	3.84E-16	3.31E-15	8.11E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250658	SLAPS LOADOUT	04/19/22	Gross Alpha/Beta	Gross Beta	9.51E-15	1.39E-14	2.32E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250658	SLAPS LOADOUT	04/19/22	Gross Alpha/Beta	Gross Alpha	2.69E-15	4.65E-15	8.11E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250658	SLAPS LOADOUT	04/19/22	Gross Alpha/Beta	Gross Beta	1.11E-14	1.41E-14	2.32E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250659	SLAPS LOADOUT	04/19/22	Gross Alpha/Beta	Gross Alpha	6.66E-15	7.02E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250659	SLAPS LOADOUT	04/19/22	Gross Alpha/Beta	Gross Beta	7.61E-15	1.38E-14	2.32E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250660	SLAPS LOADOUT	04/19/22	Gross Alpha/Beta	Gross Alpha	-1.44E-15	3.36E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250660	SLAPS LOADOUT	04/19/22	Gross Alpha/Beta	Gross Beta	1.94E-14	1.49E-14	2.30E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250661	SLAPS LOADOUT	04/19/22	Gross Alpha/Beta	Gross Alpha	2.11E-15	5.46E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250661	SLAPS LOADOUT	04/19/22	Gross Alpha/Beta	Gross Beta	1.41E-14	1.50E-14	2.41E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250662	SLAPS LOADOUT	04/19/22	Gross Alpha/Beta	Gross Alpha	3.31E-15	5.97E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250662	SLAPS LOADOUT	04/19/22	Gross Alpha/Beta	Gross Beta	1.95E-14	1.56E-14	2.41E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA250663	SLAPS LOADOUT	04/19/22	Gross Alpha/Beta	Gross Alpha	2.13E-15	5.52E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250663	SLAPS LOADOUT	04/19/22	Gross Alpha/Beta	Gross Beta	1.42E-14	1.51E-14	2.44E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250664	SLAPS LOADOUT	04/20/22	Gross Alpha/Beta	Gross Alpha	4.70E-15	6.71E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250664	SLAPS LOADOUT	04/20/22	Gross Alpha/Beta	Gross Beta	4.20E-15	1.44E-14	2.51E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250665	SLAPS LOADOUT	04/20/22	Gross Alpha/Beta	Gross Beta	3.00E-14	1.72E-14	2.51E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250665	SLAPS LOADOUT	04/20/22	Gross Alpha/Beta	Gross Alpha	4.70E-15	6.71E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250666	SLAPS LOADOUT	04/20/22	Gross Alpha/Beta	Gross Beta	2.60E-14	1.68E-14	2.51E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250666	SLAPS LOADOUT	04/20/22	Gross Alpha/Beta	Gross Alpha	7.21E-15	7.60E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250667	SLAPS LOADOUT	04/21/22	Gross Alpha/Beta	Gross Alpha	8.69E-16	4.71E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250667	SLAPS LOADOUT	04/21/22	Gross Alpha/Beta	Gross Beta	4.63E-15	1.34E-14	2.32E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250668	SLAPS LOADOUT	04/21/22	Gross Alpha/Beta	Gross Alpha	8.94E-16	4.85E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250668	SLAPS LOADOUT	04/21/22	Gross Alpha/Beta	Gross Beta	-2.14E-15	1.30E-14	2.39E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250669	SLAPS LOADOUT	04/21/22	Gross Alpha/Beta	Gross Alpha	5.56E-15	6.69E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250669	SLAPS LOADOUT	04/21/22	Gross Alpha/Beta	Gross Beta	9.94E-15	1.41E-14	2.35E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250670	SLAPS LOADOUT	04/25/22	Gross Alpha/Beta	Gross Alpha	-2.87E-16	4.07E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250670	SLAPS LOADOUT	04/25/22	Gross Alpha/Beta	Gross Beta	1.71E-14	1.47E-14	2.30E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250671	SLAPS LOADOUT	04/25/22	Gross Alpha/Beta	Gross Alpha	2.05E-15	5.30E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250671	SLAPS LOADOUT	04/25/22	Gross Alpha/Beta	Gross Beta	1.52E-14	1.47E-14	2.35E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250672	SLAPS LOADOUT	04/25/22	Gross Alpha/Beta	Gross Alpha	8.82E-15	7.62E-15	9.96E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250672	SLAPS LOADOUT	04/25/22	Gross Alpha/Beta	Gross Beta	6.01E-15	1.33E-14	2.28E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250673	SLAPS LOADOUT	04/26/22	Gross Alpha/Beta	Gross Beta	2.41E-14	1.52E-14	2.26E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250673	SLAPS LOADOUT	04/26/22	Gross Alpha/Beta	Gross Alpha	8.45E-16	4.58E-15	9.87E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250674	SLAPS LOADOUT	04/26/22	Gross Alpha/Beta	Gross Alpha	2.03E-15	5.25E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250674	SLAPS LOADOUT	04/26/22	Gross Alpha/Beta	Gross Beta	1.55E-16	1.29E-14	2.32E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250675	SLAPS LOADOUT	04/26/22	Gross Alpha/Beta	Gross Alpha	-2.87E-16	4.07E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250675	SLAPS LOADOUT	04/26/22	Gross Alpha/Beta	Gross Beta	1.12E-14	1.40E-14	2.30E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250676	SLAPS LOADOUT	04/27/22	Gross Alpha/Beta	Gross Alpha	2.03E-15	5.25E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250676	SLAPS LOADOUT	04/27/22	Gross Alpha/Beta	Gross Beta	7.61E-15	1.38E-14	2.32E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250677	SLAPS LOADOUT	04/27/22	Gross Alpha/Beta	Gross Alpha	-3.77E-15	8.99E-16	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250677	SLAPS LOADOUT	04/27/22	Gross Alpha/Beta	Gross Beta	1.06E-14	1.41E-14	2.32E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250678	SLAPS LOADOUT	04/27/22	Gross Alpha/Beta	Gross Alpha	3.25E-15	5.86E-15	1.04E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250678	SLAPS LOADOUT	04/27/22	Gross Alpha/Beta	Gross Beta	1.69E-14	1.50E-14	2.37E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250678	SLAPS LOADOUT	04/27/22	Gross Alpha/Beta	Gross Alpha	2.33E-14	1.15E-14	1.04E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250678	SLAPS LOADOUT	04/27/22	Gross Alpha/Beta	Gross Beta	6.25E-14	1.96E-14	2.37E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250679	SLAPS LOADOUT	04/27/22	Gross Alpha/Beta	Gross Alpha	2.08E-15	4.60E-15	8.81E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250679	SLAPS LOADOUT	04/27/22	Gross Alpha/Beta	Gross Beta	9.68E-15	1.25E-14	2.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250680	SLAPS LOADOUT	04/27/22	Gross Alpha/Beta	Gross Alpha	8.65E-15	7.49E-15	8.81E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250680	SLAPS LOADOUT	04/27/22	Gross Alpha/Beta	Gross Beta	1.31E-14	1.30E-14	2.06E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250681	SLAPS LOADOUT	04/27/22	Gross Alpha/Beta	Gross Beta	2.98E-14	1.53E-14	2.08E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250681	SLAPS LOADOUT	04/27/22	Gross Alpha/Beta	Gross Alpha	2.10E-15	4.65E-15	8.90E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250682	SLAPS LOADOUT	04/28/22	Gross Alpha/Beta	Gross Alpha	1.14E-14	7.96E-15	7.97E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA250682	SLAPS LOADOUT	04/28/22	Gross Alpha/Beta	Gross Beta	2.98E-14	1.41E-14	1.86E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250683	SLAPS LOADOUT	04/28/22	Gross Alpha/Beta	Gross Beta	2.03E-14	1.28E-14	1.84E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250683	SLAPS LOADOUT	04/28/22	Gross Alpha/Beta	Gross Alpha	6.58E-15	6.28E-15	7.90E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250684	SLAPS LOADOUT	04/28/22	Gross Alpha/Beta	Gross Alpha	6.87E-16	3.38E-15	7.90E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250684	SLAPS LOADOUT	04/28/22	Gross Alpha/Beta	Gross Beta	4.82E-15	1.07E-14	1.84E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250685	SLAPS LOADOUT	05/02/22	Gross Alpha/Beta	Gross Alpha	-5.15E-16	2.55E-15	8.29E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250685	SLAPS LOADOUT	05/02/22	Gross Alpha/Beta	Gross Beta	7.49E-15	1.15E-14	1.93E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250686	SLAPS LOADOUT	05/02/22	Gross Alpha/Beta	Gross Alpha	4.39E-15	5.52E-15	8.20E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250686	SLAPS LOADOUT	05/02/22	Gross Alpha/Beta	Gross Beta	1.14E-14	1.20E-14	1.91E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250687	SLAPS LOADOUT	05/02/22	Gross Alpha/Beta	Gross Beta	1.96E-14	1.32E-14	1.93E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250687	SLAPS LOADOUT	05/02/22	Gross Alpha/Beta	Gross Alpha	6.90E-15	6.59E-15	8.29E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250688	SLAPS LOADOUT	05/03/22	Gross Alpha/Beta	Gross Alpha	1.83E-15	4.05E-15	7.75E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250688	SLAPS LOADOUT	05/03/22	Gross Alpha/Beta	Gross Beta	6.25E-15	1.07E-14	1.81E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250689	SLAPS LOADOUT	05/03/22	Gross Alpha/Beta	Gross Alpha	1.81E-15	4.01E-15	7.68E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250689	SLAPS LOADOUT	05/03/22	Gross Alpha/Beta	Gross Beta	1.52E-14	1.18E-14	1.79E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250690	SLAPS LOADOUT	05/03/22	Gross Alpha/Beta	Gross Alpha	1.85E-15	4.08E-15	7.82E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250690	SLAPS LOADOUT	05/03/22	Gross Alpha/Beta	Gross Beta	-2.10E-15	9.50E-15	1.83E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA250690	SLAPS LOADOUT	05/03/22	Gross Alpha/Beta	Gross Alpha	3.01E-15	4.71E-15	7.82E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250690	SLAPS LOADOUT	05/03/22	Gross Alpha/Beta	Gross Beta	1.55E-14	1.21E-14	1.83E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257188	SLAPS LOADOUT	05/04/22	Gross Alpha/Beta	Gross Alpha	1.47E-15	4.62E-15	9.36E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257188	SLAPS LOADOUT	05/04/22	Gross Alpha/Beta	Gross Beta	-4.33E-15	1.21E-14	2.27E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257189	SLAPS LOADOUT	05/04/22	Gross Alpha/Beta	Gross Alpha	-8.06E-16	3.31E-15	9.36E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257189	SLAPS LOADOUT	05/04/22	Gross Alpha/Beta	Gross Beta	7.93E-16	1.27E-14	2.27E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257190	SLAPS LOADOUT	05/04/22	Gross Alpha/Beta	Gross Alpha	3.74E-15	5.63E-15	9.36E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257190	SLAPS LOADOUT	05/04/22	Gross Alpha/Beta	Gross Beta	1.10E-14	1.38E-14	2.27E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257191	SLAPS LOADOUT	05/04/22	Gross Alpha/Beta	Gross Alpha	3.35E-16	4.05E-15	9.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257191	SLAPS LOADOUT	05/04/22	Gross Alpha/Beta	Gross Beta	5.23E-15	1.33E-14	2.29E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257192	SLAPS LOADOUT	05/04/22	Gross Alpha/Beta	Gross Alpha	2.66E-15	5.24E-15	9.54E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257192	SLAPS LOADOUT	05/04/22	Gross Alpha/Beta	Gross Beta	6.03E-15	1.35E-14	2.31E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257193	SLAPS LOADOUT	05/04/22	Gross Alpha/Beta	Gross Alpha	1.48E-15	4.66E-15	9.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257193	SLAPS LOADOUT	05/04/22	Gross Alpha/Beta	Gross Beta	8.18E-15	1.36E-14	2.29E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257194	SLAPS LOADOUT	05/09/22	Gross Alpha/Beta	Gross Alpha	3.74E-15	5.63E-15	9.36E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257194	SLAPS LOADOUT	05/09/22	Gross Alpha/Beta	Gross Beta	1.91E-14	1.47E-14	2.27E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257195	SLAPS LOADOUT	05/09/22	Gross Alpha/Beta	Gross Alpha	1.97E-14	1.03E-14	9.36E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257195	SLAPS LOADOUT	05/09/22	Gross Alpha/Beta	Gross Beta	3.15E-14	1.60E-14	2.27E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257196	SLAPS LOADOUT	05/09/22	Gross Alpha/Beta	Gross Alpha	3.85E-15	5.79E-15	9.63E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257196	SLAPS LOADOUT	05/09/22	Gross Alpha/Beta	Gross Beta	8.34E-15	1.39E-14	2.33E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257197	SLAPS LOADOUT	05/10/22	Gross Alpha/Beta	Gross Alpha	2.47E-14	1.15E-14	9.54E-15	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257197	SLAPS LOADOUT	05/10/22	Gross Alpha/Beta	Gross Beta	4.93E-14	1.80E-14	2.31E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257198	SLAPS LOADOUT	05/10/22	Gross Alpha/Beta	Gross Alpha	-1.96E-15	2.43E-15	9.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257198	SLAPS LOADOUT	05/10/22	Gross Alpha/Beta	Gross Beta	1.41E-14	1.43E-14	2.29E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA257199	SLAPS LOADOUT	05/10/22	Gross Alpha/Beta	Gross Alpha	1.51E-14	9.20E-15	9.36E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257199	SLAPS LOADOUT	05/10/22	Gross Alpha/Beta	Gross Beta	5.05E-14	1.79E-14	2.27E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257200	SLAPS LOADOUT	05/12/22	Gross Alpha/Beta	Gross Alpha	1.51E-14	9.20E-15	9.36E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257200	SLAPS LOADOUT	05/12/22	Gross Alpha/Beta	Gross Beta	5.35E-14	1.82E-14	2.27E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257201	SLAPS LOADOUT	05/12/22	Gross Alpha/Beta	Gross Alpha	8.29E-15	7.26E-15	9.36E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257201	SLAPS LOADOUT	05/12/22	Gross Alpha/Beta	Gross Beta	1.84E-14	1.46E-14	2.27E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257202	SLAPS LOADOUT	05/12/22	Gross Alpha/Beta	Gross Alpha	1.40E-14	8.91E-15	9.36E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257202	SLAPS LOADOUT	05/12/22	Gross Alpha/Beta	Gross Beta	4.84E-14	1.77E-14	2.27E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257203	SLAPS LOADOUT	05/11/22	Gross Alpha/Beta	Gross Beta	3.92E-14	1.80E-14	2.47E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257203	SLAPS LOADOUT	05/11/22	Gross Alpha/Beta	Gross Alpha	6.57E-15	7.09E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257204	SLAPS LOADOUT	05/11/22	Gross Alpha/Beta	Gross Alpha	1.37E-14	9.20E-15	1.00E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257204	SLAPS LOADOUT	05/11/22	Gross Alpha/Beta	Gross Beta	3.68E-14	1.74E-14	2.42E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257205	SLAPS LOADOUT	05/11/22	Gross Alpha/Beta	Gross Alpha	1.10E-14	8.26E-15	9.72E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257205	SLAPS LOADOUT	05/11/22	Gross Alpha/Beta	Gross Beta	6.62E-14	1.99E-14	2.35E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257206	SLAPS LOADOUT	05/11/22	Gross Alpha/Beta	Gross Alpha	3.85E-15	5.79E-15	9.63E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257206	SLAPS LOADOUT	05/11/22	Gross Alpha/Beta	Gross Beta	8.15E-16	1.30E-14	2.33E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257207	SLAPS LOADOUT	05/11/22	Gross Alpha/Beta	Gross Alpha	2.68E-15	5.29E-15	9.63E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257207	SLAPS LOADOUT	05/11/22	Gross Alpha/Beta	Gross Beta	1.44E-14	1.46E-14	2.33E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257207	SLAPS LOADOUT	05/11/22	Gross Alpha/Beta	Gross Alpha	9.70E-15	7.83E-15	9.63E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257207	SLAPS LOADOUT	05/11/22	Gross Alpha/Beta	Gross Beta	1.66E-14	1.48E-14	2.33E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257208	SLAPS LOADOUT	05/11/22	Gross Alpha/Beta	Gross Beta	2.15E-14	1.36E-14	1.95E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257208	SLAPS LOADOUT	05/11/22	Gross Alpha/Beta	Gross Alpha	8.22E-15	7.12E-15	8.37E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257209	SLAPS LOADOUT	05/16/22	Gross Alpha/Beta	Gross Alpha	-5.42E-16	2.68E-15	8.72E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257209	SLAPS LOADOUT	05/16/22	Gross Alpha/Beta	Gross Beta	1.13E-14	1.26E-14	2.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257210	SLAPS LOADOUT	05/16/22	Gross Alpha/Beta	Gross Alpha	7.51E-16	3.69E-15	8.63E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257210	SLAPS LOADOUT	05/16/22	Gross Alpha/Beta	Gross Beta	-3.16E-15	1.04E-14	2.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257211	SLAPS LOADOUT	05/16/22	Gross Alpha/Beta	Gross Alpha	1.85E-15	4.08E-15	7.82E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257211	SLAPS LOADOUT	05/16/22	Gross Alpha/Beta	Gross Beta	-2.10E-15	9.50E-15	1.83E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257212	SLAPS LOADOUT	05/16/22	Gross Alpha/Beta	Gross Alpha	2.88E-15	4.50E-15	7.47E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257212	SLAPS LOADOUT	05/16/22	Gross Alpha/Beta	Gross Beta	1.62E-14	1.17E-14	1.74E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257213	SLAPS LOADOUT	05/16/22	Gross Alpha/Beta	Gross Beta	2.87E-14	1.33E-14	1.74E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257213	SLAPS LOADOUT	05/16/22	Gross Alpha/Beta	Gross Alpha	7.34E-15	6.35E-15	7.47E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257214	SLAPS LOADOUT	05/16/22	Gross Alpha/Beta	Gross Alpha	2.06E-15	4.55E-15	8.72E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257214	SLAPS LOADOUT	05/16/22	Gross Alpha/Beta	Gross Beta	1.55E-14	1.32E-14	2.03E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257215	SLAPS LOADOUT	05/17/22	Gross Alpha/Beta	Gross Alpha	1.83E-15	4.05E-15	7.75E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257215	SLAPS LOADOUT	05/17/22	Gross Alpha/Beta	Gross Beta	1.46E-14	1.18E-14	1.81E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257216	SLAPS LOADOUT	05/17/22	Gross Alpha/Beta	Gross Beta	2.67E-14	1.34E-14	1.81E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257216	SLAPS LOADOUT	05/17/22	Gross Alpha/Beta	Gross Alpha	6.45E-15	6.16E-15	7.75E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257217	SLAPS LOADOUT	05/17/22	Gross Alpha/Beta	Gross Beta	2.67E-14	1.34E-14	1.81E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257217	SLAPS LOADOUT	05/17/22	Gross Alpha/Beta	Gross Alpha	7.61E-15	6.59E-15	7.75E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257218	SLAPS LOADOUT	05/18/22	Gross Alpha/Beta	Gross Alpha	5.35E-15	5.76E-15	7.82E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA257218	SLAPS LOADOUT	05/18/22	Gross Alpha/Beta	Gross Beta	1.72E-15	1.01E-14	1.83E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257219	SLAPS LOADOUT	05/18/22	Gross Alpha/Beta	Gross Alpha	1.85E-15	4.08E-15	7.82E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257219	SLAPS LOADOUT	05/18/22	Gross Alpha/Beta	Gross Beta	1.40E-14	1.19E-14	1.83E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257220	SLAPS LOADOUT	05/18/22	Gross Alpha/Beta	Gross Beta	2.79E-14	1.35E-14	1.79E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257220	SLAPS LOADOUT	05/18/22	Gross Alpha/Beta	Gross Alpha	6.40E-15	6.11E-15	7.68E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257221	SLAPS LOADOUT	05/19/22	Gross Alpha/Beta	Gross Beta	3.15E-14	1.62E-14	2.19E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257221	SLAPS LOADOUT	05/19/22	Gross Alpha/Beta	Gross Alpha	7.83E-15	7.48E-15	9.40E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257222	SLAPS LOADOUT	05/19/22	Gross Alpha/Beta	Gross Alpha	8.09E-16	3.98E-15	9.30E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257222	SLAPS LOADOUT	05/19/22	Gross Alpha/Beta	Gross Beta	4.77E-15	1.24E-14	2.17E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257223	SLAPS LOADOUT	05/19/22	Gross Alpha/Beta	Gross Alpha	3.58E-15	5.60E-15	9.30E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257223	SLAPS LOADOUT	05/19/22	Gross Alpha/Beta	Gross Beta	9.31E-15	1.31E-14	2.17E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257224	SLAPS LOADOUT	05/23/22	Gross Alpha/Beta	Gross Alpha	-4.86E-16	2.40E-15	7.82E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257224	SLAPS LOADOUT	05/23/22	Gross Alpha/Beta	Gross Beta	2.48E-15	1.02E-14	1.83E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257225	SLAPS LOADOUT	05/23/22	Gross Alpha/Beta	Gross Alpha	6.74E-16	3.32E-15	7.75E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257225	SLAPS LOADOUT	05/23/22	Gross Alpha/Beta	Gross Beta	2.46E-15	1.01E-14	1.81E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257226	SLAPS LOADOUT	05/23/22	Gross Alpha/Beta	Gross Alpha	4.14E-15	5.21E-15	7.75E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257226	SLAPS LOADOUT	05/23/22	Gross Alpha/Beta	Gross Beta	1.23E-14	1.15E-14	1.81E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257227	SLAPS LOADOUT	05/24/22	Gross Alpha/Beta	Gross Alpha	6.81E-16	3.35E-15	7.82E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257227	SLAPS LOADOUT	05/24/22	Gross Alpha/Beta	Gross Beta	1.72E-15	1.01E-14	1.83E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257227	SLAPS LOADOUT	05/24/22	Gross Alpha/Beta	Gross Alpha	3.01E-15	4.71E-15	7.82E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257227	SLAPS LOADOUT	05/24/22	Gross Alpha/Beta	Gross Beta	-5.92E-15	8.88E-15	1.83E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257228	SLAPS LOADOUT	05/24/22	Gross Alpha/Beta	Gross Alpha	5.73E-15	7.02E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257228	SLAPS LOADOUT	05/24/22	Gross Alpha/Beta	Gross Beta	7.87E-15	1.53E-14	2.59E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257229	SLAPS LOADOUT	05/24/22	Gross Alpha/Beta	Gross Alpha	5.97E-15	7.32E-15	1.13E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257229	SLAPS LOADOUT	05/24/22	Gross Alpha/Beta	Gross Beta	6.55E-15	1.57E-14	2.70E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257230	SLAPS LOADOUT	05/24/22	Gross Alpha/Beta	Gross Alpha	8.53E-16	5.21E-15	1.13E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257230	SLAPS LOADOUT	05/24/22	Gross Alpha/Beta	Gross Beta	9.84E-15	1.61E-14	2.70E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257231	SLAPS LOADOUT	05/24/22	Gross Alpha/Beta	Gross Alpha	7.58E-16	4.63E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257231	SLAPS LOADOUT	05/24/22	Gross Alpha/Beta	Gross Beta	-1.03E-14	1.22E-14	2.40E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257232	SLAPS LOADOUT	05/24/22	Gross Alpha/Beta	Gross Alpha	1.88E-15	5.11E-15	9.96E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257232	SLAPS LOADOUT	05/24/22	Gross Alpha/Beta	Gross Beta	2.03E-14	1.54E-14	2.37E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257233	SLAPS LOADOUT	05/25/22	Gross Alpha/Beta	Gross Alpha	7.51E-16	4.59E-15	9.96E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257233	SLAPS LOADOUT	05/25/22	Gross Alpha/Beta	Gross Beta	1.42E-15	1.34E-14	2.37E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257234	SLAPS LOADOUT	05/25/22	Gross Alpha/Beta	Gross Alpha	7.58E-16	4.63E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257234	SLAPS LOADOUT	05/25/22	Gross Alpha/Beta	Gross Beta	7.01E-16	1.34E-14	2.40E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257235	SLAPS LOADOUT	05/25/22	Gross Alpha/Beta	Gross Alpha	5.31E-15	6.50E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257235	SLAPS LOADOUT	05/25/22	Gross Alpha/Beta	Gross Beta	1.61E-14	1.51E-14	2.40E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257236	SLAPS LOADOUT	05/26/22	Gross Alpha/Beta	Gross Alpha	1.54E-14	9.40E-15	9.96E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257236	SLAPS LOADOUT	05/26/22	Gross Alpha/Beta	Gross Beta	7.22E-15	1.40E-14	2.37E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257237	SLAPS LOADOUT	05/26/22	Gross Alpha/Beta	Gross Alpha	5.31E-15	6.50E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257237	SLAPS LOADOUT	05/26/22	Gross Alpha/Beta	Gross Beta	2.90E-15	1.37E-14	2.40E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA257238	SLAPS LOADOUT	05/26/22	Gross Alpha/Beta	Gross Alpha	1.33E-14	8.91E-15	1.01E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257238	SLAPS LOADOUT	05/26/22	Gross Alpha/Beta	Gross Beta	1.90E-14	1.54E-14	2.40E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257239	SLAPS LOADOUT	05/31/22	Gross Alpha/Beta	Gross Alpha	1.90E-14	1.03E-14	1.01E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257239	SLAPS LOADOUT	05/31/22	Gross Alpha/Beta	Gross Beta	3.66E-14	1.71E-14	2.40E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257240	SLAPS LOADOUT	05/31/22	Gross Alpha/Beta	Gross Beta	3.25E-14	1.69E-14	2.42E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257240	SLAPS LOADOUT	05/31/22	Gross Alpha/Beta	Gross Alpha	7.65E-15	7.33E-15	1.01E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257241	SLAPS LOADOUT	05/31/22	Gross Alpha/Beta	Gross Alpha	1.21E-14	8.60E-15	1.01E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257241	SLAPS LOADOUT	05/31/22	Gross Alpha/Beta	Gross Beta	1.68E-14	1.51E-14	2.40E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257242	SLAPS LOADOUT	05/31/22	Gross Alpha/Beta	Gross Alpha	1.62E-14	1.04E-14	1.13E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257242	SLAPS LOADOUT	05/31/22	Gross Alpha/Beta	Gross Beta	1.56E-14	1.67E-14	2.70E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257243	SLAPS LOADOUT	05/31/22	Gross Alpha/Beta	Gross Alpha	8.53E-16	5.21E-15	1.13E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257243	SLAPS LOADOUT	05/31/22	Gross Alpha/Beta	Gross Beta	-1.16E-14	1.37E-14	2.70E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257244	SLAPS LOADOUT	05/31/22	Gross Alpha/Beta	Gross Alpha	1.24E-14	9.32E-15	1.13E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257244	SLAPS LOADOUT	05/31/22	Gross Alpha/Beta	Gross Beta	2.63E-14	1.78E-14	2.70E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257245	SLAPS LOADOUT	06/01/22	Gross Alpha/Beta	Gross Alpha	3.49E-15	6.48E-15	1.16E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257245	SLAPS LOADOUT	06/01/22	Gross Alpha/Beta	Gross Beta	-2.56E-15	1.51E-14	2.75E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257246	SLAPS LOADOUT	06/01/22	Gross Alpha/Beta	Gross Alpha	7.33E-15	7.84E-15	1.14E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257246	SLAPS LOADOUT	06/01/22	Gross Alpha/Beta	Gross Beta	1.24E-14	1.65E-14	2.72E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257247	SLAPS LOADOUT	06/01/22	Gross Alpha/Beta	Gross Alpha	-3.83E-16	4.07E-15	1.01E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257247	SLAPS LOADOUT	06/01/22	Gross Alpha/Beta	Gross Beta	-6.68E-15	1.27E-14	2.42E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257247	SLAPS LOADOUT	06/01/22	Gross Alpha/Beta	Gross Alpha	1.10E-14	4.51E-15	3.92E-15	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257247	SLAPS LOADOUT	06/01/22	Gross Alpha/Beta	Gross Beta	3.41E-14	9.94E-15	1.32E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257248	SLAPS LOADOUT	06/02/22	Gross Alpha/Beta	Gross Beta	2.31E-14	1.52E-14	2.28E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257248	SLAPS LOADOUT	06/02/22	Gross Alpha/Beta	Gross Alpha	8.14E-15	7.13E-15	9.19E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257249	SLAPS LOADOUT	06/02/22	Gross Alpha/Beta	Gross Alpha	-3.08E-15	7.99E-16	9.36E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257249	SLAPS LOADOUT	06/02/22	Gross Alpha/Beta	Gross Beta	1.62E-15	1.31E-14	2.32E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257250	SLAPS LOADOUT	06/06/22	Gross Alpha/Beta	Gross Beta	4.62E-14	1.77E-14	2.32E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257250	SLAPS LOADOUT	06/06/22	Gross Alpha/Beta	Gross Alpha	8.29E-15	7.26E-15	9.36E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257251	SLAPS LOADOUT	06/06/22	Gross Alpha/Beta	Gross Beta	4.70E-14	1.78E-14	2.32E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257251	SLAPS LOADOUT	06/06/22	Gross Alpha/Beta	Gross Alpha	6.02E-15	6.50E-15	9.36E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257252	SLAPS LOADOUT	06/06/22	Gross Alpha/Beta	Gross Beta	4.51E-14	1.84E-14	2.46E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257252	SLAPS LOADOUT	06/06/22	Gross Alpha/Beta	Gross Alpha	-8.53E-16	3.50E-15	9.91E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257253	SLAPS LOADOUT	06/06/22	Gross Alpha/Beta	Gross Alpha	3.96E-15	5.96E-15	9.91E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257253	SLAPS LOADOUT	06/06/22	Gross Alpha/Beta	Gross Beta	5.58E-15	1.43E-14	2.46E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257254	SLAPS LOADOUT	06/06/22	Gross Alpha/Beta	Gross Alpha	5.17E-15	6.44E-15	9.91E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257254	SLAPS LOADOUT	06/06/22	Gross Alpha/Beta	Gross Beta	-6.13E-16	1.36E-14	2.46E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257255	SLAPS LOADOUT	06/06/22	Gross Alpha/Beta	Gross Alpha	8.78E-15	7.69E-15	9.91E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257255	SLAPS LOADOUT	06/06/22	Gross Alpha/Beta	Gross Beta	1.41E-14	1.52E-14	2.46E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257256	SLAPS LOADOUT	06/07/22	Gross Alpha/Beta	Gross Alpha	1.19E-14	8.44E-15	9.54E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257256	SLAPS LOADOUT	06/07/22	Gross Alpha/Beta	Gross Beta	1.13E-14	1.44E-14	2.37E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257257	SLAPS LOADOUT	06/07/22	Gross Alpha/Beta	Gross Alpha	2.66E-15	5.24E-15	9.54E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA257257	SLAPS LOADOUT	06/07/22	Gross Alpha/Beta	Gross Beta	3.88E-15	1.36E-14	2.37E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257258	SLAPS LOADOUT	06/07/22	Gross Alpha/Beta	Gross Beta	3.02E-14	1.61E-14	2.32E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257258	SLAPS LOADOUT	06/07/22	Gross Alpha/Beta	Gross Alpha	3.74E-15	5.63E-15	9.36E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257259	SLAPS LOADOUT	06/08/22	Gross Alpha/Beta	Gross Alpha	6.76E-15	8.42E-15	1.30E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257259	SLAPS LOADOUT	06/08/22	Gross Alpha/Beta	Gross Beta	2.76E-14	2.09E-14	3.22E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257260	SLAPS LOADOUT	06/08/22	Gross Alpha/Beta	Gross Alpha	1.12E-14	9.04E-15	1.11E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257260	SLAPS LOADOUT	06/08/22	Gross Alpha/Beta	Gross Beta	8.00E-15	1.62E-14	2.76E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257261	SLAPS LOADOUT	06/08/22	Gross Alpha/Beta	Gross Alpha	4.14E-15	8.18E-15	1.49E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257261	SLAPS LOADOUT	06/08/22	Gross Alpha/Beta	Gross Beta	2.81E-14	2.36E-14	3.69E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257262	SLAPS LOADOUT	06/08/22	Gross Alpha/Beta	Gross Alpha	3.03E-15	5.98E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257262	SLAPS LOADOUT	06/08/22	Gross Alpha/Beta	Gross Beta	4.43E-15	1.55E-14	2.70E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257263	SLAPS LOADOUT	06/08/22	Gross Alpha/Beta	Gross Alpha	5.95E-15	8.94E-15	1.49E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257263	SLAPS LOADOUT	06/08/22	Gross Alpha/Beta	Gross Beta	1.77E-14	2.25E-14	3.69E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257264	SLAPS LOADOUT	06/08/22	Gross Alpha/Beta	Gross Alpha	4.08E-15	8.06E-15	1.47E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257264	SLAPS LOADOUT	06/08/22	Gross Alpha/Beta	Gross Beta	2.54E-14	2.30E-14	3.64E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257265	SLAPS LOADOUT	06/09/22	Gross Alpha/Beta	Gross Beta	3.30E-14	1.67E-14	2.37E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257265	SLAPS LOADOUT	06/09/22	Gross Alpha/Beta	Gross Alpha	3.81E-15	5.74E-15	9.54E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257266	SLAPS LOADOUT	06/09/22	Gross Alpha/Beta	Gross Alpha	2.63E-15	5.20E-15	9.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257266	SLAPS LOADOUT	06/09/22	Gross Alpha/Beta	Gross Beta	8.28E-15	1.40E-14	2.34E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257267	SLAPS LOADOUT	06/09/22	Gross Alpha/Beta	Gross Alpha	3.38E-16	4.09E-15	9.54E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257267	SLAPS LOADOUT	06/09/22	Gross Alpha/Beta	Gross Beta	3.14E-15	1.35E-14	2.37E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257267	SLAPS LOADOUT	06/09/22	Gross Alpha/Beta	Gross Beta	3.30E-14	1.67E-14	2.37E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257267	SLAPS LOADOUT	06/09/22	Gross Alpha/Beta	Gross Alpha	4.97E-15	6.19E-15	9.54E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257268	SLAPS LOADOUT	06/13/22	Gross Alpha/Beta	Gross Alpha	9.10E-15	6.77E-15	6.55E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257268	SLAPS LOADOUT	06/13/22	Gross Alpha/Beta	Gross Beta	1.61E-14	1.47E-14	2.31E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257269	SLAPS LOADOUT	06/13/22	Gross Alpha/Beta	Gross Alpha	5.74E-15	5.52E-15	6.55E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257269	SLAPS LOADOUT	06/13/22	Gross Alpha/Beta	Gross Beta	1.31E-14	1.43E-14	2.31E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257270	SLAPS LOADOUT	06/13/22	Gross Alpha/Beta	Gross Alpha	1.04E-14	7.27E-15	6.67E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257270	SLAPS LOADOUT	06/13/22	Gross Alpha/Beta	Gross Beta	2.34E-14	1.57E-14	2.36E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257271	SLAPS LOADOUT	06/14/22	Gross Alpha/Beta	Gross Alpha	8.13E-15	6.50E-15	6.67E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257271	SLAPS LOADOUT	06/14/22	Gross Alpha/Beta	Gross Beta	3.88E-14	1.73E-14	2.36E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257272	SLAPS LOADOUT	06/14/22	Gross Alpha/Beta	Gross Alpha	1.61E-14	8.93E-15	6.67E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257272	SLAPS LOADOUT	06/14/22	Gross Alpha/Beta	Gross Beta	4.34E-14	1.78E-14	2.36E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257273	SLAPS LOADOUT	06/14/22	Gross Alpha/Beta	Gross Alpha	1.20E-14	7.93E-15	6.93E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257273	SLAPS LOADOUT	06/14/22	Gross Alpha/Beta	Gross Beta	4.35E-14	1.83E-14	2.45E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257274	SLAPS LOADOUT	06/15/22	Gross Alpha/Beta	Gross Alpha	9.20E-17	7.30E-17	7.50E-17	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257274	SLAPS LOADOUT	06/15/22	Gross Alpha/Beta	Gross Beta	8.90E-17	1.58E-16	2.66E-16	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257275	SLAPS LOADOUT	06/15/22	Gross Alpha/Beta	Gross Alpha	1.15E-14	7.56E-15	6.61E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257275	SLAPS LOADOUT	06/15/22	Gross Alpha/Beta	Gross Beta	4.07E-14	1.74E-14	2.34E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257276	SLAPS LOADOUT	06/15/22	Gross Alpha/Beta	Gross Alpha	1.47E-14	8.81E-15	7.07E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257276	SLAPS LOADOUT	06/15/22	Gross Alpha/Beta	Gross Beta	3.62E-14	1.78E-14	2.50E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA257277	SLAPS LOADOUT	06/15/22	Gross Alpha/Beta	Gross Alpha	1.58E-14	8.77E-15	6.55E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257277	SLAPS LOADOUT	06/15/22	Gross Alpha/Beta	Gross Beta	5.40E-14	1.86E-14	2.31E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257278	SLAPS LOADOUT	06/15/22	Gross Alpha/Beta	Gross Alpha	1.45E-14	8.72E-15	7.00E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257278	SLAPS LOADOUT	06/15/22	Gross Alpha/Beta	Gross Beta	2.29E-14	1.63E-14	2.47E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257279	SLAPS LOADOUT	06/15/22	Gross Alpha/Beta	Gross Alpha	1.26E-14	7.90E-15	6.61E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257279	SLAPS LOADOUT	06/15/22	Gross Alpha/Beta	Gross Beta	4.53E-14	1.78E-14	2.34E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257280	SLAPS LOADOUT	06/16/22	Gross Alpha/Beta	Gross Alpha	1.05E-14	7.78E-15	7.52E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257280	SLAPS LOADOUT	06/16/22	Gross Alpha/Beta	Gross Beta	2.98E-14	1.81E-14	2.66E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257281	SLAPS LOADOUT	06/16/22	Gross Alpha/Beta	Gross Alpha	5.20E-15	5.67E-15	7.37E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257281	SLAPS LOADOUT	06/16/22	Gross Alpha/Beta	Gross Beta	1.73E-14	1.64E-14	2.60E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257282	SLAPS LOADOUT	06/16/22	Gross Alpha/Beta	Gross Alpha	7.26E-15	6.32E-15	6.93E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257282	SLAPS LOADOUT	06/16/22	Gross Alpha/Beta	Gross Beta	3.15E-14	1.71E-14	2.45E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257283	SLAPS LOADOUT	06/20/22	Gross Alpha/Beta	Gross Alpha	7.98E-15	6.38E-15	6.55E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257283	SLAPS LOADOUT	06/20/22	Gross Alpha/Beta	Gross Beta	3.96E-14	1.71E-14	2.31E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257284	SLAPS LOADOUT	06/20/22	Gross Alpha/Beta	Gross Beta	3.48E-14	1.71E-14	2.40E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257284	SLAPS LOADOUT	06/20/22	Gross Alpha/Beta	Gross Alpha	3.64E-15	4.68E-15	6.80E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257285	SLAPS LOADOUT	06/20/22	Gross Alpha/Beta	Gross Alpha	1.31E-15	3.32E-15	6.80E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257285	SLAPS LOADOUT	06/20/22	Gross Alpha/Beta	Gross Beta	1.36E-14	1.49E-14	2.40E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257286	SLAPS LOADOUT	06/20/22	Gross Alpha/Beta	Gross Alpha	9.45E-15	4.12E-15	3.24E-15	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257286	SLAPS LOADOUT	06/20/22	Gross Alpha/Beta	Gross Beta	3.14E-14	1.01E-14	1.39E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257287	SLAPS LOADOUT	06/21/22	Gross Alpha/Beta	Gross Beta	3.04E-14	1.68E-14	2.43E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257287	SLAPS LOADOUT	06/21/22	Gross Alpha/Beta	Gross Alpha	-1.03E-15	4.55E-16	6.87E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257287	SLAPS LOADOUT	06/21/22	Gross Alpha/Beta	Gross Alpha	1.42E-14	8.55E-15	6.87E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257287	SLAPS LOADOUT	06/21/22	Gross Alpha/Beta	Gross Beta	3.04E-14	1.68E-14	2.43E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257288	SLAPS LOADOUT	06/21/22	Gross Alpha/Beta	Gross Beta	2.51E-14	1.54E-14	2.27E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257288	SLAPS LOADOUT	06/21/22	Gross Alpha/Beta	Gross Alpha	6.57E-15	7.02E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257289	SLAPS LOADOUT	06/21/22	Gross Alpha/Beta	Gross Beta	4.40E-14	1.70E-14	2.21E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257289	SLAPS LOADOUT	06/21/22	Gross Alpha/Beta	Gross Alpha	7.51E-15	7.20E-15	9.96E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257290	SLAPS LOADOUT	06/22/22	Gross Alpha/Beta	Gross Beta	2.53E-14	1.59E-14	2.36E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257290	SLAPS LOADOUT	06/22/22	Gross Alpha/Beta	Gross Alpha	3.21E-15	5.97E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257291	SLAPS LOADOUT	06/22/22	Gross Alpha/Beta	Gross Beta	3.50E-14	1.68E-14	2.34E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257291	SLAPS LOADOUT	06/22/22	Gross Alpha/Beta	Gross Alpha	1.99E-15	5.41E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257292	SLAPS LOADOUT	06/22/22	Gross Alpha/Beta	Gross Alpha	1.25E-14	8.85E-15	1.03E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257292	SLAPS LOADOUT	06/22/22	Gross Alpha/Beta	Gross Beta	2.83E-14	1.59E-14	2.29E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257293	SLAPS LOADOUT	06/22/22	Gross Alpha/Beta	Gross Alpha	1.13E-14	8.52E-15	1.03E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257293	SLAPS LOADOUT	06/22/22	Gross Alpha/Beta	Gross Beta	3.29E-14	1.63E-14	2.29E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257294	SLAPS LOADOUT	06/22/22	Gross Alpha/Beta	Gross Alpha	1.18E-14	8.86E-15	1.08E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257294	SLAPS LOADOUT	06/22/22	Gross Alpha/Beta	Gross Beta	3.49E-14	1.71E-14	2.38E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257295	SLAPS LOADOUT	06/22/22	Gross Alpha/Beta	Gross Alpha	1.42E-14	9.53E-15	1.08E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257295	SLAPS LOADOUT	06/22/22	Gross Alpha/Beta	Gross Beta	4.12E-14	1.77E-14	2.38E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257296	SLAPS LOADOUT	06/23/22	Gross Alpha/Beta	Gross Beta	4.04E-14	1.69E-14	2.25E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA257296	SLAPS LOADOUT	06/23/22	Gross Alpha/Beta	Gross Alpha	6.51E-15	6.96E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257297	SLAPS LOADOUT	06/23/22	Gross Alpha/Beta	Gross Beta	4.95E-14	1.77E-14	2.23E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257297	SLAPS LOADOUT	06/23/22	Gross Alpha/Beta	Gross Alpha	7.58E-15	7.27E-15	1.01E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257298	SLAPS LOADOUT	06/23/22	Gross Alpha/Beta	Gross Alpha	1.86E-14	1.01E-14	9.87E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257298	SLAPS LOADOUT	06/23/22	Gross Alpha/Beta	Gross Beta	3.35E-14	1.58E-14	2.19E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257299	SLAPS LOADOUT	06/27/22	Gross Alpha/Beta	Gross Beta	2.51E-14	1.58E-14	2.34E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257299	SLAPS LOADOUT	06/27/22	Gross Alpha/Beta	Gross Alpha	5.57E-15	6.82E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257300	SLAPS LOADOUT	06/27/22	Gross Alpha/Beta	Gross Beta	3.00E-14	1.64E-14	2.36E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257300	SLAPS LOADOUT	06/27/22	Gross Alpha/Beta	Gross Alpha	9.23E-15	8.07E-15	1.06E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257301	SLAPS LOADOUT	06/27/22	Gross Alpha/Beta	Gross Alpha	4.29E-15	6.26E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257301	SLAPS LOADOUT	06/27/22	Gross Alpha/Beta	Gross Beta	1.93E-14	1.49E-14	2.29E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257302	SLAPS LOADOUT	06/28/22	Gross Alpha/Beta	Gross Beta	3.82E-14	1.66E-14	2.25E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257302	SLAPS LOADOUT	06/28/22	Gross Alpha/Beta	Gross Alpha	4.21E-15	6.14E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257303	SLAPS LOADOUT	06/28/22	Gross Alpha/Beta	Gross Beta	3.67E-14	1.65E-14	2.25E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257303	SLAPS LOADOUT	06/28/22	Gross Alpha/Beta	Gross Alpha	6.51E-15	6.96E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257304	SLAPS LOADOUT	06/28/22	Gross Alpha/Beta	Gross Beta	2.88E-14	1.58E-14	2.27E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257304	SLAPS LOADOUT	06/28/22	Gross Alpha/Beta	Gross Alpha	3.09E-15	5.75E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257305	SLAPS LOADOUT	06/29/22	Gross Alpha/Beta	Gross Beta	3.31E-14	1.67E-14	2.36E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257305	SLAPS LOADOUT	06/29/22	Gross Alpha/Beta	Gross Alpha	8.03E-16	4.90E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257306	SLAPS LOADOUT	06/29/22	Gross Alpha/Beta	Gross Alpha	1.33E-14	8.91E-15	1.01E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257306	SLAPS LOADOUT	06/29/22	Gross Alpha/Beta	Gross Beta	3.56E-14	1.62E-14	2.23E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257307	SLAPS LOADOUT	06/29/22	Gross Alpha/Beta	Gross Beta	2.48E-14	1.60E-14	2.38E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257307	SLAPS LOADOUT	06/29/22	Gross Alpha/Beta	Gross Alpha	5.68E-15	6.95E-15	1.08E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257307	SLAPS LOADOUT	06/29/22	Gross Alpha/Beta	Gross Alpha	3.24E-15	6.03E-15	1.08E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257307	SLAPS LOADOUT	06/29/22	Gross Alpha/Beta	Gross Beta	2.32E-14	1.58E-14	2.38E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257308	SLAPS LOADOUT	06/29/22	Gross Alpha/Beta	Gross Beta	3.07E-14	1.67E-14	2.41E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257308	SLAPS LOADOUT	06/29/22	Gross Alpha/Beta	Gross Alpha	7.85E-15	7.36E-15	9.80E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257309	SLAPS LOADOUT	06/29/22	Gross Alpha/Beta	Gross Alpha	-1.89E-15	2.59E-15	9.90E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257309	SLAPS LOADOUT	06/29/22	Gross Alpha/Beta	Gross Beta	1.04E-14	1.47E-14	2.43E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257310	SLAPS LOADOUT	06/29/22	Gross Alpha/Beta	Gross Beta	4.04E-14	1.71E-14	2.29E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257310	SLAPS LOADOUT	06/29/22	Gross Alpha/Beta	Gross Alpha	5.17E-15	6.19E-15	9.34E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257311	SLAPS LOADOUT	06/30/22	Gross Alpha/Beta	Gross Beta	2.65E-14	1.61E-14	2.38E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257311	SLAPS LOADOUT	06/30/22	Gross Alpha/Beta	Gross Alpha	1.76E-15	4.88E-15	9.71E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257312	SLAPS LOADOUT	06/30/22	Gross Alpha/Beta	Gross Beta	3.86E-14	1.68E-14	2.27E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257312	SLAPS LOADOUT	06/30/22	Gross Alpha/Beta	Gross Alpha	5.12E-15	6.13E-15	9.25E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257313	SLAPS LOADOUT	06/30/22	Gross Alpha/Beta	Gross Alpha	6.39E-15	6.68E-15	9.43E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257313	SLAPS LOADOUT	06/30/22	Gross Alpha/Beta	Gross Beta	2.27E-14	1.54E-14	2.31E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257314	SLAPS LOADOUT	07/05/22	Gross Alpha/Beta	Gross Beta	3.01E-14	1.58E-14	2.25E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257314	SLAPS LOADOUT	07/05/22	Gross Alpha/Beta	Gross Alpha	3.93E-15	5.63E-15	9.17E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257315	SLAPS LOADOUT	07/05/22	Gross Alpha/Beta	Gross Beta	2.67E-14	1.55E-14	2.27E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257315	SLAPS LOADOUT	07/05/22	Gross Alpha/Beta	Gross Alpha	7.41E-15	6.95E-15	9.25E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA257316	SLAPS LOADOUT	07/05/22	Gross Alpha/Beta	Gross Beta	3.63E-14	1.65E-14	2.27E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257316	SLAPS LOADOUT	07/05/22	Gross Alpha/Beta	Gross Alpha	2.82E-15	5.19E-15	9.25E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257317	SLAPS LOADOUT	07/06/22	Gross Alpha/Beta	Gross Alpha	6.68E-15	8.00E-15	1.21E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257317	SLAPS LOADOUT	07/06/22	Gross Alpha/Beta	Gross Beta	2.53E-14	1.93E-14	2.96E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257318	SLAPS LOADOUT	07/06/22	Gross Alpha/Beta	Gross Alpha	-6.22E-16	3.33E-15	9.25E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257318	SLAPS LOADOUT	07/06/22	Gross Alpha/Beta	Gross Beta	1.94E-14	1.48E-14	2.27E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257319	SLAPS LOADOUT	07/06/22	Gross Alpha/Beta	Gross Alpha	1.69E-15	4.70E-15	9.34E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257319	SLAPS LOADOUT	07/06/22	Gross Alpha/Beta	Gross Beta	1.80E-14	1.47E-14	2.29E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257320	SLAPS LOADOUT	07/06/22	Gross Alpha/Beta	Gross Alpha	1.42E-14	1.05E-14	1.21E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257320	SLAPS LOADOUT	07/06/22	Gross Alpha/Beta	Gross Beta	3.59E-14	2.04E-14	2.96E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257321	SLAPS LOADOUT	07/06/22	Gross Alpha/Beta	Gross Alpha	9.79E-15	9.18E-15	1.22E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257321	SLAPS LOADOUT	07/06/22	Gross Alpha/Beta	Gross Beta	2.17E-14	1.91E-14	3.00E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257322	SLAPS LOADOUT	07/06/22	Gross Alpha/Beta	Gross Alpha	7.41E-15	6.95E-15	9.25E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257322	SLAPS LOADOUT	07/06/22	Gross Alpha/Beta	Gross Beta	1.64E-14	1.44E-14	2.27E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257323	SLAPS LOADOUT	07/07/22	Gross Alpha/Beta	Gross Alpha	3.86E-15	5.53E-15	9.00E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257323	SLAPS LOADOUT	07/07/22	Gross Alpha/Beta	Gross Beta	2.10E-14	1.46E-14	2.21E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257324	SLAPS LOADOUT	07/07/22	Gross Alpha/Beta	Gross Alpha	6.10E-15	6.38E-15	9.00E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257324	SLAPS LOADOUT	07/07/22	Gross Alpha/Beta	Gross Beta	2.10E-14	1.46E-14	2.21E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257325	SLAPS LOADOUT	07/07/22	Gross Alpha/Beta	Gross Alpha	4.98E-15	5.97E-15	9.00E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257325	SLAPS LOADOUT	07/07/22	Gross Alpha/Beta	Gross Beta	1.52E-14	1.40E-14	2.21E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257326	SLAPS LOADOUT	07/11/22	Gross Alpha/Beta	Gross Beta	5.26E-14	1.89E-14	2.41E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257326	SLAPS LOADOUT	07/11/22	Gross Alpha/Beta	Gross Alpha	6.64E-15	6.94E-15	9.80E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257327	SLAPS LOADOUT	07/11/22	Gross Alpha/Beta	Gross Beta	3.63E-14	1.68E-14	2.31E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257327	SLAPS LOADOUT	07/11/22	Gross Alpha/Beta	Gross Alpha	7.56E-15	7.08E-15	9.43E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257327	SLAPS LOADOUT	07/11/22	Gross Alpha/Beta	Gross Beta	3.70E-14	1.69E-14	2.32E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257327	SLAPS LOADOUT	07/11/22	Gross Alpha/Beta	Gross Alpha	2.88E-15	5.29E-15	9.43E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257328	SLAPS LOADOUT	07/11/22	Gross Alpha/Beta	Gross Beta	3.75E-14	1.75E-14	2.43E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257328	SLAPS LOADOUT	07/11/22	Gross Alpha/Beta	Gross Alpha	2.26E-15	5.46E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257329	SLAPS LOADOUT	07/12/22	Gross Alpha/Beta	Gross Alpha	-1.32E-15	3.42E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257329	SLAPS LOADOUT	07/12/22	Gross Alpha/Beta	Gross Beta	1.46E-14	1.47E-14	2.36E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257330	SLAPS LOADOUT	07/12/22	Gross Alpha/Beta	Gross Beta	2.51E-14	1.62E-14	2.43E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257330	SLAPS LOADOUT	07/12/22	Gross Alpha/Beta	Gross Alpha	4.67E-15	6.44E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257331	SLAPS LOADOUT	07/12/22	Gross Alpha/Beta	Gross Alpha	8.28E-15	7.69E-15	1.04E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257331	SLAPS LOADOUT	07/12/22	Gross Alpha/Beta	Gross Beta	2.21E-14	1.59E-14	2.43E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257332	SLAPS LOADOUT	07/13/22	Gross Alpha/Beta	Gross Beta	3.24E-14	1.65E-14	2.33E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257332	SLAPS LOADOUT	07/13/22	Gross Alpha/Beta	Gross Alpha	5.65E-15	6.62E-15	1.00E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257333	SLAPS LOADOUT	07/13/22	Gross Alpha/Beta	Gross Beta	2.74E-14	1.57E-14	2.29E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257333	SLAPS LOADOUT	07/13/22	Gross Alpha/Beta	Gross Alpha	9.95E-16	4.62E-15	9.83E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257334	SLAPS LOADOUT	07/13/22	Gross Alpha/Beta	Gross Alpha	3.27E-15	5.64E-15	9.83E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257334	SLAPS LOADOUT	07/13/22	Gross Alpha/Beta	Gross Beta	1.57E-14	1.45E-14	2.29E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257335	SLAPS LOADOUT	07/13/22	Gross Alpha/Beta	Gross Alpha	-1.30E-15	3.38E-15	1.00E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA257335	SLAPS LOADOUT	07/13/22	Gross Alpha/Beta	Gross Beta	7.05E-15	1.38E-14	2.33E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257336	SLAPS LOADOUT	07/13/22	Gross Alpha/Beta	Gross Alpha	6.68E-15	6.89E-15	9.83E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257336	SLAPS LOADOUT	07/13/22	Gross Alpha/Beta	Gross Beta	1.57E-14	1.45E-14	2.29E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257337	SLAPS LOADOUT	07/13/22	Gross Alpha/Beta	Gross Alpha	9.95E-16	4.62E-15	9.83E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257337	SLAPS LOADOUT	07/13/22	Gross Alpha/Beta	Gross Beta	1.57E-14	1.45E-14	2.29E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257338	SLAPS LOADOUT	07/14/22	Gross Alpha/Beta	Gross Beta	2.87E-14	1.61E-14	2.33E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257338	SLAPS LOADOUT	07/14/22	Gross Alpha/Beta	Gross Alpha	7.97E-15	7.40E-15	1.00E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257339	SLAPS LOADOUT	07/14/22	Gross Alpha/Beta	Gross Beta	3.09E-14	1.63E-14	2.33E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257339	SLAPS LOADOUT	07/14/22	Gross Alpha/Beta	Gross Alpha	4.49E-15	6.20E-15	1.00E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257340	SLAPS LOADOUT	07/14/22	Gross Alpha/Beta	Gross Beta	3.51E-14	1.66E-14	2.31E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257340	SLAPS LOADOUT	07/14/22	Gross Alpha/Beta	Gross Alpha	5.60E-15	6.56E-15	9.92E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257341	SLAPS LOADOUT	07/18/22	Gross Alpha/Beta	Gross Alpha	1.03E-14	8.11E-15	1.00E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257341	SLAPS LOADOUT	07/18/22	Gross Alpha/Beta	Gross Beta	4.21E-14	1.74E-14	2.33E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257342	SLAPS LOADOUT	07/18/22	Gross Alpha/Beta	Gross Beta	6.07E-14	1.92E-14	2.33E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257342	SLAPS LOADOUT	07/18/22	Gross Alpha/Beta	Gross Alpha	4.49E-15	6.20E-15	1.00E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257343	SLAPS LOADOUT	07/18/22	Gross Alpha/Beta	Gross Beta	6.78E-14	2.04E-14	2.43E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257343	SLAPS LOADOUT	07/18/22	Gross Alpha/Beta	Gross Alpha	5.87E-15	6.88E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257344	SLAPS LOADOUT	07/18/22	Gross Alpha/Beta	Gross Beta	4.36E-14	1.76E-14	2.33E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257344	SLAPS LOADOUT	07/18/22	Gross Alpha/Beta	Gross Alpha	1.01E-15	4.71E-15	1.00E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257345	SLAPS LOADOUT	07/18/22	Gross Alpha/Beta	Gross Beta	3.98E-14	1.70E-14	2.29E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257345	SLAPS LOADOUT	07/18/22	Gross Alpha/Beta	Gross Alpha	-1.42E-16	4.03E-15	9.83E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257346	SLAPS LOADOUT	07/18/22	Gross Alpha/Beta	Gross Beta	4.44E-14	1.79E-14	2.38E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257346	SLAPS LOADOUT	07/18/22	Gross Alpha/Beta	Gross Alpha	-1.48E-16	4.18E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257347	SLAPS LOADOUT	07/19/22	Gross Alpha/Beta	Gross Beta	3.18E-14	1.61E-14	2.29E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257347	SLAPS LOADOUT	07/19/22	Gross Alpha/Beta	Gross Alpha	-1.28E-15	3.32E-15	9.83E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257347	SLAPS LOADOUT	07/19/22	Gross Alpha/Beta	Gross Beta	5.45E-14	1.84E-14	2.29E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257347	SLAPS LOADOUT	07/19/22	Gross Alpha/Beta	Gross Alpha	-1.42E-16	4.03E-15	9.83E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257348	SLAPS LOADOUT	07/19/22	Gross Alpha/Beta	Gross Alpha	1.59E-14	9.74E-15	1.01E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257348	SLAPS LOADOUT	07/19/22	Gross Alpha/Beta	Gross Beta	7.18E-14	2.06E-14	2.38E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257349	SLAPS LOADOUT	07/19/22	Gross Alpha/Beta	Gross Alpha	1.05E-14	8.03E-15	9.60E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257349	SLAPS LOADOUT	07/19/22	Gross Alpha/Beta	Gross Beta	3.60E-14	1.65E-14	2.26E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257350	SLAPS LOADOUT	07/20/22	Gross Alpha/Beta	Gross Beta	5.32E-14	1.81E-14	2.24E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257350	SLAPS LOADOUT	07/20/22	Gross Alpha/Beta	Gross Alpha	3.60E-15	5.63E-15	9.51E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257351	SLAPS LOADOUT	07/20/22	Gross Alpha/Beta	Gross Alpha	1.06E-14	8.11E-15	9.69E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257351	SLAPS LOADOUT	07/20/22	Gross Alpha/Beta	Gross Beta	6.46E-14	1.94E-14	2.29E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257352	SLAPS LOADOUT	07/20/22	Gross Alpha/Beta	Gross Alpha	1.27E-14	8.60E-15	9.51E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257352	SLAPS LOADOUT	07/20/22	Gross Alpha/Beta	Gross Beta	2.54E-14	1.53E-14	2.24E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257353	SLAPS LOADOUT	07/21/22	Gross Alpha/Beta	Gross Alpha	4.78E-15	6.14E-15	9.60E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257353	SLAPS LOADOUT	07/21/22	Gross Alpha/Beta	Gross Beta	1.60E-14	1.44E-14	2.26E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257354	SLAPS LOADOUT	07/21/22	Gross Alpha/Beta	Gross Beta	3.93E-14	1.67E-14	2.24E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257354	SLAPS LOADOUT	07/21/22	Gross Alpha/Beta	Gross Alpha	3.60E-15	5.63E-15	9.51E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA257355	SLAPS LOADOUT	07/21/22	Gross Alpha/Beta	Gross Beta	2.49E-14	1.53E-14	2.26E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257355	SLAPS LOADOUT	07/21/22	Gross Alpha/Beta	Gross Alpha	3.64E-15	5.69E-15	9.60E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257356	SLAPS LOADOUT	07/25/22	Gross Alpha/Beta	Gross Beta	4.24E-14	1.97E-14	2.72E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257356	SLAPS LOADOUT	07/25/22	Gross Alpha/Beta	Gross Alpha	7.13E-15	7.88E-15	1.15E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257357	SLAPS LOADOUT	07/25/22	Gross Alpha/Beta	Gross Beta	3.25E-14	1.65E-14	2.33E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257357	SLAPS LOADOUT	07/25/22	Gross Alpha/Beta	Gross Alpha	4.92E-15	6.31E-15	9.87E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257358	SLAPS LOADOUT	07/25/22	Gross Alpha/Beta	Gross Beta	3.44E-14	1.89E-14	2.72E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257358	SLAPS LOADOUT	07/25/22	Gross Alpha/Beta	Gross Alpha	7.13E-15	7.88E-15	1.15E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257359	SLAPS LOADOUT	07/25/22	Gross Alpha/Beta	Gross Beta	3.61E-14	1.91E-14	2.72E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257359	SLAPS LOADOUT	07/25/22	Gross Alpha/Beta	Gross Alpha	1.61E-15	5.60E-15	1.15E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257360	SLAPS LOADOUT	07/25/22	Gross Alpha/Beta	Gross Beta	5.07E-14	1.80E-14	2.26E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257360	SLAPS LOADOUT	07/25/22	Gross Alpha/Beta	Gross Alpha	7.08E-15	6.95E-15	9.60E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257361	SLAPS LOADOUT	07/25/22	Gross Alpha/Beta	Gross Beta	3.34E-14	1.61E-14	2.24E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257361	SLAPS LOADOUT	07/25/22	Gross Alpha/Beta	Gross Alpha	8.15E-15	7.26E-15	9.51E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257362	SLAPS LOADOUT	07/27/22	Gross Alpha/Beta	Gross Alpha	2.77E-15	5.79E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257362	SLAPS LOADOUT	07/27/22	Gross Alpha/Beta	Gross Beta	2.36E-14	1.66E-14	2.52E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257363	SLAPS LOADOUT	07/28/22	Gross Alpha/Beta	Gross Beta	4.69E-14	1.79E-14	2.33E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257363	SLAPS LOADOUT	07/28/22	Gross Alpha/Beta	Gross Alpha	8.47E-15	7.54E-15	9.87E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257364	SLAPS LOADOUT	07/28/22	Gross Alpha/Beta	Gross Beta	4.20E-14	1.76E-14	2.35E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257364	SLAPS LOADOUT	07/28/22	Gross Alpha/Beta	Gross Alpha	3.78E-15	5.91E-15	9.97E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257365	SLAPS LOADOUT	07/28/22	Gross Alpha/Beta	Gross Beta	2.48E-14	1.61E-14	2.40E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257365	SLAPS LOADOUT	07/28/22	Gross Alpha/Beta	Gross Alpha	6.28E-15	6.95E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257366	SLAPS LOADOUT	07/28/22	Gross Alpha/Beta	Gross Beta	4.78E-14	1.83E-14	2.38E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257366	SLAPS LOADOUT	07/28/22	Gross Alpha/Beta	Gross Alpha	5.02E-15	6.44E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257367	SLAPS LOADOUT	07/28/22	Gross Alpha/Beta	Gross Beta	5.17E-14	1.87E-14	2.38E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257367	SLAPS LOADOUT	07/28/22	Gross Alpha/Beta	Gross Alpha	5.02E-15	6.44E-15	1.01E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257367	SLAPS LOADOUT	07/28/22	Gross Alpha/Beta	Gross Beta	5.48E-14	1.90E-14	2.38E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257367	SLAPS LOADOUT	07/28/22	Gross Alpha/Beta	Gross Alpha	1.41E-15	4.89E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257368	SLAPS LOADOUT	07/28/22	Gross Alpha/Beta	Gross Beta	2.69E-14	1.68E-14	2.49E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257368	SLAPS LOADOUT	07/28/22	Gross Alpha/Beta	Gross Alpha	3.29E-15	5.41E-15	9.27E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257369	SLAPS LOADOUT	08/01/22	Gross Alpha/Beta	Gross Beta	3.32E-14	2.18E-14	3.27E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257369	SLAPS LOADOUT	08/01/22	Gross Alpha/Beta	Gross Alpha	2.75E-15	6.36E-15	1.22E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257370	SLAPS LOADOUT	08/01/22	Gross Alpha/Beta	Gross Alpha	1.96E-15	4.53E-15	8.67E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257370	SLAPS LOADOUT	08/01/22	Gross Alpha/Beta	Gross Beta	2.14E-14	1.53E-14	2.33E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257371	SLAPS LOADOUT	08/01/22	Gross Alpha/Beta	Gross Beta	3.79E-14	2.26E-14	3.31E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257371	SLAPS LOADOUT	08/01/22	Gross Alpha/Beta	Gross Alpha	1.19E-15	5.60E-15	1.23E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257372	SLAPS LOADOUT	08/01/22	Gross Alpha/Beta	Gross Beta	4.11E-14	2.24E-14	3.23E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257372	SLAPS LOADOUT	08/01/22	Gross Alpha/Beta	Gross Alpha	5.82E-15	7.67E-15	1.20E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257373	SLAPS LOADOUT	08/01/22	Gross Alpha/Beta	Gross Beta	3.12E-14	1.63E-14	2.33E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257373	SLAPS LOADOUT	08/01/22	Gross Alpha/Beta	Gross Alpha	6.44E-15	6.39E-15	8.67E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257374	SLAPS LOADOUT	08/01/22	Gross Alpha/Beta	Gross Alpha	8.76E-15	7.21E-15	8.75E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA257374	SLAPS LOADOUT	08/01/22	Gross Alpha/Beta	Gross Beta	3.92E-14	1.73E-14	2.35E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257375	SLAPS LOADOUT	08/02/22	Gross Alpha/Beta	Gross Beta	4.11E-14	1.87E-14	2.57E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257375	SLAPS LOADOUT	08/02/22	Gross Alpha/Beta	Gross Alpha	3.39E-15	5.58E-15	9.56E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257376	SLAPS LOADOUT	08/02/22	Gross Alpha/Beta	Gross Alpha	6.96E-15	6.90E-15	9.37E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257376	SLAPS LOADOUT	08/02/22	Gross Alpha/Beta	Gross Beta	2.47E-14	1.67E-14	2.52E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257377	SLAPS LOADOUT	08/02/22	Gross Alpha/Beta	Gross Alpha	4.58E-15	6.04E-15	9.46E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257377	SLAPS LOADOUT	08/02/22	Gross Alpha/Beta	Gross Beta	2.00E-14	1.63E-14	2.54E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257378	SLAPS LOADOUT	08/03/22	Gross Alpha/Beta	Gross Alpha	4.45E-15	5.86E-15	9.18E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257378	SLAPS LOADOUT	08/03/22	Gross Alpha/Beta	Gross Beta	1.46E-14	1.53E-14	2.47E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257379	SLAPS LOADOUT	08/03/22	Gross Alpha/Beta	Gross Alpha	2.10E-15	4.85E-15	9.27E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257379	SLAPS LOADOUT	08/03/22	Gross Alpha/Beta	Gross Beta	1.88E-14	1.59E-14	2.49E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257380	SLAPS LOADOUT	08/03/22	Gross Alpha/Beta	Gross Alpha	5.63E-15	6.33E-15	9.18E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257380	SLAPS LOADOUT	08/03/22	Gross Alpha/Beta	Gross Beta	1.54E-14	1.54E-14	2.47E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257381	SLAPS LOADOUT	08/04/22	Gross Alpha/Beta	Gross Alpha	9.28E-15	7.64E-15	9.27E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257381	SLAPS LOADOUT	08/04/22	Gross Alpha/Beta	Gross Beta	2.60E-15	1.41E-14	2.49E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257382	SLAPS LOADOUT	08/08/22	Gross Alpha/Beta	Gross Alpha	1.09E-14	7.83E-15	8.67E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257382	SLAPS LOADOUT	08/08/22	Gross Alpha/Beta	Gross Beta	4.18E-14	1.74E-14	2.33E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257383	SLAPS LOADOUT	08/08/22	Gross Alpha/Beta	Gross Beta	3.30E-14	1.67E-14	2.35E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257383	SLAPS LOADOUT	08/08/22	Gross Alpha/Beta	Gross Alpha	5.37E-15	6.04E-15	8.75E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257384	SLAPS LOADOUT	08/08/22	Gross Alpha/Beta	Gross Alpha	5.74E-15	7.57E-15	1.19E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257384	SLAPS LOADOUT	08/08/22	Gross Alpha/Beta	Gross Beta	2.92E-14	2.09E-14	3.19E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257385	SLAPS LOADOUT	08/08/22	Gross Alpha/Beta	Gross Alpha	1.08E-15	5.07E-15	1.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257385	SLAPS LOADOUT	08/08/22	Gross Alpha/Beta	Gross Beta	-4.67E-15	1.61E-14	3.00E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257386	SLAPS LOADOUT	08/08/22	Gross Alpha/Beta	Gross Beta	3.34E-14	2.14E-14	3.19E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257386	SLAPS LOADOUT	08/08/22	Gross Alpha/Beta	Gross Alpha	2.68E-15	6.20E-15	1.19E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257387	SLAPS LOADOUT	08/08/22	Gross Alpha/Beta	Gross Alpha	-2.80E-16	3.24E-15	8.67E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257387	SLAPS LOADOUT	08/08/22	Gross Alpha/Beta	Gross Beta	9.25E-15	1.40E-14	2.33E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257387	SLAPS LOADOUT	08/08/22	Gross Alpha/Beta	Gross Alpha	1.96E-15	4.53E-15	8.67E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257387	SLAPS LOADOUT	08/08/22	Gross Alpha/Beta	Gross Beta	-1.36E-15	1.28E-14	2.33E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257388	SLAPS LOADOUT	08/09/22	Gross Alpha/Beta	Gross Alpha	-2.11E-15	3.38E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257388	SLAPS LOADOUT	08/09/22	Gross Alpha/Beta	Gross Beta	8.31E-15	1.36E-14	2.29E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257389	SLAPS LOADOUT	08/09/22	Gross Alpha/Beta	Gross Alpha	2.46E-15	5.65E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257389	SLAPS LOADOUT	08/09/22	Gross Alpha/Beta	Gross Beta	2.14E-14	1.49E-14	2.26E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257390	SLAPS LOADOUT	08/09/22	Gross Alpha/Beta	Gross Beta	2.80E-14	1.56E-14	2.26E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257390	SLAPS LOADOUT	08/09/22	Gross Alpha/Beta	Gross Alpha	1.04E-14	8.29E-15	1.06E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257391	SLAPS LOADOUT	08/10/22	Gross Alpha/Beta	Gross Alpha	8.31E-15	7.77E-15	1.08E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257391	SLAPS LOADOUT	08/10/22	Gross Alpha/Beta	Gross Beta	2.26E-14	1.53E-14	2.31E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257392	SLAPS LOADOUT	08/10/22	Gross Alpha/Beta	Gross Alpha	1.33E-15	5.17E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257392	SLAPS LOADOUT	08/10/22	Gross Alpha/Beta	Gross Beta	2.21E-14	1.50E-14	2.26E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257393	SLAPS LOADOUT	08/10/22	Gross Alpha/Beta	Gross Beta	3.21E-14	1.59E-14	2.24E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257393	SLAPS LOADOUT	08/10/22	Gross Alpha/Beta	Gross Alpha	1.88E-16	4.60E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA257394	SLAPS LOADOUT	08/10/22	Gross Alpha/Beta	Gross Alpha	3.54E-15	5.98E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257394	SLAPS LOADOUT	08/10/22	Gross Alpha/Beta	Gross Beta	8.80E-15	1.33E-14	2.22E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257395	SLAPS LOADOUT	08/10/22	Gross Alpha/Beta	Gross Beta	3.00E-14	1.61E-14	2.31E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257395	SLAPS LOADOUT	08/10/22	Gross Alpha/Beta	Gross Alpha	-9.66E-16	4.12E-15	1.08E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257396	SLAPS LOADOUT	08/10/22	Gross Alpha/Beta	Gross Alpha	2.49E-15	5.70E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257396	SLAPS LOADOUT	08/10/22	Gross Alpha/Beta	Gross Beta	1.13E-14	1.40E-14	2.29E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257397	SLAPS LOADOUT	08/11/22	Gross Alpha/Beta	Gross Beta	3.82E-14	1.67E-14	2.26E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257397	SLAPS LOADOUT	08/11/22	Gross Alpha/Beta	Gross Alpha	5.88E-15	6.90E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257398	SLAPS LOADOUT	08/11/22	Gross Alpha/Beta	Gross Alpha	1.53E-15	5.94E-15	1.21E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257398	SLAPS LOADOUT	08/11/22	Gross Alpha/Beta	Gross Beta	1.05E-15	1.46E-14	2.60E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257399	SLAPS LOADOUT	08/11/22	Gross Alpha/Beta	Gross Alpha	2.46E-15	5.65E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257399	SLAPS LOADOUT	08/11/22	Gross Alpha/Beta	Gross Beta	6.04E-15	1.33E-14	2.26E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257400	SLAPS LOADOUT	08/11/22	Gross Alpha/Beta	Gross Beta	3.30E-14	1.80E-14	2.60E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257400	SLAPS LOADOUT	08/11/22	Gross Alpha/Beta	Gross Alpha	4.14E-15	7.00E-15	1.21E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257401	SLAPS LOADOUT	08/11/22	Gross Alpha/Beta	Gross Alpha	1.72E-14	1.09E-14	1.21E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257401	SLAPS LOADOUT	08/11/22	Gross Alpha/Beta	Gross Beta	3.80E-14	1.86E-14	2.60E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257402	SLAPS LOADOUT	08/11/22	Gross Alpha/Beta	Gross Beta	3.05E-14	1.60E-14	2.29E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257402	SLAPS LOADOUT	08/11/22	Gross Alpha/Beta	Gross Alpha	1.05E-14	8.37E-15	1.07E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257403	SLAPS LOADOUT	08/15/22	Gross Alpha/Beta	Gross Alpha	1.64E-14	9.96E-15	1.08E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257403	SLAPS LOADOUT	08/15/22	Gross Alpha/Beta	Gross Beta	8.44E-14	2.14E-14	2.31E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257404	SLAPS LOADOUT	08/15/22	Gross Alpha/Beta	Gross Alpha	2.19E-14	1.15E-14	1.12E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257404	SLAPS LOADOUT	08/15/22	Gross Alpha/Beta	Gross Beta	6.91E-14	2.05E-14	2.40E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257405	SLAPS LOADOUT	08/15/22	Gross Alpha/Beta	Gross Beta	3.22E-14	1.63E-14	2.31E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257405	SLAPS LOADOUT	08/15/22	Gross Alpha/Beta	Gross Alpha	4.83E-15	6.63E-15	1.08E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257406	SLAPS LOADOUT	08/16/22	Gross Alpha/Beta	Gross Beta	4.98E-14	1.86E-14	2.40E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257406	SLAPS LOADOUT	08/16/22	Gross Alpha/Beta	Gross Alpha	1.10E-14	8.78E-15	1.12E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257407	SLAPS LOADOUT	08/16/22	Gross Alpha/Beta	Gross Beta	4.81E-14	1.82E-14	2.35E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257407	SLAPS LOADOUT	08/16/22	Gross Alpha/Beta	Gross Alpha	1.97E-16	4.82E-15	1.10E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257407	SLAPS LOADOUT	08/16/22	Gross Alpha/Beta	Gross Beta	3.13E-14	1.65E-14	2.35E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257407	SLAPS LOADOUT	08/16/22	Gross Alpha/Beta	Gross Alpha	4.92E-15	6.76E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257408	SLAPS LOADOUT	08/16/22	Gross Alpha/Beta	Gross Alpha	9.49E-15	7.41E-15	8.43E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257408	SLAPS LOADOUT	08/16/22	Gross Alpha/Beta	Gross Beta	5.29E-14	1.88E-14	2.37E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257409	SLAPS LOADOUT	08/17/22	Gross Alpha/Beta	Gross Alpha	5.73E-15	5.92E-15	8.04E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257409	SLAPS LOADOUT	08/17/22	Gross Alpha/Beta	Gross Beta	2.20E-14	1.50E-14	2.26E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257410	SLAPS LOADOUT	08/17/22	Gross Alpha/Beta	Gross Beta	3.81E-14	1.68E-14	2.28E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257410	SLAPS LOADOUT	08/17/22	Gross Alpha/Beta	Gross Alpha	3.54E-15	5.05E-15	8.12E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257411	SLAPS LOADOUT	08/17/22	Gross Alpha/Beta	Gross Beta	4.19E-14	1.77E-14	2.37E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257411	SLAPS LOADOUT	08/17/22	Gross Alpha/Beta	Gross Alpha	6.00E-15	6.20E-15	8.43E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257412	SLAPS LOADOUT	08/17/22	Gross Alpha/Beta	Gross Alpha	1.09E-14	7.93E-15	8.59E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257412	SLAPS LOADOUT	08/17/22	Gross Alpha/Beta	Gross Beta	2.19E-14	1.58E-14	2.41E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257413	SLAPS LOADOUT	08/17/22	Gross Alpha/Beta	Gross Alpha	9.77E-15	7.63E-15	8.68E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA257413	SLAPS LOADOUT	08/17/22	Gross Alpha/Beta	Gross Beta	4.55E-14	1.85E-14	2.44E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257414	SLAPS LOADOUT	08/17/22	Gross Alpha/Beta	Gross Alpha	-9.97E-16	2.48E-15	8.68E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257414	SLAPS LOADOUT	08/17/22	Gross Alpha/Beta	Gross Beta	4.31E-15	1.40E-14	2.44E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257415	SLAPS LOADOUT	08/18/22	Gross Alpha/Beta	Gross Beta	5.49E-14	1.88E-14	2.32E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257415	SLAPS LOADOUT	08/18/22	Gross Alpha/Beta	Gross Alpha	4.75E-15	5.63E-15	8.27E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257416	SLAPS LOADOUT	08/18/22	Gross Alpha/Beta	Gross Beta	4.49E-14	1.75E-14	2.28E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257416	SLAPS LOADOUT	08/18/22	Gross Alpha/Beta	Gross Alpha	3.54E-15	5.05E-15	8.12E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257417	SLAPS LOADOUT	08/18/22	Gross Alpha/Beta	Gross Alpha	9.06E-15	7.07E-15	8.04E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257417	SLAPS LOADOUT	08/18/22	Gross Alpha/Beta	Gross Beta	3.17E-14	1.60E-14	2.26E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257418	SLAPS LOADOUT	08/22/22	Gross Alpha/Beta	Gross Beta	2.90E-14	1.59E-14	2.28E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257418	SLAPS LOADOUT	08/22/22	Gross Alpha/Beta	Gross Alpha	4.66E-15	5.53E-15	8.12E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257419	SLAPS LOADOUT	08/22/22	Gross Alpha/Beta	Gross Beta	4.45E-14	1.76E-14	2.30E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257419	SLAPS LOADOUT	08/22/22	Gross Alpha/Beta	Gross Alpha	5.84E-15	6.03E-15	8.19E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257420	SLAPS LOADOUT	08/22/22	Gross Alpha/Beta	Gross Beta	4.19E-14	1.74E-14	2.32E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257420	SLAPS LOADOUT	08/22/22	Gross Alpha/Beta	Gross Alpha	4.75E-15	5.63E-15	8.27E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257421	SLAPS LOADOUT	08/23/22	Gross Alpha/Beta	Gross Beta	4.92E-14	1.83E-14	2.34E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257421	SLAPS LOADOUT	08/23/22	Gross Alpha/Beta	Gross Alpha	3.65E-15	5.19E-15	8.35E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257422	SLAPS LOADOUT	08/23/22	Gross Alpha/Beta	Gross Alpha	3.65E-15	5.19E-15	8.35E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257422	SLAPS LOADOUT	08/23/22	Gross Alpha/Beta	Gross Beta	2.13E-14	1.54E-14	2.34E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257423	SLAPS LOADOUT	08/23/22	Gross Alpha/Beta	Gross Beta	5.03E-14	1.83E-14	2.32E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257423	SLAPS LOADOUT	08/23/22	Gross Alpha/Beta	Gross Alpha	7.03E-15	6.50E-15	8.27E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257424	SLAPS LOADOUT	08/24/22	Gross Alpha/Beta	Gross Beta	2.80E-14	1.68E-14	2.46E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257424	SLAPS LOADOUT	08/24/22	Gross Alpha/Beta	Gross Alpha	7.45E-15	6.89E-15	8.77E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257425	SLAPS LOADOUT	08/24/22	Gross Alpha/Beta	Gross Beta	4.63E-14	1.85E-14	2.44E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257425	SLAPS LOADOUT	08/24/22	Gross Alpha/Beta	Gross Alpha	8.58E-15	7.24E-15	8.68E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257426	SLAPS LOADOUT	08/24/22	Gross Alpha/Beta	Gross Beta	5.60E-14	1.95E-14	2.44E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257426	SLAPS LOADOUT	08/24/22	Gross Alpha/Beta	Gross Alpha	8.58E-15	7.24E-15	8.68E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257427	SLAPS LOADOUT	08/24/22	Gross Alpha/Beta	Gross Beta	7.81E-14	2.06E-14	2.26E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257427	SLAPS LOADOUT	08/24/22	Gross Alpha/Beta	Gross Alpha	6.84E-15	6.32E-15	8.04E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257427	SLAPS LOADOUT	08/24/22	Gross Alpha/Beta	Gross Alpha	1.02E-14	7.42E-15	8.04E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257427	SLAPS LOADOUT	08/24/22	Gross Alpha/Beta	Gross Beta	7.81E-14	2.06E-14	2.26E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257428	SLAPS LOADOUT	08/24/22	Gross Alpha/Beta	Gross Alpha	1.46E-16	3.36E-15	8.52E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257428	SLAPS LOADOUT	08/24/22	Gross Alpha/Beta	Gross Beta	2.90E-15	9.97E-15	1.77E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257429	SLAPS LOADOUT	08/24/22	Gross Alpha/Beta	Gross Beta	5.74E-14	1.68E-14	1.76E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257429	SLAPS LOADOUT	08/24/22	Gross Alpha/Beta	Gross Alpha	8.24E-15	6.99E-15	8.44E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257430	SLAPS LOADOUT	08/25/22	Gross Alpha/Beta	Gross Beta	2.76E-14	1.38E-14	1.84E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257430	SLAPS LOADOUT	08/25/22	Gross Alpha/Beta	Gross Alpha	2.58E-15	4.90E-15	8.85E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257431	SLAPS LOADOUT	08/25/22	Gross Alpha/Beta	Gross Beta	3.64E-14	1.47E-14	1.81E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257431	SLAPS LOADOUT	08/25/22	Gross Alpha/Beta	Gross Alpha	7.28E-15	6.78E-15	8.69E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257432	SLAPS LOADOUT	08/25/22	Gross Alpha/Beta	Gross Beta	5.00E-14	1.62E-14	1.79E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257432	SLAPS LOADOUT	08/25/22	Gross Alpha/Beta	Gross Alpha	7.21E-15	6.72E-15	8.60E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA257433	SLAPS LOADOUT	08/29/22	Gross Alpha/Beta	Gross Alpha	1.30E-15	4.06E-15	8.44E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257433	SLAPS LOADOUT	08/29/22	Gross Alpha/Beta	Gross Beta	1.04E-14	1.10E-14	1.76E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257434	SLAPS LOADOUT	08/29/22	Gross Alpha/Beta	Gross Alpha	1.41E-15	4.38E-15	9.12E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257434	SLAPS LOADOUT	08/29/22	Gross Alpha/Beta	Gross Beta	-2.62E-15	9.75E-15	1.90E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257435	SLAPS LOADOUT	08/29/22	Gross Alpha/Beta	Gross Alpha	1.00E-14	7.89E-15	9.03E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257435	SLAPS LOADOUT	08/29/22	Gross Alpha/Beta	Gross Beta	3.22E-14	1.46E-14	1.88E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257436	SLAPS LOADOUT	08/29/22	Gross Alpha/Beta	Gross Beta	3.09E-14	1.37E-14	1.76E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257436	SLAPS LOADOUT	08/29/22	Gross Alpha/Beta	Gross Alpha	1.30E-15	4.06E-15	8.44E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257437	SLAPS LOADOUT	08/29/22	Gross Alpha/Beta	Gross Beta	3.42E-14	1.42E-14	1.77E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257437	SLAPS LOADOUT	08/29/22	Gross Alpha/Beta	Gross Alpha	3.65E-15	5.27E-15	8.52E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257438	SLAPS LOADOUT	08/29/22	Gross Alpha/Beta	Gross Beta	2.01E-14	1.30E-14	1.88E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257438	SLAPS LOADOUT	08/29/22	Gross Alpha/Beta	Gross Alpha	5.10E-15	6.11E-15	9.03E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257439	SLAPS LOADOUT	08/30/22	Gross Alpha/Beta	Gross Beta	2.81E-14	1.35E-14	1.77E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257439	SLAPS LOADOUT	08/30/22	Gross Alpha/Beta	Gross Alpha	1.31E-15	4.10E-15	8.52E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257440	SLAPS LOADOUT	08/30/22	Gross Alpha/Beta	Gross Beta	1.80E-14	1.21E-14	1.76E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257440	SLAPS LOADOUT	08/30/22	Gross Alpha/Beta	Gross Alpha	5.93E-15	6.17E-15	8.44E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257441	SLAPS LOADOUT	08/30/22	Gross Alpha/Beta	Gross Beta	3.01E-14	1.36E-14	1.76E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257441	SLAPS LOADOUT	08/30/22	Gross Alpha/Beta	Gross Alpha	-1.01E-15	2.40E-15	8.44E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257442	SLAPS LOADOUT	08/31/22	Gross Alpha/Beta	Gross Beta	2.86E-14	1.34E-14	1.76E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257442	SLAPS LOADOUT	08/31/22	Gross Alpha/Beta	Gross Alpha	2.46E-15	4.67E-15	8.44E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257443	SLAPS LOADOUT	08/31/22	Gross Alpha/Beta	Gross Beta	2.63E-14	1.31E-14	1.76E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257443	SLAPS LOADOUT	08/31/22	Gross Alpha/Beta	Gross Alpha	2.46E-15	4.67E-15	8.44E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257444	SLAPS LOADOUT	08/31/22	Gross Alpha/Beta	Gross Alpha	1.45E-16	3.33E-15	8.44E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257444	SLAPS LOADOUT	08/31/22	Gross Alpha/Beta	Gross Beta	1.57E-14	1.18E-14	1.76E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257445	SLAPS LOADOUT	08/31/22	Gross Alpha/Beta	Gross Beta	2.65E-14	1.45E-14	2.00E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257445	SLAPS LOADOUT	08/31/22	Gross Alpha/Beta	Gross Alpha	1.64E-16	3.79E-15	9.60E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257446	SLAPS LOADOUT	08/31/22	Gross Alpha/Beta	Gross Beta	3.08E-14	1.51E-14	2.00E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257446	SLAPS LOADOUT	08/31/22	Gross Alpha/Beta	Gross Alpha	2.79E-15	5.31E-15	9.60E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257447	SLAPS LOADOUT	08/31/22	Gross Alpha/Beta	Gross Alpha	7.97E-15	7.42E-15	9.50E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257447	SLAPS LOADOUT	08/31/22	Gross Alpha/Beta	Gross Beta	-7.84E-15	9.28E-15	1.98E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257447	SLAPS LOADOUT	08/31/22	Gross Alpha/Beta	Gross Alpha	5.37E-15	6.43E-15	9.50E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257447	SLAPS LOADOUT	08/31/22	Gross Alpha/Beta	Gross Beta	-1.03E-15	1.04E-14	1.98E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257448	SLAPS LOADOUT	09/01/22	Gross Alpha/Beta	Gross Beta	2.91E-14	1.57E-14	2.26E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257448	SLAPS LOADOUT	09/01/22	Gross Alpha/Beta	Gross Alpha	-9.48E-16	4.04E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257449	SLAPS LOADOUT	09/01/22	Gross Alpha/Beta	Gross Beta	3.94E-14	1.70E-14	2.30E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257449	SLAPS LOADOUT	09/01/22	Gross Alpha/Beta	Gross Alpha	3.67E-15	6.21E-15	1.08E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257450	SLAPS LOADOUT	09/01/22	Gross Alpha/Beta	Gross Beta	3.24E-14	1.62E-14	2.28E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257450	SLAPS LOADOUT	09/01/22	Gross Alpha/Beta	Gross Alpha	8.23E-15	7.70E-15	1.07E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257451	SLAPS LOADOUT	09/06/22	Gross Alpha/Beta	Gross Beta	4.30E-14	1.71E-14	2.26E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257451	SLAPS LOADOUT	09/06/22	Gross Alpha/Beta	Gross Alpha	5.88E-15	6.90E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257452	SLAPS LOADOUT	09/06/22	Gross Alpha/Beta	Gross Alpha	1.61E-14	9.77E-15	1.06E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA257452	SLAPS LOADOUT	09/06/22	Gross Alpha/Beta	Gross Beta	3.13E-14	1.59E-14	2.26E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257453	SLAPS LOADOUT	09/06/22	Gross Alpha/Beta	Gross Beta	2.40E-14	1.52E-14	2.26E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257453	SLAPS LOADOUT	09/06/22	Gross Alpha/Beta	Gross Alpha	1.33E-15	5.17E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257454	SLAPS LOADOUT	09/07/22	Gross Alpha/Beta	Gross Alpha	1.61E-14	9.77E-15	1.06E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257454	SLAPS LOADOUT	09/07/22	Gross Alpha/Beta	Gross Beta	5.91E-14	1.87E-14	2.26E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257455	SLAPS LOADOUT	09/07/22	Gross Alpha/Beta	Gross Alpha	1.16E-14	8.60E-15	1.06E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257455	SLAPS LOADOUT	09/07/22	Gross Alpha/Beta	Gross Beta	4.82E-14	1.76E-14	2.26E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257456	SLAPS LOADOUT	09/07/22	Gross Alpha/Beta	Gross Alpha	2.01E-16	4.91E-15	1.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257456	SLAPS LOADOUT	09/07/22	Gross Alpha/Beta	Gross Beta	-4.00E-15	1.28E-14	2.39E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257457	SLAPS LOADOUT	09/07/22	Gross Alpha/Beta	Gross Beta	5.72E-14	1.93E-14	2.39E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257457	SLAPS LOADOUT	09/07/22	Gross Alpha/Beta	Gross Alpha	7.43E-15	7.70E-15	1.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257458	SLAPS LOADOUT	09/07/22	Gross Alpha/Beta	Gross Beta	4.64E-14	1.82E-14	2.39E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257458	SLAPS LOADOUT	09/07/22	Gross Alpha/Beta	Gross Alpha	1.10E-14	8.78E-15	1.12E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257459	SLAPS LOADOUT	09/07/22	Gross Alpha/Beta	Gross Beta	3.57E-14	1.64E-14	2.26E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257459	SLAPS LOADOUT	09/07/22	Gross Alpha/Beta	Gross Alpha	4.74E-15	6.51E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257460	SLAPS LOADOUT	09/08/22	Gross Alpha/Beta	Gross Beta	6.72E-14	1.95E-14	2.26E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257460	SLAPS LOADOUT	09/08/22	Gross Alpha/Beta	Gross Alpha	9.29E-15	7.96E-15	1.06E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA257461	SLAPS LOADOUT	09/08/22	Gross Alpha/Beta	Gross Alpha	1.50E-14	9.49E-15	1.06E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257461	SLAPS LOADOUT	09/08/22	Gross Alpha/Beta	Gross Beta	4.89E-14	1.77E-14	2.26E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257462	SLAPS LOADOUT	09/08/22	Gross Alpha/Beta	Gross Beta	3.43E-14	1.62E-14	2.26E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257462	SLAPS LOADOUT	09/08/22	Gross Alpha/Beta	Gross Alpha	4.74E-15	6.51E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257463	SLAPS LOADOUT	09/12/22	Gross Alpha/Beta	Gross Beta	4.82E-14	1.76E-14	2.26E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257463	SLAPS LOADOUT	09/12/22	Gross Alpha/Beta	Gross Alpha	4.74E-15	6.51E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257464	SLAPS LOADOUT	09/12/22	Gross Alpha/Beta	Gross Beta	4.82E-14	1.76E-14	2.26E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257464	SLAPS LOADOUT	09/12/22	Gross Alpha/Beta	Gross Alpha	5.88E-15	6.90E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257465	SLAPS LOADOUT	09/12/22	Gross Alpha/Beta	Gross Beta	2.99E-14	1.58E-14	2.26E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA257465	SLAPS LOADOUT	09/12/22	Gross Alpha/Beta	Gross Alpha	4.74E-15	6.51E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257466	SLAPS LOADOUT	09/13/22	Gross Alpha/Beta	Gross Beta	5.33E-14	1.81E-14	2.26E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA257466	SLAPS LOADOUT	09/13/22	Gross Alpha/Beta	Gross Alpha	2.46E-15	5.65E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257467	SLAPS LOADOUT	09/13/22	Gross Alpha/Beta	Gross Alpha	2.49E-15	5.70E-15	1.07E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257467	SLAPS LOADOUT	09/13/22	Gross Alpha/Beta	Gross Beta	3.57E-15	1.30E-14	2.28E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA257467	SLAPS LOADOUT	09/13/22	Gross Alpha/Beta	Gross Alpha	2.49E-15	5.70E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257467	SLAPS LOADOUT	09/13/22	Gross Alpha/Beta	Gross Beta	2.09E-15	1.29E-14	2.28E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA257468	SLAPS LOADOUT	09/13/22	Gross Alpha/Beta	Gross Alpha	5.54E-16	3.61E-15	8.16E-15	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA257468	SLAPS LOADOUT	09/13/22	Gross Alpha/Beta	Gross Beta	1.88E-14	1.30E-14	1.97E-14	µCi/mL	UJ	T04, T05	SLAPS (General Area)-Perimeter Air
SLA257469	SLAPS LOADOUT	09/14/22	Gross Alpha/Beta	Gross Beta	2.27E-14	1.45E-14	2.15E-14	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air
SLA257469	SLAPS LOADOUT	09/14/22	Gross Alpha/Beta	Gross Alpha	1.72E-15	4.53E-15	8.90E-15	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA257470	SLAPS LOADOUT	09/14/22	Gross Alpha/Beta	Gross Alpha	1.08E-14	9.12E-15	1.14E-14	µCi/mL	UJ	T04, T05	SLAPS (General Area)-Perimeter Air
SLA257470	SLAPS LOADOUT	09/14/22	Gross Alpha/Beta	Gross Beta	1.62E-14	1.71E-14	2.74E-14	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA257471	SLAPS LOADOUT	09/14/22	Gross Alpha/Beta	Gross Beta	5.47E-14	2.12E-14	2.74E-14	µCi/mL	=		SLAPS (General Area)-Perimeter Air
SLA257471	SLAPS LOADOUT	09/14/22	Gross Alpha/Beta	Gross Alpha	1.08E-14	9.12E-15	1.14E-14	µCi/mL	UJ	T04, T05	SLAPS (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA257472	SLAPS LOADOUT	09/14/22	Gross Alpha/Beta	Gross Beta	6.15E-14	1.84E-14	2.15E-14	µCi/mL	=		SLAPS (General Area)-Perimeter Air
SLA257472	SLAPS LOADOUT	09/14/22	Gross Alpha/Beta	Gross Alpha	5.07E-15	5.96E-15	8.90E-15	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA257473	SLAPS LOADOUT	09/14/22	Gross Alpha/Beta	Gross Beta	6.30E-14	2.20E-14	2.74E-14	µCi/mL	=		SLAPS (General Area)-Perimeter Air
SLA257473	SLAPS LOADOUT	09/14/22	Gross Alpha/Beta	Gross Alpha	9.34E-15	8.65E-15	1.14E-14	µCi/mL	UJ	T04, T05	SLAPS (General Area)-Perimeter Air
SLA257474	SLAPS LOADOUT	09/14/22	Gross Alpha/Beta	Gross Alpha	1.06E-14	7.74E-15	8.82E-15	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air
SLA257474	SLAPS LOADOUT	09/14/22	Gross Alpha/Beta	Gross Beta	4.31E-14	1.65E-14	2.13E-14	µCi/mL	=		SLAPS (General Area)-Perimeter Air
SLA257475	SLAPS LOADOUT	09/15/22	Gross Alpha/Beta	Gross Beta	2.85E-14	1.54E-14	2.21E-14	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air
SLA257475	SLAPS LOADOUT	09/15/22	Gross Alpha/Beta	Gross Alpha	8.66E-15	7.33E-15	9.15E-15	µCi/mL	UJ	T04, T05	SLAPS (General Area)-Perimeter Air
SLA257476	SLAPS LOADOUT	09/15/22	Gross Alpha/Beta	Gross Beta	5.58E-14	1.82E-14	2.21E-14	µCi/mL	=		SLAPS (General Area)-Perimeter Air
SLA257476	SLAPS LOADOUT	09/15/22	Gross Alpha/Beta	Gross Alpha	5.21E-15	6.13E-15	9.15E-15	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA257477	SLAPS LOADOUT	09/15/22	Gross Alpha/Beta	Gross Alpha	2.79E-14	1.20E-14	9.07E-15	µCi/mL	=		SLAPS (General Area)-Perimeter Air
SLA257477	SLAPS LOADOUT	09/15/22	Gross Alpha/Beta	Gross Beta	5.82E-14	1.83E-14	2.19E-14	µCi/mL	=		SLAPS (General Area)-Perimeter Air
SLA257478	SLAPS LOADOUT	09/19/22	Gross Alpha/Beta	Gross Beta	6.33E-14	1.88E-14	2.19E-14	µCi/mL	=		SLAPS (General Area)-Perimeter Air
SLA257478	SLAPS LOADOUT	09/19/22	Gross Alpha/Beta	Gross Alpha	8.58E-15	7.26E-15	9.07E-15	µCi/mL	UJ	T04, T05	SLAPS (General Area)-Perimeter Air
SLA257479	SLAPS LOADOUT	09/19/22	Gross Alpha/Beta	Gross Alpha	2.24E-14	1.09E-14	9.15E-15	µCi/mL	=		SLAPS (General Area)-Perimeter Air
SLA257479	SLAPS LOADOUT	09/19/22	Gross Alpha/Beta	Gross Beta	7.13E-14	1.97E-14	2.21E-14	µCi/mL	=		SLAPS (General Area)-Perimeter Air
SLA257480	SLAPS LOADOUT	09/19/22	Gross Alpha/Beta	Gross Alpha	1.09E-14	7.96E-15	9.07E-15	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air
SLA257480	SLAPS LOADOUT	09/19/22	Gross Alpha/Beta	Gross Beta	2.24E-14	1.46E-14	2.19E-14	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air
SLA257481	SLAPS LOADOUT	09/20/22	Gross Alpha/Beta	Gross Beta	6.54E-14	1.91E-14	2.21E-14	µCi/mL	=		SLAPS (General Area)-Perimeter Air
SLA257481	SLAPS LOADOUT	09/20/22	Gross Alpha/Beta	Gross Alpha	7.51E-15	6.95E-15	9.15E-15	µCi/mL	UJ	T04, T05	SLAPS (General Area)-Perimeter Air
SLA257482	SLAPS LOADOUT	09/20/22	Gross Alpha/Beta	Gross Alpha	1.22E-14	8.44E-15	9.24E-15	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air
SLA257482	SLAPS LOADOUT	09/20/22	Gross Alpha/Beta	Gross Beta	6.08E-14	1.88E-14	2.23E-14	µCi/mL	=		SLAPS (General Area)-Perimeter Air
SLA257483	SLAPS LOADOUT	09/20/22	Gross Alpha/Beta	Gross Alpha	6.30E-15	6.49E-15	9.07E-15	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA257483	SLAPS LOADOUT	09/20/22	Gross Alpha/Beta	Gross Beta	1.43E-14	1.38E-14	2.19E-14	µCi/mL	UJ	T04, T05	SLAPS (General Area)-Perimeter Air
SLA257484	SLAPS LOADOUT	09/21/22	Gross Alpha/Beta	Gross Beta	2.97E-14	1.54E-14	2.19E-14	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air
SLA257484	SLAPS LOADOUT	09/21/22	Gross Alpha/Beta	Gross Alpha	6.30E-15	6.49E-15	9.07E-15	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA257485	SLAPS LOADOUT	09/21/22	Gross Alpha/Beta	Gross Beta	6.41E-14	2.11E-14	2.57E-14	µCi/mL	=		SLAPS (General Area)-Perimeter Air
SLA257485	SLAPS LOADOUT	09/21/22	Gross Alpha/Beta	Gross Alpha	2.06E-15	5.41E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA257486	SLAPS LOADOUT	09/21/22	Gross Alpha/Beta	Gross Alpha	1.59E-14	1.04E-14	1.10E-14	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air
SLA257486	SLAPS LOADOUT	09/21/22	Gross Alpha/Beta	Gross Beta	8.84E-14	2.40E-14	2.65E-14	µCi/mL	=		SLAPS (General Area)-Perimeter Air
SLA257487	SLAPS LOADOUT	09/21/22	Gross Alpha/Beta	Gross Beta	3.53E-14	1.80E-14	2.54E-14	µCi/mL			SLAPS (General Area)-Perimeter Air
SLA257487	SLAPS LOADOUT	09/21/22	Gross Alpha/Beta	Gross Alpha	3.36E-15	5.97E-15	1.05E-14	µCi/mL			SLAPS (General Area)-Perimeter Air
SLA257487	SLAPS LOADOUT	09/21/22	Gross Alpha/Beta	Gross Alpha	7.15E-16	4.65E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA257487	SLAPS LOADOUT	09/21/22	Gross Alpha/Beta	Gross Beta	2.34E-14	1.67E-14	2.54E-14	µCi/mL	UJ	T04, T05	SLAPS (General Area)-Perimeter Air
SLA261694	SLAPS LOADOUT	09/21/22	Gross Alpha/Beta	Gross Beta	3.72E-14	1.66E-14	2.25E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261694	SLAPS LOADOUT	09/21/22	Gross Alpha/Beta	Gross Alpha	1.32E-15	3.96E-15	8.19E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261695	SLAPS LOADOUT	09/22/22	Gross Alpha/Beta	Gross Alpha	4.66E-15	5.53E-15	8.12E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261695	SLAPS LOADOUT	09/22/22	Gross Alpha/Beta	Gross Beta	1.87E-14	1.45E-14	2.22E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261696	SLAPS LOADOUT	09/22/22	Gross Alpha/Beta	Gross Alpha	3.54E-15	5.05E-15	8.12E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261696	SLAPS LOADOUT	09/22/22	Gross Alpha/Beta	Gross Beta	1.04E-14	1.35E-14	2.22E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261697	SLAPS LOADOUT	09/22/22	Gross Alpha/Beta	Gross Beta	3.56E-14	1.64E-14	2.25E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA261697	SLAPS LOADOUT	09/22/22	Gross Alpha/Beta	Gross Alpha	2.45E-15	4.57E-15	8.19E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261698	SLAPS LOADOUT	09/26/22	Gross Alpha/Beta	Gross Alpha	6.90E-15	6.38E-15	8.12E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261698	SLAPS LOADOUT	09/26/22	Gross Alpha/Beta	Gross Beta	1.41E-14	1.40E-14	2.22E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261699	SLAPS LOADOUT	09/26/22	Gross Alpha/Beta	Gross Alpha	5.78E-15	5.97E-15	8.12E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261699	SLAPS LOADOUT	09/26/22	Gross Alpha/Beta	Gross Beta	2.10E-14	1.47E-14	2.22E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261700	SLAPS LOADOUT	09/26/22	Gross Alpha/Beta	Gross Alpha	3.54E-15	5.05E-15	8.12E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261700	SLAPS LOADOUT	09/26/22	Gross Alpha/Beta	Gross Beta	1.49E-14	1.40E-14	2.22E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261701	SLAPS LOADOUT	09/27/22	Gross Alpha/Beta	Gross Beta	2.85E-14	1.55E-14	2.22E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261701	SLAPS LOADOUT	09/27/22	Gross Alpha/Beta	Gross Alpha	2.43E-15	4.52E-15	8.12E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261702	SLAPS LOADOUT	09/27/22	Gross Alpha/Beta	Gross Alpha	1.49E-14	8.84E-15	8.19E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261702	SLAPS LOADOUT	09/27/22	Gross Alpha/Beta	Gross Beta	4.10E-14	1.70E-14	2.25E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261703	SLAPS LOADOUT	09/27/22	Gross Alpha/Beta	Gross Alpha	1.03E-14	7.49E-15	8.12E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261703	SLAPS LOADOUT	09/27/22	Gross Alpha/Beta	Gross Beta	5.42E-14	1.82E-14	2.22E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261704	SLAPS LOADOUT	09/28/22	Gross Alpha/Beta	Gross Alpha	4.67E-15	6.65E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261704	SLAPS LOADOUT	09/28/22	Gross Alpha/Beta	Gross Beta	1.96E-14	1.85E-14	2.93E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261705	SLAPS LOADOUT	09/28/22	Gross Alpha/Beta	Gross Alpha	1.72E-15	5.17E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261705	SLAPS LOADOUT	09/28/22	Gross Alpha/Beta	Gross Beta	2.06E-14	1.86E-14	2.93E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261706	SLAPS LOADOUT	09/28/22	Gross Alpha/Beta	Gross Alpha	-1.21E-15	3.02E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261706	SLAPS LOADOUT	09/28/22	Gross Alpha/Beta	Gross Beta	7.58E-15	1.69E-14	2.89E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261707	SLAPS LOADOUT	09/28/22	Gross Alpha/Beta	Gross Alpha	2.47E-15	4.61E-15	8.27E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261707	SLAPS LOADOUT	09/28/22	Gross Alpha/Beta	Gross Beta	2.13E-14	1.50E-14	2.27E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261708	SLAPS LOADOUT	09/28/22	Gross Alpha/Beta	Gross Alpha	2.43E-15	4.52E-15	8.12E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261708	SLAPS LOADOUT	09/28/22	Gross Alpha/Beta	Gross Beta	-4.76E-15	1.17E-14	2.22E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261709	SLAPS LOADOUT	09/28/22	Gross Alpha/Beta	Gross Beta	2.25E-14	1.49E-14	2.22E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261709	SLAPS LOADOUT	09/28/22	Gross Alpha/Beta	Gross Alpha	5.78E-15	5.97E-15	8.12E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261710	SLAPS LOADOUT	09/29/22	Gross Alpha/Beta	Gross Alpha	8.10E-15	6.83E-15	8.19E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261710	SLAPS LOADOUT	09/29/22	Gross Alpha/Beta	Gross Beta	2.19E-14	1.49E-14	2.25E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261711	SLAPS LOADOUT	09/29/22	Gross Alpha/Beta	Gross Alpha	4.75E-15	5.63E-15	8.27E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261711	SLAPS LOADOUT	09/29/22	Gross Alpha/Beta	Gross Beta	1.44E-14	1.42E-14	2.27E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261712	SLAPS LOADOUT	09/29/22	Gross Alpha/Beta	Gross Alpha	1.31E-15	3.93E-15	8.12E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261712	SLAPS LOADOUT	09/29/22	Gross Alpha/Beta	Gross Beta	1.57E-14	1.41E-14	2.22E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261712	SLAPS LOADOUT	09/29/22	Gross Alpha/Beta	Gross Alpha	1.31E-15	3.93E-15	8.12E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261712	SLAPS LOADOUT	09/29/22	Gross Alpha/Beta	Gross Beta	2.80E-15	1.26E-14	2.22E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261713	SLAPS LOADOUT	10/03/22	Gross Alpha/Beta	Gross Alpha	9.68E-15	7.56E-15	8.59E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261713	SLAPS LOADOUT	10/03/22	Gross Alpha/Beta	Gross Beta	3.85E-14	1.72E-14	2.33E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261714	SLAPS LOADOUT	10/03/22	Gross Alpha/Beta	Gross Beta	4.37E-14	1.77E-14	2.31E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261714	SLAPS LOADOUT	10/03/22	Gross Alpha/Beta	Gross Alpha	3.72E-15	5.30E-15	8.51E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261715	SLAPS LOADOUT	10/03/22	Gross Alpha/Beta	Gross Alpha	1.48E-14	1.02E-14	1.06E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261715	SLAPS LOADOUT	10/03/22	Gross Alpha/Beta	Gross Beta	4.44E-14	2.09E-14	2.86E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261716	SLAPS LOADOUT	10/03/22	Gross Alpha/Beta	Gross Beta	5.32E-14	2.18E-14	2.86E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261716	SLAPS LOADOUT	10/03/22	Gross Alpha/Beta	Gross Alpha	6.07E-15	7.19E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA261717	SLAPS LOADOUT	10/03/22	Gross Alpha/Beta	Gross Alpha	1.79E-14	1.11E-14	1.07E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261717	SLAPS LOADOUT	10/03/22	Gross Alpha/Beta	Gross Beta	4.59E-14	2.12E-14	2.90E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261718	SLAPS LOADOUT	10/03/22	Gross Alpha/Beta	Gross Alpha	4.61E-15	6.57E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261718	SLAPS LOADOUT	10/03/22	Gross Alpha/Beta	Gross Beta	2.57E-14	1.88E-14	2.86E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261719	SLAPS LOADOUT	10/04/22	Gross Alpha/Beta	Gross Alpha	1.05E-14	7.63E-15	8.27E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261719	SLAPS LOADOUT	10/04/22	Gross Alpha/Beta	Gross Beta	3.94E-14	1.68E-14	2.24E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261720	SLAPS LOADOUT	10/04/22	Gross Alpha/Beta	Gross Beta	6.94E-14	1.99E-14	2.24E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261720	SLAPS LOADOUT	10/04/22	Gross Alpha/Beta	Gross Alpha	5.89E-15	6.08E-15	8.27E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261721	SLAPS LOADOUT	10/04/22	Gross Alpha/Beta	Gross Alpha	1.23E-14	8.00E-15	7.97E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261721	SLAPS LOADOUT	10/04/22	Gross Alpha/Beta	Gross Beta	4.02E-14	1.65E-14	2.16E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261722	SLAPS LOADOUT	10/05/22	Gross Alpha/Beta	Gross Alpha	1.07E-14	7.78E-15	8.43E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261722	SLAPS LOADOUT	10/05/22	Gross Alpha/Beta	Gross Beta	1.97E-14	1.49E-14	2.29E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261723	SLAPS LOADOUT	10/05/22	Gross Alpha/Beta	Gross Alpha	1.18E-14	8.13E-15	8.43E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261723	SLAPS LOADOUT	10/05/22	Gross Alpha/Beta	Gross Beta	7.00E-14	2.02E-14	2.29E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261724	SLAPS LOADOUT	10/05/22	Gross Alpha/Beta	Gross Beta	4.80E-14	1.80E-14	2.29E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261724	SLAPS LOADOUT	10/05/22	Gross Alpha/Beta	Gross Alpha	8.33E-15	7.03E-15	8.43E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261725	SLAPS LOADOUT	10/06/22	Gross Alpha/Beta	Gross Beta	4.13E-14	1.65E-14	2.14E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261725	SLAPS LOADOUT	10/06/22	Gross Alpha/Beta	Gross Alpha	5.63E-15	5.81E-15	7.90E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261726	SLAPS LOADOUT	10/06/22	Gross Alpha/Beta	Gross Alpha	1.14E-14	7.83E-15	8.12E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261726	SLAPS LOADOUT	10/06/22	Gross Alpha/Beta	Gross Beta	7.34E-14	2.00E-14	2.20E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261727	SLAPS LOADOUT	10/06/22	Gross Alpha/Beta	Gross Alpha	5.50E-15	3.00E-15	3.45E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261727	SLAPS LOADOUT	10/06/22	Gross Alpha/Beta	Gross Beta	8.04E-14	1.18E-14	1.11E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261728	SLAPS LOADOUT	10/10/22	Gross Alpha/Beta	Gross Alpha	1.13E-14	7.75E-15	8.04E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261728	SLAPS LOADOUT	10/10/22	Gross Alpha/Beta	Gross Beta	8.32E-14	2.08E-14	2.18E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261729	SLAPS LOADOUT	10/10/22	Gross Alpha/Beta	Gross Alpha	1.59E-14	9.05E-15	8.12E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261729	SLAPS LOADOUT	10/10/22	Gross Alpha/Beta	Gross Beta	8.02E-14	2.07E-14	2.20E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261730	SLAPS LOADOUT	10/10/22	Gross Alpha/Beta	Gross Beta	3.83E-14	1.66E-14	2.22E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261730	SLAPS LOADOUT	10/10/22	Gross Alpha/Beta	Gross Alpha	8.10E-15	6.83E-15	8.19E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261731	SLAPS LOADOUT	10/11/22	Gross Alpha/Beta	Gross Alpha	1.40E-14	8.70E-15	8.35E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261731	SLAPS LOADOUT	10/11/22	Gross Alpha/Beta	Gross Beta	7.86E-14	2.09E-14	2.26E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261732	SLAPS LOADOUT	10/11/22	Gross Alpha/Beta	Gross Alpha	1.71E-14	9.78E-15	8.77E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261732	SLAPS LOADOUT	10/11/22	Gross Alpha/Beta	Gross Beta	1.07E-13	2.42E-14	2.38E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261732	SLAPS LOADOUT	10/11/22	Gross Alpha/Beta	Gross Beta	9.32E-14	2.29E-14	2.38E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261732	SLAPS LOADOUT	10/11/22	Gross Alpha/Beta	Gross Alpha	5.04E-15	5.97E-15	8.77E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261733	SLAPS LOADOUT	10/12/22	Gross Alpha/Beta	Gross Alpha	1.22E-14	8.60E-15	9.67E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261733	SLAPS LOADOUT	10/12/22	Gross Alpha/Beta	Gross Beta	9.36E-14	2.20E-14	2.23E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261734	SLAPS LOADOUT	10/12/22	Gross Alpha/Beta	Gross Alpha	1.22E-14	8.60E-15	9.67E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261734	SLAPS LOADOUT	10/12/22	Gross Alpha/Beta	Gross Beta	7.31E-14	2.01E-14	2.23E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261735	SLAPS LOADOUT	10/12/22	Gross Alpha/Beta	Gross Beta	2.93E-14	1.58E-14	2.25E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261735	SLAPS LOADOUT	10/12/22	Gross Alpha/Beta	Gross Alpha	2.78E-15	5.40E-15	9.77E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261736	SLAPS LOADOUT	10/13/22	Gross Alpha/Beta	Gross Beta	4.55E-14	1.69E-14	2.14E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA261736	SLAPS LOADOUT	10/13/22	Gross Alpha/Beta	Gross Alpha	7.20E-15	6.89E-15	9.31E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261737	SLAPS LOADOUT	10/13/22	Gross Alpha/Beta	Gross Alpha	2.65E-15	5.15E-15	9.31E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261737	SLAPS LOADOUT	10/13/22	Gross Alpha/Beta	Gross Beta	2.14E-14	1.43E-14	2.14E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261738	SLAPS LOADOUT	10/13/22	Gross Alpha/Beta	Gross Alpha	3.79E-15	5.63E-15	9.31E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261738	SLAPS LOADOUT	10/13/22	Gross Alpha/Beta	Gross Beta	2.07E-14	1.42E-14	2.14E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261739	SLAPS LOADOUT	10/17/22	Gross Alpha/Beta	Gross Beta	2.91E-14	1.60E-14	2.29E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261739	SLAPS LOADOUT	10/17/22	Gross Alpha/Beta	Gross Alpha	6.49E-15	6.95E-15	9.96E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261740	SLAPS LOADOUT	10/17/22	Gross Alpha/Beta	Gross Alpha	1.59E-15	4.84E-15	9.77E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261740	SLAPS LOADOUT	10/17/22	Gross Alpha/Beta	Gross Beta	1.17E-14	1.38E-14	2.25E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261741	SLAPS LOADOUT	10/17/22	Gross Alpha/Beta	Gross Beta	2.50E-14	1.51E-14	2.21E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261741	SLAPS LOADOUT	10/17/22	Gross Alpha/Beta	Gross Alpha	2.73E-15	5.29E-15	9.58E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261742	SLAPS LOADOUT	10/17/22	Gross Alpha/Beta	Gross Alpha	1.76E-15	5.36E-15	1.08E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261742	SLAPS LOADOUT	10/17/22	Gross Alpha/Beta	Gross Beta	2.40E-14	1.65E-14	2.49E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261743	SLAPS LOADOUT	10/17/22	Gross Alpha/Beta	Gross Alpha	1.76E-15	5.36E-15	1.08E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261743	SLAPS LOADOUT	10/17/22	Gross Alpha/Beta	Gross Beta	1.47E-14	1.55E-14	2.49E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261744	SLAPS LOADOUT	10/17/22	Gross Alpha/Beta	Gross Alpha	4.36E-16	4.61E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261744	SLAPS LOADOUT	10/17/22	Gross Alpha/Beta	Gross Beta	5.25E-15	1.42E-14	2.46E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261745	SLAPS LOADOUT	10/18/22	Gross Alpha/Beta	Gross Beta	4.58E-14	1.74E-14	2.23E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261745	SLAPS LOADOUT	10/18/22	Gross Alpha/Beta	Gross Alpha	-7.87E-16	3.43E-15	9.67E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261746	SLAPS LOADOUT	10/18/22	Gross Alpha/Beta	Gross Alpha	1.22E-14	8.60E-15	9.67E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261746	SLAPS LOADOUT	10/18/22	Gross Alpha/Beta	Gross Beta	7.03E-15	1.31E-14	2.23E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261747	SLAPS LOADOUT	10/18/22	Gross Alpha/Beta	Gross Alpha	1.00E-14	8.06E-15	9.86E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261747	SLAPS LOADOUT	10/18/22	Gross Alpha/Beta	Gross Beta	1.80E-14	1.47E-14	2.27E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261748	SLAPS LOADOUT	10/19/22	Gross Alpha/Beta	Gross Beta	2.60E-14	1.53E-14	2.23E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261748	SLAPS LOADOUT	10/19/22	Gross Alpha/Beta	Gross Alpha	6.30E-15	6.75E-15	9.67E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261749	SLAPS LOADOUT	10/19/22	Gross Alpha/Beta	Gross Alpha	1.46E-14	9.25E-15	9.67E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261749	SLAPS LOADOUT	10/19/22	Gross Alpha/Beta	Gross Beta	4.12E-14	1.69E-14	2.23E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261750	SLAPS LOADOUT	10/19/22	Gross Alpha/Beta	Gross Beta	2.93E-14	1.68E-14	2.44E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261750	SLAPS LOADOUT	10/19/22	Gross Alpha/Beta	Gross Alpha	5.60E-15	6.91E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261751	SLAPS LOADOUT	10/19/22	Gross Alpha/Beta	Gross Alpha	8.10E-15	7.75E-15	1.05E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261751	SLAPS LOADOUT	10/19/22	Gross Alpha/Beta	Gross Beta	1.83E-14	1.55E-14	2.41E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261752	SLAPS LOADOUT	10/19/22	Gross Alpha/Beta	Gross Beta	2.00E-14	1.36E-14	1.98E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261752	SLAPS LOADOUT	10/19/22	Gross Alpha/Beta	Gross Alpha	2.60E-15	5.26E-15	9.70E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261752	SLAPS LOADOUT	10/19/22	Gross Alpha/Beta	Gross Beta	3.07E-14	1.68E-14	2.41E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261752	SLAPS LOADOUT	10/19/22	Gross Alpha/Beta	Gross Alpha	1.71E-15	5.19E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261753	SLAPS LOADOUT	10/19/22	Gross Alpha/Beta	Gross Alpha	2.80E-15	5.85E-15	1.08E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261753	SLAPS LOADOUT	10/19/22	Gross Alpha/Beta	Gross Beta	2.47E-14	1.70E-14	2.57E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261754	SLAPS LOADOUT	10/20/22	Gross Alpha/Beta	Gross Alpha	5.07E-15	6.50E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261754	SLAPS LOADOUT	10/20/22	Gross Alpha/Beta	Gross Beta	1.55E-14	1.51E-14	2.41E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261755	SLAPS LOADOUT	10/20/22	Gross Alpha/Beta	Gross Beta	5.73E-14	1.92E-14	2.37E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261755	SLAPS LOADOUT	10/20/22	Gross Alpha/Beta	Gross Alpha	1.99E-16	4.21E-15	9.97E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA261756	SLAPS LOADOUT	10/20/22	Gross Alpha/Beta	Gross Beta	3.77E-14	1.76E-14	2.44E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261756	SLAPS LOADOUT	10/20/22	Gross Alpha/Beta	Gross Alpha	5.12E-15	6.57E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261757	SLAPS LOADOUT	10/24/22	Gross Alpha/Beta	Gross Beta	4.24E-14	1.78E-14	2.39E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261757	SLAPS LOADOUT	10/24/22	Gross Alpha/Beta	Gross Alpha	6.22E-15	6.88E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261758	SLAPS LOADOUT	10/24/22	Gross Alpha/Beta	Gross Beta	4.55E-14	1.81E-14	2.39E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261758	SLAPS LOADOUT	10/24/22	Gross Alpha/Beta	Gross Alpha	6.22E-15	6.88E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261759	SLAPS LOADOUT	10/24/22	Gross Alpha/Beta	Gross Alpha	2.58E-15	5.40E-15	9.97E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261759	SLAPS LOADOUT	10/24/22	Gross Alpha/Beta	Gross Beta	2.13E-14	1.55E-14	2.37E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261760	SLAPS LOADOUT	10/26/22	Gross Alpha/Beta	Gross Beta	3.55E-14	1.69E-14	2.34E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261760	SLAPS LOADOUT	10/26/22	Gross Alpha/Beta	Gross Alpha	4.92E-15	6.31E-15	9.87E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261761	SLAPS LOADOUT	10/26/22	Gross Alpha/Beta	Gross Alpha	2.58E-15	5.40E-15	9.97E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261761	SLAPS LOADOUT	10/26/22	Gross Alpha/Beta	Gross Beta	1.29E-14	1.46E-14	2.37E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261762	SLAPS LOADOUT	10/26/22	Gross Alpha/Beta	Gross Alpha	2.54E-15	5.30E-15	9.78E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261762	SLAPS LOADOUT	10/26/22	Gross Alpha/Beta	Gross Beta	1.41E-14	1.45E-14	2.32E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261763	SLAPS LOADOUT	10/26/22	Gross Alpha/Beta	Gross Alpha	-3.55E-15	9.02E-16	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261763	SLAPS LOADOUT	10/26/22	Gross Alpha/Beta	Gross Beta	-5.85E-15	1.31E-14	2.49E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261764	SLAPS LOADOUT	10/26/22	Gross Alpha/Beta	Gross Beta	2.83E-14	1.71E-14	2.51E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261764	SLAPS LOADOUT	10/26/22	Gross Alpha/Beta	Gross Alpha	1.48E-15	5.14E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261765	SLAPS LOADOUT	10/26/22	Gross Alpha/Beta	Gross Alpha	-1.06E-15	3.69E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261765	SLAPS LOADOUT	10/26/22	Gross Alpha/Beta	Gross Beta	1.94E-14	1.61E-14	2.51E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261766	SLAPS LOADOUT	10/27/22	Gross Alpha/Beta	Gross Alpha	7.43E-15	7.30E-15	1.01E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261766	SLAPS LOADOUT	10/27/22	Gross Alpha/Beta	Gross Beta	1.45E-14	1.49E-14	2.39E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261767	SLAPS LOADOUT	10/27/22	Gross Alpha/Beta	Gross Beta	3.39E-14	1.70E-14	2.39E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261767	SLAPS LOADOUT	10/27/22	Gross Alpha/Beta	Gross Alpha	3.81E-15	5.96E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261768	SLAPS LOADOUT	10/27/22	Gross Alpha/Beta	Gross Alpha	1.10E-14	8.43E-15	1.01E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261768	SLAPS LOADOUT	10/27/22	Gross Alpha/Beta	Gross Beta	2.00E-14	1.55E-14	2.39E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261769	SLAPS LOADOUT	10/28/22	Gross Alpha/Beta	Gross Alpha	1.34E-15	4.66E-15	9.60E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261769	SLAPS LOADOUT	10/28/22	Gross Alpha/Beta	Gross Beta	9.42E-15	1.37E-14	2.28E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261770	SLAPS LOADOUT	10/28/22	Gross Alpha/Beta	Gross Beta	3.38E-14	1.63E-14	2.28E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261770	SLAPS LOADOUT	10/28/22	Gross Alpha/Beta	Gross Alpha	3.64E-15	5.69E-15	9.60E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261771	SLAPS LOADOUT	10/29/22	Gross Alpha/Beta	Gross Beta	4.77E-14	1.81E-14	2.34E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261771	SLAPS LOADOUT	10/29/22	Gross Alpha/Beta	Gross Alpha	8.47E-15	7.54E-15	9.87E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261772	SLAPS LOADOUT	10/29/22	Gross Alpha/Beta	Gross Alpha	1.08E-14	8.26E-15	9.87E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261772	SLAPS LOADOUT	10/29/22	Gross Alpha/Beta	Gross Beta	3.48E-14	1.68E-14	2.34E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261772	SLAPS LOADOUT	10/29/22	Gross Alpha/Beta	Gross Beta	6.29E-14	1.96E-14	2.34E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261772	SLAPS LOADOUT	10/29/22	Gross Alpha/Beta	Gross Alpha	2.56E-15	5.35E-15	9.87E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261773	SLAPS LOADOUT	10/31/22	Gross Alpha/Beta	Gross Alpha	1.21E-14	9.19E-15	1.12E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261773	SLAPS LOADOUT	10/31/22	Gross Alpha/Beta	Gross Beta	6.37E-14	1.86E-14	1.95E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261774	SLAPS LOADOUT	10/31/22	Gross Alpha/Beta	Gross Beta	2.57E-14	1.41E-14	1.95E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261774	SLAPS LOADOUT	10/31/22	Gross Alpha/Beta	Gross Alpha	-1.79E-15	3.69E-15	1.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261775	SLAPS LOADOUT	10/31/22	Gross Alpha/Beta	Gross Beta	4.80E-14	1.68E-14	1.95E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA261775	SLAPS LOADOUT	10/31/22	Gross Alpha/Beta	Gross Alpha	5.78E-15	7.21E-15	1.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261776	SLAPS LOADOUT	11/01/22	Gross Alpha/Beta	Gross Beta	1.35E-13	4.20E-14	4.60E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261776	SLAPS LOADOUT	11/01/22	Gross Alpha/Beta	Gross Alpha	1.66E-14	1.80E-14	2.65E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261777	SLAPS LOADOUT	11/01/22	Gross Alpha/Beta	Gross Beta	8.79E-14	3.66E-14	4.60E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261777	SLAPS LOADOUT	11/01/22	Gross Alpha/Beta	Gross Alpha	7.68E-15	1.48E-14	2.65E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261778	SLAPS LOADOUT	11/01/22	Gross Alpha/Beta	Gross Alpha	1.36E-14	9.23E-15	1.05E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261778	SLAPS LOADOUT	11/01/22	Gross Alpha/Beta	Gross Beta	1.27E-13	2.41E-14	1.82E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261779	SLAPS LOADOUT	11/01/22	Gross Alpha/Beta	Gross Beta	4.48E-14	1.57E-14	1.82E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261779	SLAPS LOADOUT	11/01/22	Gross Alpha/Beta	Gross Alpha	3.04E-15	5.84E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261780	SLAPS LOADOUT	11/01/22	Gross Alpha/Beta	Gross Beta	6.88E-14	1.83E-14	1.82E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261780	SLAPS LOADOUT	11/01/22	Gross Alpha/Beta	Gross Alpha	4.22E-15	6.30E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261781	SLAPS LOADOUT	11/01/22	Gross Alpha/Beta	Gross Alpha	1.73E-15	1.21E-14	2.65E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261781	SLAPS LOADOUT	11/01/22	Gross Alpha/Beta	Gross Beta	1.19E-14	2.66E-14	4.60E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261782	SLAPS LOADOUT	11/02/22	Gross Alpha/Beta	Gross Beta	3.85E-14	1.56E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261782	SLAPS LOADOUT	11/02/22	Gross Alpha/Beta	Gross Alpha	3.23E-15	6.19E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261783	SLAPS LOADOUT	11/02/22	Gross Alpha/Beta	Gross Beta	6.14E-14	1.82E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261783	SLAPS LOADOUT	11/02/22	Gross Alpha/Beta	Gross Alpha	7.28E-16	5.08E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261784	SLAPS LOADOUT	11/02/22	Gross Alpha/Beta	Gross Beta	8.68E-14	2.09E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261784	SLAPS LOADOUT	11/02/22	Gross Alpha/Beta	Gross Alpha	3.23E-15	6.19E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261785	SLAPS LOADOUT	11/03/22	Gross Alpha/Beta	Gross Beta	6.80E-14	1.89E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261785	SLAPS LOADOUT	11/03/22	Gross Alpha/Beta	Gross Alpha	3.23E-15	6.19E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261786	SLAPS LOADOUT	11/03/22	Gross Alpha/Beta	Gross Beta	2.87E-14	1.44E-14	1.93E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261786	SLAPS LOADOUT	11/03/22	Gross Alpha/Beta	Gross Alpha	1.98E-15	5.66E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261787	SLAPS LOADOUT	11/03/22	Gross Alpha/Beta	Gross Beta	4.18E-14	1.60E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261787	SLAPS LOADOUT	11/03/22	Gross Alpha/Beta	Gross Alpha	5.72E-15	7.14E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261788	SLAPS LOADOUT	11/07/22	Gross Alpha/Beta	Gross Alpha	4.47E-15	6.68E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261788	SLAPS LOADOUT	11/07/22	Gross Alpha/Beta	Gross Beta	1.16E-14	1.21E-14	1.93E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261789	SLAPS LOADOUT	11/07/22	Gross Alpha/Beta	Gross Alpha	-5.15E-16	4.38E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261789	SLAPS LOADOUT	11/07/22	Gross Alpha/Beta	Gross Beta	9.01E-15	1.17E-14	1.91E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261790	SLAPS LOADOUT	11/07/22	Gross Alpha/Beta	Gross Beta	1.95E-14	1.31E-14	1.91E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261790	SLAPS LOADOUT	11/07/22	Gross Alpha/Beta	Gross Alpha	8.14E-15	7.90E-15	1.10E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261791	SLAPS LOADOUT	11/08/22	Gross Alpha/Beta	Gross Beta	2.51E-14	1.45E-14	2.04E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261791	SLAPS LOADOUT	11/08/22	Gross Alpha/Beta	Gross Alpha	6.02E-15	7.51E-15	1.17E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261792	SLAPS LOADOUT	11/08/22	Gross Alpha/Beta	Gross Beta	2.48E-14	1.43E-14	2.01E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261792	SLAPS LOADOUT	11/08/22	Gross Alpha/Beta	Gross Alpha	7.59E-16	5.29E-15	1.16E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261792	SLAPS LOADOUT	11/08/22	Gross Alpha/Beta	Gross Alpha	-5.42E-16	4.61E-15	1.16E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261792	SLAPS LOADOUT	11/08/22	Gross Alpha/Beta	Gross Beta	5.22E-15	1.16E-14	2.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261793	SLAPS LOADOUT	11/08/22	Gross Alpha/Beta	Gross Beta	3.65E-14	1.57E-14	2.00E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261793	SLAPS LOADOUT	11/08/22	Gross Alpha/Beta	Gross Alpha	5.85E-15	6.42E-15	8.87E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261794	SLAPS LOADOUT	11/09/22	Gross Alpha/Beta	Gross Beta	3.94E-14	1.67E-14	2.11E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261794	SLAPS LOADOUT	11/09/22	Gross Alpha/Beta	Gross Alpha	6.17E-15	6.77E-15	9.36E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA261795	SLAPS LOADOUT	11/09/22	Gross Alpha/Beta	Gross Alpha	1.09E-14	8.78E-15	9.90E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261795	SLAPS LOADOUT	11/09/22	Gross Alpha/Beta	Gross Beta	6.55E-14	2.04E-14	2.23E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261796	SLAPS LOADOUT	11/09/22	Gross Alpha/Beta	Gross Beta	5.72E-14	1.69E-14	1.79E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261796	SLAPS LOADOUT	11/09/22	Gross Alpha/Beta	Gross Alpha	7.58E-15	6.65E-15	7.96E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261797	SLAPS LOADOUT	11/09/22	Gross Alpha/Beta	Gross Alpha	1.13E-14	8.47E-15	9.06E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261797	SLAPS LOADOUT	11/09/22	Gross Alpha/Beta	Gross Beta	5.12E-14	1.77E-14	2.04E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261798	SLAPS LOADOUT	11/09/22	Gross Alpha/Beta	Gross Alpha	8.82E-15	7.74E-15	9.25E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261798	SLAPS LOADOUT	11/09/22	Gross Alpha/Beta	Gross Beta	1.06E-14	1.28E-14	2.08E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261799	SLAPS LOADOUT	11/09/22	Gross Alpha/Beta	Gross Beta	6.65E-14	1.97E-14	2.08E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261799	SLAPS LOADOUT	11/09/22	Gross Alpha/Beta	Gross Alpha	8.82E-15	7.74E-15	9.25E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261800	SLAPS LOADOUT	11/10/22	Gross Alpha/Beta	Gross Beta	5.41E-14	1.79E-14	2.02E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261800	SLAPS LOADOUT	11/10/22	Gross Alpha/Beta	Gross Alpha	4.60E-15	5.92E-15	8.96E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261801	SLAPS LOADOUT	11/10/22	Gross Alpha/Beta	Gross Beta	4.33E-14	1.65E-14	2.00E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261801	SLAPS LOADOUT	11/10/22	Gross Alpha/Beta	Gross Alpha	3.25E-15	5.25E-15	8.87E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261802	SLAPS LOADOUT	11/10/22	Gross Alpha/Beta	Gross Alpha	1.95E-15	4.55E-15	8.87E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261802	SLAPS LOADOUT	11/10/22	Gross Alpha/Beta	Gross Beta	1.78E-14	1.33E-14	2.00E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261803	SLAPS LOADOUT	11/14/22	Gross Alpha/Beta	Gross Alpha	5.73E-16	3.29E-15	7.81E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261803	SLAPS LOADOUT	11/14/22	Gross Alpha/Beta	Gross Beta	2.16E-15	9.79E-15	1.76E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261804	SLAPS LOADOUT	11/14/22	Gross Alpha/Beta	Gross Alpha	4.01E-15	5.16E-15	7.81E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261804	SLAPS LOADOUT	11/14/22	Gross Alpha/Beta	Gross Beta	5.16E-15	1.03E-14	1.76E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261805	SLAPS LOADOUT	11/15/22	Gross Alpha/Beta	Gross Alpha	2.28E-15	5.33E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261805	SLAPS LOADOUT	11/15/22	Gross Alpha/Beta	Gross Beta	1.18E-14	1.44E-14	2.34E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261806	SLAPS LOADOUT	11/15/22	Gross Alpha/Beta	Gross Beta	2.65E-14	1.62E-14	2.31E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261806	SLAPS LOADOUT	11/15/22	Gross Alpha/Beta	Gross Alpha	6.77E-15	7.43E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261807	SLAPS LOADOUT	11/15/22	Gross Alpha/Beta	Gross Alpha	2.23E-15	5.21E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261807	SLAPS LOADOUT	11/15/22	Gross Alpha/Beta	Gross Beta	8.64E-15	1.36E-14	2.28E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261808	SLAPS LOADOUT	11/15/22	Gross Alpha/Beta	Gross Beta	2.72E-14	1.39E-14	1.88E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261808	SLAPS LOADOUT	11/15/22	Gross Alpha/Beta	Gross Alpha	4.28E-15	5.52E-15	8.35E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261809	SLAPS LOADOUT	11/15/22	Gross Alpha/Beta	Gross Alpha	3.25E-15	5.25E-15	8.87E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261809	SLAPS LOADOUT	11/15/22	Gross Alpha/Beta	Gross Beta	7.45E-16	1.09E-14	2.00E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261810	SLAPS LOADOUT	11/15/22	Gross Alpha/Beta	Gross Beta	2.63E-14	1.41E-14	1.94E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261810	SLAPS LOADOUT	11/15/22	Gross Alpha/Beta	Gross Alpha	3.15E-15	5.09E-15	8.60E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261811	SLAPS LOADOUT	11/16/22	Gross Alpha/Beta	Gross Beta	5.68E-14	1.74E-14	1.88E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261811	SLAPS LOADOUT	11/16/22	Gross Alpha/Beta	Gross Alpha	3.06E-15	4.94E-15	8.35E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261812	SLAPS LOADOUT	11/16/22	Gross Alpha/Beta	Gross Beta	7.12E-14	1.90E-14	1.88E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261812	SLAPS LOADOUT	11/16/22	Gross Alpha/Beta	Gross Alpha	6.73E-15	6.53E-15	8.35E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261812	SLAPS LOADOUT	11/16/22	Gross Alpha/Beta	Gross Beta	5.12E-14	1.68E-14	1.88E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261812	SLAPS LOADOUT	11/16/22	Gross Alpha/Beta	Gross Alpha	7.96E-15	6.98E-15	8.35E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261813	SLAPS LOADOUT	11/17/22	Gross Alpha/Beta	Gross Beta	4.56E-14	1.82E-14	2.38E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261813	SLAPS LOADOUT	11/17/22	Gross Alpha/Beta	Gross Alpha	7.78E-15	7.25E-15	9.59E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261814	SLAPS LOADOUT	11/17/22	Gross Alpha/Beta	Gross Beta	6.25E-14	2.00E-14	2.38E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA261814	SLAPS LOADOUT	11/17/22	Gross Alpha/Beta	Gross Alpha	7.78E-15	7.25E-15	9.59E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261815	SLAPS LOADOUT	11/17/22	Gross Alpha/Beta	Gross Beta	3.10E-14	1.57E-14	2.21E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261815	SLAPS LOADOUT	11/17/22	Gross Alpha/Beta	Gross Alpha	2.77E-15	5.01E-15	8.89E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261816	SLAPS LOADOUT	11/21/22	Gross Alpha/Beta	Gross Beta	3.65E-14	1.67E-14	2.27E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261816	SLAPS LOADOUT	11/21/22	Gross Alpha/Beta	Gross Alpha	5.13E-15	6.09E-15	9.14E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261817	SLAPS LOADOUT	11/21/22	Gross Alpha/Beta	Gross Beta	2.95E-14	1.56E-14	2.21E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261817	SLAPS LOADOUT	11/21/22	Gross Alpha/Beta	Gross Alpha	-5.54E-16	3.22E-15	8.89E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261818	SLAPS LOADOUT	11/21/22	Gross Alpha/Beta	Gross Beta	6.11E-14	1.92E-14	2.27E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261818	SLAPS LOADOUT	11/21/22	Gross Alpha/Beta	Gross Alpha	3.99E-15	5.64E-15	9.14E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261819	SLAPS LOADOUT	11/21/22	Gross Alpha/Beta	Gross Alpha	2.75E-15	4.97E-15	8.81E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261819	SLAPS LOADOUT	11/21/22	Gross Alpha/Beta	Gross Beta	9.18E-15	1.32E-14	2.19E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261820	SLAPS LOADOUT	11/21/22	Gross Alpha/Beta	Gross Beta	6.04E-14	1.86E-14	2.19E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261820	SLAPS LOADOUT	11/21/22	Gross Alpha/Beta	Gross Alpha	7.14E-15	6.65E-15	8.81E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261821	SLAPS LOADOUT	11/21/22	Gross Alpha/Beta	Gross Beta	6.43E-14	1.89E-14	2.17E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261821	SLAPS LOADOUT	11/21/22	Gross Alpha/Beta	Gross Alpha	2.72E-15	4.92E-15	8.73E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261822	SLAPS LOADOUT	11/22/22	Gross Alpha/Beta	Gross Alpha	-1.78E-15	2.49E-15	9.50E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261822	SLAPS LOADOUT	11/22/22	Gross Alpha/Beta	Gross Beta	1.90E-15	1.33E-14	2.36E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261823	SLAPS LOADOUT	11/22/22	Gross Alpha/Beta	Gross Beta	6.75E-14	2.03E-14	2.36E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261823	SLAPS LOADOUT	11/22/22	Gross Alpha/Beta	Gross Alpha	7.70E-15	7.17E-15	9.50E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261824	SLAPS LOADOUT	11/22/22	Gross Alpha/Beta	Gross Beta	5.87E-14	1.94E-14	2.36E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261824	SLAPS LOADOUT	11/22/22	Gross Alpha/Beta	Gross Alpha	6.52E-15	6.76E-15	9.50E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261825	SLAPS LOADOUT	11/23/22	Gross Alpha/Beta	Gross Beta	6.23E-14	1.90E-14	2.23E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261825	SLAPS LOADOUT	11/23/22	Gross Alpha/Beta	Gross Alpha	6.16E-15	6.39E-15	8.97E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261826	SLAPS LOADOUT	11/23/22	Gross Alpha/Beta	Gross Beta	4.87E-14	1.77E-14	2.23E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261826	SLAPS LOADOUT	11/23/22	Gross Alpha/Beta	Gross Alpha	1.68E-15	4.54E-15	8.97E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261827	SLAPS LOADOUT	11/23/22	Gross Alpha/Beta	Gross Beta	3.35E-14	1.77E-14	2.51E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261827	SLAPS LOADOUT	11/23/22	Gross Alpha/Beta	Gross Alpha	6.29E-16	4.44E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261828	SLAPS LOADOUT	11/23/22	Gross Alpha/Beta	Gross Alpha	-3.60E-15	9.68E-16	1.15E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261828	SLAPS LOADOUT	11/23/22	Gross Alpha/Beta	Gross Beta	4.25E-15	1.63E-14	2.87E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261829	SLAPS LOADOUT	11/23/22	Gross Alpha/Beta	Gross Beta	7.62E-14	2.41E-14	2.87E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261829	SLAPS LOADOUT	11/23/22	Gross Alpha/Beta	Gross Alpha	6.47E-15	7.69E-15	1.15E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261830	SLAPS LOADOUT	11/23/22	Gross Alpha/Beta	Gross Beta	8.59E-14	2.50E-14	2.87E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261830	SLAPS LOADOUT	11/23/22	Gross Alpha/Beta	Gross Alpha	9.35E-15	8.71E-15	1.15E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261831	SLAPS LOADOUT	11/28/22	Gross Alpha/Beta	Gross Beta	3.54E-14	1.73E-14	2.41E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261831	SLAPS LOADOUT	11/28/22	Gross Alpha/Beta	Gross Alpha	6.65E-15	6.90E-15	9.69E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261832	SLAPS LOADOUT	11/28/22	Gross Alpha/Beta	Gross Alpha	-5.92E-16	3.44E-15	9.50E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261832	SLAPS LOADOUT	11/28/22	Gross Alpha/Beta	Gross Beta	1.55E-14	1.49E-14	2.36E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261832	SLAPS LOADOUT	11/28/22	Gross Alpha/Beta	Gross Alpha	4.15E-15	5.86E-15	9.50E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261832	SLAPS LOADOUT	11/28/22	Gross Alpha/Beta	Gross Beta	9.91E-15	1.42E-14	2.36E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261833	SLAPS LOADOUT	11/28/22	Gross Alpha/Beta	Gross Beta	4.62E-14	1.81E-14	2.36E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261833	SLAPS LOADOUT	11/28/22	Gross Alpha/Beta	Gross Alpha	8.87E-15	7.76E-15	1.00E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA261834	SLAPS LOADOUT	11/29/22	Gross Alpha/Beta	Gross Alpha	1.57E-15	4.93E-15	1.00E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261834	SLAPS LOADOUT	11/29/22	Gross Alpha/Beta	Gross Beta	2.27E-14	1.57E-14	2.36E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261835	SLAPS LOADOUT	11/29/22	Gross Alpha/Beta	Gross Beta	5.74E-14	1.91E-14	2.34E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261835	SLAPS LOADOUT	11/29/22	Gross Alpha/Beta	Gross Alpha	5.17E-15	6.44E-15	9.91E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261836	SLAPS LOADOUT	11/29/22	Gross Alpha/Beta	Gross Beta	5.77E-14	1.94E-14	2.39E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261836	SLAPS LOADOUT	11/29/22	Gross Alpha/Beta	Gross Alpha	6.50E-15	7.02E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261837	SLAPS LOADOUT	11/30/22	Gross Alpha/Beta	Gross Beta	2.71E-14	1.49E-14	2.15E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261837	SLAPS LOADOUT	11/30/22	Gross Alpha/Beta	Gross Alpha	2.54E-15	5.01E-15	9.11E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261838	SLAPS LOADOUT	11/30/22	Gross Alpha/Beta	Gross Alpha	3.68E-15	5.53E-15	9.19E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261838	SLAPS LOADOUT	11/30/22	Gross Alpha/Beta	Gross Beta	-6.88E-16	1.19E-14	2.17E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261839	SLAPS LOADOUT	11/30/22	Gross Alpha/Beta	Gross Alpha	7.22E-15	6.95E-15	9.45E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261839	SLAPS LOADOUT	11/30/22	Gross Alpha/Beta	Gross Beta	2.22E-14	1.49E-14	2.23E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261840	SLAPS LOADOUT	12/01/22	Gross Alpha/Beta	Gross Alpha	1.05E-14	7.88E-15	9.28E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261840	SLAPS LOADOUT	12/01/22	Gross Alpha/Beta	Gross Beta	2.54E-14	1.50E-14	2.19E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261841	SLAPS LOADOUT	12/01/22	Gross Alpha/Beta	Gross Alpha	-8.06E-16	3.31E-15	9.36E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261841	SLAPS LOADOUT	12/01/22	Gross Alpha/Beta	Gross Beta	-2.90E-15	1.19E-14	2.21E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261842	SLAPS LOADOUT	12/05/22	Gross Alpha/Beta	Gross Alpha	9.52E-15	7.69E-15	9.45E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261842	SLAPS LOADOUT	12/05/22	Gross Alpha/Beta	Gross Beta	1.02E-13	2.27E-14	2.23E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261843	SLAPS LOADOUT	12/05/22	Gross Alpha/Beta	Gross Beta	3.95E-14	1.66E-14	2.21E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261843	SLAPS LOADOUT	12/05/22	Gross Alpha/Beta	Gross Alpha	6.02E-15	6.50E-15	9.36E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261844	SLAPS LOADOUT	12/05/22	Gross Alpha/Beta	Gross Beta	3.13E-14	1.59E-14	2.25E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261844	SLAPS LOADOUT	12/05/22	Gross Alpha/Beta	Gross Alpha	-3.14E-15	8.14E-16	9.54E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261845	SLAPS LOADOUT	12/05/22	Gross Alpha/Beta	Gross Beta	6.26E-14	2.40E-14	3.10E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261845	SLAPS LOADOUT	12/05/22	Gross Alpha/Beta	Gross Alpha	5.25E-15	7.90E-15	1.31E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261846	SLAPS LOADOUT	12/05/22	Gross Alpha/Beta	Gross Beta	3.61E-14	2.08E-14	3.02E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261846	SLAPS LOADOUT	12/05/22	Gross Alpha/Beta	Gross Alpha	1.13E-14	9.93E-15	1.28E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261847	SLAPS LOADOUT	12/05/22	Gross Alpha/Beta	Gross Alpha	-1.10E-15	4.52E-15	1.28E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261847	SLAPS LOADOUT	12/05/22	Gross Alpha/Beta	Gross Beta	1.60E-14	1.86E-14	3.02E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261847	SLAPS LOADOUT	12/05/22	Gross Alpha/Beta	Gross Alpha	4.54E-16	5.49E-15	1.28E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261847	SLAPS LOADOUT	12/05/22	Gross Alpha/Beta	Gross Beta	8.04E-15	1.77E-14	3.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261848	SLAPS LOADOUT	12/06/22	Gross Alpha/Beta	Gross Beta	2.87E-14	1.35E-14	1.76E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261848	SLAPS LOADOUT	12/06/22	Gross Alpha/Beta	Gross Alpha	7.63E-15	6.78E-15	8.24E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261849	SLAPS LOADOUT	12/06/22	Gross Alpha/Beta	Gross Alpha	1.23E-14	8.24E-15	8.16E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261849	SLAPS LOADOUT	12/06/22	Gross Alpha/Beta	Gross Beta	6.70E-14	1.79E-14	1.74E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261850	SLAPS LOADOUT	12/06/22	Gross Alpha/Beta	Gross Beta	7.54E-14	1.90E-14	1.78E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261850	SLAPS LOADOUT	12/06/22	Gross Alpha/Beta	Gross Alpha	6.50E-15	6.40E-15	8.32E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261851	SLAPS LOADOUT	12/07/22	Gross Alpha/Beta	Gross Alpha	1.78E-14	9.65E-15	8.01E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261851	SLAPS LOADOUT	12/07/22	Gross Alpha/Beta	Gross Beta	6.65E-14	1.76E-14	1.71E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261852	SLAPS LOADOUT	12/07/22	Gross Alpha/Beta	Gross Alpha	1.83E-14	9.92E-15	8.24E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261852	SLAPS LOADOUT	12/07/22	Gross Alpha/Beta	Gross Beta	7.86E-14	1.92E-14	1.76E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261853	SLAPS LOADOUT	12/07/22	Gross Alpha/Beta	Gross Beta	3.05E-14	1.36E-14	1.73E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA261853	SLAPS LOADOUT	12/07/22	Gross Alpha/Beta	Gross Alpha	6.32E-15	6.22E-15	8.09E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261854	SLAPS LOADOUT	12/07/22	Gross Alpha/Beta	Gross Alpha	1.17E-14	9.56E-15	1.10E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261854	SLAPS LOADOUT	12/07/22	Gross Alpha/Beta	Gross Beta	1.05E-13	2.56E-14	2.34E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261855	SLAPS LOADOUT	12/07/22	Gross Alpha/Beta	Gross Alpha	1.99E-14	1.21E-14	1.11E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261855	SLAPS LOADOUT	12/07/22	Gross Alpha/Beta	Gross Beta	1.33E-13	2.86E-14	2.37E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261856	SLAPS LOADOUT	12/07/22	Gross Alpha/Beta	Gross Alpha	8.45E-15	8.32E-15	1.08E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261856	SLAPS LOADOUT	12/07/22	Gross Alpha/Beta	Gross Beta	1.83E-14	1.52E-14	2.31E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261857	SLAPS LOADOUT	12/08/22	Gross Alpha/Beta	Gross Alpha	1.67E-14	9.35E-15	8.01E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261857	SLAPS LOADOUT	12/08/22	Gross Alpha/Beta	Gross Beta	9.23E-14	2.03E-14	1.71E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261858	SLAPS LOADOUT	12/08/22	Gross Alpha/Beta	Gross Alpha	3.95E-15	5.21E-15	8.01E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261858	SLAPS LOADOUT	12/08/22	Gross Alpha/Beta	Gross Beta	1.58E-14	1.15E-14	1.71E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261859	SLAPS LOADOUT	12/08/22	Gross Alpha/Beta	Gross Beta	2.49E-14	1.28E-14	1.71E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261859	SLAPS LOADOUT	12/08/22	Gross Alpha/Beta	Gross Alpha	2.79E-15	4.67E-15	8.01E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261860	SLAPS LOADOUT	12/12/22	Gross Alpha/Beta	Gross Beta	6.56E-14	1.76E-14	1.73E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261860	SLAPS LOADOUT	12/12/22	Gross Alpha/Beta	Gross Alpha	7.49E-15	6.65E-15	8.09E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261861	SLAPS LOADOUT	12/12/22	Gross Alpha/Beta	Gross Alpha	1.19E-14	8.44E-15	8.74E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261861	SLAPS LOADOUT	12/12/22	Gross Alpha/Beta	Gross Beta	7.92E-14	1.99E-14	1.87E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261862	SLAPS LOADOUT	12/12/22	Gross Alpha/Beta	Gross Alpha	1.41E-14	9.00E-15	8.57E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261862	SLAPS LOADOUT	12/12/22	Gross Alpha/Beta	Gross Beta	7.28E-14	1.90E-14	1.83E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261863	SLAPS LOADOUT	12/12/22	Gross Alpha/Beta	Gross Alpha	9.17E-15	7.48E-15	8.57E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261863	SLAPS LOADOUT	12/12/22	Gross Alpha/Beta	Gross Beta	6.55E-14	1.82E-14	1.83E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261864	SLAPS LOADOUT	12/12/22	Gross Alpha/Beta	Gross Alpha	5.10E-16	3.52E-15	8.48E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261864	SLAPS LOADOUT	12/12/22	Gross Alpha/Beta	Gross Beta	-9.02E-16	9.55E-15	1.81E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261865	SLAPS LOADOUT	12/12/22	Gross Alpha/Beta	Gross Beta	4.04E-14	1.54E-14	1.83E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261865	SLAPS LOADOUT	12/12/22	Gross Alpha/Beta	Gross Alpha	6.70E-15	6.59E-15	8.57E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261866	SLAPS LOADOUT	12/13/22	Gross Alpha/Beta	Gross Beta	2.98E-14	1.64E-14	2.25E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261866	SLAPS LOADOUT	12/13/22	Gross Alpha/Beta	Gross Alpha	2.16E-15	5.33E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261867	SLAPS LOADOUT	12/13/22	Gross Alpha/Beta	Gross Alpha	2.69E-14	1.36E-14	1.07E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261867	SLAPS LOADOUT	12/13/22	Gross Alpha/Beta	Gross Beta	9.48E-14	2.42E-14	2.28E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261867	SLAPS LOADOUT	12/13/22	Gross Alpha/Beta	Gross Alpha	1.14E-14	9.32E-15	1.07E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261867	SLAPS LOADOUT	12/13/22	Gross Alpha/Beta	Gross Beta	4.93E-14	1.90E-14	2.28E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261868	SLAPS LOADOUT	12/13/22	Gross Alpha/Beta	Gross Alpha	1.52E-14	1.09E-14	1.25E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261868	SLAPS LOADOUT	12/13/22	Gross Alpha/Beta	Gross Beta	4.02E-14	2.02E-14	2.84E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261869	SLAPS LOADOUT	12/14/22	Gross Alpha/Beta	Gross Alpha	2.54E-15	5.30E-15	9.78E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261869	SLAPS LOADOUT	12/14/22	Gross Alpha/Beta	Gross Beta	2.01E-14	1.46E-14	2.21E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261870	SLAPS LOADOUT	12/14/22	Gross Alpha/Beta	Gross Alpha	5.45E-15	6.99E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261870	SLAPS LOADOUT	12/14/22	Gross Alpha/Beta	Gross Beta	1.32E-14	1.52E-14	2.47E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261871	SLAPS LOADOUT	12/14/22	Gross Alpha/Beta	Gross Alpha	2.01E-16	4.25E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261871	SLAPS LOADOUT	12/14/22	Gross Alpha/Beta	Gross Beta	1.29E-14	1.41E-14	2.28E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261872	SLAPS LOADOUT	12/14/22	Gross Alpha/Beta	Gross Beta	2.50E-14	1.66E-14	2.47E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261872	SLAPS LOADOUT	12/14/22	Gross Alpha/Beta	Gross Alpha	-1.09E-15	3.81E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA261873	SLAPS LOADOUT	12/14/22	Gross Alpha/Beta	Gross Alpha	1.53E-15	5.31E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261873	SLAPS LOADOUT	12/14/22	Gross Alpha/Beta	Gross Beta	5.95E-16	1.37E-14	2.47E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261874	SLAPS LOADOUT	12/14/22	Gross Alpha/Beta	Gross Alpha	1.42E-15	4.94E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261874	SLAPS LOADOUT	12/14/22	Gross Alpha/Beta	Gross Beta	9.94E-15	1.39E-14	2.30E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261875	SLAPS LOADOUT	12/15/22	Gross Alpha/Beta	Gross Beta	3.18E-14	1.57E-14	2.19E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261875	SLAPS LOADOUT	12/15/22	Gross Alpha/Beta	Gross Alpha	1.35E-15	4.70E-15	9.69E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261876	SLAPS LOADOUT	12/15/22	Gross Alpha/Beta	Gross Beta	2.53E-14	1.55E-14	2.28E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261876	SLAPS LOADOUT	12/15/22	Gross Alpha/Beta	Gross Alpha	1.41E-15	4.89E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261877	SLAPS LOADOUT	12/15/22	Gross Alpha/Beta	Gross Alpha	2.18E-16	4.62E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261877	SLAPS LOADOUT	12/15/22	Gross Alpha/Beta	Gross Beta	9.84E-15	1.48E-14	2.47E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261878	SLAPS LOADOUT	12/19/22	Gross Alpha/Beta	Gross Beta	2.25E-14	1.45E-14	2.15E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261878	SLAPS LOADOUT	12/19/22	Gross Alpha/Beta	Gross Alpha	3.60E-15	5.63E-15	9.51E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261879	SLAPS LOADOUT	12/19/22	Gross Alpha/Beta	Gross Alpha	2.56E-15	5.35E-15	9.87E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261879	SLAPS LOADOUT	12/19/22	Gross Alpha/Beta	Gross Beta	1.80E-14	1.45E-14	2.24E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261880	SLAPS LOADOUT	12/19/22	Gross Alpha/Beta	Gross Alpha	1.35E-15	4.70E-15	9.69E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261880	SLAPS LOADOUT	12/19/22	Gross Alpha/Beta	Gross Beta	1.32E-14	1.37E-14	2.19E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261881	SLAPS LOADOUT	12/20/22	Gross Alpha/Beta	Gross Beta	3.42E-14	1.57E-14	2.15E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261881	SLAPS LOADOUT	12/20/22	Gross Alpha/Beta	Gross Alpha	4.74E-15	6.08E-15	9.51E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261882	SLAPS LOADOUT	12/20/22	Gross Alpha/Beta	Gross Beta	4.85E-14	1.73E-14	2.17E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261882	SLAPS LOADOUT	12/20/22	Gross Alpha/Beta	Gross Alpha	8.23E-15	7.33E-15	9.60E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261883	SLAPS LOADOUT	12/20/22	Gross Alpha/Beta	Gross Beta	2.83E-14	1.51E-14	2.15E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261883	SLAPS LOADOUT	12/20/22	Gross Alpha/Beta	Gross Alpha	9.29E-15	7.62E-15	9.51E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261884	SLAPS LOADOUT	12/21/22	Gross Alpha/Beta	Gross Alpha	3.81E-15	5.96E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261884	SLAPS LOADOUT	12/21/22	Gross Alpha/Beta	Gross Beta	7.52E-15	1.35E-14	2.28E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261885	SLAPS LOADOUT	12/21/22	Gross Alpha/Beta	Gross Beta	7.32E-14	2.08E-14	2.35E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261885	SLAPS LOADOUT	12/21/22	Gross Alpha/Beta	Gross Alpha	2.69E-15	5.62E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261886	SLAPS LOADOUT	12/21/22	Gross Alpha/Beta	Gross Alpha	1.57E-14	1.01E-14	1.08E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261886	SLAPS LOADOUT	12/21/22	Gross Alpha/Beta	Gross Beta	7.54E-14	2.16E-14	2.45E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261887	SLAPS LOADOUT	12/21/22	Gross Alpha/Beta	Gross Beta	7.02E-14	2.15E-14	2.53E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261887	SLAPS LOADOUT	12/21/22	Gross Alpha/Beta	Gross Alpha	1.09E-14	8.94E-15	1.12E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261887	SLAPS LOADOUT	12/21/22	Gross Alpha/Beta	Gross Beta	6.24E-14	2.08E-14	2.53E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261887	SLAPS LOADOUT	12/21/22	Gross Alpha/Beta	Gross Alpha	1.09E-14	8.94E-15	1.12E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261888	SLAPS LOADOUT	12/21/22	Gross Alpha/Beta	Gross Beta	3.45E-14	1.52E-14	1.92E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261888	SLAPS LOADOUT	12/21/22	Gross Alpha/Beta	Gross Alpha	3.71E-15	6.00E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261889	SLAPS LOADOUT	12/21/22	Gross Alpha/Beta	Gross Alpha	1.07E-15	4.77E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261889	SLAPS LOADOUT	12/21/22	Gross Alpha/Beta	Gross Beta	1.92E-14	1.34E-14	1.97E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA261890	SLAPS LOADOUT	12/27/22	Gross Alpha/Beta	Gross Beta	2.00E-14	1.22E-14	1.72E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261890	SLAPS LOADOUT	12/27/22	Gross Alpha/Beta	Gross Alpha	9.41E-16	4.18E-15	9.15E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261891	SLAPS LOADOUT	12/27/22	Gross Alpha/Beta	Gross Beta	2.67E-14	1.36E-14	1.81E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261891	SLAPS LOADOUT	12/27/22	Gross Alpha/Beta	Gross Alpha	5.98E-15	6.67E-15	9.61E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261892	SLAPS LOADOUT	12/27/22	Gross Alpha/Beta	Gross Beta	2.48E-14	1.32E-14	1.79E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA261892	SLAPS LOADOUT	12/27/22	Gross Alpha/Beta	Gross Alpha	2.22E-15	5.00E-15	9.51E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261893	SLAPS LOADOUT	12/28/22	Gross Alpha/Beta	Gross Beta	5.78E-14	1.60E-14	1.59E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261893	SLAPS LOADOUT	12/28/22	Gross Alpha/Beta	Gross Alpha	1.96E-15	4.43E-15	8.43E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261894	SLAPS LOADOUT	12/28/22	Gross Alpha/Beta	Gross Beta	3.70E-14	1.36E-14	1.59E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA261894	SLAPS LOADOUT	12/28/22	Gross Alpha/Beta	Gross Alpha	8.67E-16	3.85E-15	8.43E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261895	SLAPS LOADOUT	12/29/22	Gross Alpha/Beta	Gross Beta	1.96E-14	1.16E-14	1.63E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261895	SLAPS LOADOUT	12/29/22	Gross Alpha/Beta	Gross Alpha	-1.36E-15	2.35E-15	8.66E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261896	SLAPS LOADOUT	12/29/22	Gross Alpha/Beta	Gross Beta	2.26E-14	1.20E-14	1.63E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA261896	SLAPS LOADOUT	12/29/22	Gross Alpha/Beta	Gross Alpha	3.14E-15	5.08E-15	8.66E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261897	SLAPS LOADOUT	12/29/22	Gross Alpha/Beta	Gross Beta	1.79E-14	1.17E-14	1.67E-14	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261897	SLAPS LOADOUT	12/29/22	Gross Alpha/Beta	Gross Alpha	-2.41E-16	3.34E-15	8.90E-15	µCi/mL			SLAPS Loadout (General Area)-Perimeter Air
SLA261897	SLAPS LOADOUT	12/29/22	Gross Alpha/Beta	Gross Alpha	4.38E-15	5.72E-15	8.90E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA261897	SLAPS LOADOUT	12/29/22	Gross Alpha/Beta	Gross Beta	1.41E-14	1.11E-14	1.67E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SVP243603	VP-56	01/03/22	Gross Alpha/Beta	Gross Beta	6.85E-14	2.48E-14	3.14E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP243603	VP-56	01/03/22	Gross Alpha/Beta	Gross Alpha	7.23E-15	8.75E-15	1.33E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP243604	VP-56	01/04/22	Gross Alpha/Beta	Gross Alpha	1.29E-14	9.55E-15	1.11E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP243604	VP-56	01/04/22	Gross Alpha/Beta	Gross Beta	2.29E-14	1.71E-14	2.61E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP243604	VP-56	01/04/22	Gross Alpha/Beta	Gross Alpha	1.56E-14	1.03E-14	1.11E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP243604	VP-56	01/04/22	Gross Alpha/Beta	Gross Beta	3.78E-14	1.87E-14	2.61E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254253	VP-56	02/28/22	Gross Alpha/Beta	Gross Beta	3.80E-14	1.64E-14	2.10E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254253	VP-56	02/28/22	Gross Alpha/Beta	Gross Alpha	9.40E-15	8.57E-15	1.14E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254254	VP-56	02/28/22	Gross Alpha/Beta	Gross Beta	6.53E-14	1.96E-14	2.10E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254254	VP-56	02/28/22	Gross Alpha/Beta	Gross Alpha	6.71E-15	7.67E-15	1.14E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254255	VP-56	03/01/22	Gross Alpha/Beta	Gross Beta	5.55E-14	1.74E-14	1.91E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254255	VP-56	03/01/22	Gross Alpha/Beta	Gross Alpha	1.22E-15	4.97E-15	1.04E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254256	VP-56	03/01/22	Gross Alpha/Beta	Gross Beta	4.91E-14	1.67E-14	1.91E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254256	VP-56	03/01/22	Gross Alpha/Beta	Gross Alpha	7.34E-15	7.42E-15	1.04E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254257	VP-56	03/02/22	Gross Alpha/Beta	Gross Beta	5.50E-14	1.76E-14	1.95E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254257	VP-56	03/02/22	Gross Alpha/Beta	Gross Alpha	4.99E-15	6.68E-15	1.06E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254258	VP-56	03/02/22	Gross Alpha/Beta	Gross Alpha	-2.50E-15	2.66E-15	1.06E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254258	VP-56	03/02/22	Gross Alpha/Beta	Gross Beta	1.84E-15	1.08E-14	1.95E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254259	VP-56	03/03/22	Gross Alpha/Beta	Gross Beta	3.94E-14	1.62E-14	2.03E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254259	VP-56	03/03/22	Gross Alpha/Beta	Gross Alpha	1.30E-15	5.28E-15	1.11E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254260	VP-56	03/03/22	Gross Alpha/Beta	Gross Beta	4.96E-14	1.74E-14	2.03E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254260	VP-56	03/03/22	Gross Alpha/Beta	Gross Alpha	2.60E-15	5.89E-15	1.11E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254261	VP-56	03/07/22	Gross Alpha/Beta	Gross Alpha	6.12E-15	6.99E-15	1.04E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254261	VP-56	03/07/22	Gross Alpha/Beta	Gross Beta	1.86E-14	1.30E-14	1.91E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254262	VP-56	03/07/22	Gross Alpha/Beta	Gross Alpha	0	4.33E-15	1.04E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254262	VP-56	03/07/22	Gross Alpha/Beta	Gross Beta	8.22E-15	1.15E-14	1.91E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254263	VP-56	03/08/22	Gross Alpha/Beta	Gross Beta	2.24E-14	1.41E-14	2.03E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254263	VP-56	03/08/22	Gross Alpha/Beta	Gross Alpha	1.30E-15	5.28E-15	1.11E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP254264	VP-56	03/08/22	Gross Alpha/Beta	Gross Alpha	5.20E-15	6.95E-15	1.11E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254264	VP-56	03/08/22	Gross Alpha/Beta	Gross Beta	1.38E-14	1.30E-14	2.03E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254265	VP-56	03/09/22	Gross Alpha/Beta	Gross Beta	2.29E-14	1.36E-14	1.93E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254265	VP-56	03/09/22	Gross Alpha/Beta	Gross Alpha	8.65E-15	7.89E-15	1.05E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254266	VP-56	03/09/22	Gross Alpha/Beta	Gross Beta	3.42E-14	1.50E-14	1.93E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP254266	VP-56	03/09/22	Gross Alpha/Beta	Gross Alpha	6.18E-15	7.06E-15	1.05E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP254266	VP-56	03/09/22	Gross Alpha/Beta	Gross Beta	4.31E-14	1.61E-14	1.93E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254266	VP-56	03/09/22	Gross Alpha/Beta	Gross Alpha	3.71E-15	6.13E-15	1.05E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254318	VP-56	03/10/22	Gross Alpha/Beta	Gross Beta	4.04E-14	1.81E-14	2.50E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254318	VP-56	03/10/22	Gross Alpha/Beta	Gross Alpha	5.68E-15	7.02E-15	1.09E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254319	VP-56	03/10/22	Gross Alpha/Beta	Gross Beta	3.96E-14	1.81E-14	2.50E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254319	VP-56	03/10/22	Gross Alpha/Beta	Gross Alpha	9.37E-15	8.23E-15	1.09E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254320	VP-56	03/14/22	Gross Alpha/Beta	Gross Alpha	7.60E-16	4.95E-15	1.08E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254320	VP-56	03/14/22	Gross Alpha/Beta	Gross Beta	1.96E-14	1.59E-14	2.47E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254321	VP-56	03/14/22	Gross Alpha/Beta	Gross Beta	2.75E-14	1.67E-14	2.47E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254321	VP-56	03/14/22	Gross Alpha/Beta	Gross Alpha	1.98E-15	5.52E-15	1.08E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254322	VP-56	03/15/22	Gross Alpha/Beta	Gross Beta	2.64E-14	1.65E-14	2.45E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254322	VP-56	03/15/22	Gross Alpha/Beta	Gross Alpha	7.53E-16	4.90E-15	1.07E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254323	VP-56	03/15/22	Gross Alpha/Beta	Gross Alpha	3.16E-15	5.97E-15	1.07E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254323	VP-56	03/15/22	Gross Alpha/Beta	Gross Beta	2.10E-14	1.59E-14	2.45E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254324	VP-56	03/16/22	Gross Alpha/Beta	Gross Alpha	1.96E-15	5.46E-15	1.07E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254324	VP-56	03/16/22	Gross Alpha/Beta	Gross Beta	1.01E-14	1.47E-14	2.45E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254325	VP-56	03/16/22	Gross Alpha/Beta	Gross Alpha	-4.52E-16	4.27E-15	1.07E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254325	VP-56	03/16/22	Gross Alpha/Beta	Gross Beta	5.49E-15	1.42E-14	2.45E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254326	VP-56	03/17/22	Gross Alpha/Beta	Gross Alpha	4.41E-15	6.51E-15	1.08E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254326	VP-56	03/17/22	Gross Alpha/Beta	Gross Beta	1.81E-14	1.57E-14	2.47E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254327	VP-56	03/17/22	Gross Alpha/Beta	Gross Beta	3.21E-14	1.72E-14	2.47E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254327	VP-56	03/17/22	Gross Alpha/Beta	Gross Alpha	8.06E-15	7.77E-15	1.08E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254328	VP-56	03/21/22	Gross Alpha/Beta	Gross Beta	3.61E-14	1.73E-14	2.42E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254328	VP-56	03/21/22	Gross Alpha/Beta	Gross Alpha	7.90E-15	7.62E-15	1.06E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254329	VP-56	03/21/22	Gross Alpha/Beta	Gross Alpha	7.45E-16	4.85E-15	1.06E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254329	VP-56	03/21/22	Gross Alpha/Beta	Gross Beta	6.20E-15	1.42E-14	2.42E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254330	VP-56	03/22/22	Gross Alpha/Beta	Gross Alpha	-4.52E-16	4.27E-15	1.07E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254330	VP-56	03/22/22	Gross Alpha/Beta	Gross Beta	1.09E-14	1.48E-14	2.45E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254331	VP-56	03/22/22	Gross Alpha/Beta	Gross Alpha	1.96E-15	5.46E-15	1.07E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254331	VP-56	03/22/22	Gross Alpha/Beta	Gross Beta	1.71E-14	1.55E-14	2.45E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254332	VP-56	03/23/22	Gross Alpha/Beta	Gross Alpha	-4.06E-15	9.54E-16	1.07E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254332	VP-56	03/23/22	Gross Alpha/Beta	Gross Beta	5.49E-15	1.42E-14	2.45E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254333	VP-56	03/23/22	Gross Alpha/Beta	Gross Alpha	-4.52E-16	4.27E-15	1.07E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254333	VP-56	03/23/22	Gross Alpha/Beta	Gross Beta	2.41E-14	1.62E-14	2.45E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254334	VP-56	03/24/22	Gross Alpha/Beta	Gross Alpha	3.29E-15	6.22E-15	1.11E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP254334	VP-56	03/24/22	Gross Alpha/Beta	Gross Beta	4.91E-15	1.47E-14	2.55E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254335	VP-56	03/24/22	Gross Alpha/Beta	Gross Alpha	-4.70E-16	4.44E-15	1.11E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254335	VP-56	03/24/22	Gross Alpha/Beta	Gross Beta	4.10E-15	1.46E-14	2.55E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254336	VP-56	03/28/22	Gross Alpha/Beta	Gross Alpha	3.22E-15	6.09E-15	1.09E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254336	VP-56	03/28/22	Gross Alpha/Beta	Gross Beta	2.30E-14	1.64E-14	2.50E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254337	VP-56	03/28/22	Gross Alpha/Beta	Gross Beta	2.85E-14	1.69E-14	2.50E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP254337	VP-56	03/28/22	Gross Alpha/Beta	Gross Alpha	2.00E-15	5.57E-15	1.09E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP254337	VP-56	03/28/22	Gross Alpha/Beta	Gross Alpha	1.67E-14	1.03E-14	1.09E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254337	VP-56	03/28/22	Gross Alpha/Beta	Gross Beta	4.35E-14	1.85E-14	2.50E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254338	VP-56	03/29/22	Gross Alpha/Beta	Gross Beta	5.05E-14	1.88E-14	2.43E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254338	VP-56	03/29/22	Gross Alpha/Beta	Gross Alpha	5.73E-15	6.95E-15	1.07E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254339	VP-56	03/29/22	Gross Alpha/Beta	Gross Alpha	9.38E-15	8.15E-15	1.07E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254339	VP-56	03/29/22	Gross Alpha/Beta	Gross Beta	1.61E-14	1.53E-14	2.43E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254340	VP-56	03/30/22	Gross Alpha/Beta	Gross Alpha	3.78E-15	2.17E-14	4.70E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254340	VP-56	03/30/22	Gross Alpha/Beta	Gross Beta	1.86E-15	5.95E-14	1.07E-13	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254341	VP-56	03/30/22	Gross Alpha/Beta	Gross Alpha	5.26E-15	1.03E-14	1.84E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254341	VP-56	03/30/22	Gross Alpha/Beta	Gross Beta	5.88E-14	3.91E-14	6.09E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254342	VP-56	03/31/22	Gross Alpha/Beta	Gross Beta	2.81E-14	1.67E-14	2.46E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254342	VP-56	03/31/22	Gross Alpha/Beta	Gross Alpha	4.56E-15	6.57E-15	1.08E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254343	VP-56	03/31/22	Gross Alpha/Beta	Gross Alpha	7.01E-15	7.45E-15	1.08E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254343	VP-56	03/31/22	Gross Alpha/Beta	Gross Beta	1.54E-14	1.54E-14	2.46E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254344	VP-56	04/04/22	Gross Alpha/Beta	Gross Alpha	3.29E-15	6.03E-15	1.07E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254344	VP-56	04/04/22	Gross Alpha/Beta	Gross Beta	2.08E-14	1.58E-14	2.43E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254345	VP-56	04/04/22	Gross Alpha/Beta	Gross Alpha	3.29E-15	6.03E-15	1.07E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254345	VP-56	04/04/22	Gross Alpha/Beta	Gross Beta	2.16E-14	1.59E-14	2.43E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254346	VP-56	04/05/22	Gross Alpha/Beta	Gross Beta	3.37E-14	1.80E-14	2.59E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254346	VP-56	04/05/22	Gross Alpha/Beta	Gross Alpha	2.21E-15	5.86E-15	1.14E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254347	VP-56	04/05/22	Gross Alpha/Beta	Gross Beta	3.12E-14	1.78E-14	2.59E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254347	VP-56	04/05/22	Gross Alpha/Beta	Gross Alpha	2.21E-15	5.86E-15	1.14E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254348	VP-56	04/06/22	Gross Alpha/Beta	Gross Alpha	-3.58E-16	4.35E-15	1.08E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254348	VP-56	04/06/22	Gross Alpha/Beta	Gross Beta	2.18E-14	1.60E-14	2.46E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254349	VP-56	04/06/22	Gross Alpha/Beta	Gross Alpha	2.10E-15	5.57E-15	1.08E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254349	VP-56	04/06/22	Gross Alpha/Beta	Gross Beta	1.07E-14	1.48E-14	2.46E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254350	VP-56	04/07/22	Gross Alpha/Beta	Gross Alpha	8.24E-15	7.85E-15	1.08E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254350	VP-56	04/07/22	Gross Alpha/Beta	Gross Beta	1.39E-14	1.52E-14	2.46E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254351	VP-56	04/07/22	Gross Alpha/Beta	Gross Alpha	5.73E-15	6.95E-15	1.07E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254351	VP-56	04/07/22	Gross Alpha/Beta	Gross Beta	9.03E-15	1.45E-14	2.43E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254352	VP-56	04/12/22	Gross Alpha/Beta	Gross Alpha	8.53E-16	4.90E-15	1.06E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254352	VP-56	04/12/22	Gross Alpha/Beta	Gross Beta	1.75E-14	1.53E-14	2.41E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254353	VP-56	04/12/22	Gross Alpha/Beta	Gross Alpha	-3.51E-16	4.27E-15	1.06E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254353	VP-56	04/12/22	Gross Alpha/Beta	Gross Beta	1.28E-14	1.48E-14	2.41E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP254354	VP-56	04/14/22	Gross Alpha/Beta	Gross Alpha	8.16E-15	7.77E-15	1.07E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254354	VP-56	04/14/22	Gross Alpha/Beta	Gross Beta	2.31E-14	1.61E-14	2.43E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254355	VP-56	04/14/22	Gross Alpha/Beta	Gross Beta	3.19E-14	1.74E-14	2.51E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254355	VP-56	04/14/22	Gross Alpha/Beta	Gross Alpha	8.88E-16	5.10E-15	1.10E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254356	VP-56	04/18/22	Gross Alpha/Beta	Gross Alpha	-1.57E-15	3.56E-15	1.07E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254356	VP-56	04/18/22	Gross Alpha/Beta	Gross Beta	2.39E-14	1.61E-14	2.43E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254357	VP-56	04/18/22	Gross Alpha/Beta	Gross Alpha	5.73E-15	6.95E-15	1.07E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP254357	VP-56	04/18/22	Gross Alpha/Beta	Gross Beta	1.69E-14	1.54E-14	2.43E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP254357	VP-56	04/18/22	Gross Alpha/Beta	Gross Alpha	8.61E-16	4.95E-15	1.07E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254357	VP-56	04/18/22	Gross Alpha/Beta	Gross Beta	2.31E-14	1.61E-14	2.43E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254378	VP-56	04/19/22	Gross Alpha/Beta	Gross Beta	3.09E-14	1.72E-14	2.49E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254378	VP-56	04/19/22	Gross Alpha/Beta	Gross Alpha	-1.43E-15	2.55E-15	9.35E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254379	VP-56	04/19/22	Gross Alpha/Beta	Gross Alpha	2.24E-15	4.95E-15	9.35E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254379	VP-56	04/19/22	Gross Alpha/Beta	Gross Beta	1.77E-14	1.58E-14	2.49E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254380	VP-56	04/20/22	Gross Alpha/Beta	Gross Alpha	1.12E-15	4.73E-15	1.03E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254380	VP-56	04/20/22	Gross Alpha/Beta	Gross Beta	2.40E-14	1.79E-14	2.74E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254381	VP-56	04/20/22	Gross Alpha/Beta	Gross Beta	3.58E-14	1.92E-14	2.74E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254381	VP-56	04/20/22	Gross Alpha/Beta	Gross Alpha	2.46E-15	5.44E-15	1.03E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254382	VP-56	04/21/22	Gross Alpha/Beta	Gross Alpha	3.46E-15	5.52E-15	9.35E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254382	VP-56	04/21/22	Gross Alpha/Beta	Gross Beta	-5.16E-16	1.37E-14	2.49E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254383	VP-56	04/21/22	Gross Alpha/Beta	Gross Beta	3.58E-14	1.78E-14	2.49E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254383	VP-56	04/21/22	Gross Alpha/Beta	Gross Alpha	4.68E-15	6.04E-15	9.35E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254384	VP-56	04/25/22	Gross Alpha/Beta	Gross Alpha	3.43E-15	5.46E-15	9.25E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254384	VP-56	04/25/22	Gross Alpha/Beta	Gross Beta	1.50E-14	1.54E-14	2.46E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254385	VP-56	04/25/22	Gross Alpha/Beta	Gross Alpha	-2.62E-15	7.53E-16	9.25E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254385	VP-56	04/25/22	Gross Alpha/Beta	Gross Beta	1.50E-14	1.54E-14	2.46E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254386	VP-56	04/26/22	Gross Alpha/Beta	Gross Alpha	2.20E-15	4.85E-15	9.16E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254386	VP-56	04/26/22	Gross Alpha/Beta	Gross Beta	2.06E-14	1.59E-14	2.44E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254387	VP-56	04/26/22	Gross Alpha/Beta	Gross Alpha	2.20E-15	4.85E-15	9.16E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254387	VP-56	04/26/22	Gross Alpha/Beta	Gross Beta	1.25E-14	1.50E-14	2.44E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254388	VP-56	04/27/22	Gross Alpha/Beta	Gross Alpha	5.91E-15	6.52E-15	9.35E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254388	VP-56	04/27/22	Gross Alpha/Beta	Gross Beta	2.35E-14	1.64E-14	2.49E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254389	VP-56	04/27/22	Gross Alpha/Beta	Gross Alpha	4.68E-15	6.04E-15	9.35E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254389	VP-56	04/27/22	Gross Alpha/Beta	Gross Beta	2.26E-14	1.64E-14	2.49E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254390	VP-56	04/28/22	Gross Alpha/Beta	Gross Beta	4.78E-14	1.89E-14	2.46E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254390	VP-56	04/28/22	Gross Alpha/Beta	Gross Alpha	5.85E-15	6.46E-15	9.25E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254391	VP-56	04/28/22	Gross Alpha/Beta	Gross Beta	5.35E-14	1.94E-14	2.46E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254391	VP-56	04/28/22	Gross Alpha/Beta	Gross Alpha	7.06E-15	6.90E-15	9.25E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254392	VP-56	05/02/22	Gross Alpha/Beta	Gross Alpha	-1.98E-16	3.43E-15	9.07E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254392	VP-56	05/02/22	Gross Alpha/Beta	Gross Beta	2.04E-14	1.57E-14	2.42E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254393	VP-56	05/02/22	Gross Alpha/Beta	Gross Alpha	4.55E-15	5.86E-15	9.07E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP254393	VP-56	05/02/22	Gross Alpha/Beta	Gross Beta	2.28E-14	1.60E-14	2.42E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254394	VP-56	05/03/22	Gross Alpha/Beta	Gross Alpha	3.39E-15	5.41E-15	9.16E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254394	VP-56	05/03/22	Gross Alpha/Beta	Gross Beta	1.97E-14	1.58E-14	2.44E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254395	VP-56	05/03/22	Gross Alpha/Beta	Gross Alpha	-1.40E-15	2.50E-15	9.16E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254395	VP-56	05/03/22	Gross Alpha/Beta	Gross Beta	1.81E-14	1.56E-14	2.44E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254396	VP-56	05/04/22	Gross Alpha/Beta	Gross Alpha	9.69E-16	4.09E-15	8.90E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254396	VP-56	05/04/22	Gross Alpha/Beta	Gross Beta	1.05E-14	1.43E-14	2.37E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254397	VP-56	05/04/22	Gross Alpha/Beta	Gross Alpha	2.13E-15	4.71E-15	8.90E-15	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP254397	VP-56	05/04/22	Gross Alpha/Beta	Gross Beta	2.31E-14	1.57E-14	2.37E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP254397	VP-56	05/04/22	Gross Alpha/Beta	Gross Beta	2.70E-14	1.62E-14	2.37E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254397	VP-56	05/04/22	Gross Alpha/Beta	Gross Alpha	-1.94E-16	3.36E-15	8.90E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254469	VP-56	05/09/22	Gross Alpha/Beta	Gross Alpha	1.16E-14	8.09E-15	8.04E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254469	VP-56	05/09/22	Gross Alpha/Beta	Gross Beta	3.14E-14	1.67E-14	2.38E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254470	VP-56	05/09/22	Gross Alpha/Beta	Gross Alpha	9.22E-15	7.31E-15	8.04E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254470	VP-56	05/09/22	Gross Alpha/Beta	Gross Beta	4.04E-14	1.77E-14	2.38E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254471	VP-56	05/10/22	Gross Alpha/Beta	Gross Alpha	1.27E-14	8.37E-15	7.96E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254471	VP-56	05/10/22	Gross Alpha/Beta	Gross Beta	5.14E-14	1.87E-14	2.35E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254472	VP-56	05/10/22	Gross Alpha/Beta	Gross Beta	6.03E-14	1.96E-14	2.35E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254472	VP-56	05/10/22	Gross Alpha/Beta	Gross Alpha	4.34E-15	5.40E-15	7.96E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254473	VP-56	05/11/22	Gross Alpha/Beta	Gross Alpha	1.15E-14	8.01E-15	7.96E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254473	VP-56	05/11/22	Gross Alpha/Beta	Gross Beta	4.33E-14	1.79E-14	2.35E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254474	VP-56	05/11/22	Gross Alpha/Beta	Gross Beta	3.44E-14	1.69E-14	2.35E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254474	VP-56	05/11/22	Gross Alpha/Beta	Gross Alpha	6.74E-15	6.38E-15	7.96E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254475	VP-56	05/12/22	Gross Alpha/Beta	Gross Alpha	1.61E-14	9.63E-15	8.46E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254475	VP-56	05/12/22	Gross Alpha/Beta	Gross Beta	4.43E-14	1.88E-14	2.50E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254476	VP-56	05/12/22	Gross Alpha/Beta	Gross Beta	4.34E-14	1.87E-14	2.50E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254476	VP-56	05/12/22	Gross Alpha/Beta	Gross Alpha	5.89E-15	6.28E-15	8.46E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254477	VP-56	05/16/22	Gross Alpha/Beta	Gross Beta	4.36E-14	1.78E-14	2.33E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254477	VP-56	05/16/22	Gross Alpha/Beta	Gross Alpha	3.11E-15	4.78E-15	7.88E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254478	VP-56	05/16/22	Gross Alpha/Beta	Gross Beta	3.08E-14	1.64E-14	2.33E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254478	VP-56	05/16/22	Gross Alpha/Beta	Gross Alpha	5.49E-15	5.85E-15	7.88E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254479	VP-56	05/17/22	Gross Alpha/Beta	Gross Alpha	9.41E-15	7.46E-15	8.20E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254479	VP-56	05/17/22	Gross Alpha/Beta	Gross Beta	3.62E-14	1.75E-14	2.43E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254480	VP-56	05/17/22	Gross Alpha/Beta	Gross Beta	2.96E-14	1.68E-14	2.43E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254480	VP-56	05/17/22	Gross Alpha/Beta	Gross Alpha	6.94E-15	6.58E-15	8.20E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254481	VP-56	05/18/22	Gross Alpha/Beta	Gross Alpha	9.41E-15	7.46E-15	8.20E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254481	VP-56	05/18/22	Gross Alpha/Beta	Gross Beta	4.79E-14	1.88E-14	2.43E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254482	VP-56	05/18/22	Gross Alpha/Beta	Gross Alpha	1.19E-14	8.26E-15	8.20E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254482	VP-56	05/18/22	Gross Alpha/Beta	Gross Beta	4.29E-14	1.82E-14	2.43E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254483	VP-56	05/19/22	Gross Alpha/Beta	Gross Alpha	1.15E-14	9.14E-15	1.00E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254483	VP-56	05/19/22	Gross Alpha/Beta	Gross Beta	3.42E-14	2.04E-14	2.97E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP254484	VP-56	05/19/22	Gross Alpha/Beta	Gross Beta	4.54E-14	2.16E-14	2.97E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254484	VP-56	05/19/22	Gross Alpha/Beta	Gross Alpha	1.00E-14	8.62E-15	1.00E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254485	VP-56	05/23/22	Gross Alpha/Beta	Gross Alpha	3.14E-15	4.83E-15	7.96E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254485	VP-56	05/23/22	Gross Alpha/Beta	Gross Beta	1.17E-14	1.44E-14	2.35E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254486	VP-56	05/23/22	Gross Alpha/Beta	Gross Beta	2.95E-14	1.64E-14	2.35E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254486	VP-56	05/23/22	Gross Alpha/Beta	Gross Alpha	1.95E-15	4.19E-15	7.96E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254487	VP-56	05/24/22	Gross Alpha/Beta	Gross Beta	3.46E-14	1.74E-14	2.43E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254487	VP-56	05/24/22	Gross Alpha/Beta	Gross Alpha	8.18E-15	7.03E-15	8.20E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254488	VP-56	05/24/22	Gross Alpha/Beta	Gross Beta	3.04E-14	1.69E-14	2.43E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP254488	VP-56	05/24/22	Gross Alpha/Beta	Gross Alpha	6.94E-15	6.58E-15	8.20E-15	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP254488	VP-56	05/24/22	Gross Alpha/Beta	Gross Beta	2.71E-14	1.65E-14	2.43E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254488	VP-56	05/24/22	Gross Alpha/Beta	Gross Alpha	8.18E-15	7.03E-15	8.20E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254489	VP-56	05/25/22	Gross Alpha/Beta	Gross Alpha	2.27E-15	5.00E-15	9.46E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254489	VP-56	05/25/22	Gross Alpha/Beta	Gross Beta	7.12E-15	1.14E-14	1.92E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254490	VP-56	05/25/22	Gross Alpha/Beta	Gross Alpha	2.27E-15	5.00E-15	9.46E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254490	VP-56	05/25/22	Gross Alpha/Beta	Gross Beta	1.20E-14	1.21E-14	1.92E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254491	VP-56	05/26/22	Gross Alpha/Beta	Gross Alpha	3.65E-15	5.81E-15	9.85E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254491	VP-56	05/26/22	Gross Alpha/Beta	Gross Beta	4.04E-15	1.14E-14	2.00E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254492	VP-56	05/26/22	Gross Alpha/Beta	Gross Alpha	3.65E-15	5.81E-15	9.85E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254492	VP-56	05/26/22	Gross Alpha/Beta	Gross Beta	1.92E-14	1.35E-14	2.00E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254493	VP-56	05/31/22	Gross Alpha/Beta	Gross Beta	3.01E-14	1.46E-14	1.94E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254493	VP-56	05/31/22	Gross Alpha/Beta	Gross Alpha	7.28E-15	7.12E-15	9.55E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP254494	VP-56	05/31/22	Gross Alpha/Beta	Gross Alpha	1.10E-14	8.36E-15	9.55E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254494	VP-56	05/31/22	Gross Alpha/Beta	Gross Beta	2.76E-14	1.43E-14	1.94E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254495	VP-56	06/01/22	Gross Alpha/Beta	Gross Alpha	-1.73E-15	3.11E-15	1.14E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254495	VP-56	06/01/22	Gross Alpha/Beta	Gross Beta	1.44E-14	1.46E-14	2.31E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254496	VP-56	06/02/22	Gross Alpha/Beta	Gross Alpha	2.29E-15	5.05E-15	9.55E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254496	VP-56	06/02/22	Gross Alpha/Beta	Gross Beta	-9.88E-16	1.03E-14	1.94E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254497	VP-56	06/02/22	Gross Alpha/Beta	Gross Alpha	-2.08E-16	3.61E-15	9.55E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254497	VP-56	06/02/22	Gross Alpha/Beta	Gross Beta	6.47E-16	1.06E-14	1.94E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254498	VP-56	06/07/22	Gross Alpha/Beta	Gross Beta	2.33E-14	1.36E-14	1.92E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254498	VP-56	06/07/22	Gross Alpha/Beta	Gross Alpha	1.03E-15	4.35E-15	9.46E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254499	VP-56	06/07/22	Gross Alpha/Beta	Gross Alpha	9.68E-15	7.89E-15	9.46E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254499	VP-56	06/07/22	Gross Alpha/Beta	Gross Beta	3.46E-14	1.50E-14	1.92E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254500	VP-56	06/08/22	Gross Alpha/Beta	Gross Alpha	-1.80E-15	3.22E-15	1.18E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254500	VP-56	06/08/22	Gross Alpha/Beta	Gross Beta	-2.10E-16	1.29E-14	2.40E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254501	VP-56	06/08/22	Gross Alpha/Beta	Gross Beta	2.37E-14	1.61E-14	2.37E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254501	VP-56	06/08/22	Gross Alpha/Beta	Gross Alpha	7.36E-15	8.13E-15	1.17E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254502	VP-56	06/08/22	Gross Alpha/Beta	Gross Alpha	-2.02E-15	3.62E-15	1.33E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254502	VP-56	06/08/22	Gross Alpha/Beta	Gross Beta	8.85E-15	1.59E-14	2.70E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254503	VP-56	06/09/22	Gross Alpha/Beta	Gross Alpha	1.24E-15	5.23E-15	1.14E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP254503	VP-56	06/09/22	Gross Alpha/Beta	Gross Beta	3.69E-15	1.30E-14	2.31E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254504	VP-56	06/13/22	Gross Alpha/Beta	Gross Beta	3.79E-14	1.92E-14	2.59E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP254504	VP-56	06/13/22	Gross Alpha/Beta	Gross Alpha	3.05E-15	6.74E-15	1.27E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254505	VP-56	06/13/22	Gross Alpha/Beta	Gross Alpha	-2.08E-16	3.61E-15	9.55E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254505	VP-56	06/13/22	Gross Alpha/Beta	Gross Beta	9.64E-15	1.19E-14	1.94E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254506	VP-56	06/14/22	Gross Alpha/Beta	Gross Beta	4.73E-14	1.66E-14	1.94E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254506	VP-56	06/14/22	Gross Alpha/Beta	Gross Alpha	4.79E-15	6.17E-15	9.55E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254507	VP-56	06/15/22	Gross Alpha/Beta	Gross Beta	4.15E-14	1.60E-14	1.94E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP254507	VP-56	06/15/22	Gross Alpha/Beta	Gross Alpha	2.29E-15	5.05E-15	9.55E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254508	VP-56	06/16/22	Gross Alpha/Beta	Gross Beta	1.95E-14	1.32E-14	1.94E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP254508	VP-56	06/16/22	Gross Alpha/Beta	Gross Alpha	-2.08E-16	3.61E-15	9.55E-15	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP254508	VP-56	06/16/22	Gross Alpha/Beta	Gross Alpha	1.04E-15	4.39E-15	9.55E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP254508	VP-56	06/16/22	Gross Alpha/Beta	Gross Beta	1.37E-14	1.25E-14	1.94E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258523	VP-56	06/20/22	Gross Alpha/Beta	Gross Alpha	1.07E-15	3.50E-15	7.66E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258523	VP-56	06/20/22	Gross Alpha/Beta	Gross Beta	2.03E-15	1.40E-14	2.49E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258524	VP-56	06/21/22	Gross Alpha/Beta	Gross Alpha	3.44E-15	4.83E-15	7.51E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258524	VP-56	06/21/22	Gross Alpha/Beta	Gross Beta	2.14E-14	1.59E-14	2.44E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258525	VP-56	06/22/22	Gross Alpha/Beta	Gross Beta	3.03E-14	1.81E-14	2.65E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258525	VP-56	06/22/22	Gross Alpha/Beta	Gross Alpha	3.74E-15	5.24E-15	8.15E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258526	VP-56	06/23/22	Gross Alpha/Beta	Gross Beta	3.64E-14	1.77E-14	2.46E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258526	VP-56	06/23/22	Gross Alpha/Beta	Gross Alpha	2.27E-15	4.23E-15	7.58E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258527	VP-56	06/27/22	Gross Alpha/Beta	Gross Beta	2.79E-14	1.66E-14	2.44E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258527	VP-56	06/27/22	Gross Alpha/Beta	Gross Alpha	1.05E-15	3.43E-15	7.51E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258528	VP-56	06/27/22	Gross Alpha/Beta	Gross Alpha	9.43E-15	7.24E-15	7.51E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258528	VP-56	06/27/22	Gross Alpha/Beta	Gross Beta	4.01E-14	1.79E-14	2.44E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258529	VP-56	06/28/22	Gross Alpha/Beta	Gross Alpha	9.43E-15	7.24E-15	7.51E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258529	VP-56	06/28/22	Gross Alpha/Beta	Gross Beta	2.22E-14	1.60E-14	2.44E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258530	VP-56	06/28/22	Gross Alpha/Beta	Gross Beta	2.63E-14	1.65E-14	2.44E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258530	VP-56	06/28/22	Gross Alpha/Beta	Gross Alpha	3.44E-15	4.83E-15	7.51E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258531	VP-56	06/29/22	Gross Alpha/Beta	Gross Beta	5.00E-14	1.92E-14	2.49E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258531	VP-56	06/29/22	Gross Alpha/Beta	Gross Alpha	5.96E-15	6.03E-15	7.66E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258532	VP-56	06/29/22	Gross Alpha/Beta	Gross Beta	2.93E-14	1.71E-14	2.49E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258532	VP-56	06/29/22	Gross Alpha/Beta	Gross Alpha	1.07E-15	3.50E-15	7.66E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258533	VP-56	06/30/22	Gross Alpha/Beta	Gross Beta	5.55E-14	1.95E-14	2.44E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258533	VP-56	06/30/22	Gross Alpha/Beta	Gross Alpha	2.25E-15	4.18E-15	7.51E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258534	VP-56	06/30/22	Gross Alpha/Beta	Gross Beta	2.95E-14	1.68E-14	2.44E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258534	VP-56	06/30/22	Gross Alpha/Beta	Gross Alpha	-1.50E-16	2.45E-15	7.51E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258535	VP-56	07/05/22	Gross Alpha/Beta	Gross Beta	2.88E-14	1.72E-14	2.51E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258535	VP-56	07/05/22	Gross Alpha/Beta	Gross Alpha	2.31E-15	4.31E-15	7.74E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258536	VP-56	07/05/22	Gross Alpha/Beta	Gross Alpha	9.72E-15	7.46E-15	7.74E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258536	VP-56	07/05/22	Gross Alpha/Beta	Gross Beta	1.79E-14	1.60E-14	2.51E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP258537	VP-56	07/06/22	Gross Alpha/Beta	Gross Alpha	3.41E-15	4.78E-15	7.43E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258537	VP-56	07/06/22	Gross Alpha/Beta	Gross Beta	1.80E-14	1.54E-14	2.41E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258538	VP-56	07/06/22	Gross Alpha/Beta	Gross Alpha	4.60E-15	5.34E-15	7.43E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258538	VP-56	07/06/22	Gross Alpha/Beta	Gross Beta	2.28E-14	1.60E-14	2.41E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258539	VP-56	07/07/22	Gross Alpha/Beta	Gross Alpha	4.69E-15	5.45E-15	7.58E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258539	VP-56	07/07/22	Gross Alpha/Beta	Gross Beta	7.74E-15	1.45E-14	2.46E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258540	VP-56	07/07/22	Gross Alpha/Beta	Gross Beta	4.13E-14	1.82E-14	2.46E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258540	VP-56	07/07/22	Gross Alpha/Beta	Gross Alpha	4.69E-15	5.45E-15	7.58E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258541	VP-56	07/11/22	Gross Alpha/Beta	Gross Beta	5.19E-14	1.93E-14	2.46E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258541	VP-56	07/11/22	Gross Alpha/Beta	Gross Alpha	4.69E-15	5.45E-15	7.58E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258542	VP-56	07/11/22	Gross Alpha/Beta	Gross Alpha	8.32E-15	6.89E-15	7.58E-15	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP258542	VP-56	07/11/22	Gross Alpha/Beta	Gross Beta	3.06E-14	1.71E-14	2.46E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP258542	VP-56	07/11/22	Gross Alpha/Beta	Gross Beta	3.39E-14	1.74E-14	2.46E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258542	VP-56	07/11/22	Gross Alpha/Beta	Gross Alpha	4.69E-15	5.45E-15	7.58E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258577	VP-56	07/12/22	Gross Alpha/Beta	Gross Alpha	1.07E-14	7.95E-15	8.43E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258577	VP-56	07/12/22	Gross Alpha/Beta	Gross Beta	2.58E-14	1.67E-14	2.48E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258578	VP-56	07/12/22	Gross Alpha/Beta	Gross Alpha	9.12E-15	7.32E-15	8.18E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258578	VP-56	07/12/22	Gross Alpha/Beta	Gross Beta	3.15E-14	1.69E-14	2.41E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258579	VP-56	07/13/22	Gross Alpha/Beta	Gross Beta	2.69E-14	1.61E-14	2.36E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258579	VP-56	07/13/22	Gross Alpha/Beta	Gross Alpha	6.57E-15	6.32E-15	8.02E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258580	VP-56	07/13/22	Gross Alpha/Beta	Gross Alpha	1.49E-14	8.96E-15	8.02E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258580	VP-56	07/13/22	Gross Alpha/Beta	Gross Beta	3.73E-14	1.73E-14	2.36E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258581	VP-56	07/14/22	Gross Alpha/Beta	Gross Alpha	9.12E-15	7.32E-15	8.18E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258581	VP-56	07/14/22	Gross Alpha/Beta	Gross Beta	3.81E-14	1.76E-14	2.41E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258582	VP-56	07/14/22	Gross Alpha/Beta	Gross Beta	4.79E-14	1.86E-14	2.41E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258582	VP-56	07/14/22	Gross Alpha/Beta	Gross Alpha	7.91E-15	6.89E-15	8.18E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258583	VP-56	07/18/22	Gross Alpha/Beta	Gross Alpha	1.47E-14	8.88E-15	7.94E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258583	VP-56	07/18/22	Gross Alpha/Beta	Gross Beta	5.36E-14	1.88E-14	2.34E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258584	VP-56	07/18/22	Gross Alpha/Beta	Gross Alpha	1.00E-14	7.49E-15	7.94E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258584	VP-56	07/18/22	Gross Alpha/Beta	Gross Beta	5.05E-14	1.85E-14	2.34E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258585	VP-56	07/19/22	Gross Alpha/Beta	Gross Alpha	8.86E-15	7.10E-15	7.94E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258585	VP-56	07/19/22	Gross Alpha/Beta	Gross Beta	4.49E-14	1.79E-14	2.34E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258586	VP-56	07/19/22	Gross Alpha/Beta	Gross Beta	4.41E-14	1.78E-14	2.34E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258586	VP-56	07/19/22	Gross Alpha/Beta	Gross Alpha	7.68E-15	6.69E-15	7.94E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258587	VP-56	07/20/22	Gross Alpha/Beta	Gross Alpha	1.29E-14	8.54E-15	8.26E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258587	VP-56	07/20/22	Gross Alpha/Beta	Gross Beta	4.42E-14	1.84E-14	2.43E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258588	VP-56	07/20/22	Gross Alpha/Beta	Gross Beta	4.01E-14	1.80E-14	2.43E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258588	VP-56	07/20/22	Gross Alpha/Beta	Gross Alpha	4.33E-15	5.51E-15	8.26E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258589	VP-56	07/21/22	Gross Alpha/Beta	Gross Beta	4.25E-14	1.77E-14	2.34E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258589	VP-56	07/21/22	Gross Alpha/Beta	Gross Alpha	7.68E-15	6.69E-15	7.94E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258590	VP-56	07/21/22	Gross Alpha/Beta	Gross Alpha	1.00E-14	7.49E-15	7.94E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP258590	VP-56	07/21/22	Gross Alpha/Beta	Gross Beta	3.54E-14	1.69E-14	2.34E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258591	VP-56	07/25/22	Gross Alpha/Beta	Gross Beta	3.24E-14	1.70E-14	2.41E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258591	VP-56	07/25/22	Gross Alpha/Beta	Gross Alpha	4.28E-15	5.45E-15	8.18E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258592	VP-56	07/25/22	Gross Alpha/Beta	Gross Alpha	6.70E-15	6.45E-15	8.18E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258592	VP-56	07/25/22	Gross Alpha/Beta	Gross Beta	1.93E-14	1.56E-14	2.41E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258593	VP-56	08/03/22	Gross Alpha/Beta	Gross Alpha	3.99E-15	6.34E-15	1.06E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258593	VP-56	08/03/22	Gross Alpha/Beta	Gross Beta	1.64E-15	1.75E-14	3.13E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258594	VP-56	08/03/22	Gross Alpha/Beta	Gross Alpha	2.10E-15	4.76E-15	9.19E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258594	VP-56	08/03/22	Gross Alpha/Beta	Gross Beta	1.15E-14	1.63E-14	2.71E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258595	VP-56	08/08/22	Gross Alpha/Beta	Gross Alpha	6.22E-15	1.41E-14	2.73E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258595	VP-56	08/08/22	Gross Alpha/Beta	Gross Beta	4.78E-14	5.00E-14	8.03E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258596	VP-56	08/08/22	Gross Alpha/Beta	Gross Alpha	5.46E-14	3.16E-14	2.73E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP258596	VP-56	08/08/22	Gross Alpha/Beta	Gross Beta	8.33E-14	5.40E-14	8.03E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP258596	VP-56	08/08/22	Gross Alpha/Beta	Gross Alpha	6.22E-15	1.41E-14	2.73E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258596	VP-56	08/08/22	Gross Alpha/Beta	Gross Beta	4.24E-14	4.94E-14	8.03E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258597	VP-56	08/09/22	Gross Alpha/Beta	Gross Alpha	2.76E-15	5.26E-15	9.50E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258597	VP-56	08/09/22	Gross Alpha/Beta	Gross Beta	8.34E-15	1.19E-14	1.98E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258598	VP-56	08/09/22	Gross Alpha/Beta	Gross Alpha	5.48E-15	6.56E-15	9.70E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258598	VP-56	08/09/22	Gross Alpha/Beta	Gross Beta	7.65E-15	1.20E-14	2.02E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258599	VP-56	08/10/22	Gross Alpha/Beta	Gross Beta	2.15E-14	1.31E-14	1.86E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258599	VP-56	08/10/22	Gross Alpha/Beta	Gross Alpha	3.83E-15	5.52E-15	8.94E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258600	VP-56	08/10/22	Gross Alpha/Beta	Gross Beta	2.31E-14	1.33E-14	1.86E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258600	VP-56	08/10/22	Gross Alpha/Beta	Gross Alpha	6.27E-15	6.53E-15	8.94E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258601	VP-56	08/11/22	Gross Alpha/Beta	Gross Beta	3.95E-14	1.52E-14	1.84E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258601	VP-56	08/11/22	Gross Alpha/Beta	Gross Alpha	1.36E-15	4.26E-15	8.85E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258602	VP-56	08/11/22	Gross Alpha/Beta	Gross Beta	2.13E-14	1.30E-14	1.84E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258602	VP-56	08/11/22	Gross Alpha/Beta	Gross Alpha	1.52E-16	3.50E-15	8.85E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258603	VP-56	08/15/22	Gross Alpha/Beta	Gross Beta	2.74E-14	1.40E-14	1.88E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258603	VP-56	08/15/22	Gross Alpha/Beta	Gross Alpha	3.86E-15	5.58E-15	9.03E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258604	VP-56	08/15/22	Gross Alpha/Beta	Gross Alpha	1.14E-14	8.36E-15	9.12E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258604	VP-56	08/15/22	Gross Alpha/Beta	Gross Beta	5.05E-14	1.68E-14	1.90E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258605	VP-56	08/16/22	Gross Alpha/Beta	Gross Beta	5.12E-14	1.73E-14	1.96E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258605	VP-56	08/16/22	Gross Alpha/Beta	Gross Alpha	4.02E-15	5.81E-15	9.40E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258606	VP-56	08/16/22	Gross Alpha/Beta	Gross Beta	2.01E-14	1.34E-14	1.96E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258606	VP-56	08/16/22	Gross Alpha/Beta	Gross Alpha	9.17E-15	7.79E-15	9.40E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258607	VP-56	08/17/22	Gross Alpha/Beta	Gross Alpha	1.11E-14	8.11E-15	8.85E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258607	VP-56	08/17/22	Gross Alpha/Beta	Gross Beta	3.48E-14	1.47E-14	1.84E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258608	VP-56	08/17/22	Gross Alpha/Beta	Gross Beta	3.40E-14	1.46E-14	1.84E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258608	VP-56	08/17/22	Gross Alpha/Beta	Gross Alpha	3.79E-15	5.47E-15	8.85E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258609	VP-56	08/18/22	Gross Alpha/Beta	Gross Alpha	1.10E-14	8.03E-15	8.77E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258609	VP-56	08/18/22	Gross Alpha/Beta	Gross Beta	2.19E-14	1.29E-14	1.82E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP258610	VP-56	08/18/22	Gross Alpha/Beta	Gross Alpha	1.22E-14	8.40E-15	8.77E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258610	VP-56	08/18/22	Gross Alpha/Beta	Gross Beta	3.84E-14	1.50E-14	1.82E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258611	VP-56	08/22/22	Gross Alpha/Beta	Gross Beta	4.07E-14	1.53E-14	1.82E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258611	VP-56	08/22/22	Gross Alpha/Beta	Gross Alpha	2.55E-15	4.85E-15	8.77E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258612	VP-56	08/22/22	Gross Alpha/Beta	Gross Beta	2.89E-14	1.38E-14	1.82E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258612	VP-56	08/22/22	Gross Alpha/Beta	Gross Alpha	1.35E-15	4.21E-15	8.77E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258613	VP-56	08/23/22	Gross Alpha/Beta	Gross Beta	5.25E-14	1.66E-14	1.82E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258613	VP-56	08/23/22	Gross Alpha/Beta	Gross Alpha	8.55E-15	7.26E-15	8.77E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258614	VP-56	08/23/22	Gross Alpha/Beta	Gross Alpha	1.82E-14	1.00E-14	8.77E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258614	VP-56	08/23/22	Gross Alpha/Beta	Gross Beta	4.07E-14	1.53E-14	1.82E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258615	VP-56	08/24/22	Gross Alpha/Beta	Gross Beta	3.70E-14	1.54E-14	1.92E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258615	VP-56	08/24/22	Gross Alpha/Beta	Gross Alpha	7.72E-15	7.19E-15	9.21E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258616	VP-56	08/24/22	Gross Alpha/Beta	Gross Beta	5.35E-14	1.73E-14	1.92E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP258616	VP-56	08/24/22	Gross Alpha/Beta	Gross Alpha	8.99E-15	7.63E-15	9.21E-15	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP258616	VP-56	08/24/22	Gross Alpha/Beta	Gross Beta	5.52E-14	1.75E-14	1.92E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258616	VP-56	08/24/22	Gross Alpha/Beta	Gross Alpha	7.72E-15	7.19E-15	9.21E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258623	VP-56	08/25/22	Gross Alpha/Beta	Gross Beta	6.00E-14	1.85E-14	2.04E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258623	VP-56	08/25/22	Gross Alpha/Beta	Gross Alpha	3.61E-15	6.83E-15	1.22E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258624	VP-56	08/25/22	Gross Alpha/Beta	Gross Beta	2.66E-14	1.47E-14	2.04E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258624	VP-56	08/25/22	Gross Alpha/Beta	Gross Alpha	6.16E-15	7.73E-15	1.22E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258625	VP-56	08/29/22	Gross Alpha/Beta	Gross Alpha	-3.84E-15	2.64E-15	1.16E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258625	VP-56	08/29/22	Gross Alpha/Beta	Gross Beta	4.70E-15	1.12E-14	1.94E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258626	VP-56	08/29/22	Gross Alpha/Beta	Gross Alpha	-1.41E-15	4.32E-15	1.16E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258626	VP-56	08/29/22	Gross Alpha/Beta	Gross Beta	1.66E-14	1.28E-14	1.94E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258627	VP-56	08/30/22	Gross Alpha/Beta	Gross Beta	3.12E-14	1.48E-14	1.96E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258627	VP-56	08/30/22	Gross Alpha/Beta	Gross Alpha	-2.65E-15	3.62E-15	1.17E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258628	VP-56	08/30/22	Gross Alpha/Beta	Gross Beta	2.40E-14	1.39E-14	1.96E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258628	VP-56	08/30/22	Gross Alpha/Beta	Gross Alpha	5.92E-15	7.43E-15	1.17E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258629	VP-56	08/31/22	Gross Alpha/Beta	Gross Alpha	-2.60E-15	3.55E-15	1.15E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258629	VP-56	08/31/22	Gross Alpha/Beta	Gross Beta	3.87E-15	1.10E-14	1.93E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258630	VP-56	08/31/22	Gross Alpha/Beta	Gross Beta	2.22E-14	1.36E-14	1.94E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258630	VP-56	08/31/22	Gross Alpha/Beta	Gross Alpha	3.43E-15	6.50E-15	1.16E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258631	VP-56	09/01/22	Gross Alpha/Beta	Gross Beta	2.25E-14	1.34E-14	1.91E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258631	VP-56	09/01/22	Gross Alpha/Beta	Gross Alpha	8.13E-15	7.97E-15	1.14E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258632	VP-56	09/01/22	Gross Alpha/Beta	Gross Alpha	3.37E-15	6.37E-15	1.14E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258632	VP-56	09/01/22	Gross Alpha/Beta	Gross Beta	1.55E-14	1.25E-14	1.91E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258633	VP-56	09/06/22	Gross Alpha/Beta	Gross Alpha	1.41E-14	9.62E-15	1.14E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258633	VP-56	09/06/22	Gross Alpha/Beta	Gross Beta	3.42E-14	1.48E-14	1.91E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258634	VP-56	09/06/22	Gross Alpha/Beta	Gross Beta	4.43E-14	1.60E-14	1.91E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258634	VP-56	09/06/22	Gross Alpha/Beta	Gross Alpha	5.75E-15	7.22E-15	1.14E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258635	VP-56	09/07/22	Gross Alpha/Beta	Gross Beta	3.96E-14	1.57E-14	1.94E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP258635	VP-56	09/07/22	Gross Alpha/Beta	Gross Alpha	5.86E-15	7.36E-15	1.16E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258636	VP-56	09/07/22	Gross Alpha/Beta	Gross Beta	5.27E-14	1.80E-14	2.09E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258636	VP-56	09/07/22	Gross Alpha/Beta	Gross Alpha	7.59E-15	8.32E-15	1.24E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258637	VP-56	09/08/22	Gross Alpha/Beta	Gross Beta	3.11E-14	1.45E-14	1.91E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258637	VP-56	09/08/22	Gross Alpha/Beta	Gross Alpha	3.37E-15	6.37E-15	1.14E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258638	VP-56	09/08/22	Gross Alpha/Beta	Gross Beta	3.58E-14	1.50E-14	1.91E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258638	VP-56	09/08/22	Gross Alpha/Beta	Gross Alpha	8.13E-15	7.97E-15	1.14E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258639	VP-56	09/12/22	Gross Alpha/Beta	Gross Alpha	1.17E-14	9.00E-15	1.14E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258639	VP-56	09/12/22	Gross Alpha/Beta	Gross Beta	3.58E-14	1.50E-14	1.91E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258640	VP-56	09/12/22	Gross Alpha/Beta	Gross Beta	4.90E-14	1.65E-14	1.91E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258640	VP-56	09/12/22	Gross Alpha/Beta	Gross Alpha	4.56E-15	6.81E-15	1.14E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258641	VP-56	09/13/22	Gross Alpha/Beta	Gross Beta	3.20E-14	1.49E-14	1.96E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258641	VP-56	09/13/22	Gross Alpha/Beta	Gross Alpha	1.02E-15	5.57E-15	1.17E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258642	VP-56	09/13/22	Gross Alpha/Beta	Gross Beta	3.52E-14	1.53E-14	1.96E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP258642	VP-56	09/13/22	Gross Alpha/Beta	Gross Alpha	-5.10E-15	1.09E-15	1.17E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP258642	VP-56	09/13/22	Gross Alpha/Beta	Gross Beta	3.68E-14	1.54E-14	1.96E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258642	VP-56	09/13/22	Gross Alpha/Beta	Gross Alpha	5.92E-15	7.43E-15	1.17E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258643	VP-56	09/14/22	Gross Alpha/Beta	Gross Beta	3.61E-14	1.68E-14	2.31E-14	µCi/mL	J	F01	VP-56 (General Area)-Perimeter Air
SVP258643	VP-56	09/14/22	Gross Alpha/Beta	Gross Alpha	9.08E-15	7.69E-15	9.60E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258644	VP-56	09/14/22	Gross Alpha/Beta	Gross Beta	2.99E-14	1.62E-14	2.31E-14	µCi/mL	J	F01, T04, T20	VP-56 (General Area)-Perimeter Air
SVP258644	VP-56	09/14/22	Gross Alpha/Beta	Gross Alpha	-1.76E-15	2.53E-15	9.60E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258645	VP-56	09/15/22	Gross Alpha/Beta	Gross Alpha	9.99E-15	7.83E-15	9.33E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258645	VP-56	09/15/22	Gross Alpha/Beta	Gross Beta	4.03E-14	1.69E-14	2.25E-14	µCi/mL	J	F01	VP-56 (General Area)-Perimeter Air
SVP258646	VP-56	09/15/22	Gross Alpha/Beta	Gross Beta	4.79E-14	1.77E-14	2.25E-14	µCi/mL	J	F01	VP-56 (General Area)-Perimeter Air
SVP258646	VP-56	09/15/22	Gross Alpha/Beta	Gross Alpha	5.31E-15	6.25E-15	9.33E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258647	VP-56	09/19/22	Gross Alpha/Beta	Gross Alpha	4.14E-15	5.79E-15	9.33E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258647	VP-56	09/19/22	Gross Alpha/Beta	Gross Beta	1.17E-14	1.38E-14	2.25E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258648	VP-56	09/19/22	Gross Alpha/Beta	Gross Beta	5.16E-14	1.80E-14	2.25E-14	µCi/mL	J	F01	VP-56 (General Area)-Perimeter Air
SVP258648	VP-56	09/19/22	Gross Alpha/Beta	Gross Alpha	8.82E-15	7.47E-15	9.33E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258649	VP-56	09/20/22	Gross Alpha/Beta	Gross Beta	4.95E-14	1.85E-14	2.36E-14	µCi/mL	J	F01	VP-56 (General Area)-Perimeter Air
SVP258649	VP-56	09/20/22	Gross Alpha/Beta	Gross Alpha	8.04E-15	7.44E-15	9.79E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258650	VP-56	09/20/22	Gross Alpha/Beta	Gross Alpha	5.58E-15	6.56E-15	9.79E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258650	VP-56	09/20/22	Gross Alpha/Beta	Gross Beta	1.94E-14	1.53E-14	2.36E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258651	VP-56	09/21/22	Gross Alpha/Beta	Gross Beta	4.62E-14	1.79E-14	2.31E-14	µCi/mL	J	F01	VP-56 (General Area)-Perimeter Air
SVP258651	VP-56	09/21/22	Gross Alpha/Beta	Gross Alpha	9.08E-15	7.69E-15	9.60E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258652	VP-56	09/22/22	Gross Alpha/Beta	Gross Alpha	6.81E-15	7.01E-15	9.79E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258652	VP-56	09/22/22	Gross Alpha/Beta	Gross Beta	1.63E-14	1.49E-14	2.36E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258653	VP-56	09/26/22	Gross Alpha/Beta	Gross Alpha	-4.27E-15	6.15E-15	2.33E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP258653	VP-56	09/26/22	Gross Alpha/Beta	Gross Beta	4.81E-14	3.66E-14	5.62E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP258653	VP-56	09/26/22	Gross Alpha/Beta	Gross Alpha	1.04E-14	1.45E-14	2.33E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258653	VP-56	09/26/22	Gross Alpha/Beta	Gross Beta	3.68E-14	3.54E-14	5.62E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP258711	VP-56	10/04/22	Gross Alpha/Beta	Gross Beta	3.45E-14	1.78E-14	2.52E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258711	VP-56	10/04/22	Gross Alpha/Beta	Gross Alpha	3.52E-15	6.34E-15	1.12E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258712	VP-56	10/12/22	Gross Alpha/Beta	Gross Beta	4.21E-14	1.95E-14	2.69E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258712	VP-56	10/12/22	Gross Alpha/Beta	Gross Alpha	5.12E-15	7.30E-15	1.20E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258725	VP-56	11/10/22	Gross Alpha/Beta	Gross Beta	2.27E-14	1.34E-14	1.89E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258725	VP-56	11/10/22	Gross Alpha/Beta	Gross Alpha	6.70E-15	6.59E-15	8.57E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258726	VP-56	11/14/22	Gross Alpha/Beta	Gross Beta	2.49E-14	1.47E-14	2.08E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258726	VP-56	11/14/22	Gross Alpha/Beta	Gross Alpha	7.35E-15	7.24E-15	9.41E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258727	VP-56	11/15/22	Gross Alpha/Beta	Gross Alpha	5.10E-16	3.52E-15	8.48E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258727	VP-56	11/15/22	Gross Alpha/Beta	Gross Beta	1.61E-14	1.24E-14	1.88E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258728	VP-56	11/16/22	Gross Alpha/Beta	Gross Beta	5.05E-14	1.67E-14	1.88E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258728	VP-56	11/16/22	Gross Alpha/Beta	Gross Alpha	2.96E-15	4.94E-15	8.48E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258729	VP-56	11/22/22	Gross Alpha/Beta	Gross Beta	6.03E-14	1.81E-14	1.93E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258729	VP-56	11/22/22	Gross Alpha/Beta	Gross Alpha	4.31E-15	5.69E-15	8.74E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258730	VP-56	11/23/22	Gross Alpha/Beta	Gross Beta	3.67E-14	1.57E-14	1.99E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258730	VP-56	11/23/22	Gross Alpha/Beta	Gross Alpha	3.14E-15	5.25E-15	9.01E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258731	VP-56	11/28/22	Gross Alpha/Beta	Gross Beta	6.44E-14	1.76E-14	1.77E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258731	VP-56	11/28/22	Gross Alpha/Beta	Gross Alpha	5.11E-15	5.71E-15	8.01E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258732	VP-56	11/29/22	Gross Alpha/Beta	Gross Beta	5.38E-14	1.67E-14	1.82E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258732	VP-56	11/29/22	Gross Alpha/Beta	Gross Alpha	5.25E-15	5.87E-15	8.24E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258733	VP-56	11/30/22	Gross Alpha/Beta	Gross Beta	2.57E-14	1.37E-14	1.88E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258733	VP-56	11/30/22	Gross Alpha/Beta	Gross Alpha	5.41E-15	6.04E-15	8.48E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258734	VP-56	12/01/22	Gross Alpha/Beta	Gross Beta	2.65E-14	1.38E-14	1.88E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258734	VP-56	12/01/22	Gross Alpha/Beta	Gross Alpha	5.41E-15	6.04E-15	8.48E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258735	VP-56	12/05/22	Gross Alpha/Beta	Gross Alpha	9.17E-15	7.48E-15	8.57E-15	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP258735	VP-56	12/05/22	Gross Alpha/Beta	Gross Beta	5.83E-14	1.77E-14	1.89E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP258735	VP-56	12/05/22	Gross Alpha/Beta	Gross Beta	6.80E-14	1.87E-14	1.89E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258735	VP-56	12/05/22	Gross Alpha/Beta	Gross Alpha	5.46E-15	6.10E-15	8.57E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258754	VP-56	12/06/22	Gross Alpha/Beta	Gross Beta	3.45E-14	1.51E-14	1.92E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258754	VP-56	12/06/22	Gross Alpha/Beta	Gross Alpha	6.32E-15	6.80E-15	9.56E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258755	VP-56	12/07/22	Gross Alpha/Beta	Gross Beta	9.12E-14	2.13E-14	1.90E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258755	VP-56	12/07/22	Gross Alpha/Beta	Gross Alpha	8.78E-15	7.63E-15	9.46E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258756	VP-56	12/12/22	Gross Alpha/Beta	Gross Alpha	1.00E-14	8.05E-15	9.46E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258756	VP-56	12/12/22	Gross Alpha/Beta	Gross Beta	6.47E-14	1.85E-14	1.90E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258757	VP-56	12/13/22	Gross Alpha/Beta	Gross Beta	3.01E-14	1.90E-14	2.73E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP258757	VP-56	12/13/22	Gross Alpha/Beta	Gross Alpha	-1.89E-15	3.77E-15	1.36E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258758	VP-56	12/19/22	Gross Alpha/Beta	Gross Alpha	-3.10E-15	6.20E-15	2.23E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258758	VP-56	12/19/22	Gross Alpha/Beta	Gross Beta	1.44E-14	2.63E-14	4.48E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258759	VP-56	12/19/22	Gross Alpha/Beta	Gross Alpha	2.85E-15	1.05E-14	2.23E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258759	VP-56	12/19/22	Gross Alpha/Beta	Gross Beta	3.38E-14	2.91E-14	4.48E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP258760	VP-56	12/20/22	Gross Alpha/Beta	Gross Beta	5.00E-14	1.65E-14	1.85E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2022 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP258760	VP-56	12/20/22	Gross Alpha/Beta	Gross Alpha	4.85E-15	6.05E-15	9.19E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258761	VP-56	12/20/22	Gross Alpha/Beta	Gross Beta	4.84E-14	1.63E-14	1.85E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP258761	VP-56	12/20/22	Gross Alpha/Beta	Gross Alpha	3.62E-15	5.53E-15	9.19E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258762	VP-56	12/21/22	Gross Alpha/Beta	Gross Alpha	2.25E-14	2.16E-14	2.84E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP258762	VP-56	12/21/22	Gross Alpha/Beta	Gross Beta	2.57E-14	3.46E-14	5.71E-14	µCi/mL			VP-56 (General Area)-Perimeter Air
SVP258762	VP-56	12/21/22	Gross Alpha/Beta	Gross Alpha	3.63E-15	1.33E-14	2.84E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP258762	VP-56	12/21/22	Gross Alpha/Beta	Gross Beta	5.30E-14	3.84E-14	5.71E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air

VQs:

= - Indicates that the data met all QA/QC requirements, and that the parameter has been positively identified and the associated concentration value is accurate.

J - Indicates that the parameter was positively identified; the associated numerical value is the approximate concentration of the parameter in the sample.

UJ - Indicates that the parameter was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Validation Reason Code:

T04 - Radionuclide Quantitation: Professional judgment was used to qualify the data.

T05 - Analytical result is less than the associated MDA, but greater than the counting uncertainty.

T06 - Radionuclide Quantitation: Analytical result is less than both the associated counting uncertainty and MDA.

T20 - Radionuclide Quantitation: Analytical result is greater than the associated MDA, with uncertainty 50 to 100 percent of the result.

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APPENDIX D

STORMWATER, WASTEWATER, AND EXCAVATION WATER DATA

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Table D-1. NPDES Analytical Data for CY 2022

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code
SVP234111	NPDES Outfall 002	02/09/22	ML-003	Ac-227	0.84	6.17	10.8	pCi/L		
SVP234111	NPDES Outfall 002	02/09/22	ML-003	Pa-231	17.9	23.9	43	pCi/L		
SVP234111	NPDES Outfall 002	02/09/22	ML-005	Th-230	1.08	0.64	0.95	pCi/L	J	F01, T04, T20
SVP234111	NPDES Outfall 002	02/09/22	ML-005	Th-228	0.27	0.50	1.17	pCi/L	UJ	T06
SVP234111	NPDES Outfall 002	02/09/22	ML-005	Th-232	0.07	0.30	0.81	pCi/L	UJ	T06
SVP234111	NPDES Outfall 002	02/09/22	ML-006	Ra-226	0.28	0.52	1.18	pCi/L	UJ	T06
SVP234111	NPDES Outfall 002	02/09/22	ML-003	Ac-227	2.79	6.63	11.9	pCi/L	UJ	T04, T06
SVP234111	NPDES Outfall 002	02/09/22	ML-003	Pa-231	-9.49	26.1	43.8	pCi/L	UJ	T04, T06
SVP234111	NPDES Outfall 002	02/09/22	ML-018	Gross Alpha	-1.75	6.22	11.3	pCi/L	UJ	T06
SVP234111	NPDES Outfall 002	02/09/22	ML-018	Gross Beta	-0.57	7.01	12.1	pCi/L	UJ	T06
SVP234111	NPDES Outfall 002	02/09/22	ML-021	Total U	0.57	0.05	2.53	pCi/L	U	T04, T05
SVP234111	NPDES Outfall 002	02/09/22	ML-024	pH	6.67		0.1	No Units	J	A03
SVP234111	NPDES Outfall 002	02/09/22	EPA 160.5	SS	0.0		0.1	mL/L/hour	U	
SVP234112	NPDES Outfall 002	02/17/22	ML-005	Th-230	1.63	0.69	0.48	pCi/L	J	F01
SVP234112	NPDES Outfall 002	02/17/22	ML-005	Th-228	0.46	0.37	0.48	pCi/L	UJ	T04, T05
SVP234112	NPDES Outfall 002	02/17/22	ML-005	Th-232	0.26	0.29	0.48	pCi/L	UJ	T06
SVP234112	NPDES Outfall 002	02/17/22	ML-006	Ra-226	0.38	0.37	0.56	pCi/L	UJ	T04, T05
SVP234112	NPDES Outfall 002	02/17/22	ML-003	Ac-227	4.12	7.70	13.70	pCi/L	UJ	T04, T06
SVP234112	NPDES Outfall 002	02/17/22	ML-003	Pa-231	15.5	30.7	53.7	pCi/L	UJ	T04, T06
SVP234112	NPDES Outfall 002	02/17/22	ML-018	Gross Alpha	-3.75	5.64	10.70	pCi/L	UJ	T06
SVP234112	NPDES Outfall 002	02/17/22	ML-018	Gross Beta	11.80	8.27	13.10	pCi/L	UJ	T04, T05
SVP234112	NPDES Outfall 002	02/17/22	ML-021	Total U	0.96	0.09	15.20	pCi/L	U	T04, T05
SVP234112	NPDES Outfall 002	02/17/22	ML-024	pH	7.52		0.10	No Units	J	A03
SVP234112	NPDES Outfall 002	02/17/22	EPA 160.5	SS	0.00		0.10	mL/L/hour	U	
SVP234113	NPDES Outfall 002	03/06/22	ML-003	Ac-227	-0.371	6.89	11.9	pCi/L		
SVP234113	NPDES Outfall 002	03/06/22	ML-003	Pa-231	-5.91	24.6	41.7	pCi/L		
SVP234113	NPDES Outfall 002	03/06/22	ML-005	Th-228	1.74	0.838	0.494	pCi/L	=	
SVP234113	NPDES Outfall 002	03/06/22	ML-005	Th-230	11.5	2.49	0.685	pCi/L	=	
SVP234113	NPDES Outfall 002	03/06/22	ML-005	Th-232	0.163	0.268	0.493	pCi/L	UJ	T06

Table D-1. NPDES Analytical Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code
SVP234113	NPDES Outfall 002	03/06/22	ML-006	Ra-226	0.289	0.396	0.799	pCi/L	UJ	T06
SVP234113	NPDES Outfall 002	03/06/22	ML-003	Ac-227	-0.508	7.16	12.3	pCi/L	UJ	T04, T06
SVP234113	NPDES Outfall 002	03/06/22	ML-003	Pa-231	-10.7	25.8	42.8	pCi/L	UJ	T04, T06
SVP234113	NPDES Outfall 002	03/06/22	ML-018	Gross Alpha	2.6	6.25	10.7	pCi/L	UJ	T06
SVP234113	NPDES Outfall 002	03/06/22	ML-018	Gross Beta	2.94	7.82	13.1	pCi/L	UJ	T06
SVP234113	NPDES Outfall 002	03/06/22	ML-021	Total U	2.03	0.185	15.2	pCi/L	U	T04, T05
SVP234113	NPDES Outfall 002	03/06/22	ML-024	pH	6.96		0.1	No Units	J	A03
SVP234113	NPDES Outfall 002	03/06/22	EPA 160.5	SS	0		0.1	mL/L/hour	U	
SVP234114	NPDES Outfall 002	03/30/22	ML-003	Ac-227	0.547	7.22	12.5	pCi/L		
SVP234114	NPDES Outfall 002	03/30/22	ML-003	Pa-231	1.34	26.4	45.5	pCi/L		
SVP234114	NPDES Outfall 002	03/30/22	ML-005	Th-228	0.512	0.506	0.754	pCi/L	UJ	T04, T05
SVP234114	NPDES Outfall 002	03/30/22	ML-005	Th-230	0.615	0.548	0.755	pCi/L	UJ	T04, T05
SVP234114	NPDES Outfall 002	03/30/22	ML-005	Th-232	-0.0512	0.229	0.69	pCi/L	UJ	T06
SVP234114	NPDES Outfall 002	03/30/22	ML-006	Ra-226	0	0.37	1.04	pCi/L	UJ	T06
SVP234114	NPDES Outfall 002	03/30/22	ML-003	Ac-227	-2.68	7.07	11.9	pCi/L	UJ	T04, T06
SVP234114	NPDES Outfall 002	03/30/22	ML-003	Pa-231	40	25.2	47.6	pCi/L	UJ	T04, T05
SVP234114	NPDES Outfall 002	03/30/22	ML-018	Gross Alpha	5.34	6.21	10.1	pCi/L	UJ	T06
SVP234114	NPDES Outfall 002	03/30/22	ML-018	Gross Beta	6.24	8.06	13.2	pCi/L	UJ	T06
SVP234114	NPDES Outfall 002	03/30/22	ML-021	Total U	0.17	0.0155	5.05	pCi/L	U	T04, T05
SVP234114	NPDES Outfall 002	03/30/22	ML-024	pH	7.37		0.1	No Units	J	A03
SVP234114	NPDES Outfall 002	03/30/22	EPA 160.5	SS	0.1		0.1	mL/L/hour	U	
SVP234115	NPDES Outfall 002	04/06/22	ML-005	Th-228	0.605	0.438	0.48	pCi/L	J	T04, T20
SVP234115	NPDES Outfall 002	04/06/22	ML-005	Th-230	1.35	0.655	0.525	pCi/L	J	F01
SVP234115	NPDES Outfall 002	04/06/22	ML-005	Th-232	0.142	0.247	0.524	pCi/L	UJ	T06
SVP234115	NPDES Outfall 002	04/06/22	ML-006	Ra-226	0.338	0.378	0.621	pCi/L	UJ	T06
SVP234115	NPDES Outfall 002	04/06/22	ML-003	Ac-227	3.59	7.22	12.7	pCi/L	UJ	T04, T06
SVP234115	NPDES Outfall 002	04/06/22	ML-003	Pa-231	-6.85	26.3	44.3	pCi/L	UJ	T04, T06
SVP234115	NPDES Outfall 002	04/06/22	ML-018	Gross Alpha	7.36	6.41	10.1	pCi/L	UJ	T04, T05
SVP234115	NPDES Outfall 002	04/06/22	ML-018	Gross Beta	2.57	7.88	13.2	pCi/L	UJ	T06
SVP234115	NPDES Outfall 002	04/06/22	ML-021	Total U	-0.3	0.0274	5.05	pCi/L	UJ	T06

Table D-1. NPDES Analytical Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code
SVP234115	NPDES Outfall 002	04/06/22	ML-024	pH	7.03		0.1	No Units	J	A03
SVP234115	NPDES Outfall 002	04/06/22	EPA 160.5	SS	0		0.1	mL/L/hour	U	
SVP234116	NPDES Outfall 002	04/13/22	ML-005	Th-230	3.26	1.1	0.586	pCi/L	J	F01
SVP234116	NPDES Outfall 002	04/13/22	ML-005	Th-228	0.159	0.276	0.585	pCi/L	UJ	T06
SVP234116	NPDES Outfall 002	04/13/22	ML-005	Th-232	0.0794	0.225	0.585	pCi/L	UJ	T06
SVP234116	NPDES Outfall 002	04/13/22	ML-006	Ra-226	0.146	0.358	0.876	pCi/L	UJ	T06
SVP234116	NPDES Outfall 002	04/13/22	ML-003	Ac-227	0.32	7.13	12.3	pCi/L	UJ	T04, T06
SVP234116	NPDES Outfall 002	04/13/22	ML-003	Pa-231	7.85	26.7	46.6	pCi/L	UJ	T04, T06
SVP234116	NPDES Outfall 002	04/13/22	ML-018	Gross Alpha	-1.3	5.55	10.1	pCi/L	UJ	T06
SVP234116	NPDES Outfall 002	04/13/22	ML-018	Gross Beta	0.734	7.79	13.2	pCi/L	UJ	T06
SVP234116	NPDES Outfall 002	04/13/22	ML-021	Total U	0.112	0.0102	5.05	pCi/L	U	T04, T05
SVP234116	NPDES Outfall 002	04/13/22	ML-024	pH	6.57		0.1	No Units	J	A04
SVP234116	NPDES Outfall 002	04/13/22	EPA 160.5	SS	0.1		0.1	mL/L/hour	U	
SVP234117	NPDES Outfall 002	04/24/22	ML-003	Ac-227	8.06	11.9	21.2	pCi/L		
SVP234117	NPDES Outfall 002	04/24/22	ML-003	Pa-231	24.9	46.4	81.2	pCi/L		
SVP234117	NPDES Outfall 002	04/24/22	ML-005	Th-230	0.58	0.413	0.475	pCi/L	J	F01, T04, T20
SVP234117	NPDES Outfall 002	04/24/22	ML-005	Th-228	0.387	0.343	0.474	pCi/L	UJ	T04, T05
SVP234117	NPDES Outfall 002	04/24/22	ML-005	Th-232	0.0483	0.133	0.342	pCi/L	UJ	T06
SVP234117	NPDES Outfall 002	04/24/22	ML-006	Ra-226	0	0.154	0.527	pCi/L	UJ	T06
SVP234117	NPDES Outfall 002	04/24/22	ML-003	Ac-227	-0.856	11.6	19.7	pCi/L	UJ	T04, T06
SVP234117	NPDES Outfall 002	04/24/22	ML-003	Pa-231	-19.2	45.4	75.4	pCi/L	UJ	T04, T06
SVP234117	NPDES Outfall 002	04/24/22	ML-018	Gross Alpha	1.76	6.37	11	pCi/L	UJ	T06
SVP234117	NPDES Outfall 002	04/24/22	ML-018	Gross Beta	-3.36	6.85	12.1	pCi/L	UJ	T06
SVP234117	NPDES Outfall 002	04/24/22	ML-021	Total U	1.35	0.123	15.2	pCi/L	U	T04, T05
SVP234117	NPDES Outfall 002	04/24/22	ML-024	pH	7.59		0.1	No Units	J	A03
SVP234117	NPDES Outfall 002	04/24/22	EPA 160.5	SS	0		0.1	mL/L/hour	U	
SVP234118	NPDES Outfall 002	05/05/22	ML-005	Th-228	0.531	0.393	0.363	pCi/L	J	T04, T20
SVP234118	NPDES Outfall 002	05/05/22	ML-005	Th-230	1.35	0.631	0.364	pCi/L	J	F01
SVP234118	NPDES Outfall 002	05/05/22	ML-005	Th-232	0.479	0.39	0.504	pCi/L	UJ	T04, T05

Table D-1. NPDES Analytical Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code
SVP234118	NPDES Outfall 002	05/05/22	ML-006	Ra-226	0.101	0.309	0.79	pCi/L	UJ	T06
SVP234118	NPDES Outfall 002	05/05/22	ML-003	Ac-227	0.238	7.35	12.7	pCi/L	UJ	T04, T06
SVP234118	NPDES Outfall 002	05/05/22	ML-003	Pa-231	7.77	26	45	pCi/L	UJ	T04, T06
SVP234118	NPDES Outfall 002	05/05/22	ML-018	Gross Alpha	-1.46	6.07	11	pCi/L	UJ	T06
SVP234118	NPDES Outfall 002	05/05/22	ML-018	Gross Beta	0.746	7.06	12.1	pCi/L	UJ	T06
SVP234118	NPDES Outfall 002	05/05/22	ML-021	Total U	2.13	0.194	5.05	pCi/L	U	T04, T05
SVP234118	NPDES Outfall 002	05/05/22	ML-024	pH	7.85		0.1	No Units	J	A03
SVP234118	NPDES Outfall 002	05/05/22	EPA 160.5	SS	0		0.1	mL/L/hour	U	
SVP234119	NPDES Outfall 002	05/06/22	ML-005	Th-228	0.396	0.341	0.365	pCi/L	J	T04, T20
SVP234119	NPDES Outfall 002	05/06/22	ML-005	Th-230	1.36	0.634	0.366	pCi/L	J	F01
SVP234119	NPDES Outfall 002	05/06/22	ML-005	Th-232	0.275	0.309	0.506	pCi/L	UJ	T06
SVP234119	NPDES Outfall 002	05/06/22	ML-006	Ra-226	0.211	0.395	0.887	pCi/L	UJ	T06
SVP234119	NPDES Outfall 002	05/06/22	ML-003	Ac-227	6.31	10.9	19.7	pCi/L	UJ	T04, T06
SVP234119	NPDES Outfall 002	05/06/22	ML-003	Pa-231	25.1	39.7	70.8	pCi/L	UJ	T04, T06
SVP234119	NPDES Outfall 002	05/06/22	ML-018	Gross Alpha	-5.85	5.64	11	pCi/L	UJ	T06
SVP234119	NPDES Outfall 002	05/06/22	ML-018	Gross Beta	-2.61	6.89	12.1	pCi/L	UJ	T06
SVP234119	NPDES Outfall 002	05/06/22	ML-021	Total U	0.361	0.0329	5.05	pCi/L	U	T04, T05
SVP234119	NPDES Outfall 002	05/06/22	EPA 160.5	SS	0.3		0.1	mL/L/hour	J	A01
SVP234119	NPDES Outfall 002	05/06/22	ML-024	pH	7.14		0.1	No Units	J	A04
SVP234120	NPDES Outfall 002	05/18/22	ML-003	Ac-227	2.88	6.6	11.8	pCi/L		
SVP234120	NPDES Outfall 002	05/18/22	ML-003	Pa-231	6.94	26.6	46.5	pCi/L		
SVP234120	NPDES Outfall 002	05/18/22	ML-005	Th-230	0.939	0.565	0.424	pCi/L	J	F01, T04, T20
SVP234120	NPDES Outfall 002	05/18/22	ML-005	Th-228	0.239	0.32	0.587	pCi/L	UJ	T06
SVP234120	NPDES Outfall 002	05/18/22	ML-005	Th-232	0	0.226	0.587	pCi/L	UJ	T06
SVP234120	NPDES Outfall 002	05/18/22	ML-006	Ra-226	0.0798	0.339	1.02	pCi/L	UJ	T06
SVP234120	NPDES Outfall 002	05/18/22	ML-003	Ac-227	2.09	6.85	12.1	pCi/L	UJ	T04, T06
SVP234120	NPDES Outfall 002	05/18/22	ML-003	Pa-231	15.4	27.1	48	pCi/L	UJ	T04, T06
SVP234120	NPDES Outfall 002	05/18/22	ML-018	Gross Alpha	-3.18	6.32	11.6	pCi/L	UJ	T06
SVP234120	NPDES Outfall 002	05/18/22	ML-018	Gross Beta	0.551	7.62	13	pCi/L	UJ	T06

Table D-1. NPDES Analytical Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code
SVP234120	NPDES Outfall 002	05/18/22	ML-021	Total U	0.504	0.046	2.53	pCi/L	U	T04, T05
SVP234120	NPDES Outfall 002	05/18/22	ML-024	pH	7.59		0.1	No Units	J	A03
SVP234120	NPDES Outfall 002	05/18/22	EPA 160.5	SS	0		0.1	mL/L/hour	U	
SVP234121	NPDES Outfall 002	05/21/22	ML-005	Th-230	0.984	0.538	0.433	pCi/L	J	F01, T04, T20
SVP234121	NPDES Outfall 002	05/21/22	ML-005	Th-228	0.203	0.272	0.499	pCi/L	UJ	T06
SVP234121	NPDES Outfall 002	05/21/22	ML-005	Th-232	0.203	0.272	0.499	pCi/L	UJ	T06
SVP234121	NPDES Outfall 002	05/21/22	ML-006	Ra-226	0.0375	0.327	1.08	pCi/L	UJ	T06
SVP234121	NPDES Outfall 002	05/21/22	ML-003	Ac-227	-0.379	7.08	12.2	pCi/L	UJ	T04, T06
SVP234121	NPDES Outfall 002	05/21/22	ML-003	Pa-231	10.9	26.5	46.8	pCi/L	UJ	T04, T06
SVP234121	NPDES Outfall 002	05/21/22	ML-018	Gross Alpha	2.6	6.82	11.6	pCi/L	UJ	T06
SVP234121	NPDES Outfall 002	05/21/22	ML-018	Gross Beta	2.57	7.72	13	pCi/L	UJ	T06
SVP234121	NPDES Outfall 002	05/21/22	ML-021	Total U	0.668	0.0609	2.53	pCi/L	U	T04, T05
SVP234121	NPDES Outfall 002	05/21/22	ML-024	pH	7.3		0.1	No Units	J	A04
SVP234121	NPDES Outfall 002	05/21/22	EPA 160.5	SS	0		0.1	mL/L/hour	UJ	A03
SVP234122	NPDES Outfall 002	07/27/22	ML-003	Ac-227	0.763	7.75	13.4	pCi/L		
SVP234122	NPDES Outfall 002	07/27/22	ML-003	Pa-231	10.3	27.1	47.5	pCi/L		
SVP234122	NPDES Outfall 002	07/27/22	ML-005	Th-228	0.613	0.299	0.35	pCi/L	=	
SVP234122	NPDES Outfall 002	07/27/22	ML-005	Th-230	0.763	0.314	0.202	pCi/L	J	F01
SVP234122	NPDES Outfall 002	07/27/22	ML-005	Th-232	0.0299	0.0945	0.251	pCi/L	UJ	T06
SVP234122	NPDES Outfall 002	07/27/22	ML-006	Ra-226	0.408	0.372	0.571	pCi/L	UJ	T04, T05
SVP234122	NPDES Outfall 002	07/27/22	ML-003	Ac-227	-3.26	7.79	12.9	pCi/L	UJ	T04, T06
SVP234122	NPDES Outfall 002	07/27/22	ML-003	Pa-231	-5.32	30	50.7	pCi/L	UJ	T04, T06
SVP234122	NPDES Outfall 002	07/27/22	ML-018	Gross Alpha	2.17	6.31	10.8	pCi/L	UJ	T06
SVP234122	NPDES Outfall 002	07/27/22	ML-018	Gross Beta	-0.0918	7.52	12.9	pCi/L	UJ	T06
SVP234122	NPDES Outfall 002	07/27/22	ML-021	Total U	0.158	0.0144	5.05	pCi/L	U	T04, T05
SVP234122	NPDES Outfall 002	07/27/22	ML-024	pH	6.86		0.1	No Units	J	A03
SVP234122	NPDES Outfall 002	07/27/22	EPA 160.5	SS	0.1		0.1	mL/L/hour	U	
SVP234123	NPDES Outfall 002	08/04/22	ML-003	Ac-227	1.03	6.38	11.3	pCi/L		
SVP234123	NPDES Outfall 002	08/04/22	ML-003	Pa-231	-1.45	27	46.1	pCi/L		

Table D-1. NPDES Analytical Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code
SVP234123	NPDES Outfall 002	08/04/22	ML-005	Th-228	0	0	2.45	pCi/L	U	
SVP234123	NPDES Outfall 002	08/04/22	ML-005	Th-230	0.599	0.534	0.735	pCi/L	UJ	T04, T05
SVP234123	NPDES Outfall 002	08/04/22	ML-005	Th-232	0	0	1.2	pCi/L	U	
SVP234123	NPDES Outfall 002	08/04/22	ML-006	Ra-226	0.0335	0.15	0.452	pCi/L	UJ	T06
SVP234123	NPDES Outfall 002	08/04/22	ML-003	Ac-227	8.46	7.28	13.6	pCi/L	UJ	T04, T05
SVP234123	NPDES Outfall 002	08/04/22	ML-003	Pa-231	-19.4	28	45.9	pCi/L	UJ	T04, T06
SVP234123	NPDES Outfall 002	08/04/22	ML-018	Gross Alpha	-2.97	5.98	11.1	pCi/L	UJ	T06
SVP234123	NPDES Outfall 002	08/04/22	ML-018	Gross Beta	0.893	7.44	12.7	pCi/L	UJ	T06
SVP234123	NPDES Outfall 002	08/04/22	ML-021	Total U	0.025	0.00228	2.53	pCi/L	U	T04, T05
SVP234123	NPDES Outfall 002	08/04/22	ML-024	pH	7.24		0.1	No Units	J	A03
SVP234123	NPDES Outfall 002	08/04/22	EPA 160.5	SS	0		0.1	mL/L/hour	U	
SVP234124	NPDES Outfall 002	10/25/22	ML-003	Ac-227	-3.81	7.4	12.1	pCi/L		
SVP234124	NPDES Outfall 002	10/25/22	ML-003	Pa-231	12.6	27.1	47.6	pCi/L		
SVP234124	NPDES Outfall 002	10/25/22	ML-005	Th-228	0.539	0.4	0.369	pCi/L	J	F01, T04, T20
SVP234124	NPDES Outfall 002	10/25/22	ML-005	Th-230	0.975	0.55	0.513	pCi/L	J	T04, T20
SVP234124	NPDES Outfall 002	10/25/22	ML-005	Th-232	0.0348	0.148	0.444	pCi/L	UJ	T06
SVP234124	NPDES Outfall 002	10/25/22	ML-006	Ra-226	-0.0703	0.199	0.757	pCi/L	UJ	T06
SVP234124	NPDES Outfall 002	10/25/22	ML-003	Ac-227	3.61	7.1	12.6	pCi/L	UJ	T04, T06
SVP234124	NPDES Outfall 002	10/25/22	ML-003	Pa-231	-2.71	26.1	44.5	pCi/L	UJ	T04, T06
SVP234124	NPDES Outfall 002	10/25/22	ML-018	Gross Alpha	1.32	6.02	10.5	pCi/L	UJ	T06
SVP234124	NPDES Outfall 002	10/25/22	ML-018	Gross Beta	0.84	6.77	11.6	pCi/L	UJ	T06
SVP234124	NPDES Outfall 002	10/25/22	ML-021	Total U	0.758	0.0691	10.1	pCi/L	U	T04, T05
SVP234124	NPDES Outfall 002	10/25/22	ML-024	pH	6.7		0.1	No Units	J	A03
SVP234124	NPDES Outfall 002	10/25/22	EPA 160.5	SS	0		0.1	mL/L/hour	U	
SVP234125	NPDES Outfall 002	11/05/22	ML-005	Th-230	0.716	0.472	0.39	pCi/L	J	T04, T20
SVP234125	NPDES Outfall 002	11/05/22	ML-005	Th-228	0.513	0.419	0.54	pCi/L	UJ	T04, T05
SVP234125	NPDES Outfall 002	11/05/22	ML-005	Th-232	0	0.207	0.539	pCi/L	UJ	T06
SVP234125	NPDES Outfall 002	11/05/22	ML-006	Ra-226	-0.165	0.22	0.884	pCi/L	UJ	T06
SVP234125	NPDES Outfall 002	11/05/22	ML-003	Ac-227	-4.92	8.29	13.6	pCi/L	UJ	T04, T06

Table D-1. NPDES Analytical Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code
SVP234125	NPDES Outfall 002	11/05/22	ML-003	Pa-231	0.108	31.4	53.6	pCi/L	UJ	T04, T06
SVP234125	NPDES Outfall 002	11/05/22	ML-018	Gross Alpha	-2.78	5.61	10.5	pCi/L	UJ	T06
SVP234125	NPDES Outfall 002	11/05/22	ML-018	Gross Beta	5.13	7.02	11.6	pCi/L	UJ	T06
SVP234125	NPDES Outfall 002	11/05/22	ML-021	Total U	0.912	0.0832	10.1	pCi/L	U	T04, T05
SVP234125	NPDES Outfall 002	11/05/22	ML-024	pH	5.75		0.1	No Units	J	A03
SVP234125	NPDES Outfall 002	11/05/22	EPA 160.5	SS	0		0.1	mL/L/hour	U	

VQs:

= - Indicates that the data met all QA/QC requirements, and that the parameter has been positively identified and the associated concentration value is accurate.

J - Indicates that the parameter was positively identified; the associated numerical value is the approximate concentration of the parameter in the sample.

U - Indicates that the data met all QA/QC requirements, and that the parameter was analyzed for but was not detected above the reported sample quantitation limit.

UJ - Indicates that the parameter was not detected above the reported sample quantitation limit and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. However, the reported quantitation limit is approximate.

Validation Reason Codes:

A01 - Extraction holding times were exceeded.

A03 - Analysis holding times were exceeded.

A04 - Analysis holding times were grossly exceeded.

F01 - Blanks: Sample data were qualified as a result of the method blank.

T04 - Radionuclide Quantitation: Professional judgment was used to qualify the data.

T05 - Radionuclide Quantitation: Analytical result is less than the associated MDA, but greater than the counting uncertainty.

T06 - Radionuclide Quantitation: Analytical result is less than both the associated counting uncertainty and MDA.

T20 - Radionuclide Quantitation: Analytical result is greater than the associated MDA, with uncertainty 50 percent to 100 percent of the result.

Table D-2. Rainfall Data for CY 2022
First Quarter

Date	Rainfall (inches)	Outfall	Outfall VP-56, VP-57, VP-58, Pershall Road, and I-270	Date	Rainfall (inches)	Outfall	Outfall VP-56, VP-57, VP-58, Pershall Road, and I-270	Date	Rainfall (inches)	Outfall	Outfall VP-56, VP-57, VP-58, Pershall Road, and I-270
2022	24-Hour Total	002[a]	Un-Named[b,c]	2022	24-Hour Total	002[a]	Un-Named[b,c]	2022	24-Hour Total	002[a]	Un-Named[b,c]
1-Jan	0.01			1-Feb				1-Mar			
2-Jan	0.62			2-Feb	0.81			2-Mar			
3-Jan				3-Feb	0.47			3-Mar			
4-Jan				4-Feb	0.27			4-Mar			
5-Jan				5-Feb				5-Mar			
6-Jan				6-Feb				6-Mar	0.04	0.01	
7-Jan				7-Feb				7-Mar	1.66		
8-Jan				8-Feb				8-Mar			
9-Jan	0.15			9-Feb		0.08		9-Mar			
10-Jan				10-Feb				10-Mar			
11-Jan				11-Feb				11-Mar	0.06		
12-Jan				12-Feb	0.10			12-Mar	0.02		
13-Jan				13-Feb				13-Mar			
14-Jan	0.01			14-Feb				14-Mar			
15-Jan	0.45			15-Feb				15-Mar			
16-Jan	0.10			16-Feb				16-Mar			
17-Jan	0.01			17-Feb	0.79	0.13		17-Mar			
18-Jan				18-Feb	0.76			18-Mar	0.02		
19-Jan				19-Feb				19-Mar	0.23		
20-Jan				20-Feb				20-Mar			
21-Jan				21-Feb				21-Mar			
22-Jan				22-Feb	0.15			22-Mar	0.55		
23-Jan				23-Feb				23-Mar	0.10		
24-Jan				24-Feb	0.03			24-Mar	0.19		
25-Jan				25-Feb	0.18			25-Mar	0.06		
26-Jan				26-Feb				26-Mar			
27-Jan				27-Feb				27-Mar			
28-Jan				28-Feb				28-Mar			
29-Jan								29-Mar			
30-Jan								30-Mar	0.01	0.15	
31-Jan								31-Mar	1.83		
Monthly Total	**1.35**			**Monthly Total**	**3.56**	**0.21**		**Monthly Total**	**4.77**	**0.16**	

[a] Per a USACE email dated April 19, 2018, sampling at Outfall 002 has been increased to once per month.

[b] Un-Named moving outfall is an outfall sampled during pumping activities or from a rain event producing a measurable flow offsite.

[c] Remediation work started at the Un-Named Outfall VP-56, VP-57, VP-58, Pershall Road, and I-270 on June 16, 2021.

Notes:

Flow measurements for the outfalls are reported in MGD. All blank spaces represent zero flow.

Rainfall data are obtained from the www.wunderground.com site (Weather Underground, Inc. 2022).

Table D-2. Rainfall Data for CY 2022 (Continued)
Second Quarter

Date	Rainfall (inches)	Outfall	Outfall VP-56, VP-57, VP-58, Pershall Road, and I-270	Date	Rainfall (inches)	Outfall	Outfall VP-56, VP-57, VP-58, Pershall Road, and I-270	Date	Rainfall (inches)	Outfall	Outfall VP-56, VP-57, VP-58, Pershall Road, and I-270
2022	24-Hour Total	002[a]	Un-Named[b,c]	2022	24-Hour Total	002[a]	Un-Named[b,c]	2022	24-Hour Total	002[a]	Un-Named[b,c]
1-Apr	0.02			1-May	0.03			1-Jun	0.29		
2-Apr				2-May				2-Jun	0.16		
3-Apr				3-May	0.52			3-Jun			
4-Apr	0.03			4-May				4-Jun			
5-Apr				5-May	1.02	0.17		5-Jun			
6-Apr	0.65	0.11		6-May	0.97	0.16		6-Jun			
7-Apr				7-May	0.07			7-Jun			
8-Apr	0.06			8-May				8-Jun	0.42		
9-Apr	0.02			9-May				9-Jun			
10-Apr				10-May				10-Jun	0.10		
11-Apr	0.07			11-May				11-Jun			
12-Apr	0.09			12-May				12-Jun			
13-Apr		0.13		13-May				13-Jun			
14-Apr	0.78			14-May				14-Jun			
15-Apr				15-May				15-Jun			
16-Apr				16-May				16-Jun			
17-Apr				17-May				17-Jun	0.27		
18-Apr	0.33			18-May	0.68	0.11		18-Jun	0.07		
19-Apr				19-May	0.02			19-Jun			
20-Apr	0.09			20-May	0.20			20-Jun			
21-Apr	0.16			21-May	0.46	0.07		21-Jun			
22-Apr				22-May	1.13			22-Jun			
23-Apr				23-May				23-Jun			
24-Apr	0.01	0.15		24-May				24-Jun			
25-Apr	0.92			25-May	0.02			25-Jun			
26-Apr				26-May	0.99			26-Jun	0.10		
27-Apr				27-May	0.14			27-Jun	0.38		
28-Apr				28-May	0.01			28-Jun			
29-Apr	0.04			29-May				29-Jun			
30-Apr	0.12			30-May				30-Jun			
				31-May							
Monthly Total	**3.39**	**0.38**		**Monthly Total**	**6.26**	**0.51**		**Monthly Total**	**1.79**		

[a] Per a USACE email dated April 19, 2018, sampling at Outfall 002 has been increased to once per month.

[b] Un-Named moving outfall is an outfall sampled during pumping activities or from a rain event producing a measurable flow offsite.

[c] Remediation work started at the Un-Named Outfall VP-56, VP-57, VP-58, Pershall Road, and I-270 on June 16, 2021.

Notes:

Flow measurements for the outfalls are reported in MGD. All blank spaces represent zero flow.

Rainfall data are obtained from the www.wunderground.com site (Weather Underground, Inc. 2022).

Table D-2. Rainfall Data for CY 2022 (Continued)
Third Quarter

Date	Rainfall (inches)	Outfall	Outfall VP-56, VP-57, VP-58, Pershall Road, and I-270	Date	Rainfall (inches)	Outfall	Outfall VP-56, VP-57, VP-58, Pershall Road, and I-270	Date	Rainfall (inches)	Outfall	Outfall VP-56, VP-57, VP-58, Pershall Road, and I-270
2022	24-Hour Total	002[a]	Un-Named[b,c]	2022	24-Hour Total	002[a]	Un-Named[b,c]	2022	24-Hour Total	002[a]	Un-Named[b,c]
1-Jul				1-Aug				1-Sep			
2-Jul				2-Aug				2-Sep			
3-Jul	0.30			3-Aug				3-Sep	0.21		
4-Jul				4-Aug	4.46	0.72		4-Sep	0.01		
5-Jul				5-Aug	0.30			5-Sep	0.51		
6-Jul				6-Aug				6-Sep	0.14		
7-Jul	0.10			7-Aug				7-Sep			
8-Jul	0.03			8-Aug				8-Sep			
9-Jul	0.21			9-Aug	0.09			9-Sep			
10-Jul	0.54			10-Aug				10-Sep			
11-Jul				11-Aug				11-Sep	0.62		
12-Jul	0.06			12-Aug				12-Sep	0.04		
13-Jul				13-Aug				13-Sep			
14-Jul				14-Aug				14-Sep			
15-Jul				15-Aug				15-Sep			
16-Jul				16-Aug	0.26			16-Sep			
17-Jul	0.09			17-Aug	0.15			17-Sep			
18-Jul	0.65			18-Aug				18-Sep			
19-Jul				19-Aug				19-Sep	0.08		
20-Jul				20-Aug				20-Sep			
21-Jul				21-Aug				21-Sep			
22-Jul				22-Aug				22-Sep	0.06		
23-Jul				23-Aug				23-Sep			
24-Jul				24-Aug				24-Sep	0.06		
25-Jul				25-Aug				25-Sep			
26-Jul	7.99			26-Aug	0.20			26-Sep			
27-Jul	1.98	1.61		27-Aug				27-Sep			
28-Jul				28-Aug				28-Sep			
29-Jul	0.27			29-Aug	0.32			29-Sep			
30-Jul				30-Aug				30-Sep			
31-Jul				31-Aug							
Monthly Total	**12.22**	**1.61**		**Monthly Total**	**5.78**	**0.72**		**Monthly Total**	**1.73**		

[a] Per a USACE email dated April 19, 2018, sampling at Outfall 002 has been increased to once per month.

[b] Un-Named moving outfall is an outfall sampled during pumping activities or from a rain event producing a measurable flow offsite.

[c] Remediation work started at the Un-Named Outfall VP-56, VP-57, VP-58, Pershall Road, and I-270 on June 16, 2021.

Notes:

Flow measurements for the outfalls are reported in MGD. All blank spaces represent zero flow.

Rainfall data are obtained from the www.wunderground.com site (Weather Underground, Inc. 2022).

Table D-2. Rainfall Data for CY 2022 (Continued)
Fourth Quarter

Date	Rainfall (inches)	Outfall	Outfall VP-56, VP-57, VP-58, Pershall Road, and I-270	Date	Rainfall (inches)	Outfall	Outfall VP-56, VP-57, VP-58, Pershall Road, and I-270	Date	Rainfall (inches)	Outfall	Outfall VP-56, VP-57, VP-58, Pershall Road, and I-270
2022	24-Hour Total	002[a]	Un-Named[b,c]	2022	24-Hour Total	002[a]	Un-Named[b,c]	2022	24-Hour Total	002[a]	Un-Named[b,c]
1-Oct				1-Nov	0.01			1-Dec			
2-Oct				2-Nov				2-Dec			
3-Oct				3-Nov				3-Dec			
4-Oct				4-Nov				4-Dec			
5-Oct				5-Nov	1.08	0.18		5-Dec			
6-Oct				6-Nov				6-Dec			
7-Oct	0.03			7-Nov				7-Dec	0.03		
8-Oct	0.07			8-Nov				8-Dec	0.07		
9-Oct	0.15			9-Nov				9-Dec	0.15		
10-Oct				10-Nov				10-Dec			
11-Oct				11-Nov				11-Dec			
12-Oct				12-Nov				12-Dec			
13-Oct				13-Nov				13-Dec			
14-Oct	0.82			14-Nov				14-Dec	0.82		
15-Oct	0.39			15-Nov	0.19			15-Dec	0.39		
16-Oct				16-Nov	0.01			16-Dec			
17-Oct				17-Nov				17-Dec			
18-Oct				18-Nov				18-Dec			
19-Oct				19-Nov				19-Dec			
20-Oct				20-Nov				20-Dec			
21-Oct	3.40			21-Nov				21-Dec			
22-Oct				22-Nov				22-Dec			
23-Oct				23-Nov				23-Dec	0.14		
24-Oct				24-Nov	0.06			24-Dec			
25-Oct				25-Nov	0.30			25-Dec			
26-Oct	0.30	0.05		26-Nov				26-Dec	0.04		
27-Oct	1.98			27-Nov	0.76			27-Dec	0.01		
28-Oct				28-Nov	0.05			28-Dec			
29-Oct	0.11			29-Nov				29-Dec			
30-Oct	0.25			30-Nov				30-Dec	0.30		
31-Oct	0.14							31-Dec	0.01		
Monthly Total	**7.64**	**0.05**		**Monthly Total**	**2.46**	**0.18**		**Monthly Total**	**1.96**		

[a] Per a USACE email dated April 19, 2018, sampling at Outfall 002 has been increased to once per month.

[b] Un-Named moving outfall is an outfall sampled during pumping activities or from a rain event producing a measurable flow offsite.

[c] Remediation work started at the Un-Named Outfall VP-56, VP-57, VP-58, Pershall Road, and I-270 on June 16, 2021.

Notes:

Flow measurements for the outfalls are reported in MGD. All blank spaces represent zero flow.

Rainfall data are obtained from the www.wunderground.com site (Weather Underground, Inc. 2022).

Table D-3. Self-Monitoring Report for Excavation Water Discharge During CY 2022 First Quarter

Parameter	Batch Number	Date of Discharge	Batch Results[a]		Amount Discharged (Gallons)	Total Activity per Discharge (Ci)[b]	MSD Discharge Limit		SOR
Gross Alpha (raw water)	SLAPS-355	01/18/22 - 01/19/22 (Pershall Road and I-270)	<11.3	pCi/L	176,585	3.8E-06	3,000	pCi/L	0.01
Gross Beta			<12.1	pCi/L		4.0E-06	NA		
Th-228			<0.9	pCi/L		3.0E-07	2,000	pCi/L	
Th-230			2.9	pCi/L		1.9E-06	1,000	pCi/L	
Uranium (KPA)			<2.5	pCi/L		8.5E-07	3,000	pCi/L	
Ra-226[c]			<0.9	pCi/L		3.0E-07	10	pCi/L	
Ra-228[d,e]			<0.9	pCi/L		3.0E-07	30	pCi/L	
Barium			[h]	mg/L			10	mg/L	
Lead			[h]	mg/L			0.4	mg/L	
Selenium[f]			[h]	mg/L			0.2	mg/L[f]	
BOD[g]				mg/L			-		
COD[g]				mg/L			-		
Gross Alpha (TSS filtrate)			<11.3	pCi/L			-		
TSS			21.0	mg/L			-		
Gross Alpha (raw water)	SLAPS-356	02/09/22 - 02/24/22 (Pershall Road and I-270)	<11.3	pCi/L	229,863	4.9E-06	3,000	pCi/L	0.00
Gross Beta			<13.1	pCi/L		5.7E-06	NA		
Th-228			<0.9	pCi/L		3.8E-07	2,000	pCi/L	
Th-230			1.9	pCi/L		1.6E-06	1,000	pCi/L	
Uranium (KPA)			<5.1	pCi/L		2.2E-06	3,000	pCi/L	
Ra-226[c]			<1	pCi/L		4.1E-07	10	pCi/L	
Ra-228[d,e]			<0.9	pCi/L		3.8E-07	30	pCi/L	
Barium			[h]	mg/L			10	mg/L	
Lead			[h]	mg/L			0.4	mg/L	
Selenium[f]			[h]	mg/L			0.2	mg/L[f]	
BOD[g]				mg/L			-		
COD[g]				mg/L			-		
Gross Alpha (TSS filtrate)			<11.3	pCi/L			-		
TSS			27.6	mg/L			-		

Table D-3. Self-Monitoring Report for Excavation Water Discharge During CY 2022 First Quarter (Continued)

Parameter	Batch Number	Date of Discharge	Batch Results[a]		Amount Discharged (Gallons)	Total Activity per Discharge (Ci)[b]	MSD Discharge Limit		SOR
Gross Alpha (raw water)	SLAPS-357	03/03/22 - 03/15/22 (Pershall Road and I-270)	<11.2	pCi/L	457,546	9.7E-06	3,000	pCi/L	0.00
Gross Beta			<13.1	pCi/L		1.1E-05	NA		
Th-228			<0.7	pCi/L		5.8E-07	2,000	pCi/L	
Th-230			1.9	pCi/L		3.3E-06	1,000	pCi/L	
Uranium (KPA)			<5.1	pCi/L		4.4E-06	3,000	pCi/L	
Ra-226[c]			<0.9	pCi/L		8.0E-07	10	pCi/L	
Ra-228[d,e]			<0.7	pCi/L		5.8E-07	30	pCi/L	
Barium			[h]	mg/L			10	mg/L	
Lead			[h]	mg/L			0.4	mg/L	
Selenium[f]			[h]	mg/L			0.2	mg/L[f]	
BOD[g]				mg/L			-		
COD[g]				mg/L			-		
Gross Alpha (TSS filtrate)			<11.2	pCi/L			-		
TSS			30.2	mg/L			-		

Table D-3. Self-Monitoring Report for Excavation Water Discharge During CY 2022 First Quarter (Continued)

Parameter	Batch Number	Date of Discharge	Batch Results[a]		Amount Discharged (Gallons)	Total Activity per Discharge (Ci)[b]	MSD Discharge Limit		SOR
Gross Alpha (raw water)	SLAPS-358	03/07/22 - 03/08/22 (Pershall Road and I-270, VP-56, VP-57, VP-58)	47.3	pCi/L	7,075	1.3E-06	3,000	pCi/L	0.04
Gross Beta			57.1	pCi/L		1.5E-06	NA		
Th-228			1.7	pCi/L		4.7E-08	2,000	pCi/L	
Th-230			25.8	pCi/L		6.9E-07	1,000	pCi/L	
Uranium (KPA)			<5.1	pCi/L		6.8E-08	3,000	pCi/L	
Ra-226[c]			3.0	pCi/L		8.0E-08	10	pCi/L	
Ra-228[d,e]			1.7	pCi/L		4.7E-08	30	pCi/L	
Barium			[h]	mg/L			10	mg/L	
Lead			[h]	mg/L			0.4	mg/L	
Selenium[f]			[h]	mg/L			0.2	mg/Lf	
BOD[g]				mg/L			-		
COD[g]				mg/L			-		
Gross Alpha (TSS filtrate)			<10.7	pCi/L			-		
TSS			1290.5	mg/L			-		

Total Activity Discharged in First Quarter of CY 2022 (Ci)	
Th-228	1.3E-06
Th-230	7.6E-06
Uranium (KPA)	7.5E-06
Ra-226	1.6E-06
Ra-228[d]	1.3E-06

Total Activity Discharged through 03/31/22 (Ci)	
Th-228	1.3E-06
Th-230	7.6E-06
Uranium (KPA)	7.5E-06
Ra-226	1.6E-06
Ra-228[d]	1.3E-06

Total Volume for First Quarter of CY 2022 (gallons)	
Gallons	871,069

Total Volume Discharged through 03/31/22 (gallons)	
Gallons	871,069

[a] Non-detect sample results are converted to half the DL for total activity.
[b] The weighted average was used to calculate the total activity.
[c] 10 *CFR* 20 limit is 600 pCi/L for Ra-226.
[d] Ra-228 assumed to be in equilibrium with Th-228.
[e] 10 *CFR* 20 limit is 600 pCi/L for Ra-228.
[f] The limit for selenium can be a daily total mass of 76 g, with a concentration not to exceed 0.90 mg/L.
[g] MSD surcharges apply for BOD concentration greater than 300 mg/L and COD concentration greater than 600 mg/L.
[h] Analysis for metals is not required per the MSD letter dated May 24, 2012 (MSD 2012).

Notes:
- No data/No limit
BOD - biological oxygen demand
COD - chemical oxygen demand
NA - not applicable
SOR - sum of ratios
TSS - total suspended solid(s)

Table D-3. Self-Monitoring Report for Excavation Water Discharge During CY 2022 Second Quarter

Parameter	Batch Number	Date of Discharge	Batch Results[a]		Amount Discharged (Gallons)	Total Activity per Discharge (Ci)[b]	MSD Discharge Limit		SOR
Gross Alpha (raw water)	SLAPS-359	04/04/22 - 04/26/22 (Pershall Road, I-270, VP-56, VP-57, VP-58)	<11	pCi/L	17,600	3.7E-07	3,000	pCi/L	0.01
Gross Beta			<13.2	pCi/L		4.4E-07	NA		
Th-228			<0.5	pCi/L		1.6E-08	2,000	pCi/L	
Th-230			6.0	pCi/L		4.0E-07	1,000	pCi/L	
Uranium (KPA)			<5.1	pCi/L		1.7E-07	3,000	pCi/L	
Ra-226[c]			<1.1	pCi/L		3.7E-08	10	pCi/L	
Ra-228[d,e]			<0.5	pCi/L		1.6E-08	30	pCi/L	
Barium			[h]	mg/L			10	mg/L	
Lead			[h]	mg/L			0.4	mg/L	
Selenium[f]			[h]	mg/L			0.2	mg/L[f]	
BOD[g]				mg/L			-		
COD[g]				mg/L			-		
Gross Alpha (TSS filtrate)			<11	pCi/L			-		
TSS			116.5	mg/L			-		
Gross Alpha (raw water)	SLAPS-360	04/06/22 - 04/07/22 (Pershall Road and I-270)	<10.1	pCi/L	181,261	3.5E-06	3,000	pCi/L	0.00
Gross Beta			<13.2	pCi/L		4.5E-06	NA		
Th-228			<0.5	pCi/L		1.8E-07	2,000	pCi/L	
Th-230			2.6	pCi/L		1.8E-06	1,000	pCi/L	
Uranium (KPA)			<5.1	pCi/L		1.7E-06	3,000	pCi/L	
Ra-226[c]			<0.8	pCi/L		2.6E-07	10	pCi/L	
Ra-228[d,e]			<0.5	pCi/L		1.8E-07	30	pCi/L	
Barium			[h]	mg/L			10	mg/L	
Lead			[h]	mg/L			0.4	mg/L	
Selenium[f]			[h]	mg/L			0.2	mg/L[f]	
BOD[g]				mg/L			-		
COD[g]				mg/L			-		
Gross Alpha (TSS filtrate)			<10.1	pCi/L			-		
TSS			49.3	mg/L			-		
Gross Alpha (raw water)	SLAPS-361	05/09/22 - 05/31/22 (Pershall Road, I-270, VP-56, VP-57, VP-58)	<11.6	pCi/L	37,090	8.1E-07	3,000	pCi/L	0.01
Gross Beta			<13.2	pCi/L		9.3E-07	NA		
Th-228			0.8	pCi/L		1.2E-07	2,000	pCi/L	
Th-230			6.7	pCi/L		9.4E-07	1,000	pCi/L	
Uranium (KPA)			<5.1	pCi/L		3.5E-07	3,000	pCi/L	
Ra-226[c]			<1.2	pCi/L		8.2E-08	10	pCi/L	
Ra-228[d,e]			0.8	pCi/L		1.2E-07	30	pCi/L	
Barium			[h]	mg/L			10	mg/L	
Lead			[h]	mg/L			0.4	mg/L	
Selenium[f]			[h]	mg/L			0.2	mg/L[f]	
BOD[g]				mg/L			-		
COD[g]				mg/L			-		
Gross Alpha (TSS filtrate)			<11.6	pCi/L			-		
TSS			133.1	mg/L			-		

Table D-3. Self-Monitoring Report for Excavation Water Discharge During CY 2022 Second Quarter (Continued)

Parameter	Batch Number	Date of Discharge	Batch Results[a]		Amount Discharged (Gallons)	Total Activity per Discharge (Ci)[b]	MSD Discharge Limit		SOR
Gross Alpha (raw water)	SLAPS-362	05/16/22 - 05/19/22 (Pershall Road and I-270)	<11.6	pCi/L	263,943	5.8E-06	3,000	pCi/L	0.00
Gross Beta			<13	pCi/L		6.5E-06	NA		
Th-228			<0.8	pCi/L		3.8E-07	2,000	pCi/L	
Th-230			<0.7	pCi/L		3.3E-07	1,000	pCi/L	
Uranium (KPA)			<5.1	pCi/L		2.5E-06	3,000	pCi/L	
Ra-226[c]			<1.1	pCi/L		5.4E-07	10	pCi/L	
Ra-228[d,e]			<0.8	pCi/L		3.8E-07	30	pCi/L	
Barium			[h]	mg/L			10	mg/L	
Lead			[h]	mg/L			0.4	mg/L	
Selenium[f]			[h]	mg/L			0.2	mg/L[f]	
BOD[g]				mg/L			-		
COD[g]				mg/L			-		
Gross Alpha (TSS filtrate)			<11.6	pCi/L			-		
TSS			16.5	mg/L			-		

Table D-3. Self-Monitoring Report for Excavation Water Discharge During CY 2022 Second Quarter (Continued)

Parameter	Batch Number	Date of Discharge	Batch Results[a]		Amount Discharged (Gallons)	Total Activity per Discharge (Ci)[b]	MSD Discharge Limit		SOR
Gross Alpha (raw water)	SLAPS-363	06/14/22 - 06/23/22 (Pershall Road and I-270)	<10	pCi/L	193,614	3.7E-06	3,000	pCi/L	0.01
Gross Beta			<13.2	pCi/L		4.8E-06	NA		
Th-228			1.1	pCi/L		8.3E-07	2,000	pCi/L	
Th-230			1.5	pCi/L		1.1E-06	1,000	pCi/L	
Uranium (KPA)			<5.1	pCi/L		1.9E-06	3,000	pCi/L	
Ra-226[c]			<1.3	pCi/L		4.7E-07	10	pCi/L	
Ra-228[d,e]			1.1	pCi/L		8.3E-07	30	pCi/L	
Barium			[h]	mg/L			10	mg/L	
Lead			[h]	mg/L			0.4	mg/L	
Selenium[f]			[h]	mg/L			0.2	mg/L[f]	
BOD[g]				mg/L			-		
COD[g]				mg/L			-		
Gross Alpha (TSS filtrate)			<10	pCi/L			-		
TSS			16.2	mg/L			-		

Total Activity Discharged in Second Quarter of CY 2022 (Ci)	
Th-228	1.5E-06
Th-230	4.6E-06
Uranium (KPA)	6.6E-06
Ra-226	1.4E-06
Ra-228[d]	1.5E-06

Total Activity Discharged through 06/30/22 (Ci)	
Th-228	2.8E-06
Th-230	1.2E-05
Uranium (KPA)	1.4E-05
Ra-226	3.0E-06
Ra-228[d]	2.8E-06

Total Volume for Second Quarter of CY 2022 (gallons)	
Gallons	693,508

Total Volume Discharged through 06/30/22 (gallons)	
Gallons	1,564,577

[a] Non-detect sample results are converted to half the DL for total activity.
[b] The weighted average was used to calculate the total activity.
[c] 10 *CFR* 20 limit is 600 pCi/L for Ra-226.
[d] Ra-228 assumed to be in equilibrium with Th-228.
[e] 10 *CFR* 20 limit is 600 pCi/L for Ra-228.
[f] The limit for selenium can be a daily total mass of 76 g, with a concentration not to exceed 0.90 mg/L.
[g] MSD surcharges apply for BOD concentration greater than 300 mg/L and COD concentration greater than 600 mg/L.
[h] Analysis for metals is not required per the MSD letter dated May 24, 2012 (MSD 2012).

Notes:
- No data/No limit
BOD - biological oxygen demand
COD - chemical oxygen demand
NA - not applicable
SOR - sum of ratios
TSS - total suspended solid(s)

Table D-3. Self-Monitoring Report for Excavation Water Discharge During CY 2022 Third Quarter

Parameter	Batch Number	Date of Discharge	Batch Results[a]		Amount Discharged (Gallons)	Total Activity per Discharge (Ci)[b]	MSD Discharge Limit		SOR
Gross Alpha (raw water)	SLAPS-364	07/27/22 - 07/28/22 (Pershall Road and I-270)	<10.8	pCi/L	175,079	3.6E-06	3,000	pCi/L	0.01
Gross Beta			17	pCi/L		1.1E-05	NA		
Th-228			1.0	pCi/L		6.6E-07	2,000	pCi/L	
Th-230			10.5	pCi/L		7.0E-06	1,000	pCi/L	
Uranium (KPA)			<5.1	pCi/L		1.7E-06	3,000	pCi/L	
Ra-226[c]			0.8	pCi/L		5.3E-07	10	pCi/L	
Ra-228[d,e]			1.0	pCi/L		6.6E-07	30	pCi/L	
Barium			[h]	mg/L			10	mg/L	
Lead			[h]	mg/L			0.4	mg/L	
Selenium[f]			[h]	mg/L			0.2	mg/L[f]	
BOD[g]				mg/L			-		
COD[g]				mg/L			-		
Gross Alpha (TSS filtrate)			<10.8	pCi/L			-		
TSS			393.7	mg/L			-		
Gross Alpha (raw water)	SLAPS-365	08/01/22 - 08/15/22 (Pershall Road, I-270, VP-56, VP-57, VP-58)	<11.1	pCi/L	138,000	2.9E-06	3,000	pCi/L	0.00
Gross Beta			<12.9	pCi/L		3.4E-06	NA		
Th-228			<0.7	pCi/L		1.8E-07	2,000	pCi/L	
Th-230			0.8	pCi/L		4.1E-07	1,000	pCi/L	
Uranium (KPA)			<5.1	pCi/L		1.3E-06	3,000	pCi/L	
Ra-226[c]			<0.8	pCi/L		2.2E-07	10	pCi/L	
Ra-228[d,e]			<0.7	pCi/L		1.8E-07	30	pCi/L	
Barium			[h]	mg/L			10	mg/L	
Lead			[h]	mg/L			0.4	mg/L	
Selenium[f]			[h]	mg/L			0.2	mg/L[f]	
BOD[g]				mg/L			-		
COD[g]				mg/L			-		
Gross Alpha (TSS filtrate)			<11.1	pCi/L			-		
TSS			38.4	mg/L			-		

Table D-3. Self-Monitoring Report for Excavation Water Discharge During CY 2022 Third Quarter (Continued)

Parameter	Batch Number	Date of Discharge	Batch Results[a]		Amount Discharged (Gallons)	Total Activity per Discharge (Ci)[b]	MSD Discharge Limit		SOR
Gross Alpha (raw water)	SLAPS-366	08/01/22 - 08/31/22 (SLAPS VP Ballfields)	<11.8	pCi/L	3,307,623	7.4E-05	3,000	pCi/L	0.01
Gross Beta			<12.7	pCi/L		8.0E-05	NA		
Th-228			<1	pCi/L		6.2E-06	2,000	pCi/L	
Th-230			1.8	pCi/L		2.3E-05	1,000	pCi/L	
Uranium (KPA)			<25.3	pCi/L		1.6E-04	3,000	pCi/L	
Ra-226[c]			<1.1	pCi/L		7.2E-06	10	pCi/L	
Ra-228[d,e]			<1	pCi/L		6.2E-06	30	pCi/L	
Barium			[h]	mg/L			10	mg/L	
Lead			[h]	mg/L			0.4	mg/L	
Selenium[f]			[h]	mg/L			0.2	mg/L[f]	
BOD[g]				mg/L			-		
COD[g]				mg/L			-		
Gross Alpha (TSS filtrate)			<11.8	pCi/L			-		
TSS			33.8	mg/L			-		
Gross Alpha (raw water)	SLAPS-367	09/01/22 (Pershall Road and I-270)	<11.8	pCi/L	60,368	1.3E-06	3,000	pCi/L	0.01
Gross Beta			<12.6	pCi/L		1.4E-06	NA		
Th-228			0.9	pCi/L		2.1E-07	2,000	pCi/L	
Th-230			2.7	pCi/L		6.1E-07	1,000	pCi/L	
Uranium (KPA)			<5.1	pCi/L		5.8E-07	3,000	pCi/L	
Ra-226[c]			0.7	pCi/L		1.5E-07	10	pCi/L	
Ra-228[d,e]			0.9	pCi/L		2.1E-07	30	pCi/L	
Barium			[h]	mg/L			10	mg/L	
Lead			[h]	mg/L			0.4	mg/L	
Selenium[f]			[h]	mg/L			0.2	mg/L[f]	
BOD[g]				mg/L			-		
COD[g]				mg/L			-		
Gross Alpha (TSS filtrate)			<11.8	pCi/L			-		
TSS			157.0	mg/L			-		

Table D-3. Self-Monitoring Report for Excavation Water Discharge During CY 2022 Third Quarter (Continued)

Parameter	Batch Number	Date of Discharge	Batch Results[a]		Amount Discharged (Gallons)	Total Activity per Discharge (Ci)[b]	MSD Discharge Limit		SOR
Gross Alpha (raw water)	SLAPS-368	09/20/22 - 09/29/22 (Pershall Road, I-270, VP-56, VP-57, VP-58)	<10.5	pCi/L	14,530	2.9E-07	3,000	pCi/L	0.00
Gross Beta			<11.8	pCi/L		3.2E-07	NA		
Th-228			<0.5	pCi/L		1.4E-08	2,000	pCi/L	
Th-230			1.0	pCi/L		5.7E-08	1,000	pCi/L	
Uranium (KPA)			<10.1	pCi/L		2.8E-07	3,000	pCi/L	
Ra-226[c]			<1	pCi/L		2.8E-08	10	pCi/L	
Ra-228[d,e]			<0.5	pCi/L		1.4E-08	30	pCi/L	
Barium			[h]	mg/L			10	mg/L	
Lead			[h]	mg/L			0.4	mg/L	
Selenium[f]			[h]	mg/L			0.2	mg/L[f]	
BOD[g]				mg/L			-		
COD[g]				mg/L			-		
Gross Alpha (TSS filtrate)			<10.5	pCi/L			-		
TSS			21.3	mg/L			-		

Total Activity Discharged in Third Quarter of CY 2022 (Ci)

Th-228	7.3E-06
Th-230	3.1E-05
Uranium (KPA)	1.6E-04
Ra-226	8.1E-06
Ra-228[d]	7.3E-06

Total Activity Discharged through 09/30/22 (Ci)

Th-228	1.0E-05
Th-230	4.3E-05
Uranium (KPA)	1.8E-04
Ra-226	1.1E-05
Ra-228[d]	1.0E-05

Total Volume for Third Quarter of CY 2022 (gallons)

Gallons	3,695,600

Total Volume Discharged through 09/30/22 (gallons)

Gallons	5,260,177

[a] Non-detect sample results are converted to half the DL for total activity.
[b] The weighted average was used to calculate the total activity.
[c] 10 *CFR* 20 limit is 600 pCi/L for Ra-226.
[d] Ra-228 assumed to be in equilibrium with Th-228.
[e] 10 *CFR* 20 limit is 600 pCi/L for Ra-228.
[f] The limit for selenium can be a daily total mass of 76 g, with a concentration not to exceed 0.90 mg/L.
[g] MSD surcharges apply for BOD concentration greater than 300 mg/L and COD concentration greater than 600 mg/L.
[h] Analysis for metals is not required per the MSD letter dated May 24, 2012 (MSD 2012).

Notes:
- No data/No limit
BOD - biological oxygen demand
COD - chemical oxygen demand
NA - Not applicable
SOR - sum of ratios
TSS - total suspended solid(s)

Table D-3. Self-Monitoring Report for Excavation Water Discharge During CY 2022 Fourth Quarter

Parameter	Batch Number	Date of Discharge	Batch Results[a]		Amount Discharged (Gallons)	Total Activity per Discharge (Ci)[b]	MSD Discharge Limit		SOR
Gross Alpha (raw water)	SLAPS-369	11/02/22 - 11/09/22 (Pershall Road and I-270)	<10.5	pCi/L	312,293	6.2E-06	3,000	pCi/L	0.01
Gross Beta			<11.6	pCi/L		6.9E-06	NA		
Th-228			<0.7	pCi/L		4.2E-07	2,000	pCi/L	
Th-230			1.6	pCi/L		1.9E-06	1,000	pCi/L	
Uranium (KPA)			<25.3	pCi/L		1.5E-05	3,000	pCi/L	
Ra-226[c]			<0.8	pCi/L		4.6E-07	10	pCi/L	
Ra-228[d,e]			<0.7	pCi/L		4.2E-07	30	pCi/L	
Barium			[h]	mg/L			10	mg/L	
Lead			[h]	mg/L			0.4	mg/L	
Selenium[f]			[h]	mg/L			0.2	mg/L[f]	
BOD[g]				mg/L			-		
COD[g]				mg/L			-		
Gross Alpha (TSS filtrate)			<10.5	pCi/L			-		
TSS			53.6	mg/L			-		
Gross Alpha (raw water)	SLAPS-370	11/07/22 - 11/09/22 (Pershall Road, I-270, VP-56, VP-57, VP-58)	<10.5	pCi/L	36,800	7.3E-07	3,000	pCi/L	0.01
Gross Beta			<11.6	pCi/L		8.1E-07	NA		
Th-228			<0.5	pCi/L		3.5E-08	2,000	pCi/L	
Th-230			0.5	pCi/L		7.6E-08	1,000	pCi/L	
Uranium (KPA)			<25.3	pCi/L		1.8E-06	3,000	pCi/L	
Ra-226[c]			<0.7	pCi/L		4.8E-08	10	pCi/L	
Ra-228[d,e]			<0.5	pCi/L		3.5E-08	30	pCi/L	
Barium			[h]	mg/L			10	mg/L	
Lead			[h]	mg/L			0.4	mg/L	
Selenium[f]			[h]	mg/L			0.2	mg/L[f]	
BOD[g]				mg/L			-		
COD[g]				mg/L			-		
Gross Alpha (TSS filtrate)			<10.5	pCi/L			-		
TSS			76.3	mg/L			-		

Table D-3. Self-Monitoring Report for Excavation Water Discharge During CY 2022 Fourth Quarter (Continued)

Parameter	Batch Number	Date of Discharge	Batch Results[a]		Amount Discharged (Gallons)	Total Activity per Discharge (Ci)[b]	MSD Discharge Limit		SOR
Gross Alpha (raw water)	SLAPS-371	12/28/22 - 12/29/22 (Pershall Road and I-270)	<10.7	pCi/L	180,776	3.7E-06	3,000	pCi/L	0.00
Gross Beta			<13	pCi/L		4.4E-06	NA		
Th-228			<0.7	pCi/L		2.3E-07	2,000	pCi/L	
Th-230			1.1	pCi/L		7.6E-07	1,000	pCi/L	
Uranium (KPA)			1.11	pCi/L		7.6E-07	3,000	pCi/L	
Ra-226[c]			<0.7	pCi/L		2.5E-07	10	pCi/L	
Ra-228[d,e]			<0.7	pCi/L		2.3E-07	30	pCi/L	
Barium			[h]	mg/L			10	mg/L	
Lead			[h]	mg/L			0.4	mg/L	
Selenium[f]			[h]	mg/L			0.2	mg/L[f]	
BOD[g]				mg/L			-		
COD[g]				mg/L			-		
Gross Alpha (TSS filtrate)			<10.7	pCi/L			-		
TSS			<4.2	mg/L			-		

Total Activity Discharged in Fourth Quarter of CY 2022 (Ci)

Th-228	6.8E-07
Th-230	2.7E-06
Uranium (KPA)	1.7E-05
Ra-226	7.6E-07
Ra-228[b]	6.8E-07

Total Activity Discharged through 12/31/22 (Ci)

Th-228	1.1E-05
Th-230	4.5E-05
Uranium (KPA)	1.9E-04
Ra-226	1.2E-05
Ra-228[b]	1.1E-05

Total Volume for Fourth Quarter of CY 2022 (gallons)

Gallons	529,869

Total Volume Discharged through 12/31/22 (gallons)

Gallons	5,790,046

[a] Non-detect sample results are converted to half the DL for total activity.
[b] The weighted average was used to calculate the total activity.
[c] 10 *CFR* 20 limit is 600 pCi/L for Ra-226.
[d] Ra-228 assumed to be in equilibrium with Th-228.
[e] 10 *CFR* 20 limit is 600 pCi/L for Ra-228.
[f] The limit for selenium can be a daily total mass of 76 g, with a concentration not to exceed 0.90 mg/L.
[g] MSD surcharges apply for BOD concentration greater than 300 mg/L and COD concentration greater than 600 mg/L.
[h] Analysis for metals is not required per the MSD letter dated May 24, 2012 (MSD 2012).

Notes:
- No data/No limit
BOD - biological oxygen demand
COD - chemical oxygen demand
NA - Not applicable
SOR - sum of ratios
TSS - total suspended solid(s)

ATTACHMENT D-1

PN02 ANNUAL SAMPLING FREQUENCY SCHEDULE EMAIL, DATED APRIL 19, 2018

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From: Skoba, Gwenan
To: Daniel Carey (MDNR)
Cc: Dave Evans; Viehweg, William H. (USACE)
Subject: FW: Update regarding SLAPS Outfall 002
Date: Thursday, April 19, 2018 3:00:00 PM

Hello Dan,
Sorry for the late notice, USACE has restarted remediation at the Ballfields (SLAPS Outfall 002). We have resumed the sampling per the NPDES permit equivalent.
Please let Dave know if you have any questions.
Thank you!
Gwenan

Gwenan Skoba, MBA, CHMM
Principal Regulatory Specialist
HGL
110 James S. McDonnell Blvd
Hazelwood, MO 63042

-----Original Message-----
From: Skoba, Gwenan
Sent: Thursday, February 08, 2018 12:06 PM
To: Daniel Carey (MDNR)
Cc: Dave Evans; Viehweg, William H. (USACE)
Subject: RE: Update regarding SLAPS Outfall 002

Hi Dan,
For your records, USACE has temporarily stopped working at the Ballfields (SLAPS Outfall 002). Ballfields SU-12A & 12B were just confirmed.
We will notify MDNR when remediation resumes.
Thank you!
Gwenan

Gwenan Skoba, MBA, CHMM
Principal Regulatory Specialist
HGL
110 James S. McDonnell Blvd
Hazelwood, MO 63042

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ATTACHMENT D-2

DAILY DISCHARGE LIMIT INCREASE APPROVAL EMAIL, DATED JULY 29, 2022

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From: Viehweg, William H CIV USARMY CEMVS (USA) <William.Viehweg@usace.army.mil>
Sent: Friday, July 29, 2022 10:13 AM
To: Skoba, Gwenan <gskoba@hgl.com>; Evans, David M CIV USARMY CEMVS (USA) <David.M.Evans@usace.army.mil>
Cc: DeYong, Neil <ndeyong@hgl.com>; susan.l.adams@usace.army.mil
Subject: RE: [EXTERNAL] RE: SLDS Discharge

Gwenan,

For NORCO; you are approved to increase discharge requirements from 100k to 250k.

Sincerely,

---Bill

William Viehweg
Project Engineer
U.S. Army Corps of Engineers - St. Louis District CEMVS-EC-CF
FUSRAP AREA OFFICE 114 McDonnell Blvd., Hazelwood MO.
William.Viehweg@usace.army.mil
Mobile: 314-452-3486
Office: 314-260-3916

From: Skoba, Gwenan <gskoba@hgl.com>
Sent: Friday, July 29, 2022 8:31 AM
To: Viehweg, William H CIV USARMY CEMVS (USA) <William.Viehweg@usace.army.mil>; Evans, David M CIV USARMY CEMVS (USA) <David.M.Evans@usace.army.mil>
Cc: DeYong, Neil <ndeyong@hgl.com>; Adams, Susan L CIV USARMY CEMVS (USA) <Susan.L.Adams@usace.army.mil>
Subject: [Non-DoD Source] Fwd: [EXTERNAL] RE: SLDS Discharge

Hello Bill

I hope you had a nice vacation. Can you give us the approval to increase discharge to 250,000 gallons at NORCO? We received approval last week but haven't pumped over 100,000 gallons yet.

Thank you!
Gwenan Skoba
Principal Regulatory Specialist
HGL
St. Louis FUSRAP
110 James S. McDonnell Blvd
Hazelwood, MO 63042
636.578.1353

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APPENDIX E

COLDWATER CREEK SURFACE WATER AND SEDIMENT DATA

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Table E-1. CWC Surface Water Data for CY 2022

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Error	Units	VQ
CWC255787	CWC002	04/12/22	Metals	Barium	100		0.9	µg/L	=
CWC255787	CWC002	04/12/22	Metals	Molybdenum	8.1		2	µg/L	=
CWC255787	CWC002	04/12/22	Metals	Antimony	2		2	µg/L	U
CWC255787	CWC002	04/12/22	Metals	Arsenic	4		4	µg/L	U
CWC255787	CWC002	04/12/22	Metals	Chromium	4		4	µg/L	U
CWC255787	CWC002	04/12/22	Metals	Nickel	2		2	µg/L	U
CWC255787	CWC002	04/12/22	Metals	Selenium	2		2	µg/L	U
CWC255787	CWC002	04/12/22	Metals	Thallium	0.9		0.9	µg/L	U
CWC255787	CWC002	04/12/22	Metals	Vanadium	4		4	µg/L	U
CWC255787	CWC002	04/12/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC255787	CWC002	04/12/22	Alpha Spectroscopy	Th-228	0.426	0.437	0.715	pCi/L	UJ
CWC255787	CWC002	04/12/22	Alpha Spectroscopy	Th-230	0.682	0.531	0.716	pCi/L	UJ
CWC255787	CWC002	04/12/22	Alpha Spectroscopy	Th-232	0	0.241	0.626	pCi/L	UJ
CWC255787	CWC002	04/12/22	Alpha Spectroscopy	Ra-226	0.255	0.361	0.767	pCi/L	UJ
CWC255787	CWC002	04/12/22	Alpha Spectroscopy	U-234	0.405	0.477	0.851	pCi/L	UJ
CWC255787	CWC002	04/12/22	Alpha Spectroscopy	U-235	-0.0625	0.279	0.842	pCi/L	UJ
CWC255787	CWC002	04/12/22	Alpha Spectroscopy	U-238	0.605	0.538	0.742	pCi/L	UJ
CWC255789	CWC003	04/12/22	Metals	Barium	100		0.9	µg/L	=
CWC255789	CWC003	04/12/22	Metals	Molybdenum	8.1		2	µg/L	=
CWC255789	CWC003	04/12/22	Metals	Antimony	2		2	µg/L	U
CWC255789	CWC003	04/12/22	Metals	Arsenic	4		4	µg/L	U
CWC255789	CWC003	04/12/22	Metals	Chromium	4		4	µg/L	U
CWC255789	CWC003	04/12/22	Metals	Nickel	2		2	µg/L	U
CWC255789	CWC003	04/12/22	Metals	Selenium	2		2	µg/L	U
CWC255789	CWC003	04/12/22	Metals	Thallium	0.9		0.9	µg/L	U
CWC255789	CWC003	04/12/22	Metals	Vanadium	4		4	µg/L	U
CWC255789	CWC003	04/12/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC255789	CWC003	04/12/22	Alpha Spectroscopy	Th-230	0.804	0.583	0.637	pCi/L	J
CWC255789	CWC003	04/12/22	Alpha Spectroscopy	U-234	0.99	0.705	0.809	pCi/L	J
CWC255789	CWC003	04/12/22	Alpha Spectroscopy	U-238	0.986	0.702	0.806	pCi/L	J
CWC255789	CWC003	04/12/22	Alpha Spectroscopy	Th-228	0.755	0.589	0.794	pCi/L	UJ
CWC255789	CWC003	04/12/22	Alpha Spectroscopy	Th-232	0.0472	0.211	0.636	pCi/L	UJ
CWC255789	CWC003	04/12/22	Alpha Spectroscopy	Ra-226	0.19	0.283	0.588	pCi/L	UJ
CWC255789	CWC003	04/12/22	Alpha Spectroscopy	U-235	0	0.384	0.999	pCi/L	UJ
CWC255791	CWC004	04/12/22	Metals	Barium	110		0.9	µg/L	=
CWC255791	CWC004	04/12/22	Metals	Molybdenum	7.8		2	µg/L	=

Table E-1. CWC Surface Water Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Error	DL	Units	VQ
CWC255791	CWC004	04/12/22	Metals	Antimony	2		2	µg/L	U
CWC255791	CWC004	04/12/22	Metals	Arsenic	4		4	µg/L	U
CWC255791	CWC004	04/12/22	Metals	Chromium	4		4	µg/L	U
CWC255791	CWC004	04/12/22	Metals	Nickel	2		2	µg/L	U
CWC255791	CWC004	04/12/22	Metals	Selenium	2		2	µg/L	U
CWC255791	CWC004	04/12/22	Metals	Thallium	0.9		0.9	µg/L	U
CWC255791	CWC004	04/12/22	Metals	Vanadium	4		4	µg/L	U
CWC255791	CWC004	04/12/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC255791	CWC004	04/12/22	Alpha Spectroscopy	Th-228	0.045	0.371	1.05	pCi/L	UJ
CWC255791	CWC004	04/12/22	Alpha Spectroscopy	Th-230	0.631	0.515	0.663	pCi/L	UJ
CWC255791	CWC004	04/12/22	Alpha Spectroscopy	Th-232	-0.045	0.201	0.606	pCi/L	UJ
CWC255791	CWC004	04/12/22	Alpha Spectroscopy	Ra-226	-0.183	0.272	0.965	pCi/L	UJ
CWC255791	CWC004	04/12/22	Alpha Spectroscopy	U-234	0.294	0.393	0.72	pCi/L	UJ
CWC255791	CWC004	04/12/22	Alpha Spectroscopy	U-235	0	0.342	0.889	pCi/L	UJ
CWC255791	CWC004	04/12/22	Alpha Spectroscopy	U-238	0.682	0.557	0.717	pCi/L	UJ
CWC255793	CWC005	04/12/22	Metals	Barium	100		0.9	µg/L	=
CWC255793	CWC005	04/12/22	Metals	Molybdenum	7.4		2	µg/L	=
CWC255793	CWC005	04/12/22	Metals	Selenium	2.1		2	µg/L	=
CWC255793	CWC005	04/12/22	Metals	Antimony	2		2	µg/L	U
CWC255793	CWC005	04/12/22	Metals	Arsenic	4		4	µg/L	U
CWC255793	CWC005	04/12/22	Metals	Chromium	4		4	µg/L	U
CWC255793	CWC005	04/12/22	Metals	Nickel	2		2	µg/L	U
CWC255793	CWC005	04/12/22	Metals	Thallium	0.9		0.9	µg/L	U
CWC255793	CWC005	04/12/22	Metals	Vanadium	4		4	µg/L	U
CWC255793	CWC005	04/12/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC255793	CWC005	04/12/22	Alpha Spectroscopy	Th-230	0.69	0.502	0.644	pCi/L	J
CWC255793	CWC005	04/12/22	Alpha Spectroscopy	Th-228	0.0765	0.359	0.962	pCi/L	UJ
CWC255793	CWC005	04/12/22	Alpha Spectroscopy	Th-232	-0.0382	0.171	0.515	pCi/L	UJ
CWC255793	CWC005	04/12/22	Alpha Spectroscopy	Ra-226	0.191	0.254	0.468	pCi/L	UJ
CWC255793	CWC005	04/12/22	Alpha Spectroscopy	U-234	0.224	0.388	0.823	pCi/L	UJ
CWC255793	CWC005	04/12/22	Alpha Spectroscopy	U-235	0	0.39	1.02	pCi/L	UJ
CWC255793	CWC005	04/12/22	Alpha Spectroscopy	U-238	0.334	0.447	0.819	pCi/L	UJ
CWC255795	CWC006	04/12/22	Metals	Barium	96		0.9	µg/L	=
CWC255795	CWC006	04/12/22	Metals	Molybdenum	8.3		2	µg/L	=
CWC255795	CWC006	04/12/22	Metals	Antimony	2		2	µg/L	U
CWC255795	CWC006	04/12/22	Metals	Arsenic	4		4	µg/L	U

Table E-1. CWC Surface Water Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Error	DL	Units	VQ
CWC255795	CWC006	04/12/22	Metals	Chromium	4		4	µg/L	U
CWC255795	CWC006	04/12/22	Metals	Nickel	2		2	µg/L	U
CWC255795	CWC006	04/12/22	Metals	Selenium	2		2	µg/L	U
CWC255795	CWC006	04/12/22	Metals	Thallium	0.9		0.9	µg/L	U
CWC255795	CWC006	04/12/22	Metals	Vanadium	4		4	µg/L	U
CWC255795	CWC006	04/12/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC255795	CWC006	04/12/22	Alpha Spectroscopy	Th-230	0.872	0.539	0.511	pCi/L	J
CWC255795	CWC006	04/12/22	Alpha Spectroscopy	U-234	0.85	0.616	0.674	pCi/L	J
CWC255795	CWC006	04/12/22	Alpha Spectroscopy	Th-228	0.189	0.379	0.887	pCi/L	UJ
CWC255795	CWC006	04/12/22	Alpha Spectroscopy	Th-232	0.151	0.263	0.557	pCi/L	UJ
CWC255795	CWC006	04/12/22	Alpha Spectroscopy	Ra-226	0.0584	0.309	0.823	pCi/L	UJ
CWC255795	CWC006	04/12/22	Alpha Spectroscopy	U-235	0	0.349	0.908	pCi/L	UJ
CWC255795	CWC006	04/12/22	Alpha Spectroscopy	U-238	0.498	0.511	0.837	pCi/L	UJ
CWC255799	CWC008	04/12/22	Metals	Barium	96		0.9	µg/L	=
CWC255799	CWC008	04/12/22	Metals	Molybdenum	6.2		2	µg/L	=
CWC255799	CWC008	04/12/22	Metals	Antimony	2		2	µg/L	U
CWC255799	CWC008	04/12/22	Metals	Arsenic	4		4	µg/L	U
CWC255799	CWC008	04/12/22	Metals	Chromium	4		4	µg/L	U
CWC255799	CWC008	04/12/22	Metals	Nickel	2		2	µg/L	U
CWC255799	CWC008	04/12/22	Metals	Selenium	2		2	µg/L	U
CWC255799	CWC008	04/12/22	Metals	Thallium	0.9		0.9	µg/L	U
CWC255799	CWC008	04/12/22	Metals	Vanadium	4		4	µg/L	U
CWC255799	CWC008	04/12/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC255799	CWC008	04/12/22	Alpha Spectroscopy	U-234	0.661	0.511	0.594	pCi/L	J
CWC255799	CWC008	04/12/22	Alpha Spectroscopy	Th-228	0.873	0.681	0.917	pCi/L	UJ
CWC255799	CWC008	04/12/22	Alpha Spectroscopy	Th-230	0.874	0.682	0.918	pCi/L	UJ
CWC255799	CWC008	04/12/22	Alpha Spectroscopy	Th-232	0.218	0.379	0.802	pCi/L	UJ
CWC255799	CWC008	04/12/22	Alpha Spectroscopy	Ra-226	0.274	0.336	0.636	pCi/L	UJ
CWC255799	CWC008	04/12/22	Alpha Spectroscopy	U-235	0.0544	0.243	0.732	pCi/L	UJ
CWC255799	CWC008	04/12/22	Alpha Spectroscopy	U-238	0.351	0.394	0.646	pCi/L	UJ
CWC255801	CWC009	04/12/22	Metals	Barium	92		0.9	µg/L	=
CWC255801	CWC009	04/12/22	Metals	Molybdenum	5.7		2	µg/L	=
CWC255801	CWC009	04/12/22	Metals	Antimony	2		2	µg/L	U
CWC255801	CWC009	04/12/22	Metals	Arsenic	4		4	µg/L	U
CWC255801	CWC009	04/12/22	Metals	Chromium	4		4	µg/L	U
CWC255801	CWC009	04/12/22	Metals	Nickel	2		2	µg/L	U

Table E-1. CWC Surface Water Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Error	DL	Units	VQ
CWC255801	CWC009	04/12/22	Metals	Selenium	2		2	µg/L	U
CWC255801	CWC009	04/12/22	Metals	Thallium	0.9		0.9	µg/L	U
CWC255801	CWC009	04/12/22	Metals	Vanadium	4		4	µg/L	U
CWC255801	CWC009	04/12/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC255801	CWC009	04/12/22	Alpha Spectroscopy	Th-230	1.2	0.736	0.736	pCi/L	J
CWC255801	CWC009	04/12/22	Alpha Spectroscopy	Th-228	0.25	0.436	0.967	pCi/L	UJ
CWC255801	CWC009	04/12/22	Alpha Spectroscopy	Th-232	0.1	0.282	0.734	pCi/L	UJ
CWC255801	CWC009	04/12/22	Alpha Spectroscopy	Ra-226	0	0.245	0.737	pCi/L	UJ
CWC255801	CWC009	04/12/22	Alpha Spectroscopy	U-234	0.289	0.41	0.81	pCi/L	UJ
CWC255801	CWC009	04/12/22	Alpha Spectroscopy	U-235	2.75E-06	0.291	0.999	pCi/L	UJ
CWC255801	CWC009	04/12/22	Alpha Spectroscopy	U-238	0.336	0.397	0.646	pCi/L	UJ
CWC255803	CWC010	04/12/22	Metals	Barium	120		0.9	µg/L	=
CWC255803	CWC010	04/12/22	Metals	Molybdenum	5.6		2	µg/L	=
CWC255803	CWC010	04/12/22	Metals	Antimony	2		2	µg/L	U
CWC255803	CWC010	04/12/22	Metals	Arsenic	4		4	µg/L	U
CWC255803	CWC010	04/12/22	Metals	Chromium	4		4	µg/L	U
CWC255803	CWC010	04/12/22	Metals	Nickel	2		2	µg/L	U
CWC255803	CWC010	04/12/22	Metals	Selenium	2		2	µg/L	U
CWC255803	CWC010	04/12/22	Metals	Thallium	0.9		0.9	µg/L	U
CWC255803	CWC010	04/12/22	Metals	Vanadium	4		4	µg/L	U
CWC255803	CWC010	04/12/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC255803	CWC010	04/12/22	Alpha Spectroscopy	Th-230	0.746	0.541	0.591	pCi/L	J
CWC255803	CWC010	04/12/22	Alpha Spectroscopy	U-234	0.686	0.531	0.617	pCi/L	J
CWC255803	CWC010	04/12/22	Alpha Spectroscopy	U-238	0.82	0.584	0.671	pCi/L	J
CWC255803	CWC010	04/12/22	Alpha Spectroscopy	Th-228	0.701	0.547	0.737	pCi/L	UJ
CWC255803	CWC010	04/12/22	Alpha Spectroscopy	Th-232	0.0876	0.248	0.645	pCi/L	UJ
CWC255803	CWC010	04/12/22	Alpha Spectroscopy	Ra-226	0.139	0.339	0.832	pCi/L	UJ
CWC255803	CWC010	04/12/22	Alpha Spectroscopy	U-235	0.282	0.408	0.761	pCi/L	UJ
CWC255805	CWC011	04/12/22	Metals	Barium	120		0.9	µg/L	=
CWC255805	CWC011	04/12/22	Metals	Molybdenum	5.2		2	µg/L	=
CWC255805	CWC011	04/12/22	Metals	Antimony	2		2	µg/L	U
CWC255805	CWC011	04/12/22	Metals	Arsenic	4		4	µg/L	U
CWC255805	CWC011	04/12/22	Metals	Chromium	4		4	µg/L	U
CWC255805	CWC011	04/12/22	Metals	Nickel	2		2	µg/L	U
CWC255805	CWC011	04/12/22	Metals	Selenium	2		2	µg/L	U
CWC255805	CWC011	04/12/22	Metals	Thallium	0.9		0.9	µg/L	U

Table E-1. CWC Surface Water Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Error	DL	Units	VQ
CWC255805	CWC011	04/12/22	Metals	Vanadium	4		4	µg/L	U
CWC255805	CWC011	04/12/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC255805	CWC011	04/12/22	Alpha Spectroscopy	Th-228	1.45	0.872	0.941	pCi/L	J
CWC255805	CWC011	04/12/22	Alpha Spectroscopy	Th-230	0.28	0.406	0.755	pCi/L	UJ
CWC255805	CWC011	04/12/22	Alpha Spectroscopy	Th-232	-0.0559	0.25	0.753	pCi/L	UJ
CWC255805	CWC011	04/12/22	Alpha Spectroscopy	Ra-226	0.185	0.247	0.454	pCi/L	UJ
CWC255805	CWC011	04/12/22	Alpha Spectroscopy	U-234	0.55	0.46	0.57	pCi/L	UJ
CWC255805	CWC011	04/12/22	Alpha Spectroscopy	U-235	0.104	0.295	0.768	pCi/L	UJ
CWC255805	CWC011	04/12/22	Alpha Spectroscopy	U-238	0.674	0.524	0.708	pCi/L	UJ
CWC261508	CWC002	10/12/22	Metals	Barium	72		0.69	µg/L	=
CWC261508	CWC002	10/12/22	Metals	Molybdenum	7.6		2	µg/L	=
CWC261508	CWC002	10/12/22	Metals	Arsenic	2.7		1.6	µg/L	=
CWC261508	CWC002	10/12/22	Metals	Nickel	2.7		2	µg/L	=
CWC261508	CWC002	10/12/22	Metals	Antimony	2		2	µg/L	U
CWC261508	CWC002	10/12/22	Metals	Chromium	4		4	µg/L	U
CWC261508	CWC002	10/12/22	Metals	Selenium	2		2	µg/L	U
CWC261508	CWC002	10/12/22	Metals	Thallium	0.13		0.13	µg/L	U
CWC261508	CWC002	10/12/22	Metals	Vanadium	4		4	µg/L	U
CWC261508	CWC002	10/12/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC261508	CWC002	10/12/22	Alpha Spectroscopy	Th-230	0.574	0.425	0.393	pCi/L	J
CWC261508	CWC002	10/12/22	Alpha Spectroscopy	Th-228	0.24	0.346	0.709	pCi/L	UJ
CWC261508	CWC002	10/12/22	Alpha Spectroscopy	Th-232	-0.0185	0.152	0.393	pCi/L	UJ
CWC261508	CWC002	10/12/22	Alpha Spectroscopy	Ra-226	0.459	0.411	0.718	pCi/L	UJ
CWC261508	CWC002	10/12/22	Alpha Spectroscopy	U-234	0.465	0.413	0.571	pCi/L	UJ
CWC261508	CWC002	10/12/22	Alpha Spectroscopy	U-235	0.0478	0.203	0.611	pCi/L	UJ
CWC261508	CWC002	10/12/22	Alpha Spectroscopy	U-238	0.386	0.381	0.568	pCi/L	UJ
CWC261510	CWC003	10/12/22	Metals	Barium	62		0.69	µg/L	=
CWC261510	CWC003	10/12/22	Metals	Molybdenum	6.3		2	µg/L	=
CWC261510	CWC003	10/12/22	Metals	Arsenic	2.5		1.6	µg/L	=
CWC261510	CWC003	10/12/22	Metals	Nickel	2.7		2	µg/L	=
CWC261510	CWC003	10/12/22	Metals	Antimony	2		2	µg/L	U
CWC261510	CWC003	10/12/22	Metals	Chromium	4		4	µg/L	U
CWC261510	CWC003	10/12/22	Metals	Selenium	2		2	µg/L	U
CWC261510	CWC003	10/12/22	Metals	Thallium	0.13		0.13	µg/L	U
CWC261510	CWC003	10/12/22	Metals	Vanadium	4		4	µg/L	U
CWC261510	CWC003	10/12/22	Metals	Cadmium	0.2		0.2	µg/L	U

Table E-1. CWC Surface Water Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Error	DL	Units	VQ
CWC261510	CWC003	10/12/22	Alpha Spectroscopy	Th-230	1.17	0.615	0.536	pCi/L	J
CWC261510	CWC003	10/12/22	Alpha Spectroscopy	Th-228	0.2	0.303	0.62	pCi/L	UJ
CWC261510	CWC003	10/12/22	Alpha Spectroscopy	Th-232	0.0545	0.15	0.386	pCi/L	UJ
CWC261510	CWC003	10/12/22	Alpha Spectroscopy	Ra-226	0.0331	0.273	0.776	pCi/L	UJ
CWC261510	CWC003	10/12/22	Alpha Spectroscopy	U-234	0.147	0.265	0.581	pCi/L	UJ
CWC261510	CWC003	10/12/22	Alpha Spectroscopy	U-235	0.159	0.261	0.481	pCi/L	UJ
CWC261510	CWC003	10/12/22	Alpha Spectroscopy	U-238	0.201	0.257	0.388	pCi/L	UJ
CWC261512	CWC004	10/12/22	Metals	Barium	45		0.69	µg/L	=
CWC261512	CWC004	10/12/22	Metals	Molybdenum	4		2	µg/L	=
CWC261512	CWC004	10/12/22	Metals	Arsenic	1.6		1.6	µg/L	=
CWC261512	CWC004	10/12/22	Metals	Chromium	4.5		4	µg/L	=
CWC261512	CWC004	10/12/22	Metals	Nickel	2.6		2	µg/L	=
CWC261512	CWC004	10/12/22	Metals	Vanadium	4.1		4	µg/L	=
CWC261512	CWC004	10/12/22	Metals	Antimony	2		2	µg/L	U
CWC261512	CWC004	10/12/22	Metals	Selenium	2		2	µg/L	U
CWC261512	CWC004	10/12/22	Metals	Thallium	0.13		0.13	µg/L	U
CWC261512	CWC004	10/12/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC261512	CWC004	10/12/22	Alpha Spectroscopy	Th-230	0.877	0.487	0.339	pCi/L	J
CWC261512	CWC004	10/12/22	Alpha Spectroscopy	Th-228	0	0.142	0.504	pCi/L	UJ
CWC261512	CWC004	10/12/22	Alpha Spectroscopy	Th-232	0	0.18	0.469	pCi/L	UJ
CWC261512	CWC004	10/12/22	Alpha Spectroscopy	Ra-226	0.205	0.335	0.735	pCi/L	UJ
CWC261512	CWC004	10/12/22	Alpha Spectroscopy	U-234	0.172	0.299	0.633	pCi/L	UJ
CWC261512	CWC004	10/12/22	Alpha Spectroscopy	U-235	0.0531	0.225	0.678	pCi/L	UJ
CWC261512	CWC004	10/12/22	Alpha Spectroscopy	U-238	0.278	0.352	0.618	pCi/L	UJ
CWC261514	CWC005	10/12/22	Metals	Barium	58		0.69	µg/L	=
CWC261514	CWC005	10/12/22	Metals	Molybdenum	6		2	µg/L	=
CWC261514	CWC005	10/12/22	Metals	Arsenic	2.1		1.6	µg/L	=
CWC261514	CWC005	10/12/22	Metals	Chromium	4.8		4	µg/L	=
CWC261514	CWC005	10/12/22	Metals	Nickel	2.9		2	µg/L	=
CWC261514	CWC005	10/12/22	Metals	Vanadium	4.3		4	µg/L	=
CWC261514	CWC005	10/12/22	Metals	Antimony	2		2	µg/L	U
CWC261514	CWC005	10/12/22	Metals	Selenium	2		2	µg/L	U
CWC261514	CWC005	10/12/22	Metals	Thallium	0.13		0.13	µg/L	U
CWC261514	CWC005	10/12/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC261514	CWC005	10/12/22	Alpha Spectroscopy	Th-230	0.956	0.52	0.469	pCi/L	J
CWC261514	CWC005	10/12/22	Alpha Spectroscopy	Th-228	0.159	0.302	0.696	pCi/L	UJ

Table E-1. CWC Surface Water Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Error	DL	Units	VQ
CWC261514	CWC005	10/12/22	Alpha Spectroscopy	Th-232	0.0477	0.131	0.338	pCi/L	UJ
CWC261514	CWC005	10/12/22	Alpha Spectroscopy	Ra-226	0.196	0.357	0.819	pCi/L	UJ
CWC261514	CWC005	10/12/22	Alpha Spectroscopy	U-234	0	0.213	0.555	pCi/L	UJ
CWC261514	CWC005	10/12/22	Alpha Spectroscopy	U-235	-0.0697	0.203	0.671	pCi/L	UJ
CWC261514	CWC005	10/12/22	Alpha Spectroscopy	U-238	-0.0188	0.155	0.398	pCi/L	UJ
CWC261516	CWC006	10/12/22	Metals	Barium	75		0.69	µg/L	=
CWC261516	CWC006	10/12/22	Metals	Molybdenum	6.3		2	µg/L	=
CWC261516	CWC006	10/12/22	Metals	Arsenic	2.3		1.6	µg/L	=
CWC261516	CWC006	10/12/22	Metals	Nickel	2.9		2	µg/L	=
CWC261516	CWC006	10/12/22	Metals	Vanadium	4.9		4	µg/L	=
CWC261516	CWC006	10/12/22	Metals	Antimony	2		2	µg/L	U
CWC261516	CWC006	10/12/22	Metals	Chromium	4		4	µg/L	U
CWC261516	CWC006	10/12/22	Metals	Selenium	2		2	µg/L	U
CWC261516	CWC006	10/12/22	Metals	Thallium	0.13		0.13	µg/L	U
CWC261516	CWC006	10/12/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC261516	CWC006	10/12/22	Alpha Spectroscopy	Th-228	0.503	0.386	0.497	pCi/L	J
CWC261516	CWC006	10/12/22	Alpha Spectroscopy	Th-230	0.976	0.516	0.402	pCi/L	J
CWC261516	CWC006	10/12/22	Alpha Spectroscopy	Th-232	0.173	0.221	0.334	pCi/L	UJ
CWC261516	CWC006	10/12/22	Alpha Spectroscopy	Ra-226	0.0628	0.199	0.528	pCi/L	UJ
CWC261516	CWC006	10/12/22	Alpha Spectroscopy	U-234	0.192	0.245	0.371	pCi/L	UJ
CWC261516	CWC006	10/12/22	Alpha Spectroscopy	U-235	0.0646	0.178	0.457	pCi/L	UJ
CWC261516	CWC006	10/12/22	Alpha Spectroscopy	U-238	0.174	0.246	0.444	pCi/L	UJ
CWC261518	CWC007	10/10/22	Metals	Barium	120		0.69	µg/L	=
CWC261518	CWC007	10/10/22	Metals	Molybdenum	7.4		2	µg/L	=
CWC261518	CWC007	10/10/22	Metals	Arsenic	2.9		1.6	µg/L	=
CWC261518	CWC007	10/10/22	Metals	Nickel	2.6		2	µg/L	=
CWC261518	CWC007	10/10/22	Metals	Vanadium	4		4	µg/L	=
CWC261518	CWC007	10/10/22	Metals	Antimony	2		2	µg/L	U
CWC261518	CWC007	10/10/22	Metals	Chromium	4		4	µg/L	U
CWC261518	CWC007	10/10/22	Metals	Selenium	2		2	µg/L	U
CWC261518	CWC007	10/10/22	Metals	Thallium	0.13		0.13	µg/L	U
CWC261518	CWC007	10/10/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC261518	CWC007	10/10/22	Alpha Spectroscopy	Th-230	1.09	0.568	0.368	pCi/L	J
CWC261518	CWC007	10/10/22	Alpha Spectroscopy	U-234	0.797	0.526	0.434	pCi/L	J
CWC261518	CWC007	10/10/22	Alpha Spectroscopy	U-238	0.61	0.469	0.52	pCi/L	J
CWC261518	CWC007	10/10/22	Alpha Spectroscopy	Th-228	0.0865	0.205	0.499	pCi/L	UJ

Table E-1. CWC Surface Water Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Error	DL	Units	VQ
CWC261518	CWC007	10/10/22	Alpha Spectroscopy	Th-232	0.208	0.278	0.509	pCi/L	UJ
CWC261518	CWC007	10/10/22	Alpha Spectroscopy	Ra-226	0.0661	0.209	0.556	pCi/L	UJ
CWC261518	CWC007	10/10/22	Alpha Spectroscopy	U-235	-0.0252	0.208	0.535	pCi/L	UJ
CWC261520	CWC008	10/10/22	Metals	Barium	120		0.69	µg/L	=
CWC261520	CWC008	10/10/22	Metals	Molybdenum	6.5		2	µg/L	=
CWC261520	CWC008	10/10/22	Metals	Arsenic	2.6		1.6	µg/L	=
CWC261520	CWC008	10/10/22	Metals	Nickel	2.2		2	µg/L	=
CWC261520	CWC008	10/10/22	Metals	Vanadium	4.4		4	µg/L	=
CWC261520	CWC008	10/10/22	Metals	Antimony	2		2	µg/L	U
CWC261520	CWC008	10/10/22	Metals	Chromium	4		4	µg/L	U
CWC261520	CWC008	10/10/22	Metals	Selenium	2		2	µg/L	U
CWC261520	CWC008	10/10/22	Metals	Thallium	0.13		0.13	µg/L	U
CWC261520	CWC008	10/10/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC261520	CWC008	10/10/22	Alpha Spectroscopy	Th-230	0.892	0.505	0.422	pCi/L	J
CWC261520	CWC008	10/10/22	Alpha Spectroscopy	U-234	0.905	0.543	0.409	pCi/L	J
CWC261520	CWC008	10/10/22	Alpha Spectroscopy	U-238	0.441	0.38	0.407	pCi/L	J
CWC261520	CWC008	10/10/22	Alpha Spectroscopy	Th-228	0.198	0.273	0.522	pCi/L	UJ
CWC261520	CWC008	10/10/22	Alpha Spectroscopy	Th-232	0.132	0.229	0.485	pCi/L	UJ
CWC261520	CWC008	10/10/22	Alpha Spectroscopy	Ra-226	0.138	0.258	0.58	pCi/L	UJ
CWC261520	CWC008	10/10/22	Alpha Spectroscopy	U-235	0.095	0.269	0.699	pCi/L	UJ
CWC261522	CWC009	10/10/22	Metals	Barium	140		0.69	µg/L	=
CWC261522	CWC009	10/10/22	Metals	Molybdenum	7.2		2	µg/L	=
CWC261522	CWC009	10/10/22	Metals	Arsenic	2.6		1.6	µg/L	=
CWC261522	CWC009	10/10/22	Metals	Nickel	2.5		2	µg/L	=
CWC261522	CWC009	10/10/22	Metals	Vanadium	5		4	µg/L	=
CWC261522	CWC009	10/10/22	Metals	Antimony	2		2	µg/L	U
CWC261522	CWC009	10/10/22	Metals	Chromium	4		4	µg/L	U
CWC261522	CWC009	10/10/22	Metals	Selenium	2		2	µg/L	U
CWC261522	CWC009	10/10/22	Metals	Thallium	0.13		0.13	µg/L	U
CWC261522	CWC009	10/10/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC261522	CWC009	10/10/22	Alpha Spectroscopy	Th-230	1.78	0.718	0.471	pCi/L	=
CWC261522	CWC009	10/10/22	Alpha Spectroscopy	U-234	0.998	0.712	0.816	pCi/L	J
CWC261522	CWC009	10/10/22	Alpha Spectroscopy	U-238	0.883	0.671	0.813	pCi/L	J
CWC261522	CWC009	10/10/22	Alpha Spectroscopy	Th-228	0.603	0.445	0.625	pCi/L	UJ
CWC261522	CWC009	10/10/22	Alpha Spectroscopy	Th-232	0.114	0.187	0.346	pCi/L	UJ
CWC261522	CWC009	10/10/22	Alpha Spectroscopy	Ra-226	0.204	0.288	0.57	pCi/L	UJ

Table E-1. CWC Surface Water Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Error	DL	Units	VQ
CWC261522	CWC009	10/10/22	Alpha Spectroscopy	U-235	-0.0342	0.282	0.726	pCi/L	UJ
CWC261524	CWC010	10/10/22	Metals	Barium	110		0.69	µg/L	=
CWC261524	CWC010	10/10/22	Metals	Molybdenum	5.8		2	µg/L	=
CWC261524	CWC010	10/10/22	Metals	Vanadium	6.6		4	µg/L	=
CWC261524	CWC010	10/10/22	Metals	Arsenic	2.8		1.6	µg/L	=
CWC261524	CWC010	10/10/22	Metals	Nickel	2.6		2	µg/L	=
CWC261524	CWC010	10/10/22	Metals	Antimony	2		2	µg/L	U
CWC261524	CWC010	10/10/22	Metals	Chromium	4		4	µg/L	U
CWC261524	CWC010	10/10/22	Metals	Selenium	2		2	µg/L	U
CWC261524	CWC010	10/10/22	Metals	Thallium	0.13		0.13	µg/L	U
CWC261524	CWC010	10/10/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC261524	CWC010	10/10/22	Alpha Spectroscopy	Th-230	0.841	0.479	0.42	pCi/L	J
CWC261524	CWC010	10/10/22	Alpha Spectroscopy	U-234	0.848	0.509	0.383	pCi/L	J
CWC261524	CWC010	10/10/22	Alpha Spectroscopy	Th-228	0.218	0.369	0.832	pCi/L	UJ
CWC261524	CWC010	10/10/22	Alpha Spectroscopy	Th-232	1.44E-06	0.152	0.523	pCi/L	UJ
CWC261524	CWC010	10/10/22	Alpha Spectroscopy	Ra-226	0.183	0.299	0.658	pCi/L	UJ
CWC261524	CWC010	10/10/22	Alpha Spectroscopy	U-235	0	0.252	0.656	pCi/L	UJ
CWC261524	CWC010	10/10/22	Alpha Spectroscopy	U-238	0.144	0.249	0.529	pCi/L	UJ
CWC261526	CWC011	10/10/22	Metals	Barium	120		0.69	µg/L	=
CWC261526	CWC011	10/10/22	Metals	Molybdenum	5.3		2	µg/L	=
CWC261526	CWC011	10/10/22	Metals	Arsenic	2.8		1.6	µg/L	=
CWC261526	CWC011	10/10/22	Metals	Nickel	2.6		2	µg/L	=
CWC261526	CWC011	10/10/22	Metals	Vanadium	5.9		4	µg/L	=
CWC261526	CWC011	10/10/22	Metals	Antimony	2		2	µg/L	U
CWC261526	CWC011	10/10/22	Metals	Chromium	4		4	µg/L	U
CWC261526	CWC011	10/10/22	Metals	Selenium	2		2	µg/L	U
CWC261526	CWC011	10/10/22	Metals	Thallium	0.13		0.13	µg/L	U
CWC261526	CWC011	10/10/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC261526	CWC011	10/10/22	Alpha Spectroscopy	Th-230	0.96	0.556	0.595	pCi/L	J
CWC261526	CWC011	10/10/22	Alpha Spectroscopy	U-234	0.613	0.488	0.482	pCi/L	J
CWC261526	CWC011	10/10/22	Alpha Spectroscopy	U-238	0.701	0.52	0.48	pCi/L	J
CWC261526	CWC011	10/10/22	Alpha Spectroscopy	Th-228	0.453	0.462	0.867	pCi/L	UJ
CWC261526	CWC011	10/10/22	Alpha Spectroscopy	Th-232	0.244	0.284	0.445	pCi/L	UJ
CWC261526	CWC011	10/10/22	Alpha Spectroscopy	Ra-226	4.67E-06	0.33	0.949	pCi/L	UJ
CWC261526	CWC011	10/10/22	Alpha Spectroscopy	U-235	0	0.317	0.825	pCi/L	UJ
CWC256709	CWC002	05/05/22	Metals	Barium	51		0.9	µg/L	=

Table E-1. CWC Surface Water Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Error	DL	Units	VQ
CWC256709	CWC002	05/05/22	Metals	Molybdenum	5.9		2	µg/L	=
CWC256709	CWC002	05/05/22	Metals	Nickel	2.4		2	µg/L	=
CWC256709	CWC002	05/05/22	Metals	Vanadium	5.5		4	µg/L	=
CWC256709	CWC002	05/05/22	Metals	Antimony	2		2	µg/L	U
CWC256709	CWC002	05/05/22	Metals	Arsenic	4		4	µg/L	U
CWC256709	CWC002	05/05/22	Metals	Chromium	4		4	µg/L	U
CWC256709	CWC002	05/05/22	Metals	Selenium	2		2	µg/L	U
CWC256709	CWC002	05/05/22	Metals	Thallium	0.9		0.9	µg/L	U
CWC256709	CWC002	05/05/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC256709	CWC002	05/05/22	Alpha Spectroscopy	Th-228	0.246	0.287	0.449	pCi/L	UJ
CWC256709	CWC002	05/05/22	Alpha Spectroscopy	Th-230	0.194	0.247	0.374	pCi/L	UJ
CWC256709	CWC002	05/05/22	Alpha Spectroscopy	Th-232	-0.0176	0.145	0.373	pCi/L	UJ
CWC256709	CWC002	05/05/22	Alpha Spectroscopy	Ra-226	0.0961	0.248	0.621	pCi/L	UJ
CWC256709	CWC002	05/05/22	Alpha Spectroscopy	U-234	0.0496	0.136	0.351	pCi/L	UJ
CWC256709	CWC002	05/05/22	Alpha Spectroscopy	U-235	0	0.231	0.601	pCi/L	UJ
CWC256709	CWC002	05/05/22	Alpha Spectroscopy	U-238	0.198	0.264	0.485	pCi/L	UJ
CWC256710	CWC007	05/05/22	Metals	Barium	49		0.9	µg/L	=
CWC256710	CWC007	05/05/22	Metals	Molybdenum	5.3		2	µg/L	=
CWC256710	CWC007	05/05/22	Metals	Nickel	3.6		2	µg/L	=
CWC256710	CWC007	05/05/22	Metals	Vanadium	5		4	µg/L	=
CWC256710	CWC007	05/05/22	Metals	Antimony	2		2	µg/L	U
CWC256710	CWC007	05/05/22	Metals	Arsenic	4		4	µg/L	U
CWC256710	CWC007	05/05/22	Metals	Chromium	4		4	µg/L	U
CWC256710	CWC007	05/05/22	Metals	Selenium	2		2	µg/L	U
CWC256710	CWC007	05/05/22	Metals	Thallium	0.9		0.9	µg/L	U
CWC256710	CWC007	05/05/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC256710	CWC007	05/05/22	Alpha Spectroscopy	Th-230	1.12	0.593	0.462	pCi/L	J
CWC256710	CWC007	05/05/22	Alpha Spectroscopy	U-234	0.368	0.317	0.34	pCi/L	J
CWC256710	CWC007	05/05/22	Alpha Spectroscopy	Th-228	0.397	0.426	0.789	pCi/L	UJ
CWC256710	CWC007	05/05/22	Alpha Spectroscopy	Th-232	0.0541	0.149	0.383	pCi/L	UJ
CWC256710	CWC007	05/05/22	Alpha Spectroscopy	Ra-226	0.0836	0.264	0.703	pCi/L	UJ
CWC256710	CWC007	05/05/22	Alpha Spectroscopy	U-235	0	0.223	0.581	pCi/L	UJ
CWC256710	CWC007	05/05/22	Alpha Spectroscopy	U-238	0.175	0.224	0.339	pCi/L	UJ
CWC256711	CWC009	05/05/22	Metals	Barium	49		0.9	µg/L	=
CWC256711	CWC009	05/05/22	Metals	Molybdenum	2.6		2	µg/L	=
CWC256711	CWC009	05/05/22	Metals	Nickel	3.7		2	µg/L	=

Table E-1. CWC Surface Water Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Error	DL	Units	VQ
CWC256711	CWC009	05/05/22	Metals	Vanadium	5.5		4	µg/L	=
CWC256711	CWC009	05/05/22	Metals	Antimony	2		2	µg/L	U
CWC256711	CWC009	05/05/22	Metals	Arsenic	4		4	µg/L	U
CWC256711	CWC009	05/05/22	Metals	Chromium	4		4	µg/L	U
CWC256711	CWC009	05/05/22	Metals	Selenium	2		2	µg/L	U
CWC256711	CWC009	05/05/22	Metals	Thallium	0.9		0.9	µg/L	U
CWC256711	CWC009	05/05/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC256711	CWC009	05/05/22	Alpha Spectroscopy	Th-230	1.17	0.621	0.483	pCi/L	J
CWC256711	CWC009	05/05/22	Alpha Spectroscopy	Th-228	0.453	0.443	0.76	pCi/L	UJ
CWC256711	CWC009	05/05/22	Alpha Spectroscopy	Th-232	0.0566	0.156	0.401	pCi/L	UJ
CWC256711	CWC009	05/05/22	Alpha Spectroscopy	Ra-226	0.0624	0.197	0.524	pCi/L	UJ
CWC256711	CWC009	05/05/22	Alpha Spectroscopy	U-234	0.12	0.197	0.363	pCi/L	UJ
CWC256711	CWC009	05/05/22	Alpha Spectroscopy	U-235	0.0633	0.174	0.448	pCi/L	UJ
CWC256711	CWC009	05/05/22	Alpha Spectroscopy	U-238	0.341	0.336	0.502	pCi/L	UJ
CWC259136	CWC002	07/27/22	Metals	Molybdenum	18		0.14	µg/L	=
CWC259136	CWC002	07/27/22	Metals	Barium	70		0.29	µg/L	=
CWC259136	CWC002	07/27/22	Metals	Antimony	0.46		0.4	µg/L	=
CWC259136	CWC002	07/27/22	Metals	Arsenic	2.4		0.33	µg/L	=
CWC259136	CWC002	07/27/22	Metals	Chromium	3.5		0.5	µg/L	=
CWC259136	CWC002	07/27/22	Metals	Nickel	2.4		0.3	µg/L	=
CWC259136	CWC002	07/27/22	Metals	Selenium	2.9		0.37	µg/L	=
CWC259136	CWC002	07/27/22	Metals	Vanadium	3.2		1.2	µg/L	=
CWC259136	CWC002	07/27/22	Metals	Cadmium	0.27		0.27	µg/L	U
CWC259136	CWC002	07/27/22	Metals	Thallium	0.089		0.089	µg/L	U
CWC259136	CWC002	07/27/22	Alpha Spectroscopy	Th-228	0.425	0.346	0.447	pCi/L	UJ
CWC259136	CWC002	07/27/22	Alpha Spectroscopy	Th-230	0.243	0.273	0.447	pCi/L	UJ
CWC259136	CWC002	07/27/22	Alpha Spectroscopy	Th-232	0	0.172	0.447	pCi/L	UJ
CWC259136	CWC002	07/27/22	Alpha Spectroscopy	Ra-226	0.214	0.252	0.412	pCi/L	UJ
CWC259136	CWC002	07/27/22	Alpha Spectroscopy	U-234	0.116	0.19	0.351	pCi/L	UJ
CWC259136	CWC002	07/27/22	Alpha Spectroscopy	U-235	0	0.23	0.6	pCi/L	UJ
CWC259136	CWC002	07/27/22	Alpha Spectroscopy	U-238	0.164	0.233	0.42	pCi/L	UJ
CWC259137	CWC007	07/27/22	Metals	Molybdenum	14		0.14	µg/L	=
CWC259137	CWC007	07/27/22	Metals	Nickel	3		0.3	µg/L	=
CWC259137	CWC007	07/27/22	Metals	Selenium	5.1		0.37	µg/L	=
CWC259137	CWC007	07/27/22	Metals	Barium	75		0.29	µg/L	=
CWC259137	CWC007	07/27/22	Metals	Antimony	0.57		0.4	µg/L	=

Table E-1. CWC Surface Water Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Error	DL	Units	VQ
CWC259137	CWC007	07/27/22	Metals	Arsenic	2.2		0.33	µg/L	=
CWC259137	CWC007	07/27/22	Metals	Chromium	3.8		0.5	µg/L	=
CWC259137	CWC007	07/27/22	Metals	Vanadium	3.9		1.2	µg/L	=
CWC259137	CWC007	07/27/22	Metals	Cadmium	0.27		0.27	µg/L	U
CWC259137	CWC007	07/27/22	Metals	Thallium	0.089		0.089	µg/L	U
CWC259137	CWC007	07/27/22	Alpha Spectroscopy	Th-230	0.514	0.382	0.45	pCi/L	J
CWC259137	CWC007	07/27/22	Alpha Spectroscopy	Th-228	0.233	0.288	0.531	pCi/L	UJ
CWC259137	CWC007	07/27/22	Alpha Spectroscopy	Th-232	-0.0156	0.128	0.33	pCi/L	UJ
CWC259137	CWC007	07/27/22	Alpha Spectroscopy	Ra-226	0.309	0.316	0.52	pCi/L	UJ
CWC259137	CWC007	07/27/22	Alpha Spectroscopy	U-234	0.377	0.335	0.462	pCi/L	UJ
CWC259137	CWC007	07/27/22	Alpha Spectroscopy	U-235	-0.0194	0.16	0.412	pCi/L	UJ
CWC259137	CWC007	07/27/22	Alpha Spectroscopy	U-238	0.313	0.308	0.461	pCi/L	UJ
CWC259138	CWC009	07/27/22	Metals	Molybdenum	8.2		0.14	µg/L	=
CWC259138	CWC009	07/27/22	Metals	Nickel	3.2		0.3	µg/L	=
CWC259138	CWC009	07/27/22	Metals	Barium	66		0.29	µg/L	=
CWC259138	CWC009	07/27/22	Metals	Antimony	0.65		0.4	µg/L	=
CWC259138	CWC009	07/27/22	Metals	Arsenic	2.3		0.33	µg/L	=
CWC259138	CWC009	07/27/22	Metals	Chromium	3		0.5	µg/L	=
CWC259138	CWC009	07/27/22	Metals	Selenium	2.1		0.37	µg/L	=
CWC259138	CWC009	07/27/22	Metals	Vanadium	3.8		1.2	µg/L	=
CWC259138	CWC009	07/27/22	Metals	Cadmium	0.27		0.27	µg/L	U
CWC259138	CWC009	07/27/22	Metals	Thallium	0.089		0.089	µg/L	U
CWC259138	CWC009	07/27/22	Alpha Spectroscopy	Th-230	0.663	0.397	0.299	pCi/L	J
CWC259138	CWC009	07/27/22	Alpha Spectroscopy	Th-228	0.38	0.327	0.48	pCi/L	UJ
CWC259138	CWC009	07/27/22	Alpha Spectroscopy	Th-232	0.197	0.229	0.359	pCi/L	UJ
CWC259138	CWC009	07/27/22	Alpha Spectroscopy	Ra-226	-0.16	0.212	0.854	pCi/L	UJ
CWC259138	CWC009	07/27/22	Alpha Spectroscopy	U-234	0.136	0.246	0.538	pCi/L	UJ
CWC259138	CWC009	07/27/22	Alpha Spectroscopy	U-235	0.0419	0.178	0.536	pCi/L	UJ
CWC259138	CWC009	07/27/22	Alpha Spectroscopy	U-238	0.254	0.274	0.359	pCi/L	UJ
CWC264248	CWC002	10/26/22	Metals	Barium	57		0.69	µg/L	=
CWC264248	CWC002	10/26/22	Metals	Molybdenum	16		2	µg/L	=
CWC264248	CWC002	10/26/22	Metals	Arsenic	1.9		1.6	µg/L	=
CWC264248	CWC002	10/26/22	Metals	Selenium	2.7		2	µg/L	=
CWC264248	CWC002	10/26/22	Metals	Antimony	2		2	µg/L	U
CWC264248	CWC002	10/26/22	Metals	Chromium	4		4	µg/L	U
CWC264248	CWC002	10/26/22	Metals	Nickel	2		2	µg/L	U

Table E-1. CWC Surface Water Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Error	DL	Units	VQ
CWC264248	CWC002	10/26/22	Metals	Thallium	0.13		0.13	µg/L	U
CWC264248	CWC002	10/26/22	Metals	Vanadium	4		4	µg/L	U
CWC264248	CWC002	10/26/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC264248	CWC002	10/26/22	Alpha Spectroscopy	Th-230	1.4	0.825	0.792	pCi/L	J
CWC264248	CWC002	10/26/22	Alpha Spectroscopy	U-234	0.771	0.462	0.348	pCi/L	J
CWC264248	CWC002	10/26/22	Alpha Spectroscopy	Th-228	0.645	0.575	0.791	pCi/L	UJ
CWC264248	CWC002	10/26/22	Alpha Spectroscopy	Th-232	0.107	0.304	0.791	pCi/L	UJ
CWC264248	CWC002	10/26/22	Alpha Spectroscopy	Ra-226	-0.142	0.376	1.18	pCi/L	UJ
CWC264248	CWC002	10/26/22	Alpha Spectroscopy	U-235	0.0607	0.167	0.43	pCi/L	UJ
CWC264248	CWC002	10/26/22	Alpha Spectroscopy	U-238	0.294	0.297	0.417	pCi/L	UJ
CWC264249	CWC007	10/26/22	Metals	Barium	49		0.69	µg/L	=
CWC264249	CWC007	10/26/22	Metals	Molybdenum	13		2	µg/L	=
CWC264249	CWC007	10/26/22	Metals	Selenium	5.4		2	µg/L	=
CWC264249	CWC007	10/26/22	Metals	Arsenic	1.8		1.6	µg/L	=
CWC264249	CWC007	10/26/22	Metals	Vanadium	4.5		4	µg/L	=
CWC264249	CWC007	10/26/22	Metals	Antimony	2		2	µg/L	U
CWC264249	CWC007	10/26/22	Metals	Chromium	4		4	µg/L	U
CWC264249	CWC007	10/26/22	Metals	Nickel	2		2	µg/L	U
CWC264249	CWC007	10/26/22	Metals	Thallium	0.13		0.13	µg/L	U
CWC264249	CWC007	10/26/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC264249	CWC007	10/26/22	Alpha Spectroscopy	Th-230	1.08	0.694	0.724	pCi/L	J
CWC264249	CWC007	10/26/22	Alpha Spectroscopy	Th-228	0.59	0.525	0.723	pCi/L	UJ
CWC264249	CWC007	10/26/22	Alpha Spectroscopy	Th-232	0.0736	0.203	0.521	pCi/L	UJ
CWC264249	CWC007	10/26/22	Alpha Spectroscopy	Ra-226	0.229	0.324	0.643	pCi/L	UJ
CWC264249	CWC007	10/26/22	Alpha Spectroscopy	U-234	0.323	0.307	0.361	pCi/L	UJ
CWC264249	CWC007	10/26/22	Alpha Spectroscopy	U-235	-0.021	0.173	0.445	pCi/L	UJ
CWC264249	CWC007	10/26/22	Alpha Spectroscopy	U-238	0.203	0.271	0.498	pCi/L	UJ
CWC264250	CWC009	10/26/22	Metals	Barium	39		0.69	µg/L	=
CWC264250	CWC009	10/26/22	Metals	Molybdenum	7.8		2	µg/L	=
CWC264250	CWC009	10/26/22	Metals	Arsenic	1.6		1.6	µg/L	=
CWC264250	CWC009	10/26/22	Metals	Selenium	2.1		2	µg/L	=
CWC264250	CWC009	10/26/22	Metals	Antimony	2		2	µg/L	U
CWC264250	CWC009	10/26/22	Metals	Chromium	4		4	µg/L	U
CWC264250	CWC009	10/26/22	Metals	Nickel	2		2	µg/L	U
CWC264250	CWC009	10/26/22	Metals	Thallium	0.13		0.13	µg/L	U
CWC264250	CWC009	10/26/22	Metals	Vanadium	4		4	µg/L	U

Table E-1. CWC Surface Water Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Error	DL	Units	VQ
CWC264250	CWC009	10/26/22	Metals	Cadmium	0.2		0.2	µg/L	U
CWC264250	CWC009	10/26/22	Alpha Spectroscopy	Th-228	0.743	0.529	0.608	pCi/L	J
CWC264250	CWC009	10/26/22	Alpha Spectroscopy	Th-230	0.641	0.475	0.439	pCi/L	J
CWC264250	CWC009	10/26/22	Alpha Spectroscopy	Th-232	0.0619	0.17	0.438	pCi/L	UJ
CWC264250	CWC009	10/26/22	Alpha Spectroscopy	Ra-226	0.259	0.305	0.498	pCi/L	UJ
CWC264250	CWC009	10/26/22	Alpha Spectroscopy	U-234	0.307	0.308	0.485	pCi/L	UJ
CWC264250	CWC009	10/26/22	Alpha Spectroscopy	U-235	-0.0189	0.156	0.402	pCi/L	UJ
CWC264250	CWC009	10/26/22	Alpha Spectroscopy	U-238	0.168	0.214	0.324	pCi/L	UJ

VQs:

= - Indicates that the data met all QA/QC requirements, and that the parameter has been positively identified and the associated concentration value is accurate.

J - Indicates that the parameter was positively identified; the associated numerical value is the approximate concentration of the parameter in the sample.

U - Indicates that the data met all QA/QC requirements, and that the parameter was analyzed for but was not detected above the reported sample quantitation limit.

UJ - Indicates that the parameter was not detected above the reported sample quantitation limit and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. However, the reported quantitation limit is approximate.

Table E-2. CWC Sediment Data for CY 2022

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC255788	CWC002	04/12/22	Metals	Antimony	2.2	2.2	mg/kg	U	
CWC255788	CWC002	04/12/22	Metals	Arsenic	4.7	4.4	mg/kg	=	
CWC255788	CWC002	04/12/22	Metals	Barium	54	5.5	mg/kg	=	
CWC255788	CWC002	04/12/22	Metals	Cadmium	0.48	0.27	mg/kg	J	E01, E08
CWC255788	CWC002	04/12/22	Metals	Chromium	17	5	mg/kg	=	
CWC255788	CWC002	04/12/22	Metals	Molybdenum	2.2	2.2	mg/kg	U	
CWC255788	CWC002	04/12/22	Metals	Nickel	7.9	2.2	mg/kg	=	
CWC255788	CWC002	04/12/22	Metals	Selenium	3.5	3.5	mg/kg	U	
CWC255788	CWC002	04/12/22	Metals	Thallium	2.2	2.2	mg/kg	U	
CWC255788	CWC002	04/12/22	Metals	Vanadium	15	4.4	mg/kg	=	
CWC255788	CWC002	04/12/22	Gamma Spectroscopy	Ac-227	0.0916	0.0917	pCi/g	U	T04, T05
CWC255788	CWC002	04/12/22	Gamma Spectroscopy	Pa-231	-0.203	0.724	pCi/g	UJ	T04, T06
CWC255788	CWC002	04/12/22	Gamma Spectroscopy	Ra-226	0.952	0.0414	pCi/g	=	
CWC255788	CWC002	04/12/22	Gamma Spectroscopy	K-40	8.7	0.183	pCi/g	=	
CWC255788	CWC002	04/12/22	Gamma Spectroscopy	Ra-228	0.355	0.0417	pCi/g	=	
CWC255788	CWC002	04/12/22	Alpha Spectroscopy	Th-228	0.583	0.159	pCi/g	=	
CWC255788	CWC002	04/12/22	Gamma Spectroscopy	Th-228	0.355	0.0417	pCi/g	=	
CWC255788	CWC002	04/12/22	Alpha Spectroscopy	Th-230	1.12	0.159	pCi/g	J	F01
CWC255788	CWC002	04/12/22	Gamma Spectroscopy	Th-230	1.18	3.94	pCi/g	UJ	T04, T06
CWC255788	CWC002	04/12/22	Alpha Spectroscopy	Th-232	0.237	0.159	pCi/g	J	T04, T20
CWC255788	CWC002	04/12/22	Gamma Spectroscopy	Am-241	-0.0313	0.0382	pCi/g	UJ	T04, T06
CWC255788	CWC002	04/12/22	Gamma Spectroscopy	Cs-137	-2.88E-05	0.0168	pCi/g	UJ	T04, T06
CWC255788	CWC002	04/12/22	Gamma Spectroscopy	Th-232	0.355	0.0417	pCi/g	=	
CWC255788	CWC002	04/12/22	Gamma Spectroscopy	U-235	0.129	0.249	pCi/g	UJ	T04, T06
CWC255788	CWC002	04/12/22	Gamma Spectroscopy	U-238	1.46	0.241	pCi/g	=	
CWC255790	CWC003	04/12/22	Metals	Antimony	2.2	2.2	mg/kg	U	
CWC255790	CWC003	04/12/22	Metals	Arsenic	4.7	4.4	mg/kg	=	
CWC255790	CWC003	04/12/22	Metals	Barium	230	5.5	mg/kg	=	
CWC255790	CWC003	04/12/22	Metals	Cadmium	0.51	0.26	mg/kg	J	E01, E08
CWC255790	CWC003	04/12/22	Metals	Chromium	19	4.9	mg/kg	=	
CWC255790	CWC003	04/12/22	Metals	Molybdenum	2.2	2.2	mg/kg	U	
CWC255790	CWC003	04/12/22	Metals	Nickel	12	2.2	mg/kg	=	
CWC255790	CWC003	04/12/22	Metals	Selenium	3.5	3.5	mg/kg	U	
CWC255790	CWC003	04/12/22	Metals	Thallium	2.2	2.2	mg/kg	U	
CWC255790	CWC003	04/12/22	Metals	Vanadium	24	4.4	mg/kg	=	

Table E-2. CWC Sediment Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC255790	CWC003	04/12/22	Gamma Spectroscopy	Ac-227	0.000883	0.178	pCi/g	UJ	T04, T06
CWC255790	CWC003	04/12/22	Gamma Spectroscopy	Pa-231	-0.102	0.662	pCi/g	UJ	T04, T06
CWC255790	CWC003	04/12/22	Gamma Spectroscopy	Ra-226	0.853	0.0432	pCi/g	=	
CWC255790	CWC003	04/12/22	Gamma Spectroscopy	K-40	8.55	0.176	pCi/g	=	
CWC255790	CWC003	04/12/22	Gamma Spectroscopy	Ra-228	0.249	0.0401	pCi/g	J	F01
CWC255790	CWC003	04/12/22	Alpha Spectroscopy	Th-228	0.402	0.135	pCi/g	J	T04, T20
CWC255790	CWC003	04/12/22	Gamma Spectroscopy	Th-228	0.249	0.0401	pCi/g	J	F01
CWC255790	CWC003	04/12/22	Alpha Spectroscopy	Th-230	1.01	0.115	pCi/g	J	F01
CWC255790	CWC003	04/12/22	Gamma Spectroscopy	Th-230	1.07	3.53	pCi/g	UJ	T04, T06
CWC255790	CWC003	04/12/22	Alpha Spectroscopy	Th-232	0.53	0.177	pCi/g	=	
CWC255790	CWC003	04/12/22	Gamma Spectroscopy	Am-241	-0.00714	0.0349	pCi/g	UJ	T04, T06
CWC255790	CWC003	04/12/22	Gamma Spectroscopy	Cs-137	-0.00877	0.0158	pCi/g	UJ	T04, T06
CWC255790	CWC003	04/12/22	Gamma Spectroscopy	Th-232	0.249	0.0401	pCi/g	J	F01
CWC255790	CWC003	04/12/22	Gamma Spectroscopy	U-235	-0.0108	0.216	pCi/g	UJ	T04, T06
CWC255790	CWC003	04/12/22	Gamma Spectroscopy	U-238	0.633	0.217	pCi/g	=	
CWC255792	CWC004	04/12/22	Metals	Antimony	0.86	0.31	mg/kg	=	
CWC255792	CWC004	04/12/22	Metals	Arsenic	5.5	0.63	mg/kg	=	
CWC255792	CWC004	04/12/22	Metals	Barium	120	0.78	mg/kg	=	
CWC255792	CWC004	04/12/22	Metals	Cadmium	0.5	0.038	mg/kg	J	E01, E08
CWC255792	CWC004	04/12/22	Metals	Chromium	22	0.71	mg/kg	=	
CWC255792	CWC004	04/12/22	Metals	Molybdenum	0.65	0.31	mg/kg	=	
CWC255792	CWC004	04/12/22	Metals	Nickel	14	0.31	mg/kg	=	
CWC255792	CWC004	04/12/22	Metals	Selenium	0.74	0.5	mg/kg	=	
CWC255792	CWC004	04/12/22	Metals	Thallium	0.31	0.31	mg/kg	U	
CWC255792	CWC004	04/12/22	Metals	Vanadium	23	0.63	mg/kg	=	
CWC255792	CWC004	04/12/22	Gamma Spectroscopy	Ac-227	-0.0243	0.222	pCi/g	UJ	T04, T06
CWC255792	CWC004	04/12/22	Gamma Spectroscopy	Pa-231	0.172	0.842	pCi/g	UJ	T04, T06
CWC255792	CWC004	04/12/22	Gamma Spectroscopy	Ra-226	1.05	0.0537	pCi/g	=	
CWC255792	CWC004	04/12/22	Gamma Spectroscopy	K-40	14.5	0.208	pCi/g	=	
CWC255792	CWC004	04/12/22	Gamma Spectroscopy	Ra-228	0.874	0.0546	pCi/g	=	
CWC255792	CWC004	04/12/22	Alpha Spectroscopy	Th-228	1.27	0.173	pCi/g	=	
CWC255792	CWC004	04/12/22	Gamma Spectroscopy	Th-228	0.874	0.0546	pCi/g	=	
CWC255792	CWC004	04/12/22	Alpha Spectroscopy	Th-230	2.35	0.173	pCi/g	=	
CWC255792	CWC004	04/12/22	Gamma Spectroscopy	Th-230	1.44	4.53	pCi/g	UJ	T04, T06
CWC255792	CWC004	04/12/22	Alpha Spectroscopy	Th-232	1.03	0.173	pCi/g	=	
CWC255792	CWC004	04/12/22	Gamma Spectroscopy	Am-241	0.0268	0.0479	pCi/g	UJ	T04, T06
CWC255792	CWC004	04/12/22	Gamma Spectroscopy	Cs-137	-0.0205	0.0202	pCi/g	UJ	T04, T06
CWC255792	CWC004	04/12/22	Gamma Spectroscopy	Th-232	0.874	0.0546	pCi/g	=	

Table E-2. CWC Sediment Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC255792	CWC004	04/12/22	Gamma Spectroscopy	U-235	0.0226	0.283	pCi/g	UJ	T04, T06
CWC255792	CWC004	04/12/22	Gamma Spectroscopy	U-238	1.3	0.279	pCi/g	=	
CWC255794	CWC005	04/12/22	Metals	Antimony	1	0.8	mg/kg	=	
CWC255794	CWC005	04/12/22	Metals	Arsenic	8.7	1.6	mg/kg	=	
CWC255794	CWC005	04/12/22	Metals	Barium	180	2	mg/kg	=	
CWC255794	CWC005	04/12/22	Metals	Cadmium	2.7	0.097	mg/kg	J	E01, E08
CWC255794	CWC005	04/12/22	Metals	Chromium	29	1.8	mg/kg	=	
CWC255794	CWC005	04/12/22	Metals	Molybdenum	1.6	0.8	mg/kg	=	
CWC255794	CWC005	04/12/22	Metals	Nickel	18	0.8	mg/kg	=	
CWC255794	CWC005	04/12/22	Metals	Selenium	1.3	1.3	mg/kg	U	
CWC255794	CWC005	04/12/22	Metals	Thallium	0.8	0.8	mg/kg	U	
CWC255794	CWC005	04/12/22	Metals	Vanadium	25	1.6	mg/kg	=	
CWC255794	CWC005	04/12/22	Gamma Spectroscopy	Ac-227	0.0417	0.234	pCi/g	UJ	T04, T06
CWC255794	CWC005	04/12/22	Gamma Spectroscopy	Pa-231	-0.37	0.841	pCi/g	UJ	T04, T06
CWC255794	CWC005	04/12/22	Gamma Spectroscopy	Ra-226	1.1	0.0546	pCi/g	=	
CWC255794	CWC005	04/12/22	Gamma Spectroscopy	Cs-137	0.0214	0.0137	pCi/g	=	
CWC255794	CWC005	04/12/22	Gamma Spectroscopy	K-40	12.9	0.211	pCi/g	=	
CWC255794	CWC005	04/12/22	Gamma Spectroscopy	Ra-228	0.714	0.0566	pCi/g	=	
CWC255794	CWC005	04/12/22	Alpha Spectroscopy	Th-228	0.818	0.112	pCi/g	=	
CWC255794	CWC005	04/12/22	Gamma Spectroscopy	Th-228	0.714	0.0566	pCi/g	=	
CWC255794	CWC005	04/12/22	Alpha Spectroscopy	Th-230	1.86	0.173	pCi/g	=	
CWC255794	CWC005	04/12/22	Gamma Spectroscopy	Th-230	2.3	4.66	pCi/g	UJ	T04, T06
CWC255794	CWC005	04/12/22	Alpha Spectroscopy	Th-232	0.728	0.173	pCi/g	=	
CWC255794	CWC005	04/12/22	Gamma Spectroscopy	Am-241	-0.0124	0.0491	pCi/g	UJ	T04, T06
CWC255794	CWC005	04/12/22	Gamma Spectroscopy	Th-232	0.714	0.0566	pCi/g	=	
CWC255794	CWC005	04/12/22	Gamma Spectroscopy	U-235	0.0569	0.276	pCi/g	UJ	T04, T06
CWC255794	CWC005	04/12/22	Gamma Spectroscopy	U-238	1.11	0.285	pCi/g	=	
CWC255796	CWC006	04/12/22	Metals	Antimony	0.5	0.25	mg/kg	=	
CWC255796	CWC006	04/12/22	Metals	Arsenic	4.2	0.51	mg/kg	=	
CWC255796	CWC006	04/12/22	Metals	Barium	130	0.64	mg/kg	=	
CWC255796	CWC006	04/12/22	Metals	Cadmium	0.17	0.031	mg/kg	J	E01, E08
CWC255796	CWC006	04/12/22	Metals	Chromium	14	0.57	mg/kg	=	
CWC255796	CWC006	04/12/22	Metals	Molybdenum	0.31	0.25	mg/kg	=	
CWC255796	CWC006	04/12/22	Metals	Nickel	13	0.25	mg/kg	=	
CWC255796	CWC006	04/12/22	Metals	Selenium	1.4	0.41	mg/kg	=	
CWC255796	CWC006	04/12/22	Metals	Thallium	0.25	0.25	mg/kg	U	
CWC255796	CWC006	04/12/22	Metals	Vanadium	21	0.51	mg/kg	=	
CWC255796	CWC006	04/12/22	Gamma Spectroscopy	Ac-227	0.0848	0.221	pCi/g	UJ	T04, T06

Table E-2. CWC Sediment Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC255796	CWC006	04/12/22	Gamma Spectroscopy	Pa-231	-0.000851	0.797	pCi/g	UJ	T04, T06
CWC255796	CWC006	04/12/22	Gamma Spectroscopy	Ra-226	0.982	0.0494	pCi/g	=	
CWC255796	CWC006	04/12/22	Gamma Spectroscopy	K-40	14.4	0.207	pCi/g	=	
CWC255796	CWC006	04/12/22	Gamma Spectroscopy	Ra-228	0.859	0.0517	pCi/g	=	
CWC255796	CWC006	04/12/22	Alpha Spectroscopy	Th-228	1.12	0.122	pCi/g	=	
CWC255796	CWC006	04/12/22	Gamma Spectroscopy	Th-228	0.859	0.0517	pCi/g	=	
CWC255796	CWC006	04/12/22	Alpha Spectroscopy	Th-230	2.54	0.189	pCi/g	=	
CWC255796	CWC006	04/12/22	Gamma Spectroscopy	Th-230	0.551	4.41	pCi/g	UJ	T04, T06
CWC255796	CWC006	04/12/22	Alpha Spectroscopy	Th-232	1.07	0.122	pCi/g	=	
CWC255796	CWC006	04/12/22	Gamma Spectroscopy	Am-241	-0.000353	0.0463	pCi/g	UJ	T04, T06
CWC255796	CWC006	04/12/22	Gamma Spectroscopy	Cs-137	-0.00106	0.0202	pCi/g	UJ	T04, T06
CWC255796	CWC006	04/12/22	Gamma Spectroscopy	Th-232	0.859	0.0517	pCi/g	=	
CWC255796	CWC006	04/12/22	Gamma Spectroscopy	U-235	0.162	0.271	pCi/g	UJ	T04, T05
CWC255796	CWC006	04/12/22	Gamma Spectroscopy	U-238	1.08	0.275	pCi/g	=	
CWC255800	CWC008	04/12/22	Metals	Antimony	1.3	0.69	mg/kg	=	
CWC255800	CWC008	04/12/22	Metals	Arsenic	7.4	1.4	mg/kg	=	
CWC255800	CWC008	04/12/22	Metals	Barium	180	1.7	mg/kg	=	
CWC255800	CWC008	04/12/22	Metals	Cadmium	0.64	0.083	mg/kg	J	E01, E08
CWC255800	CWC008	04/12/22	Metals	Chromium	28	1.6	mg/kg	=	
CWC255800	CWC008	04/12/22	Metals	Molybdenum	2	0.69	mg/kg	=	
CWC255800	CWC008	04/12/22	Metals	Nickel	23	0.69	mg/kg	=	
CWC255800	CWC008	04/12/22	Metals	Selenium	1.7	1.1	mg/kg	=	
CWC255800	CWC008	04/12/22	Metals	Thallium	0.69	0.69	mg/kg	U	
CWC255800	CWC008	04/12/22	Metals	Vanadium	31	1.4	mg/kg	=	
CWC255800	CWC008	04/12/22	Gamma Spectroscopy	Ac-227	0.0877	0.384	pCi/g	UJ	T04, T06
CWC255800	CWC008	04/12/22	Gamma Spectroscopy	Pa-231	0.53	1.43	pCi/g	UJ	T04, T06
CWC255800	CWC008	04/12/22	Gamma Spectroscopy	Ra-226	1.1	0.0866	pCi/g	=	
CWC255800	CWC008	04/12/22	Gamma Spectroscopy	K-40	13.9	0.308	pCi/g	=	
CWC255800	CWC008	04/12/22	Gamma Spectroscopy	Ra-228	0.9	0.0842	pCi/g	=	
CWC255800	CWC008	04/12/22	Alpha Spectroscopy	Th-228	1.08	0.105	pCi/g	=	
CWC255800	CWC008	04/12/22	Gamma Spectroscopy	Th-228	0.9	0.0842	pCi/g	=	
CWC255800	CWC008	04/12/22	Alpha Spectroscopy	Th-230	2.98	0.162	pCi/g	=	
CWC255800	CWC008	04/12/22	Gamma Spectroscopy	Th-230	3.28	6.68	pCi/g	UJ	T04, T06
CWC255800	CWC008	04/12/22	Alpha Spectroscopy	Th-232	1.25	0.105	pCi/g	=	
CWC255800	CWC008	04/12/22	Gamma Spectroscopy	Am-241	-0.013	0.0701	pCi/g	UJ	T04, T06
CWC255800	CWC008	04/12/22	Gamma Spectroscopy	Cs-137	0.00975	0.0365	pCi/g	UJ	T04, T06
CWC255800	CWC008	04/12/22	Gamma Spectroscopy	Th-232	0.9	0.0842	pCi/g	=	
CWC255800	CWC008	04/12/22	Gamma Spectroscopy	U-235	0.0352	0.423	pCi/g	UJ	T04, T06

Table E-2. CWC Sediment Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC255800	CWC008	04/12/22	Gamma Spectroscopy	U-238	1.13	0.427	pCi/g	=	
CWC255802	CWC009	04/12/22	Metals	Antimony	0.39	0.26	mg/kg	=	
CWC255802	CWC009	04/12/22	Metals	Arsenic	10	0.52	mg/kg	=	
CWC255802	CWC009	04/12/22	Metals	Barium	140	0.65	mg/kg	=	
CWC255802	CWC009	04/12/22	Metals	Cadmium	0.18	0.031	mg/kg	J	E01, E08
CWC255802	CWC009	04/12/22	Metals	Chromium	19	0.58	mg/kg	=	
CWC255802	CWC009	04/12/22	Metals	Molybdenum	0.28	0.26	mg/kg	=	
CWC255802	CWC009	04/12/22	Metals	Nickel	13	0.26	mg/kg	=	
CWC255802	CWC009	04/12/22	Metals	Selenium	1.5	0.41	mg/kg	=	
CWC255802	CWC009	04/12/22	Metals	Thallium	0.26	0.26	mg/kg	U	
CWC255802	CWC009	04/12/22	Metals	Vanadium	32	0.52	mg/kg	=	
CWC255802	CWC009	04/12/22	Gamma Spectroscopy	Ac-227	-0.0323	0.198	pCi/g	UJ	T04, T06
CWC255802	CWC009	04/12/22	Gamma Spectroscopy	Pa-231	0.26	0.704	pCi/g	UJ	T04, T06
CWC255802	CWC009	04/12/22	Gamma Spectroscopy	Ra-226	0.797	0.047	pCi/g	=	
CWC255802	CWC009	04/12/22	Gamma Spectroscopy	K-40	9.94	0.162	pCi/g	=	
CWC255802	CWC009	04/12/22	Gamma Spectroscopy	Ra-228	0.578	0.0479	pCi/g	=	
CWC255802	CWC009	04/12/22	Alpha Spectroscopy	Th-228	1.09	0.164	pCi/g	=	
CWC255802	CWC009	04/12/22	Gamma Spectroscopy	Th-228	0.578	0.0479	pCi/g	=	
CWC255802	CWC009	04/12/22	Alpha Spectroscopy	Th-230	1.62	0.164	pCi/g	J	F01
CWC255802	CWC009	04/12/22	Gamma Spectroscopy	Th-230	1.86	3.85	pCi/g	UJ	T04, T06
CWC255802	CWC009	04/12/22	Alpha Spectroscopy	Th-232	1.04	0.106	pCi/g	=	
CWC255802	CWC009	04/12/22	Gamma Spectroscopy	Am-241	0.0023	0.0405	pCi/g	UJ	T04, T06
CWC255802	CWC009	04/12/22	Gamma Spectroscopy	Cs-137	-0.0061	0.0175	pCi/g	UJ	T04, T06
CWC255802	CWC009	04/12/22	Gamma Spectroscopy	Th-232	0.578	0.0479	pCi/g	=	
CWC255802	CWC009	04/12/22	Gamma Spectroscopy	U-235	0.138	0.244	pCi/g	UJ	T04, T06
CWC255802	CWC009	04/12/22	Gamma Spectroscopy	U-238	0.545	0.241	pCi/g	=	
CWC255804	CWC010	04/12/22	Metals	Antimony	0.69	0.65	mg/kg	=	
CWC255804	CWC010	04/12/22	Metals	Arsenic	7.2	1.3	mg/kg	=	
CWC255804	CWC010	04/12/22	Metals	Barium	180	1.6	mg/kg	=	
CWC255804	CWC010	04/12/22	Metals	Cadmium	0.58	0.078	mg/kg	J	E01, E08
CWC255804	CWC010	04/12/22	Metals	Chromium	34	1.5	mg/kg	=	
CWC255804	CWC010	04/12/22	Metals	Molybdenum	0.82	0.65	mg/kg	=	
CWC255804	CWC010	04/12/22	Metals	Nickel	20	0.65	mg/kg	=	
CWC255804	CWC010	04/12/22	Metals	Selenium	1.5	1	mg/kg	=	
CWC255804	CWC010	04/12/22	Metals	Thallium	0.65	0.65	mg/kg	U	
CWC255804	CWC010	04/12/22	Metals	Vanadium	28	1.3	mg/kg	=	
CWC255804	CWC010	04/12/22	Gamma Spectroscopy	Ac-227	0.0649	0.224	pCi/g	UJ	T04, T06
CWC255804	CWC010	04/12/22	Gamma Spectroscopy	Pa-231	-0.266	0.772	pCi/g	UJ	T04, T06

Table E-2. CWC Sediment Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC255804	CWC010	04/12/22	Gamma Spectroscopy	Ra-226	0.943	0.0506	pCi/g	=	
CWC255804	CWC010	04/12/22	Gamma Spectroscopy	K-40	10.9	0.196	pCi/g	=	
CWC255804	CWC010	04/12/22	Gamma Spectroscopy	Ra-228	0.655	0.0517	pCi/g	=	
CWC255804	CWC010	04/12/22	Alpha Spectroscopy	Th-228	0.983	0.102	pCi/g	=	
CWC255804	CWC010	04/12/22	Gamma Spectroscopy	Th-228	0.655	0.0517	pCi/g	=	
CWC255804	CWC010	04/12/22	Alpha Spectroscopy	Th-230	2.05	0.12	pCi/g	=	
CWC255804	CWC010	04/12/22	Gamma Spectroscopy	Th-230	1.51	4.23	pCi/g	UJ	T04, T06
CWC255804	CWC010	04/12/22	Alpha Spectroscopy	Th-232	0.707	0.158	pCi/g	=	
CWC255804	CWC010	04/12/22	Gamma Spectroscopy	Am-241	-0.0349	0.0422	pCi/g	UJ	T04, T06
CWC255804	CWC010	04/12/22	Gamma Spectroscopy	Cs-137	-0.00755	0.0188	pCi/g	UJ	T04, T06
CWC255804	CWC010	04/12/22	Gamma Spectroscopy	Th-232	0.655	0.0517	pCi/g	=	
CWC255804	CWC010	04/12/22	Gamma Spectroscopy	U-235	0.0185	0.255	pCi/g	UJ	T04, T06
CWC255804	CWC010	04/12/22	Gamma Spectroscopy	U-238	0.813	0.256	pCi/g	=	
CWC255806	CWC011	04/12/22	Metals	Antimony	0.57	0.24	mg/kg	=	
CWC255806	CWC011	04/12/22	Metals	Arsenic	9.2	0.48	mg/kg	=	
CWC255806	CWC011	04/12/22	Metals	Barium	250	0.6	mg/kg	=	
CWC255806	CWC011	04/12/22	Metals	Cadmium	1.2	0.029	mg/kg	J	E01, E08
CWC255806	CWC011	04/12/22	Metals	Chromium	54	0.54	mg/kg	=	
CWC255806	CWC011	04/12/22	Metals	Molybdenum	0.73	0.24	mg/kg	=	
CWC255806	CWC011	04/12/22	Metals	Nickel	25	0.24	mg/kg	=	
CWC255806	CWC011	04/12/22	Metals	Selenium	1.7	0.38	mg/kg	=	
CWC255806	CWC011	04/12/22	Metals	Thallium	0.24	0.24	mg/kg	U	
CWC255806	CWC011	04/12/22	Metals	Vanadium	27	0.48	mg/kg	=	
CWC255806	CWC011	04/12/22	Gamma Spectroscopy	Ac-227	0.174	0.103	pCi/g	=	
CWC255806	CWC011	04/12/22	Gamma Spectroscopy	Pa-231	0.233	0.793	pCi/g	UJ	T04, T06
CWC255806	CWC011	04/12/22	Gamma Spectroscopy	Ra-226	1.11	0.0476	pCi/g	=	
CWC255806	CWC011	04/12/22	Gamma Spectroscopy	Ra-228	0.616	0.0457	pCi/g	=	
CWC255806	CWC011	04/12/22	Gamma Spectroscopy	Cs-137	0.03	0.013	pCi/g	=	
CWC255806	CWC011	04/12/22	Gamma Spectroscopy	K-40	10.3	0.182	pCi/g	=	
CWC255806	CWC011	04/12/22	Alpha Spectroscopy	Th-228	1.4	0.132	pCi/g	=	
CWC255806	CWC011	04/12/22	Gamma Spectroscopy	Th-228	0.616	0.0457	pCi/g	=	
CWC255806	CWC011	04/12/22	Alpha Spectroscopy	Th-230	13.1	0.132	pCi/g	=	
CWC255806	CWC011	04/12/22	Gamma Spectroscopy	Th-230	7.87	3.85	pCi/g	=	
CWC255806	CWC011	04/12/22	Alpha Spectroscopy	Th-232	1.01	0.173	pCi/g	=	
CWC255806	CWC011	04/12/22	Gamma Spectroscopy	Th-232	0.616	0.0457	pCi/g	=	
CWC255806	CWC011	04/12/22	Gamma Spectroscopy	Am-241	0.00573	0.0453	pCi/g	UJ	T04, T06
CWC255806	CWC011	04/12/22	Gamma Spectroscopy	U-235	-0.018	0.247	pCi/g	UJ	T04, T06
CWC255806	CWC011	04/12/22	Gamma Spectroscopy	U-238	0.696	0.273	pCi/g	=	

Table E-2. CWC Sediment Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC261509	CWC002	10/12/22	Metals	Antimony	0.06	0.06	mg/kg	U	
CWC261509	CWC002	10/12/22	Metals	Arsenic	1.1	0.089	mg/kg	=	
CWC261509	CWC002	10/12/22	Metals	Barium	14	0.14	mg/kg	=	H01, H04, H05
CWC261509	CWC002	10/12/22	Metals	Cadmium	0.3	0.015	mg/kg	J	E01, E08
CWC261509	CWC002	10/12/22	Metals	Chromium	3.9	0.44	mg/kg	=	
CWC261509	CWC002	10/12/22	Metals	Molybdenum	0.68	0.13	mg/kg	=	
CWC261509	CWC002	10/12/22	Metals	Nickel	2.4	0.14	mg/kg	=	
CWC261509	CWC002	10/12/22	Metals	Selenium	0.4	0.18	mg/kg	=	
CWC261509	CWC002	10/12/22	Metals	Thallium	0.022	0.022	mg/kg	U	
CWC261509	CWC002	10/12/22	Metals	Vanadium	2.9	0.39	mg/kg	=	
CWC261509	CWC002	10/12/22	Gamma Spectroscopy	Ac-227	0.0469	0.173	pCi/g	UJ	T04, T06
CWC261509	CWC002	10/12/22	Gamma Spectroscopy	Pa-231	-0.041	0.643	pCi/g	UJ	T04, T06
CWC261509	CWC002	10/12/22	Gamma Spectroscopy	Ra-226	0.813	0.0356	pCi/g	=	
CWC261509	CWC002	10/12/22	Gamma Spectroscopy	K-40	8.47	0.171	pCi/g	=	
CWC261509	CWC002	10/12/22	Gamma Spectroscopy	Ra-228	0.262	0.0369	pCi/g	J	F01
CWC261509	CWC002	10/12/22	Alpha Spectroscopy	Th-228	0.233	0.164	pCi/g	J	T04, T20
CWC261509	CWC002	10/12/22	Gamma Spectroscopy	Th-228	0.262	0.0369	pCi/g	J	F01
CWC261509	CWC002	10/12/22	Alpha Spectroscopy	Th-230	0.993	0.101	pCi/g	J	F01
CWC261509	CWC002	10/12/22	Gamma Spectroscopy	Th-230	1.03	3.13	pCi/g	UJ	T04, T06
CWC261509	CWC002	10/12/22	Alpha Spectroscopy	Th-232	0.353	0.119	pCi/g	J	T04, T20
CWC261509	CWC002	10/12/22	Gamma Spectroscopy	Am-241	-0.00294	0.0331	pCi/g	UJ	T04, T06
CWC261509	CWC002	10/12/22	Gamma Spectroscopy	Cs-137	-0.0119	0.0138	pCi/g	UJ	T04, T06
CWC261509	CWC002	10/12/22	Gamma Spectroscopy	Th-232	0.262	0.0369	pCi/g	J	F01
CWC261509	CWC002	10/12/22	Gamma Spectroscopy	U-235	-0.022	0.205	pCi/g	UJ	T04, T06
CWC261509	CWC002	10/12/22	Gamma Spectroscopy	U-238	0.553	0.222	pCi/g	=	
CWC261511	CWC003	10/12/22	Metals	Antimony	0.084	0.058	mg/kg	=	
CWC261511	CWC003	10/12/22	Metals	Arsenic	1.2	0.086	mg/kg	=	
CWC261511	CWC003	10/12/22	Metals	Barium	20	0.13	mg/kg	=	
CWC261511	CWC003	10/12/22	Metals	Cadmium	0.2	0.014	mg/kg	J	E01, E08
CWC261511	CWC003	10/12/22	Metals	Chromium	2.4	0.42	mg/kg	=	
CWC261511	CWC003	10/12/22	Metals	Molybdenum	0.18	0.12	mg/kg	=	
CWC261511	CWC003	10/12/22	Metals	Nickel	2.2	0.13	mg/kg	=	
CWC261511	CWC003	10/12/22	Metals	Selenium	0.19	0.18	mg/kg	=	
CWC261511	CWC003	10/12/22	Metals	Thallium	0.021	0.021	mg/kg	U	
CWC261511	CWC003	10/12/22	Metals	Vanadium	3.2	0.37	mg/kg	=	
CWC261511	CWC003	10/12/22	Gamma Spectroscopy	Ac-227	-0.059	0.181	pCi/g	UJ	T04, T06
CWC261511	CWC003	10/12/22	Gamma Spectroscopy	Pa-231	0.121	0.689	pCi/g	UJ	T04, T06
CWC261511	CWC003	10/12/22	Gamma Spectroscopy	Ra-226	0.845	0.039	pCi/g	=	

Table E-2. CWC Sediment Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC261511	CWC003	10/12/22	Gamma Spectroscopy	K-40	8.77	0.172	pCi/g	=	
CWC261511	CWC003	10/12/22	Gamma Spectroscopy	Ra-228	0.352	0.0388	pCi/g	=	
CWC261511	CWC003	10/12/22	Alpha Spectroscopy	Th-228	0.62	0.16	pCi/g	=	
CWC261511	CWC003	10/12/22	Gamma Spectroscopy	Th-228	0.352	0.0388	pCi/g	=	
CWC261511	CWC003	10/12/22	Alpha Spectroscopy	Th-230	0.967	0.174	pCi/g	J	F01
CWC261511	CWC003	10/12/22	Gamma Spectroscopy	Th-230	2.83	3.31	pCi/g	UJ	T04, T05
CWC261511	CWC003	10/12/22	Alpha Spectroscopy	Th-232	0.628	0.132	pCi/g	=	
CWC261511	CWC003	10/12/22	Gamma Spectroscopy	Am-241	-0.00186	0.0335	pCi/g	UJ	T04, T06
CWC261511	CWC003	10/12/22	Gamma Spectroscopy	Cs-137	-0.00265	0.0163	pCi/g	UJ	T04, T06
CWC261511	CWC003	10/12/22	Gamma Spectroscopy	Th-232	0.352	0.0388	pCi/g	=	
CWC261511	CWC003	10/12/22	Gamma Spectroscopy	U-235	0.0116	0.219	pCi/g	UJ	T04, T06
CWC261511	CWC003	10/12/22	Gamma Spectroscopy	U-238	0.568	0.224	pCi/g	=	
CWC261513	CWC004	10/12/22	Metals	Antimony	0.24	0.059	mg/kg	=	
CWC261513	CWC004	10/12/22	Metals	Arsenic	4.5	0.087	mg/kg	=	
CWC261513	CWC004	10/12/22	Metals	Barium	100	0.13	mg/kg	=	
CWC261513	CWC004	10/12/22	Metals	Cadmium	0.4	0.014	mg/kg	J	E01, E08
CWC261513	CWC004	10/12/22	Metals	Chromium	15	0.43	mg/kg	=	
CWC261513	CWC004	10/12/22	Metals	Molybdenum	0.63	0.12	mg/kg	=	
CWC261513	CWC004	10/12/22	Metals	Nickel	11	0.14	mg/kg	=	
CWC261513	CWC004	10/12/22	Metals	Selenium	0.92	0.18	mg/kg	=	
CWC261513	CWC004	10/12/22	Metals	Thallium	0.097	0.022	mg/kg	=	
CWC261513	CWC004	10/12/22	Metals	Vanadium	13	0.38	mg/kg	=	
CWC261513	CWC004	10/12/22	Gamma Spectroscopy	Ac-227	-0.0906	0.203	pCi/g	UJ	T04, T06
CWC261513	CWC004	10/12/22	Gamma Spectroscopy	Pa-231	0.466	0.79	pCi/g	UJ	T04, T05
CWC261513	CWC004	10/12/22	Gamma Spectroscopy	Ra-226	0.949	0.0462	pCi/g	=	
CWC261513	CWC004	10/12/22	Gamma Spectroscopy	Cs-137	0.0133	0.0132	pCi/g	J	T04, T20
CWC261513	CWC004	10/12/22	Gamma Spectroscopy	K-40	11.9	0.184	pCi/g	=	
CWC261513	CWC004	10/12/22	Gamma Spectroscopy	Ra-228	0.67	0.0441	pCi/g	=	
CWC261513	CWC004	10/12/22	Alpha Spectroscopy	Th-228	0.625	0.181	pCi/g	=	
CWC261513	CWC004	10/12/22	Gamma Spectroscopy	Th-228	0.67	0.0441	pCi/g	=	
CWC261513	CWC004	10/12/22	Alpha Spectroscopy	Th-230	1.74	0.118	pCi/g	J	F01
CWC261513	CWC004	10/12/22	Gamma Spectroscopy	Th-230	1.7	3.93	pCi/g	UJ	T04, T06
CWC261513	CWC004	10/12/22	Alpha Spectroscopy	Th-232	0.938	0.118	pCi/g	=	
CWC261513	CWC004	10/12/22	Gamma Spectroscopy	Am-241	-0.00943	0.0397	pCi/g	UJ	T04, T06
CWC261513	CWC004	10/12/22	Gamma Spectroscopy	Th-232	0.67	0.0441	pCi/g	=	
CWC261513	CWC004	10/12/22	Gamma Spectroscopy	U-235	-0.0405	0.253	pCi/g	UJ	T04, T06
CWC261513	CWC004	10/12/22	Gamma Spectroscopy	U-238	0.931	0.279	pCi/g	=	
CWC261515	CWC005	10/12/22	Metals	Antimony	0.67	0.054	mg/kg	=	

Table E-2. CWC Sediment Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC261515	CWC005	10/12/22	Metals	Arsenic	4.9	0.081	mg/kg	=	
CWC261515	CWC005	10/12/22	Metals	Barium	110	0.12	mg/kg	=	
CWC261515	CWC005	10/12/22	Metals	Cadmium	0.46	0.013	mg/kg	J	E01, E08
CWC261515	CWC005	10/12/22	Metals	Chromium	21	0.39	mg/kg	=	
CWC261515	CWC005	10/12/22	Metals	Molybdenum	1.6	0.11	mg/kg	=	
CWC261515	CWC005	10/12/22	Metals	Nickel	17	0.13	mg/kg	=	
CWC261515	CWC005	10/12/22	Metals	Selenium	0.76	0.17	mg/kg	=	
CWC261515	CWC005	10/12/22	Metals	Thallium	0.1	0.02	mg/kg	=	
CWC261515	CWC005	10/12/22	Metals	Vanadium	13	0.35	mg/kg	=	
CWC261515	CWC005	10/12/22	Gamma Spectroscopy	Ac-227	0.204	0.219	pCi/g	UJ	T04, T05
CWC261515	CWC005	10/12/22	Gamma Spectroscopy	Pa-231	0.164	0.77	pCi/g	UJ	T04, T06
CWC261515	CWC005	10/12/22	Gamma Spectroscopy	Ra-226	0.975	0.0453	pCi/g	=	
CWC261515	CWC005	10/12/22	Gamma Spectroscopy	K-40	11.3	0.175	pCi/g	=	
CWC261515	CWC005	10/12/22	Gamma Spectroscopy	Ra-228	0.631	0.0465	pCi/g	=	
CWC261515	CWC005	10/12/22	Alpha Spectroscopy	Th-228	1.08	0.157	pCi/g	=	
CWC261515	CWC005	10/12/22	Gamma Spectroscopy	Th-228	0.631	0.0465	pCi/g	=	
CWC261515	CWC005	10/12/22	Alpha Spectroscopy	Th-230	6.09	0.121	pCi/g	=	
CWC261515	CWC005	10/12/22	Gamma Spectroscopy	Th-230	2.5	2.76	pCi/g	UJ	T04, T05
CWC261515	CWC005	10/12/22	Alpha Spectroscopy	Th-232	0.829	0.142	pCi/g	=	
CWC261515	CWC005	10/12/22	Gamma Spectroscopy	Am-241	0.0117	0.0416	pCi/g	UJ	T04, T06
CWC261515	CWC005	10/12/22	Gamma Spectroscopy	Cs-137	-0.00169	0.02	pCi/g	UJ	T04, T06
CWC261515	CWC005	10/12/22	Gamma Spectroscopy	Th-232	0.631	0.0465	pCi/g	=	
CWC261515	CWC005	10/12/22	Gamma Spectroscopy	U-235	-0.0158	0.246	pCi/g	UJ	T04, T06
CWC261515	CWC005	10/12/22	Gamma Spectroscopy	U-238	0.853	0.26	pCi/g	=	
CWC261517	CWC006	10/12/22	Metals	Antimony	0.19	0.056	mg/kg	=	
CWC261517	CWC006	10/12/22	Metals	Arsenic	4.6	0.084	mg/kg	=	
CWC261517	CWC006	10/12/22	Metals	Barium	120	0.13	mg/kg	=	
CWC261517	CWC006	10/12/22	Metals	Cadmium	0.3	0.014	mg/kg	J	E01, E08
CWC261517	CWC006	10/12/22	Metals	Chromium	11	0.41	mg/kg	=	
CWC261517	CWC006	10/12/22	Metals	Molybdenum	0.37	0.12	mg/kg	=	
CWC261517	CWC006	10/12/22	Metals	Nickel	12	0.13	mg/kg	=	
CWC261517	CWC006	10/12/22	Metals	Selenium	0.86	0.17	mg/kg	=	
CWC261517	CWC006	10/12/22	Metals	Thallium	0.15	0.021	mg/kg	=	
CWC261517	CWC006	10/12/22	Metals	Vanadium	16	0.36	mg/kg	=	
CWC261517	CWC006	10/12/22	Gamma Spectroscopy	Ac-227	0.118	0.227	pCi/g	UJ	T04, T06
CWC261517	CWC006	10/12/22	Gamma Spectroscopy	Pa-231	-0.0953	0.775	pCi/g	UJ	T04, T06
CWC261517	CWC006	10/12/22	Gamma Spectroscopy	Ra-226	0.946	0.0495	pCi/g	=	
CWC261517	CWC006	10/12/22	Gamma Spectroscopy	K-40	15.9	0.189	pCi/g	=	

Table E-2. CWC Sediment Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC261517	CWC006	10/12/22	Gamma Spectroscopy	Ra-228	0.8	0.0493	pCi/g	=	
CWC261517	CWC006	10/12/22	Alpha Spectroscopy	Th-228	1.01	0.136	pCi/g	=	
CWC261517	CWC006	10/12/22	Gamma Spectroscopy	Th-228	0.8	0.0493	pCi/g	=	
CWC261517	CWC006	10/12/22	Alpha Spectroscopy	Th-230	1.96	0.0954	pCi/g	=	
CWC261517	CWC006	10/12/22	Gamma Spectroscopy	Th-230	-0.796	4.16	pCi/g	UJ	T04, T06
CWC261517	CWC006	10/12/22	Alpha Spectroscopy	Th-232	0.977	0.0952	pCi/g	=	
CWC261517	CWC006	10/12/22	Gamma Spectroscopy	Am-241	-0.025	0.0419	pCi/g	UJ	T04, T06
CWC261517	CWC006	10/12/22	Gamma Spectroscopy	Cs-137	-0.00408	0.0191	pCi/g	UJ	T04, T06
CWC261517	CWC006	10/12/22	Gamma Spectroscopy	Th-232	0.8	0.0493	pCi/g	=	
CWC261517	CWC006	10/12/22	Gamma Spectroscopy	U-235	0.178	0.269	pCi/g	UJ	T04, T05
CWC261517	CWC006	10/12/22	Gamma Spectroscopy	U-238	1.05	0.303	pCi/g	=	
CWC261519	CWC007	10/10/22	Metals	Antimony	0.2	0.058	mg/kg	=	
CWC261519	CWC007	10/10/22	Metals	Arsenic	3.1	0.086	mg/kg	=	
CWC261519	CWC007	10/10/22	Metals	Barium	80	0.13	mg/kg	=	
CWC261519	CWC007	10/10/22	Metals	Cadmium	0.3	0.014	mg/kg	J	E01, E08
CWC261519	CWC007	10/10/22	Metals	Chromium	8.7	0.42	mg/kg	=	
CWC261519	CWC007	10/10/22	Metals	Molybdenum	0.6	0.12	mg/kg	=	
CWC261519	CWC007	10/10/22	Metals	Nickel	8	0.14	mg/kg	=	
CWC261519	CWC007	10/10/22	Metals	Selenium	0.63	0.18	mg/kg	=	
CWC261519	CWC007	10/10/22	Metals	Thallium	0.073	0.021	mg/kg	=	
CWC261519	CWC007	10/10/22	Metals	Vanadium	9.8	0.37	mg/kg	=	
CWC261519	CWC007	10/10/22	Gamma Spectroscopy	Ac-227	0.107	0.203	pCi/g	UJ	T04, T06
CWC261519	CWC007	10/10/22	Gamma Spectroscopy	Pa-231	0.193	0.696	pCi/g	UJ	T04, T06
CWC261519	CWC007	10/10/22	Gamma Spectroscopy	Ra-226	1.14	0.0453	pCi/g	=	
CWC261519	CWC007	10/10/22	Gamma Spectroscopy	K-40	7.5	0.149	pCi/g	=	
CWC261519	CWC007	10/10/22	Gamma Spectroscopy	Ra-228	0.376	0.0408	pCi/g	=	
CWC261519	CWC007	10/10/22	Alpha Spectroscopy	Th-228	0.942	0.162	pCi/g	=	
CWC261519	CWC007	10/10/22	Gamma Spectroscopy	Th-228	0.376	0.0408	pCi/g	=	
CWC261519	CWC007	10/10/22	Alpha Spectroscopy	Th-230	4.8	0.123	pCi/g	=	
CWC261519	CWC007	10/10/22	Gamma Spectroscopy	Th-230	2.31	2.59	pCi/g	UJ	T04, T05
CWC261519	CWC007	10/10/22	Alpha Spectroscopy	Th-232	0.555	0.162	pCi/g	=	
CWC261519	CWC007	10/10/22	Gamma Spectroscopy	Am-241	-0.0121	0.0372	pCi/g	UJ	T04, T06
CWC261519	CWC007	10/10/22	Gamma Spectroscopy	Cs-137	0.0104	0.013	pCi/g	UJ	T04, T05
CWC261519	CWC007	10/10/22	Gamma Spectroscopy	Th-232	0.376	0.0408	pCi/g	=	
CWC261519	CWC007	10/10/22	Gamma Spectroscopy	U-235	0.124	0.245	pCi/g	UJ	T04, T06
CWC261519	CWC007	10/10/22	Gamma Spectroscopy	U-238	0.83	0.248	pCi/g	=	
CWC261521	CWC008	10/10/22	Metals	Antimony	0.2	0.057	mg/kg	=	
CWC261521	CWC008	10/10/22	Metals	Arsenic	4.5	0.084	mg/kg	=	

Table E-2. CWC Sediment Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC261521	CWC008	10/10/22	Metals	Barium	100	0.13	mg/kg	=	
CWC261521	CWC008	10/10/22	Metals	Cadmium	0.32	0.014	mg/kg	J	E01, E08
CWC261521	CWC008	10/10/22	Metals	Chromium	10	0.41	mg/kg	=	
CWC261521	CWC008	10/10/22	Metals	Molybdenum	0.4	0.12	mg/kg	=	
CWC261521	CWC008	10/10/22	Metals	Nickel	11	0.13	mg/kg	=	
CWC261521	CWC008	10/10/22	Metals	Selenium	0.77	0.17	mg/kg	=	
CWC261521	CWC008	10/10/22	Metals	Thallium	0.086	0.021	mg/kg	=	
CWC261521	CWC008	10/10/22	Metals	Vanadium	14	0.37	mg/kg	=	
CWC261521	CWC008	10/10/22	Gamma Spectroscopy	Ac-227	0.0594	0.105	pCi/g	UJ	T04, T05
CWC261521	CWC008	10/10/22	Gamma Spectroscopy	Pa-231	0.284	0.792	pCi/g	UJ	T04, T06
CWC261521	CWC008	10/10/22	Gamma Spectroscopy	Ra-226	1.01	0.0476	pCi/g	=	
CWC261521	CWC008	10/10/22	Gamma Spectroscopy	K-40	13.2	0.193	pCi/g	=	
CWC261521	CWC008	10/10/22	Gamma Spectroscopy	Ra-228	0.794	0.0488	pCi/g	=	
CWC261521	CWC008	10/10/22	Alpha Spectroscopy	Th-228	1	0.141	pCi/g	=	
CWC261521	CWC008	10/10/22	Gamma Spectroscopy	Th-228	0.794	0.0488	pCi/g	=	
CWC261521	CWC008	10/10/22	Alpha Spectroscopy	Th-230	2.4	0.165	pCi/g	=	
CWC261521	CWC008	10/10/22	Gamma Spectroscopy	Th-230	0.754	4.06	pCi/g	UJ	T04, T06
CWC261521	CWC008	10/10/22	Alpha Spectroscopy	Th-232	1.03	0.141	pCi/g	=	
CWC261521	CWC008	10/10/22	Gamma Spectroscopy	Am-241	-0.00916	0.0429	pCi/g	UJ	T04, T06
CWC261521	CWC008	10/10/22	Gamma Spectroscopy	Cs-137	-0.00942	0.0181	pCi/g	UJ	T04, T06
CWC261521	CWC008	10/10/22	Gamma Spectroscopy	Th-232	0.794	0.0488	pCi/g	=	
CWC261521	CWC008	10/10/22	Gamma Spectroscopy	U-235	-0.0195	0.255	pCi/g	UJ	T04, T06
CWC261521	CWC008	10/10/22	Gamma Spectroscopy	U-238	0.992	0.271	pCi/g	=	
CWC261523	CWC009	10/10/22	Metals	Antimony	0.14	0.059	mg/kg	=	
CWC261523	CWC009	10/10/22	Metals	Arsenic	2.9	0.088	mg/kg	=	
CWC261523	CWC009	10/10/22	Metals	Barium	77	0.13	mg/kg	=	
CWC261523	CWC009	10/10/22	Metals	Cadmium	0.25	0.014	mg/kg	J	E01, E08
CWC261523	CWC009	10/10/22	Metals	Chromium	19	0.43	mg/kg	=	
CWC261523	CWC009	10/10/22	Metals	Molybdenum	0.37	0.13	mg/kg	=	
CWC261523	CWC009	10/10/22	Metals	Nickel	8	0.14	mg/kg	=	
CWC261523	CWC009	10/10/22	Metals	Selenium	0.61	0.18	mg/kg	=	
CWC261523	CWC009	10/10/22	Metals	Thallium	0.073	0.022	mg/kg	=	
CWC261523	CWC009	10/10/22	Metals	Vanadium	9.6	0.38	mg/kg	=	
CWC261523	CWC009	10/10/22	Gamma Spectroscopy	Ac-227	0.0326	0.23	pCi/g	UJ	T04, T06
CWC261523	CWC009	10/10/22	Gamma Spectroscopy	Pa-231	0.252	0.853	pCi/g	UJ	T04, T06
CWC261523	CWC009	10/10/22	Gamma Spectroscopy	Ra-226	1.1	0.0528	pCi/g	=	
CWC261523	CWC009	10/10/22	Gamma Spectroscopy	K-40	13.1	0.184	pCi/g	=	
CWC261523	CWC009	10/10/22	Gamma Spectroscopy	Ra-228	0.806	0.0522	pCi/g	=	

Table E-2. CWC Sediment Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC261523	CWC009	10/10/22	Alpha Spectroscopy	Th-228	1.05	0.149	pCi/g	=	
CWC261523	CWC009	10/10/22	Gamma Spectroscopy	Th-228	0.806	0.0522	pCi/g	=	
CWC261523	CWC009	10/10/22	Alpha Spectroscopy	Th-230	2.95	0.161	pCi/g	=	
CWC261523	CWC009	10/10/22	Gamma Spectroscopy	Th-230	4.89	4.28	pCi/g	J	T04, T20
CWC261523	CWC009	10/10/22	Alpha Spectroscopy	Th-232	0.872	0.16	pCi/g	=	
CWC261523	CWC009	10/10/22	Gamma Spectroscopy	Th-232	0.806	0.0522	pCi/g	=	
CWC261523	CWC009	10/10/22	Gamma Spectroscopy	Am-241	-0.0154	0.0453	pCi/g	UJ	T04, T06
CWC261523	CWC009	10/10/22	Gamma Spectroscopy	Cs-137	-0.00845	0.0194	pCi/g	UJ	T04, T06
CWC261523	CWC009	10/10/22	Gamma Spectroscopy	U-235	-0.0204	0.273	pCi/g	UJ	T04, T06
CWC261523	CWC009	10/10/22	Gamma Spectroscopy	U-238	1.02	0.305	pCi/g	=	
CWC261525	CWC010	10/10/22	Metals	Antimony	0.26	0.058	mg/kg	=	
CWC261525	CWC010	10/10/22	Metals	Arsenic	9	0.085	mg/kg	=	
CWC261525	CWC010	10/10/22	Metals	Barium	160	0.13	mg/kg	=	
CWC261525	CWC010	10/10/22	Metals	Cadmium	0.55	0.014	mg/kg	J	E01, E08
CWC261525	CWC010	10/10/22	Metals	Chromium	19	0.42	mg/kg	=	
CWC261525	CWC010	10/10/22	Metals	Molybdenum	0.82	0.12	mg/kg	=	
CWC261525	CWC010	10/10/22	Metals	Nickel	14	0.13	mg/kg	=	
CWC261525	CWC010	10/10/22	Metals	Selenium	0.85	0.18	mg/kg	=	
CWC261525	CWC010	10/10/22	Metals	Thallium	0.091	0.021	mg/kg	=	
CWC261525	CWC010	10/10/22	Metals	Vanadium	16	0.37	mg/kg	=	
CWC261525	CWC010	10/10/22	Gamma Spectroscopy	Ac-227	0.0772	0.2	pCi/g	UJ	T04, T06
CWC261525	CWC010	10/10/22	Gamma Spectroscopy	Pa-231	-0.144	0.722	pCi/g	UJ	T04, T06
CWC261525	CWC010	10/10/22	Gamma Spectroscopy	Ra-226	1.08	0.0449	pCi/g	=	
CWC261525	CWC010	10/10/22	Gamma Spectroscopy	K-40	9.39	0.187	pCi/g	=	
CWC261525	CWC010	10/10/22	Gamma Spectroscopy	Ra-228	0.431	0.0416	pCi/g	=	
CWC261525	CWC010	10/10/22	Alpha Spectroscopy	Th-228	0.786	0.163	pCi/g	=	
CWC261525	CWC010	10/10/22	Gamma Spectroscopy	Th-228	0.431	0.0416	pCi/g	=	
CWC261525	CWC010	10/10/22	Alpha Spectroscopy	Th-230	3.76	0.165	pCi/g	=	
CWC261525	CWC010	10/10/22	Gamma Spectroscopy	Th-230	2.06	3.38	pCi/g	UJ	T04, T06
CWC261525	CWC010	10/10/22	Alpha Spectroscopy	Th-232	0.435	0.14	pCi/g	=	
CWC261525	CWC010	10/10/22	Gamma Spectroscopy	Am-241	0.0136	0.0388	pCi/g	UJ	T04, T06
CWC261525	CWC010	10/10/22	Gamma Spectroscopy	Cs-137	-0.00657	0.0168	pCi/g	UJ	T04, T06
CWC261525	CWC010	10/10/22	Gamma Spectroscopy	Th-232	0.431	0.0416	pCi/g	=	
CWC261525	CWC010	10/10/22	Gamma Spectroscopy	U-235	0.0198	0.237	pCi/g	UJ	T04, T06
CWC261525	CWC010	10/10/22	Gamma Spectroscopy	U-238	0.534	0.242	pCi/g	=	
CWC261527	CWC011	10/10/22	Metals	Antimony	0.17	0.054	mg/kg	=	
CWC261527	CWC011	10/10/22	Metals	Arsenic	5.8	0.08	mg/kg	=	
CWC261527	CWC011	10/10/22	Metals	Barium	130	0.12	mg/kg	=	

Table E-2. CWC Sediment Data for CY 2022 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC261527	CWC011	10/10/22	Metals	Cadmium	0.51	0.013	mg/kg	J	E01, E08
CWC261527	CWC011	10/10/22	Metals	Chromium	25	0.39	mg/kg	=	
CWC261527	CWC011	10/10/22	Metals	Molybdenum	0.35	0.11	mg/kg	=	
CWC261527	CWC011	10/10/22	Metals	Nickel	14	0.13	mg/kg	=	
CWC261527	CWC011	10/10/22	Metals	Selenium	0.72	0.17	mg/kg	=	
CWC261527	CWC011	10/10/22	Metals	Thallium	0.12	0.02	mg/kg	=	
CWC261527	CWC011	10/10/22	Metals	Vanadium	15	0.35	mg/kg	=	
CWC261527	CWC011	10/10/22	Gamma Spectroscopy	Ac-227	0.113	0.109	pCi/g	=	
CWC261527	CWC011	10/10/22	Gamma Spectroscopy	Pa-231	0.437	0.798	pCi/g	UJ	T04, T06
CWC261527	CWC011	10/10/22	Gamma Spectroscopy	Ra-226	1.21	0.0515	pCi/g	=	
CWC261527	CWC011	10/10/22	Gamma Spectroscopy	Ra-228	0.754	0.0478	pCi/g	=	
CWC261527	CWC011	10/10/22	Gamma Spectroscopy	Cs-137	0.0259	0.0127	pCi/g	J	Q02
CWC261527	CWC011	10/10/22	Gamma Spectroscopy	K-40	12.8	0.198	pCi/g	=	
CWC261527	CWC011	10/10/22	Alpha Spectroscopy	Th-228	0.992	0.185	pCi/g	=	
CWC261527	CWC011	10/10/22	Gamma Spectroscopy	Th-228	0.754	0.0478	pCi/g	=	
CWC261527	CWC011	10/10/22	Alpha Spectroscopy	Th-230	5.01	0.147	pCi/g	J	Q02
CWC261527	CWC011	10/10/22	Gamma Spectroscopy	Th-230	5.07	4.24	pCi/g	J	Q02, T04, T20
CWC261527	CWC011	10/10/22	Alpha Spectroscopy	Th-232	0.954	0.126	pCi/g	=	
CWC261527	CWC011	10/10/22	Gamma Spectroscopy	Th-232	0.754	0.0478	pCi/g	=	
CWC261527	CWC011	10/10/22	Gamma Spectroscopy	Am-241	-0.0107	0.0441	pCi/g	UJ	T04, T06
CWC261527	CWC011	10/10/22	Gamma Spectroscopy	U-235	-0.0743	0.265	pCi/g	UJ	T04, T06
CWC261527	CWC011	10/10/22	Gamma Spectroscopy	U-238	1.09	0.286	pCi/g	=	

VQs

= - Indicates that the data met all QA/QC requirements, and that the parameter has been positively identified and the associated concentration value is accurate.

J - Indicates that the parameter was positively identified; the associated numerical value is the approximate concentration of the parameter in the sample.

U - Indicates that the data met all QA/QC requirements, and that the parameter was analyzed for but was not detected above the reported sample quantitation limit.

UJ - Indicates that the parameter was not detected above the reported sample quantitation limit and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. However, the reported quantitation limit is approximate.

Validation Reason Codes:

E01 - Interference check sample recovery was outside the control limit.

E08 - Professional judgment was used to qualify the data.

F01 - Blanks: Sample data were qualified as a result of the method blank.

H01 - Matrix spike/matrix spike duplicate recovery was above the upper control limit.

H04 - Matrix spike/matrix spike duplicate pairs exceed the RPD limit.

H05 - No action was taken on matrix spike/matrix spike duplicate results.

Q02 - Radiological field duplicate NAD was outside the control limit.

T04 - Radionuclide Quantitation: Professional judgment was used to qualify the data.

T05 - Radionuclide Quantitation: Analytical result is less than the associated MDA, but greater than the counting uncertainty.

T06 - Radionuclide Quantitation: Analytical result is less than both the associated counting uncertainty and MDA.

T20 - Radionuclide Quantitation: Analytical result is greater than the associated MDA, with uncertainty 50 percent to 100 percent of the result.

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APPENDIX F

GROUNDWATER FIELD PARAMETER DATA AND ANALYTICAL DATA RESULTS FOR CALENDAR YEAR 2022

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Table F-1. Groundwater Monitoring Field Parameters for the Latty Avenue Properties First Quarter 2022

Station ID	Date Sampled	Purge Rate (mL/minute)	Volume Removed (mL)	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	Depth to Water at Sampling Time	Depth to Water (BTOC) 02/14/22
HISS-01	---	---	---	---	---	---	---	---	---	---	7.43
HISS-06A	02/15/22	100	1,200	7.05	1.49	5.7	0.42	13.39	319	7.52	7.22
HISS-10	---	---	---	---	---	---	---	---	---	---	5.75
HISS-11A	02/15/22	50	750	7.14	0.788	0.6	1.07	14.00	323	12.58	11.66
HISS-17S	---	---	---	---	---	---	---	---	---	---	5.00
HISS-19S	---	---	---	---	---	---	---	---	---	---	14.48
HW22	---	---	---	---	---	---	---	---	---	---	13.24
HW23	---	---	---	---	---	---	---	---	---	---	9.44

Table F-1. Groundwater Monitoring Field Parameters for the Latty Avenue Properties (Continued)
Second Quarter 2022

Station ID	Date Sampled	Purge Rate (mL/minute)	Volume Removed (mL)	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	Depth to Water at Sampling Time	Depth to Water (BTOC) 05/16/22
HISS-01	---	---	---	---	---	---	---	---	---	---	8.22
HISS-06A	---	---	---	---	---	---	---	---	---	---	7.74
HISS-10	05/18/22	150	2,700	7.05	1.27	30.7	0.00	15.24	282	6.03	6.15
HISS-11A	---	---	---	---	---	---	---	---	---	---	12.61
HISS-17S	---	---	---	---	---	---	---	---	---	---	6.81
HISS-19S	---	---	---	---	---	---	---	---	---	---	14.45
HW22	05/18/22	35	315	6.80	2.01	44.1	0.80	19.65	142	13.57	13.16
HW23	05/18/22	80	1,300	7.52	1.12	101	3.61	16.54	-158	9.56	9.50

Table F-1. Groundwater Monitoring Field Parameters for the Latty Avenue Properties (Continued)
Third Quarter 2022

Station ID	Date Sampled	Purge Rate (mL/minute)	Volume Removed (mL)	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	Depth to Water at Sampling Time	Depth to Water (BTOC) 08/22/22
HISS-01	08/24/22	120	1,080	7.29	1.19	0.0	2.19	23.15	259	9.03	8.65
HISS-06A	---	---	---	---	---	---	---	---	---	---	8.00
HISS-10	---	---	---	---	---	---	---	---	---	---	6.37
HISS-11A	---	---	---	---	---	---	---	---	---	---	12.91
HISS-17S	---	---	---	---	---	---	---	---	---	---	7.04
HISS-19S	---	---	---	---	---	---	---	---	---	---	14.35
HW22	---	---	---	---	---	---	---	---	---	---	14.00
HW23	---	---	---	---	---	---	---	---	---	---	9.58

Table F-1. Groundwater Monitoring Field Parameters for the Latty Avenue Properties (Continued)
Fourth Quarter 2022

Station ID	Date Sampled	Purge Rate (mL/minute)	Volume Removed (mL)	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	Depth to Water at Sampling Time	Depth to Water (BTOC) 11/14/22
HISS-01	---	---	---	---	---	---	---	---	---	---	10.43
HISS-06A	---	---	---	---	---	---	---	---	---	---	9.11
HISS-10	11/14/22	150	1,350	7.02	1.32	0.1	0.00	15.32	313	8.05	7.67
HISS-11A	---	---	---	---	---	---	---	---	---	---	12.78
HISS-17S	---	---	---	---	---	---	---	---	---	---	7.33
HISS-19S	---	---	---	---	---	---	---	---	---	---	14.61
HW22	---	---	---	---	---	---	---	---	---	---	14.17
HW23	---	---	---	---	---	---	---	---	---	---	9.69

--- Monitoring well was not sampled during this event.

BTOC – below top of casing

Table F-2. Groundwater Monitoring Field Parameters for SLAPS and SLAPS VPs
First Quarter 2022

Station ID	Date Sampled	Purge Rate (mL/minute)	Volume Removed (mL)	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	Depth to Water at Sampling Time	Depth to Water (BTOC) 02/14/22
B53W01D	---	---	---	---	---	---	---	---	---	---	10.13
B53W01S	---	---	---	---	---	---	---	---	---	---	13.12
B53W06S	02/15/22	22	264	6.76	1.36	44.3	0.00	14.64	119	16.53	15.65
B53W07D	---	---	---	---	---	---	---	---	---	---	10.30
B53W07S	---	---	---	---	---	---	---	---	---	---	19.38
B53W09S	---	---	---	---	---	---	---	---	---	---	15.73
B53W17S	---	---	---	---	---	---	---	---	---	---	10.80
MW31-98	---	---	---	---	---	---	---	---	---	---	12.97
MW32-98	---	---	---	---	---	---	---	---	---	---	15.83
PW35	---	---	---	---	---	---	---	---	---	---	9.81
PW36	---	---	---	---	---	---	---	---	---	---	9.57
PW42	---	---	---	---	---	---	---	---	---	---	10.10
PW43	---	---	---	---	---	---	---	---	---	---	*
PW44	---	---	---	---	---	---	---	---	---	---	3.60
PW45	---	---	---	---	---	---	---	---	---	---	6.62
PW46	02/15/22	50	600	6.72	2.56	3.2	0.00	12.40	340	11.18	10.74

Table F-2. Groundwater Monitoring Field Parameters for SLAPS and SLAPS VPs (Continued)
Second Quarter 2022

Station ID	Date Sampled	Purge Rate (mL/minute)	Volume Removed (mL)	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	Depth to Water at Sampling Time	Depth to Water (BTOC) 05/16/22
B53W01D	---	---	---	---	---	---	---	---	---	---	10.23
B53W01S	05/16/22	50	600	6.93	0.927	0.0	1.26	17.07	177	12.57	12.05
B53W06S	---	---	---	---	---	---	---	---	---	---	13.09
B53W07D	---	---	---	---	---	---	---	---	---	---	10.33
B53W07S	---	---	---	---	---	---	---	---	---	---	18.12
B53W09S	---	---	---	---	---	---	---	---	---	---	15.70
B53W17S	05/17/22	50	750	6.71	5.17	0.0	1.64	17.89	266	9.34	8.92
MW31-98	---	---	---	---	---	---	---	---	---	---	10.49
MW32-98	---	---	---	---	---	---	---	---	---	---	12.21
PW35	---	---	---	---	---	---	---	---	---	---	9.78
PW36	---	---	---	---	---	---	---	---	---	---	9.60
PW42	---	---	---	---	---	---	---	---	---	---	10.08
PW43	05/17/22	50	750	7.02	0.843	14.2	1.81	21.89	235	15.02	14.09
PW44	---	---	---	---	---	---	---	---	---	---	4.36
PW45	---	---	---	---	---	---	---	---	---	---	6.46
PW46	05/17/22	50	1,050	6.69	2.62	20.0	0.00	19.52	-3	11.90	11.53

Table F-2. Groundwater Monitoring Field Parameters for SLAPS and SLAPS VPs (Continued)
Third Quarter 2022

Station ID	Date Sampled	Purge Rate (mL/minute)	Volume Removed (mL)	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	Depth to Water at Sampling Time	Depth to Water (BTOC) 08/22/22
B53W01D	08/22/22	120	1,800	7.27	1.07	69.1	0.00	18.11	-181	10.32	10.23
B53W01S	---	---	---	---	---	---	---	---	---	---	12.17
B53W06S	08/24/22	20	300	6.78	1.97	89.4	0.35	18.95	291	15.98	14.33
B53W07D	08/23/22	40	480	7.25	1.04	100	0.00	18.46	-184	10.51	10.44
B53W07S	08/23/22	15	180	6.96	1.52	49.1	0.38	21.42	275	19.55	18.89
B53W09S	08/24/22	30	450	7.02	1.09	4.4	0.16	19.97	47	15.55	14.84
B53W17S	---	---	---	---	---	---	---	---	---	---	11.27
MW31-98	---	---	---	---	---	---	---	---	---	---	13.05
MW32-98	---	---	---	---	---	---	---	---	---	---	14.62
PW35	---	---	---	---	---	---	---	---	---	---	9.92
PW36	---	---	---	---	---	---	---	---	---	---	9.68
PW42	---	---	---	---	---	---	---	---	---	---	10.22
PW43	---	---	---	---	---	---	---	---	---	---	14.78
PW44	---	---	---	---	---	---	---	---	---	---	5.66
PW45	---	---	---	---	---	---	---	---	---	---	6.99
PW46	08/23/22	50	750	6.64	2.49	14.4	0.08	21.57	37	12.65	12.20

Table F-2. Groundwater Monitoring Field Parameters for SLAPS and SLAPS VPs (Continued)
Fourth Quarter 2022

Station ID	Date Sampled	Purge Rate (mL/minute)	Volume Removed (mL)	pH	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	Temp (°C)	ORP (mV)	Depth to Water at Sampling Time	Depth to Water (BTOC) 11/14/22
B53W01D	---	---	---	---	---	---	---	---	---	---	10.28
B53W01S	---	---	---	---	---	---	---	---	---	---	13.86
B53W06S	---	---	---	---	---	---	---	---	---	---	15.89
B53W07D	---	---	---	---	---	---	---	---	---	---	10.45
B53W07S	11/17/22	50	600	6.67	5.19	85.0	0.00	14.71	326	14.25	19.97
B53W09S	---	---	---	---	---	---	---	---	---	---	15.90
B53W17S	---	---	---	---	---	---	---	---	---	---	13.86
MW31-98	---	---	---	---	---	---	---	---	---	---	16.97
MW32-98	---	---	---	---	---	---	---	---	---	---	16.64
PW35	11/15/22	45	540	8.11	1.56	68.7	5.56	12.41	-72	11.47	9.47
PW36	11/15/22	300	3,600	7.21	1.06	132	0.00	14.43	-182	9.70	9.62
PW42	---	---	---	---	---	---	---	---	---	---	10.30
PW43	---	---	---	---	---	---	---	---	---	---	17.01
PW44	---	---	---	---	---	---	---	---	---	---	9.02
PW45	---	---	---	---	---	---	---	---	---	---	7.64
PW46	---	---	---	---	---	---	---	---	---	---	12.99

* No water level measurement was taken at monitoring well PW43 during the first-quarter 2022 sampling event because it was inaccessible.

--- Monitoring well was not sampled during this event.

Table F-3. CY 2022 Groundwater Sampling Data for the Latty Avenue Properties

Site: Latty Avenue Properties

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Filtered
HIS259242	HISS-01	08/24/22	ML-005	Th-228	0.347	0.342	0.51	pCi/L	UJ	T04, T05	No
HIS259242	HISS-01	08/24/22	ML-005	Th-230	0.746	0.469	0.369	pCi/L	J	F01, T04, T20	No
HIS259242	HISS-01	08/24/22	ML-005	Th-232	0.139	0.241	0.51	pCi/L	UJ	T06	No
HIS259242	HISS-01	08/24/22	ML-006	Ra-226	-0.126	0.222	0.814	pCi/L	UJ	T06	No
HIS259242	HISS-01	08/24/22	ML-015	U-234	7.77	1.75	0.566	pCi/L	=		No
HIS259242	HISS-01	08/24/22	ML-015	U-235	0.474	0.467	0.698	pCi/L	UJ	T04, T05	No
HIS259242	HISS-01	08/24/22	ML-015	U-238	8.65	1.87	0.564	pCi/L	=		No
HIS254836	HISS-06A	02/15/22	ML-005	Th-228	0.714	0.584	0.751	pCi/L	UJ	T04, T05	No
HIS254836	HISS-06A	02/15/22	ML-005	Th-230	0.613	0.546	0.752	pCi/L	UJ	T04, T05	No
HIS254836	HISS-06A	02/15/22	ML-005	Th-232	-0.051	0.216	0.651	pCi/L	UJ	T06	No
HIS254836	HISS-06A	02/15/22	ML-006	Ra-226	0.949	0.532	0.474	pCi/L	J	T04, T20	No
HIS254836	HISS-06A	02/15/22	ML-015	U-234	1.96	0.932	0.643	pCi/L	=		No
HIS254836	HISS-06A	02/15/22	ML-015	U-235	0.124	0.352	0.915	pCi/L	UJ	T06	No
HIS254836	HISS-06A	02/15/22	ML-015	U-238	1.3	0.765	0.738	pCi/L	J	T04, T20	No
HIS254836	HISS-06A	02/15/22	SW846 6020	Antimony	2		2	µg/L	U		No
HIS254836	HISS-06A	02/15/22	SW846 6020	Arsenic	4		4	µg/L	U		No
HIS254836	HISS-06A	02/15/22	SW846 6020	Barium	70		0.9	µg/L	=		No
HIS254836	HISS-06A	02/15/22	SW846 6020	Cadmium	0.25		0.2	µg/L	J	E01, E08	No
HIS254836	HISS-06A	02/15/22	SW846 6020	Chromium	4		4	µg/L	U		No
HIS254836	HISS-06A	02/15/22	SW846 6020	Molybdenum	2.8		2	µg/L	=		No
HIS254836	HISS-06A	02/15/22	SW846 6020	Nickel	5.00		2	µg/L	=		No
HIS254836	HISS-06A	02/15/22	SW846 6020	Selenium	160		2	µg/L	=		No
HIS254836	HISS-06A	02/15/22	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
HIS254836	HISS-06A	02/15/22	SW846 6020	Vanadium	5.9		4	µg/L	=		No
HIS256695	HISS-10	05/18/22	ML-005	Th-228	0.378	0.325	0.477	pCi/L	UJ	T04, T05	No
HIS256695	HISS-10	05/18/22	ML-005	Th-230	0.882	0.458	0.297	pCi/L	J	F01, T04, T20	No
HIS256695	HISS-10	05/18/22	ML-005	Th-232	-0.014	0.115	0.297	pCi/L	UJ	T06	No
HIS256695	HISS-10	05/18/22	ML-006	Ra-226	0.095	0.269	0.699	pCi/L	UJ	T06	No
HIS256695	HISS-10	05/18/22	ML-015	U-234	5.87	1.82	1.1	pCi/L	=		No
HIS256695	HISS-10	05/18/22	ML-015	U-235	1.34E-07	0.344	1.18	pCi/L	UJ	T06	No
HIS256695	HISS-10	05/18/22	ML-015	U-238	3.97	1.44	0.835	pCi/L	=		No
HIS256695	HISS-10	05/18/22	SW846 6020	Antimony	0.81		0.4	µg/L	=		No
HIS256695	HISS-10	05/18/22	SW846 6020	Arsenic	0.33		0.33	µg/L	U		No

Table F-3. CY 2022 Groundwater Sampling Data for the Latty Avenue Properties (Continued)

Site: Latty Avenue Properties

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Filtered
HIS256695	HISS-10	05/18/22	SW846 6020	Barium	67		0.29	µg/L	=		No
HIS256695	HISS-10	05/18/22	SW846 6020	Cadmium	0.51		0.27	µg/L	=		No
HIS256695	HISS-10	05/18/22	SW846 6020	Chromium	0.5		0.5	µg/L	U		No
HIS256695	HISS-10	05/18/22	SW846 6020	Molybdenum	46		0.14	µg/L	=		No
HIS256695	HISS-10	05/18/22	SW846 6020	Nickel	5		0.3	µg/L	=		No
HIS256695	HISS-10	05/18/22	SW846 6020	Selenium	49		0.37	µg/L	=		No
HIS256695	HISS-10	05/18/22	SW846 6020	Thallium	0.098		0.089	µg/L	=		No
HIS256695	HISS-10	05/18/22	SW846 6020	Vanadium	1.2		1.2	µg/L	U		No
HIS264414	HISS-10	11/14/22	SW846 6020	Antimony	2		2	µg/L	U		No
HIS264414	HISS-10	11/14/22	SW846 6020	Arsenic	1.6		1.6	µg/L	U		No
HIS264414	HISS-10	11/14/22	SW846 6020	Barium	97		0.69	µg/L	=		No
HIS264414	HISS-10	11/14/22	SW846 6020	Cadmium	0.25		0.2	µg/L	J	E01, E08	No
HIS264414	HISS-10	11/14/22	SW846 6020	Chromium	4		4	µg/L	U		No
HIS264414	HISS-10	11/14/22	SW846 6020	Molybdenum	49		2	µg/L	=		No
HIS264414	HISS-10	11/14/22	SW846 6020	Nickel	3.5		2	µg/L	=		No
HIS264414	HISS-10	11/14/22	SW846 6020	Selenium	54		2	µg/L	=		No
HIS264414	HISS-10	11/14/22	SW846 6020	Thallium	0.13		0.13	µg/L	U		No
HIS264414	HISS-10	11/14/22	SW846 6020	Vanadium	4		4	µg/L	U		No
HIS254837	HISS-11A	02/15/22	ML-005	Th-228	1.05	0.584	0.405	pCi/L	J	T04, T20	No
HIS254837	HISS-11A	02/15/22	ML-005	Th-230	0.572	0.44	0.487	pCi/L	J	T04, T20	No
HIS254837	HISS-11A	02/15/22	ML-005	Th-232	0.0762	0.216	0.561	pCi/L	UJ	T06	No
HIS254837	HISS-11A	02/15/22	ML-006	Ra-226	0.0346	0.23	0.67	pCi/L	UJ	T06	No
HIS254837	HISS-11A	02/15/22	ML-015	U-234	1.72	0.81	0.633	pCi/L	=		No
HIS254837	HISS-11A	02/15/22	ML-015	U-235	0.212	0.368	0.781	pCi/L	UJ	T06	No
HIS254837	HISS-11A	02/15/22	ML-015	U-238	1.46	0.743	0.63	pCi/L	J	T04, T20	No
HIS254837	HISS-11A	02/15/22	SW846 6020	Antimony	2		2	µg/L	U		No
HIS254837	HISS-11A	02/15/22	SW846 6020	Arsenic	4		4	µg/L	U		No
HIS254837	HISS-11A	02/15/22	SW846 6020	Barium	100		0.9	µg/L	=		No
HIS254837	HISS-11A	02/15/22	SW846 6020	Cadmium	0.22		0.2	µg/L	J	E01, E08	No
HIS254837	HISS-11A	02/15/22	SW846 6020	Chromium	4		4	µg/L	U		No
HIS254837	HISS-11A	02/15/22	SW846 6020	Molybdenum	3.3		2	µg/L	=		No
HIS254837	HISS-11A	02/15/22	SW846 6020	Nickel	2		2	µg/L	U		No
HIS254837	HISS-11A	02/15/22	SW846 6020	Selenium	6.6		2	µg/L	=		No
HIS254837	HISS-11A	02/15/22	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
HIS254837	HISS-11A	02/15/22	SW846 6020	Vanadium	5.4		4	µg/L	=		No

Table F-3. CY 2022 Groundwater Sampling Data for the Latty Avenue Properties (Continued)

Site: Latty Avenue Properties

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Filtered
HIS256696	HW22	05/18/22	ML-005	Th-228	0.599	0.49	0.754	pCi/L	UJ	T04, T05	No
HIS256696	HW22	05/18/22	ML-005	Th-230	0.244	0.308	0.541	pCi/L	UJ	T06	No
HIS256696	HW22	05/18/22	ML-005	Th-232	-0.0749	0.168	0.592	pCi/L	UJ	T06	No
HIS256696	HW22	05/18/22	ML-006	Ra-226	0.218	0.384	0.872	pCi/L	UJ	T06	No
HIS256696	HW22	05/18/22	ML-015	U-234	6.83	2.15	1	pCi/L	=		No
HIS256696	HW22	05/18/22	ML-015	U-235	0.59	0.699	1.13	pCi/L	UJ	T06	No
HIS256696	HW22	05/18/22	ML-015	U-238	7.14	2.19	0.916	pCi/L	=		No
HIS256696	HW22	05/18/22	SW846 6020	Antimony	0.4		0.4	µg/L	U		No
HIS256696	HW22	05/18/22	SW846 6020	Arsenic	0.38		0.33	µg/L	=		No
HIS256696	HW22	05/18/22	SW846 6020	Barium	130		0.29	µg/L	=		No
HIS256696	HW22	05/18/22	SW846 6020	Cadmium	0.51		0.27	µg/L	=		No
HIS256696	HW22	05/18/22	SW846 6020	Chromium	0.53		0.5	µg/L	=		No
HIS256696	HW22	05/18/22	SW846 6020	Molybdenum	0.98		0.14	µg/L	J	F01	No
HIS256696	HW22	05/18/22	SW846 6020	Nickel	1.8		0.3	µg/L	J	F01	No
HIS256696	HW22	05/18/22	SW846 6020	Selenium	14		0.37	µg/L	=		No
HIS256696	HW22	05/18/22	SW846 6020	Thallium	0.089		0.089	µg/L	U		No
HIS256696	HW22	05/18/22	SW846 6020	Vanadium	2.6		1.2	µg/L	=		No
HIS256697	HW23	05/18/22	ML-005	Th-228	0.288	0.275	0.322	pCi/L	UJ	T04, T05	No
HIS256697	HW23	05/18/22	ML-005	Th-230	0.608	0.413	0.481	pCi/L	J	F01, T04, T20	No
HIS256697	HW23	05/18/22	ML-005	Th-232	0.167	0.213	0.322	pCi/L	UJ	T06	No
HIS256697	HW23	05/18/22	ML-006	Ra-226	1.17	0.697	0.833	pCi/L	J	T04, T20	No
HIS256697	HW23	05/18/22	ML-015	U-234	0.152	0.264	0.56	pCi/L	UJ	T06	No
HIS256697	HW23	05/18/22	ML-015	U-235	0.282	0.377	0.691	pCi/L	UJ	T06	No
HIS256697	HW23	05/18/22	ML-015	U-238	0.0758	0.215	0.558	pCi/L	UJ	T06	No
HIS256697	HW23	05/18/22	SW846 6020	Antimony	0.4		0.4	µg/L	U		No
HIS256697	HW23	05/18/22	SW846 6020	Arsenic	200		0.33	µg/L	=		No
HIS256697	HW23	05/18/22	SW846 6020	Barium	420		0.29	µg/L	=		No
HIS256697	HW23	05/18/22	SW846 6020	Cadmium	0.7		0.27	µg/L	=		No

Table F-3. CY 2022 Groundwater Sampling Data for the Latty Avenue Properties (Continued)

Site: Latty Avenue Properties

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Filtered
HIS256697	HW23	05/18/22	SW846 6020	Chromium	1.5		0.5	µg/L	=		No
HIS256697	HW23	05/18/22	SW846 6020	Molybdenum	7.5		0.14	µg/L	J	F01	No
HIS256697	HW23	05/18/22	SW846 6020	Nickel	3.7		0.3	µg/L	J	F01	No
HIS256697	HW23	05/18/22	SW846 6020	Selenium	0.37		0.37	µg/L	U		No
HIS256697	HW23	05/18/22	SW846 6020	Thallium	0.089		0.089	µg/L	U		No
HIS256697	HW23	05/18/22	SW846 6020	Vanadium	2		1.2	µg/L	=		No

VQs:

= - Indicates that the data met all QA/QC requirements, and that the parameter has been positively identified and the associated concentration value is accurate.

J - Indicates that the parameter was positively identified; the associated numerical value is the approximate concentration of the parameter in the sample.

U - Indicates that the data met all QA/QC requirements, and that the parameter was analyzed for but was not detected above the reported sample quantitation limit.

UJ - Indicates that the parameter was not detected above the reported sample quantitation limit and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. However, the reported quantitation limit is approximate.

Validation Reason Codes:

E01 - ICP and Furnace Requirements: Interference check sample recovery was outside the control limit.

E08 - ICP and Furnace Requirements: Professional judgement was used to qualify the data.

F01 - Blanks: Sample data were qualified as a result of the method blank.

T04 - Radionuclide Quantitation: Professional judgment was used to qualify the data.

T05 - Radionuclide Quantitation: Analytical result is less than the associated MDA, but greater than the counting uncertainty.

T06 - Radionuclide Quantitation: Analytical result is less than both the associated counting uncertainty and MDA.

T20 - Radionuclide Quantitation: Analytical result is greater than the associated MDA, with uncertainly 50 to 100 percent of the result.

Table F-4. CY 2022 Groundwater Sampling Data for the SLAPS and SLAPS VPs

Site: SLAPS and SLAPS VPs											
Sample Name	**Station Name**	**Collection Date**	**Method**	**Analyte**	**Result**	**Measurement Error**	**DL**	**Units**	**VQ**	**Validation Reason Code**	**Filtered**
SVP259244	B53W01D	08/22/22	SW846 6020	Antimony	0.4		0.4	µg/L	U		No
SVP259244	B53W01D	08/22/22	SW846 6020	Arsenic	89		0.33	µg/L	=		No
SVP259244	B53W01D	08/22/22	SW846 6020	Barium	410		0.29	µg/L	=		No
SVP259244	B53W01D	08/22/22	SW846 6020	Cadmium	6.2		0.27	µg/L	=		No
SVP259244	B53W01D	08/22/22	SW846 6020	Chromium	4.7		0.5	µg/L	=		No
SVP259244	B53W01D	08/22/22	SW846 6020	Molybdenum	1.3		0.14	µg/L	=		No
SVP259244	B53W01D	08/22/22	SW846 6020	Nickel	4		0.3	µg/L	=		No
SVP259244	B53W01D	08/22/22	SW846 6020	Selenium	0.37		0.37	µg/L	U		No
SVP259244	B53W01D	08/22/22	SW846 6020	Thallium	0.089		0.089	µg/L	U		No
SVP259244	B53W01D	08/22/22	SW846 6020	Vanadium	1.9		1.2	µg/L	=		No
SVP256703	B53W01S	05/16/22	ML-005	Th-228	0.359	0.339	0.532	pCi/L	UJ	T04, T05	No
SVP256703	B53W01S	05/16/22	ML-005	Th-230	0.781	0.46	0.399	pCi/L	J	F01, T04, T20	No
SVP256703	B53W01S	05/16/22	ML-005	Th-232	0.0623	0.176	0.459	pCi/L	UJ	T06	No
SVP256703	B53W01S	05/16/22	ML-006	Ra-226	-0.0763	0.341	1.08	pCi/L	UJ	T06	No
SVP256703	B53W01S	05/16/22	ML-015	U-234	0.771	0.518	0.567	pCi/L	J	T04, T20	No
SVP256703	B53W01S	05/16/22	ML-015	U-235	0.285	0.382	0.7	pCi/L	UJ	T06	No
SVP256703	B53W01S	05/16/22	ML-015	U-238	0.691	0.491	0.565	pCi/L	J	T04, T20	No
SVP254840	B53W06S	02/15/22	SW846 6020	Antimony	2		2	µg/L	U		No
SVP254840	B53W06S	02/15/22	SW846 6020	Arsenic	4		4	µg/L	U		No
SVP254840	B53W06S	02/15/22	SW846 6020	Barium	260		0.9	µg/L	=		No
SVP254840	B53W06S	02/15/22	SW846 6020	Cadmium	10		0.2	µg/L	=	E01, E08	No
SVP254840	B53W06S	02/15/22	SW846 6020	Chromium	6.5		4	µg/L	=		No
SVP254840	B53W06S	02/15/22	SW846 6020	Molybdenum	6.1		2	µg/L	=		No
SVP254840	B53W06S	02/15/22	SW846 6020	Nickel	12		2	µg/L	=		No
SVP254840	B53W06S	02/15/22	SW846 6020	Selenium	25		2	µg/L	=		No
SVP254840	B53W06S	02/15/22	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
SVP254840	B53W06S	02/15/22	SW846 6020	Vanadium	11		4	µg/L	=		No
SVP259245	B53W06S	08/24/22	SW846 6020	Antimony	2.4		0.4	µg/L	=		No
SVP259245	B53W06S	08/24/22	SW846 6020	Arsenic	1.7		0.33	µg/L	=		No

Table F-4. CY 2022 Groundwater Sampling Data for the SLAPS and SLAPS VPs (Continued)

Site: SLAPS and SLAPS VPs											
Sample Name	**Station Name**	**Collection Date**	**Method**	**Analyte**	**Result**	**Measurement Error**	**DL**	**Units**	**VQ**	**Validation Reason Code**	**Filtered**
SVP259245	B53W06S	08/24/22	SW846 6020	Barium	290		0.29	µg/L	=		No
SVP259245	B53W06S	08/24/22	SW846 6020	Cadmium	35		0.27	µg/L	=		No
SVP259245	B53W06S	08/24/22	SW846 6020	Chromium	6.1		0.5	µg/L	=		No
SVP259245	B53W06S	08/24/22	SW846 6020	Molybdenum	9.5		0.14	µg/L	=		No
SVP259245	B53W06S	08/24/22	SW846 6020	Nickel	14		0.3	µg/L	=		No
SVP259245	B53W06S	08/24/22	SW846 6020	Selenium	17		0.37	µg/L	=		No
SVP259245	B53W06S	08/24/22	SW846 6020	Thallium	0.089		0.089	µg/L	U		No
SVP259245	B53W06S	08/24/22	SW846 6020	Vanadium	6.7		1.2	µg/L	=		No
SVP259246	B53W07D	08/23/22	SW846 6020	Antimony	0.4		0.4	µg/L	U		No
SVP259246	B53W07D	08/23/22	SW846 6020	Arsenic	78		0.33	µg/L	=		No
SVP259246	B53W07D	08/23/22	SW846 6020	Barium	340		0.29	µg/L	=		No
SVP259246	B53W07D	08/23/22	SW846 6020	Cadmium	0.72		0.27	µg/L	=		No
SVP259246	B53W07D	08/23/22	SW846 6020	Chromium	4.6		0.5	µg/L	=		No
SVP259246	B53W07D	08/23/22	SW846 6020	Molybdenum	2.2		0.14	µg/L	=		No
SVP259246	B53W07D	08/23/22	SW846 6020	Nickel	7.6		0.3	µg/L	=		No
SVP259246	B53W07D	08/23/22	SW846 6020	Selenium	0.37		0.37	µg/L	U		No
SVP259246	B53W07D	08/23/22	SW846 6020	Thallium	0.089		0.089	µg/L	U		No
SVP259246	B53W07D	08/23/22	SW846 6020	Vanadium	3.4		1.2	µg/L	=		No
SVP259247	B53W07S	08/23/22	SW846 6020	Antimony	0.4		0.4	µg/L	U		No
SVP259247	B53W07S	08/23/22	SW846 6020	Arsenic	0.33		0.33	µg/L	U		No
SVP259247	B53W07S	08/23/22	SW846 6020	Barium	240		0.29	µg/L	=		No
SVP259247	B53W07S	08/23/22	SW846 6020	Cadmium	0.32		0.27	µg/L	=		No
SVP259247	B53W07S	08/23/22	SW846 6020	Chromium	0.5		0.5	µg/L	U		No
SVP259247	B53W07S	08/23/22	SW846 6020	Molybdenum	1.4		0.14	µg/L	=		No
SVP259247	B53W07S	08/23/22	SW846 6020	Nickel	2.5		0.3	µg/L	=		No
SVP259247	B53W07S	08/23/22	SW846 6020	Selenium	2.3		0.37	µg/L	=		No
SVP259247	B53W07S	08/23/22	SW846 6020	Thallium	0.089		0.089	µg/L	U		No
SVP259247	B53W07S	08/23/22	SW846 6020	Vanadium	1.2		1.2	µg/L	U		No

Table F-4. CY 2022 Groundwater Sampling Data for the SLAPS and SLAPS VPs (Continued)

Site: SLAPS and SLAPS VPs											
Sample Name	**Station Name**	**Collection Date**	**Method**	**Analyte**	**Result**	**Measurement Error**	**DL**	**Units**	**VQ**	**Validation Reason Code**	**Filtered**
SVP259248	B53W09S	08/24/22	SW846 6020	Antimony	0.4		0.4	µg/L	U		No
SVP259248	B53W09S	08/24/22	SW846 6020	Arsenic	0.87		0.33	µg/L	=		No
SVP259248	B53W09S	08/24/22	SW846 6020	Barium	280		0.29	µg/L	=		No
SVP259248	B53W09S	08/24/22	SW846 6020	Cadmium	0.27		0.27	µg/L	U		No
SVP259248	B53W09S	08/24/22	SW846 6020	Chromium	27		0.5	µg/L	=		No
SVP259248	B53W09S	08/24/22	SW846 6020	Molybdenum	3.3		0.14	µg/L	=		No
SVP259248	B53W09S	08/24/22	SW846 6020	Nickel	23		0.3	µg/L	=		No
SVP259248	B53W09S	08/24/22	SW846 6020	Selenium	0.81		0.37	µg/L	=		No
SVP259248	B53W09S	08/24/22	SW846 6020	Thallium	0.089		0.089	µg/L	U		No
SVP259248	B53W09S	08/24/22	SW846 6020	Vanadium	1.2		1.2	µg/L	U		No
SVP256704	B53W17S	05/17/22	SW846 6020	Antimony	0.4		0.4	µg/L	U		No
SVP256704	B53W17S	05/17/22	SW846 6020	Arsenic	0.33		0.33	µg/L	U		No
SVP256704	B53W17S	05/17/22	SW846 6020	Barium	270		0.29	µg/L	=		No
SVP256704	B53W17S	05/17/22	SW846 6020	Cadmium	0.63		0.27	µg/L	=		No
SVP256704	B53W17S	05/17/22	SW846 6020	Chromium	2.3		0.5	µg/L	=		No
SVP256704	B53W17S	05/17/22	SW846 6020	Molybdenum	0.79		0.14	µg/L	=		No
SVP256704	B53W17S	05/17/22	SW846 6020	Nickel	2.4		0.3	µg/L	=		No
SVP256704	B53W17S	05/17/22	SW846 6020	Selenium	91		0.37	µg/L	=		No
SVP256704	B53W17S	05/17/22	SW846 6020	Thallium	0.089		0.089	µg/L	U		No
SVP256704	B53W17S	05/17/22	SW846 6020	Vanadium	1.2		1.2	µg/L	U		No
SVP264417	B53W17S	11/17/22	ML-005	Th-228	0.597	0.517	0.552	pCi/L	J	T04, T20	No
SVP264417	B53W17S	11/17/22	ML-005	Th-230	0.52	0.514	0.766	pCi/L	UJ	T04, T05	No
SVP264417	B53W17S	11/17/22	ML-005	Th-232	0	0.294	0.764	pCi/L	UJ	T06	No
SVP264417	B53W17S	11/17/22	ML-006	Ra-226	0.0708	0.3	0.904	pCi/L	UJ	T06	No
SVP264417	B53W17S	11/17/22	ML-015	U-234	1.99	0.934	0.536	pCi/L	=		No
SVP264417	B53W17S	11/17/22	ML-015	U-235	0.125	0.353	0.917	pCi/L	UJ	T06	No
SVP264417	B53W17S	11/17/22	ML-015	U-238	2.84	1.14	0.725	pCi/L	=		No
SVP264415	PW35	11/15/22	ML-005	Th-228	1.21	0.582	0.468	pCi/L	=		No

Table F-4. CY 2022 Groundwater Sampling Data for the SLAPS and SLAPS VPs (Continued)

Site: SLAPS and SLAPS VPs											
Sample Name	**Station Name**	**Collection Date**	**Method**	**Analyte**	**Result**	**Measurement Error**	**DL**	**Units**	**VQ**	**Validation Reason Code**	**Filtered**
SVP264415	PW35	11/15/22	ML-005	Th-230	1.53	0.656	0.468	pCi/L	J	F01	No
SVP264415	PW35	11/15/22	ML-005	Th-232	0.492	0.364	0.337	pCi/L	J	T04, T20	No
SVP264415	PW35	11/15/22	ML-006	Ra-226	3.64	1.48	0.781	pCi/L	=		No
SVP264415	PW35	11/15/22	ML-015	U-234	0.135	0.234	0.496	pCi/L	UJ	T06	No
SVP264415	PW35	11/15/22	ML-015	U-235	0.0831	0.235	0.611	pCi/L	UJ	T06	No
SVP264415	PW35	11/15/22	ML-015	U-238	0.536	0.406	0.493	pCi/L	J	T04, T20	No
SVP264415	PW35	11/15/22	SW846 6020	Antimony	2		2	µg/L	U		No
SVP264415	PW35	11/15/22	SW846 6020	Arsenic	3.70E+01		1.6	µg/L	=		No
SVP264415	PW35	11/15/22	SW846 6020	Barium	2100		0.69	µg/L	=		No
SVP264415	PW35	11/15/22	SW846 6020	Cadmium	1.2		0.2	µg/L	J	E01, E08	No
SVP264415	PW35	11/15/22	SW846 6020	Chromium	12		4	µg/L	=		No
SVP264415	PW35	11/15/22	SW846 6020	Molybdenum	4.4		2	µg/L	=		No
SVP264415	PW35	11/15/22	SW846 6020	Nickel	12		2	µg/L	=		No
SVP264415	PW35	11/15/22	SW846 6020	Selenium	2		2	µg/L	U		No
SVP264415	PW35	11/15/22	SW846 6020	Thallium	0.13		0.13	µg/L	U		No
SVP264415	PW35	11/15/22	SW846 6020	Vanadium	13		4	µg/L	=		No
SVP264416	PW36	11/15/22	ML-005	Th-228	0.473	0.385	0.497	pCi/L	UJ	T04, T05	No
SVP264416	PW36	11/15/22	ML-005	Th-230	1.08	0.569	0.498	pCi/L	J	F01, T04, T20	No
SVP264416	PW36	11/15/22	ML-005	Th-232	0.101	0.197	0.431	pCi/L	UJ	T06	No
SVP264416	PW36	11/15/22	ML-006	Ra-226	0.813	0.718	0.998	pCi/L	UJ	T04, T05	No
SVP264416	PW36	11/15/22	ML-015	U-234	0.486	0.396	0.511	pCi/L	UJ	T04, T05	No
SVP264416	PW36	11/15/22	ML-015	U-235	-0.0643	0.187	0.618	pCi/L	UJ	T06	No
SVP264416	PW36	11/15/22	ML-015	U-238	0.346	0.341	0.509	pCi/L	UJ	T04, T05	No
SVP264416	PW36	11/15/22	SW846 6020	Antimony	2		2	µg/L	U		No
SVP264416	PW36	11/15/22	SW846 6020	Arsenic	130		1.6	µg/L	=		No
SVP264416	PW36	11/15/22	SW846 6020	Barium	460		0.69	µg/L	=		No
SVP264416	PW36	11/15/22	SW846 6020	Cadmium	0.51		0.2	µg/L	J	E01, E08	No
SVP264416	PW36	11/15/22	SW846 6020	Chromium	4		4	µg/L	U		No

Table F-4. CY 2022 Groundwater Sampling Data for the SLAPS and SLAPS VPs (Continued)

Site: SLAPS and SLAPS VPs											
Sample Name	**Station Name**	**Collection Date**	**Method**	**Analyte**	**Result**	**Measurement Error**	**DL**	**Units**	**VQ**	**Validation Reason Code**	**Filtered**
SVP264416	PW36	11/15/22	SW846 6020	Molybdenum	2		2	µg/L	U		No
SVP264416	PW36	11/15/22	SW846 6020	Nickel	2.9		2	µg/L	=		No
SVP264416	PW36	11/15/22	SW846 6020	Selenium	2		2	µg/L	U		No
SVP264416	PW36	11/15/22	SW846 6020	Thallium	0.13		0.13	µg/L	U		No
SVP264416	PW36	11/15/22	SW846 6020	Vanadium	4		4	µg/L	U		No
SVP256705	PW43	05/17/22	SW846 6020	Antimony	0.4		0.4	µg/L	U		No
SVP256705	PW43	05/17/22	SW846 6020	Arsenic	1.3		0.33	µg/L	=		No
SVP256705	PW43	05/17/22	SW846 6020	Barium	150		0.29	µg/L	=		No
SVP256705	PW43	05/17/22	SW846 6020	Cadmium	0.7		0.27	µg/L	=		No
SVP256705	PW43	05/17/22	SW846 6020	Chromium	0.5		0.5	µg/L	U		No
SVP256705	PW43	05/17/22	SW846 6020	Molybdenum	1.4		0.14	µg/L	=		No
SVP256705	PW43	05/17/22	SW846 6020	Nickel	1.6		0.3	µg/L	=		No
SVP256705	PW43	05/17/22	SW846 6020	Selenium	0.37		0.37	µg/L	U		No
SVP256705	PW43	05/17/22	SW846 6020	Thallium	0.089		0.089	µg/L	U		No
SVP256705	PW43	05/17/22	SW846 6020	Vanadium	1.2		1.2	µg/L	U		No
SLA254841	PW46	02/15/22	ML-005	Th-228	0.292	0.391	0.716	pCi/L	UJ	T06	No
SLA254841	PW46	02/15/22	ML-005	Th-230	0.292	0.391	0.717	pCi/L	UJ	T06	No
SLA254841	PW46	02/15/22	ML-005	Th-232	0.34	0.397	0.621	pCi/L	UJ	T06	No
SLA254841	PW46	02/15/22	ML-006	Ra-226	-0.299	0.366	1.3	pCi/L	UJ	T06	No
SLA254841	PW46	02/15/22	ML-015	U-234	44.1	5.96	0.42	pCi/L	J	Q02	No
SLA254841	PW46	02/15/22	ML-015	U-235	1.64	0.825	0.518	pCi/L	J	T04, T20	No
SLA254841	PW46	02/15/22	ML-015	U-238	44.4	5.99	0.418	pCi/L	J	Q02	No
SLA254841	PW46	02/15/22	SW846 6020	Antimony	2		2	µg/L	U		No
SLA254841	PW46	02/15/22	SW846 6020	Arsenic	4		4	µg/L	U		No
SLA254841	PW46	02/15/22	SW846 6020	Barium	61		0.9	µg/L	=		No
SLA254841	PW46	02/15/22	SW846 6020	Cadmium	0.2		0.2	µg/L	U	E01, E08	No
SLA254841	PW46	02/15/22	SW846 6020	Chromium	4		4	µg/L	U		No
SLA254841	PW46	02/15/22	SW846 6020	Molybdenum	2		2	µg/L	U		No

Table F-4. CY 2022 Groundwater Sampling Data for the SLAPS and SLAPS VPs (Continued)

Site: SLAPS and SLAPS VPs											
Sample Name	**Station Name**	**Collection Date**	**Method**	**Analyte**	**Result**	**Measurement Error**	**DL**	**Units**	**VQ**	**Validation Reason Code**	**Filtered**
SLA254841	PW46	02/15/22	SW846 6020	Nickel	2		2	µg/L	=		No
SLA254841	PW46	02/15/22	SW846 6020	Selenium	42		2	µg/L	=		No
SLA254841	PW46	02/15/22	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
SLA254841	PW46	02/15/22	SW846 6020	Vanadium	4.1		4	µg/L	=		No
SLA254841-1	PW46	02/15/22	ML-005	Th-228	0.257	0.447	0.946	pCi/L	UJ	T06	No
SLA254841-1	PW46	02/15/22	ML-005	Th-230	0.933	0.747	0.928	pCi/L	J	T04, T20	No
SLA254841-1	PW46	02/15/22	ML-005	Th-232	0	0.364	0.946	pCi/L	UJ	T06	No
SLA254841-1	PW46	02/15/22	ML-006	Ra-226	0	0.302	1.02	pCi/L	UJ	T06	No
SLA254841-1	PW46	02/15/22	ML-015	U-234	77.6	12.5	1.09	pCi/L	=		No
SLA254841-1	PW46	02/15/22	ML-015	U-235	1.63	1.14	0.987	pCi/L	J	T04, T20	No
SLA254841-1	PW46	02/15/22	ML-015	U-238	76	12.3	0.797	pCi/L	=		No
SLA254841-1	PW46	02/15/22	SW846 6020	Antimony	2		2	µg/L	U		No
SLA254841-1	PW46	02/15/22	SW846 6020	Arsenic	4		4	µg/L	U		No
SLA254841-1	PW46	02/15/22	SW846 6020	Barium	61		0.9	µg/L	=		No
SLA254841-1	PW46	02/15/22	SW846 6020	Cadmium	0.2		0.2	µg/L	U	E01, E08	No
SLA254841-1	PW46	02/15/22	SW846 6020	Chromium	4		4	µg/L	U		No
SLA254841-1	PW46	02/15/22	SW846 6020	Molybdenum	2		2	µg/L	U		No
SLA254841-1	PW46	02/15/22	SW846 6020	Nickel	2		2	µg/L	=		No
SLA254841-1	PW46	02/15/22	SW846 6020	Selenium	42		2	µg/L	=		No
SLA254841-1	PW46	02/15/22	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
SLA254841-1	PW46	02/15/22	SW846 6020	Vanadium	4		4	µg/L	U		No
SLA254841-2	PW46	02/15/22	EML A-01-R MOD	Th-228	0.0964	0.184	0.298	pCi/L	UJ	T06	No
SLA254841-2	PW46	02/15/22	EML A-01-R MOD	Th-230	0.223	0.242	0.3	pCi/L	UJ	T06	No
SLA254841-2	PW46	02/15/22	EML A-01-R MOD	Th-232	0.0196	0.079	0.176	pCi/L	UJ	T06	No
SLA254841-2	PW46	02/15/22	EML A-01-R MOD	U-234	135	12.4	0.324	pCi/L	=		No
SLA254841-2	PW46	02/15/22	EML A-01-R MOD	U-235	6.4	1.35	0.181	pCi/L	=		No
SLA254841-2	PW46	02/15/22	EML A-01-R MOD	U-238	144	13.2	0.234	pCi/L	=		No
SLA254841-2	PW46	02/15/22	SW846 9315 MODL	Ra-226	0.351	0.215	0.263	pCi/L	J	T04, W04, T20	No

Table F-4. CY 2022 Groundwater Sampling Data for the SLAPS and SLAPS VPs (Continued)

Site: SLAPS and SLAPS VPs											
Sample Name	**Station Name**	**Collection Date**	**Method**	**Analyte**	**Result**	**Measurement Error**	**DL**	**Units**	**VQ**	**Validation Reason Code**	**Filtered**
SLA254841-2	PW46	02/15/22	SW846 9320 MODL	Ra-228	0.564	0.289	0.419	pCi/L	J	P01, T04, T20	No
SLA259243	PW46	08/23/22	ML-005	Th-228	0.489	0.444	0.568	pCi/L	UJ	T04, T05	No
SLA259243	PW46	08/23/22	ML-005	Th-230	0.534	0.475	0.655	pCi/L	UJ	T04, T05	No
SLA259243	PW46	08/23/22	ML-005	Th-232	0	0.251	0.654	pCi/L	UJ	T06	No
SLA259243	PW46	08/23/22	ML-006	Ra-226	0.27	0.39	0.729	pCi/L	UJ	T06	No
SLA259243	PW46	08/23/22	ML-015	U-234	51.4	6.64	0.551	pCi/L	=		No
SLA259243	PW46	08/23/22	ML-015	U-235	2.65	1.03	0.49	pCi/L	=		No
SLA259243	PW46	08/23/22	ML-015	U-238	51.5	6.64	0.476	pCi/L	=		No

VQs:

= - Indicates that the data met all QA/QC requirements, and that the parameter has been positively identified and the associated concentration value is accurate.

J - Indicates that the parameter was positively identified; the associated numerical value is the approximate concentration of the parameter in the sample.

U - Indicates that the data met all QA/QC requirements, and that the parameter was analyzed for but was not detected above the reported sample quantitation limit.

UJ - Indicates that the parameter was not detected above the reported sample quantitation limit and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. However, the reported quantitation limit is approximate.

Validation Reason Codes:

E01 - ICP and Furnace Requirements: Interference check sample recovery was outside the control limit.

E08 - ICP and Furnace Requirements: Professional judgement was used to qualify the data.

F01 - Blanks: Sample data were qualified as a result of the method blank.

P01 - Laboratory Control Samples: LCS recovery was above upper control limit.

Q02 - Field Duplicate: Radiological field duplicate normalized absolute difference was outside the control limit.

T04 - Radionuclide Quantitation: Professional judgment was used to qualify the data.

T05 - Radionuclide Quantitation: Analytical result is less than the associated MDA, but greater than the counting uncertainty.

T06 - Radionuclide Quantitation: Analytical result is less than both the associated counting uncertainty and MDA.

T20 - Radionuclide Quantitation: Analytical result is greater than the associated MDA, with uncertainly 50 to 100 percent of the result.

W04 - Radionuclide Identification: Professional judgement was used to qualify the data.

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APPENDIX G

CALCULATION OF THE RECORD OF DECISION GROUNDWATER EVALUATION GUIDELINES

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CALCULATION OF THE RECORD OF DECISION GROUNDWATER MONITORING GUIDELINES

This appendix briefly outlines the methodology used to develop the groundwater monitoring guidelines for select wells and analytes at the NC Sites. The development of these guidelines was necessary to meet the requirements of response-action monitoring and long-term monitoring specified in the ROD (USACE 2005). These requirements are also identified in the EMICY22 (USACE 2021). The results of these calculations are used in the EMDAR to evaluate groundwater monitoring data at the Latty Avenue Properties and the SLAPS and SLAPS VPs for CY 2022.

INTRODUCTION

Response-action monitoring is conducted for HZ-A and HZ-C groundwater at the NC Sites to assess if water quality has improved due to source removals or if groundwater conditions have significantly degraded. Based on the ROD, a significantly degraded groundwater condition requires all of the following:

1. That soil COC concentrations have statistically increased in groundwater (relative to the well's historical data and accounting for uncertainty) for more than a 12-month period. Significantly increased concentrations are defined as doubling of an individual COC concentration above the UCL of the mean (based on the historical concentration before remedial activity) for a period of 12 months;
2. That the degraded well is close enough to impact CWC; and
3. That a significant degradation of CWC surface water is anticipated (USACE 2005).

In addition to the previous requirements, the ROD specifies that the maximum contaminant level for total U of 30 µg/L be used as a monitoring guideline for both response-action and long-term monitoring of groundwater. If groundwater monitoring indicates the presence of COCs at significantly increased concentrations and total U significantly above 30 µg/L, then an evaluation of potential response actions would be conducted.

METHODOLOGY

In order to evaluate groundwater for significant degradation, the UCL must be calculated using the historical groundwater data (i.e., data collected before remedial activity). The UCL is used to represent a historical average concentration for an analyte in a particular well. As stated in the USEPA's *Supplemental Guidance to RAGS: Calculating the Concentration Term*, "because of the uncertainty associated with estimating the true average concentration at a site, the UCL_{95} of the arithmetic mean should be used for this variable" (USEPA 1992). Based on the previously specified guidance, a 95 percent confidence interval was used in the UCL calculations.

Consistent with the ROD, UCL_{95} values for the soil COCs are used in the EMDAR to evaluate if concentrations have statistically increased in groundwater for more than a 12-month period. The soil COCs defined in the ROD include antimony, arsenic, barium, cadmium, chromium, molybdenum, nickel, selenium, thallium, total U, vanadium, Ra-226, Ra-228, Th-228, Th-230, Th-232, U-234, U-235, and U-238. Because the SLAPS well PW46 is a replacement well, pre-2006 data from PW38 were used to develop the groundwater monitoring guideline to compare with the PW46 results. PW46 was installed in April of 2006 near the former location of PW38 and is screened across the same interval. Similarly, pre-2006 data from HISS-06 and HISS-11 were used to develop the groundwater monitoring guidelines for the

two replacement wells (HISS-06A and HISS-11A) installed in CY 2011 at the HISS. For wells located in areas in which a response action has occurred, significant degradation is defined as occurring if the concentration of any COC in a recent sample from that well is double its UCL_{95}, and the total U is significantly above 30 µg/L. The ROD groundwater monitoring guideline for the soil COC for a particular well is defined as equivalent to two times the UCL_{95} value.

The dataset used for this evaluation was reduced prior to performing the statistical analysis. Filtered data, results qualified with an "R" designation, and QC samples were removed from each of the datasets. The analytical result was used when the VQ was assigned an "=" or a "J." For nondetect chemical data (i.e., the VQ was assigned a "U" or "UJ"), the value used in the UCL_{95} calculation was half the DL. For nondetect radiological data, the reported value was used, except in cases in which the value reported was negative. In those cases, a value of zero was substituted for the negative value.

RESULTS

The USEPA software package ProUCL Version 5.0 was used to calculate the UCL_{95} value. ProUCL computes parametric UCLs (for normal, lognormal, and gamma distributions) and nonparametric UCLs using several nonparametric methods (USEPA 2013). Based upon the data distribution and the associated skewness, ProUCL performs and recommends the appropriate UCL.

The UCL_{95} values are those recommended by ProUCL with the following exceptions.

- If the calculated UCL_{95} exceeded the maximum detected value, then the maximum detected value was used, as recommended in the USEPA's *Risk Assessment Guidance for Superfund Volume 1 Human Health Evaluation Manual (Part A)* (USEPA 1989c).
- If no values were detected for the COC in the historical database for that well, then the UCL_{95} was not determined. If only one value of the COC was detected, then the detected value was used.

The groundwater monitoring guidelines based on these UCL_{95} values are listed in Tables G-1 and G-2 for the Latty Avenue Properties and the SLAPS and SLAPS VPs, respectively.

Table G-1. ROD Monitoring Guidelines for Groundwater at the Latty Avenue Properties

Analyte Type	Soil COCs	HISS-01	HISS-06A[a]	HISS-09	HISS-10	HISS-11A[a]	HISS-14
Inorganics (µg/L)	Antimony	12	---	---	---	---	---
	Arsenic	---	---	---	---	5.2	---
	Barium	250	240	420	270	370	1,080
	Cadmium	---	---	---	1.4	---	---
	Chromium	13	2.2	---	2.4	7.0	---
	Molybdenum	23	40	22	5.6	4.8	---
	Nickel	20	34	21	3.8	20	11
	Selenium	570	770	19	7.6	---	610
	Thallium	4.6	---	---	---	---	5.8
	Total U	30	30	30	30	30	30
	Vanadium	37	31	17	16	---	250
Radionuclides (pCi/L)	Ra-226	5.3	---	---	---	16	4.2
	Th-228	1.9	2.4	3.2	3.4	3.4	2.0
	Th-230	4.2	7.0	7.4	6.0	5.0	21
	Th-232	---	1.8	---	0.2	---	---
	U-234	12	32	1.8	6.6	4.8	14
	U-235	---	4.2	---	---	---	---
	U-238	13	31	1.4	5.2	3.0	11

Table G-1. ROD Monitoring Guidelines for Groundwater at the Latty Avenue Properties (Continued)

Analyte Type	Soil COCs	HISS-17S	HISS-18S	HISS-19S	HW21	HW22	HW23
Inorganics (µg/L)	Antimony	---	---	7.4	---	---	4.6
	Arsenic	---	6.6	510	6.8	2.4	320
	Barium	500	410	1,200	3,700	460	810
	Cadmium	---	---	---	2.8	1.6	3.4
	Chromium	12	---	3.0	7.0	9.0	8.1
	Molybdenum	16	---	10	5.6	3.4	26
	Nickel	30	39	7.0	44	7.0	12
	Selenium	250	---	---	110	17	---
	Thallium	---	---	8.0	6.2	---	5.4
	Total U	30	30	30	30	30	30
	Vanadium	18	16	4.4	12	4.0	6.4
Radionuclides (pCi/L)	Ra-226	5.7	5.5	2.5	8.4	11	2.4
	Th-228	2.4	3.2	10	4.2	1.8	2.6
	Th-230	3.8	5.8	12	5.2	3.8	5.2
	Th-232	---	1.9	---	---	---	1.0
	U-234	8.2	8.2	---	24	6.4	3.8
	U-235	---	---	---	2.0	---	---
	U-238	5.6	3.7	---	16	5.4	3.2

[a] The ROD evaluation criteria for HISS-06A and HISS-11A were calculated using historical data from the previous wells at these locations (HISS-06 and HISS-11).

--- The analyte was not detected in the historical database, so a monitoring guideline was not developed.

Groundwater monitoring guideline = 2 x UCL_{95}

Total U monitoring guide = 30 µg/L.

Table G-2. ROD Monitoring Guidelines for Groundwater at the SLAPS and SLAPS VPs

Analyte Type	Soil COCs	B53W01D	B53W01S	B53W06S	B53W07D	B53W07S	B53W09S	B53W13S	B53W17S	B53W18S
Inorganics (µg/L)	Antimony	---	---	105	5.0	---	---	---	---	---
	Arsenic	170	---	---	150	140	---	---	---	3.6
	Barium	840	390	190	730	530	630	510	450	1,200
	Cadmium	---	---	---	---	---	---	---	8.8	---
	Chromium	7.2	15	47	5.6	11	9.6	9.1	7.0	51
	Molybdenum	---	---	22	4.0	4.4	14	3.2	21	28
	Nickel	---	30	16	12	5.2	83	38	5.2	910
	Selenium	---	---	---	4.0	5.2	700	790	140	---
	Thallium	---	8.0	---	7.4	---	---	7.0	---	---
	Total U	30	30	30	30	30	30	30	30	30
	Vanadium	19	44	48	12	17	24	---	83	54
Radionuclides (pCi/L)	Ra-226	4.4	---	3.8	3.4	7.2	2.5	---	---	7.2
	Th-228	1.6	1.0	1.5	---	2.2	3.0	4.4	3.8	7.0
	Th-230	5.8	2.9	3.9	4.4	4.0	5.0	6.0	5.6	8.0
	Th-232	---	---	---	---	---	---	---	---	1.4
	U-234	3.4	8.2	66	3.6	11	18	13	5.4	4.5
	U-235	---	---	2.9	---	---	6.1	---	4.4	---
	U-238	2.7	2.7	57	4.6	8.2	13	10	4.2	3.4

Table G-2. ROD Monitoring Guidelines for Groundwater at the SLAPS and SLAPS VPs (Continued)

Analyte Type	Soil COCs	B53W19S	MW31-98	MW32-98	PW35	PW36	PW42	PW43	PW44	PW45	PW46[a]
Inorganics (µg/L)	Antimony	---	---	---	---	---	---	---	---	---	---
	Arsenic	36	---	5.8	90	220	280	53	13	---	7.0
	Barium	510	1,300	700	3,300	1,500	670	260	260	610	250
	Cadmium	0.7	3.8	3.8	0.6	---	0.8	---	---	---	1.2
	Chromium	290	4.6	5.6	16	3.2	52	3.5	---	---	37
	Molybdenum	130	35	3.0	32	8.0	6.0	6.4	12	1,500	2.2
	Nickel	1,100	7.8	4.0	35	13	28	3.6	---	67	3.4
	Selenium	4.2	390	740	2.8	3.8	---	---	---	7,200	710
	Thallium	7.7	---	9.8	7.4	14	7.6	---	---	---	---
	Total U	30	30	30	30	30	30	30	30	30	30
	Vanadium	36	110	54	35	13	12	3.1	---	---	67
Radionuclides (pCi/L)	Ra-226	1.4	3.4	1.6	8.0	2.0	4.0	6.1	1.8	2.4	22
	Th-228	5.2	4.6	1.4	2.6	2.6	1.6	2.4	3.4	2.5	2.1
	Th-230	6.0	4.0	4.0	4.1	3.6	3.4	2.6	12	5.8	60
	Th-232	2.2	---	0.4	2.3	---	---	---	---	---	7.0
	U-234	2.4	7.0	21	4.3	3.2	9.0	29	4.7	79	5,500
	U-235	---	5.9	9.4	---	---	---	2.2	---	3.0	290
	U-238	1.8	5.7	19	4.7	4.9	6.6	26	3.4	64	5,600

[a] The ROD evaluation criteria for PW46 were calculated using historical data from the previous well at this location (PW38).

--- The analyte was not detected in the historical database, so a monitoring guideline was not developed.

Groundwater monitoring guideline = 2 x UCL_{95}

Total U monitoring guide = 30 µg/L.

APPENDIX H

WELL MAINTENANCE CHECKLISTS FOR THE ANNUAL GROUNDWATER MONITORING WELL INSPECTIONS CONDUCTED IN CALENDAR YEAR 2022

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CALENDAR YEAR 2022 WELL MAINTENANCE CHECKLISTS FOR THE HAZELWOOD INTERIM STORAGE SITE

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Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/6/22 **Time:** 0925

Property/Location: ☐SLDS ☐SLAPS and Vicinity Properties (VPs) ☒HISS

Monitoring Well Station Identification: HISS-01

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☒	☐	☐
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Re-paint and remark ID.

Sounding: 26.40’, Semi-soft bottom

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/6/22 **Time:** 0930

Property/Location: ☐SLDS ☐SLAPS and Vicinity Properties (VPs) ☒HISS

Monitoring Well Station Identification: HISS-06A

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☒	☐	☐
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Re-paint and remark ID.

Sounding: 22.30’, Semi-soft bottom

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/6/22 **Time:** 0920

Property/Location: ☐SLDS ☐SLAPS and Vicinity Properties (VPs) ☒HISS

Monitoring Well Station Identification: HISS-10

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☒	☐	☐
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Remark ID.

Sounding: 25.85’, Semi-soft bottom

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/6/22 **Time:** 0915

Property/Location: ☐ SLDS ☐ SLAPS and Vicinity Properties (VPs) ☒ HISS

Monitoring Well Station Identification: HISS-11A

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☒	☐	☐
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Re-paint and remark ID.

Sounding: 23.45’, Solid bottom

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/6/22 **Time:** 0940

Property/Location: ☐SLDS ☐SLAPS and Vicinity Properties (VPs) ☒HISS

Monitoring Well Station Identification: HISS-17S

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☒	☐	☐
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Remark ID.

Sounding: 22.15’, Solid bottom

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/6/22 **Time:** 0910

Property/Location: ☐ SLDS ☐ SLAPS and Vicinity Properties (VPs) ☒ HISS

Monitoring Well Station Identification: HISS-19S

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☐	☐	☒
2.	Is well identification visible on top of well casing for flush mount well?	☒	☐	☐
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☐	☐	☒
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Re-paint and remark ID, replace cap and lock.

Sounding: 29.00’, Solid bottom

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/4/22 **Time:** 1225

Property/Location: ☐ SLDS ☐ SLAPS and Vicinity Properties (VPs) ☒ HISS

Monitoring Well Station Identification: HW22

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☒	☐	☐
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Re-paint and remark ID.

Sounding: 27.75’, Solid bottom

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/4/22 **Time:** 1220

Property/Location: ☐ SLDS ☐ SLAPS and Vicinity Properties (VPs) ☒ HISS

Monitoring Well Station Identification: HW23

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☒	☐	☐
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Re-paint and remark ID.

Sounding: 90.55’, Soft bottom

CALENDAR YEAR 2022 WELL MAINTENANCE CHECKLISTS FOR THE ST. LOUIS AIRPORT SITE AND ST. LOUIS AIRPORT SITE VICINITY PROPERTIES

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Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/4/22 **Time:** 1335

Property/Location: ☐SLDS ☒SLAPS and Vicinity Properties (VPs) ☐HISS

Monitoring Well Station Identification: B53W01D

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☐	☐	☒
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Re-paint and label

Sounding: 95.82’, Soft bottom

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/4/22 **Time:** 1340

Property/Location: ☐SLDS ☒SLAPS and Vicinity Properties (VPs) ☐HISS

Monitoring Well Station Identification: B53W01S

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☐	☐	☒
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Re-paint and label

Sounding: 28.53’, Solid bottom

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/4/22 **Time:** 1305

Property/Location: ☐SLDS ☒SLAPS and Vicinity Properties (VPs) ☐HISS

Monitoring Well Station Identification: B53W06S

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☐	☐	☒
2.	Is well identification visible on top of well casing for flush mount well?	☒	☐	☐
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☒	☐	☐
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Bladder pump is functional but may need replacement soon.

Sounding: 36.03’, Solid bottom

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/4/22 **Time:** 1310

Property/Location: ☐SLDS ☒SLAPS and Vicinity Properties (VPs) ☐HISS

Monitoring Well Station Identification: B53W07D

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☒	☐	☐
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Re-label.

Sounding: 88.84’, Soft bottom

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/4/22 **Time:** 1315

Property/Location: ☐SLDS ☒SLAPS and Vicinity Properties (VPs) ☐HISS

Monitoring Well Station Identification: B53W07S

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☒	☐	☐
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Re-label.

Sounding: 36.00’, Solid bottom

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/4/22 **Time:** 1400

Property/Location: ☐SLDS ☒SLAPS and Vicinity Properties (VPs) ☐HISS

Monitoring Well Station Identification: B53W09S

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☐	☐	☒
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Re-paint and re-label.

Sounding: 35.91’ Soft bottom

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/4/22 **Time:** 1245

Property/Location: ☐SLDS ☒SLAPS and Vicinity Properties (VPs) ☐HISS

Monitoring Well Station Identification: B53W17S

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☐	☐	☒
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Re-label ID.

Sounding: 37.80’, Semi-soft

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/4/22 **Time:** 1255

Property/Location: ☐SLDS ☒SLAPS and Vicinity Properties (VPs) ☐HISS

Monitoring Well Station Identification: MW31-98

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☐	☐	☒
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

None.

Sounding 35.70’, Semi-solid bottom

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/4/22 **Time:** 1300

Property/Location: ☐SLDS ☒SLAPS and Vicinity Properties (VPs) ☐HISS

Monitoring Well Station Identification: MW32-98

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☐	☐	☒
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

None.

Sounding: 22.95’, Solid bottom

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/6/22 **Time:** 1020

Property/Location: ☐SLDS ☒SLAPS and Vicinity Properties (VPs) ☐HISS

Monitoring Well Station Identification: PW35

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☐	☐	☒
2.	Is well identification visible on top of well casing for flush mount well?	☒	☐	☐
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☐	☐	☒
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Re-paint and re-label.

Sounding: 114.8’, Soft bottom

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/6/22 **Time:** 1015

Property/Location: ☐SLDS ☒SLAPS and Vicinity Properties (VPs) ☐HISS

Monitoring Well Station Identification: PW36

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☐	☐	☒
2.	Is well identification visible on top of well casing for flush mount well?	☒	☐	☐
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☐	☐	☒
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Re-paint and re-label.

Sounding: 87.8’, Soft bottom

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/4/22 **Time:** 1400

Property/Location: ☐SLDS ☒SLAPS and Vicinity Properties (VPs) ☐HISS

Monitoring Well Station Identification: PW42

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☐	☒	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☐	☐	☒
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Re-paint and re-label. Soil needs to be added around the well pad.

Sounding: 87.43’, Semi-soft bottom

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/4/22 **Time:** 1320

Property/Location: ☐SLDS ☒SLAPS and Vicinity Properties (VPs) ☐HISS

Monitoring Well Station Identification: PW43

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☐	☐	☒
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Re-mark.

Sounding: 23.90’, Soft bottom

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/4/22 **Time:** 1010

Property/Location: ☐SLDS ☒SLAPS and Vicinity Properties (VPs) ☐HISS

Monitoring Well Station Identification: PW44

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☐	☒	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☐	☒	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☐	☐	☒
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Re-mark.

Well pad is stable but cracked with gaps between the pad and protective casing. However, the well does not appear to be compromised.

Sounding: 20.40’, Solid bottom

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/6/22 **Time:** 1005

Property/Location: ☐SLDS ☒SLAPS and Vicinity Properties (VPs) ☐HISS

Monitoring Well Station Identification: PW45

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☐	☐	☒
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Re-mark.

Sounding: 22.65’, Solid bottom

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 4/4/22 **Time:** 1345

Property/Location: ☐SLDS ☒SLAPS and Vicinity Properties (VPs) ☐HISS

Monitoring Well Station Identification: PW46

		Yes	No	N/A
1.	Is well identification number visible on outer casing for a stick up well?	☒	☐	☐
2.	Is well identification visible on top of well casing for flush mount well?	☐	☐	☒
3.	Is well accessible?	☒	☐	☐
4.	Is well free of obstructions (i.e. debris, overgrown vegetation, etc.)?	☒	☐	☐
5.	Is well casing free of standing water or debris? If not, remove water.	☒	☐	☐
6.	Is the weep hole open? If not, clear blockage.	☒	☐	☐
7.	Is the protective casing free of dents, damage, rust, or other matter (i.e., bird droppings, wasp nests, etc.)?	☒	☐	☐
8.	Is well riser free of dents or damage?	☒	☐	☐
9.	Is concrete pad intact (i.e. free of major cracks, chips, etc.)?	☒	☐	☐
10.	Is well pad stable?	☒	☐	☐
11.	Is well pad and well casing free of gaps?	☒	☐	☐
12.	Is well and/or pad area free of erosion?	☒	☐	☐
13.	Is riser cap present?	☒	☐	☐
14.	If well is in the Mississippi River and Coldwater Creek floodplain, does it have a properly working pressure cap?	☐	☐	☒
15.	Is well bladder pump or dedicated tubing functional and working properly?	☒	☐	☐
16.	Is the well secure (i.e. shut properly or locked, if applicable)?	☒	☐	☐
17.	Does the lock work properly?	☒	☐	☐
18.	Is lock free of rust?	☒	☐	☐
19.	Does surface water flow away from well casing (i.e., no ponding)?	☒	☐	☐
20.	Is top-of casing (TOC) elevation mark clearly visible?	☒	☐	☐
21.	Is well free from impacts associated with a change in land use or remedial actions? If no, describe in Comments/Observations section below.	☒	☐	☐
22.	Is well ready for the next groundwater monitoring event? If no, describe the type of attention needed in Comments/Observations section below.	☒	☐	☐
23.	Were photographs collected documenting the appearance and condition of the well?	☒	☐	☐

Comments/Observations:

Re-mark.

Sounding: 22.75’, Solid bottom

APPENDIX I

DOSE ASSESSMENT ASSUMPTIONS

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DOSE ASSESSMENT ASSUMPTIONS

DOSE FROM THE LATTY AVENUE PROPERTIES TO A MAXIMALLY EXPOSED INDIVIDUAL

The TEDE to a hypothetical maximally exposed individual was calculated for an area adjacent to the VP-40A railroad tracks. Dose from the remainder of the Latty Avenue Properties is considered negligible.

This section discusses the estimated TEDE to a hypothetical maximally exposed individual assumed to work in an area directly adjacent to the railroad tracks on VP-40A near the fence on the boundary of VP-40A and Futura. No private residences are adjacent to the site. Therefore, all calculations of dose equivalent due to the applicable pathway assume a realistic residence time that is less than 100 percent. A full-time-employee business receptor was considered the maximally exposed individual for the Latty Avenue Properties.

The exposure scenario assumptions are as follows:

- Exposure to external gamma radiation and radon from Futura/VP-40A sources occurs to the maximally exposed individual while working full time outside at the receptor location (i.e., Futura) located approximately 50 m east from the area identified as having the highest external gamma level in the area adjacent to Futura. Exposure time is 2,000 hours per year (Leidos 2023a).
- Exposure from external gamma radiation was calculated using environmental TLD monitoring data at the perimeter between the source and the receptor. The site is assumed to represent a line-source to the receptor (Leidos 2023a).
- Exposure from Rn-222 (and decay chain isotopes) was calculated using a dispersion factor and Rn-222 (ATD) monitoring data at the site perimeter between the source and the receptor (Leidos 2023a).

Airborne Radioactive Particulates

No RA excavations near the Latty Avenue Properties were performed in CY 2022, and potentially contaminated soil is covered by asphalt/concrete, gravel/railroad ballast, and vegetative ground cover; therefore, dose due to air particulate emissions was assumed to be negligible.

External Gamma Pathway

The Futura/VP-40A TLDs measured an average above background annual exposure of 2.3 mrem per year based on 8,760 hours of continuous exposure. The dose equivalent due to gamma exposure for the maximally exposed individual is estimated by assuming the site approximates a line source with a source strength (H_1) that is the average of the TLD measurements between the source and the receptor (Cember 1996).

$$H_1 = 2.3 \text{ mrem/year}$$

Based on a 100-percent occupancy rate, the exposure rate (H_2) to the receptor was calculated.

$$H_2 = H_1 \times \frac{h_1}{h_2} * \frac{\tan^{-1}(L/h_2)}{\tan^{-1}(L/h_1)}$$

$$H_2 = 1.2\text{E-01 mrem/year}$$

where:

H_2 = exposure rate to the receptor (continuous exposure)
H_1 = exposure rate to TLDs
h_2 = distance from source to receptor = 50 m
h_1 = distance from source to TLDs = 5 m
L = average distance from centerline of the line source (H_1) to the end of the line source = 50 m

The actual dose to the maximally exposed individual, who is present during a normal work year only, was calculated.

$$H_{MEI} = H_2 \times \frac{2{,}000 \text{ hours per work year}}{8{,}760 \text{ hours per total year}} = 2.7\text{-}02 \text{ mrem/year}$$

$$H_{MEI} = <0.1 \text{ mrem/year}$$

Airborne Radon Pathway

The Futura/VP-40A ATDs measured an average above background annual exposure of 0.11 pCi/L based on 8,760 hours of continuous exposure. Exposure to the receptor from radon (and decay chain isotopes) was estimated using a dispersion factor (C_2) and the average ATD monitoring data (S_1) at the site perimeter between the source and the receptor (Leidos 2023a).

To calculate the dispersion factor, the radon concentrations were determined for a receptor located at 1 m and 50 m east of the monitored area on Futura/VP-40A by inputting a radon release rate of 1 Ci per year, the St. Louis – Lambert International Airport wind file, and a surface area of 300 m^2 into the CAP88-PC model. The CAP88-PC input data and the result of the CAP88-PC run are highlighted and presented in Appendix B. The radon dispersion factor (C_2) for the site was calculated as follows.

$$C_2 = (1.65\text{E-}02)/(2.25\text{E-}02) = 0.73$$

The average of ATD monitoring data (S_1) at the site perimeter (Futura fence line) was calculated as follows.

$$S_1 = 0.10 \text{ pCi/L}$$

The actual radon exposure dose to the hypothetical maximally exposed individual was calculated.

$$S_{MEI} = S_1 \times F \times DCF \times T \times C_1 \times C_2$$

$$S_{MEI} = 0.10 \text{ pCi/L}*0.007 \text{ WL/pCi.L}*1{,}250 \text{ mrem/WLM}*2{,}000 \text{ hours/year}*1 \text{ month/170 hours}* 0.73$$

$$S_{MEI} = 7.3 \text{ mrem/year}$$

where:

S_{MEI} = radon exposure to the hypothetical maximally exposed individual
S_1 = fenceline average of ATD measurements between source and receptor
F = equilibrium fraction based on Section 4 of *Measurement of Radon and Radon Daughters in Air*, 1 WL = 100 pCi/L and 0.7 outdoor equilibrium factor (NRCP 1988)
DCF = dose conversion factor (USEPA 1989b) = 1,250 mrem per WLM
T = exposure time = 2,000 hours per year
C_1 = occupancy factor constant = 1 month per 170 hours

C_2 = constant derived using CAP88-PC Version 4.1, the Lambert – St. Louis International Airport wind file (assuming a distance of 50 m), and an impacted surface area of 300 m^2). Calculation assumes a 1 Ci per year radon release rate, then ratios the concentrations at 1 m and 50 m to determine the constant.

WL = working level (concentration unit)

WLM = working level month (exposure unit)

Total Effective Dose Equivalent

Based on the exposure scenario and assumptions described previously, a maximally exposed individual working outside at the receptor facility 50 m east of the area adjacent to Futura identified as having the highest external gamma level would have received less than 0.1 mrem per year from airborne particulates, less than 0.1 mrem per year from external gamma, and 7.3 mrem per year from Rn-222, for a TEDE of 7.3 mrem per year (Leidos 2023a).

$$\text{TEDE} = \text{CEDE (airborne particulates)} + H_{MEI}\text{ (external gamma)} + S_{MEI}\text{ (airborne radon)}$$

$$\text{TEDE} = \text{negligible} + <0.1\text{ mrem/year} + 7.3\text{ mrem/year} = 7.3\text{ mrem/year}$$

DOSE FROM THE ST. LOUIS AIRPORT SITE TO A MAXIMALLY EXPOSED INDIVIDUAL

A full-time-employee business receptor was evaluated to determine the maximally exposed individual from the SLAPS. The business receptor worked full time at a facility located approximately 200 m west-northwest of the center of the SLAPS Loadout area. Exposure time was 2,000 hours per year (250 days per year).

Gamma radiation and radon exposure measured at the SLAPS perimeter assumes a hypothetical member of the public would be at the same location 24 hours per day, 365 days per year. Dose to the nearest member of the public is dependent upon the member's proximity to the gamma source and amount of time spent at the affected site. A residence-based exposure assumes a 100-percent occupancy rate at a given location. No public areas or residences exist near the SLAPS; therefore, exposure to a residence-based receptor is greatly reduced due to the distance relative to the site. A worker exposure assumes that a worker's occupancy rate is 23 percent, based on 40 hours per week for 50 weeks per year. The worker-based receptor is a more realistic choice to represent the hypothetical maximally exposed individual, because of the proximity of the receptor. A realistic assessment of dose can be performed using conservative assumptions of occupancy rate and distance from the source.

The following dose assessment is for a maximally exposed individual who works full time (2,000 hours per year) at a location approximately 200 m west-northwest of the center of the SLAPS Loadout area.

Airborne Radioactive Particulates

The EDE of 0.7 mrem per year to the receptor was calculated using activity fractions and air particulate monitoring data to determine source terms, and then using the USEPA CAP88-PC modeling code to calculate doses to the receptor at 200 m west-northwest of the center of the SLAPS Loadout area and 200 m east-southeast of the IA-09 Ballfield excavations (Leidos 2023b). Details related to calculation of EDEs for the exposed receptors are contained in Appendix B of this EMDAR.

External Gamma Pathway

The SLAPS TLDs measured an average above background annual exposure of 14.2 mrem per year based on 8,760 hours of continuous exposure. The dose equivalent due to gamma exposure for the maximally exposed individual is estimated by assuming the site approximates a line source with a source strength (H_1) that is the average of the TLD measurements between the source and the receptor (Cember 1996).

$$H_1 = 14.2 \text{ mrem/year}$$

Based on a 100-percent occupancy rate, the exposure rate (H_2) to the receptor was calculated.

$$H_2 = H_1 \times \frac{h_1}{h_2} * \frac{\tan^{-1}(L/h_2)}{\tan^{-1}(L/h_1)}$$

$$H_2 = 7.2\text{E-02 mrem/year}$$

where:

H_2 = exposure rate to the receptor (continuous exposure)
H_1 = exposure rate to TLDs
h_2 = distance from source to receptor = 200 m
h_1 = distance from source to TLDs = 6 m
L = average distance from centerline of the line source (H_1) to the end of the line source = 50 m

The actual dose to the maximally exposed individual, who is present during a normal work year only, was calculated.

$$H_{MEI} = H_2 \times \frac{2{,}000 \text{ hours per work year}}{8{,}760 \text{ hours per total year}} = 1.6\text{E-02 mrem/year}$$

$$H_{MEI} = <0.1 \text{ mrem/year}$$

Airborne Radon Pathway

The SLAPS ATDs measured an average above background annual exposure of 0.07 pCi/L based on 8,760 hours of continuous exposure.

Exposure to the receptor from radon (and decay chain isotopes) was estimated using a dispersion factor (C2) and the average ATD monitoring data (S1) at the site perimeter between the source and the receptor (Leidos 2023a).

To calculate the dispersion factor, the radon concentrations were determined for a receptor located at 1.0 m and 200 m west-northwest of the SLAPS Loadout pile by inputting a radon release rate of 1.0 Ci per year, the St. Louis – Lambert International Airport wind file, and a surface area of 5,000 m^2 into the CAP88-PC model. Effective surface area was determined by summing the time-weighted average annual open surface areas for the SLAPS Loadout area. The CAP88-PC input data and the result of the CAP88-PC run are highlighted and contained in Appendix B. The radon dispersion factor (C2) for the site was calculated as follows.

$$C2 = (1.39\text{E-03})/(3.11\text{E-02}) = 0.045$$

The average of ATD monitoring data (S_1) at the site perimeter (the SLAPS Loadout area) was calculated as follows.

$$S_1 = 0.07 \text{ pCi/L}$$

The actual radon exposure dose to the hypothetical maximally exposed individual was calculated.

$$S_{MEI} = S_1 \times F \times DCF \times T \times C_1 \times C_2$$

S_{MEI} = 0.7 pCi/L*0.007 WL/pCi.L*1250 mrem/WLM*2000 hours/year*1 month/170 hours* 0.045

$$S_{MEI} = 3.1E\text{-}01 \text{ mrem/year}$$

where:

- S_{MEI} = radon exposure to the hypothetical maximally exposed individual
- S_1 = fenceline average of ATD measurements between source and receptor
- F = equilibrium fraction based on Section 4 of *Measurement of Radon and Radon Daughters in Air*, 1 WL = 100 pCi/L and 0.7 outdoor equilibrium factor (NRCP 1988)
- DCF = dose conversion factor (USEPA 1989b) = 1,250 mrem per WLM
- T = exposure time = 2,000 hours per year
- C_1 = occupancy factor constant = 1 month per 170 hours
- C_2 = constant derived using CAP88-PC Version 4.1, the Lambert – St. Louis International Airport wind file (assuming a distance of 200 m), and an impacted surface area of 5,000 m^2). Calculation assumes a 1 Ci per year radon release rate, then ratios the concentrations at 1 m and 200 m to determine the constant.
- WL = working level (concentration unit)
- WLM = working level month (exposure unit)

Total Effective Dose Equivalent

TEDE = CEDE (airborne particulates) + H_{MEI} (external gamma) + S_{MEI} (airborne radon)

TEDE = 0.7 mrem/year + <0.1 mrem/year + 0.3 mrem/year = 1.0 mrem/year

DOSE FROM THE ST. LOUIS AIRPORT SITE VICINITY PROPERTIES TO A MAXIMALLY EXPOSED INDIVIDUAL

A full-time, residence-based receptor was evaluated to determine the maximally exposed individual from the SLAPS VPs, because the RA work conducted on the SLAPS VPs occurred in the vicinity of the receptor. The residence-based receptor lived full-time between the two areas remediated during CY 2022 at a location approximately 200 m northeast of the Pershall Road excavation areas, 330 m northwest of VP-56 excavation areas, and 2,000 m north of the IA-09 Ballfields excavation areas. Exposure time was 8,760 hours per year (365 days per year).

Gamma radiation and radon exposure were considered negligible at the excavation area. Therefore, only exposure to airborne radioactive particulates was considered in the dose estimate calculation.

Airborne Radioactive Particulates

EDEs of 0.1, 0.2, and less than 0.1 mrem per year to the residential receptor were calculated using activity fraction and air particulate monitoring data to determine a source term, and then using the USEPA CAP88-PC modeling code to calculate dose to the receptor at 200 m northeast of the Pershall Road excavations, 330 m northwest of the VP-56 excavations, and 2,000 m north of the IA-09 Ballfields excavation areas, respectively (Leidos 2023b). Details related to calculation of EDEs for the exposed receptors are contained in Appendix B of this EMDAR.

Total Effective Dose Equivalent

$$TEDE = CEDE\ (\text{airborne particulates}) + H_{MEI}\ (\text{external gamma}) + S_{MEI}\ (\text{airborne radon})$$

$$TEDE_{Pershall/VP\text{-}56/IA\text{-}09\ Ballfields} = 0.4\ \text{mrem/year} + \text{negligible} + \text{negligible} = 0.4\ \text{mrem/year}$$

DOSE FROM COLDWATER CREEK TO A MAXIMALLY EXPOSED INDIVIDUAL

The following dose assessment is for a maximally exposed individual assumed to be a youth (10-year-old child) who spends time at CWC for recreational purposes.

Contaminated Water Ingestion (Leidos 2023c)

The UCL_{95} values of the average contamination values measured in CWC surface water in CY 2022 at each monitoring station (Table I-1) were used to calculate the EDE to the receptor from an intake of contaminated water. Assumptions follow.

The receptor visits CWC as a recreational user once every 2 weeks (26 visits per year), and the receptor drinks 2 L per day of contaminated water from CWC during each visit (USEPA 1989c).

The TEDE due to ingestion of surface water ($TEDE_w$) was calculated.

$$TEDE_W = \Sigma\ (TEDE_{Tot\text{-}U}, TEDE_{Th\text{-}228}, TEDE_{Th\text{-}230}, TEDE_{Th\text{-}232}, TEDE_{Ra\text{-}226}, TEDE_{Ra\text{-}228})$$

$$TEDE_i = (\text{Average})\ \text{pCi/L} \times 2.0\ \text{L/day} \times 26\ \text{days/year} \times \text{DCF mrem/pCi}$$

Table I-1. Average Values for Radionuclides for CY 2022

Radionuclides	Average Concentration	Unit
Ra-226	0.75	pCi/L
Th-228	0.88	pCi/L
Th-230	1.03	pCi/L
Th-232	0.59	pCi/L
Total U	2.34	pCi/L

The dose conversion factors (DCFs) (ORNL 2014) for radionuclides present in CWC surface water are presented in Table I-2.

Table I-2. Radionuclide Dose Conversion Factors for CY 2022

Radionuclides	DCF[a]	Unit
Ra-226	2.97E-03	mrem/pCi
Th-228	5.07E-04	mrem/pCi
Th-230	9.10E-04	mrem/pCi
Th-232	1.07E-03	mrem/pCi
Total U	2.63E-04	mrem/pCi

[a] For a youth (10-year-old child).

Therefore:

$$TEDE_{Ra\text{-}226} = 0.75\ \text{pCi/L} \times 2.0\ \text{L/day} \times 26\ \text{day/year} \times 2.97\text{E-}03\ \text{mrem/pCi} = 1.16\text{E-}01\ \text{mrem/year}$$

$$TEDE_{Th\text{-}228} = 0.88\ \text{pCi/L} \times 2.0\ \text{L/day} \times 26\ \text{day/year} \times 5.07\text{E-}04\ \text{mrem/pCi} = 2.31\text{E-}02\ \text{mrem/year}$$

$$TEDE_{Th\text{-}230} = 1.03\ pCi/L \times 2.0\ L/day \times 26\ day/year \times 9.10E\text{-}04 mrem/pCi = 4.86E\text{-}02\ mrem/year$$

$$TEDE_{Th\text{-}232} = 0.59\ pCi/L \times 2.0\ L/day \times 26\ day/year \times 1.07E\text{-}3\ mrem/pCi = 3.28E\text{-}02\ mrem/year$$

$$TEDE_{Tot\text{-}U} = 2.34\ pCi/L \times 2.0\ L/day \times 26\ day/year \times 2.63E\text{-}04\ mrem/pCi = 3.20E\text{-}02\ mrem/year$$

$$TEDE_W = 2.53E\text{-}01\ mrem/year$$

Contaminated Sediment Ingestion (Leidos 2023c)

The UCL_{95} values of the average contamination values measured in CWC sediment in CY 2022 at each monitoring station (Table I-3) were used to calculate the EDE to the receptor from an intake of contaminated sediment. Assumptions follow.

The receptor visits CWC as a recreational user once every 2 weeks (26 visits per year). The receptor ingests 50 mg per day of contaminated sediment from CWC during each visit (USEPA 1989c).

The TEDE due to ingestion of contaminated sediment ($TEDE_S$) was calculated.

$$TEDE_S = \Sigma\ (TEDE_{Tot\text{-}U}, TEDE_{Th\text{-}228}, TEDE_{Th\text{-}230}, TEDE_{Th\text{-}232}, TEDE_{Ra\text{-}226}, TEDE_{Ra\text{-}228})$$

$$TEDE_i = (\text{Average})\ pCi/g \times 0.05\ g/day \times 26\ days/year \times DCF\ mrem/pCi$$

Table I-3. Average Values for Radionuclide for CY 2022

Radionuclides	Average Concentration	Unit
Ra-226	1.05	pCi/g
Ra-228	0.70	pCi/g
Th-228	1.02	pCi/g
Th-230	4.34	pCi/g
Th-232	0.91	pCi/g
Total U	2.30	pCi/g

The DCFs (ORNL 2014) for radionuclides present in CWC sediment are presented in Table I-4.

Table I-4. Radionuclide Dose Conversion Factors for CY 2022

Radionuclides	DCF[a]	Unit
Ra-226	2.97E-03	mrem/pCi
Ra-228	1.45E-02	mrem/pCi
Th-228	5.07E-04	mrem/pCi
Th-230	9.10E-04	mrem/pCi
Th-232	1.07E-03	mrem/pCi
Total U	2.63E-04	mrem/pCi

[a] For a youth (10-year-old child).

Therefore:

$$TEDE_{Ra\text{-}226} = 1.05\ pCi/g \times 0.05\ g/day \times 26\ day/year \times 2.97E\text{-}03\ mrem/pCi = 4.03E\text{-}03\ mrem/year$$

$$TEDE_{Ra\text{-}228} = 0.70\ pCi/g \times 0.05\ g/day \times 26\ day/year \times 1.45E\text{-}02\ mrem/pCi = 1.32E\text{-}02\ mrem/year$$

$$TEDE_{Th\text{-}228} = 1.02\ pCi/g \times 0.05\ g/day \times 26\ day/year \times 5.07E\text{-}04\ mrem/pCi = 6.70E\text{-}04\ mrem/year$$

$$TEDE_{Th\text{-}230} = 4.34\ pCi/g \times 0.05\ g/day \times 26\ day/year \times 9.10E\text{-}04\ mrem/pCi = 5.13E\text{-}03\ mrem/year$$

$$TEDE_{Th\text{-}232} = 0.91\ pCi/g \times 0.05\ g/day \times 26\ day/year \times 1.07E\text{-}3\ mrem/pCi2 = 1.27E\text{-}03\ mrem/year$$

$$TEDE_{Tot\text{-}U} = 2.30\ pCi/g \times 0.05\ g/day \times 26\ day/year \times 2.63E\text{-}4\ mrem/pCi = 7.86E\text{-}04\ mrem/year$$

$$TEDE_S = 2.51E\text{-}02\ mrem/year$$

Total Effective Dose Equivalent

$$TEDE = TEDE_W + TEDE_S$$

$$TEDE = 2.51E\text{-}01\ mrem/year + 2.51E\text{-}02\ mrem/year = 0.3\ mrem/year$$