REVISION 0

NORTH ST. LOUIS COUNTY SITES ANNUAL ENVIRONMENTAL MONITORING DATA AND ANALYSIS REPORT FOR CALENDAR YEAR 2021

ST. LOUIS, MISSOURI

JULY 8, 2022

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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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
CCV	continuing calibration verification
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*
EMICY21	*Environmental Monitoring Implementation Plan for the North St. Louis County Sites for CY 2021*
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
ICV	initial calibration verification

ACRONYMS AND ABBREVIATIONS (Continued)

K	potassium
KPA	kinetic phosphorescence analysis
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
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
SS	settleable solid
SU	survey unit
TEDE	total effective dose equivalent
Th	thorium
TLD	thermoluminescent dosimeter

ACRONYMS AND ABBREVIATIONS (Continued)

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) 2021 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:

1. to document the environmental monitoring activities, and
2. to assess whether remedial actions (RAs) had a measurable environmental impact by:
    a. reporting the current condition of the NC Sites,
    b. summarizing the data collection effort for CY 2021, and
    c. providing an analysis of the environmental monitoring data to date.

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 2021* (EMICY21) (USACE 2020) 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 EMICY21 (USACE 2020). 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 4.7 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 EMICY21 (USACE 2020).

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 EMICY21 (USACE 2020).

EXCAVATION WATER DISCHARGE MONITORING

CY 2021 was the 20th year excavation water was treated and discharged from the NC Sites. 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 July 16, 2020, from Mr. Steve Grace to Mr. Bruce Munholand. This authorization expires on July 23, 2022 (MSD 2020). The selenium discharge variance for the SLAPS was not utilized in CY 2021 (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).

Wastewater from the FUSRAP St. Louis Radioanalytical Laboratory was discharged in accordance with the MSD discharge authorization letter dated July 16, 2020. This MSD special discharge approval expires on July 23, 2022 (MSD 2020).

The data collected at the NC Sites were compared to discharge limits described in Section 2.2.2 of the EMICY21 (USACE 2020). During CY 2021, no exceedances of the discharge limits occurred at the project laboratory or the NC Sites.

COLDWATER CREEK MONITORING

The CY 2021 CWC surface water and sediment sampling events, which were completed in April and October of 2021, evaluated the physical, radiological, and chemical conditions in the creek. During the April sampling event, samples were collected at each of the 10 surface water and sediment sampling locations (C002 through C011). During the October sampling event, samples were collected at 9 surface water and sediment sampling locations (C002 through C006 and C008 through C011). RAs and bridge construction prevented sampling at C007. These sampling locations are shown on Figure 3-3.

Two surface water sampling events were also planned for CWC during high-flow conditions as a BMP to determine if the creek is being measurably affected by COC migration. However, due to the lack of high-flow conditions as defined in the EMICY21, high-flow sampling was not conducted in CY 2021.

The data collected were compared to the monitoring guidelines and/or remediation goals (RGs) described in Section 2.2.3 of the EMICY21 (USACE 2020). 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 2021 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 EMICY21 (USACE 2020) 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 EMICY21 (USACE 2020) 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 2021 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 six hydrostratigraphic zone (HZ)-A groundwater monitoring wells at the Latty Avenue Properties during CY 2021. Contaminant of concern (COC) concentrations in three wells (molybdenum, nickel, and selenium in HISS-10; cadmium and vanadium in HW22; and total uranium [U] in HISS-01) exceeded the ROD guideline in HZ-A groundwater at the Latty Avenue Properties during CY 2021. 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 2021. Concentrations of all inorganic and radiological soil COCs were below the ROD groundwater guidelines in CY 2021 groundwater samples from the HZ-C well HW23.

The Mann-Kendall Trend Test was performed for five COCs in three HZ-A wells (cadmium and vanadium in HW22, molybdenum and selenium in HISS-10, and total U in HISS-01) during CY 2021. A statistically significant increasing trend was identified for molybdenum and selenium concentrations in HISS-10 and total U in HISS-01, and no statistically significant trend was identified for cadmium and vanadium concentrations 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.

Concentrations of all soil COCs were below the NC ROD groundwater criteria in CY 2021 groundwater samples from the HZ-C well HW23. Therefore, a trend analysis was not conducted for HZ-C groundwater.

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-17 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 2021. Eight wells, screened in HZ-A, were sampled at the SLAPS and the adjacent SLAPS VP Ballfields. Three inorganic analytes (barium, chromium, and nickel) 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 2021, three 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 2021. 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 nickel in B53W06S and for cadmium and total U in PW46. No trend was observed for cadmium and total U in PW46. Statistically significant increasing trends were observed for nickel concentrations in B53W06S.

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 east.

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) 2021 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 enhance the reader's awareness of the current condition of the NC Sites, summarize the data collection efforts for CY 2021, and provide analysis of the CY 2021 environmental monitoring data results. This EMDAR presents the following information:

- Sample collection data for various media at each site and interpretation of CY 2021 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 2021* [EMICY21] [USACE 2020]);
- 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 2021 are listed in Appendix A.

1.3.1 Latty Avenue Properties Calendar Year 2021 Remedial Actions

In CY 2021, RAs were performed at the following Latty Avenue Properties (Figure 1-2): Futura/VP-40A. RAs at Futura/VP-40A started in the second quarter and were completed in the third quarter. During these RAs, 1,742 yd^3 of contaminated material were shipped from the Latty Avenue Properties via railcar to U.S. Ecology, Inc., in Idaho.

During CY 2021, *Multi-Agency Radiation Survey and Site Investigation Manual* (MARSSIM) (U.S. Department of Defense [DOD] 2000) Class 1 verifications were performed at Futura/VP-40A (survey unit [SU]-21). No Class 2 or Class 3 final status surveys were performed at the Latty Avenue Properties in CY 2021. Verifications are performed to confirm the ROD remediation goals (RGs) were achieved. No characterization/pre-design investigation (PDI) was performed on Latty Avenue Properties in CY 2021.

1.3.2 St. Louis Airport Site and St. Louis Airport Site Vicinity Properties Calendar Year 2021 Remedial Actions

In CY 2021, RAs were performed at the following SLAPS-related VPs and investigation areas (IAs) (Figure 1-2): the IA-09 Ballfields; VP-56; and I-270 and Pershall Road (henceforth referred to as I-270/Pershall Road in this EMDAR). RAs at the IA-09 Ballfields continued through the fourth quarter. RAs at VP-56 started in the second quarter and continued through the fourth quarter. RAs at I-270/Pershall Road were completed during the second quarter. During these RAs, 32,905 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 2021, MARSSIM Class 1 verifications were performed at the IA-09 Ballfields (In-Situ Overburden Lift 1 through Lift 4 and at SU-25 and SU-26), VP-56 (SU-1), and I-270/Pershall Road (In-Situ Overburden SU-1 through SU-5 and at SU-8). MARSSIM Class 2 final status surveys were performed at VP-56 in CY 2021. No MARSSIM Class 3 final status surveys were performed in CY 2021.

Characterizations/PDIs were performed at the following SLAPS IAs and VPs in CY 2021: CWC and 45 adjacent floodplain properties. Based on final status survey evaluations performed in CY2021, Class 2 sample results did not exceed RGs for 81 properties.

In CY 2021, no Resource Conservation and Recovery Act (RCRA) hazardous waste was generated or shipped.

No monitoring wells were decommissioned in CY 2021.

In accordance with the Metropolitan St. Louis Sewer District (MSD) authorization letter, 2,486,240 gallons of excavation water were discharged from the NC Sites in CY 2021. Since the beginning of the project, 42,139,495 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 2021.

All radiological air monitoring required through implementation of the EMICY21 (USACE 2020) was conducted as planned in CY 2021. 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 4.7 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 2021 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 2021 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 2021 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 2021 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. 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 2021 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 conducted at Futura/VP-40A in CY 2021.

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 2021. 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 2021. A summary of TLD monitoring data for CY 2021 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 2021

Monitoring Location	Monitoring Station	First Quarter TLD Data		Second Quarter TLD Data		Third Quarter TLD Data		Fourth Quarter TLD Data		CY 2021 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	23.4	4.5	21.3	2.0	23.1	3.7	19.7	0.1	10.3
	FA-3	19.1	0.0	17.2	0.0	[c]	[c]	18.7	0.0	0.0
Background	BA-1	19.3	---	19.4	---	19.8	---	19.6	---	---

[a] All quarterly data reported from the vendor have been normalized to exactly one quarter's exposure above background.
[b] CY 2021 net TLD data are corrected for background, shelter absorption (s/a = 1.075), and fade.
[c] Detector was missing when it was time to be removed for analysis.
--- Result calculation not required for background data.
Cor. – Corrected
Rpt. – Reported

2.2.2 Evaluation of Airborne Radioactive Particulate Data

For the Latty Avenue Properties, air sampling for particulate radionuclides was conducted at the perimeter of each active excavation throughout CY 2021. 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 Latty Avenue Properties is shown in Table 2-2. Airborne radioactive particulate data are contained in Appendix C, Table C-4, of this EMDAR.

Table 2-2. Summary of Futura/VP-40A Airborne Radioactive Particulate Data for CY 2021

Monitoring Location	Average Concentration (µCi/mL)[a]	
	Gross Alpha	Gross Beta
Futura/VP-40A	3.85E-15	2.12E-14
Background Concentration[b]	4.31E-15	2.17E-14

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

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 2021. 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 2021 outdoor radon data at Futura/VP-40A is shown in Table 2-3. Outdoor ATD data are contained in Appendix C, Table C-2 of this EMDAR.

Table 2-3. Summary of Futura/VP-40A Outdoor Airborne Radon (Rn-222) Data for CY 2021

Monitoring Location	Monitoring Station	Average Annual Concentration (pCi/L)		
		01/06/21 to 07/07/21[a] (Uncorrected)	07/07/21 to 01/05/22[a] (Uncorrected)	Average Annual Concentration[b]
Futura/VP-40A	FA-1	0.14	0.46	0.15
	FA-2	0.14	0.49	0.17
	FA-3	0.08	0.22	0.00
Background	BA-1	0.08	0.22	---

[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 2021 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 2-4 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 2-4. Summary of Futura Indoor Airborne Radon (Rn-222) Data for CY 2021

Monitoring Location	Monitoring Station	Average Annual Concentration (pCi/L)				WL[d]
		01/06/21 to 07/07/21[a]	07/07/21 to 01/05/22[a]	Annual Average[b]	Building Average[c]	
Futura Building 1	HF-1	4.2	5.4	4.8	2.58	0.010
	HF-2	2.1	3.2	2.65		
	HF-3	0.16	0.41	0.29		
Futura Building 2/3	HF-4	0.73	1.4	1.07	1.00	0.004
	HF-5	0.59	1.4	1.00		
	HF-6	0.51	1.1	0.81		
	HF-7	0.95	1.3	1.13		
Futura Building 4	HF-8	0.73	0.97	0.85	0.91	0.004
	HF-9	0.76	1.0	0.88		
	HF-10	0.89	1.1	1.00		

[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, the average annual result for each monitoring station within the building was used to calculate a building 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)).

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

Radiological air monitoring was conducted at the intersection of I-270 and Pershall Road, the IA-09 Ballfields, and the SLAPS Loadout Area at the SLAPS and SLAPS VPs in CY 2021.

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 2021 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 2021 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 2021

Monitoring Location	Monitoring Station	First Quarter TLD Data		Second Quarter TLD Data		Third Quarter TLD Data		Fourth Quarter TLD Data		CY 2021 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	19.2	0.0	20.1	0.8	24.3	5.0	20.7	1.2	6.9
	PA-2	22.0	2.9	23.8	4.7	25.5	6.3	22.8	3.5	17.5
	PA-2 dup[c]	23.0	4.0	22.4	3.2	23.4	4.0	24.8	5.6	---
	PA-3	18.3	0.0	19.7	0.3	21.0	1.3	18.5	0.0	1.7
	PA-4	25.1	6.3	26.1	7.2	25.1	5.9	26.8	7.8	27.2
Background	BA-1	19.3	---	19.4	---	19.8	---	19.6	---	---

[a] All quarterly data reported from the vendor have been normalized to exactly one quarter's exposure.
[b] CY 2021 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 2021. 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 2021

Monitoring Location	Average Concentration (μCi/mL)[a]	
	Gross Alpha	Gross Beta
I-270/Pershall Road	6.57E-15	3.21E-14
VP-56	4.81E-15	2.87E-14
IA-09 Ballfields	4.82E-15	3.16E-14
SLAPS Loadout	4.19E-15	2.86E-14
Background Concentration[b]	4.31E-15	2.17E-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 2021 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 2021

Monitoring Location	Monitoring Station	Average Annual Concentration (pCi/L)		
		01/06/21 to 07/07/21[a] (Uncorrected)	07/07/21 to 01/05/22[a] (Uncorrected)	Average Annual Concentration[b]
SLAPS Perimeter	PA-1	0.08	0.24	0.01
	PA-2	0.08	0.3	0.04
	PA-2[c]	0.08	0.3	---
	PA-3	0.08	0.27	0.03
	PA-4	0.08	0.32	0.05
Background	BA-1	0.08	0.22	---

[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 2021. 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 EMICY21 (USACE 2020).

Section 2.2.2 of the EMICY21 outlines the discharge limits for the stormwater and excavation water discharged at each site (USACE 2020). 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, 2018b, 2020). The pollutants addressed for all NC Sites are identified in Table 2-5 of the EMICY21 (USACE 2020). 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 EMICY21 (USACE 2020). 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 2021. The monitoring results obtained from these activities are presented and compared with the various authorization letters or permit-equivalent limits as presented in the EMICY21 (USACE 2020). 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 2021, 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, 2022 (MSD 2020).

3.1.2 Evaluation of Stormwater Discharge Monitoring Results

In CY 2021, 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 2021. 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). These emails are contained in Appendix D.

During 2021, Un-Named Outfall VP-56/VP-57/VP-58 and I-270/Pershall Road, a moving pumping outfall, was utilized for the management of stormwater with regard to sediment control and pumped excavation water. Un-Named Outfall HISS/Futura was established but never utilized in CY 2021. 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 2021 stormwater monitoring events for the NC Sites are presented in the following subsections. NC Site stormwater monitoring results for CY 2021 are contained in Tables 3-1.

During CY 2021, rainfall data were obtained for the National Weather Service Lambert – St. Louis International Weather Station (Weather Underground, Inc. 2021), 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 2021, 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 2021, 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, and one sampling event was conducted at Un-Named Moving Outfall VP-56/VP-57/VP-58 and I-270/Pershall Road.

Third Quarter

During the third quarter (July, August, and September) of CY 2021, all NPDES sample results were in compliance with permit-equivalent requirements (Table 3-3). During the third quarter, eight sampling events were conducted at Outfall PN02.

Fourth Quarter

During the fourth quarter (October, November, and December) of CY 2021, 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, 2022 (MSD 2020). 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 2021 (MSD 2005, 2008, 2010, 2012, 2014, 2016, 2018b, 2020). 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 2021, approximately 2,486,240 gallons of treated excavation water from 15 treatment batches were released to MSD manholes 10L3-043S, 10K1-019S, 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 2021 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	f	f	f		
Oil and Grease	15	10	mg/L	f	f	f		
TPHs	10	10	mg/L	f	f	f		
pH-Units	6.0-9.0	NA	s.u.	f	f	f		
COD[b]	120	90	mg/L	f	f	f		
SSs[c]	1.5	1.0	mL/L/hour	f	f	f		
Arsenic, Total Recoverable	100	100	µg/L	f	f	f		
Lead, Total Recoverable[d]	190	190	µg/L	f	f	f		
Chromium, Total Recoverable	280	280	µg/L	f	f	f		
Copper, Total Recoverable[d]	84	84	µg/L	f	f	f		
Cadmium, Total Recoverable	94	94	µg/L	f	f	f		
PCBs	No release	No release	µg/L	f	f	f		
Event Sampling Date				Radiological Parameters[g,h,i]				
				Event 1	Event 2	Event 3	Event 4	
				01/25/21	03/18/21	03/25/21	03/27/21	
Total U[j,k]	Monitor only	Monitor only	µg/L	5.E-01	7.E-01	2.E+00	-2.E-01	
Total Ra[j,k]	Monitor only	Monitor only	µg/L	3.E-07	-1.E-07	-3.E-07	1.E-07	
Total Th[j,k]	Monitor only	Monitor only	µg/L	5.E+00	8.E-05	5.E-01	3.E+00	
Gross Alpha[j]	Monitor only	Monitor only	pCi/L	1.E+01	0.E+00	-6.E+00	6.E+00	
Gross Beta[j]	Monitor only	Monitor only	pCi/L	-7.E-01	5.E+00	6.E+00	3.E+01	
Pa-231[j]	Monitor only	Monitor only	pCi/L	6.E+00	-3.E+00	1.E+01	-1.E+01	
Ac-227[j]	Monitor only	Monitor only	pCi/L	8.E-01	2.E+00	6.E+00	5.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.
m The SS values ranged from 0 to 0.10 with the weighted average of less than 0.1 mL/L/hour.
NA – not applicable

Table 3-2. Second Quarter CY 2021 NPDES Sampling Event[a]

Monitoring Parameter	Final Effluent Limitations		Units	Analytical Results								
				Outfall 002			Un-Named Outfall – HISS/Futura[n]			Un-Named Outfall – VP-56/VP-57/VP-58 and I-270/Pershall Road[o]		
	Daily Maximum	Monthly Average		Chemical Parameters								
				April	May	June	April	May	June	April	May	June
Flow	Monitor only	Monitor only	MGD	f	f	f	e,n	e	e	o	o	f,o
Oil and Grease	15	10	mg/L	f	f	f	e,n	e	e	o	o	f,o
TPHs	10	10	mg/L	f	f	f	e,n	e	e	o	o	f,o
pH-Units	6.0-9.0	NA	s.u.	f	f	f	e,n	e	e	o	o	f,o
COD[b]	120	90	mg/L	f	f	f	e,n	e	e	o	o	f,o
SSs[c]	1.5	1.0	mL/L/hour	f	f	f	e,n	e	e	o	o	f,o
Arsenic, Total Recoverable	100	100	µg/L	f	f	f	e,n	e	e	o	o	f,o
Lead, Total Recoverable[d]	190	190	µg/L	f	f	f	e,n	e	e	o	o	f,o
Chromium, Total Recoverable	280	280	µg/L	f	f	f	e,n	e	e	o	o	f,o
Copper, Total Recoverable[d]	84	84	µg/L	f	f	f	e,n	e	e	o	o	f,o
Cadmium, Total Recoverable	94	94	µg/L	f	f	f	e,n	e	e	o	o	f,o
PCBs	No release	No release	µg/L	f	f	f	e,n	e	e	o	o	f,o
Event Sampling Date				Radiological Parameters[g,h,i]								
				Event 1	Event 2	Event 3	Event 1	Event 2	Event 3	Event 1	Event 2	Event 3
				04/07/21	04/10-11/21	04/24/21	NA	NA	NA	o	o	o
Total U[j,k]	Monitor only	Monitor only	µg/L	-1.E+00	-1.E+00	3.E-01	o	o	o	o	o	o
Total Ra[j,k]	Monitor only	Monitor only	µg/L	7.E-07	3.E-07	2.E-07	o	o	o	o	o	o
Total Th[j,k]	Monitor only	Monitor only	µg/L	9.E-01	8.E-01	1.E+00	o	o	o	o	o	o
Gross Alpha[j]	Monitor only	Monitor only	pCi/L	-5.E+00	9.E-01	2.E+00	o	o	o	o	o	o
Gross Beta[j]	Monitor only	Monitor only	pCi/L	2.E+01	2.E+01	4.E+00	o	o	o	o	o	o
Pa-231[j]	Monitor only	Monitor only	pCi/L	-1.E+01	1.E+01	-5.E+01	o	o	o	o	o	o
Ac-227[j]	Monitor only	Monitor only	pCi/L	2.E+00	-8.E-01	3.E+00	o	o	o	o	o	o
Radon (semi-annual monitoring)	Monitor only	Monitor only	pCi/L	l	l	l	o	o	o	o	o	o
Event Sampling Date				Event 4	Event 5	Event 6	Event 4	Event 5	Event 6	Event 4	Event 5	Event 6
				05/27/21	06/25-26/21	06/28/21	NA	NA	NA	o	NA	06/28/21
Total U[j,k]	Monitor only	2.E-07	4.E-07	5.E-01	7.E-02	2.E+00	o	e	e	o	e,o	1.E+00
Total Ra[j,k]	Monitor only	2.E+00	5.E+00	3.E-07	2.E-07	4.E-07	o	e	e	o	e,o	1.E-06
Total Th[j,k]	Monitor only	8.E-01	5.E+00	1.E+00	2.E+00	5.E+00	o	e	e	o	e,o	6.E+00
Gross Alpha[j]	Monitor only	7.E+00	1.E+01	5.E+00	8.E-01	5.E+00	o	e	e	o	e,o	7.E+00
Gross Beta[j]	Monitor only	2.E+01	-5.E+00	1.E+00	7.E+00	1.E+01	o	e	e	o	e,o	2.E+01
Pa-231[j]	Monitor only	-4.E+00	2.E+00	9.E+00	2.E+01	-5.E+00	o	e	e	o	e,o	-3.E+01
Ac-227[j]	Monitor only	Monitor only	pCi/L	-1.E+01	-4.E+00	2.E+00	o	e	e	o	e,o	-1.E+00
Radon (semi-annual monitoring)	Monitor only	Monitor only	pCi/L	l	l	l	o	e	e	o	e,o	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 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.
[m] The SS values ranged from 0 to 0.10 with the weighted average of less than 0.1 mL/L/hour.
[n] Remediation work started at the Un-Named Outfall – HISS/Futura on April 7, 2021.
[o] Remediation work started at the Un-Named Outfall VP-56/VP-57/VP-58, and I-270/Pershall Road on June 16, 2021.
NA – not applicable

Table 3-3. Third Quarter CY 2021 NPDES Sampling Event[a]

Monitoring Parameter	Final Effluent Limitations: Daily Maximum	Final Effluent Limitations: Monthly Average	Units	Analytical Results – Chemical Parameters: Outfall 002 July	Outfall 002 August	Outfall 002 September	Un-Named Outfall – HISS/Futura[m] July	Un-Named Outfall – HISS/Futura[m] August	Un-Named Outfall – HISS/Futura[m] September	Un-Named Outfall – VP-56/VP-57/VP-58 and I-270/Pershall Road July	Un-Named Outfall – VP-56/VP-57/VP-58 and I-270/Pershall Road August	Un-Named Outfall – VP-56/VP-57/VP-58 and I-270/Pershall Road September
Flow	Monitor only	Monitor only	MGD	f	f	e	e	e,m	e,m	e	e	e
Oil and Grease	15	10	mg/L	f	f	e	e	e,m	e,m	e	e	e
TPHs	10	10	mg/L	f	f	e	e	e,m	e,m	e	e	e
pH-Units	6.0-9.0	NA	s.u.	f	f	e	e	e,m	e,m	e	e	e
COD[b]	120	90	mg/L	f	f	e	e	e,m	e,m	e	e	e
SSs[c]	1.5	1.0	mL/L/hour	f	f	e	e	e,m	e,m	e	e	e
Arsenic, Total Recoverable	100	100	µg/L	f	f	e	e	e,m	e,m	e	e	e
Lead, Total Recoverable[d]	190	190	µg/L	f	f	e	e	e,m	e,m	e	e	e
Chromium, Total Recoverable	280	280	µg/L	f	f	e	e	e,m	e,m	e	e	e
Copper, Total Recoverable[d]	84	84	µg/L	f	f	e	e	e,m	e,m	e	e	e
Cadmium, Total Recoverable	94	94	µg/L	f	f	e	e	e,m	e,m	e	e	e
PCBs	No release	No release	µg/L	f	f	e	e	e,m	e,m	e	e	e

Radiological Parameters[g,h,i]	Daily Maximum	Monthly Average	Units	Outfall 002 Event 1	Outfall 002 Event 2	Outfall 002 Event 3	Outfall 002 Event 4	HISS/Futura Event 1	HISS/Futura Event 2	HISS/Futura Event 3	HISS/Futura Event 4	VP-56/VP-57/VP-58 and I-270/Pershall Road Event 1	VP-56/VP-57/VP-58 and I-270/Pershall Road Event 2	VP-56/VP-57/VP-58 and I-270/Pershall Road Event 3	VP-56/VP-57/VP-58 and I-270/Pershall Road Event 4
Event Sampling Date				07/01/21	07/09/21-07/10/21	07/16/21	07/25/21	NA	NA	NA	NA	NA	NA	NA	NA
Total U[j,k]	Monitor only	Monitor only	µg/L	-3.E+00	-2.E+00	7.E-01	5.E-01	e	e	e	e	e	e	e	e
Total Ra[j,k]	Monitor only	Monitor only	µg/L	-5.E-08	3.E-07	4.E-08	2.E-07	e	e	e	e	e	e	e	e
Total Th[j,k]	Monitor only	Monitor only	µg/L	3.E+00	5.E-01	1.E+00	8.E-01	e	e	e	e	e	e	e	e
Gross Alpha[j]	Monitor only	Monitor only	pCi/L	1.E+00	3.E+00	4.E+00	-9.E-01	e	e	e	e	e	e	e	e
Gross Beta[j]	Monitor only	Monitor only	pCi/L	8.E+00	4.E+00	5.E+00	-2.E+00	e	e	e	e	e	e	e	e
Pa-231[j]	Monitor only	Monitor only	pCi/L	3.E+00	9.E+00	4.E+00	-8.E-01	e	e	e	e	e	e	e	e
Ac-227[j]	Monitor only	Monitor only	pCi/L	-3.E+00	6.E+00	4.E-01	4.E+00	e	e	e	e	e	e	e	e
Radon (semi-annual monitoring)	Monitor only	Monitor only	pCi/L	l	l	l	l	e	e	e	e	e	e	e	e
				Event 5	**Event 6**	**Event 7**	**Event 8**	**Event 5**	**Event 6**	**Event 7**	**Event 8**	**Event 5**	**Event 6**	**Event 7**	**Event 8**
Event Sampling Date				08/08/21-08/09/21	08/12/21	09/04/21	09/21/21	NA	NA	NA	NA	NA	NA	NA	NA
Total U[j,k]	Monitor only	Monitor only	µg/L	2.E+00	1.E-01	9.E-01	-5.E-01	e	e	e,m	e,m	e	e	e	e
Total Ra[j,k]	Monitor only	Monitor only	µg/L	3.E-07	4.E-07	1.E-07	2.E-09	e	e	e,m	e,m	e	e	e	e
Total Th[j,k]	Monitor only	Monitor only	µg/L	3.E-01	4.E+00	3.E+00	1.E+00	e	e	e,m	e,m	e	e	e	e
Gross Alpha[j]	Monitor only	Monitor only	pCi/L	4.E+00	-5.E+00	1.E+00	-2.E+00	e	e	e,m	e,m	e	e	e	e
Gross Beta[j]	Monitor only	Monitor only	pCi/L	1.E+01	1.E+01	1.E+01	6.E+00	e	e	e,m	e,m	e	e	e	e
Pa-231[j]	Monitor only	Monitor only	pCi/L	9.E+00	2.E+01	4.E+00	3.E+01	e	e	e,m	e,m	e	e	e	e
Ac-227[j]	Monitor only	Monitor only	pCi/L	-4.E+00	-2.E+00	-7.E-01	-5.E+00	e	e	e,m	e,m	e	e	e	e
Radon (semi-annual monitoring)	Monitor only	Monitor only	pCi/L	l	l	l	l	e	e	e,m	e,m	e	e	e	e

[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 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.
[m] Remediation work was completed at the Un-Named Outfall – HISS/Futura on August 24, 2021.
NA – not applicable

Table 3-4. Fourth Quarter CY 2021 NPDES Sampling Event[a]

Monitoring Parameter	Final Effluent Limitations		Units	Analytical Results					
	Daily Maximum	Monthly Average		Outfall 002			Un-Named Outfall – VP-56/VP-57/VP-58 and I-270 Pershall Road		
				Chemical Parameters					
				October	November	December	October	November	December
Flow	Monitor only	Monitor only	MGD	[e]	[e]	[f]	[e]	[e]	[e]
Oil and Grease	15	10	mg/L	[e]	[e]	[f]	[e]	[e]	[e]
TPHs	10	10	mg/L	[e]	[e]	[f]	[e]	[e]	[e]
pH-Units	6.0-9.0	NA	s.u.	[e]	[e]	[f]	[e]	[e]	[e]
COD[b]	120	90	mg/L	[e]	[e]	[f]	[e]	[e]	[e]
SSs[c]	1.5	1.0	mL/L/hour	[e]	[e]	[f]	[e]	[e]	[e]
Arsenic, Total Recoverable	100	100	µg/L	[e]	[e]	[f]	[e]	[e]	[e]
Lead, Total Recoverable[d]	190	190	µg/L	[e]	[e]	[f]	[e]	[e]	[e]
Chromium, Total Recoverable	280	280	µg/L	[e]	[e]	[f]	[e]	[e]	[e]
Copper, Total Recoverable[d]	84	84	µg/L	[e]	[e]	[f]	[e]	[e]	[e]
Cadmium, Total Recoverable	94	94	µg/L	[e]	[e]	[f]	[e]	[e]	[e]
PCBs	No release	No release	µg/L	[e]	[e]	[f]	[e]	[e]	[e]
Event Sampling Date				Radiological Parameters[g,h,i]					
				Event 1	Event 2		Event 1	Event 2	
				12/10/21	12/28/21		NA	NA	
Total U[j,k]	Monitor only	Monitor only	µg/L	2.E-01	5.E-01		[e]	[e]	
Total Ra[j,k]	Monitor only	Monitor only	µg/L	2.E-07	1.E-06		[e]	[e]	
Total Th[j,k]	Monitor only	Monitor only	µg/L	4.E+00	2.E+00		[e]	[e]	
Gross Alpha[j]	Monitor only	Monitor only	pCi/L	-1.E+00	7.E-01		[e]	[e]	
Gross Beta[j]	Monitor only	Monitor only	pCi/L	-8.E+00	9.E+00		[e]	[e]	
Pa-231[j]	Monitor only	Monitor only	pCi/L	2.E+01	-3.E+01		[e]	[e]	
Ac-227[j]	Monitor only	Monitor only	pCi/L	-1.E+00	-1.E+00		[e]	[e]	
Radon (semi-annual monitoring)	Monitor only	Monitor only	pCi/L	[l]	[l]		[e]	[e]	

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 sample is required, because no rain events producing measurable flow offsite occurred, and no pumping activities were performed.
f No pumping activities occurred in December, 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.

Note: In CY 2021, Un-Named Outfall VP-56/VP-57/VP-58 and I-270/Pershall Road was established but not utilized.
NA – not applicable

Table 3-5. Excavation Water Discharged in CY 2021

Quarter	Number of Discharges	Number of Gallons Discharged[a]	Total Activity (Ci)		
			Thorium[b]	Uranium (KPA)[c]	Radium[d]
1	3	1,037,442	4.41E-06	9.92E-06	4.78E-06
2	5	432,251	9.11E-06	1.23E-05	1.55E-06
3	7	1,016,547	1.07E-05	1.51E-05	3.56E-06
4	0	0	0.00E+00	0.00E+00	0.00E+00
Total	15	2,486,240	2.42E-05	3.73E-05	9.89E-06

[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 EMICY21 (USACE 2020). 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 EMICY21 (USACE 2020); 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 2020). 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. Due to the lack of high-flow conditions as defined in the EMICY, no high-flow sampling event was conducted in 2021.

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 March and October in CY 2021. 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 October sampling period because of remediation along CWC at that location.

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 EMICY21 (USACE 2020). 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 high-flow surface water sampling and the lack of sample at C007 in October, all surface water monitoring required through implementation of the EMICY21 was conducted as planned during CY 2021 (USACE 2020). 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.

<u>Water Quality Parameters</u>

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 March and October sampling events were 12.0 and 20.0 °C, respectively. The average surface water pH values were 6.26 and 7.47, respectively. The average pH values for both the March 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 October were 8.59 mg/L. The average specific conductivity for the March sampling event was 0.132 mS/cm, and the average specific conductivity for the October sampling event was 0.579 mS/cm. The average ORP value during the March sampling event (215 mV) was lower than that of the October sampling event (248 mV). The average turbidity value during the October sampling event was 23 NTU.

Table 3-6. Water Quality Results for CY 2021 CWC Surface Water Sampling

Monitoring Parameter	Unit	Monitoring Station										Average
		C002	C003	C004	C005	C006	C007	C008	C009	C010	C011	
First Sampling Event (03/30/21 to 03/31/21)												
Temperature	°C	10.6	10.9	9.9	13.8	12.8	12	12.9	12	12.6	12.2	12.0
pH	s.u.	6.42	6.15	5.64	6.92	6.78	6.54	6.23	6.11	5.99	5.81	6.26
DO	mg/L	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Specific Conductivity	mS/cm	0.129	0.128	0.143	0.14	0.143	0.144	0.14	0.135	0.115	0.098	0.132
ORP	mV	215	207	203	203	203	232	243	236	218	185	215
Turbidity	NTU	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Second Sampling Event (10/12/21 to 10/13/21)												
Temperature	°C	20.2	19.8	18.95	20.36	20.1	NS1	19.85	19.83	20.22	20.44	20.0
pH	s.u.	8.02	7.97	7.44	7.89	7.43	NS1	7.38	7.21	7.12	6.81	7.47
DO	mg/L	11.76	11.4	11.6	6.91	5.3	NS1	5.55	9.85	10.01	4.91	8.59
Specific Conductivity	mS/cm	0.846	0.839	0.849	0.635	0.533	NS1	0.399	0.354	0.317	0.443	0.579
ORP	mV	246	236	238	244	262	NS1	252	260	255	236	248
Turbidity	NTU	3.5	8.4	8.5	15.4	14.3	NS1	31.8	36.1	50.2	38.3	23

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 in October.
N/R – non-read due to an error with the water quality meter.

Radiological Parameters

The radiological monitoring results for the CY 2021 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 2021, because Ra-228 rapidly achieves equilibrium with Th-228, such that their concentrations are equal.

Table 3-7. Radiological Results for CY 2021 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 (03/30/21 to 03/31/21)										
Ra-226	<0.24[a]	<0.17[a]	0.72	<0.28[a]	<0.21[a]	<0.25[a]	<0.22[a]	<0.23[a]	<0.17[a]	<0.32[a]
Th-228[b]	<0.48[a]	<0.27[a]	<0.39[a]	0.47	<0.35[a]	<0.26[a]	0.75	<0.33[a]	<0.42[a]	0.86
Th-230	0.57	0.73	0.51	<0.40[a]	<0.39[a]	<0.67[a]	0.67	0.99	0.63	0.76
Th-232	<0.27[a]	<0.19[a]	<0.30[a]	<0.16[a]	<0.24[a]	<0.25[a]	<0.17[a]	<0.23[a]	<0.16[a]	<0.27[a]
U-234	0.36	1.61	1.50	1.13	1.02	1.20	0.70	1.03	0.67	0.84
U-235	<0.19[a]	<0.17[a]	<0.25[a]	<0.19[a]	<0.24[a]	<0.25[a]	<0.19[a]	<0.20[a]	<0.19[a]	<0.19[a]
U-238	<0.40[a]	0.94	0.64	0.98	0.53	0.77	1.37	0.63	0.81	0.45
Total U[c] (µg/L)	1.31	3.76	3.29	3.23	2.29	3.16	3.06	2.56	2.31	1.91

Table 3-7. Radiological Results for CY 2021 CWC Surface Water Sampling (Continued)

Monitoring Parameter	Monitoring Stations									
	C002	C003	C004	C005	C006	C007	C008	C009	C010	C011
Radionuclide Concentration (pCi/L)										
Second Sampling Event (10/12/21 to 10/13/21)										
Ra-226	<0.31[a]	<0.51[a]	<0.30[a]	<0.30[a]	<0.26[a]	NS1	<0.21[a]	<0.20[a]	<0.28[a]	<0.31[a]
Th-228[b]	<0.47[a]	<0.50[a]	<0.42[a]	<0.52[a]	<0.30[a]	NS1	0.46	0.88	0.61	<0.40[a]
Th-230	1.07	1.21	0.72	0.99	0.48	NS1	0.89	1.12	0.88	0.88
Th-232	<0.24[a]	<0.26[a]	<0.20[a]	<0.25[a]	<0.21[a]	NS1	<0.23[a]	<0.24[a]	<0.15[a]	<0.17[a]
U-234	0.59	0.36	<0.26[a]	0.50	<0.32[a]	NS1	<0.21[a]	<0.25[a]	<0.22[a]	<0.29[a]
U-235	<0.26[a]	<0.16[a]	<0.16[a]	<0.23[a]	<0.28[a]	NS1	<0.25[a]	<0.25[a]	<0.22[a]	<0.25[a]
U-238	0.92	<0.34[a]	<0.35[a]	<0.33[a]	0.37	NS1	<0.33[a]	0.46	<0.13[a]	<0.15[a]
Total U[c] (µg/L)	2.23	1.10	1.03	1.47	1.34	NS1	0.67	0.89	0.27	0.48

[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 microgram per picocurie is 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.

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

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 2011 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	03/11	10/11	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
C002	Total U[a]	µg/L	2.3	3.8	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
	Ra-226	pCi/L	<2.14[b]	0.87	<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]
	Th-228[c]	pCi/L	<0.52[b]	<0.55[b]	<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]
	Th-230	pCi/L	<0.52[b]	0.37	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
	Th-232	pCi/L	<0.17[b]	<0.20[b]	<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]
C003	Total U[a]	µg/L	6.0	3.4	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
	Ra-226	pCi/L	<1.3[a]	<1.3[b]	<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]
	Th-228[c]	pCi/L	<0.53[a]	<0.50[b]	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]
	Th-230	pCi/L	0.52	0.48	<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
	Th-232	pCi/L	<0.43[b]	<0.18[b]	<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]
C004	Total U[a]	µg/L	3.0	2.3	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
	Ra-226	pCi/L	<1.9[b]	0.64	<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]
	Th-228[c]	pCi/L	<0.52[b]	<0.49[b]	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]
	Th-230	pCi/L	0.43	<0.49[b]	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
	Th-232	pCi/L	<0.20[b]	0.25	<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]
C005	Total U[a]	µg/L	2.1	2.6	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
	Ra-226	pCi/L	<1.8[b]	0.68	<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]
	Th-228[c]	pCi/L	<0.39[b]	0.32	<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]
	Th-230	pCi/L	<0.39[b]	<0.64[b]	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
	Th-232	pCi/L	<0.18[b]	<0.3[b]	<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]
C006	Total U[a]	µg/L	2.8	1.9	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
	Ra-226	pCi/L	<1.82[b]	<1.26[a]	<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]
	Th-228[c]	pCi/L	<0.44[b]	<0.57[b]	<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]
	Th-230	pCi/L	0.45	0.38	<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
	Th-232	pCi/L	<0.21[b]	<0.26[b]	<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]
C007	Total U[a]	µg/L	2.6	1.6	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
	Ra-226	pCi/L	<1.2[b]	<1.4[b]	<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
	Th-228[c]	pCi/L	<0.43[b]	<0.40[b]	<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
	Th-230	pCi/L	0.59	0.40	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
	Th-232	pCi/L	<0.20[b]	<0.18[b]	<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

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

Stations	Radionuclide	Units	03/11	10/11	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
	Total U[a]	µg/L								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
	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]
C008[d]	Th-228[c]	pCi/L	NA	NA	NA	NA	NA	NA	NA	<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
	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
	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]
	Total U[a]	µg/L								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
	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]
C009[d]	Th-228[c]	pCi/L	NA	NA	NA	NA	NA	NA	NA	<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
	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
	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]
	Total U[a]	µg/L																			1.93	1.19	2.31	0.27
	Ra-226	pCi/L																			<1.74[a]	<0.62[a]	<0.17[a]	<0.28[a]
C010[e]	Th-228[c]	pCi/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.44[a]	<0.36[a]	<0.42[a]	0.61
	Th-230	pCi/L																			<0.48[a]	1.01	0.63	0.88
	Th-232	pCi/L																			<0.32[a]	<0.31[a]	<0.16[a]	<0.15[a]
	Total U[a]	µg/L																			2.90	1.13	1.91	0.48
	Ra-226	pCi/L																			<0.98[a]	<0.68[a]	<0.32[a]	<0.31[a]
C011[e]	Th-228[c]	pCi/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.38[a]	<0.37[a]	0.86	<0.40[a]
	Th-230	pCi/L																			0.47	0.72	0.76	0.88
	Th-232	pCi/L																			<0.53[a]	<0.53[a]	<0.27[a]	<0.17[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 microgram per picocurie is 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 COC migration.
NA – not applicable (No sample was collected during this event, because this station was established after 2014.)
NS1 – no sample, remediation activities at this location prevented sampling in October.
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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 2021 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 2021 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 (03/30/21 to 03/31/21)										
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	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]
Barium	120	120	130	120	120	120	110	110	110	96
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]	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]	<4.0[b]
Molybdenum	7.9	8.0	7.9	7.8	8.0	11	7.6	7.2	5.9	4.6
Nickel	<2.0[b]	<2.0[b]	<2.0[b]	<2.0[b]	2.0	2.0	<2.0[b]	<2.0[b]	<2.0[b]	2.1
Selenium	2.0	2.6	2.7	2.8	2.8	3.8	2.6	2.5	2.1	<2.0
Thallium	<0.9[b]	<0.9[b]	<0.9[b]	<0.9[b]	<0.9[b]	<0.9[b]	<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]	<4.0[b]	4.1	4.1	<4.0[b]	4.6
Second Sampling Event (10/12/21 to 10/13/21)										
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	87	89	92	72	62	NS	51	46	45	57
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	11	12	11	8.3	7.5	NS	4.8	3.4	2.7	2.6
Nickel	<2.0[b]	<2.0[b]	2.0	<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]	<2.0[b]	<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]	4.1	4.4	4.5

[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 in October.

3.2.2 Coldwater Creek Sediment Monitoring Results

CY 2021 sediment sampling at CWC was conducted during the months of March 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 EMICY21 (USACE 2020). No sediment sample was collected at C007 during the October sampling period because of remediation along CWC at that location.

With the exception of the October sediment sample at C007, all sediment monitoring required through implementation of the EMICY21 was conducted as planned during CY 2021 (USACE 2020). 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 2021 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 2021, because U-234 is assumed to be in equilibrium with U-238.

Table 3-10. Radiological Results for CY 2021 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 (03/30/21 to 03/31/21)											
Ac-227	No RG	<0.12[b]	<0.16[b]	<0.15[b]	<0.14[b]	<0.16[b]	0.16	<0.16[b]	<0.15[b]	<0.15[b]	<0.18[b]
Pa-231	No RG	<0.47[b]	<0.61[b]	<0.53[b]	<0.54[b]	<0.61[b]	<0.59[b]	<0.62[b]	<0.56[b]	<0.54[b]	<0.60[b]
Ra-226	15	0.83	1.06	1.10	1.07	1.12	1.20	1.07	1.13	1.19	1.16
Ra-228	No RG	0.34	0.84	0.75	0.94	0.92	0.75	0.92	0.80	0.65	0.84
Th-228[c]	No RG	0.33	1.13	1.72	1.29	1.24	1.02	1.74	1.18	0.86	1.15
Th-230[c]	43	1.35	1.61	2.06	2.10	2.17	7.30	2.70	4.43	1.63	3.86
Th-232[c]	No RG	<0.20[b]	1.05	1.14	1.08	1.02	0.85	1.00	1.01	0.94	1.51
U-235	No RG	<0.15[b]	<0.19[b]	<0.18[b]	<0.18[b]	<0.19[b]	<0.18[b]	<0.19[b]	<0.18[b]	<0.17[b]	<0.19[b]
U-238[d]	150	0.62	1.20	0.90	1.01	1.16	1.16	1.14	1.37	0.93	1.20
Second Sampling Event (10/12/21 to 10/13/21)											
Ac-227	No RG	<0.11[b]	<0.13[b]	<0.14[b]	<0.14[b]	<0.14[b]	NS	<0.04[b]	<0.14[b]	<0.12[b]	<0.07[b]
Pa-231	No RG	<0.42[b]	<0.47[b]	<0.49[b]	<0.54[b]	<0.54[b]	NS	<0.52[b]	<0.53[b]	<0.45[b]	<0.77[b]
Ra-226	15	0.97	1.02	1.14	1.14	1.08	NS	1.17	1.15	1.13	1.09
Ra-228	No RG	0.31	0.55	0.79	0.86	0.87	NS	0.87	0.78	0.39	0.60
Th-228[c]	No RG	0.50	0.76	1.15	1.24	1.09	NS	1.17	1.00	0.61	0.92
Th-230[c]	43	0.92	1.75	1.69	1.99	1.87	NS	2.53	3.44	3.52	12.1
Th-232[c]	No RG	0.52	0.91	0.75	1.33	1.23	NS	1.12	0.80	0.37	1.07
U-235	No RG	<0.14[b]	<0.16[b]	<0.16[b]	<0.18[b]	<0.17[b]	NS	<0.17[b]	<0.17[b]	<0.15[b]	<0.25[b]
U-238[d]	150	0.62	0.76	1.03	1.22	1.20	NS	1.14	0.87	0.73	0.69

[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 in October.

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 2011 are summarized in Table 3-11.

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

Station	Radionuclide	Units	03/11	10/11	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
C002	Total U[a]	pCi/g	1.4	1.1	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
	Ra-226	pCi/g	0.87	0.85	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
	Ra-228	pCi/g	0.27	0.28	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
	Th-228	pCi/g	0.26	0.37	0.37	0.37	0.30	<0.16[c]	<0.26[c]	0.69	<0.18[b]	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
	Th-230	pCi/g	1.5	1.1	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
	Th-232	pCi/g	<0.29[c]	0.39	0.35	0.47	0.36	<0.44[c]	0.26	0.55	0.26	1.36	1.39	0.57	0.89	0.41	<0.16[b]	0.62	0.75	0.34	0.41	0.56	<0.20[b]	0.52
C003	Total U[a]	pCi/g	1.4	1.5	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
	Ra-226	pCi/g	0.73	1.2	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
	Ra-228	pCi/g	0.39	0.79	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
	Th-228	pCi/g	0.55	1.79	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
	Th-230	pCi/g	0.89	1.9	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
	Th-232	pCi/g	0.64	1.22	1.28	1.18	0.99	<0.35[c]	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
C004	Total U[a]	pCi/g	1.8	2.0	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
	Ra-226	pCi/g	1.1	1.3	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
	Ra-228	pCi/g	0.85	0.96	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
	Th-228	pCi/g	1.4	1.3	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
	Th-230	pCi/g	2.7	3.8	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
	Th-232	pCi/g	0.85	1.1	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
C005	Total U[a]	pCi/g	1.8	2.5	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
	Ra-226	pCi/g	1.2	1.5	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
	Ra-228	pCi/g	0.56	0.94	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
	Th-228	pCi/g	0.61	0.61	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
	Th-230	pCi/g	3.9	3.4	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
	Th-232	pCi/g	0.63	0.87	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
C006	Total U[a]	pCi/g	2.0	1.0	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
	Ra-226	pCi/g	1.3	0.90	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
	Ra-228	pCi/g	0.86	0.48	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
	Th-228	pCi/g	1.9	0.54	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
	Th-230	pCi/g	9.7	1.2	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
	Th-232	pCi/g	1.6	0.82	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

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

Station	Radionuclide	Units	03/11	10/11	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
C007	Total U[a]	pCi/g	1.9	2.4	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
	Ra-226	pCi/g	1.3	1.4	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
	Ra-228	pCi/g	0.87	0.81	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
	Th-228	pCi/g	1.4	1.3	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
	Th-230	pCi/g	3.3	2.8	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
	Th-232	pCi/g	0.93	0.95	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
C008[d]	Total U[a]	pCi/g	NA	NA	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
	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
	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
	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
	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
	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
C009[d]	Total U[a]	pCi/g	NA	NA	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
	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
	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
	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
	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
	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
C010[e]	Total U[a]	pCi/g	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.56	2.14	1.87	1.64
	Ra-226	pCi/g																			1.48	1.14	1.19	1.13
	Ra-228	pCi/g																			0.70	0.85	0.65	0.39
	Th-228	pCi/g																			0.91	1.62	0.86	0.61
	Th-230	pCi/g																			2.63	2.52	1.63	3.52
	Th-232	pCi/g																			0.99	0.89	0.94	0.37

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

Station	Radionuclide	Units	03/11	10/11	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
C011[e]	Total U[a]	pCi/g	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.62	2.32	2.40	1.56
	Ra-226	pCi/g																			1.63	1.27	1.16	1.09
	Ra-228	pCi/g																			0.88	0.89	0.84	0.60
	Th-228	pCi/g																			1.48	1.3	1.15	0.92
	Th-230	pCi/g																			4.22	3.48	3.86	12.1
	Th-232	pCi/g																			1.57	1.22	1.51	1.07

[a] Total U is equal to the sum of the concentrations of U isotopes (Office of the Federal Register, NARA 1998).
[b] Both gamma spectroscopy and alpha spectroscopy results were produced; gamma spectroscopy results are reported.
[c] Reported result is less than the MDC and is therefore set equal to the MDC.
[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: 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 after 2014).
NS1 – no sample, remediation activities at this location prevented sampling in October.

Chemical Parameters

Chemical monitoring results for CY 2021 CWC sediment sampling events are presented in Table 3-12.

Table 3-12. Chemical Results for CY 2021 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 (03/30/21 to 03/31/21)										
Antimony	<0.67[a]	<0.7[a]	<0.73[a]	<0.7[a]	<0.68[a]	<0.68[a]	<0.84[a]	<0.66[a]	<0.64[a]	<0.73[a]
Arsenic	4.0	5.3	4.2	4.2	2.9	8.3	4.4	5.7	7.3	7.0
Barium	320	160	120	160	130	200	140	130	160	150
Cadmium	0.35	0.69	0.44	0.26	0.21	2.4	0.37	0.52	0.48	0.65
Chromium	15	21	14	15	13	30	14	24	17	16
Molybdenum	1.3	1.1	<0.73[a]	<0.7[a]	<0.68[a]	2.0	<0.84[a]	0.69	<0.64[a]	<0.73[a]
Nickel	11	18	15	17	15	26	16	16	20	17
Selenium	1.1	1.6	1.3	1.6	1.4	1.9	1.6	1.5	1.3	1.7
Thallium	<0.67[a]	<0.7[a]	<0.73[a]	<0.7[a]	<0.68[a]	<0.68[a]	<0.84[a]	<0.66[a]	<0.64[a]	<0.73[a]
Vanadium	9.8	19	16	17	14	22	15	17	19	18
Second Sampling Event (10/12/21 to 10/13/21)										
Antimony	0.26	0.27	0.2	<0.19[a]	0.21	NS1	<0.18[a]	0.34	0.21	<0.19[a]
Arsenic	2.4	3.1	3.1	3.3	2.8	NS1	2.3	3.8	10	4.1
Barium	2,000	110	69	93	95	NS1	72	97	97	100
Cadmium	0.29	0.44	0.25	0.2	0.66	NS1	0.23	0.37	0.52	0.44
Chromium	24	16	9.6	9.1	11	NS1	9.2	17	28	25
Molybdenum	5.3	0.72	0.32	0.2	1.4	NS1	0.27	0.56	0.43	0.33
Nickel	7.1	9.5	8	9.3	14	NS1	7.5	10	11	11
Selenium	0.64	1.6	0.71	0.8	0.7	NS1	0.63	1.1	0.79	0.71
Thallium	<0.17[a]	<0.18[a]	<0.19[a]	<0.19[a]	<0.17[a]	NS1	<0.18[a]	<0.17[a]	<0.19[a]	<0.19[a]
Vanadium	6.6	12	11	13	12	NS1	10	13	18	13

[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 in October.

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 2021 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 2021 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 and C009 are also included on Figures 3-3 and 3-4.

Surface water and sediment data and associated qualitative trend line graphs for total U from monitoring stations C010 and C011 will be presented in future EMDARs when additional sample data are collected and available.

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 2021, 18 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 2021 sampling are contained in Appendix F, Tables F-1 and F-2. Summary tables providing the NC Sites groundwater analytical sampling results for CY 2021 are contained in Appendix F, Tables F-3 and F-4.

Groundwater Guidelines

The CY 2021 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 eight Latty Avenue VPs (VPs 01[L] through 06[L], VP-40A, and Parcel 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 2021 Groundwater Monitoring Results at the Latty Avenue Properties

Based on an evaluation of the groundwater data at the Latty Avenue Properties, five inorganic soil COCs (cadmium, molybdenum, nickel, selenium, and vanadium) and one radiological COC (total U) were detected at concentrations in excess of the ROD guidelines in HZ-A groundwater at the Latty Avenue Properties in CY 2021 when measurement error is taken into account. Cadmium and vanadium were detected above the corresponding ROD guidelines in HZ-A well HW22 during the second-quarter sampling event. However, cadmium and vanadium did not exceed the ROD guidelines at HW22 in the sample collected during the previous sampling event performed in the fourth quarter of CY 2020. Therefore, cadmium and vanadium concentrations in HW22 have not exceeded the ROD guideline for more than 12 months. Analytical results for cadmium and vanadium in the historical dataset for HW22 are generally non-detect values or near the detection limit (DL).

Molybdenum was detected above the ROD guideline at HISS-10 in the samples collected during the second-quarter and fourth-quarter sampling events. Selenium and nickel were detected above the ROD guidelines at HISS-10 in the samples collected during the second-quarter and fourth-quarter sampling events, respectively. Nickel was not detected above the ROD guideline in HISS-10 in the second-quarter sampling event; therefore, nickel has not exceeded the ROD guideline for more than 12 months. Molybdenum and selenium were above the ROD guideline in the previous sampling events conducted in CY 2018 through CY 2020 at HISS-10. Therefore, molybdenum and selenium concentrations in HISS-10 have exceeded the ROD guideline for more than 12 months. The Mann-Kendall Trend Test results indicate statistically significant increasing trends for molybdenum and selenium in HISS-10.

The total U concentration in the sample collected at HISS-01 during the third-quarter sampling event exceeded the ROD guideline. Total U was not detected above the ROD guideline at HISS-01 in samples collected in CY 2018 through CY 2020. Therefore, total U has not exceeded the ROD guideline for more than 12 months in HISS-01.

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 and selenium 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 2021 results for HW23, concentrations of all inorganic and radiological soil COCs were below the ROD groundwater guidelines in HZ-C during CY 2021. 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 2021 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 March 16, 2021.

Table 4-1. Screened HZs for Groundwater Monitoring Wells at the Latty Avenue Properties in CY 2021

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

[a] Wells sampled in CY 2021.

Groundwater sampling was conducted at seven groundwater monitoring wells at the Latty Avenue Properties in CY 2021. No groundwater monitoring wells were sampled at the Latty Avenue Properties in the first quarter. Second-quarter sampling was conducted on May 12, 2021; third-quarter sampling was conducted on August 4, 2021; and fourth-quarter sampling was conducted on November 9, 2021.

HZ-A Groundwater

Groundwater samples were collected from six HZ-A wells in CY 2021. A summary table presenting the CY 2021 analytical data for all analytes is included in Appendix F (Table F-3).

For response-action monitoring, the CY 2021 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 2021 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 2021 are listed in Table 4-2. Because no groundwater sampling data are available for HISS-11A prior to CY 2011, the ROD guidelines for HISS-11A were developed using the pre-2006 data from the well previously at this location (HISS-11).

Table 4-2. Analytes Exceeding ROD Guidelines in HZ-A Groundwater at the Latty Avenue Properties in CY 2021

Analyte	Units	Station	ROD Guidelines[a]	Minimum Detected	Maximum Detected	Mean Detected	No. Detects > ROD Guidelines[a]	Frequency of Detection
Cadmium	µg/L	HW22	1.6	2.0	2.0	2.0	1	1/1
Molybdenum	µg/L	HISS-10	5.6	23	59	41	2	2/2
Nickel	µg/L	HISS-10	3.8	2.4	5.6	4.0	1	2/2
Selenium	µg/L	HISS-10	7.6	7.6	39	23.3	1	2/2
Vanadium	µg/L	HW-22	4.0	6.3	6.3	6.3	1	1/1
Total U	µg/L	HISS-01	30	37.9	37.9	37.9	1	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.

Five inorganic COCs (cadmium, molybdenum, nickel, selenium, and vanadium) and one radiological COC (total U) were detected above their ROD guidelines (when measurement error is taken into account) in HZ-A groundwater at the Latty Avenue Properties in CY 2021. Cadmium was detected in HW22 at levels above the ROD guideline of 1.6 µg/L in the second-quarter sample (2 µg/L). Cadmium was not detected above the ROD guideline in the previous sampling event in the fourth quarter of CY 2020. Therefore, cadmium concentrations in HW22 have not exceeded the ROD guideline for more than 12 months. 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 (23 µg/L and 59 µg/L, respectively). Molybdenum was above the ROD guideline in the previous sampling event conducted in the second quarter of CY 2020. 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 fourth-quarter sample (5.6 µg/L). The nickel concentration did not exceed the ROD guideline in the second-quarter sample or the sample collected in the second quarter of CY 2020. 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 sample (39 µg/L). Selenium was above the ROD guideline in the previous sampling events conducted in CY 2018 through CY 2020. Therefore, selenium concentrations in HISS-10 have exceeded the ROD guideline for more than 12 months. Vanadium was detected in HW22 at a level above the ROD guideline (4 µg/L) in the second-quarter sample (6.3 µg/L). Vanadium was below the ROD guideline in the previous sampling events conducted in CY 2020. Therefore, vanadium concentrations in

HW22 have not exceeded the ROD guideline for more than 12 months. Total U was detected in HISS-01 at a level above the ROD guideline (30 µg/L) in the third-quarter sample (37.9 µg/L). Total U was not detected above the ROD guideline in the previous sampling event in the third quarter of CY 2020. Therefore, total U concentrations in HW22 have not exceeded the ROD guideline for more than 12 months.

In summary, comparison of the data to the ROD guidelines indicates that five inorganic COCs (cadmium, molybdenum, nickel, selenium, and vanadium) and one radiological COC (total U) exceeded the ROD guidelines in HZ-A groundwater in CY 2021 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 and selenium 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 2021. 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 2021.

In summary, the CY 2021 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 2021. Statistical analysis was used to assist with identifying trends for those contaminants that exceeded the ROD guidelines in CY 2021.

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 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. However, because the Mann-Kendall Trend Test is a nonparametric test that uses relative magnitudes, not actual values, it is generally valid even in cases in which there are a large number of non-detect results.

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 HISS-01 are provided on Figure 4-3.

<u>Results of Trend Analysis for Groundwater at the Latty Avenue Properties</u>

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.

<u>HZ-A Groundwater</u>

The Mann-Kendall Trend Test was performed for those wells in which analytes exceeded the ROD guidelines at least once during CY 2021, 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 2021), 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 2021 groundwater samples from HZ-A well HISS-10. In addition, the concentrations of cadmium and vanadium were above the ROD groundwater criteria in the CY 2021 groundwater samples from HZ-A well HW22. 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 constituent. Therefore, a trend analysis was conducted for molybdenum and selenium in HISS-10 and for cadmium and vanadium in HW22. For molybdenum and selenium in HISS-10, the dataset was restricted to the time period of CY 2002 through CY 2021 to meet the Mann-Kendall Trend Test requirement that the dataset have a detection frequency greater than 50 percent. For cadmium and vanadium in HW22, the dataset was restricted to the time period of CY 2003 through CY 2021 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 2021 dataset. No trend was identified for cadmium or vanadium in HW22.

Table 4-3. Results of the Mann-Kendall Trend Test for Analytes Exceeding the ROD Guidelines at the Latty Avenue Properties in CY 2021

Analyte	Station	N[a]	Test Statistics[b]		Trend[d]
			S[c]	Z[c]	
Cadmium	HW22	15	14	0.67	No Trend
Molybdenum	HISS-10	22	140	3.95	Upward Trend
Selenium	HISS-10	22	74	2.08	Upward Trend
Vanadium	HW22	16	5	0.20	No Trend
Total U	HISS-01	39	151	1.81	Upward Trend

[a] N is the number of unfiltered groundwater sample results for a particular analyte. For HISS-01, the dataset was not restricted and covers the period from January 1999 to December 2021. For HW22, the dataset was restricted to January 2003 to December 2021 to meet the Mann-Kendall Trend Test requirement that the dataset have a detection frequency greater than 50 percent. For HISS-10, the dataset was restricted to January 2002 to December 2021 in order 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 greater than 10, the Z-score is compared to ±1.65 to determine trend significance.

Radionuclides

The concentration of one radiological COC (total U) was above the ROD groundwater criteria in the CY 2021 groundwater sample from HZ-A well HISS-01. Therefore, a trend analysis was conducted for total U in HISS-01. For total U in HISS-01, the dataset was not restricted and covers the time period of CY 1999 through CY 2021. As shown in Table 4-3 and on the time-versus-concentration plots 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 HISS-01 for the CY 1999 through CY 2021 dataset. The time-versus-concentration plot for total U in HISS-01 on Figure 4-3 further shows that the trend in concentrations has been decreasing since May 2009.

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 2021. Concentrations of all soil COCs were below the ROD groundwater criteria in CY 2021 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 2021. Groundwater elevation contours were drawn using the May 10, 2021, and November 8, 2021, 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 0.008 ft/ft (November) to 0.01 ft/ft (May) in CY 2021. Based on the CY 2021 water-level measurements, the position of the HZ-A groundwater surface averages approximately 1.3 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 east at an average horizontal gradient of 0.0008 ft/ft in May and 0.0002 ft/ft in November.

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, consists primarily 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 the 3T, 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. Average depths to the groundwater surface at the site range from approximately 5 ft below ground surface during the spring months to approximately 10 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 2021 Groundwater Monitoring Results at the St. Louis Airport Site and St. Louis Airport Site Vicinity Properties

Three soil COCs (cadmium, nickel, and total U) exceeded the ROD guidelines in HZ-A groundwater at the SLAPS and SLAPS VPs in CY 2021 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 increasing trend was observed for nickel concentrations in B53W06S. The Mann-Kendall Trend Test results indicate no trend for cadmium and total U in PW46.

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-C groundwater at the SLAPS and SLAPS VPs in CY 2021 when measurement error was taken into account. Cadmium has not 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. No radiological soil COCs exceeded the ROD groundwater guidelines in HZ-C groundwater during CY 2021 when measurement error was 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-C groundwater, as defined by the ROD.

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.

As noted in Section 4.1.1, 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 March 2021.

Table 4-4. Groundwater Monitoring Well Network at the SLAPS and SLAPS VPs in CY 2021

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

[a] Wells sampled in CY 2021.

During CY 2021, 11 groundwater wells were sampled for various parameters at the SLAPS and SLAPS VPs. Groundwater samples collected from these wells were analyzed for both radiological and 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 2021 groundwater sampling at the SLAPS and SLAPS VPs are contained in Appendix F, Table F-4.

In CY 2021, groundwater sampling was conducted on February 9 (first quarter); May 11 (second quarter); August 2, 3, and 25 (third quarter); and November 8 (fourth quarter). The CY 2021 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

Eight HZ-A wells (B53W06S, B53W07S, B53W09S, B53W17S, MW31-98, MW32-98, PW43, and PW46) were sampled at the SLAPS and SLAPS VPs during CY 2021. Table 4-5 lists those soil COCs exceeding the ROD guidelines in CY 2021 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 2021

Analyte	Units	Station	ROD Guidelines[a]	Minimum Detected	Maximum Detected	Mean Detected	No. Detects > ROD Guidelines[a]	Frequency of Detection
Cadmium	μg/L	PW46	1.2	2.9	2.9	2.9	1	1/1
Nickel	μg/L	B53W06S	16	35	35	35	1	1/1
Vanadium	μg/L	PW43	3.1	4.8[b]	4.8[b]	4.8	1	1/1
U-234	pCi/L	PW46	5,500	106[c]	194[c]	150[c]	0	2/2
U-235	pCi/L	PW46	290	5.8[c]	8.8[c]	7.3[c]	0	2/2
U-238	pCi/L	PW46	5,600	111[c]	200[c]	156[c]	0	2/2
Total U[d]	μg/L	PW46	30	334	601	468	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 did not exceed the ROD guideline if the associated measurement error is taken into account.

[c] 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.

[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 soil COCs (cadmium, nickel, and vanadium) were detected in HZ-A groundwater at concentrations in excess of the ROD guidelines at the SLAPS and SLAPS VPs during CY 2021. Cadmium was detected at a concentration in excess of the ROD guideline in the HZ-A well PW46 during CY 2021. The cadmium concentration did not exceed the ROD guideline in the sample collected from PW46 in CY 2020. Therefore, cadmium concentrations in PW46 did not exceed the ROD guideline for more than 12 months.

Nickel was detected at a concentration in excess of the ROD guideline in HZ-A well B53W06S during CY 2021. The nickel concentration did not exceed the ROD guideline in the sample collected from B53W06S in CY 2020 (Figure 4-12). Therefore, the nickel concentration at B53W06S has not exceeded the ROD guideline for a period of at least 12 months.

Vanadium was detected at a concentration in excess of the ROD guideline in HZ-A well PW43 during CY 2021. However, when measurement error is taken into account, the vanadium concentration is PW43 is less than the ROD guideline. The vanadium concentration did not exceed the ROD guideline in the sample collected from PW43 in CY 2020 (Figure 4-12).

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 2021 sampling events. The total U concentration during CY 2021 in PW46 ranged from 334 µg/L (third-quarter sample) to 601 µg/L (first-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. Based on the total U data collected from PW38 prior to its decommissioning in November of 2003, the CY 2021 total U concentration at PW46 is lower than the historical concentrations reported at PW38 (Figure 4-13). Based on the statistical evaluation of trends presented in Section 4.2.2, no statistically significant trend in the concentrations of total U was observed in PW46 during CY 2021.

In summary, two inorganic soil COCs (cadmium in PW46 and nickel in B53W06S) exceeded the ROD guidelines in HZ-A groundwater at the SLAPS and SLAPS VPs in CY 2021 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 2021 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 2021. Groundwater samples were collected from three HZ-C wells (B53W07D, PW35, and PW42) in CY 2021. Monitoring wells B53W07D and PW42 were sampled in the third quarter for inorganics and radionuclides. Monitoring well PW35 was sampled in the second quarter for inorganics. One inorganic soil COC (cadmium) was detected at a concentration in excess of the ROD groundwater guideline in HZ-C groundwater in CY 2021. 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 did not exceed the ROD groundwater guideline in the sample collected from PW35 during CY 2020 when measurement error was taken into account. Therefore, cadmium has not 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.

Radionuclide concentrations did not exceed the ROD guidelines in the samples collected from HZ-C groundwater during CY 2021.

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-C groundwater, as defined by the ROD.

Table 4-6. Analytes Exceeding ROD Guidelines in HZ-C Groundwater at the SLAPS and SLAPS VPs in CY 2021

Analyte	Units	Station	ROD Guidelines[a]	Minimum Detected	Maximum Detected	Mean Detected	No. Detects > 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 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).

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 2021 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 2021. 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.

<u>Results of Trend Analysis at the St. Louis Airport Site and St. Louis Airport Site Vicinity Properties</u>

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 2021. For those monitoring wells at which an analyte exceeded these guidelines in one or more samples during CY 2021 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 2021 groundwater monitoring data for the SLAPS and SLAPS VPs, three soil COCs (cadmium, nickel, and total U) exceeded the ROD guidelines in HZ-A groundwater in CY 2021 when measurement error was taken into account. The Mann-Kendall Trend Test was performed for nickel in B53W06S and for cadmium and total U in PW46. To aid in the evaluation of trends, time-versus-concentration plots for nickel in B53W06S and for total U in PW46 are provided on Figures 4-12 and 4-13, respectively.

When measurement error was taken into account, one soil COC exceeded the ROD guideline in lower groundwater (HZ-C through HZ-E) during CY 2021 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.

<u>Inorganics</u>

The results of the Mann-Kendall Trend Tests are provided in Table 4-7. As shown in Table 4-7, a statistically significant increasing trend was observed for nickel concentrations in B53W06S.

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 this figure.

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 2021

Analyte	Station	N[a]	Test Statistics[b]		Trend[d]
			S[c]	Z[c]	
Cadmium	PW46	21	43	1.31	No Trend
Nickel	B53W06S	26	151	3.33	Upward Trend
Total U	PW46	26	-41	-0.88	No 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 2021. With the exception of total U at PW46, the time period is between January of 1999 and December of 2021. For PW46, which was installed in April of 2006, the dataset covers the period between May of 2006 and December of 2021.

[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.

<u>Radionuclides</u>

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 2021 (PW46). The results of the Mann-Kendall Trend Test are provided in Table 4-7. The Mann-Kendall Trend Test results indicate no trend for total U 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 2021 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 2021. Groundwater elevation contours were drawn using the May 10, 2021 and November 8, 2021, 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 2021, 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). 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 10, 2021) and the dry season

(November 8, 2021). The hydraulic gradient in HZ-A groundwater increases near CWC, where the average horizontal gradient ranges from 0.026 ft/ft (November 8, 2021) to 0.045 ft/ft (May 10, 2021). 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 2021 water-level measurements, the elevation of the HZ-A groundwater surface averaged approximately 1.91 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 indicates that many wells are 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 2021 are illustrated on Figures 4-6 and 4-8. The flow direction in HZ-C is generally east beneath the SLAPS and SLAPS VPs, at an average horizontal gradient of 0.0018 ft/ft in May and November of 2021. 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 7.9 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.

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 documents for 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 EMICY21 outlines the analyses to be performed at the NC Sites for various media (USACE 2020).

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.

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 EMICY21 (USACE 2020).

5.5.1 Field Assessments

Internal assessments (audit or surveillance) of field activities (sampling and measurements) were conducted by the QA/QC Officer (or designee). Assessments included 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 26 and 27, 2021.

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 identity of duplicate samples is held blind to the analysts. 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 each medium addressed by this project 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 2021 environmental monitoring activities was acceptable. See Section 5.9 for the evaluation process.

Table 5-1. Non-Radiological Duplicate Sample Analysis for CY 2021 – Surface Water and Groundwater

Water Sample Name[a]	Antimony	Arsenic	Barium	Cadmium	Chromium
	RPD[b]	RPD[b]	RPD[b]	RPD[b]	RPD[b]
CWC239151 / CWC239151-1	NC	NC	0.00	NC	NC
CWC248040 / CWC248040-1	NC	NC	0.00	NC	NC
SLA238258 / SLA238258-1	NC	NC	0.00	NC	NC
Water Sample Name[a]	**Molybdenum**	**Nickel**	**Selenium**	**Thallium**	**Vanadium**
	RPD[b]	**RPD[b]**	**RPD[b]**	**RPD[b]**	**RPD[b]**
CWC239151 / CWC239151-1	7.02	NC	4.88	NC	NC
CWC248040 / CWC248040-1	0.00	NC	NC	NC	NC
SLA238258 / SLA238258-1	NC	NC	25.81	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)
SLA – St. Louis Airport Sites (sample prefix designation)

Table 5-2. Non-Radiological Duplicate Sample Analysis for CY 2021 – Sediment

Soil Sample Name[a]	Antimony	Arsenic	Barium	Cadmium	Chromium
	RPD[b]	RPD[b]	RPD[b]	RPD[b]	RPD[b]
CWC239152 / CWC239152-1	NC	28.24	27.03	33.04	5.71
CWC248041 / CWC248041-1	7.69	3.28	43.09	12.05	46.15
Soil Sample Name[a]	**Molybdenum**	**Nickel**	**Selenium**	**Thallium**	**Vanadium**
	RPD[b]	**RPD[b]**	**RPD[b]**	**RPD[b]**	**RPD[b]**
CWC239152 / CWC239152-1	NC	5.13	NC	NC	19.05
CWC248041 / CWC248041-1	38.02	6.52	28.57	NC	18.18

[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 2021 – 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]
CWC239151 / CWC239151-1	NC	NA	*	*	NC	NA	34.06	0.33
CWC248040 / CWC248040-1	NC	NA	*	*	NC	NA	30.15	0.40
SLA238258 / SLA238258-1	NC	NA	*	*	NC	NA	56.00	1.00
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]
CWC239151 / CWC239151-1	NC	NA	37.22	0.42	NC	NA	20.30	NA
CWC248040 / CWC248040-1	NC	NA	5.09	NA	NC	NA	NC	NA
SLA238258 / SLA238258-1	NC	NA	16.55	NA	14.96	NA	16.09	NA

[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 2021 – Sediment

Soil Sample Name[a]	Th-228		Th-230		Th-232	
	RPD[b]	NAD[b]	RPD[b]	NAD[b]	RPD[b]	NAD[b]
CWC239152 / CWC239152-1	10.92	NA	3.02	NA	28.40	NA
CWC248041 / CWC248041-1	26.24	NA	11.83	NA	29.15	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.
NA – not applicable (see RPD)

Table 5-5. Radiological Duplicate Sample Gamma Analysis for CY 2021 – 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]
CWC239152 / CWC239152-1	NC	NA	NC	NA	NC	NA	3.66	NA
CWC248041 / CWC248041-1	NC	NA	NC	NA	NC	NA	1.71	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]
CWC239152 / CWC239152-1	NC	NA	0.84	NA	0.61	NA	0.61	NA
CWC248041 / CWC248041-1	NC	NA	3.49	NA	1.26	NA	1.26	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]
CWC239152 / CWC239152-1	NC	NA	0.61	NA	NC	NA	16.85	NA
CWC248041 / CWC248041-1	NC	NA	1.26	NA	NC	NA	16.75	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
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 field samples of each matrix for non-radiological and for radiological analytes across the SLS.

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. The overall accuracy for the CY 2021 environmental monitoring activities was acceptable. See Section 5.9 for the evaluation process.

Table 5-6. Non-Radiological Split Sample Analysis for CY 2021 – Surface Water and Groundwater

Water Sample Name[a]	Antimony	Arsenic	Barium	Cadmium	Chromium
	RPD[b]	RPD[b]	RPD[b]	RPD[b]	RPD[b]
CWC239151 / CWC239151-2	NC	NC	1.80	NC	NC
CWC248040 / CWC248040-2	NC	NC	4.82	NC	NC
SLA238258 / SLA238258-2	NC	NC	4.80	NC	NC
Water Sample Name[a]	**Molybdenum**	**Nickel**	**Selenium**	**Thallium**	**Vanadium**
	RPD[b]	**RPD[b]**	**RPD[b]**	**RPD[b]**	**RPD[b]**
CWC239151 / CWC239151-2	15.63	NC	5.10	NC	NC
CWC248040 / CWC248040-2	**34.48**	NC	NC	NC	NC
SLA238258 / SLA238258-2	NC	NC	**112.97**	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 2021 – Sediment

Soil Sample Name[a]	Antimony	Arsenic	Barium	Cadmium	Chromium
	RPD[b]	RPD[b]	RPD[b]	RPD[b]	RPD[b]
CWC239152 / CWC239152-2	NC	6.95	36.16	4.26	**55.93**
CWC248041 / CWC248041-2	**91.46**	47.29	12.77	29.62	42.75
Soil Sample Name[a]	**Molybdenum**	**Nickel**	**Selenium**	**Thallium**	**Vanadium**
	RPD[b]	**RPD[b]**	**RPD[b]**	**RPD[b]**	**RPD[b]**
CWC239152 / CWC239152-2	NC	**53.16**	**54.75**	NC	35.29
CWC248041 / CWC248041-2	NC	36.91	6.06	NC	26.71

[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 2021 – 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]
CWC239151 / CWC239151-2	NC	NA	*	*	NC	NA	NC	NA
CWC248040 / CWC248040-2	NC	NA	*	*	NC	NA	NC	NA
SLA238258 / SLA238258-2	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]**
CWC239151 / CWC239151-2	NC	NA	0.45	NA	NC	NA	23.93	NA
CWC248040 / CWC248040-2	NC	NA	18.62	NA	NC	NA	NC	NA
SLA238258 / SLA238258-2	NC	NA	**132.93**	**7.88**	**149.09**	**3.34**	**128.89**	**7.68**

[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 2021 – Sediment

Soil Sample Name[a]	Th-228		Th-230		Th-232	
	RPD[b]	NAD[b]	RPD[b]	NAD[b]	RPD[b]	NAD[b]
CWC239152 / CWC239152-2	9.24	NA	37.41	NA	0.42	NA
CWC248041 / CWC248041-2	66.78	1.21	51.80	1.40	74.08	1.45

[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.
NA – not applicable (see RPD)

Table 5-10. Radiological Split Sample Gamma Analysis for CY 2021 – 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]
CWC239152 / CWC239152-2	NC	NA	NC	NA	NC	NA	15.51	NA
CWC248041 / CWC248041-2	NC	NA	NC	NA	NC	NA	24.98	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]
CWC239152 / CWC239152-2	NC	NA	18.45	NA	15.93	NA	15.93	NA
CWC248041 / CWC248041-2	NC	NA	33.94	NA	2.39	NA	2.39	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]
CWC239152 / CWC239152-2	*	*	15.93	NA	NC	NA	26.04	NA
CWC248041 / CWC248041-2	*	*	2.39	NA	NC	NA	NC	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.
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 2021 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

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 2021 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 2021 environmental monitoring activities was acceptable.

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 EMICY21, 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 2021 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 2021 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 2021

Water Sample Name[a]	Antimony[b]			Arsenic[b]			Barium[b]			Cadmium[b]			Chromium[b]		
	Result	DL	VQ	Result	DL	VQ	Result	DL	VQ	Result	DL	VQ	Result	DL	VQ
CWC239151	2.0	2.0	U	4.0	4.00	U	110.00	0.9	=	0.2	0.2	U	4.0	4.0	U
CWC239151-1	2.0	2.0	U	4.0	4.00	U	110.00	0.9	=	0.2	0.2	U	4.0	4.0	U
CWC239151-2	2.5	2.5	U	1.95	0.50	=	112.00	1.5	=	0.3	0.3	U	2.0	2.0	U
CWC248040	2.0	2.0	U	4.0	4.00	U	89.00	0.9	=	0.2	0.2	U	4.0	4.0	U
CWC248040-1	2.0	2.0	U	4.0	4.00	U	89.00	0.9	=	0.2	0.2	U	4.0	4.0	U
CWC248040-2	2.5	2.5	U	2.9	0.50	=	93.40	1.5	=	0.3	0.3	U	2.0	2.0	U
SLA238258	2.0	2.0	U	4.0	4.00	U	59.00	0.9	=	2.9	0.2	=	4.0	4.0	U
SLA238258-1	2.0	2.0	U	4.0	4.00	U	59.00	0.9	=	0.2	0.2	U	4.0	4.0	U
SLA238258-2	2.5	2.5	U	0.95	0.50	=	61.90	1.5	=	0.3	0.3	U	2.0	2.0	U
Water Sample Name[a]	**Molybdenum[b]**			**Nickel[b]**			**Selenium[b]**			**Thallium[b]**			**Vanadium[b]**		
	Result	**DL**	**VQ**	**Result**	**DL**	**VQ**	**Result**	**DL**	**VQ**	**Result**	**DL**	**VQ**	**Result**	**DL**	**VQ**
CWC239151	5.9	2.0	=	2.0	2.0	U	2.1	2.0	=	0.9	0.9	U	4.0	4.0	U
CWC239151-1	5.5	2.0	=	2.0	2.0	U	2.0	2.0	=	0.9	0.9	U	4.4	4.0	=
CWC239151-2	6.9	5.0	=	2.0	2.0	U	2.21	0.5	=	0.1	0.1	U	2.19	2.0	=
CWC248040	12	2.0	=	2.0	2.0	U	2.0	2.0	U	0.9	0.9	U	4.0	4.0	U
CWC248040-1	12	2.0	=	2.0	2.0	U	2.0	2.0	U	0.9	0.9	U	4.0	4.0	U
CWC248040-2	17	5.0	=	2.0	2.0	U	2.04	0.5	=	0.1	0.1	U	2.0	2.0	U
SLA238258	2.0	2.0	U	2.0	2.0	U	2.7	2.0	=	0.9	0.9	U	4.0	4.0	U
SLA238258-1	2.0	2.0	U	2.0	2.0	U	3.5	2.0	=	0.9	0.9	U	4.0	4.0	U
SLA238258-2	5.0	5.0	U	2.0	2.0	U	9.71	0.5	=	0.1	0.1	U	2.0	2.0	U

[a] Samples ending in "-1" are duplicate samples. Samples ending in "-2" are split samples.
[b] Result values are expressed in µg/L.
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 2021

Soil Sample Name[a]	Antimony[b]			Arsenic[b]			Barium[b]			Cadmium[b]			Chromium[b]		
	Result	DL	VQ	Result	DL	VQ	Result	DL	VQ	Result	DL	VQ	Result	DL	VQ
CWC239152	0.64	0.64	U	7.3	1.3	=	160	1.6	=	0.48	0.08	J	17	1.40	=
CWC239152-1	0.68	0.68	U	9.7	1.4	=	210	1.7	=	0.67	0.08	J	18	1.50	=
CWC239152-2	0.30	0.24	=	6.81	0.24	=	111	1.81	=	0.46	0.06	=	30.2	0.24	=
CWC248041	0.27	0.18	=	3.1	0.36	=	110	0.45	=	0.44	0.02	=	16	0.40	=
CWC248041-1	0.25	0.18	=	3.0	0.37	=	71	0.46	=	0.39	0.02	=	10	0.41	=
CWC248041-2	0.73	0.29	=	5.02	0.29	=	125	2.18	=	0.59	0.07	=	24.7	0.29	=
Soil Sample Name[a]	**Molybdenum[b]**			**Nickel[b]**			**Selenium[b]**			**Thallium[b]**			**Vanadium[b]**		
	Result	**DL**	**VQ**	**Result**	**DL**	**VQ**	**Result**	**DL**	**VQ**	**Result**	**DL**	**VQ**	**Result**	**DL**	**VQ**
CWC239152	0.64	0.64	U	20	0.64	=	1.3	1.0	=	0.64	0.64	U	19	1.3	=
CWC239152-1	0.68	0.68	U	19	0.68	=	1.1	1.1	U	0.68	0.68	U	23	1.4	=
CWC239152-2	1.42	1.42	U	11.6	0.48	=	2.28	0.12	=	0.02	0.02	U	13.3	3.02	=
CWC248041	0.72	0.18	=	9.5	0.18	=	1.6	0.28	=	0.18	0.18	U	12	0.36	=
CWC248041-1	0.49	0.18	=	8.9	0.18	=	1.2	0.29	=	0.18	0.18	U	10	0.37	=
CWC248041-2	1.64	1.64	U	13.8	0.58	=	1.7	0.15	=	0.1	0.03	=	15.7	3.64	=

[a] Samples ending in "-1" are duplicate samples. Samples ending in "-2" are split samples.
[b] Result values are expressed in mg/kg.
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 2021

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
CWC239151	-0.04	0.17	0.52	UJ	*	*	*	*	0.48	0.42	0.58	UJ	0.63	0.46	0.35	J
CWC239151-1	-0.08	0.17	0.60	UJ	*	*	*	*	0.88	0.63	0.72	J	0.88	0.63	0.72	J
CWC239151-2	0.08	0.09	0.13	UJ	*	*	*	*	-0.1	0.13	0.31	UJ	-0.09	0.18	0.32	UJ
CWC248040	0.35	0.51	1.09	UJ	*	*	*	*	0.64	0.50	0.77	UJ	1.21	0.62	0.47	J
CWC248040-1	0.24	0.38	0.84	UJ	*	*	*	*	0.52	0.40	0.51	J	0.89	0.50	0.35	J
CWC248040-2	0.41	0.26	0.34	J	*	*	*	*	0.03	0.13	0.22	UJ	0.06	0.18	0.27	UJ
SLA238258	0.28	0.38	0.70	UJ	*	*	*	*	0.21	0.43	1.00	UJ	1.53	0.69	0.48	J
SLA238258-1	0.12	0.23	0.52	UJ	*	*	*	*	0.98	0.59	0.65	J	2.72	0.97	0.49	J
SLA238258-2	0.07	0.09	0.14	UJ	*	*	*	*	0.08	0.22	0.39	UJ	0.25	0.32	0.43	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
CWC239151	-0.02	0.16	0.41	UJ	0.67	0.46	0.34	J	0.08	0.19	0.41	UJ	0.81	0.50	0.33	J
CWC239151-1	0.29	0.39	0.72	UJ	0.97	0.56	0.40	J	0.07	0.19	0.49	UJ	0.66	0.46	0.39	J
CWC239151-2	0.06	0.08	0.1	UJ	0.66	0.27	0.23	=	-0.04	0.07	0.24	UJ	0.64	0.25	0.15	=
CWC248040	0.2	0.26	0.39	UJ	0.36	0.31	0.34	J	-0.02	0.16	0.42	UJ	0.38	0.34	0.46	UJ
CWC248040-1	-0.02	0.13	0.34	UJ	0.38	0.33	0.35	J	0.04	0.17	0.52	UJ	0.27	0.30	0.49	UJ
CWC248040-2	0.04	0.07	0.12	UJ	0.30	0.14	0.12	=	-0.01	0.01	0.10	UJ	0.37	0.15	0.07	=
SLA238258	-0.04	0.16	0.48	UJ	194	17.2	0.42	=	8.78	1.49	0.46	=	200	17.7	0.26	=
SLA238258-1	0.29	0.31	0.41	UJ	229	20	0.39	=	10.2	1.68	0.34	=	235	21.0	0.3	=
SLA238258-2	0.03	0.08	0.17	UJ	963	96	5.19	=	60.2	15.3	2.58	=	925	92.7	2.07	=

[a] Samples ending in "-1" are duplicate samples. Samples ending in "-2" are split samples.
[b] Result values are expressed in pCi/L. 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 2021

Soil Sample Name[a]	Th-228[b,c]				Th-230[b,c]				Th-232[b,c]			
	Result	Error	MDC	VQ	Result	Error	MDC	VQ	Result	Error	MDC	VQ
CWC239152	0.86	0.37	0.21	=	1.63	0.53	0.19	J	0.94	0.39	0.15	=
CWC239152-1	0.96	0.40	0.22	=	1.68	0.54	0.18	J	0.71	0.34	0.15	=
CWC239152-2	0.94	0.20	0.12	=	2.38	0.35	0.14	=	0.95	0.19	0.05	=
CWC248041	0.76	0.29	0.14	=	1.75	0.47	0.15	=	0.91	0.32	0.12	=
CWC248041-1	0.59	0.24	0.11	=	1.97	0.49	0.17	=	0.68	0.27	0.17	=
CWC248041-2	0.38	0.13	0.10	=	1.03	0.21	0.12	=	0.42	0.12	0.05	=
Soil Sample Name[a]	**Ac-227[c]**				**Am-241[c]**				**Cs-137[c]**			
	Result	Error	MDC	VQ	Result	Error	MDC	VQ	Result	Error	MDC	VQ
CWC239152	0.05	0.15	0.26	UJ	-0.01	0.03	0.05	UJ	-0.01	0.01	0.02	UJ
CWC239152-1	0.11	0.15	0.27	UJ	-0.01	0.03	0.04	UJ	-0.01	0.01	0.02	UJ
CWC239152-2	0.10	0.38	0.83	UJ	0.03	0.16	0.27	UJ	-0.02	0.08	0.13	UJ
CWC248041	0.05	0.13	0.22	UJ	0.00	0.03	0.04	UJ	0.00	0.01	0.02	UJ
CWC248041-1	0.07	0.13	0.22	UJ	0.01	0.02	0.04	UJ	0.00	0.01	0.02	UJ
CWC248041-2	0.10	0.59	0.77	UJ	-0.04	0.19	0.33	UJ	-0.02	0.05	0.11	UJ
Soil Sample Name[a]	**K-40[c]**				**Pa-231[c]**				**Ra-226[c]**			
	Result	Error	MDC	VQ	Result	Error	MDC	VQ	Result	Error	MDC	VQ
CWC239152	9.93	1.35	0.23	=	-0.27	0.54	0.89	UJ	1.19	0.30	0.06	=
CWC239152-1	10.30	1.40	0.22	=	-0.11	0.54	0.91	UJ	1.18	0.30	0.06	=
CWC239152-2	11.60	1.83	0.55	=	0.42	1.59	5.07	UJ	0.99	0.20	0.12	=
CWC248041	11.80	1.55	0.20	=	0.18	0.47	0.80	UJ	1.02	0.26	0.05	=
CWC248041-1	11.60	1.52	0.17	=	-0.59	0.47	0.73	UJ	0.99	0.25	0.05	=
CWC248041-2	9.18	1.63	0.65	=	0.63	2.16	3.64	UJ	0.72	0.17	0.12	=
Soil Sample Name[a]	**Ra-228[c]**				**Th-228[c]**				**Th-230[c]**			
	Result	Error	MDC	VQ	Result	Error	MDC	VQ	Result	Error	MDC	VQ
CWC239152	0.65	0.08	0.06	=	0.65	0.08	0.06	=	2.29	2.74	4.61	UJ
CWC239152-1	0.65	0.10	0.06	=	0.65	0.10	0.06	=	2.01	2.02	3.28	UJ
CWC239152-2	0.77	0.17	0.08	=	0.77	0.17	0.08	=	*	*	*	*
CWC248041	0.55	0.07	0.05	=	0.55	0.07	0.05	=	1.39	2.46	4.14	UJ
CWC248041-1	0.56	0.07	0.05	=	0.56	0.07	0.05	=	1.88	1.94	3.15	UJ
CWC248041-2	0.54	0.22	0.20	=	0.54	0.22	0.20	=	*	*	*	*
Soil Sample Name[a]	**Th-232[c]**				**U-235[c]**				**U-238[c]**			
	Result	Error	MDC	VQ	Result	Error	MDC	VQ	Result	Error	MDC	VQ
CWC239152	0.65	0.08	0.06	=	0.00	0.17	0.28	UJ	0.93	0.17	0.27	=
CWC239152-1	0.65	0.10	0.06	=	0.03	0.17	0.28	UJ	0.79	0.15	0.28	=
CWC239152-2	0.77	0.17	0.08	=	0.08	0.23	1.09	UJ	0.72	0.38	0.66	J
CWC248041	0.55	0.07	0.05	=	0.03	0.16	0.26	UJ	0.76	0.13	0.27	=
CWC248041-1	0.56	0.07	0.05	=	0.05	0.15	0.25	UJ	0.89	0.15	0.28	=
CWC248041-2	0.54	0.22	0.20	=	0.17	0.48	0.95	UJ	0.63	0.72	0.95	UJ

[a] Samples ending in “-1” are duplicate samples. Samples ending in “-2” are split samples.
[b] Results from alpha spectroscopy.
[c] Result values are expressed in pCi/g.
* 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.

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 2021 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 4.7 mrem per year, estimated for an individual who works full time at a location approximately 75 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 0.8 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 0.3 mrem per year, estimated for a resident who lives full time at a location approximately 230 m north-northwest and 2,000 m north from the center of the I-270/Pershall Road and VP-56 excavation areas and the IA-09 Ballfields excavation area, respectively.

The TEDE from CWC to a hypothetical maximally exposed individual from all complete/applicable pathways combined was less than 0.2 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 2021 at applicable NC Sites are documented on Figure 6-1. A comparison of the maximum annual dose from CY 2000 to CY 2021 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 2021 and were thus incorporated into radiological dose estimates.

Table 6-1. Complete Radiological Exposure Pathways

Exposure Pathway	Pathway Description	Applicable to CY 2021 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 2021. 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 2021 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 2021 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 2021 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 2021 TEDE for a hypothetical maximally exposed individual near the Latty Avenue Properties, the SLAPS, the SLAPS VPs, and CWC is 4.7 mrem per year, less than 0.8 mrem per year, 0.3 mrem per year, and 0.2 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 2021. This section discusses the estimated TEDE to a hypothetical maximally exposed individual assumed to be located approximately 75 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 75 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 2022b).
- 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 2022b).
- 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 (Leidos 2022b).
- 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 2022b).

Based on the exposure scenario and assumptions described previously, a maximally exposed individual working outside at the Futura facility located 75 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, less than 0.1 mrem per year from airborne radioactive particulates, and 4.6 mrem per year from Rn-222, for a TEDE of 4.7 mrem per year (Leidos 2022b).

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 2021) 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 2022c).
- 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 2022c).
- 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 2022c).
- 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 2022c).

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 0.6 mrem per year from airborne radioactive particulates, and 0.2 mrem per year from Rn-222, for a TEDE of 0.8 mrem per year (Leidos 2022c).

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 2021) include the following: I-270/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 230 m north-northwest and 2,000 m north of the I-270/Pershall Road and VP-56 excavations and the IA-09 Ballfields excavation, 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 230 m north-northwest and 2,000 m north of the I-270/Pershall Road and VP-56 excavations and the IA-09 Ballfields excavation, respectively. Exposure time is 8,760 hours per year (Leidos 2022c).
- 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 2022c).

Based on the exposure scenario and assumptions described previously, a maximally exposed individual living at the residence receptor location 230 m west-northwest and 2,000 m north of the I-270/Pershall Road and VP-56 excavations and the IA-09 Ballfields excavation, respectively would have received 0.2 mrem per year from airborne radioactive particulates for a TEDE of 0.2 mrem per year (Leidos 2022c).

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 2022d).
- The soil/sediment ingestion rate is 50 mg per day, and the water ingestion rate is 2 L per day (USEPA 1989b; Leidos 2022d).
- The UCL_{95} of the mean radionuclide concentrations in CWC surface water/sediment samples collected in CY 2021 were assumed to be present in the water/sediment ingested by the maximally exposed individual (Leidos 2022d).
- 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 2022d).

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 0.1 mrem per year from water ingestion, for a TEDE of approximately 0.2 mrem per year (Leidos 2022d).

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FIGURES

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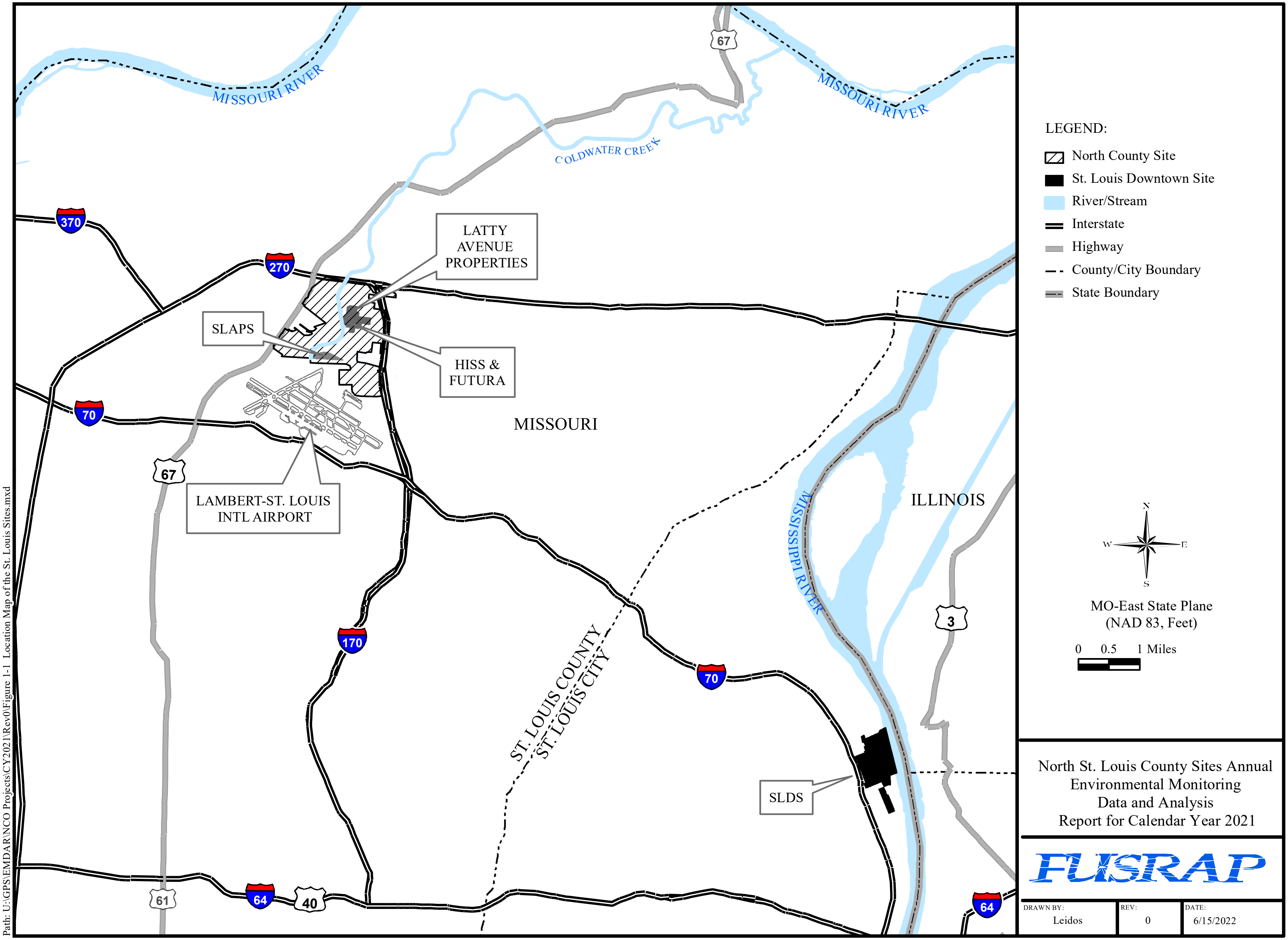
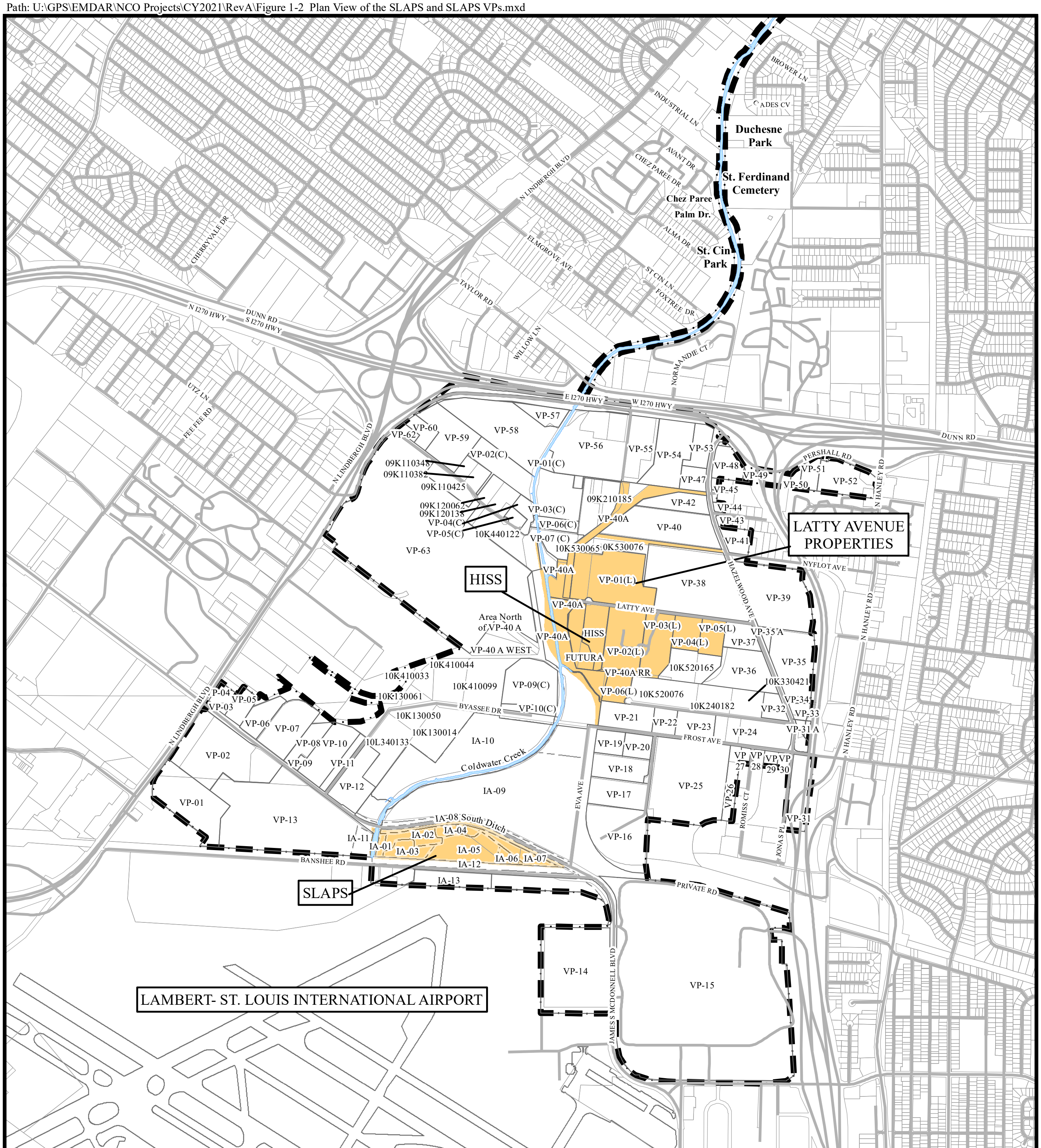


Figure 1-1. Location Map of the St. Louis Sites

Path: U:\GPS\EMDAR\NCO Projects\CY2021\RevA\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

North St. Louis County Sites Annual Environmental Monitoring Data and Analysis Report for Calendar Year 2021

FUSRAP

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

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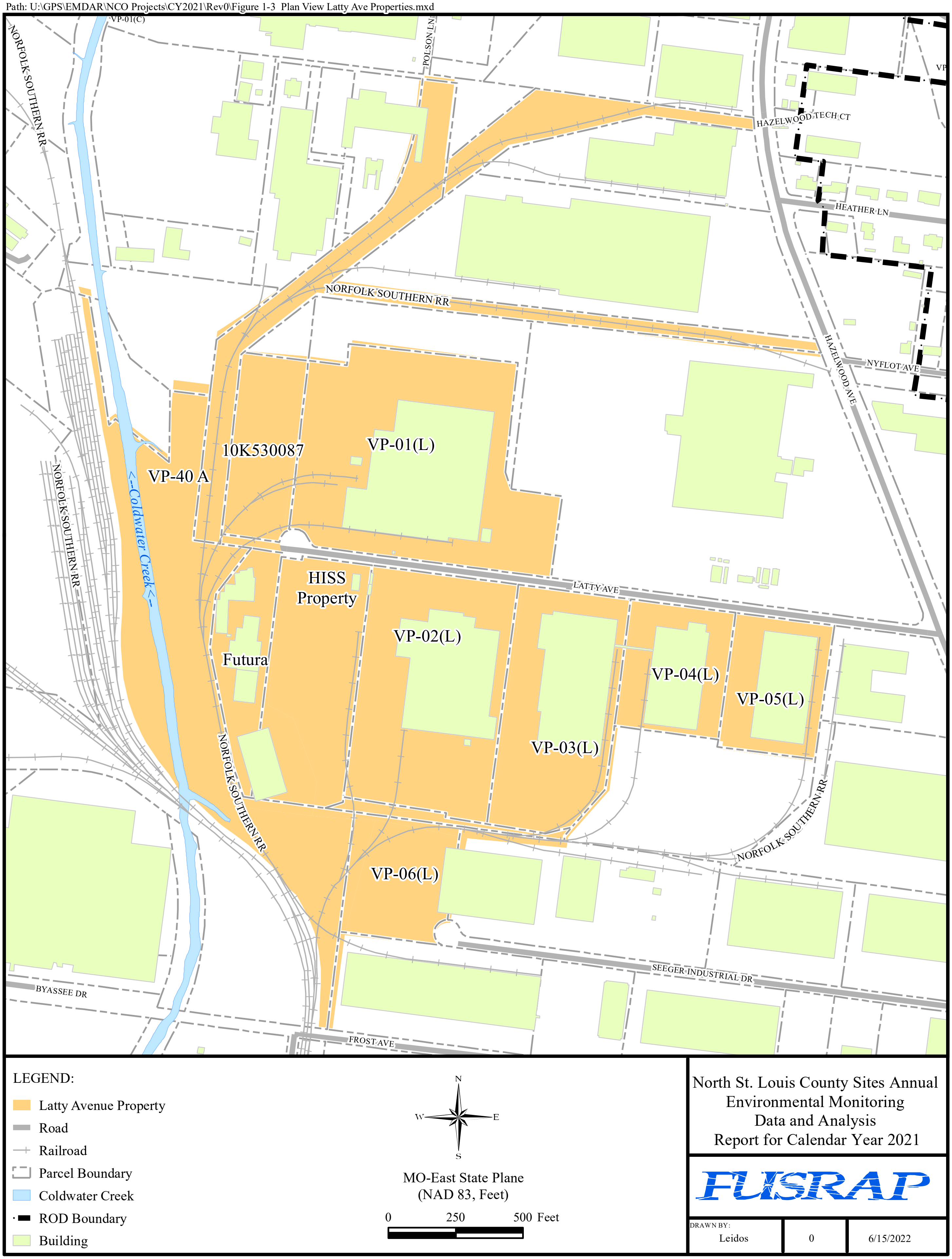


Figure 1-3. Plan View of the Latty Avenue Propeties including HISS and Futura

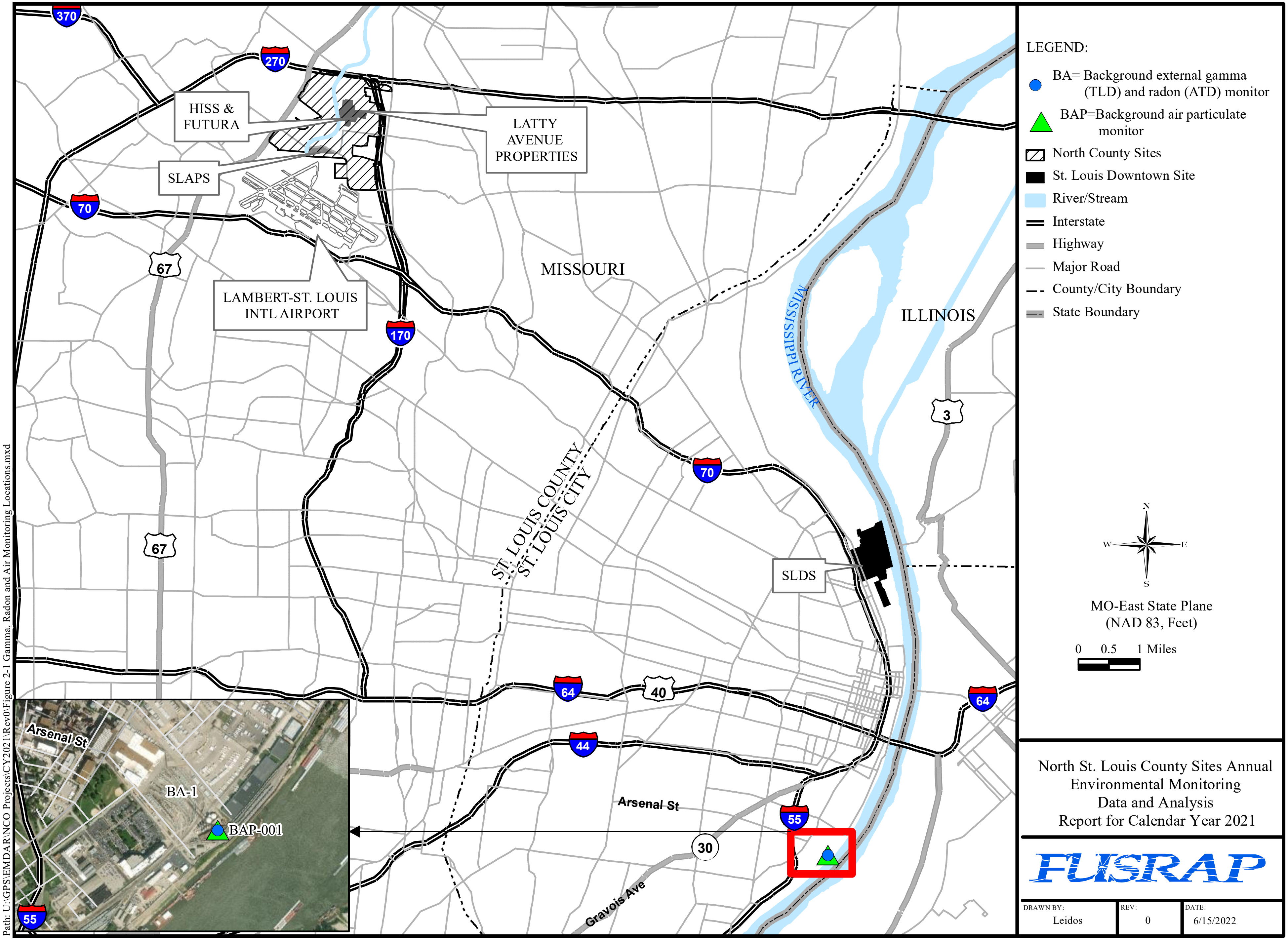


Figure 2-1. Gamma Radiation, Radon, and Particulate Air Monitoring at the St. Louis Background Location - USACE Service Base

Path: U:\GPS\EMDAR\NCO Projects\CY2021\Rev0\Figure 2-1 Gamma, Radon and Air Monitoring Locations.mxd

Path: U:\GPS\EMDAR\NCO Projects\CY2021\Rev0\Figure 2-2 Gamma Radiation, Rn, and Particulate Air Monitoring Locations at the Latty Avenue Properties.mxd

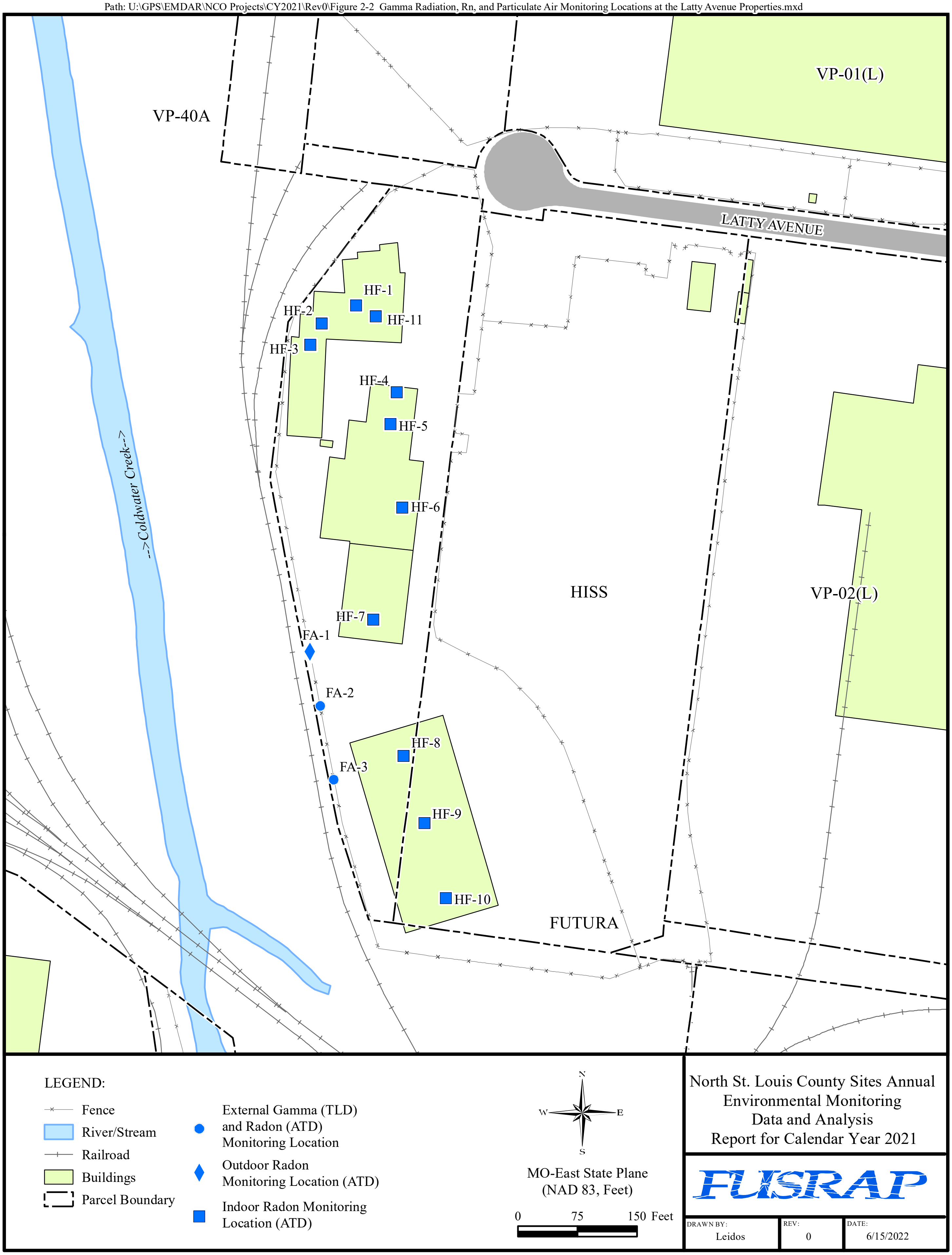


Figure 2-2. Gamma Radiation and Radon Monitoring Locations at the Latty Avenue Properties

Path: U:\GPS\EMDAR\NCO Projects\CY2021\Rev0\Figure 2-3 Gamma Radiation and Radon Monitoring Locations at the SLAPS.mxd

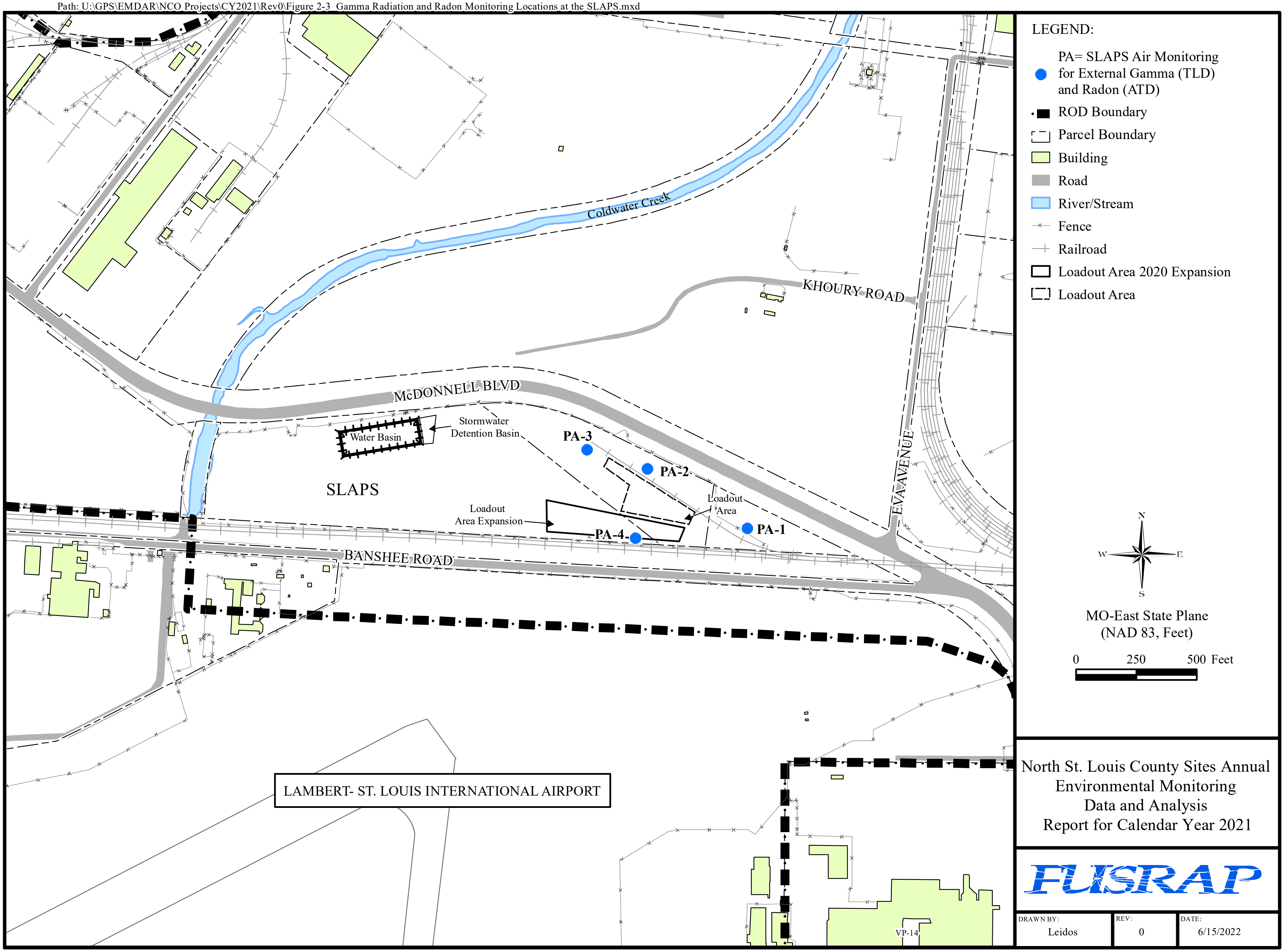
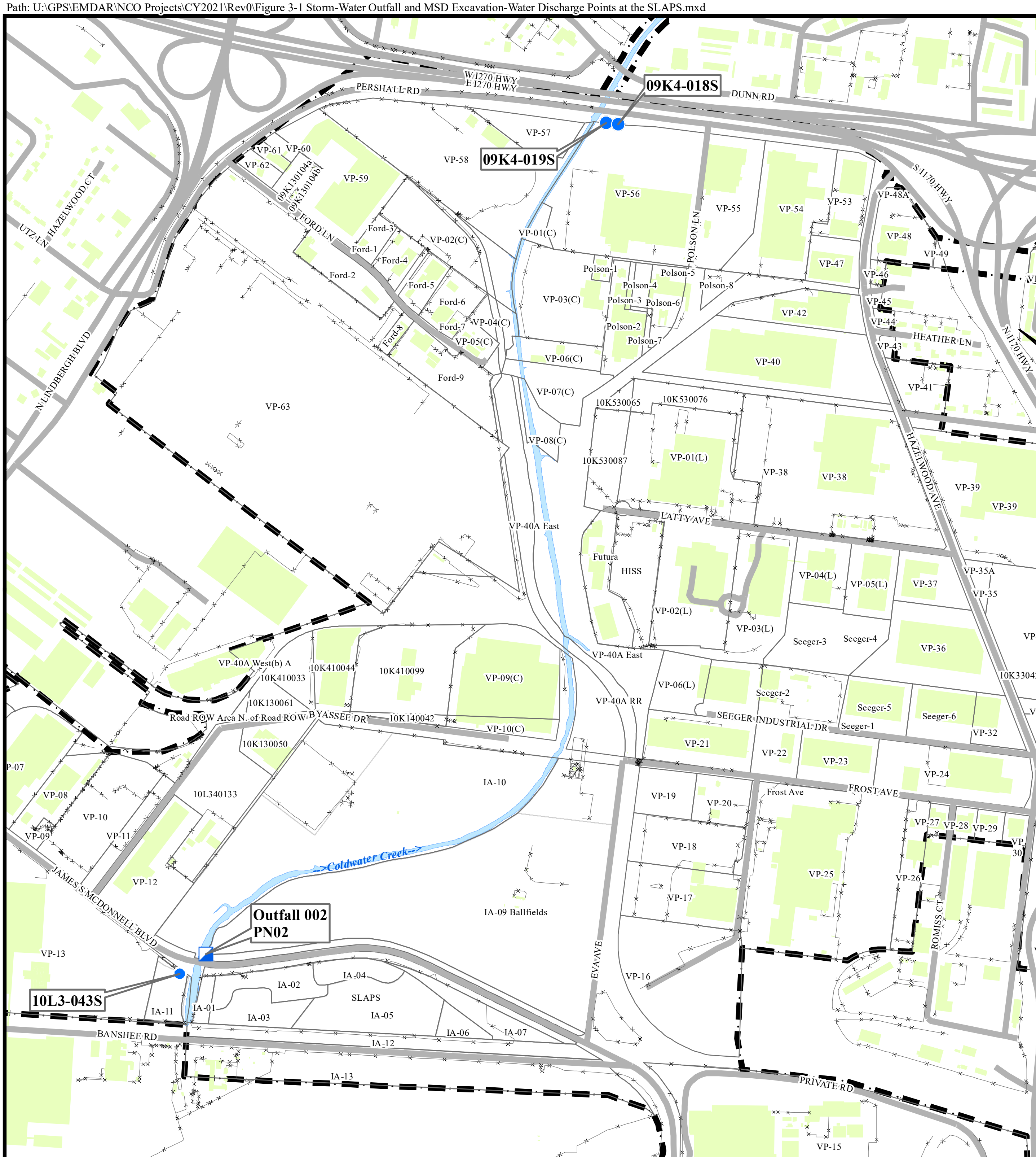


Figure 2-3. Gamma Radiation and Radon Monitoring Locations at the SLAPS

Path: U:\GPS\EMDAR\NCO Projects\CY2021\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 W E S

MO-East State Plane
(NAD 83, Feet)

0 500 1,000 Feet

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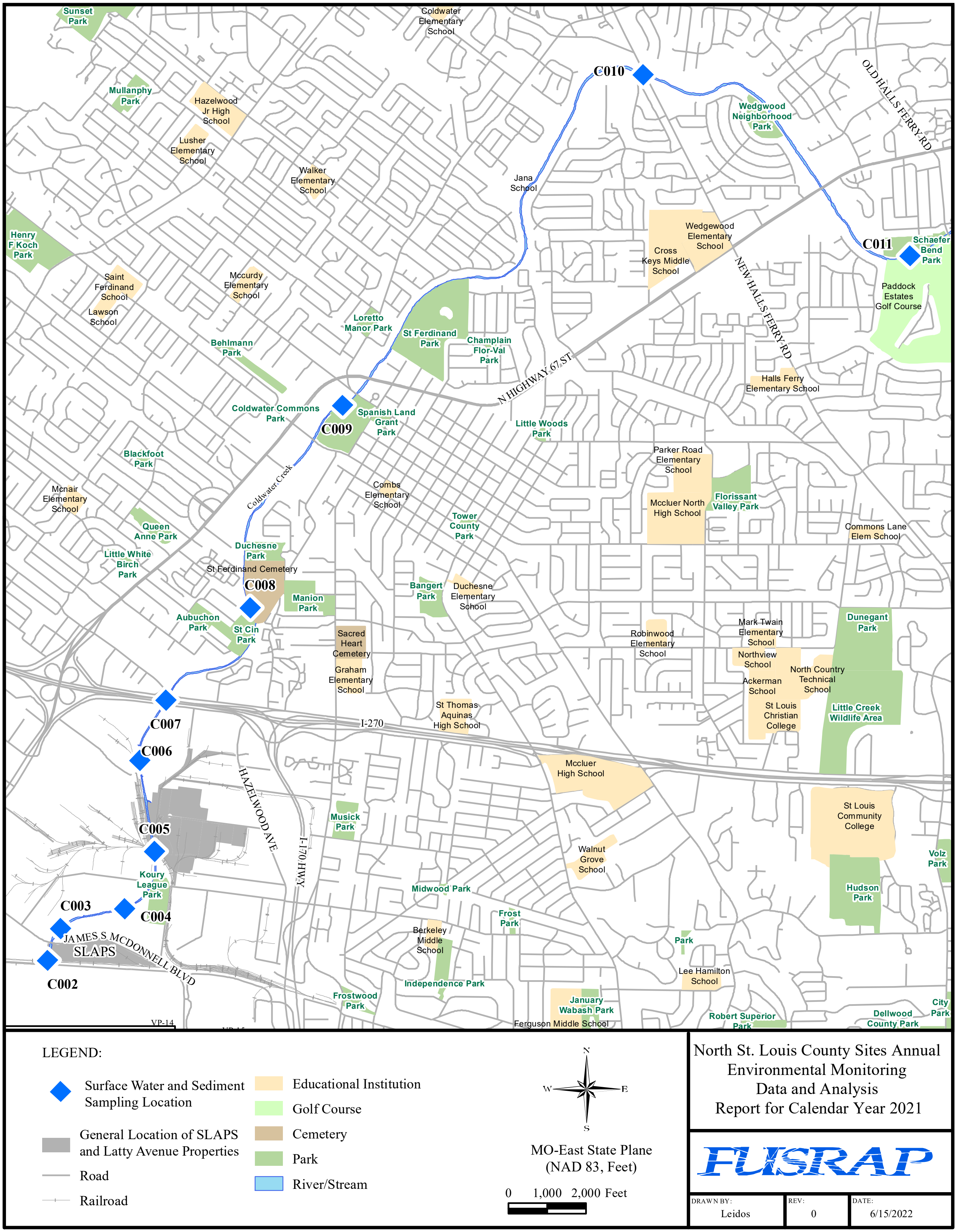
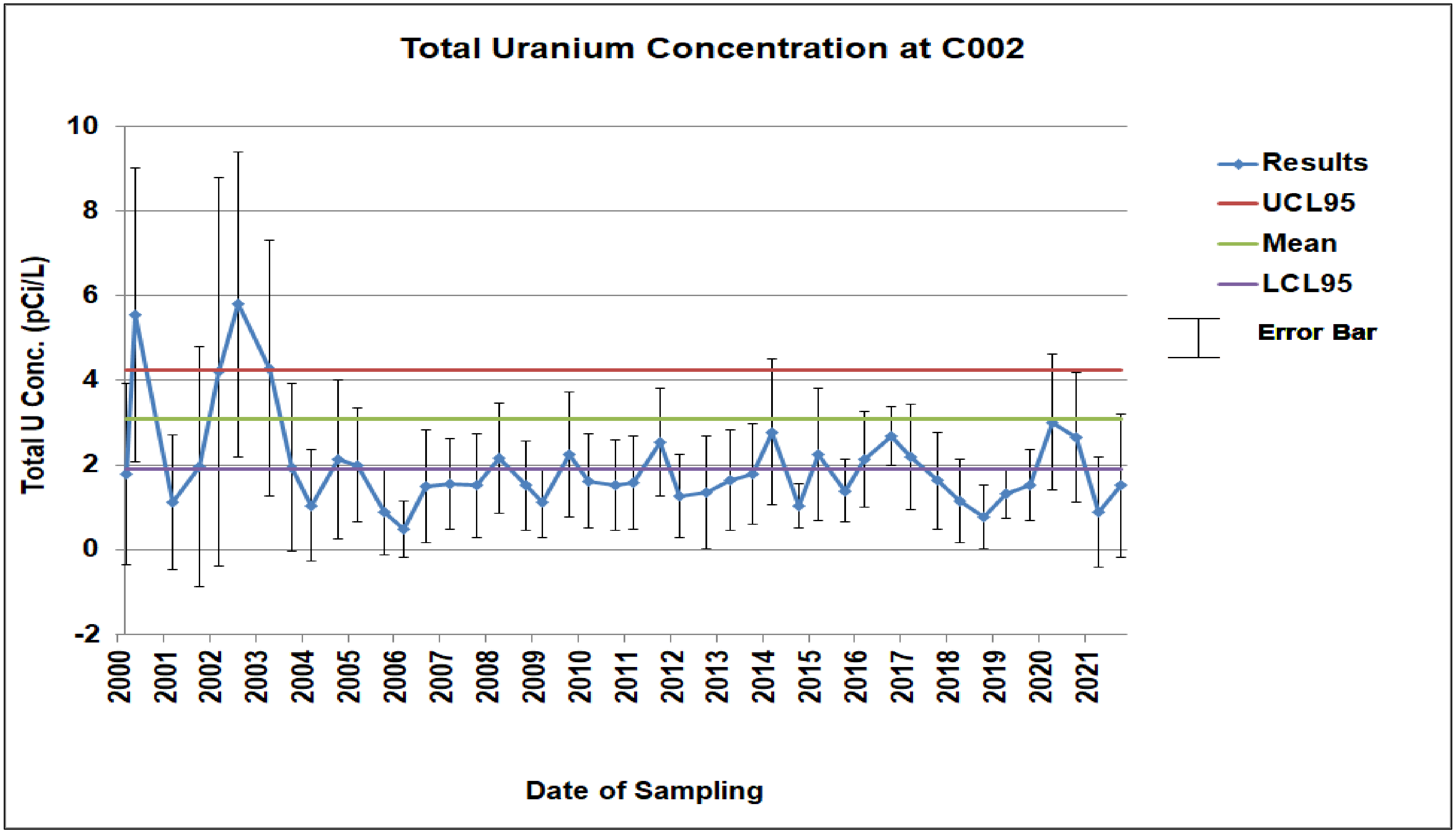
Figure 3-1. Stormwater Outfall and MSD Excavation Water Discharge Points at the SLAPS



Path: U:\GPS\EMDAR\NCO Projects\CY2021\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.

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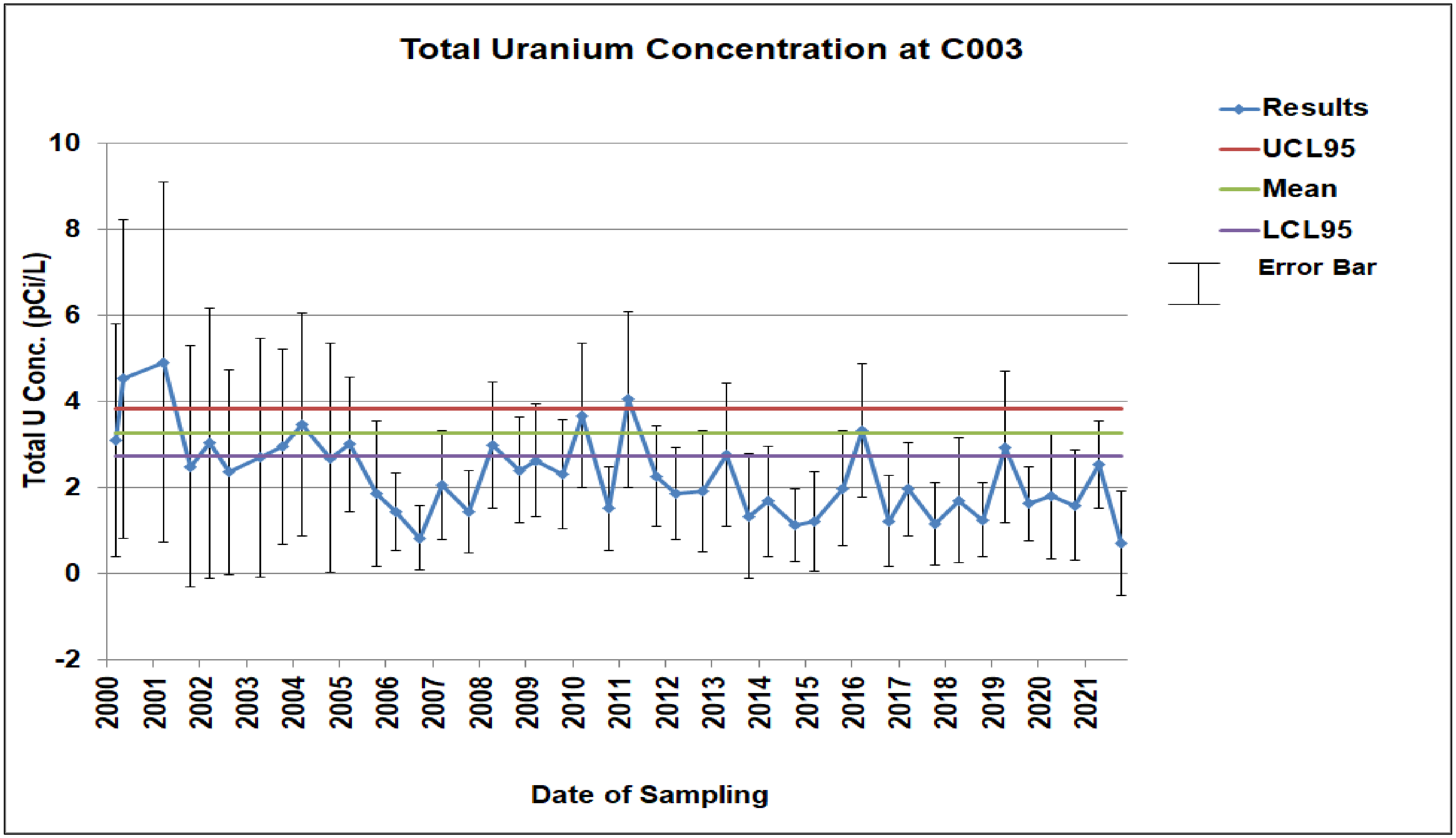
Figure 3-3. Total U Concentrations in Surface Water Versus Sampling Date



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

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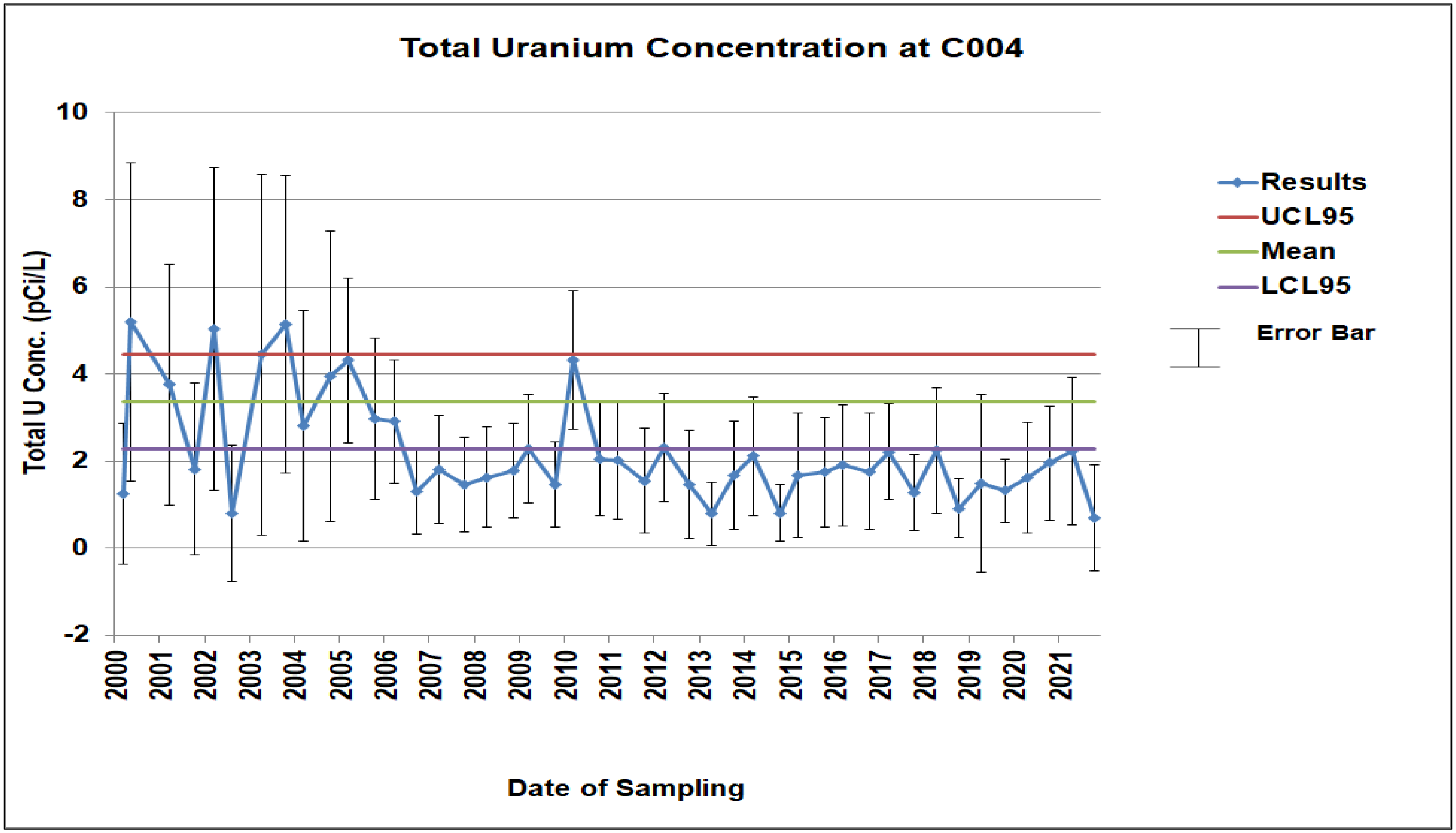
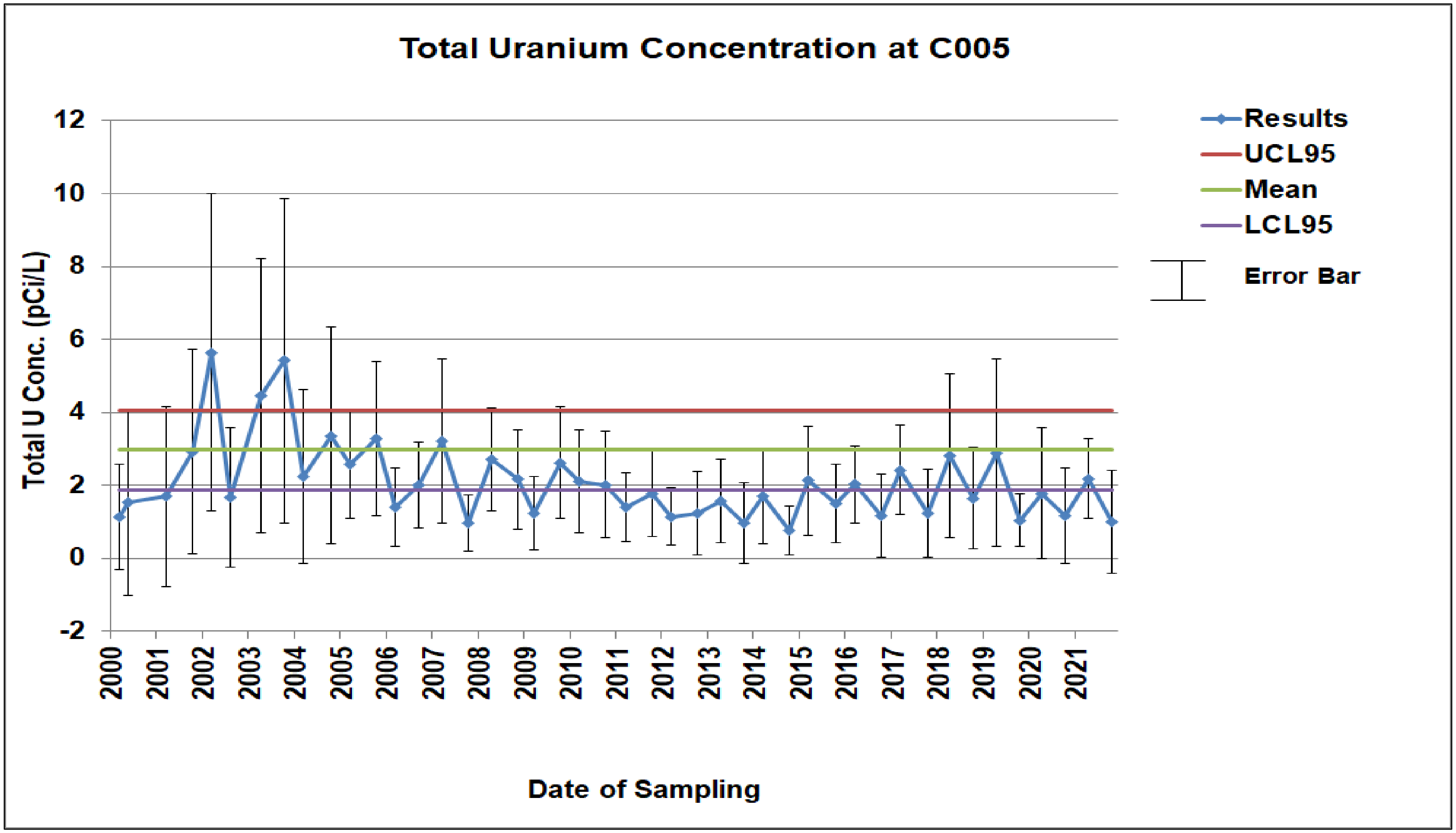
Figure 3-3. Total U Concentrations in Surface Water Versus Sampling Date (Continued)



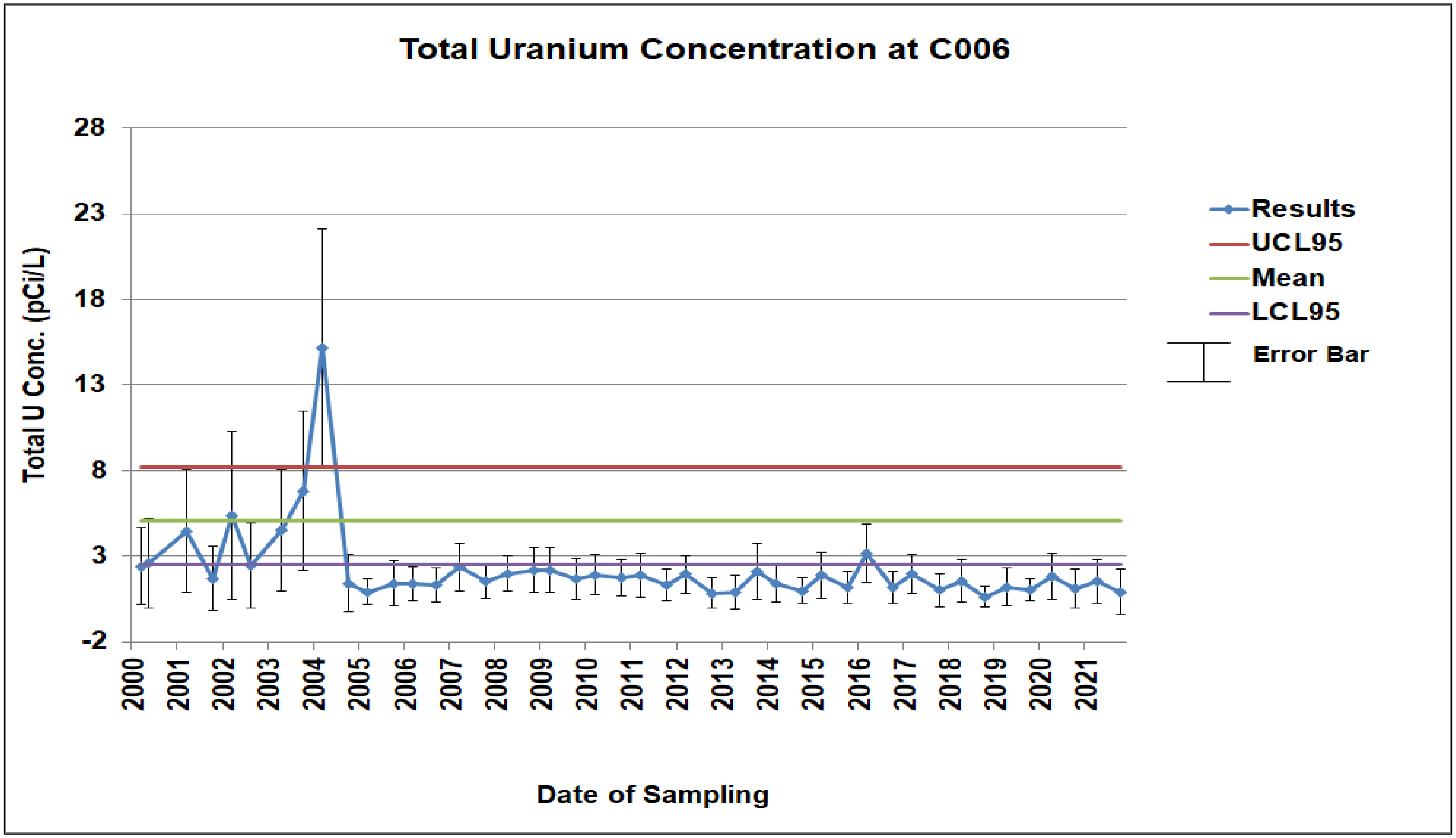
Note:
The error bar represents ± the sum of the measurement errors for U-234, U-235, and U-238.

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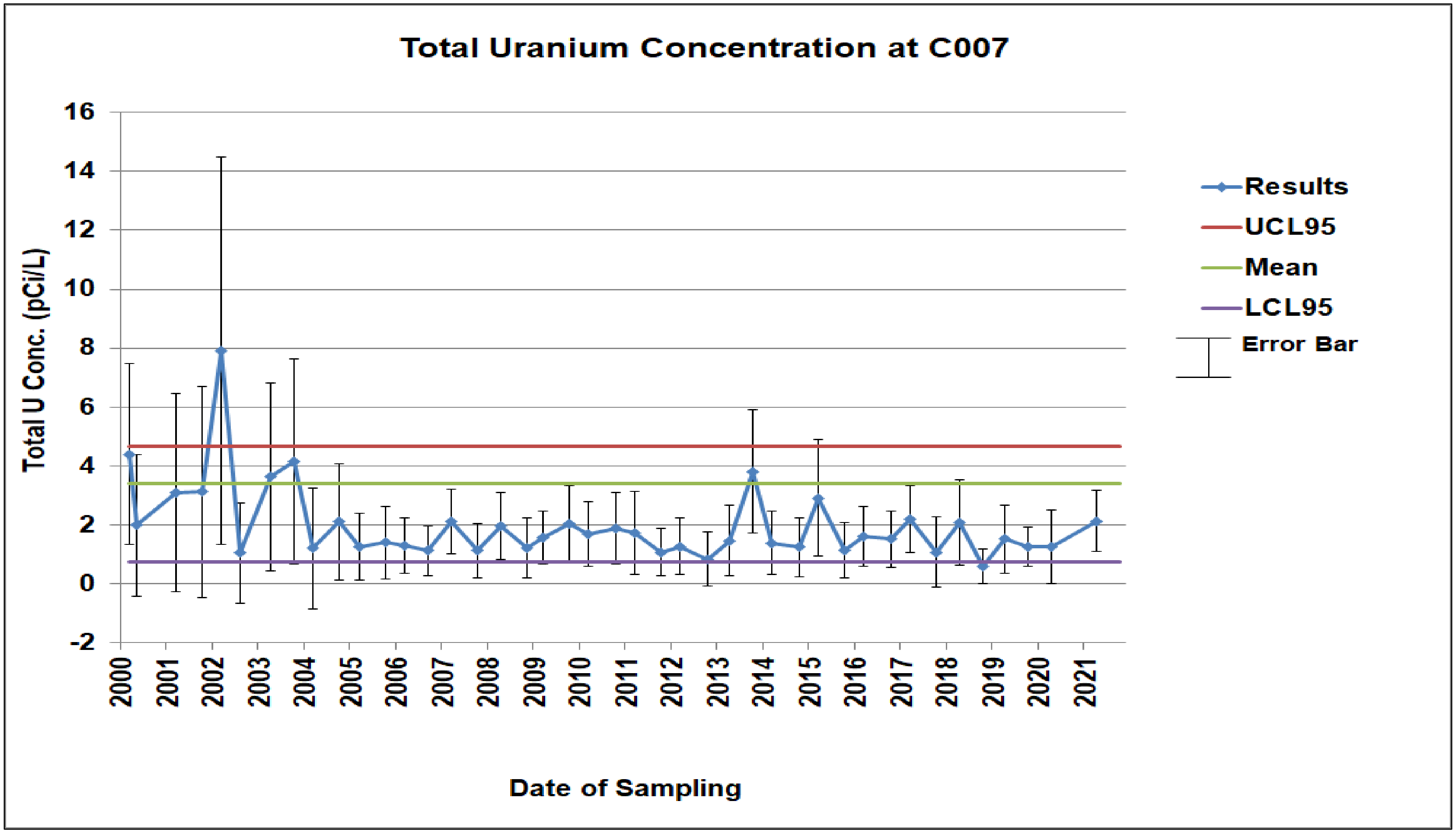
Figure 3-3. Total U Concentrations in Surface Water Versus Sampling Date (Continued)



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

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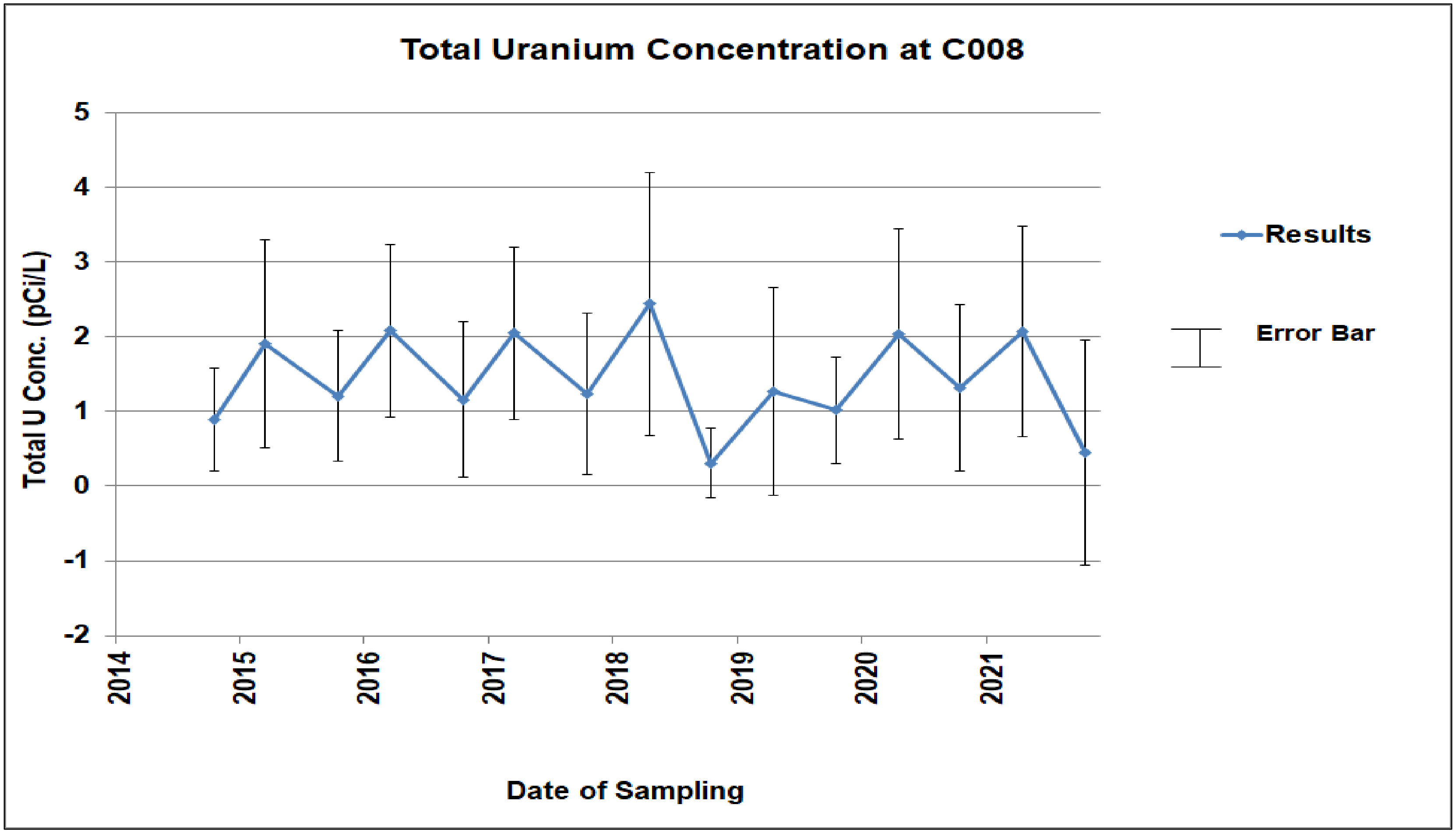
Figure 3-3. Total U Concentrations in Surface Water Versus Sampling Date (Continued)



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

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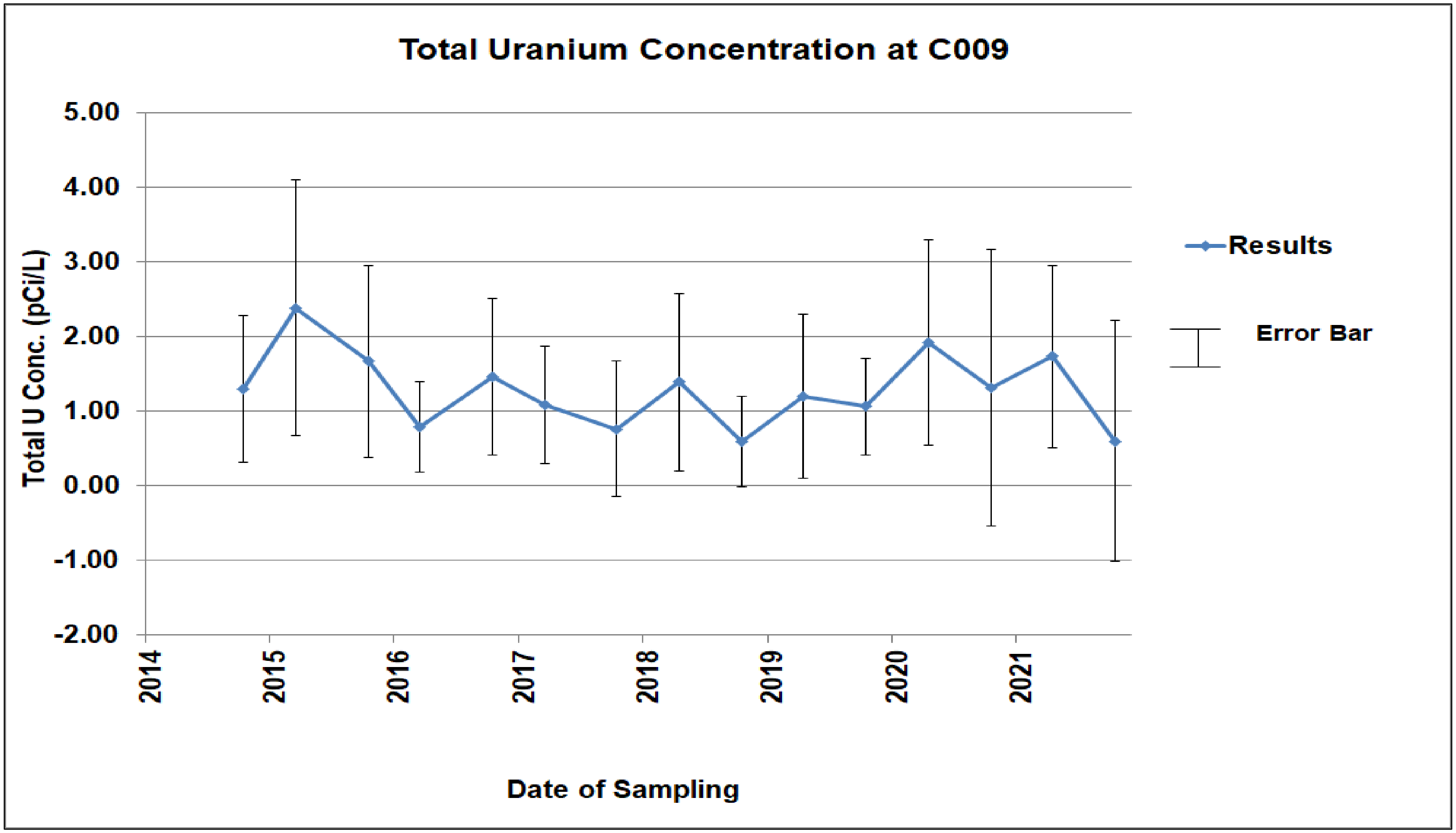
Figure 3-3. Total U Concentrations in Surface Water Versus Sampling Date (Continued)



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

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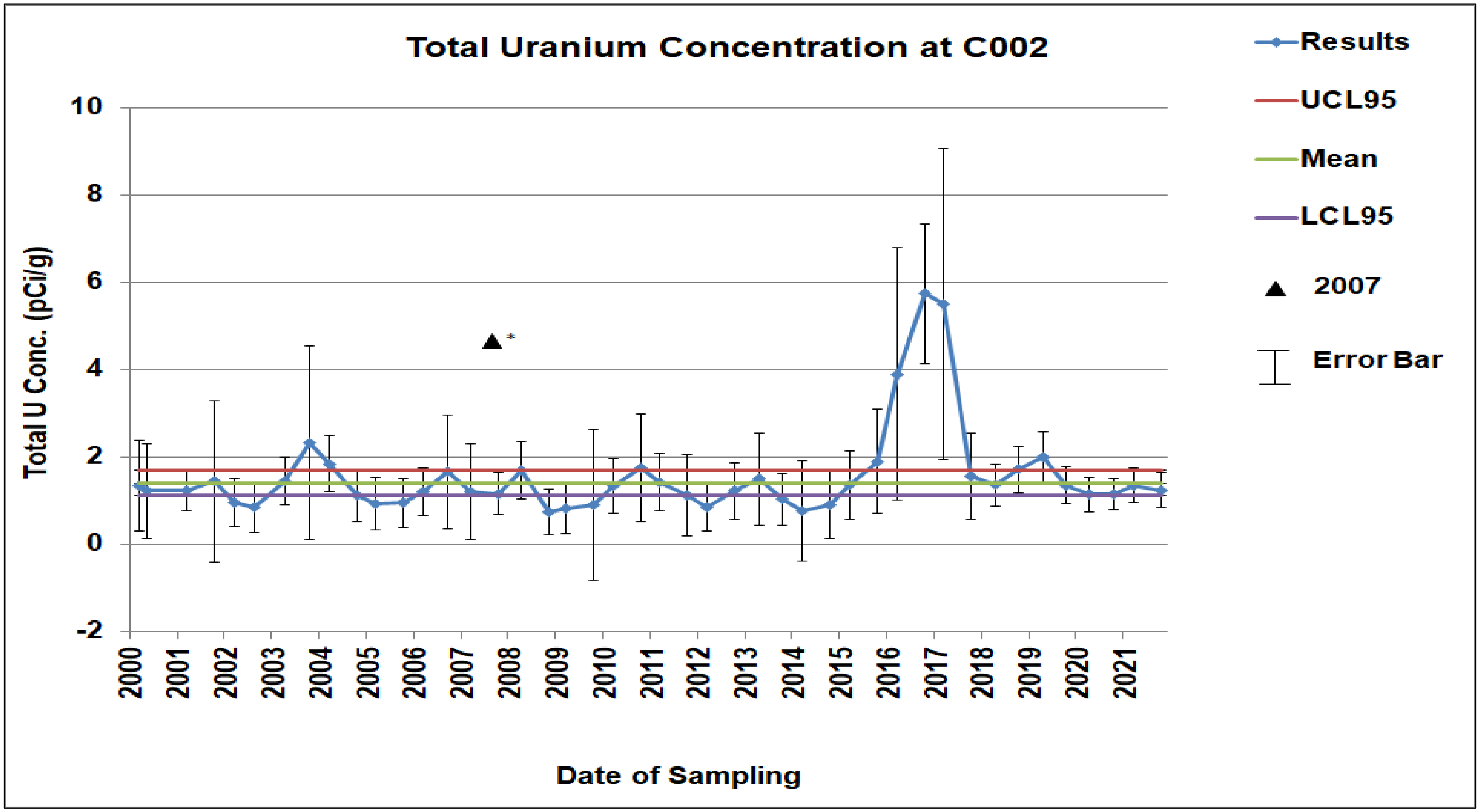
Figure 3-3. Total U Concentrations in Surface Water Versus Sampling Date (Continued)



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.

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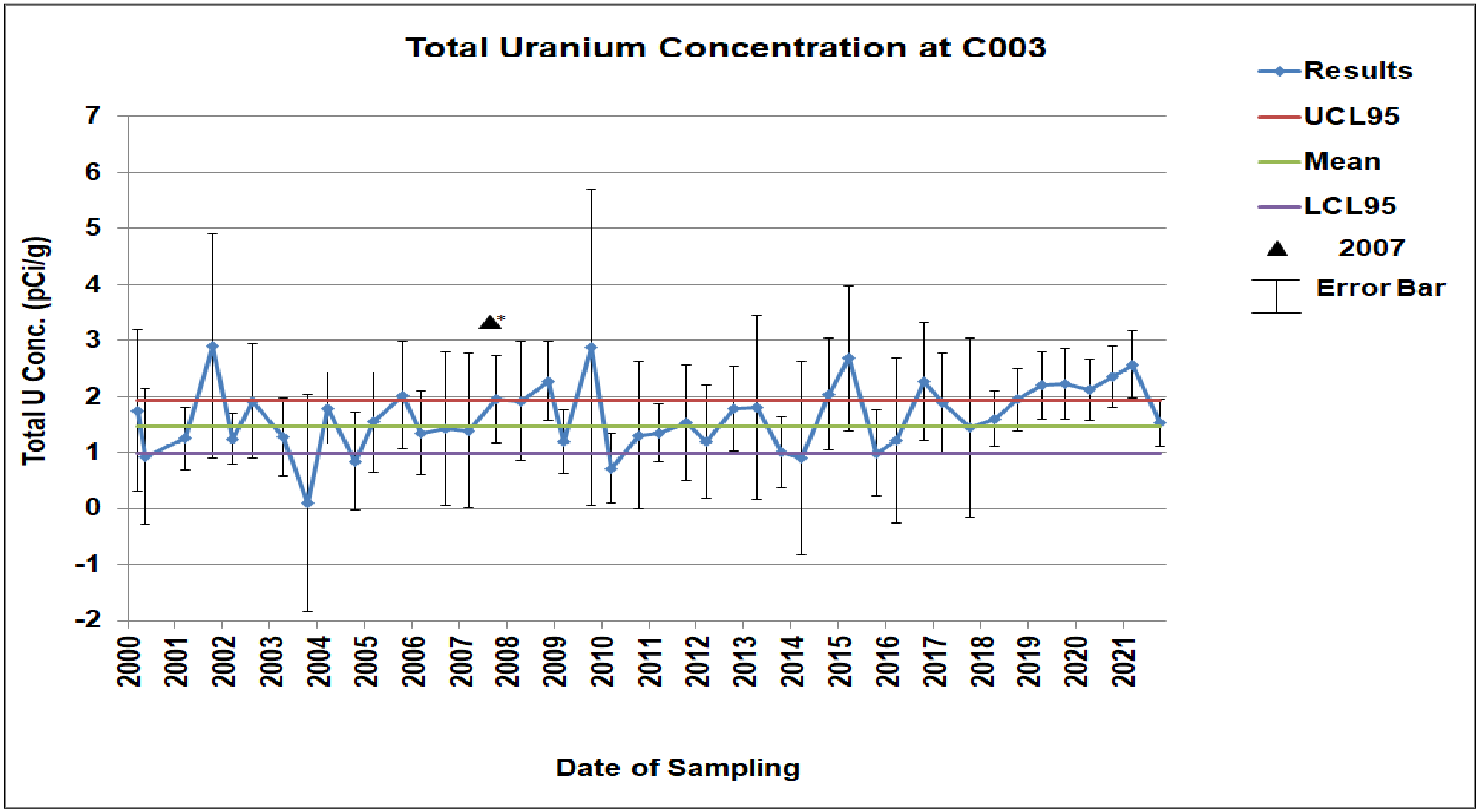
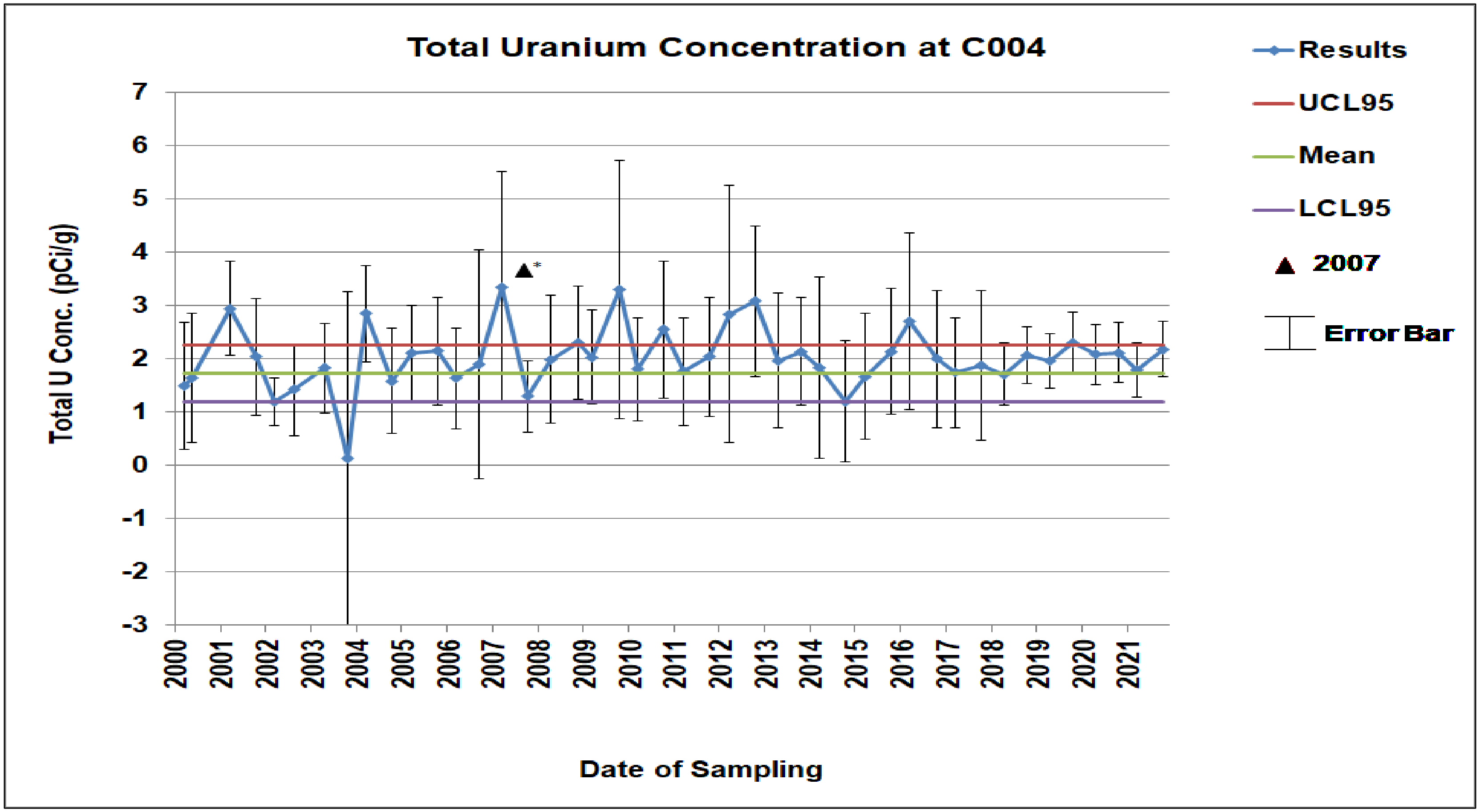
Figure 3-4. Total U Concentrations in Sediment Versus Sampling Date



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.

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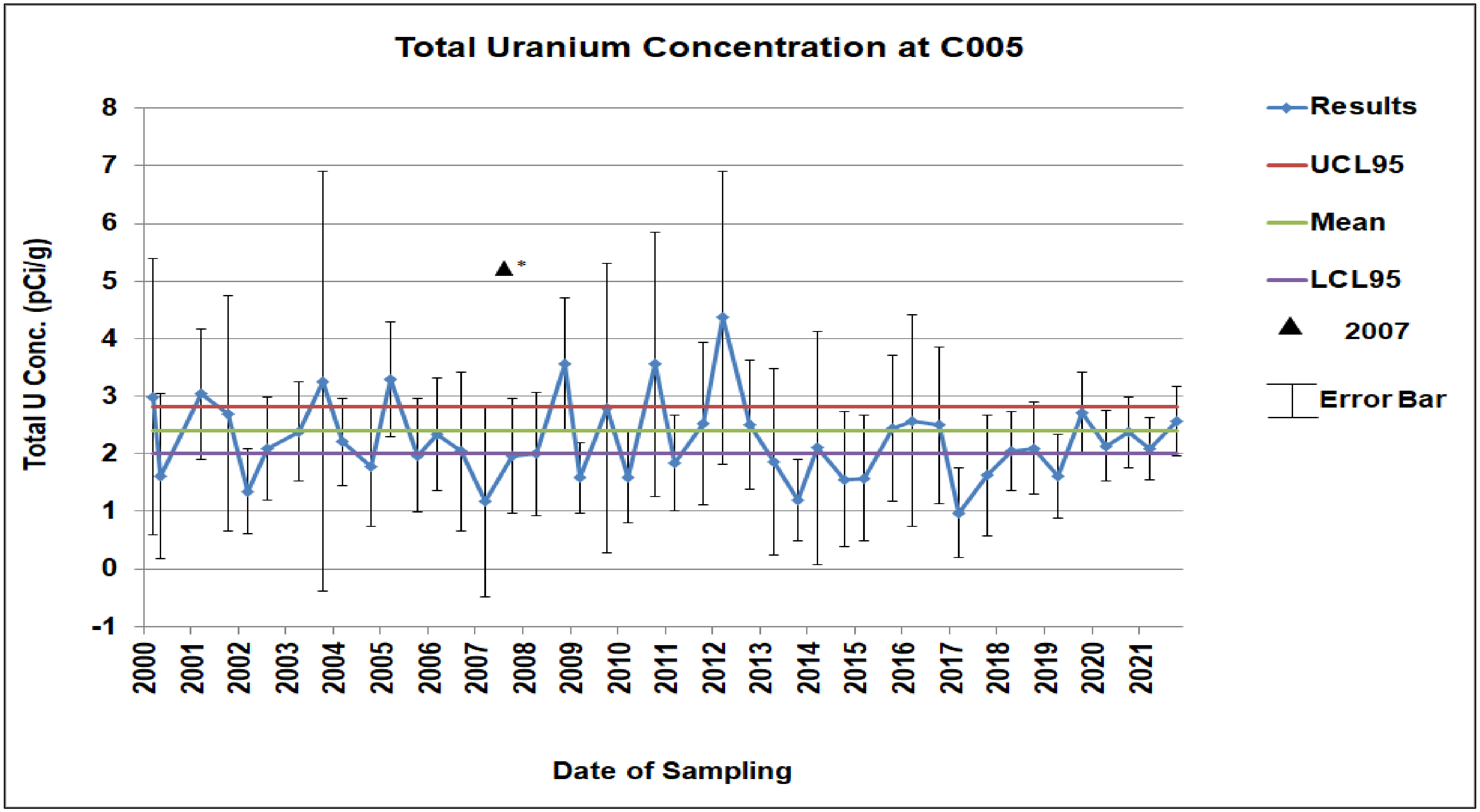
Figure 3-4. Total U Concentrations in Sediment Versus Sampling Date (Continued)



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.

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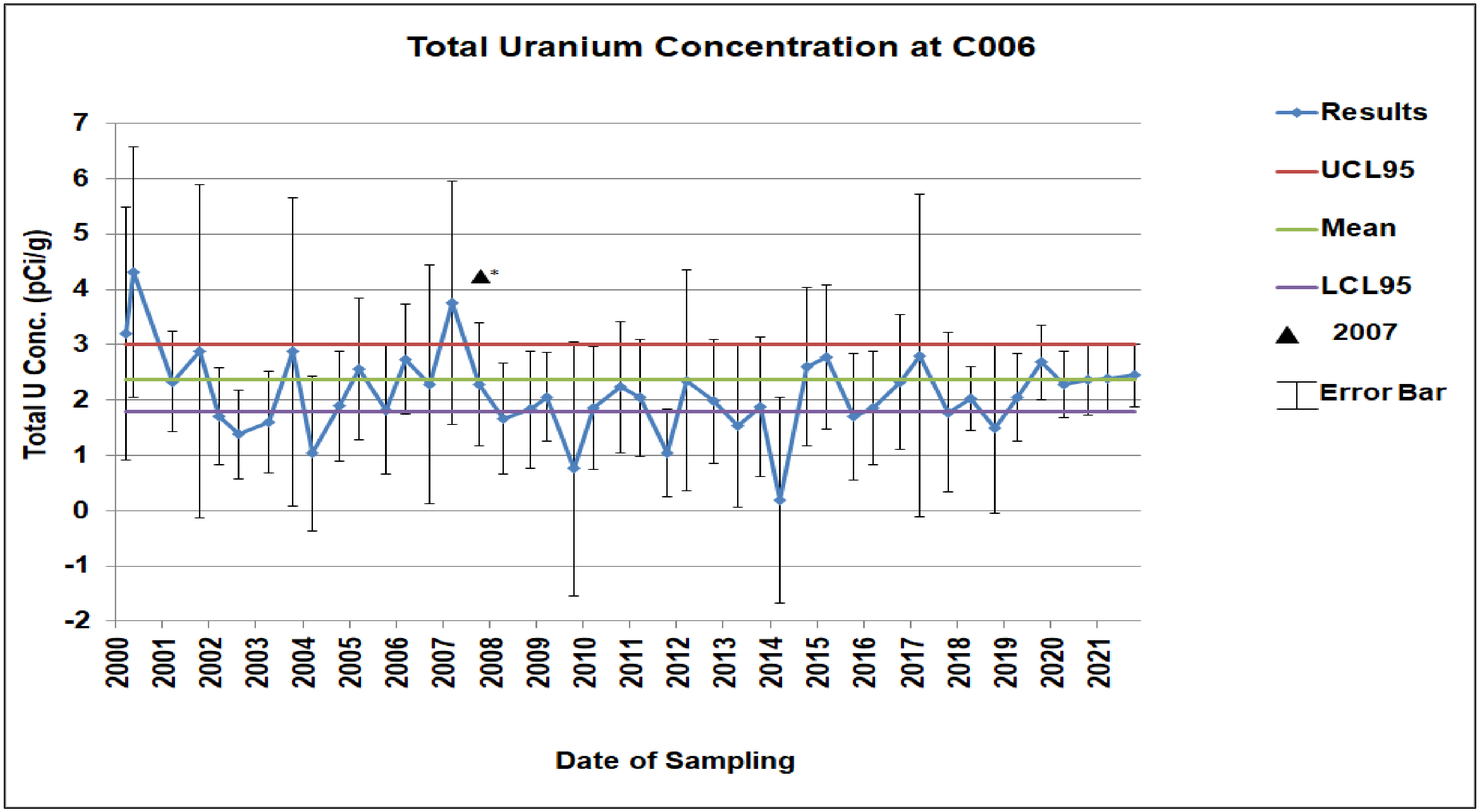
Figure 3-4. Total U Concentrations in Sediment Versus Sampling Date (Continued)



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.

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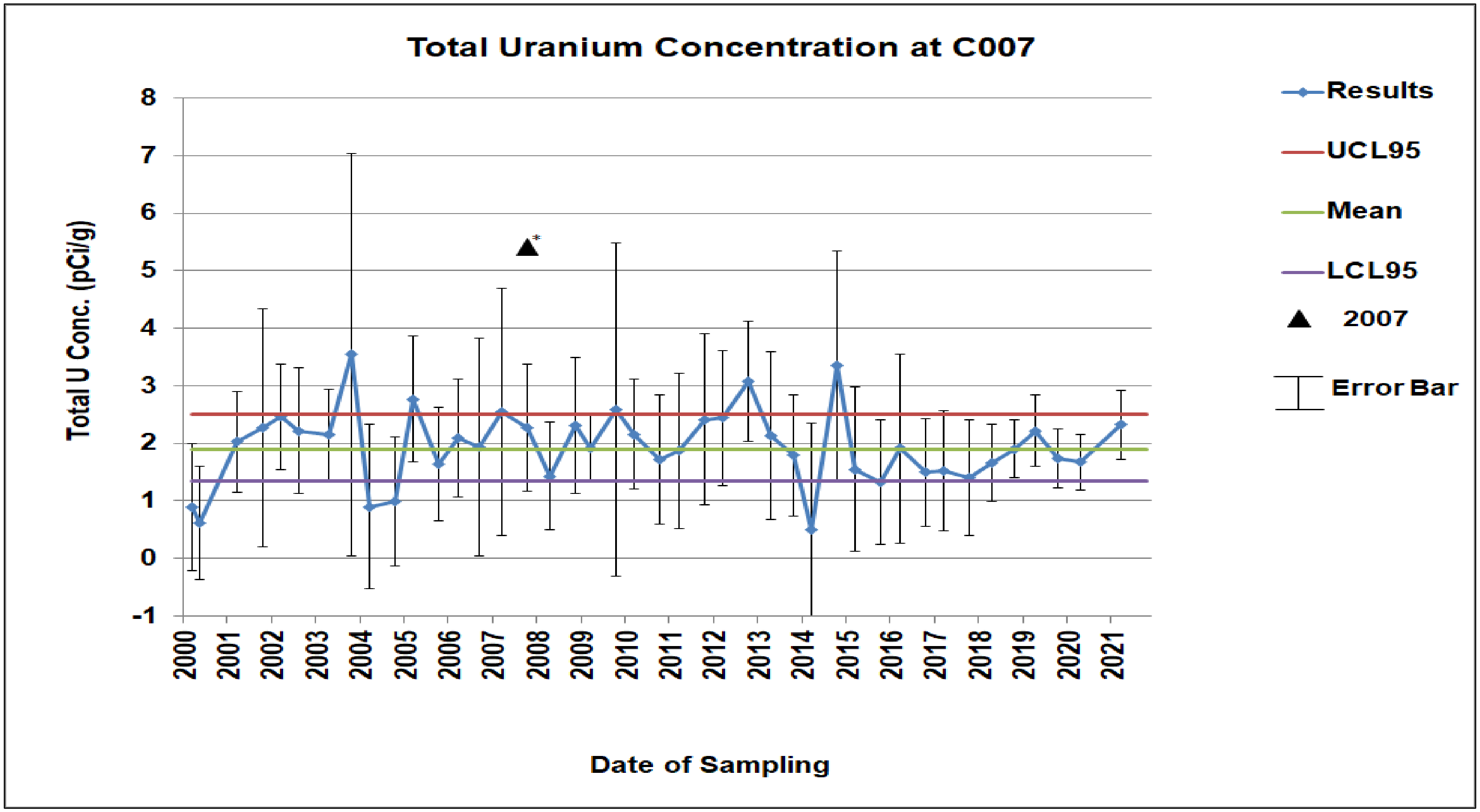
Figure 3-4. Total U Concentrations in Sediment Versus Sampling Date (Continued)



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.

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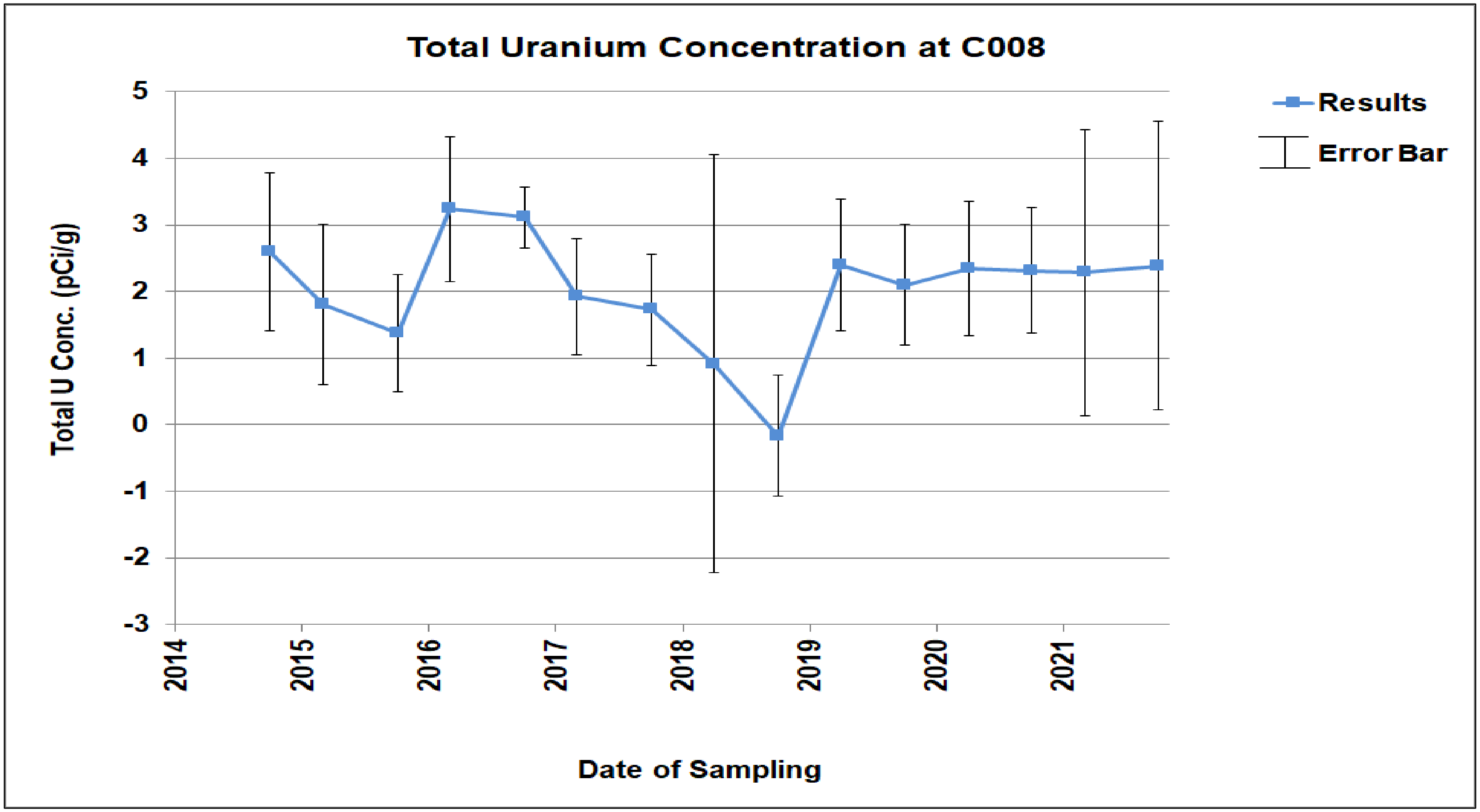
Figure 3-4. Total U Concentrations in Sediment Versus Sampling Date (Continued)



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

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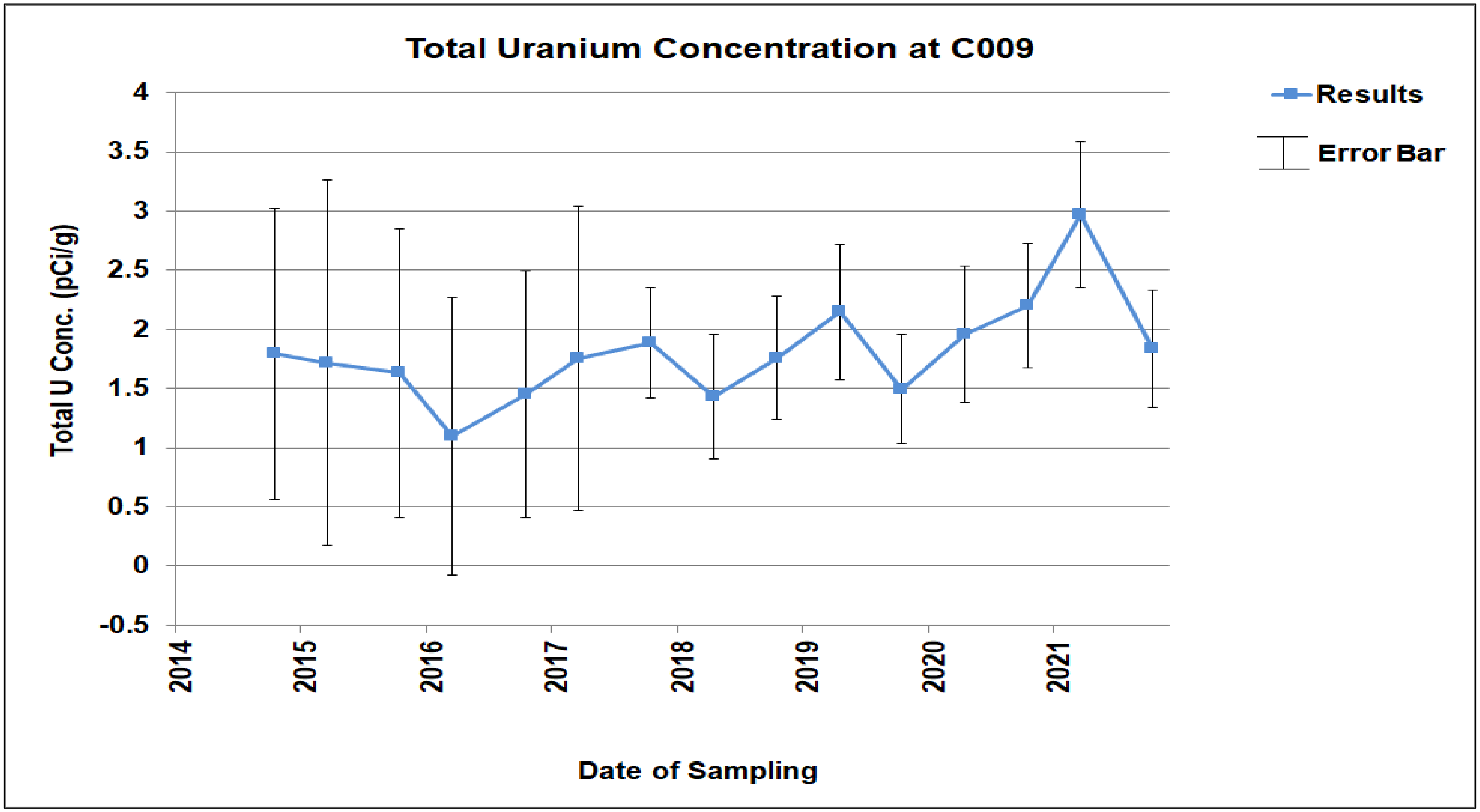
Figure 3-4. Total U Concentrations in Sediment Versus Sampling Date (Continued)



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

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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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Figure 4-1. Generalized Stratigraphic Column for the NC Sites

Path: U:\GPS\EMDAR\NCO Projects\CY2021\Rev0\Figure 4-2_Existing Monitoring Well Locations at the Latty Avenue Properties2.mxd

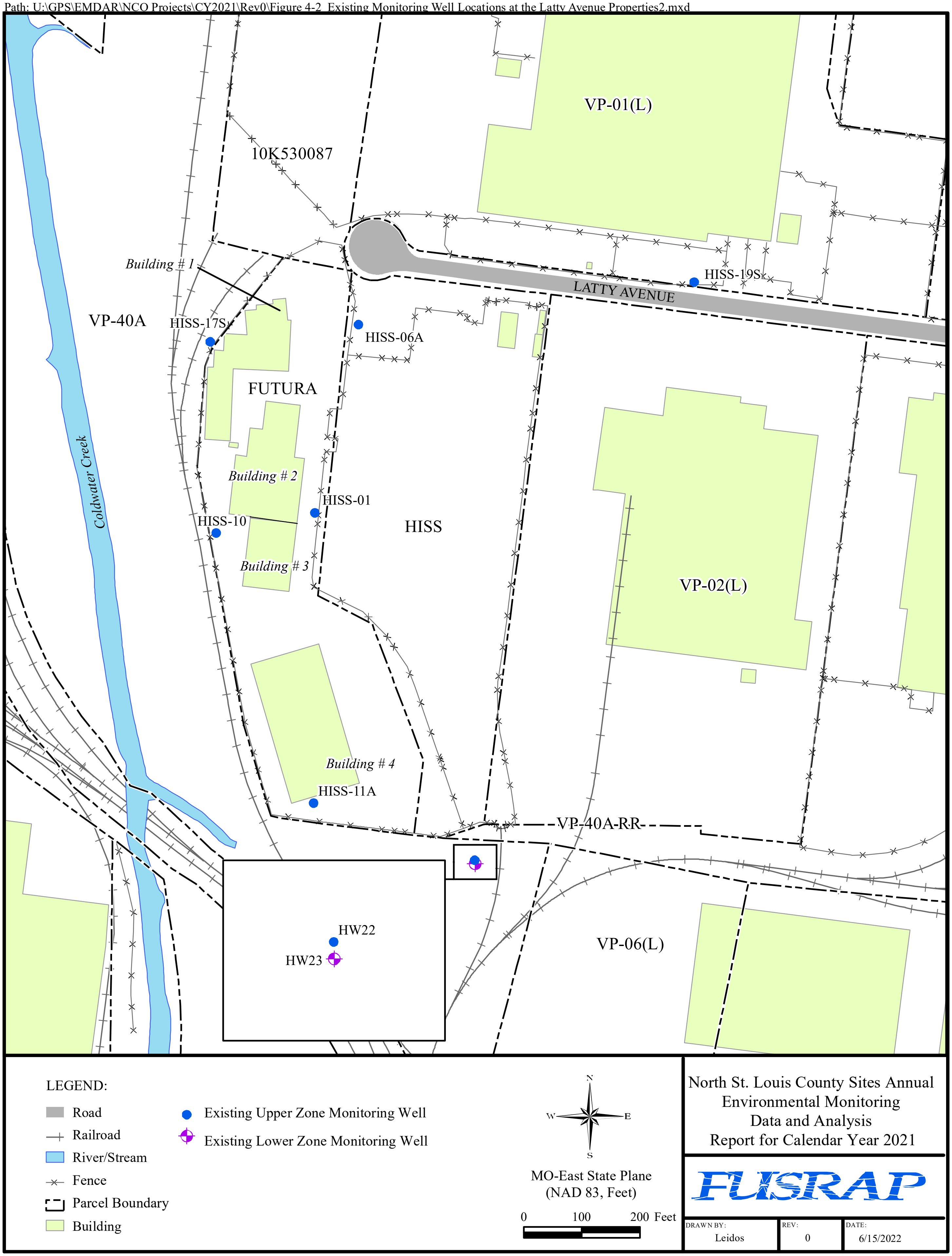

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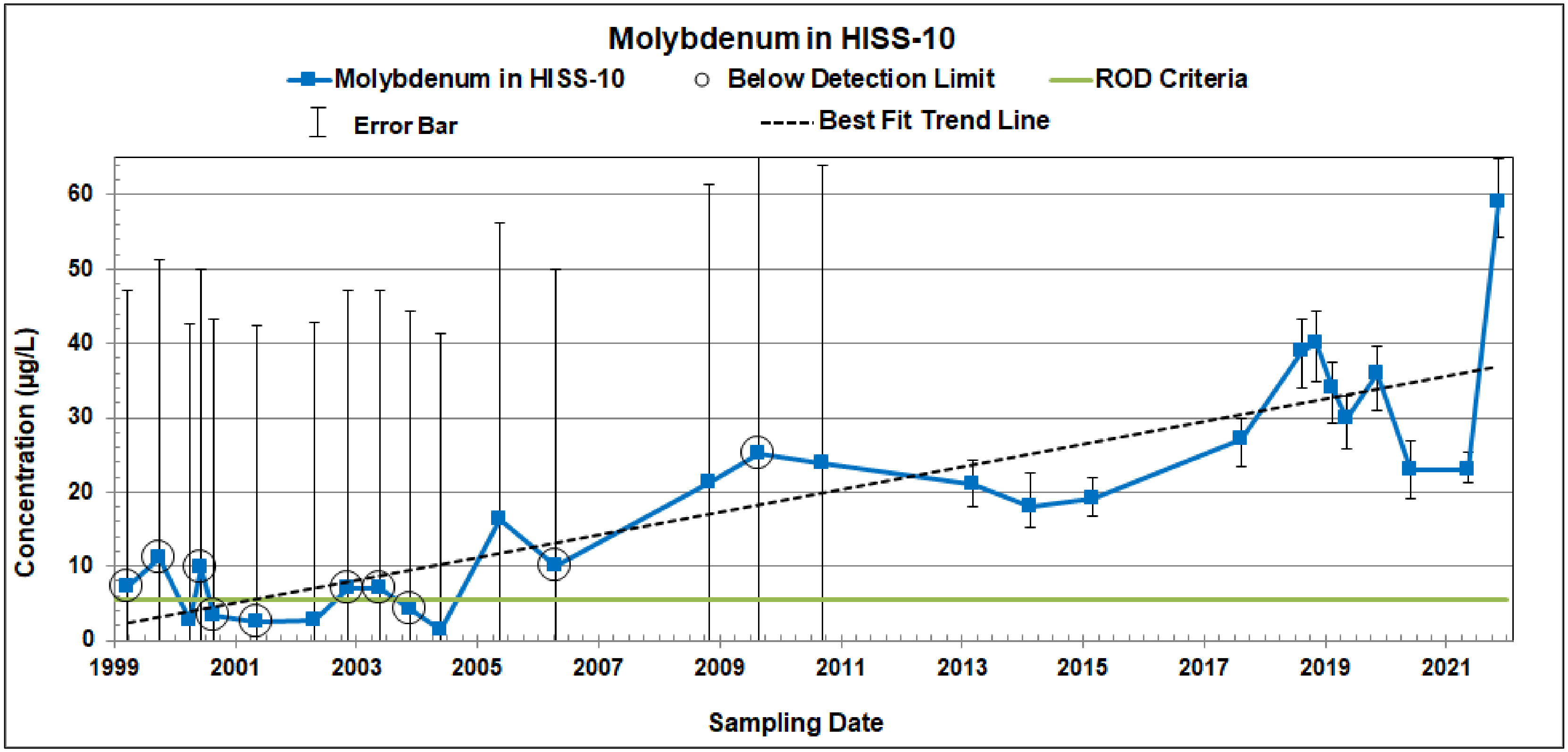
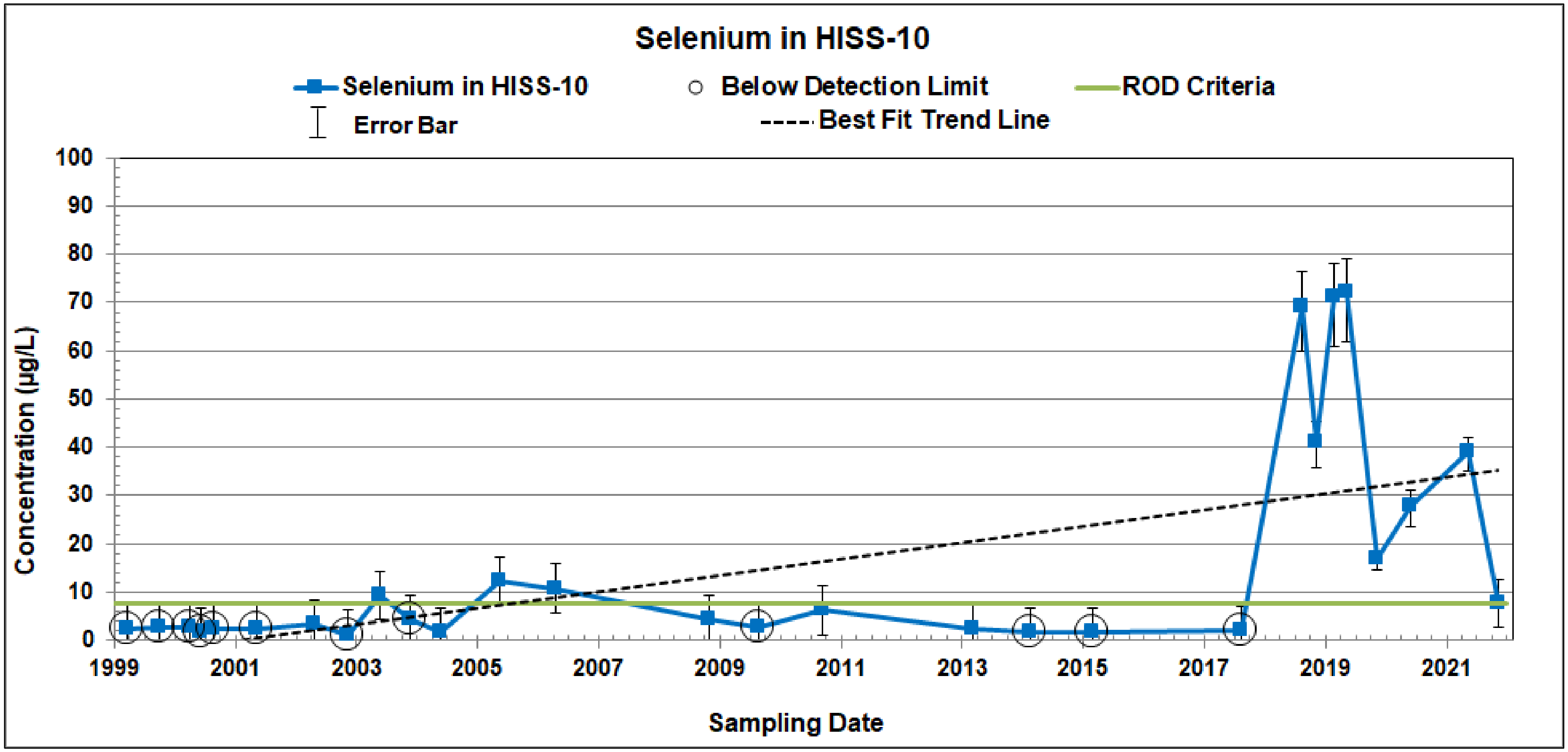
Figure 4-2. Existing Monitoring Well Locations at the Latty Avenue Properties



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 Plot for Molybdenum and Selenium in HISS-10 and Total U in HISS-01 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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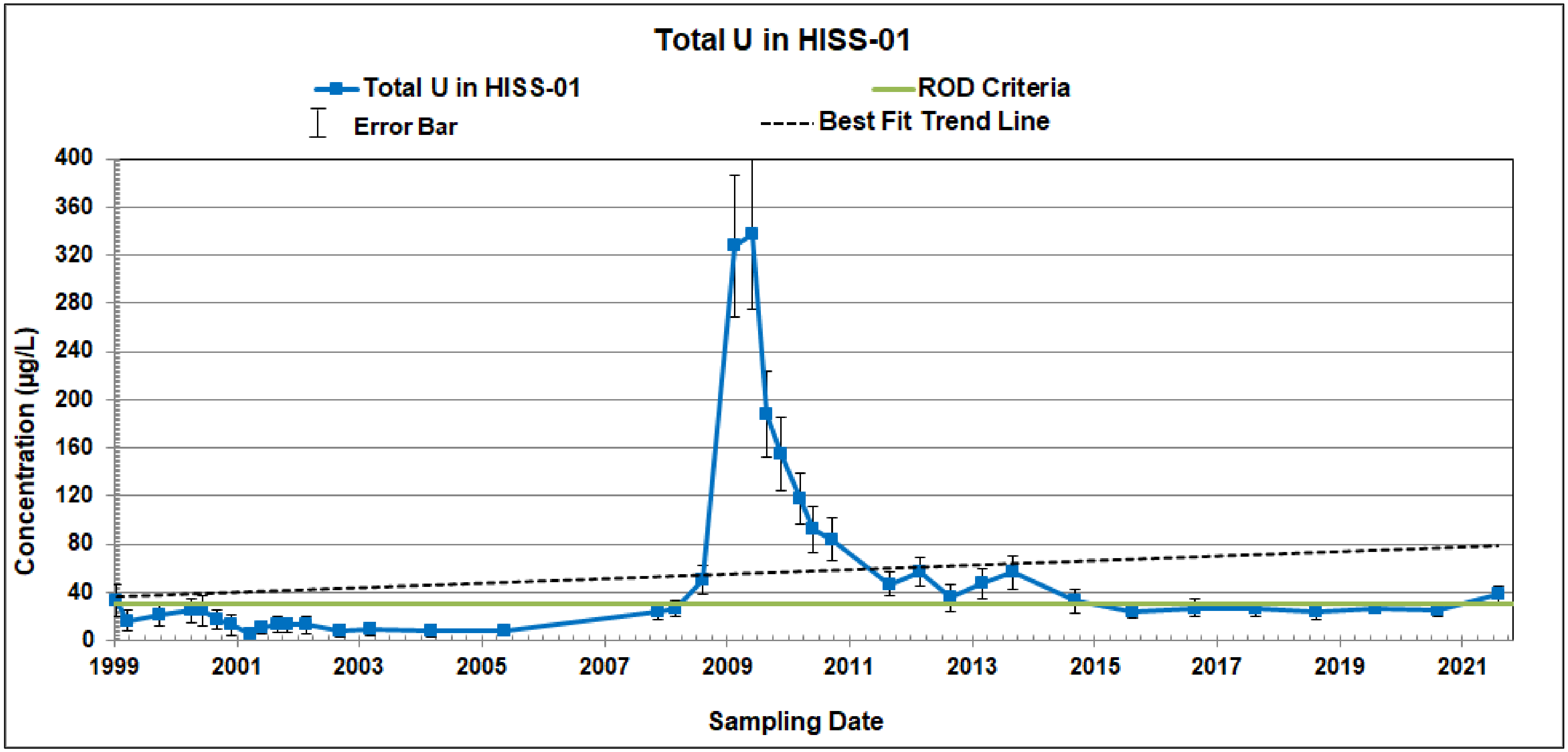
Figure 4-3. Time-Versus-Concentration Plot for Molybdenum and Selenium in HISS-10 and Total U in HISS-01 at the HISS (Continued)



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.

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Figure 4-3. Time-Versus-Concentration Plot for Molybdenum and Selenium in HISS-10 and Total U in HISS-01 at the HISS (Continued)

Path: U:\GPS\EMDAR\NCO Projects\CY2021\RevA\Figure 4-4 Total U Concentrations in Unfiltered HZ-A Ground Water at the Latty Avenue Properties.mxd

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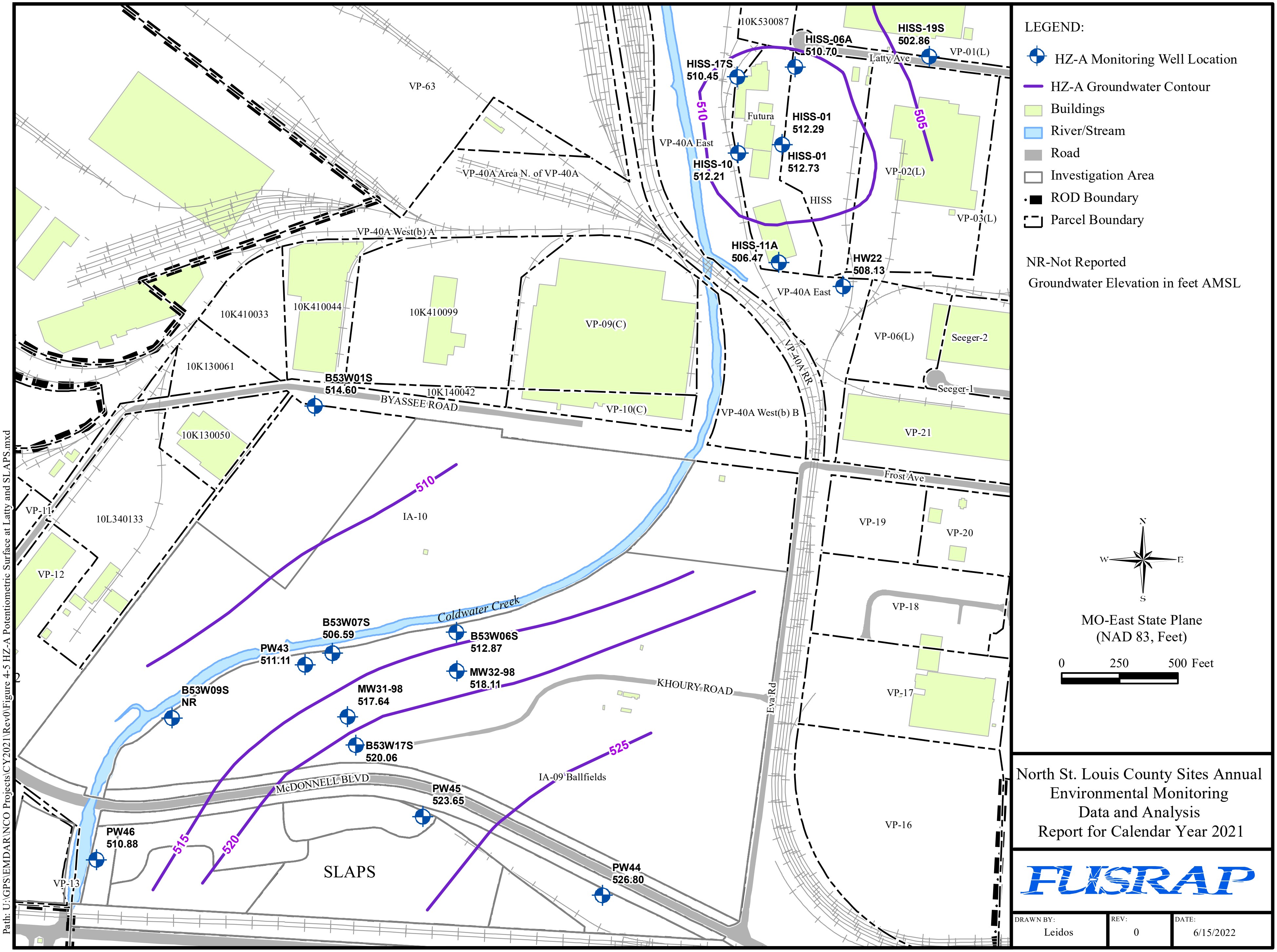
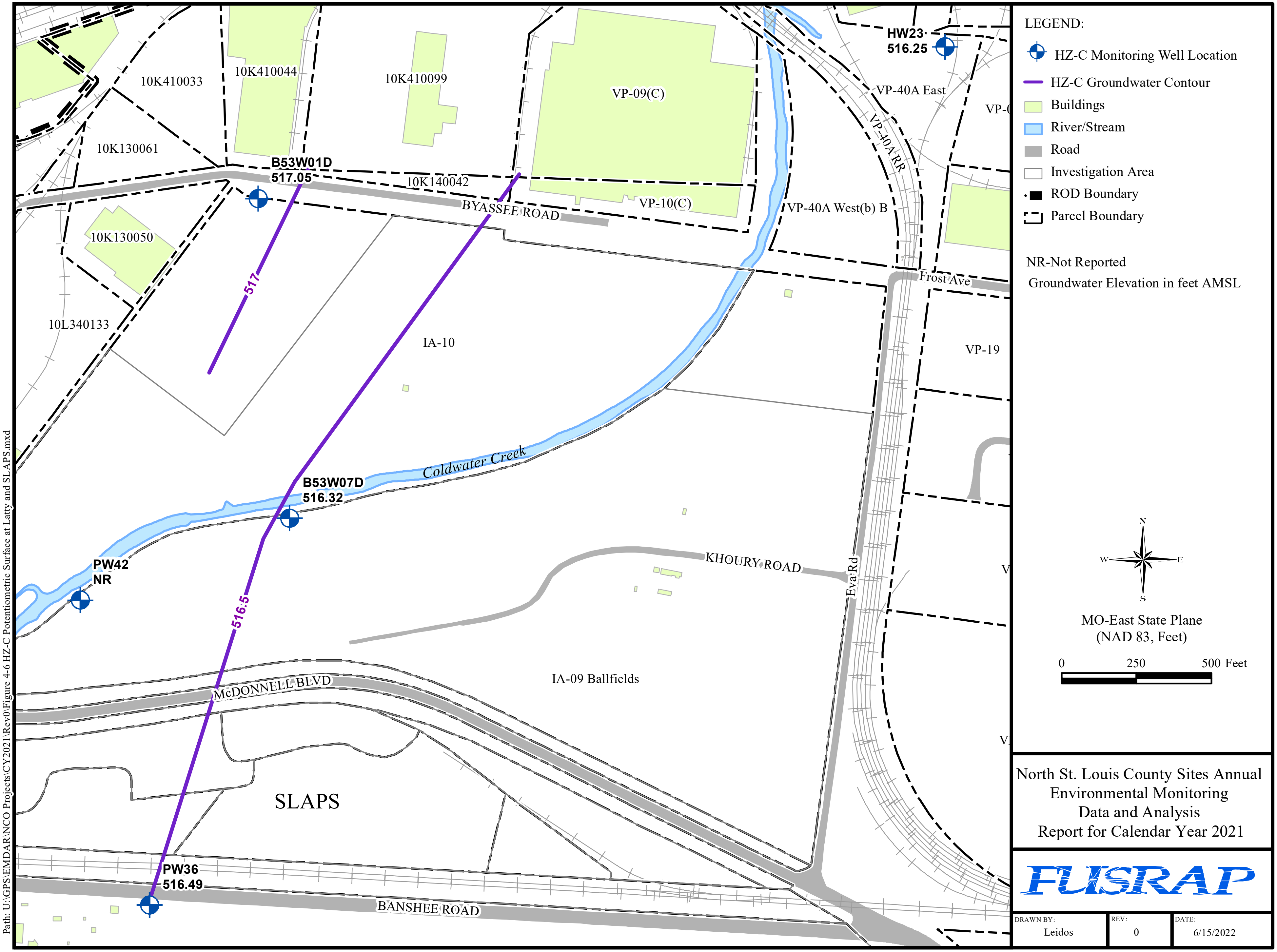
Figure 4-4. Total U Concentrations in Unfiltered Groundwater at the Latty Avenue Properties



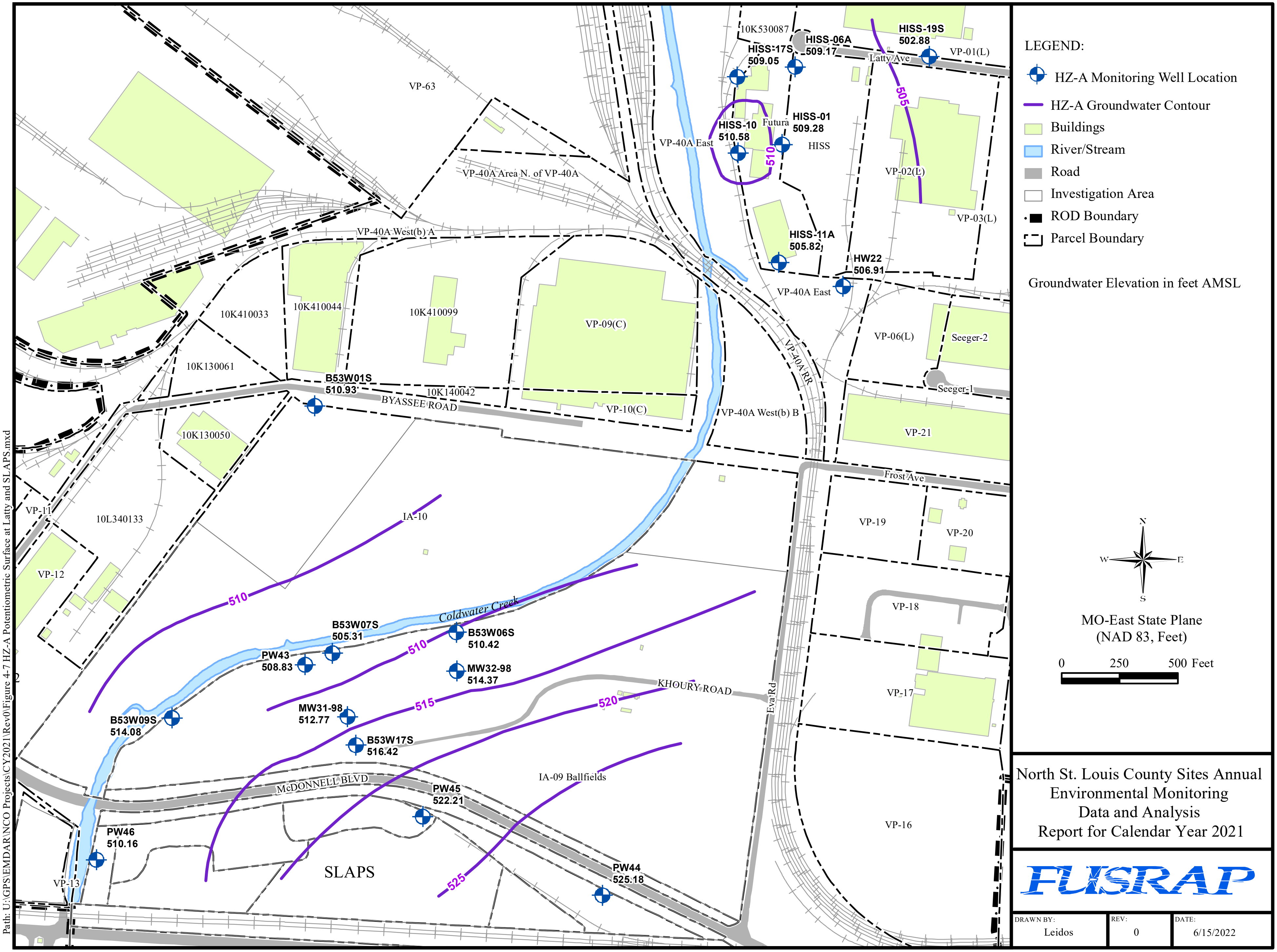
Path: U:\GPS\EMDAR\NCO Projects\CY2021\Rev0\Figure 4-5 HZ-A Potentiometric Surface at Latty and SLAPS.mxd

Figure 4-5. HZ-A Potentiometric Surface at the Latty Avenue Properties and the SLAPS and SLAPS VPs (May 10, 2021)



Path: U:\GPS\EMDAR\NCO Projects\CY2021\Rev0\Figure 4-6 HZ-C Potentiometric Surface at Latty and SLAPS.mxd

Figure 4-6. HZ-C Potentiometric Surface at the Latty Avenue Properties and the SLAPS and SLAPS VPs (May 10, 2021)



Path: U:\GPS\EMDAR\NCO Projects\CY2021\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 8, 2021)

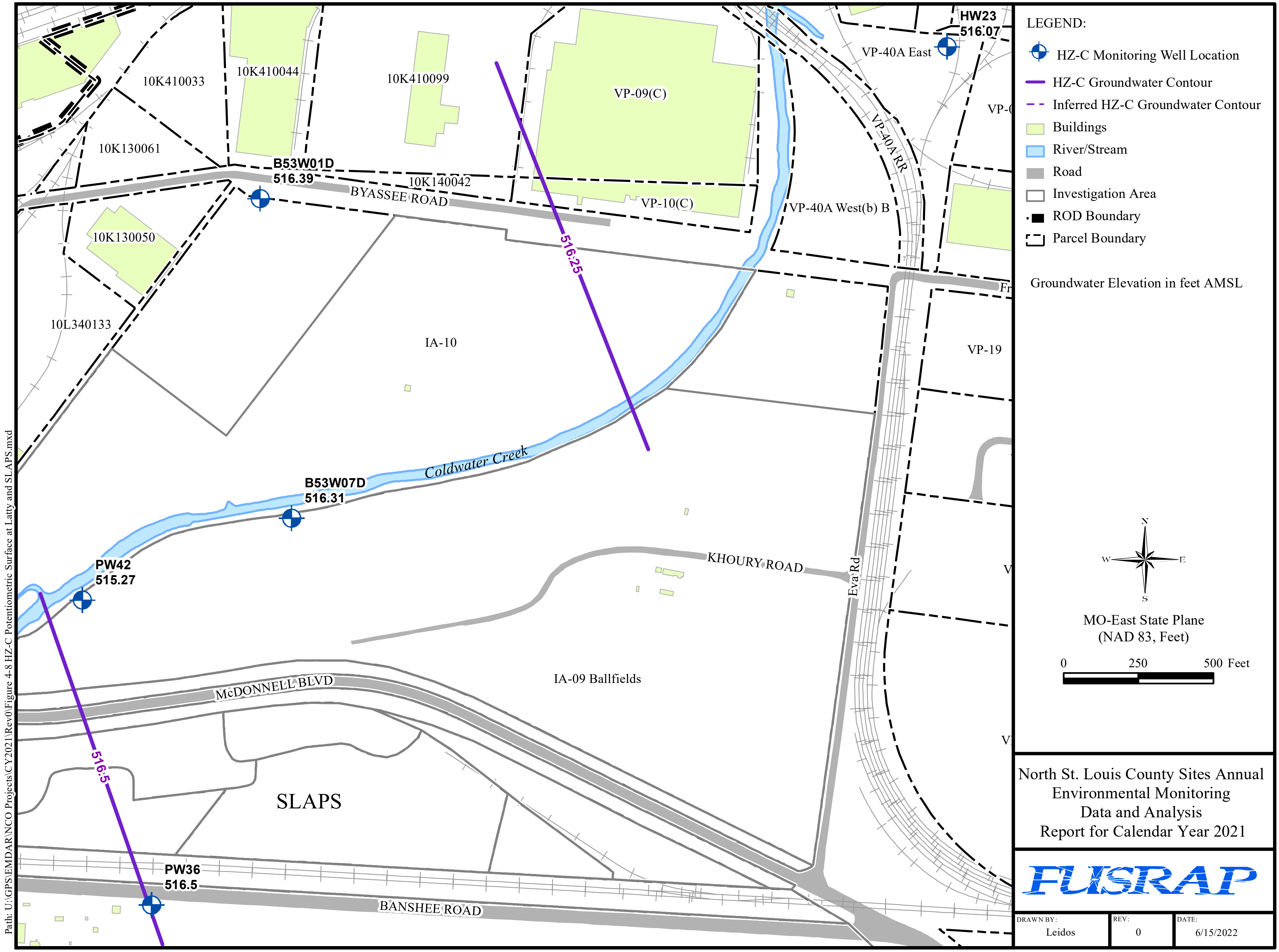
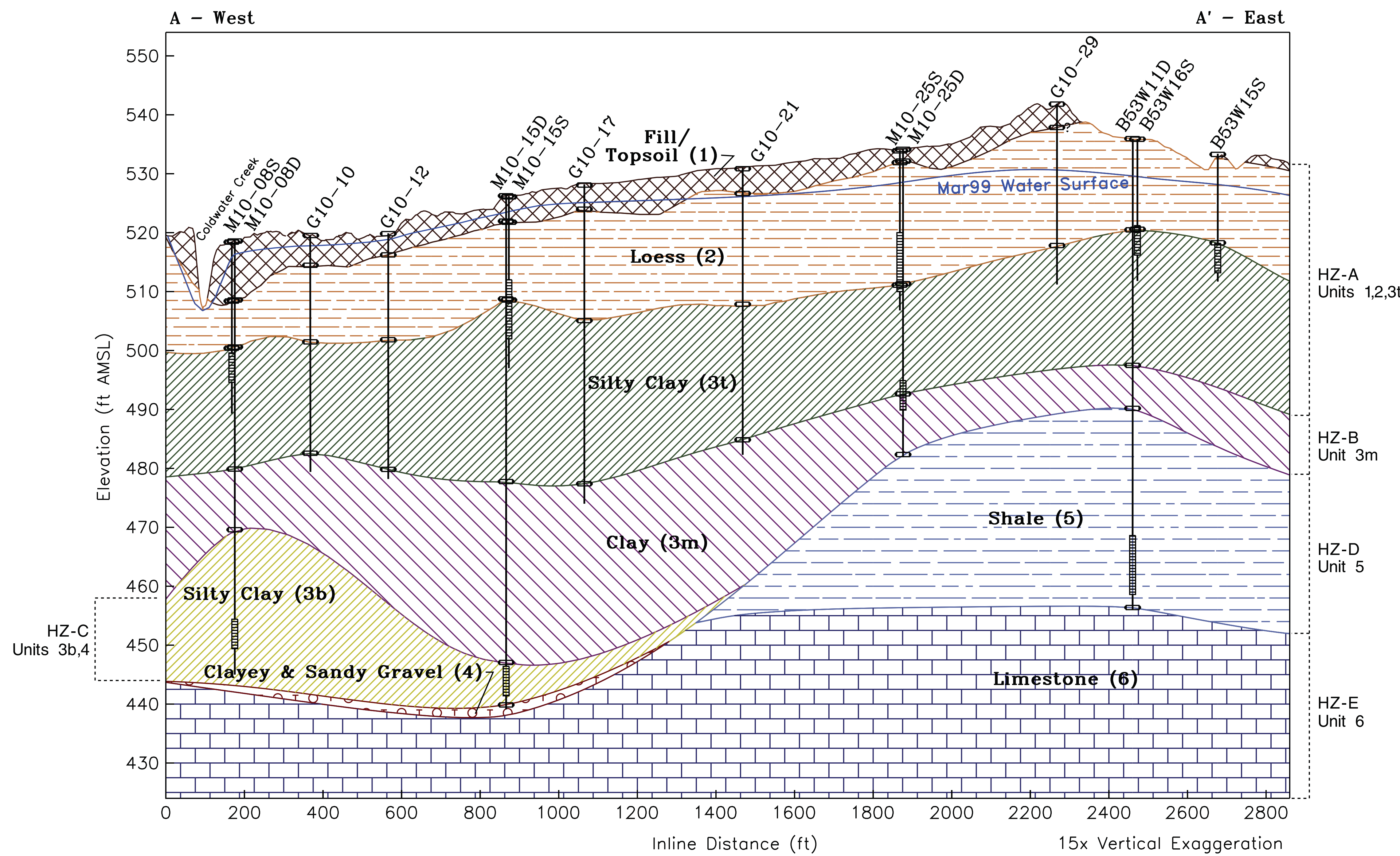


Figure 4-8. HZ-C Potentiometric Surface at the Latty Avenue Properties and the SLAPS and SLAPS VPs (November 8, 2021)



Notes

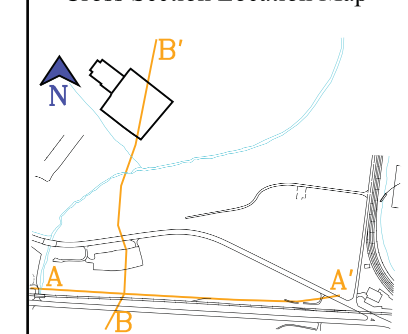
Geologic data used in the cross section collected through 2000.

Legend

Borehole pick

Well screen

Cross Section Location Map



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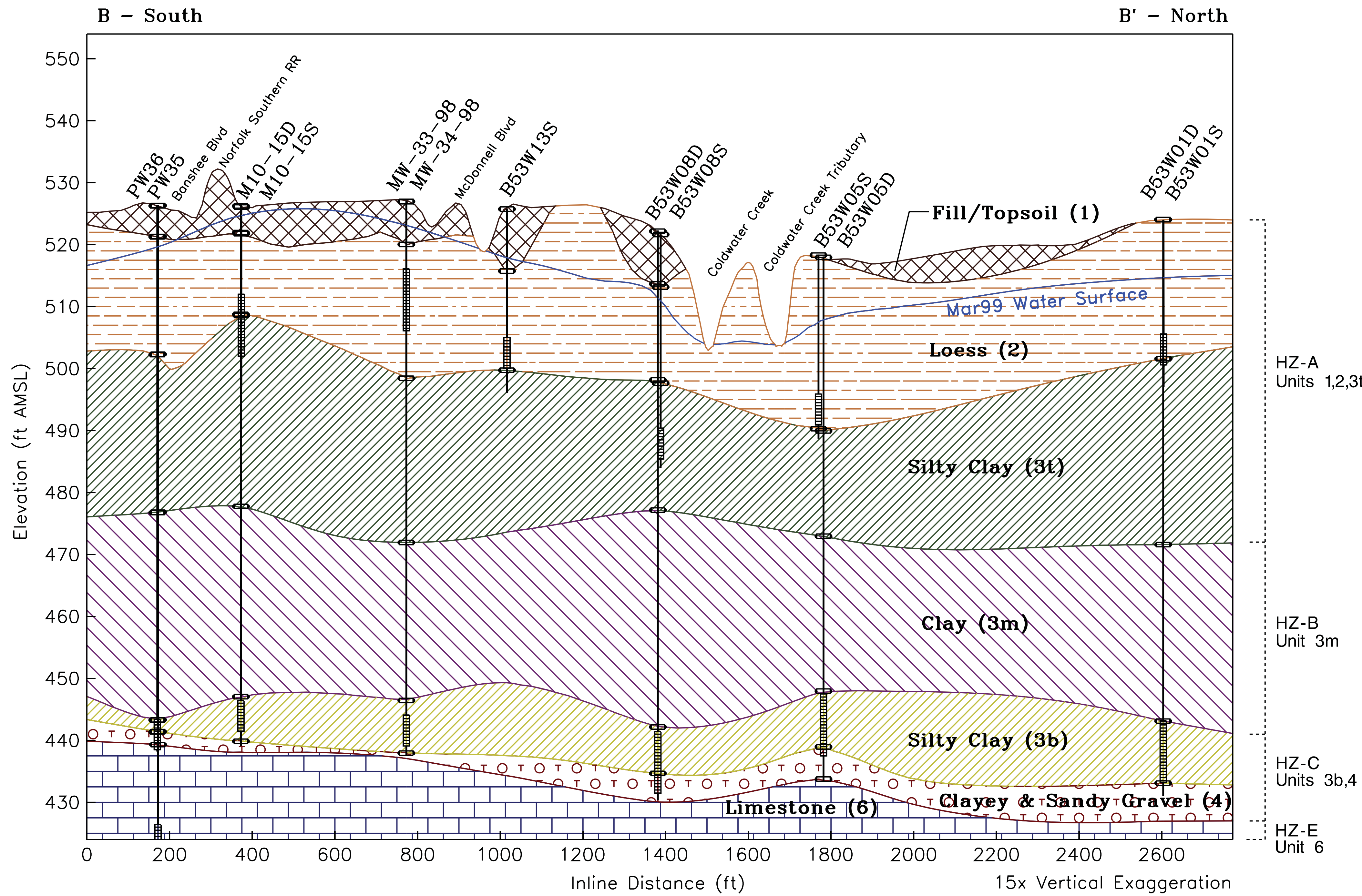
Drawn By: N. Voorhies

Date: 08/29/2000, revised 03/23/2022

File: SLAPSGlg05ExtendedAAS.sho

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



Notes

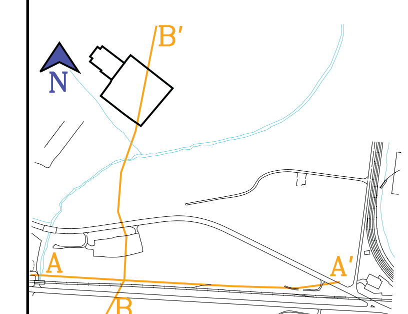
Geologic data used in the cross section collected through 2000.

Legend

Borehole pick

Well screen

Cross Section Location Map



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Drawn By: N. Voorhies

Date: 8/29/2000, revised 03/23/2022

File: SLAPSGlg05ExtendedBBS.sho

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

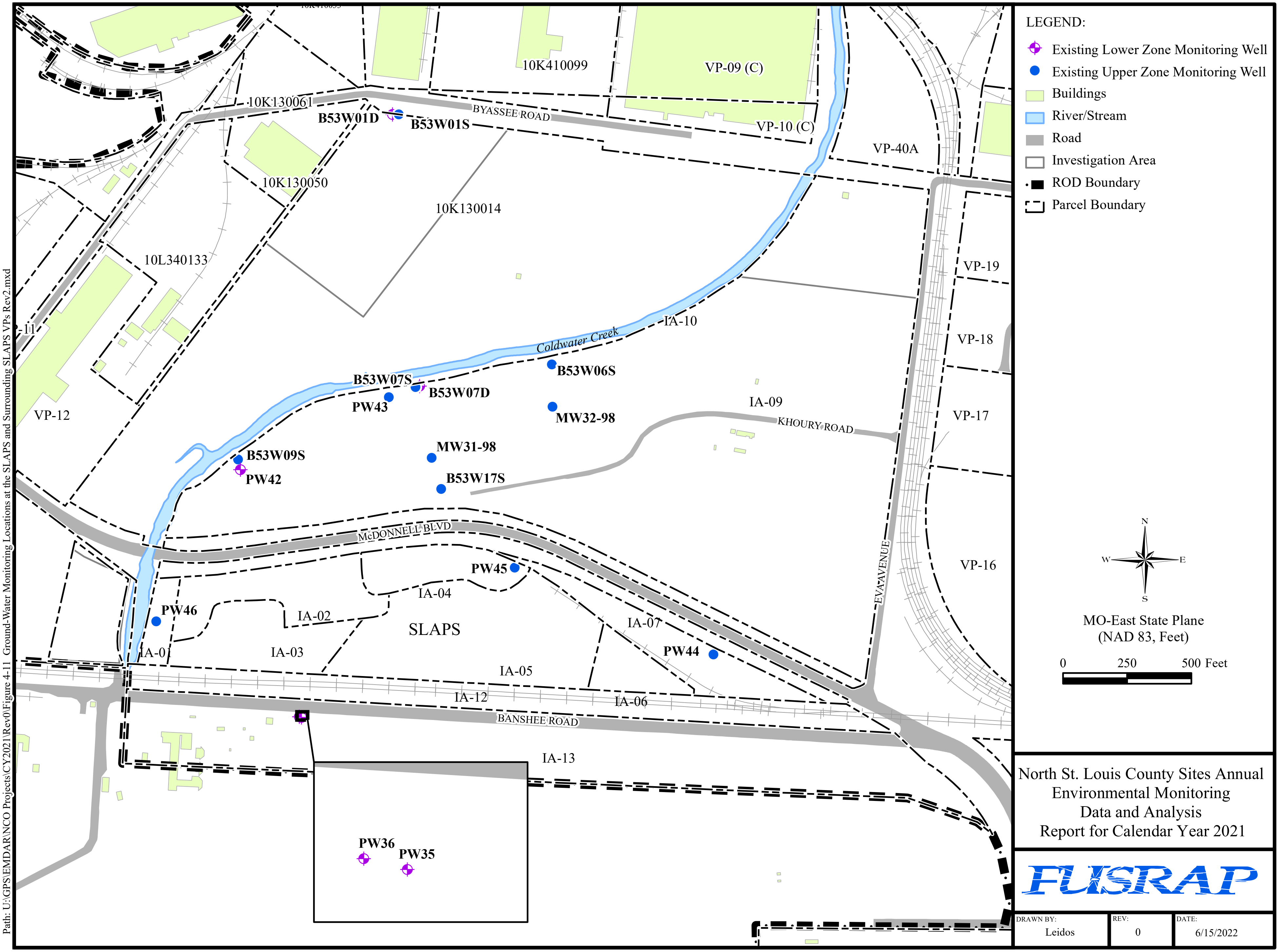
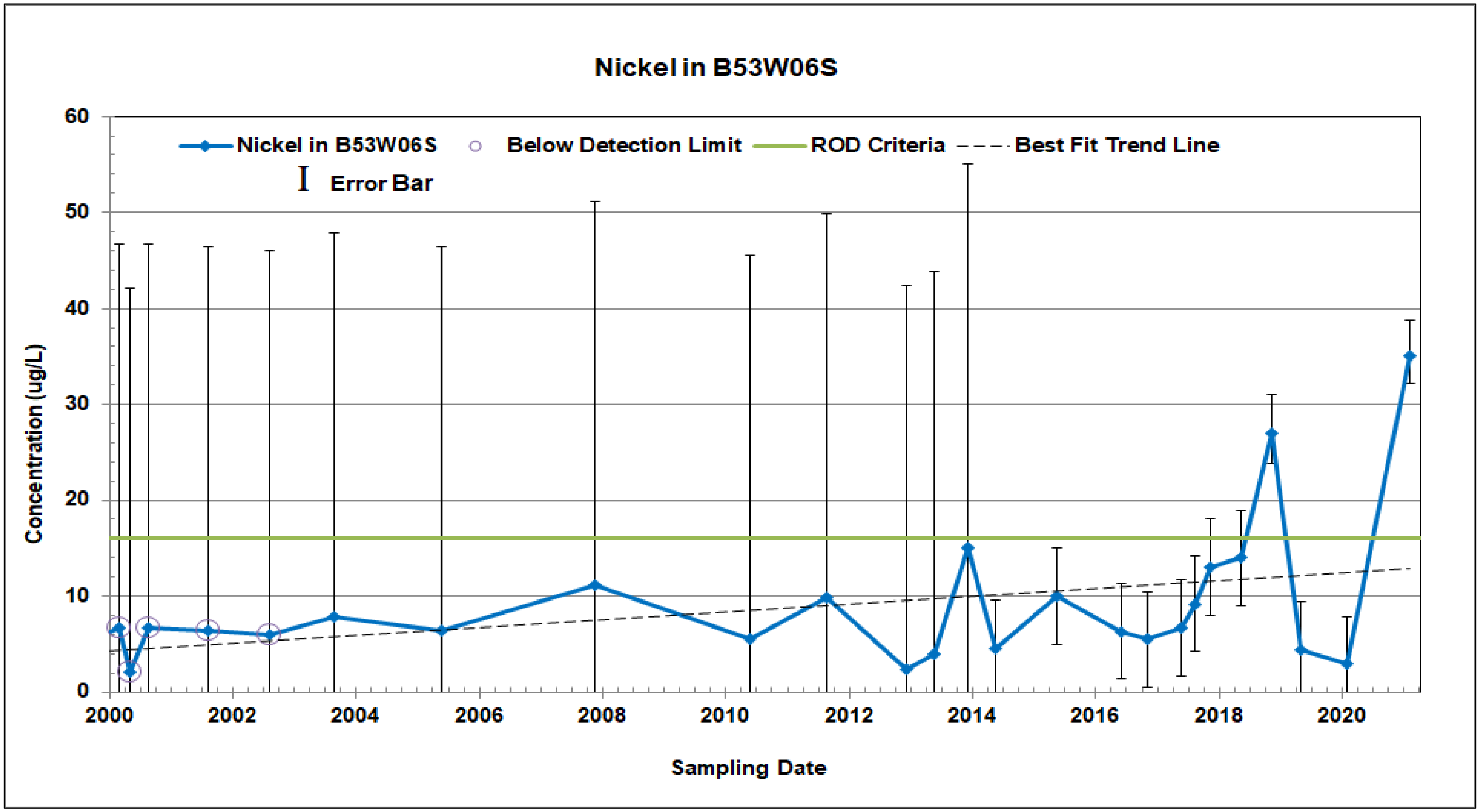


Figure 4-11. Existing Groundwater Monitoring Locations at the SLAPS and SLAPS VPs



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. The RL for nickel changed from 40 ug/L to 5 ug/L in 2014.
For results reported below the DL (non-detect), the value plotted is half the DL.

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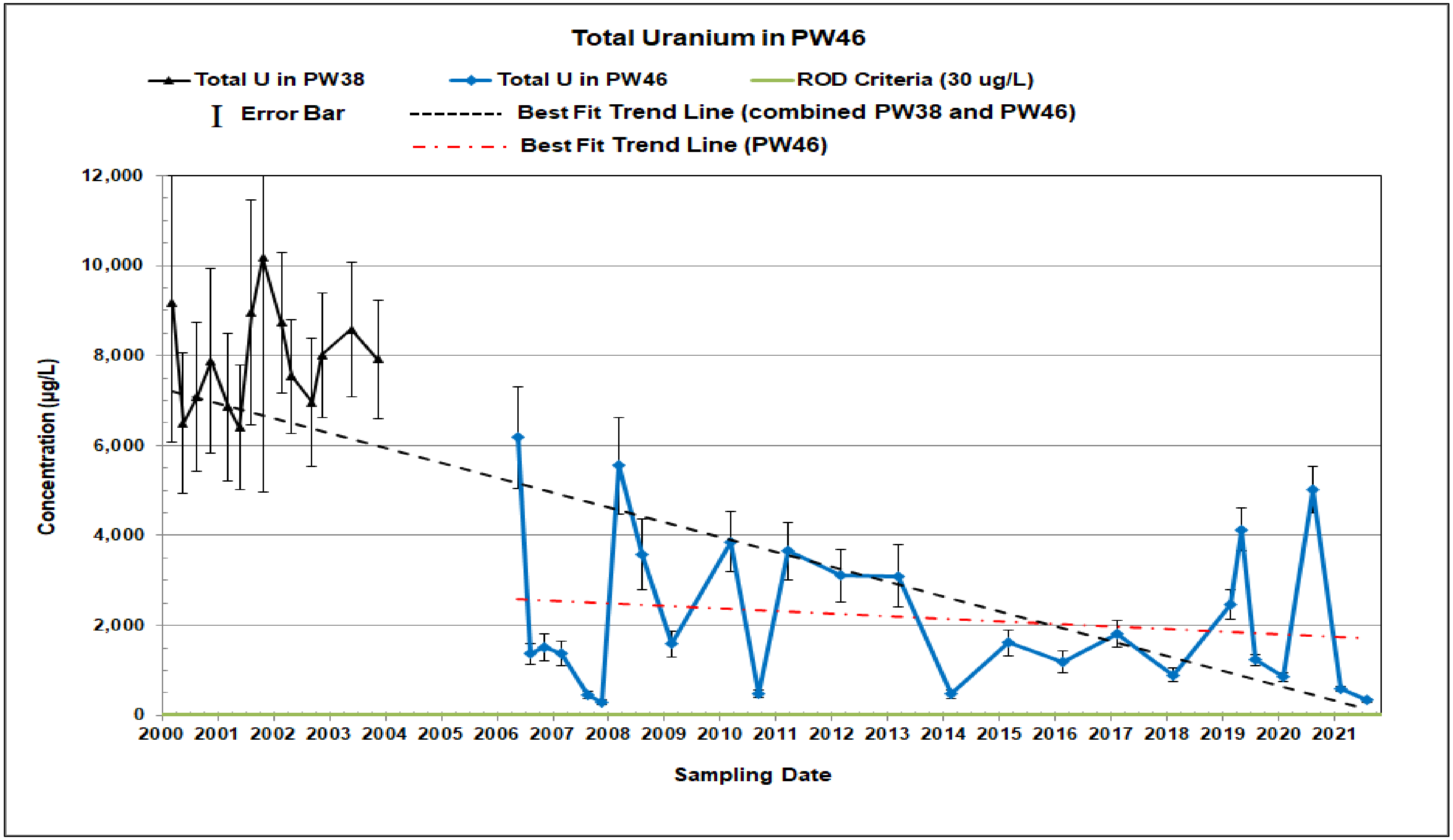
Figure 4-12. Time-Versus-Concentration Graphs for Nickel in Groundwater at B53W06S



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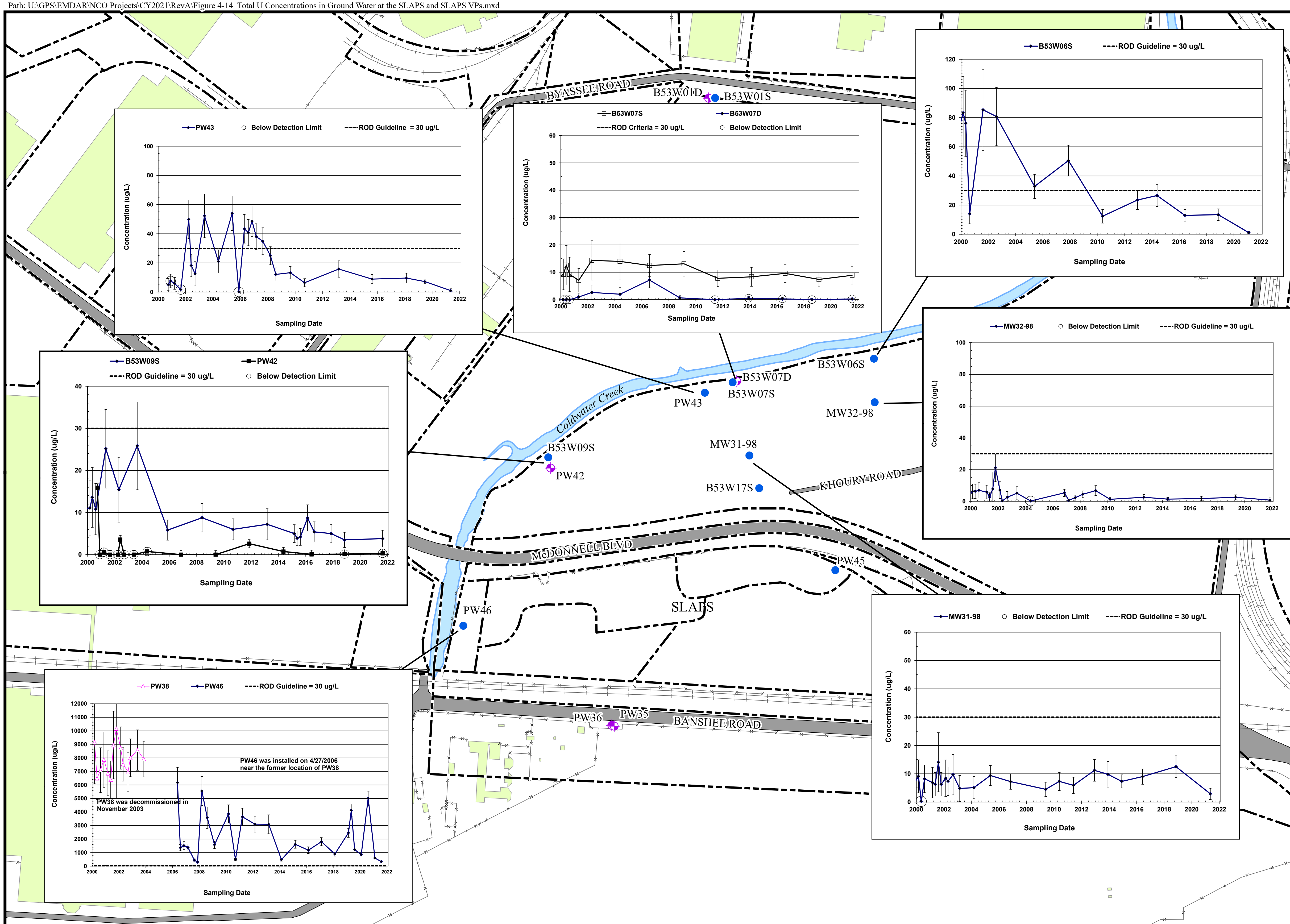
Figure 4-13. Time-Versus-Concentration Graphs for Total U in Groundwater at PW46

Path: U:\GPS\EMDAR\NCO Projects\CY2021\RevA\Figure 4-14 Total U Concentrations in Ground Water at the SLAPS and SLAPS VPs.mxd



Legend

- Existing HZ-C or HZ-E Monitoring Well
- Existing HZ-A Monitoring Well
- Parcel Boundary
- River/Stream
- Road
- Fence
- Railroad
- Building
- Error Bars

N
W E
S

MO-East State Plane
(NAD 83, Feet)

0 190 380 Feet

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DRAWN BY:	REV:	DATE:
Leidos	0	6/15/2022

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

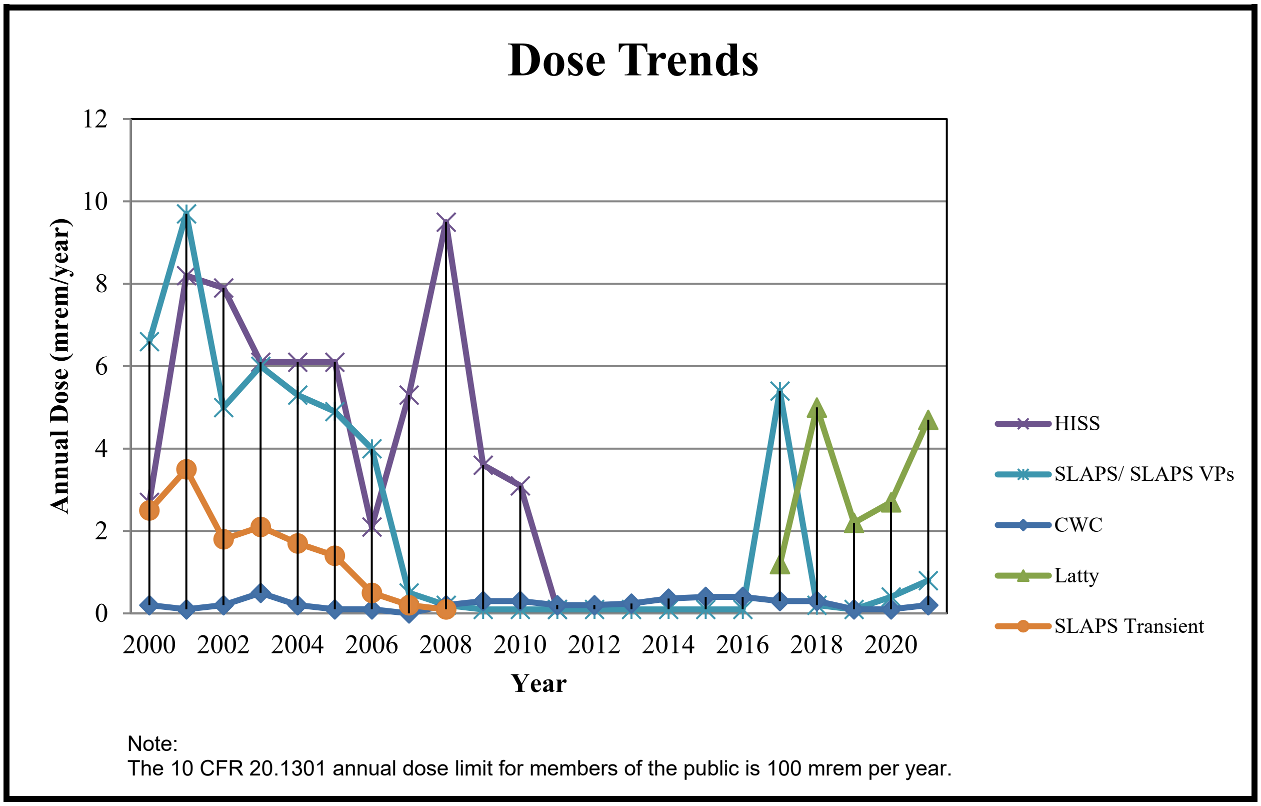

Figure 6-1. Dose Trends

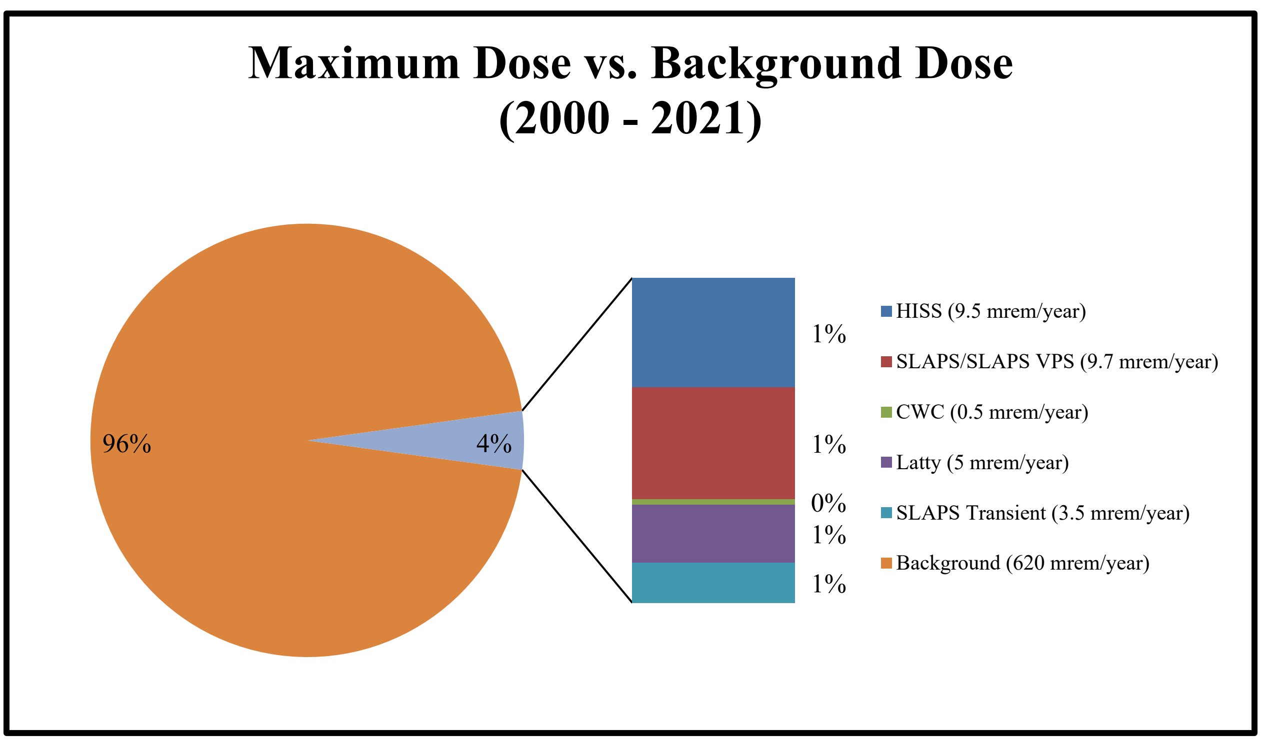

Figure 6-2. Maximum Dose Versus Background Dose

APPENDIX A

DOCUMENTS FINALIZED IN CALENDAR YEAR 2021

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- *Remedial Design/Remedial Action Work Description, Pershall Road and Interstate 270 North Reconstruction Area* (January 27).
- *Pre-Design Investigation Summary Report, Pershall Road and Interstate - 270 North Corridor Properties* (January 27).
- *Pre-Design Investigation Summary Report and Final Status Survey Evaluation for Coldwater Creek (CWC)-Floodplain Properties CWC-158, CWC-178 through CWC-180, CWC-182 through CWC-225, CWC-227 through CWC-234, CWC-261, CWC-397 through CWC-409, St. Denis Street West, North Highway 67 (Partial), and Patterson Road* (February 9).
- *Addendum to the Pre-Design Investigation Work Plan for Coldwater Creek North of St. Denis Bridge: Old Halls Ferry Road to Black Jack Park* (February 9).
- *CY 2020 Fourth Quarter Laboratory QA/QC Report for the FUSRAP St. Louis Radioanalytical Laboratory and Associated Satellite Laboratories* (April).
- *Pre-Design Investigation Work Description, FUSRAP North St. Louis County Sites* (April 6).
- *Addendum to the Pre-Design Investigation Work Plan for Coldwater Creek North of St. Denis Bridge: Black Jack Park to Old Jamestown Road* (June 14).
- *CY 2021 First Quarter Laboratory QA/QC Report for the FUSRAP St. Louis Radioanalytical Laboratory and Associated Satellite Laboratories* (June).
- *Remedial Design/Remedial Action Work Description, Vicinity Property-56 and Pershall Road South Right of Way – Planned Construction Area, Supplement No. 13 to the Remedial Action Work Plan, Coldwater Creek Properties* (July 14).
- *North St. Louis County Sites Annual Environmental Monitoring Data and Analysis Report for CY 2020* (July 15).
- *CY 2021 Second Quarter Laboratory QA/QC Report for the FUSRAP St. Louis Radioanalytical Laboratory and Associated Satellite Laboratories* (August).
- *Pre-Design Investigation Summary Report and Final Status Survey Evaluation for Coldwater Creek (CWC)-Floodplain Properties CWC-52, CWC-100, and CWC-160 through CWC-165* (August 24).
- *Addendum to the Pre-Design Investigation Work Plan for Coldwater Creek North of St. Denis Bridge: Old Jamestown Road to Fox Manor Drive* (September 17).
- *CY 2021 Third Quarter Laboratory QA/QC Report for the FUSRAP St. Louis Radioanalytical Laboratory and Associated Satellite Laboratories* (November).
- *Environmental Monitoring Implementation Plan for the North St. Louis Sites for Calendar Year 2022* (December 23).

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APPENDIX B

NORTH ST. LOUIS COUNTY FUSRAP SITES
2021 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
I	Interstate
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)
$\mu Ci/cm^3$	microcurie(s) per cubic centimeter
µCi/mL	microcurie(s) per milliliter
Ci	curie(s)
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)

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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) 2021. 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: Interstate (I)-270 and Pershall Road (henceforth referred to as 1-270/Pershall Road in Appendix B); vicinity property (VP)-56; the investigation area (IA)-09 Ballfields; Futura/VP-40A; and the St. Louis Airport Site (SLAPS) Loadout area. 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 2021 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 less than 0.1 mrem per year from the Latty Avenue Properties, of 0.6 mrem per year from the SLAPS, and of 0.3 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 Latty Avenue Properties, 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: I-270/Pershall Road, VP-56, IA-09 Ballfields, Futura/VP-40A, 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 remedial action (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 2021.

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

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 Futrua 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 2021

During CY 2021, excavations were conducted on Futura/VP-40A. Air particulate samples were collected around excavation perimeters during active excavation on the Latty Avenue Properties throughout CY 2021. Analytical results of air particulate samples were used to determine windblown in situ emissions.

4.3 SOURCE DESCRIPTION – RADIONUCLIDE SOIL CONCENTRATIONS

The radionuclide-specific concentrations on Futura/VP-40A were determined by using air particulate data and radionuclide-specific activity fractions estimated from 2021 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.

4.4 LIST OF ASSUMED AIR RELEASES FOR CALENDAR YEAR 2021

Ground releases of particulate radionuclides in soil, as a result of windblown action and RA in the form of excavation of soil for Futura/VP-40A, are assumed for the particulate radionuclide emission determinations from the Latty Avenue Properties at which excavations occurred in CY 2021. Other Latty Avenue Properties do not contribute to the emission determinations for periods of inactivity due to the low activity and vegetative cover.

4.5 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. Latty Avenue Properties Critical Receptors for CY 2021

Sources	Nearest Residence		Farm		Business		School	
	Distance (m)	Direction	Distance (m)	Direction	Distance (m)[a]	Direction	Distance (m)	Direction
Futura/VP-40A	850	East-Northeast	850	East-Northeast	75	East	1,300	Northeast

4.6 EMISSIONS DETERMINATION

4.6.1 Measured Airborne Radioactive Particulate Emissions

Particulate air samples were collected from around the perimeter of active excavations to measure the radionuclide emissions. The sample results provide the basis for determining the radionuclide emission rates during all of CY 2021. The average gross alpha and gross beta concentrations (in µCi/mL) were determined for each monitoring location for CY 2021. The site average concentrations are presented in Table B-4.

Table B-4. Latty Avenue Properties Average Gross Alpha and Beta Airborne Particulate Emissions for CY 2021

Monitoring Location	Average Concentration (µCi/mL)[a]	
	Gross Alpha	Gross Beta
Futura/VP-40A	3.85E-15	2.12E-14
Background Concentration[b]	4.31E-15	2.17E-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 2021 railcar data from the excavated areas for the Latty Avenue Properties. 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 excavated Latty Avenue Properties. Calculation of the effective surface area is contained in Attachment B-1 of this NESHAP report.

Table B-5. Latty Avenue Properties Excavation Effective Areas and Effective Diameters for CY 2021

Location	Effective Area (m^2)	Effective Diameters (m)
Futura/VP-40A	224	17

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 Latty Avenue Properties, 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. Latty Avenue Properties Site Release Flow Rates for CY 2021

Location	Site Release Flow Rate (m^3/minute)
Futura/VP-40A	6.1E+04

4.6.2 Latty Avenue Properties Total Airborne Radioactive Particulate Emission Rates

The total CY 2021 emission/release rates input into the USEPA codes for the Latty Avenue Properties 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 area.

Table B-7. Latty Avenue Properties Total Airborne Radioactive Particulate Emission Rates for CY 2021

Radionuclide	Emission (Ci/year)[a]
	I-270/Pershall Road
Uranium (U)-238	1.8E-06
U-235	7.9E-08
U-234	1.8E-06
Radium (Ra)-226	3.4E-06
Thorium (Th)-232	3.6E-07
Th-230	1.1E-04
Th-228	3.6E-07
Ra-224	3.6E-07
Th-234	2.8E-04
Protactinium (Pa)-234m	2.8E-04
Th-231	1.2E-05
Ra-228	5.5E-05
Actinium (Ac)-228	5.5E-05
Pa-231	1.8E-06
Ac-227	2.0E-06

[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.

4.7 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. Latty Avenue Properties CAP88-PC Results for Critical Receptors for CY 2021

Source	Dose (mrem/year)			
	Nearest Residence[a]	Farm[a]	Business[b]	School[b]
Futura/VP-40A	<0.1	<0.1	<0.1	<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).
[c] Distance from the business receptor to the center of the source is 75 m for emissions determination.

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 2021

During CY 2021, excavations were conducted on I-270/Pershall Road, VP-56, and the IA-09 Ballfields, 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 2021. 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 I-270/Pershall Road, VP-56, the IA-09 Ballfields, and the SLAPS Loadout facility were determined by using air particulate data and radionuclide-specific activity fractions estimated from 2021 railcar waste characterization data collected by the remedial action contractor. Attachment B-1 of this NESHAP report contains Table B-1-6, 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 2021

Ground releases of particulate radionuclides in soil, as a result of windblown action and RA in the form of excavation of soil for I-270/Pershall Road, VP-56, the IA-09 Ballfields, are assumed for the particulate radionuclide emission determinations from the SLAPS VPs at which excavations occurred in CY 2021. 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-9. Distances and directions to critical receptors are determined using tools in a GIS.

Table B-9. SLAPS and SLAPS VPs Critical Receptors for CY 2021

Sources	Nearest Residence		Farm		Business		School	
	Distance (m)	Direction	Distance (m)	Direction	Distance (m)[a]	Direction	Distance (m)	Direction
I-270/Pershall Road VP-56	230	North-Northwest	1,000	Southeast	130	Northeast	700	East
IA-09 Ballfields	1,300	Northwest	1,700	Northeast	200	East-Southeast	2,300	Northeast
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.

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 2021. The average gross alpha and gross beta concentrations (in µCi/mL) were determined for each monitoring location for CY 2021. The site average concentrations are presented in Table B-10.

Table B-10. SLAPS and SLAPS VPs Average Gross Alpha and Beta Airborne Particulate Emissions for CY 2021

Monitoring Location	Average Concentration (µCi/mL)[a]	
	Gross Alpha	Gross Beta
I-270/Pershall Road	6.57E-15	3.21E-14
VP-56	4.81E-15	2.87E-14
IA-09 Ballfields	4.82E-15	3.16E-14
SLAPS Loadout	4.19E-15	2.86E-14
Background Concentration[b]	4.31E-15	2.17E-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 2021 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 $\mu Ci/cm^3$. The gross average concentration (in $\mu Ci/cm^3$) 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.

$$D = (1.3\ A)^{1/2}$$ *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-11 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-11. SLAPS and SLAPS VPs Excavation Effective Areas and Effective Diameters for CY 2021

Location	Effective Area (m^2)	Effective Diameters (m)
I-270/Pershall Road	120	12
VP-56	348	21
IA-09 Ballfields	1,873	49
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.

$$F = V\ \pi\ (D)^2 / 4$$ *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-12. 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-13. Attachment B-1 of this NESHAP report contains flow rate and average radionuclide concentration data.

Table B-12. SLAPS and SLAPS VPs Site Release Flow Rates for CY 2021

Location	Site Release Flow Rate (m^3/minute)
I-270/Pershall Road	3.3E+04
VP-56	9.5E+04
IA-09 Ballfields	5.1E+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 2021 emission/release rates input into the USEPA codes for the SLAPS and SLAPS VPs are shown in Table B-13 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-13. SLAPS and SLAPS VPs Total Airborne Radioactive Particulate Emission Rates for CY 2021

Radionuclide	Emission (Ci/year)[a]			
	I-270/Pershall Road	VP-56	IA-09 Ballfields	SLAPS Loadout
U-238	1.2E-05	1.3E-05	3.5E-05	7.3E-05
U-235	3.1E-07	6.3E-07	1.2E-06	2.7E-06
U-234	1.2E-05	1.3E-05	3.5E-05	7.3E-05
Ra-226	1.5E-05	1.6E-05	7.4E-05	1.4E-04
Th-232	9.3E-06	9.1E-06	2.5E-05	4.1E-05
Th-230	4.4E-05	1.7E-04	1.0E-03	2.6E-03
Th-228	9.3E-06	9.1E-06	2.5E-05	4.1E-05
Ra-224	9.3E-06	9.1E-06	2.5E-05	4.1E-05
Th-234	1.5E-04	4.1E-04	2.4E-03	6.5E-03
Pa-234m	1.5E-04	4.1E-04	2.4E-03	6.5E-03
Th-231	3.9E-06	2.0E-05	8.5E-05	2.4E-04
Ra-228	1.2E-04	2.9E-04	1.8E-03	3.6E-03
Ac-228	1.2E-04	2.9E-04	1.8E-03	3.6E-03
Pa-231	3.1E-07	6.3E-07	8.2E-06	2.7E-06
Ac-227	4.6E-07	2.5E-06	1.7E-05	2.7E-06

[a] Release rate based on a 365-day period at a respective flow rate (as presented in Table B-12) as determined from the average annual wind speed (4.446 m per second) and the effective site area (as presented in Table B-11) 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-11. Results show compliance with the 10 mrem per year criterion for all critical receptors. The results are summarized in Table B-14.

Table B-14. SLAPS and SLAPS VPs CAP88-PC Results for Critical Receptors for CY 2021

Source	Dose (mrem/year)			
	Nearest Residence[a]	Farm[a]	Business[b]	School[b]
I-270/Pershall Road	<0.1	<0.1	<0.1	<0.1
VP-56	0.1	<0.1	<0.1	<0.1
IA-09 Ballfields	<0.1	< 0.1	0.2	<0.1
SLAPS Loadout[c]	0.2	0.2	0.4	<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).
[c] 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 2021

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-15. Distances and directions to critical receptors are determined using tools in a GIS.

Table B-15. Laboratory Critical Receptors for CY 2021

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-16. With these data, the following equation was used to calculate laboratory emissions from the operations conducted in CY 2021.

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

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-16. Laboratory Annual Sample Inventory for CY 2021

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	110	---	108	---	110	108
Latty Avenue Properties	Water	---	4	4	4	0	12
Iowa Army Ammunitions Plant (IAAAP)	Soil	906	---	---	927	906	927
IAAAP	Water	---	---	---	19	0	19
SLAPS	Soil	---	---	---	---	0	0
SLAPS	Water	---	5	5	5	0	15
SLAPS VPs	Soil	3,180	---	3,182		3,180	3,182
SLAPS VPs	Water	25	101	101	6	25	208
Coldwater Creek (CWC)	Sediment (soil)	6,467	---	7,536	---	6,467	7,536
CWC	Water	---	21	21	21	0	63
SLDS	Soil	1,813	51	1,817	58	1,813	1,926
SLDS	Water	---	100	101	12	0	213
		HISS and Latty Ave VPs Total				110	120
		IAAAP Total				906	946
		SLAPS, SLAPS VPs, and CWC Total				9,672	11,004
		SLDS Total				1,813	2,139
		Grand Total				12,501	14,209

[a] Data obtained from St. Louis FUSRAP database for samples analyzed in 2021.
[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 2021 emission rate was input into the USEPA CAP88-PC code. The total emission rates are shown in Table B-17 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-17. Laboratory Total Airborne Radioactive Particulate Emission Rates for CY 2021

Radionuclide	Emission (Ci/year)[a]
U-238	1.8E-07
U-235	9.3E-09
U-234	1.8E-07
Ra-226	1.3E-07
Th-232	6.8E-08
Th-230	3.4E-07
Th-228	6.8E-08
Ra-224	6.8E-08
Th-234	1.8E-07
Pa-234m	1.8E-07
Th-231	9.3E-09
Ra-228	6.8E-08
Ac-228	6.8E-08
Pa-231	1.9E-08
Ac-227	1.9E-08

[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-18.

Table B-18. Laboratory CAP88-PC Results for Critical Receptors for CY 2021

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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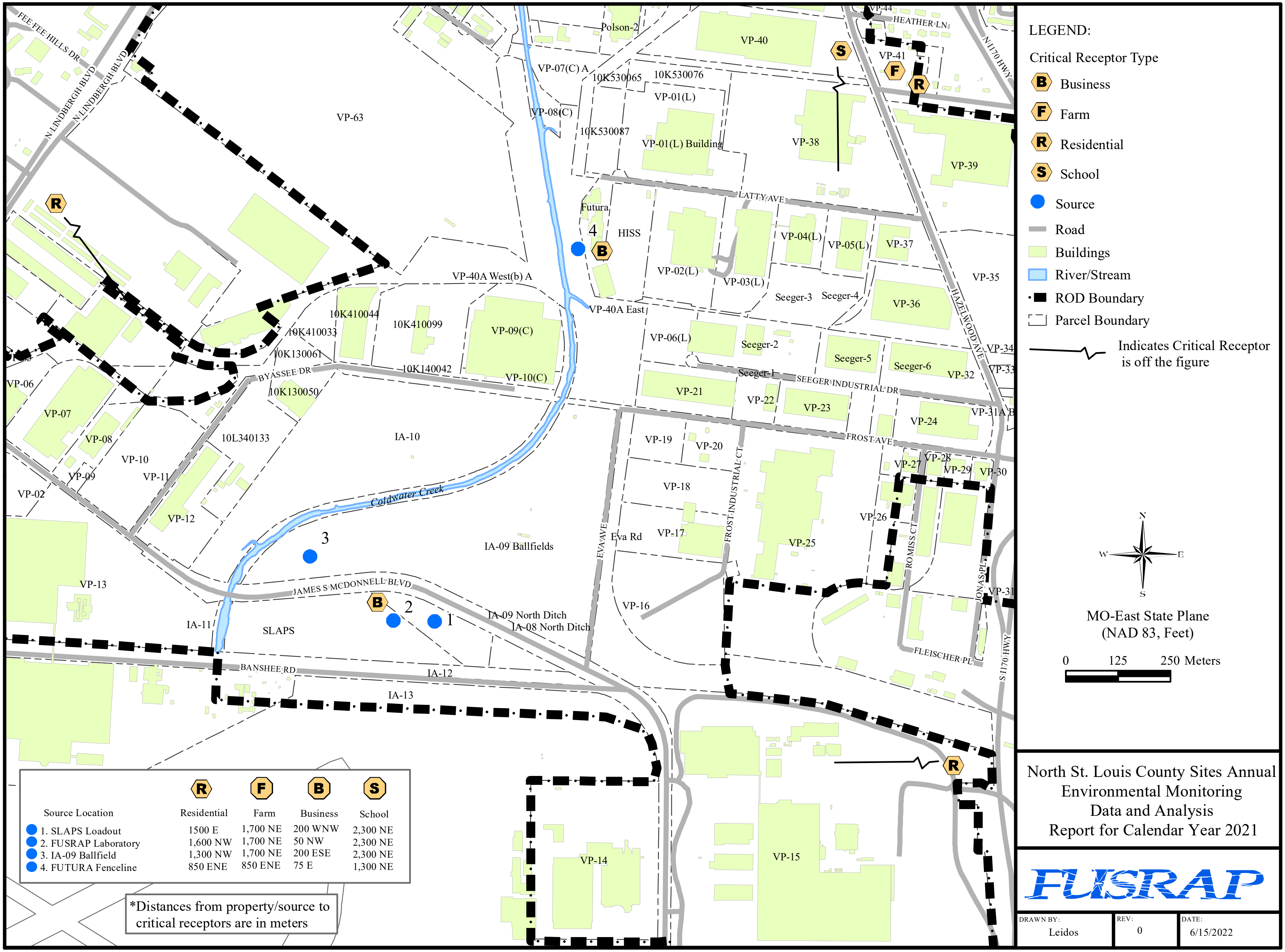

Path: U:\GPS\EMDAR\NCO Projects\CY2021\Rev0\Figure B-1 Laboratory SLAPS and SLAPS VPs Critical Receptors South.mxd

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

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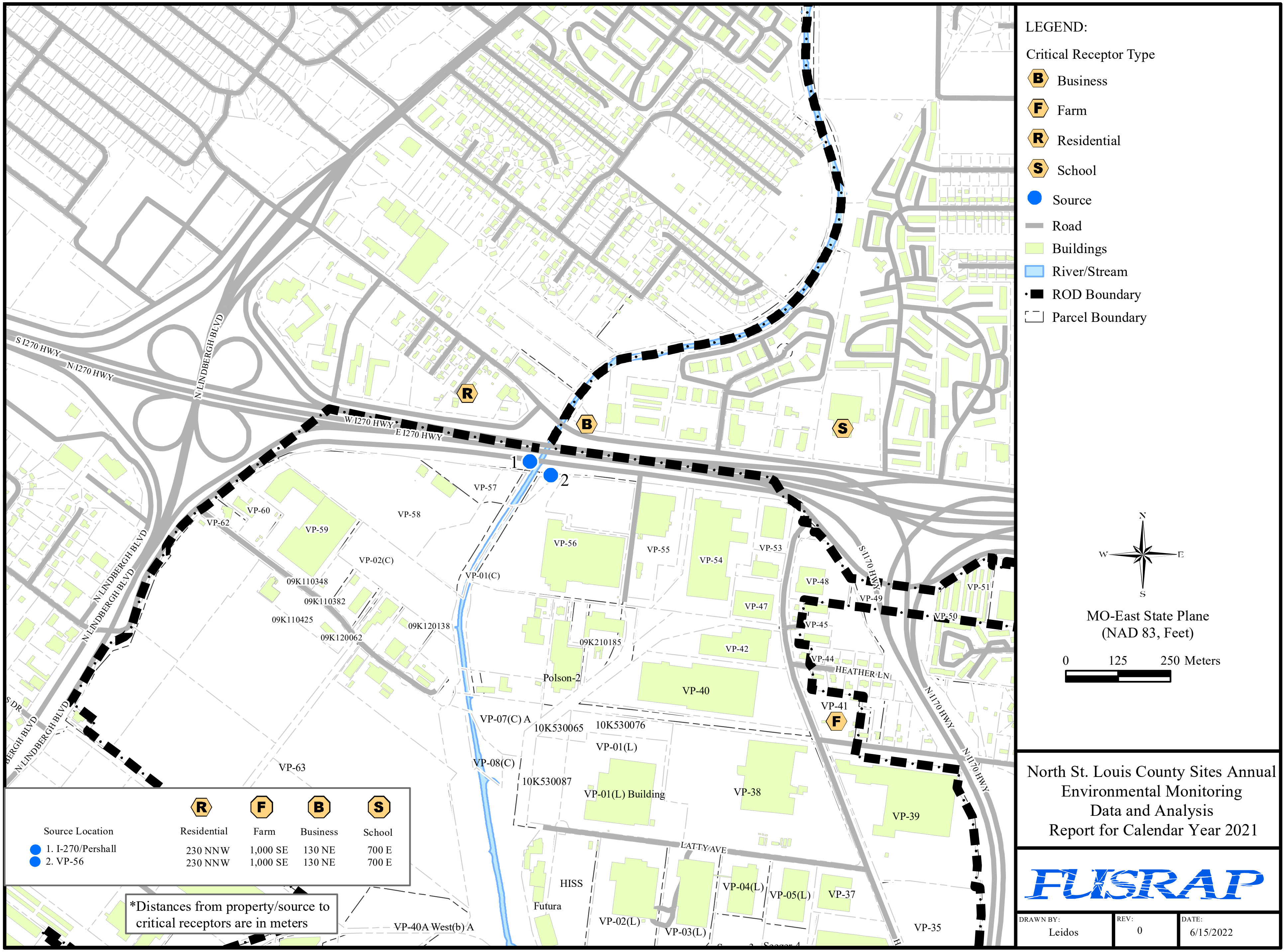

Figure B-2. SLAPS and SLAPS VPs Critical Receptors - North

ATTACHMENT B-1

CALCULATED EMISSION RATES

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Table B-1-1. Latty Avenue Properties Soil Radionuclide Concentrations for CY 2021

Property	Futura/VP-40A
Radionuclide	**Average Concentration[a] (pCi/g)**
U-238	2.75
U-235	0.12
U-234	2.75
Ra-226	5.19
Ra-228	0.54
Th-232	0.54
Th-230	168.83
Th-228	0.54
Pa-231	2.72
Ac-227	3.08

[a] Soil radionuclide concentrations derived from the average soil radionuclide concentrations from the 2021 railcar concentrations.

Table B-1-2. Latty Avenue Properties Average Gross Alpha and Beta Airborne Particulate Emissions for CY 2021

Location	Average Concentration (µCi/mL) for Location[a]	
	Gross Alpha	**Gross Beta**
Futura/VP-40A	3.85E-15	2.12E-14
Background Concentration[b]	4.31E-15	2.17E-14

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

Table B-1-3. Latty Avenue Properties Excavation Data for CY 2021

Location	Area (m^2)	Excavation Start Date[a]	Excavation End Date[a]
Futura Fence Line Survey Unit (SU)-21A through SU-21L	614	04/07/21	08/17/21

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

Table B-1-4. Latty Avenue Properties Average Surface Area and Flow Rate per Location for CY 2021

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)
Futura/VP-40A					
Futura Fence Line SU-21A through SU-21L	133	81,662	---	---	---
	Total	**81,662**	**224**	**17.1**	**6.1E+04**

Note: --- not applicable

Table B-1-5. Latty Avenue Properties Airborne Radioactive Particulate Emissions Based on Site Perimeter Air Samples for CY 2021

Property	Futura/VP-40A		
Radionuclide	Activity Fraction[a]	Emission Concentration (μCi/cm^3)[b]	Release Rate (Ci/year)[c]
U-238	0.01	5.7E-17	1.8E-06
U-235	0.001	2.5E-18	7.9E-08
U-234	0.01	5.7E-17	1.8E-06
Ra-226	0.03	1.1E-16	3.4E-06
Th-232	0.003	1.1E-17	3.6E-07
Th-230	0.90	3.5E-15	1.1E-04
Th-228	0.003	1.1E-17	3.6E-07
Ra-224[d]	0.003	1.1E-17	3.6E-07
Th-234[d]	0.41	8.7E-15	2.8E-04
Pa-234m[d]	0.41	8.7E-15	2.8E-04
Th-231[d]	0.02	3.8E-16	1.2E-05
Ra-228	0.08	1.7E-15	5.5E-05
Ac-228[d]	0.08	1.7E-15	5.5E-05
Pa-231	0.01	5.6E-17	1.8E-06
Ac-227	0.02	6.3E-17	2.0E-06

[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. SLAPS and SLAPS VPs Soil Radionuclide Concentrations for CY 2021

Property	I-270/Pershall Road[a]	VP-56[a]	IA-09 Ballfields[a]	SLAPS Loadout[a]
Radionuclide	Average Concentration (pCi/g)			
U-238	0.78	0.82	0.86	1.07
U-235	0.02	0.04	0.03	0.04
U-234	0.78	0.82	0.86	1.07
Ra-226	1.00	1.01	1.80	2.01
Ra-228	0.61	0.58	0.62	0.60
Th-232	0.61	0.58	0.62	0.61
Th-230	2.91	10.61	25.39	38.09
Th-228	0.61	0.58	0.62	0.61
Pa-231	0.02	0.04	0.20	0.5
Ac-227	0.03	0.16	0.42	0.67

[a] Soil radionuclide concentrations derived from the average soil radionuclide concentrations from the 2021 railcar concentrations.

Table B-1-7. SLAPS and SLAPS VPs Average Gross Alpha and Beta Airborne Particulate Emissions for CY 2021

Location	Average Concentration (µCi/mL) for Location[a]	
	Gross Alpha	Gross Beta
I-270/Pershall Road	6.57E-15	3.21E-14
VP-56	4.81E-15	2.87E-14
IA-09 Ballfields	4.82E-15	3.16E-14
SLAPS Loadout	4.19E-15	2.86E-14
Background Concentration[b]	4.31E-15	2.17E-14

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

Table B-1-8. SLAPS and SLAPS VPs Excavation Data for CY 2021

Location	Area (m^2)	Excavation Start Date[a]	Excavation End Date[a]
IA-09 Ballfields Phase 2B SU-25A	567	01/07/21	03/18/21
IA-09 Ballfields Phase 3 SU-25B and SU-26A	2,131	01/26/21	11/23/21
I-270/Pershall Road SU-8A through SU-8C	1,454	08/10/21	09/08/21
VP-56, Green Street SU-1A through SU-1C	1,814	06/16/21	08/24/21
SLAPS Loadout	5,000	01/01/21	12/31/21

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

Table B-1-9. SLAPS and SLAPS VPs Average Surface Area and Flow Rate per Location for CY 2021

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)
I-270/Pershall Road					
I-270/Pershall Road SU-1A	30	43,620	---	---	---
	Total	**43,620**	**120**	**12**	**3.3E+04**
VP-56, Green Street					
VP-56, Green Street SU-1A through SU-1C	70	126,980	---	---	---
	Total	**126,980**	**348**	**21**	**9.5E+04**
IA-09 Ballfields					
Ballfields Phase 2B SU-25A	71	40,257	---	---	---
Ballfields Phase 3 SU-25B and SU-26A	302	643,562	---	---	---
	Total	**683,819**	**1,873**	**49**	**5.1E+05**
SLAPS Loadout					
SLAPS Loadout	365	1,825,000	---	---	---
	Total	**1,825,000**	**5,000**	**81**	**1.4E+06**

Note: --- not applicable

Table B-1-10. SLAPS and SLAPS VPs Airborne Radioactive Particulate Emissions Based on Site Perimeter Air Samples for CY 2021

Property	I-270/Pershall Road			VP-56			IA-09 Ballfields			SLAPS Loadout		
Radionuclide	Activity Fraction[a]	Activity Fraction[a]	Emission Concentration (μCi/cm^3)[b]	Release Rate (Ci/year)[c]	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]	0.11	7.0E-16	1.2E-05	0.05	2.6E-16	1.3E-05	0.03	1.3E-16	3.5E-05	0.02	1.0E-16	7.3E-05
U-235[a]	0.003	1.8E-17	3.1E-07	0.003	1.3E-17	6.3E-07	0.001	4.6E-18	1.2E-06	0.001	3.8E-18	2.7E-06
U-234	0.11	7.0E-16	1.2E-05	0.05	2.6E-16	1.3E-05	0.03	1.3E-16	3.5E-05	0.02	1.0E-16	7.3E-05
Ra-226[a]	0.14	8.9E-16	1.5E-05	0.07	3.2E-16	1.6E-05	0.06	2.8E-16	7.4E-05	0.05	1.9E-16	1.4E-04
Th-232[a]	0.08	5.4E-16	9.3E-06	0.04	1.8E-16	9.1E-06	0.02	9.5E-17	2.5E-05	0.01	5.7E-17	4.1E-05
Th-230[a]	0.39	2.6E-15	4.4E-05	0.70	3.4E-15	1.7E-04	0.81	3.9E-15	1.0E-03	0.86	3.6E-15	2.6E-03
Th-228[a]	0.08	5.4E-16	9.3E-06	0.04	1.8E-16	9.1E-06	0.02	9.5E-17	2.5E-05	0.01	5.7E-17	4.1E-05
Ra-224[d]	0.08	5.4E-16	9.3E-06	0.04	1.8E-16	9.1E-06	0.02	9.5E-17	2.5E-05	0.01	5.7E-17	4.1E-05
Th-234[d]	0.28	8.9E-15	1.5E-04	0.29	8.3E-15	4.1E-04	0.29	9.1E-15	2.4E-03	0.32	9.0E-15	6.5E-03
Pa-234m[d]	0.28	8.9E-15	1.5E-04	0.29	8.3E-15	4.1E-04	0.29	9.1E-15	2.4E-03	0.32	9.0E-15	6.5E-03
Th-231[d]	0.01	2.3E-16	3.9E-06	0.01	4.0E-16	2.0E-05	0.01	3.2E-16	8.5E-05	0.01	3.4E-16	2.4E-04
Ra-228[a]	0.22	7.0E-15	1.2E-04	0.20	5.9E-15	2.9E-04	0.21	6.6E-15	1.8E-03	0.18	5.1E-15	3.6E-03
Ac-228[d]	0.22	7.0E-15	1.2E-04	0.20	5.9E-15	2.9E-04	0.21	6.6E-15	1.8E-03	0.18	5.1E-15	3.6E-03
Pa-231[a,d]	0.003	1.8E-17	3.1E-07	0.003	1.3E-17	6.3E-07	0.006	3.1E-17	8.2E-06	0.001	3.8E-18	2.7E-06
Ac-227[a,d]	0.004	2.7E-17	4.6E-07	0.01	5.1E-17	2.5E-06	0.013	6.4E-17	1.7E-05	0.001	3.8E-18	2.7E-06

[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-1-11. USACE St. Louis FUSRAP Laboratory Analyses for CY 2021

Site	Type	Gamma Spectroscopy	Isotopic Ra[a]	Isotopic Th[a]	Isotopic U[a]	Total Drying and Grinding[b]	Total Separations[c]
Latty VPs	Soil	110	---	108	---	110	108
Latty VPs	Water	---	4	4	4	0	12
IAAAP	Soil	906	---	---	927	906	927
IAAAP	Water	---	---	---	19	0	19
SLAPS	Soil	---	---	---	---	0	0
SLAPS	Water	---	5	5	5	0	15
SLAPS VPs	Soil	3,180	---	3,182	---	3,180	3,182
SLAPS VPs	Water	25	101	101	6	25	208
CWC	Sediment (Soil)	6,467	---	7,536	---	6,467	7,536
CWC	Water	---	21	21	21	0	63
SLDS	Soil	1,813	51	1,817	58	1,813	1,926
SLDS	Water	---	100	101	12	0	213
					Latty Avenue Properties Total	110	120
					IAAAP Total	906	946
					SLAPS, SLAPS VPs, and CWC Total	9,672	11,004
					SLDS Total	1,813	2,139
					Grand Total	12,501	14,209

[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 2021.
--- not applicable

Table B-1-12. SLDS Property Laboratory Samples for CY 2021

Radionuclide	Average (pCi/g)	No. Samples (Drying and Grinding)	No. Samples (Separations)	Emission Rate (Ci/year)[a]
U-238[b]	8.2	1,813	2,139	1.0E-07
U-235[b]	0.5	1,813	2,139	6.4E-09
U-234[b,c]	8.2	1,813	2,139	1.0E-07
Ra-226[b]	2.8	1,813	2,139	3.4E-08
Th-232[b]	0.7	1,813	2,139	8.6E-09
Th-230[b]	9.0	1,813	2,139	1.1E-07
Th-228[b]	0.7	1,813	2,139	8.6E-09
Ra-224[c]	0.7	1,813	2,139	8.6E-09
Th-234[c]	8.2	1,813	2,139	1.0E-07
Pa-234m[c]	8.2	1,813	2,139	1.0E-07
Th-231[c]	0.5	1,813	2,139	6.4E-09
Ra-228[b]	0.7	1,813	2,139	8.6E-09
Ac-228[c]	0.7	1,813	2,139	8.6E-09
Pa-231[c]	1.3	1,813	2,139	1.6E-08
Ac-227[c]	1.3	1,813	2,139	1.6E-08

[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 2021.
[c] When data were not available, the radionuclide was assumed to be in secular equilibrium with the parent radionuclide.

Table B-1-13. SLAPS and SLAPS VPs Laboratory Samples for CY 2021

Radionuclide	Average (pCi/g)	No. Samples (Drying and Grinding)	No. Samples (Separations)	Emission Rate (Ci/year)[a]
U-238[b]	1.1	9,672	11,004	7.2E-08
U-235[b]	0.04	9,672	11,004	2.6E-09
U-234[b,c]	1.1	9,672	11,004	7.2E-08
Ra-226[b]	1.4	9,672	11,004	9.1E-08
Th-232[b]	0.8	9,672	11,004	5.4E-08
Th-230[b]	3.4	9,672	11,004	2.2E-07
Th-228[b]	0.8	9,672	11,004	5.4E-08
Ra-224[c]	0.8	9,672	11,004	5.4E-08
Th-234[c]	1.1	9,672	11,004	7.2E-08
Pa-234m[c]	1.1	9,672	11,004	7.2E-08
Th-231[c]	0.04	9,672	11,004	2.6E-09
Ra-228[b]	0.8	9,672	11,004	5.4E-08
Ac-228[c]	0.8	9,672	11,004	5.4E-08
Pa-231[c]	0.04	9,672	11,004	2.6E-09
Ac-227[c]	0.04	9,672	11,004	2.6E-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 2021.
[c] When data were not available, the radionuclide was assumed to be in secular equilibrium with the parent radionuclide.

Table B-1-14. Latty Avenue Property Laboratory Samples for CY 2021

Radionuclide	Average (pCi/g)	No. Samples (Drying and Grinding)	No. Samples[a] (Separations)	Emission Rate (Ci/year)[a]
U-238[b]	1.2	110	120	8.2E-10
U-235[b]	0.04	110	120	2.8E-11
U-234[b,c]	1.2	110	120	8.2E-10
Ra-226[b]	1.0	110	120	7.3E-10
Th-232[b]	0.8	110	120	5.8E-10
Th-230[b]	1.0	110	120	7.0E-10
Th-228[b]	0.8	110	120	5.8E-10
Ra-224[c]	0.8	110	120	5.8E-10
Th-234[c]	1.2	110	120	8.2E-10
Pa-234m[c]	1.2	110	120	8.2E-10
Th-231[c]	0.04	110	120	2.8E-11
Ra-228[b]	0.8	110	120	5.8E-10
Ac-228[c]	0.8	110	120	5.8E-10
Pa-231[b]	0.04	110	120	2.8E-11
Ac-227[b]	0.04	110	120	2.8E-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 data analyzed at the project laboratory during 2021.
[c] When data were not available, the radionuclide was assumed to be in secular equilibrium with the parent radionuclide.

Table B-1-15. Iowa Army Ammunition Plant Laboratory Samples for CY 2021

Radionuclide	Average (pCi/g)	No. Samples (Drying and Grinding)	No. Samples (Separations)	Emission Rate (Ci/year)[a]
U-238[b]	1.5	906	946	8.6E-09
U-235[b]	0.1	906	946	2.8E-10
U-234[c]	1.5	906	946	8.6E-09
Ra-226[b]	1.0	906	946	5.4E-09
Th-232[b]	0.9	906	946	4.8E-09
Th-230[b]	0.9	906	946	5.1E-09
Th-228[b]	0.9	906	946	4.8E-09
Ra-224[c]	0.9	906	946	4.8E-09
Th-234[c]	1.5	906	946	8.6E-09
Pa-234m[c]	1.5	906	946	8.6E-09
Th-231[c]	0.1	906	946	2.8E-10
Ra-228[b]	0.9	906	946	4.8E-09
Ac-228[c]	0.9	906	946	4.8E-09
Pa-231[c]	0.1	906	946	2.8E-10
Ac-227[c]	0.1	906	946	2.8E-10

[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 2021.
[c] When data were not available, the radionuclide was assumed to be in secular equilibrium with the parent radionuclide.

Table B-1-16. Total Laboratory Airborne Radioactive Particulate Emission Rate for CY 2021

Radionuclide	Emission Rate (Ci/year)				
	SLDS	SLAPS and SLAPS VPs	Latty Avenue Properties	IAAAP	Total Across Laboratory[a]
U-238	1.0E-07	7.2E-08	8.2E-10	8.6E-09	1.8E-07
U-235	6.4E-09	2.6E-09	2.8E-11	2.8E-10	9.3E-09
U-234	1.0E-07	7.2E-08	8.2E-10	8.6E-09	1.8E-07
Ra-226	3.4E-08	9.1E-08	7.3E-10	5.4E-09	1.3E-07
Th-232	8.6E-09	5.4E-08	5.8E-10	4.8E-09	6.8E-08
Th-230	1.1E-07	2.2E-07	7.0E-10	5.1E-09	3.4E-07
Th-228	8.6E-09	5.4E-08	5.8E-10	4.8E-09	6.8E-08
Ra-224	8.6E-09	5.4E-08	5.8E-10	4.8E-09	6.8E-08
Th-234	1.0E-07	7.2E-08	8.2E-10	8.6E-09	1.8E-07
Pa-234m	1.0E-07	7.2E-08	8.2E-10	8.6E-09	1.8E-07
Th-231	6.4E-09	2.6E-09	2.8E-11	2.8E-10	9.3E-09
Ra-228	8.6E-09	5.4E-08	5.8E-10	4.8E-09	6.8E-08
Ac-228	8.6E-09	5.4E-08	5.8E-10	4.8E-09	6.8E-08
Pa-231	1.6E-08	2.6E-09	2.8E-11	2.8E-10	1.9E-08
Ac-227	1.6E-08	2.6E-09	2.8E-11	2.8E-10	1.9E-08

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

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ATTACHMENT B-2

CAP88-PC RUNS

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CAP88-PC RUNS FOR THE LATTY AVENUE PROPERTIES

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CAP88 OUTPUT RESULTS

Futura/VP-40A

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
Wed Mar 16 11:40:54 2022

```
     Facility:  VP-40A - Futura
      Address:
         City:  St. Louis
        State:  MO          Zip:  63042

Source Category:  Area
    Source Type:  Area
  Emission Year:  2021
 DOSE Age Group:  Adult

       Comments:  Air

   Dataset Name:  VP-40A - Futura.
   Dataset Date:  Mar 16, 2022 11:40 AM
      Wind File:  C:\Users\randy\OneDrive\Documents\CAP88\Wind Files\13994.WND
```

Wed Mar 16 11:40:54 2022

SUMMARY
Page 1

ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem)
Adrenals	5.53E-02
UB_Wall	5.96E-02
Bone_Sur	9.91E+00
Brain	5.75E-02
Breasts	6.15E-02
St_Wall	5.80E-02
SI_Wall	5.78E-02
ULI_Wall	6.15E-02
LLI_Wall	6.92E-02
Kidneys	1.92E-01
Liver	3.61E-01
Muscle	6.29E-02
Ovaries	1.27E-01
Pancreas	5.57E-02
R_Marrow	4.72E-01
Skin	3.45E-01
Spleen	5.83E-02
Testes	1.34E-01
Thymus	5.77E-02
Thyroid	5.93E-02
GB_Wall	5.59E-02
Ht_Wall	5.75E-02
Uterus	5.71E-02
ET_Reg	7.07E-01
Lung	1.72E+00
Effectiv	4.41E-01

PATHWAY EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem)
INGESTION	2.32E-02
INHALATION	3.74E-01
AIR IMMERSION	3.13E-06
GROUND SURFACE	4.32E-02
INTERNAL	3.97E-01
EXTERNAL	4.32E-02
TOTAL	4.41E-01

Wed Mar 16 11:40:54 2022 SUMMARY

Page 2

NUCLIDE EFFECTIVE DOSE EQUIVALENT SUMMARY

Nuclide	Selected Individual (mrem)
U-238	8.04E-04
Th-234	5.08E-04
Pa-234m	3.93E-04
Pa-234	7.73E-06
U-234	9.71E-04
Th-230	2.87E-01
Ra-226	2.53E-03
Rn-222	2.68E-06
Po-218	4.80E-11
Pb-214	1.75E-03
At-218	1.80E-10
Bi-214	1.02E-02
Rn-218	1.04E-12
Po-214	5.67E-07
Tl-210	4.00E-06
Pb-210	8.31E-06
Bi-210	1.34E-04
Hg-206	1.08E-11
Po-210	3.47E-08
Tl-206	3.13E-10
U-235	5.49E-05
Th-231	2.34E-06
Pa-231	3.21E-02
Ac-227	2.70E-02
Th-227	3.11E-04
Fr-223	2.93E-06
Ra-223	3.47E-04
Rn-219	1.50E-04
At-219	0.00E+00
Bi-215	6.76E-10
Po-215	4.60E-07
Pb-211	2.95E-04
Bi-211	1.22E-04
Tl-207	1.53E-04
Po-211	5.86E-08
Th-232	1.73E-03
Ra-228	4.24E-02
Ac-228	1.15E-02
Th-228	2.36E-03
Ra-224	2.73E-04
Rn-220	7.76E-06
Po-216	1.87E-07
Pb-212	1.70E-03
Bi-212	1.99E-03
Po-212	0.00E+00
Tl-208	1.37E-02
TOTAL	4.41E-01

Wed Mar 16 11:40:54 2022 SUMMARY
Page 3

CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk
Esophagu	5.79E-10
Stomach	2.12E-09
Colon	6.09E-09
Liver	4.77E-09
LUNG	1.77E-07
Bone	6.75E-09
Skin	3.39E-10
Breast	2.33E-09
Ovary	1.42E-09
Bladder	1.38E-09
Kidneys	8.56E-10
Thyroid	1.68E-10
Leukemia	3.56E-09
Residual	7.78E-09
Total	2.15E-07
TOTAL	2.15E-07

PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	7.28E-09
INHALATION	1.85E-07
AIR IMMERSION	1.62E-12
GROUND SURFACE	2.25E-08
INTERNAL	1.92E-07
EXTERNAL	2.25E-08
TOTAL	2.15E-07

Wed Mar 16 11:40:54 2022 SUMMARY
Page 4

NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
U-238	8.36E-10
Th-234	5.69E-10
Pa-234m	6.88E-11
Pa-234	4.20E-12
U-234	1.02E-09
Th-230	1.54E-07
Ra-226	2.20E-09
Rn-222	1.46E-12
Po-218	2.14E-17
Pb-214	9.37E-10
At-218	2.22E-17
Bi-214	5.41E-09
Rn-218	5.71E-19
Po-214	3.11E-13
Tl-210	2.14E-12
Pb-210	3.72E-12
Bi-210	1.49E-11
Hg-206	4.81E-18
Po-210	1.91E-14
Tl-206	3.52E-17
U-235	4.89E-11
Th-231	1.55E-12
Pa-231	3.15E-09
Ac-227	7.44E-09
Th-227	1.68E-10
Fr-223	1.09E-12
Ra-223	1.88E-10
Rn-219	8.23E-11
At-219	0.00E+00
Bi-215	3.02E-16
Po-215	2.52E-13
Pb-211	1.06E-10
Bi-211	6.65E-11
Tl-207	1.97E-11
Po-211	3.21E-14
Th-232	7.67E-10
Ra-228	1.96E-08
Ac-228	6.15E-09
Th-228	2.38E-09
Ra-224	2.46E-10
Rn-220	4.25E-12
Po-216	1.03E-13
Pb-212	9.27E-10
Bi-212	7.67E-10
Po-212	0.00E+00
Tl-208	7.47E-09
TOTAL	2.15E-07

Wed Mar 16 11:40:54 2022 SUMMARY
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INDIVIDUAL EFFECTIVE DOSE EQUIVALENT (mrem)
(All Radionuclides and Pathways)

Direction	Distance (m) 75	850	1300	
N	4.4E-01	2.2E-02	2.0E-02	
NNW	2.3E-01	2.0E-02	1.8E-02	
NW	2.7E-01	2.0E-02	1.9E-02	
WNW	3.3E-01	2.1E-02	1.9E-02	
W	2.5E-01	2.0E-02	1.8E-02	
WSW	1.3E-01	1.8E-02	1.8E-02	
SW	1.8E-01	1.9E-02	1.8E-02	
SSW	2.1E-01	1.9E-02	1.8E-02	
S	1.9E-01	1.9E-02	1.8E-02	
SSE	1.4E-01	1.9E-02	1.8E-02	
SE	1.9E-01	1.9E-02	1.8E-02	
ESE	3.2E-01	2.1E-02	1.9E-02	Resident, Farm
E	4.1E-01	2.2E-02	1.9E-02	Business
ENE	3.4E-01	2.1E-02	1.9E-02	
NE	2.2E-01	1.9E-02	1.8E-02	School
NNE	1.9E-01	1.9E-02	1.8E-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.

Wed Mar 16 11:40:54 2022

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

	Distance (m)		
Direction	75	850	1300
N	2.1E-07	7.9E-09	6.6E-09
NNW	1.1E-07	6.7E-09	6.1E-09
NW	1.3E-07	6.9E-09	6.2E-09
WNW	1.6E-07	7.3E-09	6.3E-09
W	1.2E-07	6.8E-09	6.1E-09
WSW	6.2E-08	6.1E-09	5.8E-09
SW	8.4E-08	6.4E-09	5.9E-09
SSW	1.0E-07	6.6E-09	6.0E-09
S	9.2E-08	6.5E-09	5.9E-09
SSE	6.6E-08	6.2E-09	5.8E-09
SE	9.3E-08	6.5E-09	5.9E-09
ESE	1.5E-07	7.2E-09	6.3E-09
E	2.0E-07	7.7E-09	6.5E-09
ENE	1.7E-07	7.3E-09	6.3E-09
NE	1.0E-07	6.6E-09	6.0E-09
NNE	8.9E-08	6.4E-09	5.9E-09

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CAP88-PC RUNS FOR THE SLAPS AND SLAPS VICINITY PROPERTIES

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CAP88 OUTPUT RESULTS

I-270/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
Tue Mar 15 16:08:36 2022

```
      Facility:  I-270/Pershall Rd
       Address:
          City:  St. Louis
         State:  MO          Zip:  63042


Source Category:  Area
    Source Type:  Area
  Emission Year:  2021
 DOSE Age Group:  Adult

       Comments:  Air


   Dataset Name:  I-270 Pershall R
   Dataset Date:  Mar 15, 2022 04:08 PM
      Wind File:  C:\Users\randy\OneDrive\Documents\CAP88\Wind Files\13994.WND
```

Tue Mar 15 16:08:36 2022 SUMMARY
Page 1

ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem)
Adrenals	4.87E-02
UB_Wall	5.38E-02
Bone_Sur	2.51E+00
Brain	5.13E-02
Breasts	5.57E-02
St_Wall	5.18E-02
SI_Wall	5.15E-02
ULI_Wall	5.34E-02
LLI_Wall	5.77E-02
Kidneys	9.18E-02
Liver	1.23E-01
Muscle	5.74E-02
Ovaries	6.48E-02
Pancreas	4.93E-02
R_Marrow	1.96E-01
Skin	3.89E-01
Spleen	5.21E-02
Testes	7.21E-02
Thymus	5.15E-02
Thyroid	5.33E-02
GB_Wall	4.94E-02
Ht_Wall	5.12E-02
Uterus	5.09E-02
ET_Reg	2.70E-01
Lung	7.36E-01
Effectiv	1.88E-01

PATHWAY EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem)
INGESTION	1.70E-02
INHALATION	1.21E-01
AIR IMMERSION	2.29E-06
GROUND SURFACE	4.99E-02
INTERNAL	1.38E-01
EXTERNAL	4.99E-02
TOTAL	1.88E-01

Tue Mar 15 16:08:36 2022 SUMMARY
Page 2

NUCLIDE EFFECTIVE DOSE EQUIVALENT SUMMARY

Nuclide	Selected Individual (mrem)
U-238	2.09E-03
Th-234	1.59E-04
Pa-234m	7.89E-04
Pa-234	1.56E-05
U-234	2.53E-03
Th-230	4.48E-02
Ra-226	4.40E-03
Rn-222	3.29E-06
Po-218	5.87E-11
Pb-214	2.15E-03
At-218	2.21E-10
Bi-214	1.25E-02
Rn-218	1.28E-12
Po-214	6.95E-07
Tl-210	4.90E-06
Pb-210	1.05E-05
Bi-210	1.70E-04
Hg-206	1.37E-11
Po-210	4.41E-08
Tl-206	3.97E-10
U-235	8.45E-05
Th-231	2.77E-06
Pa-231	2.16E-03
Ac-227	2.42E-03
Th-227	2.44E-05
Fr-223	2.30E-07
Ra-223	2.73E-05
Rn-219	1.18E-05
At-219	0.00E+00
Bi-215	5.32E-11
Po-215	3.61E-08
Pb-211	2.32E-05
Bi-211	9.57E-06
Tl-207	1.20E-05
Po-211	4.61E-09
Th-232	1.74E-02
Ra-228	3.69E-02
Ac-228	1.33E-02
Th-228	2.35E-02
Ra-224	1.65E-03
Rn-220	9.15E-06
Po-216	2.21E-07
Pb-212	2.01E-03
Bi-212	2.34E-03
Po-212	0.00E+00
Tl-208	1.62E-02
TOTAL	1.88E-01

Tue Mar 15 16:08:36 2022 SUMMARY
Page 3

CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk
Esophagu	5.58E-10
Stomach	2.16E-09
Colon	5.96E-09
Liver	2.15E-09
LUNG	7.92E-08
Bone	2.83E-09
Skin	3.90E-10
Breast	2.52E-09
Ovary	9.23E-10
Bladder	1.33E-09
Kidneys	5.29E-10
Thyroid	1.72E-10
Leukemia	3.31E-09
Residual	8.04E-09
Total	1.10E-07
TOTAL	1.10E-07

PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	6.24E-09
INHALATION	7.78E-08
AIR IMMERSION	1.24E-12
GROUND SURFACE	2.60E-08
INTERNAL	8.41E-08
EXTERNAL	2.60E-08
TOTAL	1.10E-07

Tue Mar 15 16:08:36 2022 SUMMARY
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NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
U-238	2.18E-09
Th-234	1.47E-10
Pa-234m	1.38E-10
Pa-234	8.46E-12
U-234	2.66E-09
Th-230	2.41E-08
Ra-226	3.79E-09
Rn-222	1.79E-12
Po-218	2.62E-17
Pb-214	1.15E-09
At-218	2.72E-17
Bi-214	6.62E-09
Rn-218	7.00E-19
Po-214	3.81E-13
Tl-210	2.62E-12
Pb-210	4.72E-12
Bi-210	1.89E-11
Hg-206	6.09E-18
Po-210	2.42E-14
Tl-206	4.47E-17
U-235	7.50E-11
Th-231	1.33E-12
Pa-231	2.11E-10
Ac-227	6.68E-10
Th-227	1.32E-11
Fr-223	8.58E-14
Ra-223	1.48E-11
Rn-219	6.48E-12
At-219	0.00E+00
Bi-215	2.37E-17
Po-215	1.98E-14
Pb-211	8.30E-12
Bi-211	5.23E-12
Tl-207	1.55E-12
Po-211	2.52E-15
Th-232	7.73E-09
Ra-228	1.69E-08
Ac-228	7.10E-09
Th-228	2.39E-08
Ra-224	1.87E-09
Rn-220	5.01E-12
Po-216	1.21E-13
Pb-212	1.09E-09
Bi-212	9.04E-10
Po-212	0.00E+00
Tl-208	8.81E-09
TOTAL	1.10E-07

Tue Mar 15 16:08:36 2022 SUMMARY
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INDIVIDUAL EFFECTIVE DOSE EQUIVALENT (mrem)
(All Radionuclides and Pathways)

Direction	130	230	700	1000	
	Distance (m)				
N	1.9E-01	7.5E-02	2.1E-02	1.7E-02	
NNW	1.0E-01	4.5E-02	1.7E-02	1.5E-02	Resident
NW	1.2E-01	5.0E-02	1.8E-02	1.5E-02	
WNW	1.4E-01	5.9E-02	1.9E-02	1.6E-02	
W	1.1E-01	4.8E-02	1.7E-02	1.5E-02	
WSW	6.0E-02	3.0E-02	1.5E-02	1.4E-02	
SW	8.0E-02	3.7E-02	1.6E-02	1.4E-02	
SSW	9.5E-02	4.2E-02	1.7E-02	1.5E-02	
S	8.4E-02	3.8E-02	1.6E-02	1.5E-02	
SSE	6.3E-02	3.1E-02	1.5E-02	1.4E-02	
SE	8.6E-02	3.9E-02	1.6E-02	1.5E-02	Farm
ESE	1.4E-01	5.7E-02	1.9E-02	1.6E-02	
E	1.8E-01	7.2E-02	2.0E-02	1.7E-02	School
ENE	1.5E-01	6.1E-02	1.9E-02	1.6E-02	
NE	9.6E-02	4.2E-02	1.7E-02	1.5E-02	Business
NNE	8.3E-02	3.8E-02	1.6E-02	1.5E-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.

Tue Mar 15 16:08:36 2022 SUMMARY
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INDIVIDUAL LIFETIME RISK (deaths)
(All Radionuclides and Pathways)

Direction	Distance (m) 130	230	700	1000
N	1.1E-07	4.2E-08	9.5E-09	7.2E-09
NNW	5.9E-08	2.4E-08	7.2E-09	6.0E-09
NW	6.8E-08	2.7E-08	7.6E-09	6.2E-09
WNW	8.3E-08	3.2E-08	8.2E-09	6.5E-09
W	6.4E-08	2.6E-08	7.4E-09	6.1E-09
WSW	3.3E-08	1.5E-08	6.0E-09	5.4E-09
SW	4.5E-08	1.9E-08	6.5E-09	5.7E-09
SSW	5.5E-08	2.2E-08	6.9E-09	5.9E-09
S	4.8E-08	2.0E-08	6.7E-09	5.8E-09
SSE	3.5E-08	1.5E-08	6.1E-09	5.5E-09
SE	4.8E-08	2.0E-08	6.7E-09	5.8E-09
ESE	8.0E-08	3.2E-08	8.1E-09	6.5E-09
E	1.0E-07	4.0E-08	9.1E-09	7.0E-09
ENE	8.7E-08	3.4E-08	8.4E-09	6.6E-09
NE	5.5E-08	2.2E-08	7.0E-09	5.9E-09
NNE	4.7E-08	2.0E-08	6.6E-09	5.7E-09

CAP88 OUTPUT RESULTS

VP-56

CAP88-PC

Version 4.1

Clean Air Act Assessment Package - 1988

VP-56

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

        Non-Radon Individual Assessment
            Tue Mar 15 16:17:48 2022



      Facility:  VP-56
       Address:
          City:  St. Louis
         State:  MO          Zip:  63042


 Source Category:  Area
     Source Type:  Area
   Emission Year:  2021
  DOSE Age Group:  Adult

        Comments:  Air


    Dataset Name:  VP-56.
    Dataset Date:  Mar 15, 2022 04:17 PM
       Wind File:  C:\Users\randy\OneDrive\Documents\CAP88\Wind Files\13994.WND
```

Tue Mar 15 16:17:48 2022 SUMMARY
Page 1

ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem)
Adrenals	9.14E-02
UB_Wall	1.00E-01
Bone_Sur	7.17E+00
Brain	9.58E-02
Breasts	1.04E-01
St_Wall	9.67E-02
SI_Wall	9.61E-02
ULI_Wall	1.00E-01
LLI_Wall	1.10E-01
Kidneys	2.05E-01
Liver	3.16E-01
Muscle	1.06E-01
Ovaries	1.39E-01
Pancreas	9.23E-02
R_Marrow	4.80E-01
Skin	6.48E-01
Spleen	9.73E-02
Testes	1.52E-01
Thymus	9.61E-02
Thyroid	9.93E-02
GB_Wall	9.25E-02
Ht_Wall	9.57E-02
Uterus	9.51E-02
ET_Reg	6.22E-01
Lung	1.56E+00
Effectiv	4.19E-01

PATHWAY EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem)
INGESTION	4.01E-02
INHALATION	2.91E-01
AIR IMMERSION	5.57E-06
GROUND SURFACE	8.71E-02
INTERNAL	3.31E-01
EXTERNAL	8.71E-02
TOTAL	4.19E-01

Tue Mar 15 16:17:48 2022 SUMMARY
Page 2

NUCLIDE EFFECTIVE DOSE EQUIVALENT SUMMARY

Nuclide	Selected Individual (mrem)
U-238	2.27E-03
Th-234	3.42E-04
Pa-234m	8.90E-04
Pa-234	1.75E-05
U-234	2.74E-03
Th-230	1.73E-01
Ra-226	4.71E-03
Rn-222	3.89E-06
Po-218	6.95E-11
Pb-214	2.54E-03
At-218	2.61E-10
Bi-214	1.48E-02
Rn-218	1.51E-12
Po-214	8.23E-07
Tl-210	5.80E-06
Pb-210	1.23E-05
Bi-210	1.99E-04
Hg-206	1.61E-11
Po-210	5.16E-08
Tl-206	4.65E-10
U-235	1.72E-04
Th-231	5.87E-06
Pa-231	4.38E-03
Ac-227	1.32E-02
Th-227	9.47E-05
Fr-223	8.93E-07
Ra-223	1.06E-04
Rn-219	4.59E-05
At-219	0.00E+00
Bi-215	2.06E-10
Po-215	1.40E-07
Pb-211	9.01E-05
Bi-211	3.71E-05
Tl-207	4.67E-05
Po-211	1.79E-08
Th-232	1.71E-02
Ra-228	8.91E-02
Ac-228	2.68E-02
Th-228	2.30E-02
Ra-224	1.76E-03
Rn-220	1.82E-05
Po-216	4.40E-07
Pb-212	4.00E-03
Bi-212	4.67E-03
Po-212	0.00E+00
Tl-208	3.23E-02
TOTAL	4.19E-01

Tue Mar 15 16:17:48 2022 SUMMARY
Page 3

CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk
Esophagu	1.05E-09
Stomach	4.04E-09
Colon	1.13E-08
Liver	5.29E-09
LUNG	1.65E-07
Bone	7.25E-09
Skin	6.48E-10
Breast	4.56E-09
Ovary	1.92E-09
Bladder	2.49E-09
Kidneys	1.15E-09
Thyroid	3.19E-10
Leukemia	6.29E-09
Residual	1.49E-08
Total	2.26E-07
TOTAL	2.26E-07

PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	1.45E-08
INHALATION	1.66E-07
AIR IMMERSION	3.00E-12
GROUND SURFACE	4.56E-08
INTERNAL	1.80E-07
EXTERNAL	4.56E-08
TOTAL	2.26E-07

Tue Mar 15 16:17:48 2022 SUMMARY
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NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
U-238	2.36E-09
Th-234	3.55E-10
Pa-234m	1.56E-10
Pa-234	9.53E-12
U-234	2.88E-09
Th-230	9.30E-08
Ra-226	4.05E-09
Rn-222	2.12E-12
Po-218	3.11E-17
Pb-214	1.36E-09
At-218	3.22E-17
Bi-214	7.84E-09
Rn-218	8.28E-19
Po-214	4.52E-13
Tl-210	3.10E-12
Pb-210	5.52E-12
Bi-210	2.21E-11
Hg-206	7.13E-18
Po-210	2.83E-14
Tl-206	5.23E-17
U-235	1.52E-10
Th-231	2.99E-12
Pa-231	4.30E-10
Ac-227	3.63E-09
Th-227	5.13E-11
Fr-223	3.33E-13
Ra-223	5.72E-11
Rn-219	2.51E-11
At-219	0.00E+00
Bi-215	9.20E-17
Po-215	7.68E-14
Pb-211	3.22E-11
Bi-211	2.03E-11
Tl-207	6.00E-12
Po-211	9.78E-15
Th-232	7.56E-09
Ra-228	4.09E-08
Ac-228	1.43E-08
Th-228	2.34E-08
Ra-224	1.91E-09
Rn-220	9.97E-12
Po-216	2.42E-13
Pb-212	2.18E-09
Bi-212	1.80E-09
Po-212	0.00E+00
Tl-208	1.75E-08
TOTAL	2.26E-07

Tue Mar 15 16:17:48 2022 SUMMARY
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INDIVIDUAL EFFECTIVE DOSE EQUIVALENT (mrem)
(All Radionuclides and Pathways)

	Distance (m)				
Direction	130	230	700	1000	
N	4.2E-01	1.7E-01	4.8E-02	3.9E-02	
NNW	2.3E-01	1.0E-01	3.9E-02	3.5E-02	Resident
NW	2.7E-01	1.1E-01	4.1E-02	3.6E-02	
WNW	3.2E-01	1.3E-01	4.3E-02	3.7E-02	
W	2.5E-01	1.1E-01	4.0E-02	3.5E-02	
WSW	1.3E-01	6.7E-02	3.5E-02	3.3E-02	
SW	1.8E-01	8.3E-02	3.7E-02	3.4E-02	
SSW	2.1E-01	9.5E-02	3.8E-02	3.5E-02	
S	1.9E-01	8.7E-02	3.8E-02	3.4E-02	
SSE	1.4E-01	7.0E-02	3.5E-02	3.3E-02	
SE	1.9E-01	8.8E-02	3.8E-02	3.4E-02	Farm
ESE	3.1E-01	1.3E-01	4.3E-02	3.7E-02	
E	4.0E-01	1.6E-01	4.6E-02	3.9E-02	School
ENE	3.3E-01	1.4E-01	4.4E-02	3.7E-02	
NE	2.1E-01	9.6E-02	3.9E-02	3.5E-02	Business
NNE	1.8E-01	8.5E-02	3.7E-02	3.4E-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.

Tue Mar 15 16:17:48 2022 SUMMARY
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INDIVIDUAL LIFETIME RISK (deaths)
(All Radionuclides and Pathways)

	Distance (m)			
Direction	130	230	700	1000
N	2.3E-07	8.7E-08	2.1E-08	1.6E-08
NNW	1.2E-07	5.0E-08	1.6E-08	1.4E-08
NW	1.4E-07	5.7E-08	1.7E-08	1.4E-08
WNW	1.7E-07	6.8E-08	1.8E-08	1.5E-08
W	1.3E-07	5.4E-08	1.6E-08	1.4E-08
WSW	6.9E-08	3.1E-08	1.4E-08	1.2E-08
SW	9.3E-08	4.0E-08	1.5E-08	1.3E-08
SSW	1.1E-07	4.7E-08	1.5E-08	1.3E-08
S	9.9E-08	4.2E-08	1.5E-08	1.3E-08
SSE	7.2E-08	3.3E-08	1.4E-08	1.3E-08
SE	1.0E-07	4.3E-08	1.5E-08	1.3E-08
ESE	1.7E-07	6.6E-08	1.8E-08	1.5E-08
E	2.2E-07	8.3E-08	2.0E-08	1.6E-08
ENE	1.8E-07	7.1E-08	1.8E-08	1.5E-08
NE	1.1E-07	4.7E-08	1.6E-08	1.3E-08
NNE	9.7E-08	4.1E-08	1.5E-08	1.3E-08

CAP88 OUTPUT RESULTS

IA-09 BALLFIELDS

CAP88-PC

Version 4.1

Clean Air Act Assessment Package - 1988

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

Non-Radon Individual Assessment
Tue Mar 15 15:58:50 2022


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


   Source Category:  Area
       Source Type:  Area
     Emission Year:  2021
    DOSE Age Group:  Adult

          Comments:  Air


      Dataset Name:  IA-9 Ballfields.
      Dataset Date:  Mar 15, 2022 03:58 PM
         Wind File:  C:\Users\randy\OneDrive\Documents\CAP88\Wind Files\13994.WND
```

Tue Mar 15 15:58:50 2022 SUMMARY
Page 1

ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem)
Adrenals	2.35E-01
UB_Wall	2.58E-01
Bone_Sur	1.94E+01
Brain	2.46E-01
Breasts	2.66E-01
St_Wall	2.49E-01
SI_Wall	2.47E-01
ULI_Wall	2.58E-01
LLI_Wall	2.81E-01
Kidneys	5.36E-01
Liver	8.66E-01
Muscle	2.74E-01
Ovaries	3.67E-01
Pancreas	2.37E-01
R_Marrow	1.26E+00
Skin	1.58E+00
Spleen	2.50E-01
Testes	4.01E-01
Thymus	2.47E-01
Thyroid	2.55E-01
GB_Wall	2.38E-01
Ht_Wall	2.46E-01
Uterus	2.45E-01
ET_Reg	1.54E+00
Lung	3.71E+00
Effectiv	1.06E+00

PATHWAY EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem)
INGESTION	9.16E-02
INHALATION	7.42E-01
AIR IMMERSION	1.57E-05
GROUND SURFACE	2.22E-01
INTERNAL	8.34E-01
EXTERNAL	2.22E-01
TOTAL	1.06E+00

Tue Mar 15 15:58:50 2022 SUMMARY
Page 2

NUCLIDE EFFECTIVE DOSE EQUIVALENT SUMMARY

Nuclide	Selected Individual (mrem)
U-238	2.77E-03
Th-234	7.99E-04
Pa-234m	1.20E-03
Pa-234	2.35E-05
U-234	3.35E-03
Th-230	4.64E-01
Ra-226	9.42E-03
Rn-222	8.64E-06
Po-218	1.55E-10
Pb-214	5.65E-03
At-218	5.81E-10
Bi-214	3.30E-02
Rn-218	3.36E-12
Po-214	1.83E-06
Tl-210	1.29E-05
Pb-210	2.73E-05
Bi-210	4.41E-04
Hg-206	3.56E-11
Po-210	1.14E-07
Tl-206	1.03E-09
U-235	1.49E-04
Th-231	5.59E-06
Pa-231	2.60E-02
Ac-227	4.08E-02
Th-227	3.64E-04
Fr-223	3.43E-06
Ra-223	4.07E-04
Rn-219	1.76E-04
At-219	0.00E+00
Bi-215	7.92E-10
Po-215	5.38E-07
Pb-211	3.46E-04
Bi-211	1.43E-04
Tl-207	1.79E-04
Po-211	6.86E-08
Th-232	2.14E-02
Ra-228	2.35E-01
Ac-228	7.13E-02
Th-228	2.90E-02
Ra-224	2.61E-03
Rn-220	4.81E-05
Po-216	1.16E-06
Pb-212	1.06E-02
Bi-212	1.23E-02
Po-212	0.00E+00
Tl-208	8.52E-02
TOTAL	1.06E+00

Tue Mar 15 15:58:50 2022 SUMMARY
Page 3

CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk
Esophagu	2.67E-09
Stomach	1.03E-08
Colon	2.84E-08
Liver	1.39E-08
LUNG	3.90E-07
Bone	1.86E-08
Skin	1.57E-09
Breast	1.16E-08
Ovary	4.96E-09
Bladder	6.35E-09
Kidneys	2.94E-09
Thyroid	8.12E-10
Leukemia	1.61E-08
Residual	3.78E-08
Total	5.46E-07
TOTAL	5.46E-07

PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	3.32E-08
INHALATION	3.96E-07
AIR IMMERSION	8.47E-12
GROUND SURFACE	1.17E-07
INTERNAL	4.30E-07
EXTERNAL	1.17E-07
TOTAL	5.46E-07

Tue Mar 15 15:58:50 2022

SUMMARY
Page 4

NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
U-238	2.89E-09
Th-234	8.60E-10
Pa-234m	2.09E-10
Pa-234	1.28E-11
U-234	3.53E-09
Th-230	2.50E-07
Ra-226	8.38E-09
Rn-222	4.72E-12
Po-218	6.90E-17
Pb-214	3.02E-09
At-218	7.16E-17
Bi-214	1.74E-08
Rn-218	1.84E-18
Po-214	1.00E-12
Tl-210	6.88E-12
Pb-210	1.22E-11
Bi-210	4.89E-11
Hg-206	1.58E-17
Po-210	6.27E-14
Tl-206	1.16E-16
U-235	1.33E-10
Th-231	3.16E-12
Pa-231	2.55E-09
Ac-227	1.13E-08
Th-227	1.97E-10
Fr-223	1.28E-12
Ra-223	2.20E-10
Rn-219	9.64E-11
At-219	0.00E+00
Bi-215	3.53E-16
Po-215	2.95E-13
Pb-211	1.24E-10
Bi-211	7.78E-11
Tl-207	2.30E-11
Po-211	3.76E-14
Th-232	9.49E-09
Ra-228	1.09E-07
Ac-228	3.80E-08
Th-228	2.94E-08
Ra-224	2.62E-09
Rn-220	2.64E-11
Po-216	6.39E-13
Pb-212	5.75E-09
Bi-212	4.76E-09
Po-212	0.00E+00
Tl-208	4.64E-08
TOTAL	5.46E-07

Tue Mar 15 15:58:50 2022 SUMMARY
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INDIVIDUAL EFFECTIVE DOSE EQUIVALENT (mrem)
(All Radionuclides and Pathways)

Direction	Distance (m) 200	1300	1700	2300	
N	1.1E+00	9.7E-02	8.5E-02	7.7E-02	
NNW	5.7E-01	8.1E-02	7.5E-02	7.1E-02	
NW	6.6E-01	8.4E-02	7.7E-02	7.2E-02	Resident
WNW	8.0E-01	8.8E-02	7.9E-02	7.3E-02	
W	6.2E-01	8.2E-02	7.6E-02	7.1E-02	
WSW	3.3E-01	7.3E-02	7.0E-02	6.8E-02	
SW	4.4E-01	7.6E-02	7.2E-02	6.9E-02	
SSW	5.3E-01	7.9E-02	7.4E-02	7.0E-02	
S	4.7E-01	7.8E-02	7.3E-02	7.0E-02	
SSE	3.5E-01	7.4E-02	7.0E-02	6.8E-02	
SE	4.8E-01	7.8E-02	7.3E-02	7.0E-02	
ESE	7.8E-01	8.7E-02	7.9E-02	7.3E-02	Business
E	1.0E+00	9.3E-02	8.3E-02	7.6E-02	
ENE	8.4E-01	8.8E-02	8.0E-02	7.4E-02	
NE	5.3E-01	7.9E-02	7.4E-02	7.0E-02	Farm (1700 m), School (2300 m)
NNE	4.6E-01	7.7E-02	7.3E-02	6.9E-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.

Tue Mar 15 15:58:50 2022 SUMMARY
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INDIVIDUAL LIFETIME RISK (deaths)
(All Radionuclides and Pathways)

	Distance (m)			
Direction	200	1300	1700	2300
N	5.5E-07	4.0E-08	3.4E-08	3.0E-08
NNW	2.9E-07	3.2E-08	2.9E-08	2.7E-08
NW	3.4E-07	3.4E-08	3.0E-08	2.7E-08
WNW	4.1E-07	3.6E-08	3.1E-08	2.8E-08
W	3.2E-07	3.3E-08	2.9E-08	2.7E-08
WSW	1.6E-07	2.8E-08	2.6E-08	2.5E-08
SW	2.2E-07	3.0E-08	2.7E-08	2.6E-08
SSW	2.7E-07	3.1E-08	2.8E-08	2.6E-08
S	2.4E-07	3.0E-08	2.8E-08	2.6E-08
SSE	1.7E-07	2.8E-08	2.7E-08	2.5E-08
SE	2.4E-07	3.1E-08	2.8E-08	2.6E-08
ESE	4.0E-07	3.5E-08	3.1E-08	2.8E-08
E	5.2E-07	3.9E-08	3.3E-08	2.9E-08
ENE	4.3E-07	3.6E-08	3.2E-08	2.8E-08
NE	2.7E-07	3.1E-08	2.9E-08	2.7E-08
NNE	2.3E-07	3.0E-08	2.8E-08	2.6E-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
                      Tue Mar 15 15:49:59 2022


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


  Source Category:  Area
      Source Type:  Area
    Emission Year:  2021
   DOSE Age Group:  Adult

         Comments:  Air


     Dataset Name:  SLAPS Loadout.
     Dataset Date:  Mar 15, 2022 03:49 PM
        Wind File:  C:\Users\randy\OneDrive\Documents\CAP88\Wind Files\13994.WND
```

Tue Mar 15 15:49:59 2022 SUMMARY
Page 1

ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem)
Adrenals	4.56E-01
UB_Wall	5.01E-01
Bone_Sur	4.07E+01
Brain	4.79E-01
Breasts	5.18E-01
St_Wall	4.83E-01
SI_Wall	4.81E-01
ULI_Wall	5.01E-01
LLI_Wall	5.45E-01
Kidneys	1.11E+00
Liver	1.34E+00
Muscle	5.33E-01
Ovaries	7.22E-01
Pancreas	4.61E-01
R_Marrow	2.55E+00
Skin	3.08E+00
Spleen	4.86E-01
Testes	7.88E-01
Thymus	4.80E-01
Thyroid	4.96E-01
GB_Wall	4.62E-01
Ht_Wall	4.78E-01
Uterus	4.75E-01
ET_Reg	3.58E+00
Lung	8.61E+00
Effectiv	2.25E+00

PATHWAY EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem)
INGESTION	1.87E-01
INHALATION	1.62E+00
AIR IMMERSION	3.21E-05
GROUND SURFACE	4.38E-01
INTERNAL	1.81E+00
EXTERNAL	4.38E-01
TOTAL	2.25E+00

Tue Mar 15 15:49:59 2022 SUMMARY
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NUCLIDE EFFECTIVE DOSE EQUIVALENT SUMMARY

Nuclide	Selected Individual (mrem)
U-238	5.78E-03
Th-234	2.12E-03
Pa-234m	2.59E-03
Pa-234	5.10E-05
U-234	6.99E-03
Th-230	1.21E+00
Ra-226	1.78E-02
Rn-222	1.74E-05
Po-218	3.11E-10
Pb-214	1.14E-02
At-218	1.17E-09
Bi-214	6.63E-02
Rn-218	6.76E-12
Po-214	3.68E-06
Tl-210	2.59E-05
Pb-210	5.45E-05
Bi-210	8.81E-04
Hg-206	7.11E-11
Po-210	2.28E-07
Tl-206	2.06E-09
U-235	3.36E-04
Th-231	1.30E-05
Pa-231	8.56E-03
Ac-227	6.49E-03
Th-227	8.11E-05
Fr-223	7.65E-07
Ra-223	9.07E-05
Rn-219	3.93E-05
At-219	0.00E+00
Bi-215	1.77E-10
Po-215	1.20E-07
Pb-211	7.72E-05
Bi-211	3.18E-05
Tl-207	4.00E-05
Po-211	1.53E-08
Th-232	3.50E-02
Ra-228	4.69E-01
Ac-228	1.41E-01
Th-228	4.76E-02
Ra-224	4.54E-03
Rn-220	9.51E-05
Po-216	2.29E-06
Pb-212	2.09E-02
Bi-212	2.44E-02
Po-212	0.00E+00
Tl-208	1.68E-01
TOTAL	2.25E+00

Tue Mar 15 15:49:59 2022 SUMMARY
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CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk
Esophagu	5.22E-09
Stomach	2.01E-08
Colon	5.62E-08
Liver	2.29E-08
LUNG	8.95E-07
Bone	3.77E-08
Skin	3.08E-09
Breast	2.29E-08
Ovary	9.71E-09
Bladder	1.24E-08
Kidneys	5.97E-09
Thyroid	1.59E-09
Leukemia	3.17E-08
Residual	7.42E-08
Total	1.20E-06
TOTAL	1.20E-06

PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	6.66E-08
INHALATION	9.03E-07
AIR IMMERSION	1.72E-11
GROUND SURFACE	2.30E-07
INTERNAL	9.69E-07
EXTERNAL	2.30E-07
TOTAL	1.20E-06

Tue Mar 15 15:49:59 2022 SUMMARY
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NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
U-238	6.03E-09
Th-234	2.30E-09
Pa-234m	4.54E-10
Pa-234	2.77E-11
U-234	7.37E-09
Th-230	6.49E-07
Ra-226	1.59E-08
Rn-222	9.48E-12
Po-218	1.39E-16
Pb-214	6.07E-09
At-218	1.44E-16
Bi-214	3.50E-08
Rn-218	3.70E-18
Po-214	2.02E-12
Tl-210	1.38E-11
Pb-210	2.44E-11
Bi-210	9.77E-11
Hg-206	3.16E-17
Po-210	1.25E-13
Tl-206	2.31E-16
U-235	2.99E-10
Th-231	7.66E-12
Pa-231	8.40E-10
Ac-227	1.79E-09
Th-227	4.40E-11
Fr-223	2.85E-13
Ra-223	4.90E-11
Rn-219	2.15E-11
At-219	0.00E+00
Bi-215	7.88E-17
Po-215	6.58E-14
Pb-211	2.76E-11
Bi-211	1.74E-11
Tl-207	5.14E-12
Po-211	8.38E-15
Th-232	1.56E-08
Ra-228	2.18E-07
Ac-228	7.52E-08
Th-228	4.82E-08
Ra-224	4.44E-09
Rn-220	5.21E-11
Po-216	1.26E-12
Pb-212	1.14E-08
Bi-212	9.40E-09
Po-212	0.00E+00
Tl-208	9.15E-08
TOTAL	1.20E-06

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

Direction	Distance (m) 200	1500	1700	2300	
N	2.2E+00	1.8E-01	1.7E-01	1.6E-01	
NNW	1.2E+00	1.6E-01	1.5E-01	1.4E-01	
NW	1.4E+00	1.6E-01	1.6E-01	1.5E-01	
WNW	1.7E+00	1.7E-01	1.6E-01	1.5E-01	Business
W	1.3E+00	1.6E-01	1.5E-01	1.4E-01	
WSW	7.0E-01	1.4E-01	1.4E-01	1.4E-01	
SW	9.4E-01	1.5E-01	1.5E-01	1.4E-01	
SSW	1.1E+00	1.5E-01	1.5E-01	1.4E-01	
S	9.9E-01	1.5E-01	1.5E-01	1.4E-01	
SSE	7.3E-01	1.5E-01	1.4E-01	1.4E-01	
SE	1.0E+00	1.5E-01	1.5E-01	1.4E-01	
ESE	1.6E+00	1.7E-01	1.6E-01	1.5E-01	
E	2.1E+00	1.8E-01	1.7E-01	1.5E-01	Resident
ENE	1.8E+00	1.7E-01	1.6E-01	1.5E-01	
NE	1.1E+00	1.6E-01	1.5E-01	1.4E-01	Farm (1700 m), School (2300 m)
NNE	9.7E-01	1.5E-01	1.5E-01	1.4E-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	200	1500	1700	2300
N	1.2E-06	7.6E-08	7.1E-08	6.1E-08
NNW	6.4E-07	6.2E-08	5.9E-08	5.5E-08
NW	7.4E-07	6.4E-08	6.1E-08	5.6E-08
WNW	9.0E-07	6.8E-08	6.4E-08	5.7E-08
W	6.9E-07	6.3E-08	6.0E-08	5.5E-08
WSW	3.6E-07	5.5E-08	5.3E-08	5.1E-08
SW	4.9E-07	5.8E-08	5.6E-08	5.2E-08
SSW	5.9E-07	6.0E-08	5.8E-08	5.3E-08
S	5.2E-07	5.9E-08	5.7E-08	5.3E-08
SSE	3.8E-07	5.6E-08	5.4E-08	5.1E-08
SE	5.3E-07	5.9E-08	5.7E-08	5.3E-08
ESE	8.7E-07	6.8E-08	6.4E-08	5.7E-08
E	1.1E-06	7.3E-08	6.8E-08	6.0E-08
ENE	9.5E-07	6.9E-08	6.5E-08	5.8E-08
NE	5.9E-07	6.1E-08	5.8E-08	5.4E-08
NNE	5.0E-07	5.9E-08	5.6E-08	5.3E-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

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

                     Non-Radon Individual Assessment
                          Tue Mar 15 12:51:59 2022


      Facility:  USACE Laboratory
       Address:
          City:  St. Louis
         State:  MO          Zip:  63042


  Source Category:  Area
      Source Type:  Stack
    Emission Year:  2021
   DOSE Age Group:  Adult

         Comments:  Air


     Dataset Name:  Usace Laboratory
     Dataset Date:  Mar 15, 2022 12:51 PM
        Wind File:  C:\Users\randy\OneDrive\Documents\CAP88\Wind Files\13994.WND
```

Tue Mar 15 12:51:59 2022 SUMMARY
Page 1

ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem)
Adrenals	1.19E-04
UB_Wall	1.30E-04
Bone_Sur	8.95E-03
Brain	1.25E-04
Breasts	1.35E-04
St_Wall	1.26E-04
SI_Wall	1.25E-04
ULI_Wall	1.30E-04
LLI_Wall	1.39E-04
Kidneys	2.48E-04
Liver	5.02E-04
Muscle	1.39E-04
Ovaries	1.88E-04
Pancreas	1.20E-04
R_Marrow	4.82E-04
Skin	1.31E-03
Spleen	1.27E-04
Testes	2.06E-04
Thymus	1.25E-04
Thyroid	1.30E-04
GB_Wall	1.20E-04
Ht_Wall	1.24E-04
Uterus	1.24E-04
ET_Reg	8.11E-04
Lung	2.35E-03
Effectiv	5.73E-04

PATHWAY EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem)
INGESTION	1.37E-05
INHALATION	4.37E-04
AIR IMMERSION	6.44E-10
GROUND SURFACE	1.22E-04
INTERNAL	4.51E-04
EXTERNAL	1.22E-04
TOTAL	5.73E-04

Tue Mar 15 12:51:59 2022 SUMMARY
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NUCLIDE EFFECTIVE DOSE EQUIVALENT SUMMARY

Nuclide	Selected Individual (mrem)
U-238	1.39E-05
Th-234	4.92E-07
Pa-234m	6.01E-06
Pa-234	1.18E-07
U-234	1.68E-05
Th-230	1.54E-04
Ra-226	1.65E-05
Rn-222	1.47E-08
Po-218	2.64E-13
Pb-214	9.63E-06
At-218	9.91E-13
Bi-214	5.63E-05
Rn-218	5.74E-15
Po-214	3.12E-09
Tl-210	2.20E-08
Pb-210	4.73E-08
Bi-210	7.64E-07
Hg-206	6.17E-14
Po-210	1.98E-10
Tl-206	1.78E-12
U-235	1.18E-06
Th-231	4.22E-08
Pa-231	5.86E-05
Ac-227	4.44E-05
Th-227	6.41E-07
Fr-223	6.04E-09
Ra-223	7.17E-07
Rn-219	3.10E-07
At-219	0.00E+00
Bi-215	1.40E-12
Po-215	9.48E-10
Pb-211	6.10E-07
Bi-211	2.51E-07
Tl-207	3.16E-07
Po-211	1.21E-10
Th-232	5.65E-05
Ra-228	8.96E-06
Ac-228	1.70E-05
Th-228	7.62E-05
Ra-224	5.07E-06
Rn-220	1.22E-08
Po-216	2.94E-10
Pb-212	2.67E-06
Bi-212	3.12E-06
Po-212	0.00E+00
Tl-208	2.16E-05
TOTAL	5.73E-04

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CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk
Esophagu	1.24E-12
Stomach	4.59E-12
Colon	1.23E-11
Liver	6.23E-12
LUNG	2.54E-10
Bone	5.47E-12
Skin	1.30E-12
Breast	5.70E-12
Ovary	2.22E-12
Bladder	2.99E-12
Kidneys	1.11E-12
Thyroid	3.75E-13
Leukemia	7.17E-12
Residual	1.73E-11
Total	3.22E-10
TOTAL	3.22E-10

PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	3.75E-12
INHALATION	2.56E-10
AIR IMMERSION	3.42E-16
GROUND SURFACE	6.18E-11
INTERNAL	2.60E-10
EXTERNAL	6.18E-11
TOTAL	3.22E-10

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NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
U-238	1.45E-11
Th-234	2.89E-13
Pa-234m	1.05E-12
Pa-234	6.44E-14
U-234	1.77E-11
Th-230	8.26E-11
Ra-226	1.45E-11
Rn-222	8.05E-15
Po-218	1.18E-19
Pb-214	5.15E-12
At-218	1.22E-19
Bi-214	2.97E-11
Rn-218	3.14E-21
Po-214	1.71E-15
Tl-210	1.17E-14
Pb-210	2.12E-14
Bi-210	8.47E-14
Hg-206	2.74E-20
Po-210	1.09E-16
Tl-206	2.01E-19
U-235	1.03E-12
Th-231	1.93E-14
Pa-231	5.77E-12
Ac-227	1.22E-11
Th-227	3.47E-13
Fr-223	2.25E-15
Ra-223	3.87E-13
Rn-219	1.70E-13
At-219	0.00E+00
Bi-215	6.23E-19
Po-215	5.20E-16
Pb-211	2.18E-13
Bi-211	1.37E-13
Tl-207	4.06E-14
Po-211	6.62E-17
Th-232	2.51E-11
Ra-228	4.14E-12
Ac-228	9.05E-12
Th-228	7.74E-11
Ra-224	5.93E-12
Rn-220	6.67E-15
Po-216	1.61E-16
Pb-212	1.45E-12
Bi-212	1.20E-12
Po-212	0.00E+00
Tl-208	1.17E-11
TOTAL	3.22E-10

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SUMMARY
Page 5

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

Direction	Distance (m) 50	1600	1700	2300	
N	5.7E-04	2.2E-05	2.1E-05	1.6E-05	
NNW	3.3E-04	1.6E-05	1.5E-05	1.3E-05	
NW	3.1E-04	1.7E-05	1.6E-05	1.3E-05	Business (50 m), Residence (1600 m)
WNW	3.3E-04	1.9E-05	1.8E-05	1.4E-05	
W	3.3E-04	1.6E-05	1.6E-05	1.3E-05	
WSW	1.8E-04	1.3E-05	1.2E-05	1.1E-05	
SW	1.9E-04	1.4E-05	1.4E-05	1.2E-05	
SSW	2.3E-04	1.5E-05	1.5E-05	1.2E-05	
S	3.2E-04	1.5E-05	1.4E-05	1.2E-05	
SSE	2.5E-04	1.3E-05	1.3E-05	1.1E-05	
SE	3.0E-04	1.5E-05	1.4E-05	1.2E-05	
ESE	3.9E-04	1.8E-05	1.8E-05	1.4E-05	
E	4.1E-04	2.1E-05	2.0E-05	1.6E-05	
ENE	3.1E-04	1.9E-05	1.8E-05	1.5E-05	
NE	2.7E-04	1.5E-05	1.5E-05	1.3E-05	Farm (1700 m), School (2300 m)
NNE	2.5E-04	1.4E-05	1.4E-05	1.2E-05	

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	3.2E-10	1.0E-11	9.3E-12	6.6E-12
NNW	1.8E-10	6.4E-12	6.0E-12	4.7E-12
NW	1.7E-10	7.0E-12	6.6E-12	5.0E-12
WNW	1.8E-10	7.9E-12	7.4E-12	5.5E-12
W	1.8E-10	6.6E-12	6.2E-12	4.8E-12
WSW	1.0E-10	4.5E-12	4.3E-12	3.6E-12
SW	1.1E-10	5.3E-12	5.0E-12	4.1E-12
SSW	1.3E-10	5.9E-12	5.6E-12	4.4E-12
S	1.8E-10	5.6E-12	5.3E-12	4.2E-12
SSE	1.4E-10	4.7E-12	4.5E-12	3.7E-12
SE	1.7E-10	5.7E-12	5.4E-12	4.3E-12
ESE	2.2E-10	7.8E-12	7.3E-12	5.4E-12
E	2.3E-10	9.4E-12	8.7E-12	6.3E-12
ENE	1.7E-10	8.2E-12	7.6E-12	5.6E-12
NE	1.5E-10	6.0E-12	5.7E-12	4.5E-12
NNE	1.4E-10	5.5E-12	5.2E-12	4.2E-12

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APPENDIX C

ENVIRONMENTAL THERMOLUMINESCENT DOSIMETER, ALPHA TRACK DETECTOR, AND PERIMETER AIR DATA

(On the CD-ROM on the Back Cover of this Report)

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Table C-1. Background Air Particulate Data Results for CY 2021

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
BKG219185	BAP-001	01/04/21	Gross Alpha/Beta	Gross Alpha	1.01E-14	1.73E-15	4.93E-16	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG219185	BAP-001	01/04/21	Gross Alpha/Beta	Gross Beta	3.15E-14	3.15E-15	9.57E-16	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG219185	BAP-001	01/04/21	Gross Alpha/Beta	Gross Alpha	8.20E-15	1.54E-15	4.93E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG219185	BAP-001	01/04/21	Gross Alpha/Beta	Gross Beta	3.32E-14	3.26E-15	9.57E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG219186	BAP-001	01/11/21	Gross Alpha/Beta	Gross Alpha	5.87E-15	1.28E-15	4.85E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG219186	BAP-001	01/11/21	Gross Alpha/Beta	Gross Beta	2.68E-14	2.79E-15	9.41E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237162	BAP-001	01/19/21	Gross Alpha/Beta	Gross Alpha	4.88E-15	1.08E-15	4.21E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237162	BAP-001	01/19/21	Gross Alpha/Beta	Gross Beta	2.32E-14	2.42E-15	8.17E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237163	BAP-001	01/25/21	Gross Alpha/Beta	Gross Alpha	3.41E-15	1.05E-15	5.83E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237163	BAP-001	01/25/21	Gross Alpha/Beta	Gross Beta	1.47E-14	2.04E-15	1.13E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237164	BAP-001	02/01/21	Gross Alpha/Beta	Gross Alpha	2.24E-15	7.83E-16	4.89E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237164	BAP-001	02/01/21	Gross Alpha/Beta	Gross Beta	1.51E-14	1.92E-15	9.50E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237165	BAP-001	02/08/21	Gross Alpha/Beta	Gross Alpha	7.84E-15	1.59E-15	5.60E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237165	BAP-001	02/08/21	Gross Alpha/Beta	Gross Beta	3.25E-14	3.34E-15	1.09E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237166	BAP-001	02/17/21	Gross Alpha/Beta	Gross Alpha	5.10E-15	1.05E-15	3.74E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237166	BAP-001	02/17/21	Gross Alpha/Beta	Gross Beta	3.20E-14	2.96E-15	7.27E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237167	BAP-001	02/22/21	Gross Alpha/Beta	Gross Alpha	5.40E-15	1.49E-15	7.35E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237167	BAP-001	02/22/21	Gross Alpha/Beta	Gross Beta	3.49E-14	3.81E-15	1.43E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237168	BAP-001	03/01/21	Gross Alpha/Beta	Gross Alpha	2.19E-15	8.00E-16	5.21E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237168	BAP-001	03/01/21	Gross Alpha/Beta	Gross Beta	1.65E-14	2.08E-15	1.01E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237169	BAP-001	03/08/21	Gross Alpha/Beta	Gross Alpha	3.23E-15	9.47E-16	4.99E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237169	BAP-001	03/08/21	Gross Alpha/Beta	Gross Beta	2.51E-14	2.69E-15	9.69E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237170	BAP-001	03/15/21	Gross Alpha/Beta	Gross Alpha	2.54E-15	8.30E-16	4.87E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237170	BAP-001	03/15/21	Gross Alpha/Beta	Gross Beta	1.85E-14	2.18E-15	9.46E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237171	BAP-001	03/22/21	Gross Alpha/Beta	Gross Alpha	1.58E-15	7.11E-16	5.59E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237171	BAP-001	03/22/21	Gross Alpha/Beta	Gross Beta	2.00E-14	2.41E-15	1.09E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237172	BAP-001	03/29/21	Gross Alpha/Beta	Gross Alpha	8.36E-16	4.79E-16	4.58E-16	µCi/mL	J	T04, T20	Background Air (Particulate Air)-Environmental Monitoring
BKG237172	BAP-001	03/29/21	Gross Alpha/Beta	Gross Beta	1.31E-14	1.73E-15	8.89E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237173	BAP-001	04/05/21	Gross Alpha/Beta	Gross Alpha	7.08E-15	1.53E-15	4.90E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237173	BAP-001	04/05/21	Gross Alpha/Beta	Gross Beta	1.67E-14	2.16E-15	9.70E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237174	BAP-001	04/12/21	Gross Alpha/Beta	Gross Alpha	6.01E-15	1.34E-15	4.43E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237174	BAP-001	04/12/21	Gross Alpha/Beta	Gross Beta	1.45E-14	1.91E-15	8.77E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237175	BAP-001	04/19/21	Gross Alpha/Beta	Gross Alpha	4.32E-15	1.17E-15	4.87E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237175	BAP-001	04/19/21	Gross Alpha/Beta	Gross Beta	1.08E-14	1.66E-15	9.65E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237176	BAP-001	04/26/21	Gross Alpha/Beta	Gross Alpha	5.86E-15	1.32E-15	4.42E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237176	BAP-001	04/26/21	Gross Alpha/Beta	Gross Beta	1.71E-14	2.12E-15	8.75E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237177	BAP-001	05/03/21	Gross Alpha/Beta	Gross Alpha	5.14E-15	1.29E-15	4.90E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237177	BAP-001	05/03/21	Gross Alpha/Beta	Gross Beta	2.02E-14	2.45E-15	9.70E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237178	BAP-001	05/10/21	Gross Alpha/Beta	Gross Alpha	2.54E-15	8.36E-16	4.28E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237178	BAP-001	05/10/21	Gross Alpha/Beta	Gross Beta	1.25E-14	1.72E-15	8.47E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237179	BAP-001	05/17/21	Gross Alpha/Beta	Gross Alpha	2.66E-15	9.35E-16	5.11E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237179	BAP-001	05/17/21	Gross Alpha/Beta	Gross Beta	1.18E-14	1.78E-15	1.01E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring

Table C-1. Background Air Particulate Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
BKG237180	BAP-001	05/24/21	Gross Alpha/Beta	Gross Alpha	5.46E-15	1.29E-15	4.57E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237180	BAP-001	05/24/21	Gross Alpha/Beta	Gross Beta	2.04E-14	2.42E-15	9.04E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237181	BAP-001	06/01/21	Gross Alpha/Beta	Gross Alpha	2.52E-15	8.21E-16	4.15E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237181	BAP-001	06/01/21	Gross Alpha/Beta	Gross Beta	1.40E-14	1.82E-15	8.21E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237182	BAP-001	06/07/21	Gross Alpha/Beta	Gross Alpha	3.88E-15	1.13E-15	5.04E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237182	BAP-001	06/07/21	Gross Alpha/Beta	Gross Beta	2.18E-14	2.61E-15	9.99E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237183	BAP-001	06/14/21	Gross Alpha/Beta	Gross Alpha	2.40E-15	8.80E-16	5.03E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237183	BAP-001	06/14/21	Gross Alpha/Beta	Gross Beta	1.39E-14	1.95E-15	9.96E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237184	BAP-001	06/21/21	Gross Alpha/Beta	Gross Alpha	3.46E-15	1.05E-15	4.96E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237184	BAP-001	06/21/21	Gross Alpha/Beta	Gross Beta	2.62E-14	2.95E-15	9.83E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237185	BAP-001	06/28/21	Gross Alpha/Beta	Gross Alpha	1.82E-15	7.54E-16	4.86E-16	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG237185	BAP-001	06/28/21	Gross Alpha/Beta	Gross Beta	1.36E-14	1.90E-15	9.63E-16	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG237185	BAP-001	06/28/21	Gross Alpha/Beta	Gross Alpha	2.03E-15	7.97E-16	4.86E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237185	BAP-001	06/28/21	Gross Alpha/Beta	Gross Beta	1.50E-14	2.02E-15	9.63E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237186	BAP-001	07/06/21	Gross Alpha/Beta	Gross Alpha	4.64E-15	1.05E-15	3.83E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237186	BAP-001	07/06/21	Gross Alpha/Beta	Gross Beta	1.24E-14	1.72E-15	1.07E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237187	BAP-001	07/12/21	Gross Alpha/Beta	Gross Alpha	5.65E-15	1.39E-15	5.66E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237187	BAP-001	07/12/21	Gross Alpha/Beta	Gross Beta	1.65E-14	2.38E-15	1.57E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237188	BAP-001	07/19/21	Gross Alpha/Beta	Gross Alpha	4.08E-15	1.02E-15	4.19E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237188	BAP-001	07/19/21	Gross Alpha/Beta	Gross Beta	1.26E-14	1.79E-15	1.17E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237189	BAP-001	07/26/21	Gross Alpha/Beta	Gross Alpha	7.32E-15	1.49E-15	4.78E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237189	BAP-001	07/26/21	Gross Alpha/Beta	Gross Beta	2.41E-14	2.83E-15	1.33E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237190	BAP-001	08/02/21	Gross Alpha/Beta	Gross Alpha	6.88E-15	1.39E-15	4.42E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237190	BAP-001	08/02/21	Gross Alpha/Beta	Gross Beta	2.67E-14	2.97E-15	1.23E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237191	BAP-001	08/09/21	Gross Alpha/Beta	Gross Alpha	4.46E-15	1.11E-15	4.58E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237191	BAP-001	08/09/21	Gross Alpha/Beta	Gross Beta	2.03E-14	2.49E-15	1.28E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237192	BAP-001	08/16/21	Gross Alpha/Beta	Gross Alpha	3.55E-15	9.87E-16	4.60E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237192	BAP-001	08/16/21	Gross Alpha/Beta	Gross Beta	1.53E-14	2.09E-15	1.28E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237193	BAP-001	08/23/21	Gross Alpha/Beta	Gross Alpha	4.87E-15	1.16E-15	4.57E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237193	BAP-001	08/23/21	Gross Alpha/Beta	Gross Beta	2.58E-14	2.92E-15	1.27E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237194	BAP-001	08/30/21	Gross Alpha/Beta	Gross Alpha	4.02E-15	1.01E-15	4.19E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237194	BAP-001	08/30/21	Gross Alpha/Beta	Gross Beta	2.57E-14	2.84E-15	1.17E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237195	BAP-001	09/07/21	Gross Alpha/Beta	Gross Alpha	3.42E-15	9.13E-16	4.07E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237195	BAP-001	09/07/21	Gross Alpha/Beta	Gross Beta	2.15E-14	2.49E-15	1.13E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237196	BAP-001	09/13/21	Gross Alpha/Beta	Gross Alpha	3.34E-15	1.01E-15	5.11E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237196	BAP-001	09/13/21	Gross Alpha/Beta	Gross Beta	2.65E-14	3.08E-15	1.42E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237197	BAP-001	09/20/21	Gross Alpha/Beta	Gross Alpha	2.00E-15	7.36E-16	4.56E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237197	BAP-001	09/20/21	Gross Alpha/Beta	Gross Beta	1.78E-14	2.29E-15	1.27E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237198	BAP-001	09/27/21	Gross Alpha/Beta	Gross Alpha	2.09E-15	7.56E-16	4.62E-16	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG237198	BAP-001	09/27/21	Gross Alpha/Beta	Gross Beta	1.88E-14	2.38E-15	1.29E-15	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG237198	BAP-001	09/27/21	Gross Alpha/Beta	Gross Alpha	1.41E-15	6.26E-16	4.62E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237198	BAP-001	09/27/21	Gross Alpha/Beta	Gross Beta	1.71E-14	2.24E-15	1.29E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring

Table C-1. Background Air Particulate Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
BKG237199	BAP-001	10/04/21	Gross Alpha/Beta	Gross Alpha	6.50E-15	1.36E-15	4.75E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237199	BAP-001	10/04/21	Gross Alpha/Beta	Gross Beta	2.07E-14	2.45E-15	9.33E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237200	BAP-001	10/07/21	Gross Alpha/Beta	Gross Alpha	6.85E-15	2.06E-15	1.10E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237200	BAP-001	10/07/21	Gross Alpha/Beta	Gross Beta	2.28E-14	3.55E-15	2.15E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237201	BAP-001	10/18/21	Gross Alpha/Beta	Gross Alpha	6.76E-15	1.46E-15	5.32E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237201	BAP-001	10/18/21	Gross Alpha/Beta	Gross Beta	2.33E-14	2.74E-15	1.05E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237202	BAP-001	10/25/21	Gross Alpha/Beta	Gross Alpha	6.78E-15	1.37E-15	4.57E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237202	BAP-001	10/25/21	Gross Alpha/Beta	Gross Beta	2.39E-14	2.67E-15	8.99E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237203	BAP-001	11/01/21	Gross Alpha/Beta	Gross Alpha	3.22E-15	9.51E-16	4.95E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237203	BAP-001	11/01/21	Gross Alpha/Beta	Gross Beta	1.29E-14	1.83E-15	9.73E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237204	BAP-001	11/08/21	Gross Alpha/Beta	Gross Alpha	5.46E-15	1.24E-15	4.83E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237204	BAP-001	11/08/21	Gross Alpha/Beta	Gross Beta	2.89E-14	3.11E-15	9.49E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237205	BAP-001	11/15/21	Gross Alpha/Beta	Gross Alpha	4.80E-15	1.17E-15	4.96E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237205	BAP-001	11/15/21	Gross Alpha/Beta	Gross Beta	2.03E-14	2.44E-15	9.76E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237206	BAP-001	11/22/21	Gross Alpha/Beta	Gross Alpha	3.99E-15	1.04E-15	4.75E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237206	BAP-001	11/22/21	Gross Alpha/Beta	Gross Beta	2.20E-14	2.54E-15	9.33E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237207	BAP-001	11/29/21	Gross Alpha/Beta	Gross Alpha	4.29E-15	1.15E-15	5.43E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237207	BAP-001	11/29/21	Gross Alpha/Beta	Gross Beta	2.88E-14	3.21E-15	1.07E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237208	BAP-001	12/06/21	Gross Alpha/Beta	Gross Alpha	4.06E-15	1.04E-15	4.69E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237208	BAP-001	12/06/21	Gross Alpha/Beta	Gross Beta	3.11E-14	3.26E-15	9.22E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237209	BAP-001	12/13/21	Gross Alpha/Beta	Gross Alpha	2.18E-15	8.11E-16	5.31E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237209	BAP-001	12/13/21	Gross Alpha/Beta	Gross Beta	2.38E-14	2.78E-15	1.04E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237210	BAP-001	12/20/21	Gross Alpha/Beta	Gross Alpha	3.50E-15	9.63E-16	4.66E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237210	BAP-001	12/20/21	Gross Alpha/Beta	Gross Beta	2.70E-14	2.93E-15	9.16E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237211	BAP-001	12/27/21	Gross Alpha/Beta	Gross Alpha	2.63E-15	8.33E-16	4.67E-16	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG237211	BAP-001	12/27/21	Gross Alpha/Beta	Gross Beta	4.38E-14	4.24E-15	9.18E-16	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG237211	BAP-001	12/27/21	Gross Alpha/Beta	Gross Alpha	3.98E-15	1.03E-15	4.67E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG237211	BAP-001	12/27/21	Gross Alpha/Beta	Gross Beta	4.16E-14	4.08E-15	9.18E-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 2021

Sample Name	Station Name	Collect Date	Method Type	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
HIS242933	BA-1	07/07/21	Radiological	Ra-222	0.08	0	0.08	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2021
HIS253442	BA-1	01/05/22	Radiological	Ra-222	0.22	0	0.22	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2021
HIS242934	HF-1	07/07/21	Radiological	Ra-222	4.2	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2021
HIS253443	HF-1	01/05/22	Radiological	Ra-222	5.4	0	0.22	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2021
HIS242935	HF-2	07/07/21	Radiological	Ra-222	2.1	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2021
HIS253444	HF-2	01/05/22	Radiological	Ra-222	3.2	0	0.22	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2021
HIS242936	HF-3	07/07/21	Radiological	Ra-222	0.16	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2021
HIS253445	HF-3	01/05/22	Radiological	Ra-222	0.41	0	0.22	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2021
HIS242937	HF-4	07/07/21	Radiological	Ra-222	0.73	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2021
HIS253446	HF-4	01/05/22	Radiological	Ra-222	1.4	0	0.22	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2021
HIS242938	HF-5	07/07/21	Radiological	Ra-222	0.59	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2021
HIS253447	HF-5	01/05/22	Radiological	Ra-222	1.4	0	0.22	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2021
HIS242939	HF-6	07/07/21	Radiological	Ra-222	0.51	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2021
HIS253448	HF-6	01/05/22	Radiological	Ra-222	1.1	0	0.22	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2021
HIS242940	HF-7	07/07/21	Radiological	Ra-222	0.95	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2021
HIS253449	HF-7	01/05/22	Radiological	Ra-222	1.3	0	0.22	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2021
HIS242941	HF-8	07/07/21	Radiological	Ra-222	0.73	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2021
HIS253450	HF-8	01/05/22	Radiological	Ra-222	0.97	0	0.22	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2021
HIS242942	HF-9	07/07/21	Radiological	Ra-222	0.76	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2021
HIS253451	HF-9	01/05/22	Radiological	Ra-222	1	0	0.22	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2021
HIS242943	HF-10	07/07/21	Radiological	Ra-222	0.89	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2021
HIS253452	HF-10	01/05/22	Radiological	Ra-222	1.1	0	0.22	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2021
SLA242921	PA-1	07/07/21	Radiological	Ra-222	0.08	0	0.08	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2021
SLA253464	PA-1	01/05/22	Radiological	Ra-222	0.24	0	0.22	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2021
SLA242922	PA-2	07/07/21	Radiological	Ra-222	0.08	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2021
SLA253465	PA-2	01/05/22	Radiological	Ra-222	0.3	0	0.22	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2021
SLA242922-1	PA-2dup	07/07/21	Radiological	Ra-222	0.08	0	0.08	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2021
SLA253465-1	PA-2dup	01/05/22	Radiological	Ra-222	0.3	0	0.22	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2021
SLA242923	PA-3	07/07/21	Radiological	Ra-222	0.08	0	0.08	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2021
SLA253466	PA-3	01/05/22	Radiological	Ra-222	0.27	0	0.22	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2021
SLA242924	PA-4	07/07/21	Radiological	Ra-222	0.08	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2021
SLA253467	PA-4	01/05/22	Radiological	Ra-222	0.32	0	0.22	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2021
HIS242944	FA-1	07/07/21	Radiological	Ra-222	0.14	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2021
HIS253453	FA-1	01/05/22	Radiological	Ra-222	0.46	0	0.22	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2021
HIS242945	FA-2	07/07/21	Radiological	Ra-222	0.14	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2021
HIS253454	FA-2	01/05/22	Radiological	Ra-222	0.49	0	0.22	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2021
HIS242946	FA-3	07/07/21	Radiological	Ra-222	0.08	0	0.08	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2021
HIS253455	FA-3	01/05/22	Radiological	Ra-222	0.22	0	0.22	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2021

Note: The ATDs at stations HF-3 and HF-8 were missing when collecting ATDs after the first monitoring period.

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 2021

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
HIS240718	BA-1	04/06/21	Radiological	External gamma radiation	19.3	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2021
HIS242907	BA-1	07/07/21	Radiological	External gamma radiation	19.4	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2021
HIS248088	BA-1	10/05/21	Radiological	External gamma radiation	19.8	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2021
HIS253428	BA-1	01/05/22	Radiological	External gamma radiation	19.6	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2021
HIS240719	FA-2	04/06/21	Radiological	External gamma radiation	23.4	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2021
HIS242908	FA-2	07/07/21	Radiological	External gamma radiation	21.3	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2021
HIS248089	FA-2	10/05/21	Radiological	External gamma radiation	23.1	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2021
HIS253429	FA-2	01/05/22	Radiological	External gamma radiation	19.7	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2021
HIS240720	FA-3	04/06/21	Radiological	External gamma radiation	19.1	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2021
HIS242909	FA-3	07/07/21	Radiological	External gamma radiation	17.2	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2021
HIS253430	FA-3	01/05/22	Radiological	External gamma radiation	18.7	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2021
SLA240714	PA-1	04/06/21	Radiological	External gamma radiation	19.2	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2021
SLA242910	PA-1	07/07/21	Radiological	External gamma radiation	20.1	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2021
SLA248090	PA-1	10/05/21	Radiological	External gamma radiation	24.3	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2021
SLA253431	PA-1	01/05/22	Radiological	External gamma radiation	20.7	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2021
SLA240715	PA-2	04/06/21	Radiological	External gamma radiation	22	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2021
SLA242911	PA-2	07/07/21	Radiological	External gamma radiation	23.8	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2021
SLA248091	PA-2	10/05/21	Radiological	External gamma radiation	25.5	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2021
SLA253432	PA-2	01/05/22	Radiological	External gamma radiation	22.8	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2021
SLA240715-1	PA-2dup	04/06/21	Radiological	External gamma radiation	23	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2021
SLA242911-1	PA-2dup	07/07/21	Radiological	External gamma radiation	22.4	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2021
SLA248091-1	PA-2dup	10/05/21	Radiological	External gamma radiation	23.4	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2021
SLA253432-1	PA-2dup	01/05/22	Radiological	External gamma radiation	24.8	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2021
SLA240716	PA-3	04/06/21	Radiological	External gamma radiation	18.3	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2021
SLA242912	PA-3	07/07/21	Radiological	External gamma radiation	19.7	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2021
SLA248092	PA-3	10/05/21	Radiological	External gamma radiation	21	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2021
SLA253433	PA-3	01/05/22	Radiological	External gamma radiation	18.5	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2021
SLA240717	PA-4	04/06/21	Radiological	External gamma radiation	25.1	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2021
SLA242913	PA-4	07/07/21	Radiological	External gamma radiation	26.1	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2021
SLA248093	PA-4	10/05/21	Radiological	External gamma radiation	25.1	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2021
SLA253434	PA-4	01/05/22	Radiological	External gamma radiation	26.8	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2021

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 2021

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP232245	BALL FIELDS	01/07/21	Gross Alpha/Beta	Gross Alpha	2.54E-15	5.41E-15	9.08E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232245	BALL FIELDS	01/07/21	Gross Alpha/Beta	Gross Beta	2.67E-14	1.39E-14	1.85E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232246	BALL FIELDS	01/07/21	Gross Alpha/Beta	Gross Alpha	4.98E-15	6.42E-15	9.08E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232246	BALL FIELDS	01/07/21	Gross Alpha/Beta	Gross Beta	3.07E-14	1.44E-14	1.85E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232247	BALL FIELDS	01/07/21	Gross Alpha/Beta	Gross Alpha	9.85E-15	8.08E-15	9.08E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232247	BALL FIELDS	01/07/21	Gross Alpha/Beta	Gross Beta	5.74E-14	1.74E-14	1.85E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232248	BALL FIELDS	01/11/21	Gross Alpha/Beta	Gross Alpha	1.35E-15	4.92E-15	9.26E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232248	BALL FIELDS	01/11/21	Gross Alpha/Beta	Gross Beta	3.69E-14	1.54E-14	1.89E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232249	BALL FIELDS	01/11/21	Gross Alpha/Beta	Gross Alpha	1.35E-15	4.92E-15	9.26E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232249	BALL FIELDS	01/11/21	Gross Alpha/Beta	Gross Beta	1.76E-14	1.30E-14	1.89E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232250	BALL FIELDS	01/11/21	Gross Alpha/Beta	Gross Alpha	9.90E-17	4.05E-15	8.82E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232250	BALL FIELDS	01/11/21	Gross Alpha/Beta	Gross Beta	3.98E-14	1.52E-14	1.80E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232251	BALL FIELDS	01/12/21	Gross Alpha/Beta	Gross Alpha	3.76E-15	5.94E-15	9.08E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232251	BALL FIELDS	01/12/21	Gross Alpha/Beta	Gross Beta	6.06E-14	1.77E-14	1.85E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232252	BALL FIELDS	01/12/21	Gross Alpha/Beta	Gross Alpha	7.42E-15	7.30E-15	9.08E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232252	BALL FIELDS	01/12/21	Gross Alpha/Beta	Gross Beta	5.03E-14	1.67E-14	1.85E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232253	BALL FIELDS	01/12/21	Gross Alpha/Beta	Gross Alpha	1.96E-14	1.07E-14	9.08E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232253	BALL FIELDS	01/12/21	Gross Alpha/Beta	Gross Beta	7.00E-14	1.87E-14	1.85E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232254	BALL FIELDS	01/13/21	Gross Alpha/Beta	Gross Alpha	-1.11E-15	3.34E-15	8.99E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232254	BALL FIELDS	01/13/21	Gross Alpha/Beta	Gross Beta	9.43E-14	2.10E-14	1.83E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232255	BALL FIELDS	01/13/21	Gross Alpha/Beta	Gross Alpha	1.31E-15	4.78E-15	8.99E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232255	BALL FIELDS	01/13/21	Gross Alpha/Beta	Gross Beta	7.95E-14	1.96E-14	1.83E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232256	BALL FIELDS	01/13/21	Gross Alpha/Beta	Gross Alpha	9.76E-15	8.01E-15	8.99E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232256	BALL FIELDS	01/13/21	Gross Alpha/Beta	Gross Beta	4.91E-14	1.64E-14	1.83E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232257	BALL FIELDS	01/14/21	Gross Alpha/Beta	Gross Alpha	6.14E-15	6.81E-15	8.99E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232257	BALL FIELDS	01/14/21	Gross Alpha/Beta	Gross Beta	6.47E-14	1.81E-14	1.83E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232258	BALL FIELDS	01/14/21	Gross Alpha/Beta	Gross Alpha	4.93E-15	6.36E-15	8.99E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232258	BALL FIELDS	01/14/21	Gross Alpha/Beta	Gross Beta	4.91E-14	1.64E-14	1.83E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232259	BALL FIELDS	01/14/21	Gross Alpha/Beta	Gross Alpha	4.93E-15	6.36E-15	8.99E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232259	BALL FIELDS	01/14/21	Gross Alpha/Beta	Gross Beta	3.97E-14	1.54E-14	1.83E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232260	BALL FIELDS	01/19/21	Gross Alpha/Beta	Gross Alpha	1.01E-16	4.12E-15	8.99E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232260	BALL FIELDS	01/19/21	Gross Alpha/Beta	Gross Beta	2.57E-14	1.37E-14	1.83E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232261	BALL FIELDS	01/19/21	Gross Alpha/Beta	Gross Alpha	2.52E-15	5.36E-15	8.99E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232261	BALL FIELDS	01/19/21	Gross Alpha/Beta	Gross Beta	2.42E-14	1.35E-14	1.83E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232262	BALL FIELDS	01/19/21	Gross Alpha/Beta	Gross Alpha	1.01E-16	4.12E-15	8.99E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232262	BALL FIELDS	01/19/21	Gross Alpha/Beta	Gross Beta	3.27E-14	1.45E-14	1.83E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232263	BALL FIELDS	01/20/21	Gross Alpha/Beta	Gross Alpha	-1.11E-15	3.34E-15	8.99E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232263	BALL FIELDS	01/20/21	Gross Alpha/Beta	Gross Beta	3.35E-14	1.46E-14	1.83E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232264	BALL FIELDS	01/20/21	Gross Alpha/Beta	Gross Alpha	4.93E-15	6.36E-15	8.99E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232264	BALL FIELDS	01/20/21	Gross Alpha/Beta	Gross Beta	3.04E-14	1.43E-14	1.83E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232274	BALL FIELDS	01/20/21	Gross Alpha/Beta	Gross Alpha	4.53E-15	6.28E-15	1.04E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232274	BALL FIELDS	01/20/21	Gross Alpha/Beta	Gross Beta	2.48E-14	1.70E-14	2.41E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232275	BALL FIELDS	01/21/21	Gross Alpha/Beta	Gross Alpha	-1.86E-16	3.90E-15	9.84E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232275	BALL FIELDS	01/21/21	Gross Alpha/Beta	Gross Beta	2.05E-14	1.58E-14	2.28E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232276	BALL FIELDS	01/21/21	Gross Alpha/Beta	Gross Alpha	3.17E-15	5.50E-15	9.84E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP232276	BALL FIELDS	01/21/21	Gross Alpha/Beta	Gross Beta	1.75E-14	1.55E-14	2.28E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232277	BALL FIELDS	1/21/2021	Gross Alpha/Beta	Gross Alpha	-1.86E-16	3.90E-15	9.84E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232277	BALL FIELDS	1/21/2021	Gross Alpha/Beta	Gross Beta	3.16E-14	1.69E-14	2.28E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232278	BALL FIELDS	1/26/2021	Gross Alpha/Beta	Gross Alpha	-4.81E-16	1.01E-14	2.54E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232278	BALL FIELDS	1/26/2021	Gross Alpha/Beta	Gross Beta	2.59E-14	3.79E-14	5.89E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232279	BALL FIELDS	1/26/2021	Gross Alpha/Beta	Gross Alpha	2.41E-15	1.16E-14	2.54E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232279	BALL FIELDS	1/26/2021	Gross Alpha/Beta	Gross Beta	1.63E-14	3.69E-14	5.89E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232280	BALL FIELDS	1/26/2021	Gross Alpha/Beta	Gross Alpha	-1.41E-15	3.44E-15	1.06E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232280	BALL FIELDS	1/26/2021	Gross Alpha/Beta	Gross Beta	8.42E-15	1.56E-14	2.46E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232281	BALL FIELDS	1/27/2021	Gross Alpha/Beta	Gross Alpha	-1.93E-16	4.04E-15	1.02E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232281	BALL FIELDS	1/27/2021	Gross Alpha/Beta	Gross Beta	2.74E-14	1.70E-14	2.37E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232282	BALL FIELDS	1/27/2021	Gross Alpha/Beta	Gross Alpha	5.61E-15	6.59E-15	1.02E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232282	BALL FIELDS	1/27/2021	Gross Alpha/Beta	Gross Beta	2.20E-14	1.64E-14	2.37E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232283	BALL FIELDS	1/27/2021	Gross Alpha/Beta	Gross Alpha	-1.93E-16	4.04E-15	1.02E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232283	BALL FIELDS	1/27/2021	Gross Alpha/Beta	Gross Beta	3.67E-14	1.79E-14	2.37E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232284	BALL FIELDS	1/28/2021	Gross Alpha/Beta	Gross Alpha	1.01E-15	4.89E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232284	BALL FIELDS	1/28/2021	Gross Alpha/Beta	Gross Beta	2.15E-14	1.71E-14	2.48E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232285	BALL FIELDS	1/28/2021	Gross Alpha/Beta	Gross Alpha	1.01E-15	4.89E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232285	BALL FIELDS	1/28/2021	Gross Alpha/Beta	Gross Beta	3.12E-14	1.80E-14	2.48E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232286	BALL FIELDS	1/28/2021	Gross Alpha/Beta	Gross Alpha	-2.03E-16	4.24E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232286	BALL FIELDS	1/28/2021	Gross Alpha/Beta	Gross Beta	1.66E-14	1.66E-14	2.48E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232287	BALL FIELDS	2/1/2021	Gross Alpha/Beta	Gross Alpha	2.19E-15	5.36E-15	1.05E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232287	BALL FIELDS	2/1/2021	Gross Alpha/Beta	Gross Beta	2.74E-14	1.74E-14	2.43E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232288	BALL FIELDS	2/1/2021	Gross Alpha/Beta	Gross Alpha	5.17E-15	1.27E-14	2.48E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232288	BALL FIELDS	2/1/2021	Gross Alpha/Beta	Gross Beta	3.29E-14	3.79E-14	5.75E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232289	BALL FIELDS	2/1/2021	Gross Alpha/Beta	Gross Alpha	4.57E-15	6.34E-15	1.05E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232289	BALL FIELDS	2/1/2021	Gross Alpha/Beta	Gross Beta	4.33E-14	1.89E-14	2.43E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232290	BALL FIELDS	2/2/2021	Gross Alpha/Beta	Gross Alpha	4.22E-15	5.07E-15	7.27E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232290	BALL FIELDS	2/2/2021	Gross Alpha/Beta	Gross Beta	4.47E-14	1.75E-14	2.29E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232291	BALL FIELDS	2/2/2021	Gross Alpha/Beta	Gross Alpha	4.22E-15	5.07E-15	7.27E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232291	BALL FIELDS	2/2/2021	Gross Alpha/Beta	Gross Beta	2.27E-14	1.53E-14	2.29E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232292	BALL FIELDS	2/3/2021	Gross Alpha/Beta	Gross Alpha	8.72E-15	6.80E-15	7.27E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232292	BALL FIELDS	2/3/2021	Gross Alpha/Beta	Gross Beta	2.20E-14	1.52E-14	2.29E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232293	BALL FIELDS	2/3/2021	Gross Alpha/Beta	Gross Alpha	7.60E-15	6.41E-15	7.27E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232293	BALL FIELDS	2/3/2021	Gross Alpha/Beta	Gross Beta	3.87E-14	1.69E-14	2.29E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232294	BALL FIELDS	2/3/2021	Gross Alpha/Beta	Gross Alpha	9.85E-15	7.17E-15	7.27E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232294	BALL FIELDS	2/3/2021	Gross Alpha/Beta	Gross Beta	3.41E-14	1.64E-14	2.29E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232295	BALL FIELDS	2/4/2021	Gross Alpha/Beta	Gross Alpha	8.60E-16	3.29E-15	7.41E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232295	BALL FIELDS	2/4/2021	Gross Alpha/Beta	Gross Beta	1.62E-14	1.48E-14	2.34E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232296	BALL FIELDS	2/4/2021	Gross Alpha/Beta	Gross Alpha	3.15E-15	4.62E-15	7.41E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232296	BALL FIELDS	2/4/2021	Gross Alpha/Beta	Gross Beta	1.23E-14	1.44E-14	2.34E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232297	BALL FIELDS	2/4/2021	Gross Alpha/Beta	Gross Alpha	4.30E-15	5.16E-15	7.41E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232297	BALL FIELDS	2/4/2021	Gross Alpha/Beta	Gross Beta	3.48E-14	1.68E-14	2.34E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232298	BALL FIELDS	2/8/2021	Gross Alpha/Beta	Gross Alpha	8.97E-15	6.99E-15	7.48E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232298	BALL FIELDS	2/8/2021	Gross Alpha/Beta	Gross Beta	6.48E-14	1.98E-14	2.36E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP232299	BALL FIELDS	2/8/2021	Gross Alpha/Beta	Gross Alpha	8.68E-16	3.32E-15	7.48E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232299	BALL FIELDS	2/8/2021	Gross Alpha/Beta	Gross Beta	6.96E-15	1.39E-14	2.36E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232300	BALL FIELDS	2/8/2021	Gross Alpha/Beta	Gross Alpha	1.13E-14	7.73E-15	7.48E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232300	BALL FIELDS	2/8/2021	Gross Alpha/Beta	Gross Beta	5.77E-14	1.92E-14	2.36E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232301	BALL FIELDS	2/9/2021	Gross Alpha/Beta	Gross Alpha	-2.89E-16	2.37E-15	7.48E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232301	BALL FIELDS	2/9/2021	Gross Alpha/Beta	Gross Beta	1.17E-14	1.44E-14	2.36E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232302	BALL FIELDS	2/9/2021	Gross Alpha/Beta	Gross Alpha	3.21E-15	4.71E-15	7.55E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232302	BALL FIELDS	2/9/2021	Gross Alpha/Beta	Gross Beta	2.91E-14	1.64E-14	2.38E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232303	BALL FIELDS	2/9/2021	Gross Alpha/Beta	Gross Alpha	4.38E-15	5.26E-15	7.55E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232303	BALL FIELDS	2/9/2021	Gross Alpha/Beta	Gross Beta	2.60E-14	1.61E-14	2.38E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232304	BALL FIELDS	2/10/2021	Gross Alpha/Beta	Gross Alpha	7.89E-15	6.65E-15	7.55E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232304	BALL FIELDS	2/10/2021	Gross Alpha/Beta	Gross Beta	6.07E-14	1.96E-14	2.38E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232305	BALL FIELDS	2/10/2021	Gross Alpha/Beta	Gross Alpha	7.89E-15	6.65E-15	7.55E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232305	BALL FIELDS	2/10/2021	Gross Alpha/Beta	Gross Beta	4.65E-14	1.82E-14	2.38E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232306	BALL FIELDS	2/10/2021	Gross Alpha/Beta	Gross Alpha	8.76E-16	3.35E-15	7.55E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232306	BALL FIELDS	2/10/2021	Gross Alpha/Beta	Gross Beta	7.03E-15	1.40E-14	2.38E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232307	BALL FIELDS	2/11/2021	Gross Alpha/Beta	Gross Alpha	8.89E-15	6.93E-15	7.41E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232307	BALL FIELDS	2/11/2021	Gross Alpha/Beta	Gross Beta	5.35E-15	1.36E-14	2.34E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232308	BALL FIELDS	2/11/2021	Gross Alpha/Beta	Gross Alpha	4.30E-15	5.16E-15	7.41E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232308	BALL FIELDS	2/11/2021	Gross Alpha/Beta	Gross Beta	3.40E-14	1.67E-14	2.34E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232309	BALL FIELDS	2/11/2021	Gross Alpha/Beta	Gross Alpha	4.30E-15	5.16E-15	7.41E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232309	BALL FIELDS	2/11/2021	Gross Alpha/Beta	Gross Beta	4.09E-14	1.74E-14	2.34E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232310	BALL FIELDS	2/17/2021	Gross Alpha/Beta	Gross Alpha	4.72E-15	5.77E-15	8.65E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232310	BALL FIELDS	2/17/2021	Gross Alpha/Beta	Gross Beta	1.96E-14	1.54E-14	2.38E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232311	BALL FIELDS	2/17/2021	Gross Alpha/Beta	Gross Alpha	8.23E-15	7.07E-15	8.65E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232311	BALL FIELDS	2/17/2021	Gross Alpha/Beta	Gross Beta	4.87E-14	1.84E-14	2.38E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232312	BALL FIELDS	2/17/2021	Gross Alpha/Beta	Gross Alpha	1.22E-15	4.10E-15	8.65E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232312	BALL FIELDS	2/17/2021	Gross Alpha/Beta	Gross Beta	3.77E-14	1.73E-14	2.38E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232313	BALL FIELDS	2/18/2021	Gross Alpha/Beta	Gross Alpha	6.93E-15	6.54E-15	8.49E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232313	BALL FIELDS	2/18/2021	Gross Alpha/Beta	Gross Beta	4.08E-14	1.74E-14	2.34E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232314	BALL FIELDS	2/18/2021	Gross Alpha/Beta	Gross Alpha	6.93E-15	6.54E-15	8.49E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232314	BALL FIELDS	2/18/2021	Gross Alpha/Beta	Gross Beta	5.24E-14	1.85E-14	2.34E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232315	BALL FIELDS	2/18/2021	Gross Alpha/Beta	Gross Alpha	8.07E-15	6.93E-15	8.49E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232315	BALL FIELDS	2/18/2021	Gross Alpha/Beta	Gross Beta	4.86E-14	1.81E-14	2.34E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232316	BALL FIELDS	2/22/2021	Gross Alpha/Beta	Gross Alpha	8.07E-15	6.93E-15	8.49E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232316	BALL FIELDS	2/22/2021	Gross Alpha/Beta	Gross Beta	6.33E-14	1.96E-14	2.34E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232317	BALL FIELDS	2/22/2021	Gross Alpha/Beta	Gross Alpha	8.07E-15	6.93E-15	8.49E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232317	BALL FIELDS	2/22/2021	Gross Alpha/Beta	Gross Beta	5.01E-14	1.83E-14	2.34E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232318	BALL FIELDS	2/22/2021	Gross Alpha/Beta	Gross Alpha	1.19E-15	4.03E-15	8.49E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232318	BALL FIELDS	2/22/2021	Gross Alpha/Beta	Gross Beta	4.94E-14	1.82E-14	2.34E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232319	BALL FIELDS	2/23/2021	Gross Alpha/Beta	Gross Alpha	4.63E-15	5.66E-15	8.49E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232319	BALL FIELDS	2/23/2021	Gross Alpha/Beta	Gross Beta	2.46E-14	1.57E-14	2.34E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232320	BALL FIELDS	2/23/2021	Gross Alpha/Beta	Gross Alpha	2.34E-15	4.64E-15	8.49E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232320	BALL FIELDS	2/23/2021	Gross Alpha/Beta	Gross Beta	1.84E-14	1.50E-14	2.34E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232321	BALL FIELDS	2/23/2021	Gross Alpha/Beta	Gross Alpha	4.63E-15	5.66E-15	8.49E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP232321	BALL FIELDS	2/23/2021	Gross Alpha/Beta	Gross Beta	1.07E-14	1.42E-14	2.34E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232322	BALL FIELDS	2/24/2021	Gross Alpha/Beta	Gross Alpha	3.39E-15	5.03E-15	8.26E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232322	BALL FIELDS	2/24/2021	Gross Alpha/Beta	Gross Beta	3.22E-14	1.61E-14	2.28E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232323	BALL FIELDS	2/24/2021	Gross Alpha/Beta	Gross Alpha	4.60E-17	3.22E-15	8.26E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232323	BALL FIELDS	2/24/2021	Gross Alpha/Beta	Gross Beta	1.94E-14	1.48E-14	2.28E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232324	BALL FIELDS	2/24/2021	Gross Alpha/Beta	Gross Alpha	4.51E-15	5.51E-15	8.26E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232324	BALL FIELDS	2/24/2021	Gross Alpha/Beta	Gross Beta	3.60E-14	1.65E-14	2.28E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232325	BALL FIELDS	2/25/2021	Gross Alpha/Beta	Gross Alpha	3.49E-15	5.17E-15	8.49E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232325	BALL FIELDS	2/25/2021	Gross Alpha/Beta	Gross Beta	2.77E-14	1.60E-14	2.34E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232326	BALL FIELDS	2/25/2021	Gross Alpha/Beta	Gross Alpha	2.34E-15	4.64E-15	8.49E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232326	BALL FIELDS	2/25/2021	Gross Alpha/Beta	Gross Beta	1.53E-14	1.47E-14	2.34E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232327	BALL FIELDS	2/25/2021	Gross Alpha/Beta	Gross Alpha	7.06E-15	6.66E-15	8.65E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232327	BALL FIELDS	2/25/2021	Gross Alpha/Beta	Gross Beta	3.77E-14	1.73E-14	2.38E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232328	BALL FIELDS	3/1/2021	Gross Alpha/Beta	Gross Alpha	4.72E-15	5.77E-15	8.65E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232328	BALL FIELDS	3/1/2021	Gross Alpha/Beta	Gross Beta	2.98E-14	1.65E-14	2.38E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232329	BALL FIELDS	3/1/2021	Gross Alpha/Beta	Gross Alpha	3.55E-15	5.27E-15	8.65E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232329	BALL FIELDS	3/1/2021	Gross Alpha/Beta	Gross Beta	4.40E-14	1.79E-14	2.38E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232331	BALL FIELDS	3/1/2021	Gross Alpha/Beta	Gross Alpha	1.95E-15	4.74E-15	9.17E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232331	BALL FIELDS	3/1/2021	Gross Alpha/Beta	Gross Beta	3.49E-14	1.74E-14	2.47E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232332	BALL FIELDS	3/2/2021	Gross Alpha/Beta	Gross Alpha	8.72E-15	7.25E-15	8.91E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232332	BALL FIELDS	3/2/2021	Gross Alpha/Beta	Gross Beta	1.52E-14	1.50E-14	2.40E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232333	BALL FIELDS	3/2/2021	Gross Alpha/Beta	Gross Alpha	4.17E-15	5.62E-15	8.91E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232333	BALL FIELDS	3/2/2021	Gross Alpha/Beta	Gross Beta	2.64E-14	1.62E-14	2.40E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232334	BALL FIELDS	3/2/2021	Gross Alpha/Beta	Gross Alpha	7.58E-15	6.88E-15	8.91E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232334	BALL FIELDS	3/2/2021	Gross Alpha/Beta	Gross Beta	3.24E-14	1.68E-14	2.40E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232335	BALL FIELDS	3/3/2021	Gross Alpha/Beta	Gross Alpha	9.77E-15	7.54E-15	8.83E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232335	BALL FIELDS	3/3/2021	Gross Alpha/Beta	Gross Beta	1.28E-14	1.46E-14	2.38E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232336	BALL FIELDS	3/3/2021	Gross Alpha/Beta	Gross Alpha	7.51E-15	6.82E-15	8.83E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232336	BALL FIELDS	3/3/2021	Gross Alpha/Beta	Gross Beta	2.84E-14	1.62E-14	2.38E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232337	BALL FIELDS	3/3/2021	Gross Alpha/Beta	Gross Alpha	1.88E-15	4.56E-15	8.83E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232337	BALL FIELDS	3/3/2021	Gross Alpha/Beta	Gross Beta	4.66E-15	1.38E-14	2.38E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232338	BALL FIELDS	3/4/2021	Gross Alpha/Beta	Gross Alpha	6.76E-15	6.81E-15	9.35E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232338	BALL FIELDS	3/4/2021	Gross Alpha/Beta	Gross Beta	3.32E-14	1.75E-14	2.52E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232339	BALL FIELDS	3/4/2021	Gross Alpha/Beta	Gross Alpha	6.76E-15	6.81E-15	9.35E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232339	BALL FIELDS	3/4/2021	Gross Alpha/Beta	Gross Beta	4.34E-14	1.85E-14	2.52E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232340	BALL FIELDS	3/4/2021	Gross Alpha/Beta	Gross Alpha	4.37E-15	5.90E-15	9.35E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232340	BALL FIELDS	3/4/2021	Gross Alpha/Beta	Gross Beta	2.14E-14	1.63E-14	2.52E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232341	BALL FIELDS	3/8/2021	Gross Alpha/Beta	Gross Alpha	7.51E-15	6.82E-15	8.83E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232341	BALL FIELDS	3/8/2021	Gross Alpha/Beta	Gross Beta	2.02E-14	1.54E-14	2.38E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232342	BALL FIELDS	3/8/2021	Gross Alpha/Beta	Gross Alpha	1.09E-14	7.87E-15	8.83E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232342	BALL FIELDS	3/8/2021	Gross Alpha/Beta	Gross Beta	4.10E-14	1.75E-14	2.38E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP232343	BALL FIELDS	3/8/2021	Gross Alpha/Beta	Gross Alpha	6.39E-15	6.43E-15	8.83E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232343	BALL FIELDS	3/8/2021	Gross Alpha/Beta	Gross Beta	1.95E-14	1.53E-14	2.38E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232344	BALL FIELDS	3/9/2021	Gross Alpha/Beta	Gross Alpha	4.13E-15	5.57E-15	8.83E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232344	BALL FIELDS	3/9/2021	Gross Alpha/Beta	Gross Beta	3.50E-14	1.69E-14	2.38E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP232345	BALL FIELDS	3/9/2021	Gross Alpha/Beta	Gross Alpha	7.51E-15	6.82E-15	8.83E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232345	BALL FIELDS	3/9/2021	Gross Alpha/Beta	Gross Beta	2.76E-14	1.62E-14	2.38E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232346	BALL FIELDS	3/9/2021	Gross Alpha/Beta	Gross Alpha	4.13E-15	5.57E-15	8.83E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232346	BALL FIELDS	3/9/2021	Gross Alpha/Beta	Gross Beta	3.92E-15	1.37E-14	2.38E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232347	BALL FIELDS	3/10/2021	Gross Alpha/Beta	Gross Alpha	3.01E-15	5.09E-15	8.83E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232347	BALL FIELDS	3/10/2021	Gross Alpha/Beta	Gross Beta	9.11E-15	1.42E-14	2.38E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232348	BALL FIELDS	3/10/2021	Gross Alpha/Beta	Gross Alpha	1.88E-15	4.56E-15	8.83E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232348	BALL FIELDS	3/10/2021	Gross Alpha/Beta	Gross Beta	1.73E-14	1.51E-14	2.38E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232349	BALL FIELDS	3/10/2021	Gross Alpha/Beta	Gross Alpha	4.13E-15	5.57E-15	8.83E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232349	BALL FIELDS	3/10/2021	Gross Alpha/Beta	Gross Beta	1.87E-14	1.53E-14	2.38E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232350	BALL FIELDS	3/15/2021	Gross Alpha/Beta	Gross Alpha	8.28E-16	4.37E-15	9.73E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232350	BALL FIELDS	3/15/2021	Gross Alpha/Beta	Gross Beta	2.72E-14	1.75E-14	2.62E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP232351	BALL FIELDS	3/15/2021	Gross Alpha/Beta	Gross Alpha	3.82E-15	5.60E-15	9.12E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232351	BALL FIELDS	3/15/2021	Gross Alpha/Beta	Gross Beta	2.45E-14	1.74E-14	2.66E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232352	BALL FIELDS	3/15/2021	Gross Alpha/Beta	Gross Alpha	1.03E-16	3.58E-15	9.12E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232352	BALL FIELDS	3/15/2021	Gross Alpha/Beta	Gross Beta	1.61E-14	1.65E-14	2.66E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232353	BALL FIELDS	3/16/2021	Gross Alpha/Beta	Gross Alpha	2.34E-15	4.55E-15	8.28E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232353	BALL FIELDS	3/16/2021	Gross Alpha/Beta	Gross Beta	1.54E-14	1.51E-14	2.41E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232354	BALL FIELDS	3/16/2021	Gross Alpha/Beta	Gross Alpha	-1.03E-15	2.34E-15	8.28E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232354	BALL FIELDS	3/16/2021	Gross Alpha/Beta	Gross Beta	1.09E-14	1.46E-14	2.41E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232355	BALL FIELDS	3/16/2021	Gross Alpha/Beta	Gross Alpha	1.22E-15	3.95E-15	8.28E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232355	BALL FIELDS	3/16/2021	Gross Alpha/Beta	Gross Beta	5.54E-15	1.40E-14	2.41E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232356	BALL FIELDS	3/17/2021	Gross Alpha/Beta	Gross Alpha	-1.03E-15	2.34E-15	8.28E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232356	BALL FIELDS	3/17/2021	Gross Alpha/Beta	Gross Beta	1.39E-14	1.49E-14	2.41E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232357	BALL FIELDS	3/17/2021	Gross Alpha/Beta	Gross Alpha	3.47E-15	5.08E-15	8.28E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232357	BALL FIELDS	3/17/2021	Gross Alpha/Beta	Gross Beta	1.09E-14	1.46E-14	2.41E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232358	BALL FIELDS	3/17/2021	Gross Alpha/Beta	Gross Alpha	2.34E-15	4.55E-15	8.28E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232358	BALL FIELDS	3/17/2021	Gross Alpha/Beta	Gross Beta	1.47E-14	1.50E-14	2.41E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232359	BALL FIELDS	3/23/2021	Gross Alpha/Beta	Gross Alpha	2.37E-15	4.59E-15	8.35E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232359	BALL FIELDS	3/23/2021	Gross Alpha/Beta	Gross Beta	1.56E-14	1.52E-14	2.43E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232360	BALL FIELDS	3/23/2021	Gross Alpha/Beta	Gross Alpha	1.23E-15	3.99E-15	8.35E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232360	BALL FIELDS	3/23/2021	Gross Alpha/Beta	Gross Beta	1.63E-14	1.53E-14	2.43E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP232361	BALL FIELDS	3/23/2021	Gross Alpha/Beta	Gross Alpha	9.50E-17	3.28E-15	8.35E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232361	BALL FIELDS	3/23/2021	Gross Alpha/Beta	Gross Beta	1.86E-14	1.55E-14	2.43E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP239159	BALL FIELDS	3/24/2021	Gross Alpha/Beta	Gross Alpha	1.22E-15	3.95E-15	8.28E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239159	BALL FIELDS	3/24/2021	Gross Alpha/Beta	Gross Beta	2.00E-14	1.56E-14	2.41E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP239160	BALL FIELDS	3/24/2021	Gross Alpha/Beta	Gross Alpha	-1.03E-15	2.34E-15	8.28E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239160	BALL FIELDS	3/24/2021	Gross Alpha/Beta	Gross Beta	2.00E-14	1.56E-14	2.41E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP239161	BALL FIELDS	3/24/2021	Gross Alpha/Beta	Gross Alpha	9.40E-17	3.25E-15	8.28E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239161	BALL FIELDS	3/24/2021	Gross Alpha/Beta	Gross Beta	-5.09E-15	1.28E-14	2.41E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239162	BALL FIELDS	3/25/2021	Gross Alpha/Beta	Gross Alpha	-2.59E-15	7.84E-16	9.93E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239162	BALL FIELDS	3/25/2021	Gross Alpha/Beta	Gross Beta	2.85E-14	1.91E-14	2.89E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP239163	BALL FIELDS	3/25/2021	Gross Alpha/Beta	Gross Alpha	-1.24E-15	2.81E-15	9.93E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239163	BALL FIELDS	3/25/2021	Gross Alpha/Beta	Gross Beta	-7.02E-15	1.53E-14	2.89E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239164	BALL FIELDS	3/25/2021	Gross Alpha/Beta	Gross Alpha	1.46E-15	4.74E-15	9.93E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP239164	BALL FIELDS	3/25/2021	Gross Alpha/Beta	Gross Beta	1.58E-14	1.78E-14	2.89E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239165	BALL FIELDS	3/29/2021	Gross Alpha/Beta	Gross Alpha	4.87E-15	5.89E-15	8.76E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239165	BALL FIELDS	3/29/2021	Gross Alpha/Beta	Gross Beta	3.64E-14	1.80E-14	2.55E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP239166	BALL FIELDS	3/29/2021	Gross Alpha/Beta	Gross Alpha	1.29E-15	4.18E-15	8.76E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239166	BALL FIELDS	3/29/2021	Gross Alpha/Beta	Gross Beta	3.00E-14	1.74E-14	2.55E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP239167	BALL FIELDS	3/29/2021	Gross Alpha/Beta	Gross Alpha	1.29E-15	4.18E-15	8.76E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239167	BALL FIELDS	3/29/2021	Gross Alpha/Beta	Gross Beta	3.00E-14	1.74E-14	2.55E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP239168	BALL FIELDS	3/30/2021	Gross Alpha/Beta	Gross Alpha	3.62E-15	5.38E-15	8.82E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239168	BALL FIELDS	3/30/2021	Gross Alpha/Beta	Gross Beta	3.37E-14	1.76E-14	2.51E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP239169	BALL FIELDS	3/30/2021	Gross Alpha/Beta	Gross Alpha	5.00E-17	3.44E-15	8.82E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239169	BALL FIELDS	3/30/2021	Gross Alpha/Beta	Gross Beta	7.70E-16	1.40E-14	2.51E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239170	BALL FIELDS	3/30/2021	Gross Alpha/Beta	Gross Alpha	4.82E-15	5.89E-15	8.82E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239170	BALL FIELDS	3/30/2021	Gross Alpha/Beta	Gross Beta	2.81E-14	1.70E-14	2.51E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP239171	BALL FIELDS	3/31/2021	Gross Alpha/Beta	Gross Alpha	1.17E-15	3.95E-15	8.33E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239171	BALL FIELDS	3/31/2021	Gross Alpha/Beta	Gross Beta	2.12E-14	1.55E-14	2.37E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP239172	BALL FIELDS	3/31/2021	Gross Alpha/Beta	Gross Alpha	4.55E-15	5.56E-15	8.33E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239172	BALL FIELDS	3/31/2021	Gross Alpha/Beta	Gross Beta	4.10E-14	1.75E-14	2.37E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP239173	BALL FIELDS	3/31/2021	Gross Alpha/Beta	Gross Alpha	6.80E-15	6.42E-15	8.33E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP239173	BALL FIELDS	3/31/2021	Gross Alpha/Beta	Gross Beta	3.19E-14	1.66E-14	2.37E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP239174	BALL FIELDS	4/1/2021	Gross Alpha/Beta	Gross Alpha	6.01E-15	6.35E-15	8.82E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239174	BALL FIELDS	4/1/2021	Gross Alpha/Beta	Gross Beta	1.61E-14	1.57E-14	2.51E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP239175	BALL FIELDS	4/1/2021	Gross Alpha/Beta	Gross Alpha	4.82E-15	5.89E-15	8.82E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239175	BALL FIELDS	4/1/2021	Gross Alpha/Beta	Gross Beta	2.41E-14	1.66E-14	2.51E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP239176	BALL FIELDS	4/1/2021	Gross Alpha/Beta	Gross Alpha	1.24E-15	4.18E-15	8.82E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239176	BALL FIELDS	4/1/2021	Gross Alpha/Beta	Gross Beta	3.78E-14	1.80E-14	2.51E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP239177	BALL FIELDS	4/5/2021	Gross Alpha/Beta	Gross Alpha	2.58E-15	5.12E-15	9.37E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239177	BALL FIELDS	4/5/2021	Gross Alpha/Beta	Gross Beta	3.16E-14	1.82E-14	2.67E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP239178	BALL FIELDS	4/5/2021	Gross Alpha/Beta	Gross Alpha	6.38E-15	6.75E-15	9.37E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239178	BALL FIELDS	4/5/2021	Gross Alpha/Beta	Gross Beta	2.47E-14	1.75E-14	2.67E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP239179	BALL FIELDS	4/5/2021	Gross Alpha/Beta	Gross Alpha	2.58E-15	5.12E-15	9.37E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239179	BALL FIELDS	4/5/2021	Gross Alpha/Beta	Gross Beta	5.21E-14	2.02E-14	2.67E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP239180	BALL FIELDS	4/6/2021	Gross Alpha/Beta	Gross Alpha	4.82E-15	5.89E-15	8.82E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239180	BALL FIELDS	4/6/2021	Gross Alpha/Beta	Gross Beta	1.20E-14	1.53E-14	2.51E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239181	BALL FIELDS	4/6/2021	Gross Alpha/Beta	Gross Alpha	4.82E-15	5.89E-15	8.82E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239181	BALL FIELDS	4/6/2021	Gross Alpha/Beta	Gross Beta	3.61E-14	1.78E-14	2.51E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP239182	BALL FIELDS	4/6/2021	Gross Alpha/Beta	Gross Alpha	4.82E-15	5.89E-15	8.82E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239182	BALL FIELDS	4/6/2021	Gross Alpha/Beta	Gross Beta	2.41E-14	1.66E-14	2.51E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP239183	BALL FIELDS	4/7/2021	Gross Alpha/Beta	Gross Alpha	3.39E-15	5.03E-15	8.26E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239183	BALL FIELDS	4/7/2021	Gross Alpha/Beta	Gross Beta	3.01E-14	1.63E-14	2.35E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP239184	BALL FIELDS	4/7/2021	Gross Alpha/Beta	Gross Alpha	2.28E-15	4.51E-15	8.26E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239184	BALL FIELDS	4/7/2021	Gross Alpha/Beta	Gross Beta	2.03E-14	1.53E-14	2.35E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP239185	BALL FIELDS	4/7/2021	Gross Alpha/Beta	Gross Alpha	2.28E-15	4.51E-15	8.26E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239185	BALL FIELDS	4/7/2021	Gross Alpha/Beta	Gross Beta	1.95E-14	1.52E-14	2.35E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP239186	BALL FIELDS	4/8/2021	Gross Alpha/Beta	Gross Alpha	4.60E-17	3.19E-15	8.18E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239186	BALL FIELDS	4/8/2021	Gross Alpha/Beta	Gross Beta	1.04E-14	1.41E-14	2.33E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP239187	BALL FIELDS	4/8/2021	Gross Alpha/Beta	Gross Alpha	4.47E-15	5.46E-15	8.18E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239187	BALL FIELDS	4/8/2021	Gross Alpha/Beta	Gross Beta	4.44E-15	1.34E-14	2.33E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239206	BALL FIELDS	4/8/2021	Gross Alpha/Beta	Gross Alpha	-7.83E-16	2.29E-15	7.84E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239206	BALL FIELDS	4/8/2021	Gross Alpha/Beta	Gross Beta	1.07E-14	1.43E-14	2.35E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239207	BALL FIELDS	4/12/2021	Gross Alpha/Beta	Gross Alpha	3.70E-15	5.07E-15	7.98E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239207	BALL FIELDS	4/12/2021	Gross Alpha/Beta	Gross Beta	1.85E-14	1.53E-14	2.39E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP239208	BALL FIELDS	4/12/2021	Gross Alpha/Beta	Gross Alpha	2.58E-15	4.54E-15	7.98E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239208	BALL FIELDS	4/12/2021	Gross Alpha/Beta	Gross Beta	1.70E-14	1.52E-14	2.39E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP239209	BALL FIELDS	4/12/2021	Gross Alpha/Beta	Gross Alpha	-7.97E-16	2.33E-15	7.98E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239209	BALL FIELDS	4/12/2021	Gross Alpha/Beta	Gross Beta	2.53E-14	1.60E-14	2.39E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP239210	BALL FIELDS	4/13/2021	Gross Alpha/Beta	Gross Alpha	-1.96E-15	6.26E-16	8.13E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239210	BALL FIELDS	4/13/2021	Gross Alpha/Beta	Gross Beta	1.84E-15	1.38E-14	2.44E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239211	BALL FIELDS	4/13/2021	Gross Alpha/Beta	Gross Alpha	3.34E-16	3.30E-15	8.13E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239211	BALL FIELDS	4/13/2021	Gross Alpha/Beta	Gross Beta	5.71E-15	1.42E-14	2.44E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239212	BALL FIELDS	4/13/2021	Gross Alpha/Beta	Gross Alpha	3.34E-16	3.30E-15	8.13E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239212	BALL FIELDS	4/13/2021	Gross Alpha/Beta	Gross Beta	3.38E-15	1.39E-14	2.44E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239213	BALL FIELDS	4/14/2021	Gross Alpha/Beta	Gross Alpha	6.12E-15	6.17E-15	8.21E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239213	BALL FIELDS	4/14/2021	Gross Alpha/Beta	Gross Beta	3.62E-14	1.75E-14	2.46E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP239214	BALL FIELDS	4/14/2021	Gross Alpha/Beta	Gross Alpha	2.65E-15	4.67E-15	8.21E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239214	BALL FIELDS	4/14/2021	Gross Alpha/Beta	Gross Beta	4.98E-15	1.42E-14	2.46E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239215	BALL FIELDS	4/14/2021	Gross Alpha/Beta	Gross Alpha	3.81E-15	5.22E-15	8.21E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239215	BALL FIELDS	4/14/2021	Gross Alpha/Beta	Gross Beta	-1.27E-15	1.35E-14	2.46E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239216	BALL FIELDS	4/15/2021	Gross Alpha/Beta	Gross Alpha	1.50E-15	4.06E-15	8.21E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239216	BALL FIELDS	4/15/2021	Gross Alpha/Beta	Gross Beta	8.88E-15	1.47E-14	2.46E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239217	BALL FIELDS	4/15/2021	Gross Alpha/Beta	Gross Alpha	-1.98E-15	6.32E-16	8.21E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239217	BALL FIELDS	4/15/2021	Gross Alpha/Beta	Gross Beta	1.44E-14	1.53E-14	2.46E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239218	BALL FIELDS	4/15/2021	Gross Alpha/Beta	Gross Alpha	1.50E-15	4.06E-15	8.21E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239218	BALL FIELDS	4/15/2021	Gross Alpha/Beta	Gross Beta	1.05E-14	1.48E-14	2.46E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239219	BALL FIELDS	4/19/2021	Gross Alpha/Beta	Gross Alpha	9.09E-16	8.97E-15	2.21E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239219	BALL FIELDS	4/19/2021	Gross Alpha/Beta	Gross Beta	-2.44E-14	3.40E-14	6.63E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239220	BALL FIELDS	4/19/2021	Gross Alpha/Beta	Gross Alpha	7.14E-15	1.26E-14	2.21E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239220	BALL FIELDS	4/19/2021	Gross Alpha/Beta	Gross Beta	-4.13E-14	3.19E-14	6.63E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239221	BALL FIELDS	4/19/2021	Gross Alpha/Beta	Gross Alpha	1.03E-14	1.41E-14	2.21E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239221	BALL FIELDS	4/19/2021	Gross Alpha/Beta	Gross Beta	1.76E-14	3.88E-14	6.63E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239222	BALL FIELDS	4/20/2021	Gross Alpha/Beta	Gross Alpha	3.41E-16	3.36E-15	8.29E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239222	BALL FIELDS	4/20/2021	Gross Alpha/Beta	Gross Beta	-4.93E-16	1.38E-14	2.49E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239223	BALL FIELDS	4/20/2021	Gross Alpha/Beta	Gross Alpha	7.35E-15	6.66E-15	8.29E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP239223	BALL FIELDS	4/20/2021	Gross Alpha/Beta	Gross Beta	2.00E-14	1.60E-14	2.49E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP239224	BALL FIELDS	4/20/2021	Gross Alpha/Beta	Gross Alpha	5.02E-15	5.77E-15	8.29E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239224	BALL FIELDS	4/20/2021	Gross Alpha/Beta	Gross Beta	5.82E-15	1.45E-14	2.49E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239225	BALL FIELDS	4/21/2021	Gross Alpha/Beta	Gross Alpha	3.38E-16	3.33E-15	8.21E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239225	BALL FIELDS	4/21/2021	Gross Alpha/Beta	Gross Beta	1.86E-15	1.39E-14	2.46E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239244	BALL FIELDS	4/21/2021	Gross Alpha/Beta	Gross Alpha	-8.84E-16	3.43E-15	9.76E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239244	BALL FIELDS	4/21/2021	Gross Alpha/Beta	Gross Beta	2.82E-14	1.60E-14	2.32E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP239245	BALL FIELDS	4/21/2021	Gross Alpha/Beta	Gross Alpha	5.01E-15	6.30E-15	9.76E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP239245	BALL FIELDS	4/21/2021	Gross Alpha/Beta	Gross Beta	4.21E-14	1.75E-14	2.32E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP239246	BALL FIELDS	4/22/2021	Gross Alpha/Beta	Gross Alpha	2.92E-16	4.12E-15	9.67E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239246	BALL FIELDS	4/22/2021	Gross Alpha/Beta	Gross Beta	8.94E-15	1.38E-14	2.30E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239247	BALL FIELDS	4/22/2021	Gross Alpha/Beta	Gross Alpha	2.63E-15	5.29E-15	9.67E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239247	BALL FIELDS	4/22/2021	Gross Alpha/Beta	Gross Beta	4.78E-14	1.79E-14	2.30E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP239248	BALL FIELDS	4/22/2021	Gross Alpha/Beta	Gross Alpha	6.13E-15	6.67E-15	9.67E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239248	BALL FIELDS	4/22/2021	Gross Alpha/Beta	Gross Beta	3.63E-14	1.67E-14	2.30E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP239249	BALL FIELDS	4/26/2021	Gross Alpha/Beta	Gross Alpha	2.79E-16	3.94E-15	9.23E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239249	BALL FIELDS	4/26/2021	Gross Alpha/Beta	Gross Beta	3.45E-15	1.26E-14	2.20E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239250	BALL FIELDS	4/26/2021	Gross Alpha/Beta	Gross Alpha	5.86E-15	6.37E-15	9.23E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239250	BALL FIELDS	4/26/2021	Gross Alpha/Beta	Gross Beta	4.05E-14	1.66E-14	2.20E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP239251	BALL FIELDS	4/26/2021	Gross Alpha/Beta	Gross Alpha	3.63E-15	5.52E-15	9.23E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239251	BALL FIELDS	4/26/2021	Gross Alpha/Beta	Gross Beta	5.58E-14	1.81E-14	2.20E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP239252	BALL FIELDS	4/27/2021	Gross Alpha/Beta	Gross Alpha	3.76E-15	5.73E-15	9.58E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239252	BALL FIELDS	4/27/2021	Gross Alpha/Beta	Gross Beta	2.39E-14	1.53E-14	2.28E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP239253	BALL FIELDS	4/27/2021	Gross Alpha/Beta	Gross Alpha	8.39E-15	7.39E-15	9.58E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP239253	BALL FIELDS	4/27/2021	Gross Alpha/Beta	Gross Beta	4.43E-14	1.74E-14	2.28E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP239254	BALL FIELDS	4/27/2021	Gross Alpha/Beta	Gross Alpha	7.23E-15	7.01E-15	9.58E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP239254	BALL FIELDS	4/27/2021	Gross Alpha/Beta	Gross Beta	5.71E-14	1.87E-14	2.28E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP239255	BALL FIELDS	4/28/2021	Gross Alpha/Beta	Gross Alpha	2.63E-15	5.29E-15	9.67E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239255	BALL FIELDS	4/28/2021	Gross Alpha/Beta	Gross Beta	8.18E-15	1.37E-14	2.30E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239256	BALL FIELDS	4/28/2021	Gross Alpha/Beta	Gross Alpha	8.47E-15	7.46E-15	9.67E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP239256	BALL FIELDS	4/28/2021	Gross Alpha/Beta	Gross Beta	9.70E-15	1.39E-14	2.30E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239257	BALL FIELDS	4/28/2021	Gross Alpha/Beta	Gross Alpha	4.96E-15	6.24E-15	9.67E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239257	BALL FIELDS	4/28/2021	Gross Alpha/Beta	Gross Beta	2.87E-14	1.60E-14	2.30E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP239258	BALL FIELDS	4/29/2021	Gross Alpha/Beta	Gross Alpha	1.45E-15	4.70E-15	9.58E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239258	BALL FIELDS	4/29/2021	Gross Alpha/Beta	Gross Beta	1.87E-14	1.48E-14	2.28E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP239259	BALL FIELDS	4/29/2021	Gross Alpha/Beta	Gross Alpha	1.45E-15	4.70E-15	9.58E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239259	BALL FIELDS	4/29/2021	Gross Alpha/Beta	Gross Beta	8.86E-15	1.37E-14	2.28E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239260	BALL FIELDS	4/29/2021	Gross Alpha/Beta	Gross Alpha	3.76E-15	5.73E-15	9.58E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP239260	BALL FIELDS	4/29/2021	Gross Alpha/Beta	Gross Beta	2.02E-14	1.49E-14	2.28E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243403	BALL FIELDS	9/21/2021	Gross Alpha/Beta	Gross Alpha	1.70E-14	1.47E-14	1.88E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243403	BALL FIELDS	9/21/2021	Gross Alpha/Beta	Gross Beta	4.10E-14	2.47E-14	3.49E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243404	BALL FIELDS	9/21/2021	Gross Alpha/Beta	Gross Alpha	7.77E-15	1.14E-14	1.88E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243404	BALL FIELDS	9/21/2021	Gross Alpha/Beta	Gross Beta	4.71E-14	2.55E-14	3.49E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243405	BALL FIELDS	9/22/2021	Gross Alpha/Beta	Gross Alpha	6.24E-15	6.63E-15	9.46E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243405	BALL FIELDS	9/22/2021	Gross Alpha/Beta	Gross Beta	2.68E-14	1.32E-14	1.76E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243406	BALL FIELDS	9/22/2021	Gross Alpha/Beta	Gross Alpha	5.08E-15	6.21E-15	9.46E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243406	BALL FIELDS	9/22/2021	Gross Alpha/Beta	Gross Beta	1.99E-14	1.24E-14	1.76E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243407	BALL FIELDS	9/23/2021	Gross Alpha/Beta	Gross Alpha	1.73E-15	5.09E-15	1.02E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243407	BALL FIELDS	9/23/2021	Gross Alpha/Beta	Gross Beta	1.82E-14	1.29E-14	1.91E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243408	BALL FIELDS	9/23/2021	Gross Alpha/Beta	Gross Alpha	6.75E-15	7.17E-15	1.02E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243408	BALL FIELDS	9/23/2021	Gross Alpha/Beta	Gross Beta	2.40E-14	1.37E-14	1.91E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243409	BALL FIELDS	9/27/2021	Gross Alpha/Beta	Gross Alpha	7.55E-15	7.17E-15	9.64E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243409	BALL FIELDS	9/27/2021	Gross Alpha/Beta	Gross Beta	4.75E-14	1.59E-14	1.80E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP243410	BALL FIELDS	9/27/2021	Gross Alpha/Beta	Gross Alpha	9.91E-15	7.93E-15	9.64E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243410	BALL FIELDS	9/27/2021	Gross Alpha/Beta	Gross Beta	5.76E-14	1.71E-14	1.80E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243411	BALL FIELDS	9/28/2021	Gross Alpha/Beta	Gross Alpha	6.30E-15	6.70E-15	9.55E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243411	BALL FIELDS	9/28/2021	Gross Alpha/Beta	Gross Beta	4.01E-14	1.50E-14	1.78E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243412	BALL FIELDS	9/28/2021	Gross Alpha/Beta	Gross Alpha	1.66E-15	4.89E-15	9.83E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243412	BALL FIELDS	9/28/2021	Gross Alpha/Beta	Gross Beta	4.37E-14	1.57E-14	1.83E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243413	BALL FIELDS	9/29/2021	Gross Alpha/Beta	Gross Alpha	8.81E-15	7.63E-15	9.74E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243413	BALL FIELDS	9/29/2021	Gross Alpha/Beta	Gross Beta	5.03E-14	1.64E-14	1.81E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243414	BALL FIELDS	9/29/2021	Gross Alpha/Beta	Gross Alpha	4.07E-15	5.97E-15	9.83E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243414	BALL FIELDS	9/29/2021	Gross Alpha/Beta	Gross Beta	3.50E-14	1.46E-14	1.83E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243415	BALL FIELDS	9/30/2021	Gross Alpha/Beta	Gross Alpha	1.12E-14	8.36E-15	9.74E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243415	BALL FIELDS	9/30/2021	Gross Alpha/Beta	Gross Beta	4.09E-14	1.53E-14	1.81E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243416	BALL FIELDS	9/30/2021	Gross Alpha/Beta	Gross Alpha	4.03E-15	5.92E-15	9.74E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243416	BALL FIELDS	9/30/2021	Gross Alpha/Beta	Gross Beta	2.68E-14	1.35E-14	1.81E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243417	BALL FIELDS	10/4/2021	Gross Alpha/Beta	Gross Alpha	1.01E-14	8.08E-15	9.83E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243417	BALL FIELDS	10/4/2021	Gross Alpha/Beta	Gross Beta	5.80E-14	1.73E-14	1.83E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243418	BALL FIELDS	10/4/2021	Gross Alpha/Beta	Gross Alpha	1.13E-14	8.44E-15	9.83E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243418	BALL FIELDS	10/4/2021	Gross Alpha/Beta	Gross Beta	3.34E-14	1.45E-14	1.83E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243419	BALL FIELDS	10/5/2021	Gross Alpha/Beta	Gross Alpha	7.69E-15	7.31E-15	9.83E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243419	BALL FIELDS	10/5/2021	Gross Alpha/Beta	Gross Beta	3.26E-14	1.44E-14	1.83E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243420	BALL FIELDS	10/5/2021	Gross Alpha/Beta	Gross Alpha	4.07E-15	5.97E-15	9.83E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243420	BALL FIELDS	10/5/2021	Gross Alpha/Beta	Gross Beta	2.71E-14	1.37E-14	1.83E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243421	BALL FIELDS	10/6/2021	Gross Alpha/Beta	Gross Alpha	3.96E-15	5.80E-15	9.55E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243421	BALL FIELDS	10/6/2021	Gross Alpha/Beta	Gross Beta	3.71E-14	1.46E-14	1.78E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243422	BALL FIELDS	10/6/2021	Gross Alpha/Beta	Gross Alpha	6.30E-15	6.70E-15	9.55E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243422	BALL FIELDS	10/6/2021	Gross Alpha/Beta	Gross Beta	3.01E-14	1.38E-14	1.78E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243423	BALL FIELDS	10/7/2021	Gross Alpha/Beta	Gross Alpha	3.64E-15	5.84E-15	9.95E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243423	BALL FIELDS	10/7/2021	Gross Alpha/Beta	Gross Beta	2.76E-14	1.65E-14	2.43E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243424	BALL FIELDS	10/7/2021	Gross Alpha/Beta	Gross Alpha	4.82E-15	6.30E-15	9.95E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243424	BALL FIELDS	10/7/2021	Gross Alpha/Beta	Gross Beta	1.61E-14	1.53E-14	2.43E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243425	BALL FIELDS	10/11/2021	Gross Alpha/Beta	Gross Alpha	4.82E-15	6.30E-15	9.95E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243425	BALL FIELDS	10/11/2021	Gross Alpha/Beta	Gross Beta	4.30E-14	1.80E-14	2.43E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243426	BALL FIELDS	10/11/2021	Gross Alpha/Beta	Gross Alpha	1.19E-14	8.59E-15	9.95E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243426	BALL FIELDS	10/11/2021	Gross Alpha/Beta	Gross Beta	5.37E-14	1.91E-14	2.43E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243427	BALL FIELDS	10/11/2021	Gross Alpha/Beta	Gross Alpha	1.07E-14	8.25E-15	9.95E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243427	BALL FIELDS	10/11/2021	Gross Alpha/Beta	Gross Beta	3.84E-14	1.76E-14	2.43E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243428	BALL FIELDS	10/12/2021	Gross Alpha/Beta	Gross Alpha	1.63E-14	9.66E-15	9.77E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243428	BALL FIELDS	10/12/2021	Gross Alpha/Beta	Gross Beta	4.52E-14	1.80E-14	2.38E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243429	BALL FIELDS	10/12/2021	Gross Alpha/Beta	Gross Alpha	1.86E-14	1.02E-14	9.77E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243429	BALL FIELDS	10/12/2021	Gross Alpha/Beta	Gross Beta	5.35E-14	1.88E-14	2.38E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243430	BALL FIELDS	10/12/2021	Gross Alpha/Beta	Gross Alpha	1.66E-14	9.84E-15	9.95E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243430	BALL FIELDS	10/12/2021	Gross Alpha/Beta	Gross Beta	8.45E-14	2.20E-14	2.43E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243431	BALL FIELDS	10/13/2021	Gross Alpha/Beta	Gross Alpha	1.43E-14	9.23E-15	9.95E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243431	BALL FIELDS	10/13/2021	Gross Alpha/Beta	Gross Beta	4.76E-14	1.85E-14	2.43E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243432	BALL FIELDS	10/13/2021	Gross Alpha/Beta	Gross Alpha	3.64E-15	5.84E-15	9.95E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP243432	BALL FIELDS	10/13/2021	Gross Alpha/Beta	Gross Beta	4.53E-14	1.83E-14	2.43E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243433	BALL FIELDS	10/13/2021	Gross Alpha/Beta	Gross Alpha	1.59E-14	9.82E-15	1.03E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243433	BALL FIELDS	10/13/2021	Gross Alpha/Beta	Gross Beta	3.16E-14	1.73E-14	2.50E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243434	BALL FIELDS	10/14/2021	Gross Alpha/Beta	Gross Alpha	8.60E-15	7.75E-15	1.03E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243434	BALL FIELDS	10/14/2021	Gross Alpha/Beta	Gross Beta	2.29E-14	1.64E-14	2.50E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243435	BALL FIELDS	10/14/2021	Gross Alpha/Beta	Gross Alpha	1.10E-14	8.49E-15	1.03E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243435	BALL FIELDS	10/14/2021	Gross Alpha/Beta	Gross Beta	2.21E-14	1.63E-14	2.50E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243436	BALL FIELDS	10/14/2021	Gross Alpha/Beta	Gross Alpha	8.60E-15	7.75E-15	1.03E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243436	BALL FIELDS	10/14/2021	Gross Alpha/Beta	Gross Beta	3.08E-14	1.72E-14	2.50E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243437	BALL FIELDS	10/18/2021	Gross Alpha/Beta	Gross Alpha	4.82E-15	6.30E-15	9.95E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243437	BALL FIELDS	10/18/2021	Gross Alpha/Beta	Gross Beta	5.68E-14	1.94E-14	2.43E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243438	BALL FIELDS	10/18/2021	Gross Alpha/Beta	Gross Alpha	1.35E-14	9.18E-15	1.03E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243438	BALL FIELDS	10/18/2021	Gross Alpha/Beta	Gross Beta	4.58E-14	1.87E-14	2.50E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243439	BALL FIELDS	10/18/2021	Gross Alpha/Beta	Gross Alpha	4.96E-15	6.49E-15	1.03E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243439	BALL FIELDS	10/18/2021	Gross Alpha/Beta	Gross Beta	4.19E-14	1.83E-14	2.50E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243440	BALL FIELDS	10/19/2021	Gross Alpha/Beta	Gross Alpha	6.17E-15	6.93E-15	1.03E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243440	BALL FIELDS	10/19/2021	Gross Alpha/Beta	Gross Beta	4.82E-14	1.89E-14	2.50E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243441	BALL FIELDS	10/19/2021	Gross Alpha/Beta	Gross Alpha	2.20E-14	1.13E-14	1.03E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243441	BALL FIELDS	10/19/2021	Gross Alpha/Beta	Gross Beta	6.88E-14	2.09E-14	2.50E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243442	BALL FIELDS	10/19/2021	Gross Alpha/Beta	Gross Alpha	1.10E-14	8.49E-15	1.03E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243442	BALL FIELDS	10/19/2021	Gross Alpha/Beta	Gross Beta	3.56E-14	1.77E-14	2.50E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243443	BALL FIELDS	10/20/2021	Gross Alpha/Beta	Gross Alpha	4.57E-16	4.30E-15	9.93E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243443	BALL FIELDS	10/20/2021	Gross Alpha/Beta	Gross Beta	5.13E-14	1.67E-14	1.85E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243444	BALL FIELDS	10/20/2021	Gross Alpha/Beta	Gross Alpha	7.77E-15	7.38E-15	9.93E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243444	BALL FIELDS	10/20/2021	Gross Alpha/Beta	Gross Beta	4.09E-14	1.55E-14	1.85E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243445	BALL FIELDS	10/20/2021	Gross Alpha/Beta	Gross Alpha	8.99E-15	7.78E-15	9.93E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243445	BALL FIELDS	10/20/2021	Gross Alpha/Beta	Gross Beta	4.65E-14	1.61E-14	1.85E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243446	BALL FIELDS	10/21/2021	Gross Alpha/Beta	Gross Alpha	-1.98E-15	2.57E-15	9.93E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243446	BALL FIELDS	10/21/2021	Gross Alpha/Beta	Gross Beta	-2.30E-15	9.54E-15	1.85E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243447	BALL FIELDS	10/21/2021	Gross Alpha/Beta	Gross Alpha	1.63E-15	4.80E-15	9.64E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243447	BALL FIELDS	10/21/2021	Gross Alpha/Beta	Gross Beta	1.65E-15	9.90E-15	1.80E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243448	BALL FIELDS	10/21/2021	Gross Alpha/Beta	Gross Alpha	4.44E-16	4.18E-15	9.64E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243448	BALL FIELDS	10/21/2021	Gross Alpha/Beta	Gross Beta	1.64E-14	1.21E-14	1.80E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243449	BALL FIELDS	10/25/2021	Gross Alpha/Beta	Gross Alpha	1.63E-15	4.80E-15	9.64E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243449	BALL FIELDS	10/25/2021	Gross Alpha/Beta	Gross Beta	2.19E-14	1.28E-14	1.80E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243450	BALL FIELDS	10/25/2021	Gross Alpha/Beta	Gross Alpha	-7.19E-16	3.34E-15	9.38E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243450	BALL FIELDS	10/25/2021	Gross Alpha/Beta	Gross Beta	-1.42E-15	9.14E-15	1.75E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243451	BALL FIELDS	10/25/2021	Gross Alpha/Beta	Gross Alpha	-7.19E-16	3.34E-15	9.38E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243451	BALL FIELDS	10/25/2021	Gross Alpha/Beta	Gross Beta	6.90E-15	1.04E-14	1.75E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243452	BALL FIELDS	10/26/2021	Gross Alpha/Beta	Gross Alpha	-2.10E-15	2.73E-15	1.06E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243452	BALL FIELDS	10/26/2021	Gross Alpha/Beta	Gross Beta	1.12E-14	1.22E-14	1.96E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243453	BALL FIELDS	10/26/2021	Gross Alpha/Beta	Gross Alpha	1.78E-15	5.25E-15	1.06E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243453	BALL FIELDS	10/26/2021	Gross Alpha/Beta	Gross Beta	6.91E-15	1.16E-14	1.96E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243454	BALL FIELDS	10/26/2021	Gross Alpha/Beta	Gross Alpha	-8.09E-16	3.76E-15	1.06E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243454	BALL FIELDS	10/26/2021	Gross Alpha/Beta	Gross Beta	1.80E-14	1.32E-14	1.96E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP243455	BALL FIELDS	10/27/2021	Gross Alpha/Beta	Gross Alpha	-7.62E-16	3.54E-15	9.93E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243455	BALL FIELDS	10/27/2021	Gross Alpha/Beta	Gross Beta	1.45E-14	1.21E-14	1.85E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243456	BALL FIELDS	10/27/2021	Gross Alpha/Beta	Gross Alpha	6.55E-15	6.96E-15	9.93E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243456	BALL FIELDS	10/27/2021	Gross Alpha/Beta	Gross Beta	1.69E-14	1.24E-14	1.85E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243457	BALL FIELDS	10/27/2021	Gross Alpha/Beta	Gross Alpha	4.57E-16	4.30E-15	9.93E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243457	BALL FIELDS	10/27/2021	Gross Alpha/Beta	Gross Beta	1.93E-14	1.27E-14	1.85E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243458	BALL FIELDS	10/28/2021	Gross Alpha/Beta	Gross Alpha	1.90E-15	5.60E-15	1.13E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243458	BALL FIELDS	10/28/2021	Gross Alpha/Beta	Gross Beta	3.64E-14	1.63E-14	2.10E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243459	BALL FIELDS	10/28/2021	Gross Alpha/Beta	Gross Alpha	-8.63E-16	4.01E-15	1.13E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243459	BALL FIELDS	10/28/2021	Gross Alpha/Beta	Gross Beta	1.74E-14	1.38E-14	2.10E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243460	BALL FIELDS	10/28/2021	Gross Alpha/Beta	Gross Alpha	-8.63E-16	4.01E-15	1.13E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243460	BALL FIELDS	10/28/2021	Gross Alpha/Beta	Gross Beta	1.83E-14	1.40E-14	2.10E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243461	BALL FIELDS	11/1/2021	Gross Alpha/Beta	Gross Alpha	4.44E-16	4.18E-15	9.64E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243461	BALL FIELDS	11/1/2021	Gross Alpha/Beta	Gross Beta	3.51E-14	1.45E-14	1.80E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243462	BALL FIELDS	11/1/2021	Gross Alpha/Beta	Gross Alpha	1.63E-15	4.80E-15	9.64E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243462	BALL FIELDS	11/1/2021	Gross Alpha/Beta	Gross Beta	1.95E-14	1.25E-14	1.80E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243469	BALL FIELDS	11/1/2021	Gross Alpha/Beta	Gross Alpha	9.09E-15	7.90E-15	1.04E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243469	BALL FIELDS	11/1/2021	Gross Alpha/Beta	Gross Beta	1.69E-14	1.49E-14	2.35E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243470	BALL FIELDS	11/2/2021	Gross Alpha/Beta	Gross Alpha	4.50E-15	6.50E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243470	BALL FIELDS	11/2/2021	Gross Alpha/Beta	Gross Beta	3.24E-14	1.70E-14	2.42E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243471	BALL FIELDS	11/2/2021	Gross Alpha/Beta	Gross Alpha	3.29E-15	6.02E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243471	BALL FIELDS	11/2/2021	Gross Alpha/Beta	Gross Beta	2.92E-14	1.67E-14	2.42E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243472	BALL FIELDS	11/2/2021	Gross Alpha/Beta	Gross Alpha	3.29E-15	6.02E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243472	BALL FIELDS	11/2/2021	Gross Alpha/Beta	Gross Beta	2.61E-14	1.63E-14	2.42E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243473	BALL FIELDS	11/3/2021	Gross Alpha/Beta	Gross Alpha	9.36E-15	8.13E-15	1.07E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243473	BALL FIELDS	11/3/2021	Gross Alpha/Beta	Gross Beta	2.05E-14	1.57E-14	2.42E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243474	BALL FIELDS	11/3/2021	Gross Alpha/Beta	Gross Alpha	6.93E-15	7.36E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243474	BALL FIELDS	11/3/2021	Gross Alpha/Beta	Gross Beta	4.82E-14	1.86E-14	2.42E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243475	BALL FIELDS	11/3/2021	Gross Alpha/Beta	Gross Alpha	1.18E-14	8.85E-15	1.07E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243475	BALL FIELDS	11/3/2021	Gross Alpha/Beta	Gross Beta	4.66E-14	1.84E-14	2.42E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243476	BALL FIELDS	11/4/2021	Gross Alpha/Beta	Gross Alpha	1.42E-14	9.51E-15	1.07E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243476	BALL FIELDS	11/4/2021	Gross Alpha/Beta	Gross Beta	1.89E-14	1.56E-14	2.42E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243477	BALL FIELDS	11/4/2021	Gross Alpha/Beta	Gross Alpha	8.14E-15	7.75E-15	1.07E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243477	BALL FIELDS	11/4/2021	Gross Alpha/Beta	Gross Beta	4.74E-14	1.85E-14	2.42E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243478	BALL FIELDS	11/4/2021	Gross Alpha/Beta	Gross Alpha	1.42E-14	9.51E-15	1.07E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243478	BALL FIELDS	11/4/2021	Gross Alpha/Beta	Gross Beta	3.71E-14	1.75E-14	2.42E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243479	BALL FIELDS	11/8/2021	Gross Alpha/Beta	Gross Alpha	1.54E-14	9.82E-15	1.07E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243479	BALL FIELDS	11/8/2021	Gross Alpha/Beta	Gross Beta	5.29E-14	1.91E-14	2.42E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243480	BALL FIELDS	11/8/2021	Gross Alpha/Beta	Gross Alpha	1.18E-14	8.85E-15	1.07E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243480	BALL FIELDS	11/8/2021	Gross Alpha/Beta	Gross Beta	1.18E-14	1.48E-14	2.42E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243481	BALL FIELDS	11/8/2021	Gross Alpha/Beta	Gross Alpha	6.93E-15	7.36E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243481	BALL FIELDS	11/8/2021	Gross Alpha/Beta	Gross Beta	5.53E-14	1.93E-14	2.42E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243482	BALL FIELDS	11/9/2021	Gross Alpha/Beta	Gross Alpha	2.38E-14	1.52E-14	1.65E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243482	BALL FIELDS	11/9/2021	Gross Alpha/Beta	Gross Beta	8.31E-14	2.96E-14	3.74E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243483	BALL FIELDS	11/9/2021	Gross Alpha/Beta	Gross Alpha	6.96E-15	1.00E-14	1.65E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP243483	BALL FIELDS	11/9/2021	Gross Alpha/Beta	Gross Beta	8.18E-14	2.95E-14	3.74E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243484	BALL FIELDS	11/9/2021	Gross Alpha/Beta	Gross Alpha	1.07E-14	1.14E-14	1.65E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243484	BALL FIELDS	11/9/2021	Gross Alpha/Beta	Gross Beta	6.47E-14	2.78E-14	3.74E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243485	BALL FIELDS	11/10/2021	Gross Alpha/Beta	Gross Alpha	6.93E-15	7.36E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243485	BALL FIELDS	11/10/2021	Gross Alpha/Beta	Gross Beta	8.30E-14	2.20E-14	2.42E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243486	BALL FIELDS	11/10/2021	Gross Alpha/Beta	Gross Alpha	1.18E-14	8.85E-15	1.07E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243486	BALL FIELDS	11/10/2021	Gross Alpha/Beta	Gross Beta	5.22E-14	1.90E-14	2.42E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243487	BALL FIELDS	11/15/2021	Gross Alpha/Beta	Gross Alpha	-3.51E-16	4.26E-15	1.06E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243487	BALL FIELDS	11/15/2021	Gross Alpha/Beta	Gross Beta	1.09E-14	1.45E-14	2.40E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243488	BALL FIELDS	11/15/2021	Gross Alpha/Beta	Gross Alpha	3.29E-15	6.02E-15	1.07E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243488	BALL FIELDS	11/15/2021	Gross Alpha/Beta	Gross Beta	3.16E-14	1.69E-14	2.42E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243489	BALL FIELDS	11/15/2021	Gross Alpha/Beta	Gross Alpha	-1.22E-15	2.54E-15	9.08E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243489	BALL FIELDS	11/15/2021	Gross Alpha/Beta	Gross Beta	1.72E-14	1.22E-14	1.80E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243490	BALL FIELDS	11/16/2021	Gross Alpha/Beta	Gross Alpha	8.21E-15	7.10E-15	8.74E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243490	BALL FIELDS	11/16/2021	Gross Alpha/Beta	Gross Beta	4.73E-14	1.56E-14	1.73E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243491	BALL FIELDS	11/16/2021	Gross Alpha/Beta	Gross Alpha	9.38E-15	7.48E-15	8.74E-15	µCi/mL	J	F01, T04, T20	Ballfields (General Area)-Perimeter Air
SVP243491	BALL FIELDS	11/16/2021	Gross Alpha/Beta	Gross Beta	4.04E-14	1.48E-14	1.73E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243492	BALL FIELDS	11/16/2021	Gross Alpha/Beta	Gross Alpha	3.52E-15	5.29E-15	8.74E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243492	BALL FIELDS	11/16/2021	Gross Alpha/Beta	Gross Beta	7.20E-14	1.84E-14	1.73E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243493	BALL FIELDS	11/17/2021	Gross Alpha/Beta	Gross Alpha	4.74E-15	5.85E-15	8.82E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243493	BALL FIELDS	11/17/2021	Gross Alpha/Beta	Gross Beta	5.40E-14	1.65E-14	1.75E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243494	BALL FIELDS	11/17/2021	Gross Alpha/Beta	Gross Alpha	2.37E-15	4.79E-15	8.82E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243494	BALL FIELDS	11/17/2021	Gross Alpha/Beta	Gross Beta	4.31E-14	1.52E-14	1.75E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243495	BALL FIELDS	11/17/2021	Gross Alpha/Beta	Gross Alpha	4.74E-15	5.85E-15	8.82E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243495	BALL FIELDS	11/17/2021	Gross Alpha/Beta	Gross Beta	5.09E-14	1.61E-14	1.75E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243496	BALL FIELDS	11/18/2021	Gross Alpha/Beta	Gross Alpha	3.66E-15	5.50E-15	9.08E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243496	BALL FIELDS	11/18/2021	Gross Alpha/Beta	Gross Beta	2.04E-14	1.26E-14	1.80E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243497	BALL FIELDS	11/18/2021	Gross Alpha/Beta	Gross Alpha	1.10E-14	8.16E-15	9.08E-15	µCi/mL	J	F01, T04, T20	Ballfields (General Area)-Perimeter Air
SVP243497	BALL FIELDS	11/18/2021	Gross Alpha/Beta	Gross Beta	3.48E-14	1.45E-14	1.80E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243498	BALL FIELDS	11/18/2021	Gross Alpha/Beta	Gross Alpha	3.66E-15	5.50E-15	9.08E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243498	BALL FIELDS	11/18/2021	Gross Alpha/Beta	Gross Beta	3.16E-14	1.41E-14	1.80E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243499	BALL FIELDS	11/22/2021	Gross Alpha/Beta	Gross Alpha	2.44E-15	4.93E-15	9.08E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243499	BALL FIELDS	11/22/2021	Gross Alpha/Beta	Gross Beta	3.80E-14	1.49E-14	1.80E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243500	BALL FIELDS	11/22/2021	Gross Alpha/Beta	Gross Alpha	3.66E-15	5.50E-15	9.08E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243500	BALL FIELDS	11/22/2021	Gross Alpha/Beta	Gross Beta	1.80E-14	1.23E-14	1.80E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243501	BALL FIELDS	11/22/2021	Gross Alpha/Beta	Gross Alpha	1.22E-15	4.28E-15	9.08E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243501	BALL FIELDS	11/22/2021	Gross Alpha/Beta	Gross Beta	1.64E-14	1.21E-14	1.80E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243502	BALL FIELDS	11/23/2021	Gross Alpha/Beta	Gross Alpha	4.87E-15	6.02E-15	9.08E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243502	BALL FIELDS	11/23/2021	Gross Alpha/Beta	Gross Beta	1.48E-14	1.19E-14	1.80E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243503	BALL FIELDS	11/23/2021	Gross Alpha/Beta	Gross Alpha	3.66E-15	5.50E-15	9.08E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243503	BALL FIELDS	11/23/2021	Gross Alpha/Beta	Gross Beta	1.56E-14	1.20E-14	1.80E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243504	BALL FIELDS	11/23/2021	Gross Alpha/Beta	Gross Alpha	2.44E-15	4.93E-15	9.08E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243504	BALL FIELDS	11/23/2021	Gross Alpha/Beta	Gross Beta	2.84E-14	1.37E-14	1.80E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243505	BALL FIELDS	11/24/2021	Gross Alpha/Beta	Gross Alpha	1.10E-14	8.16E-15	9.08E-15	µCi/mL	J	F01, T04, T20	Ballfields (General Area)-Perimeter Air
SVP243505	BALL FIELDS	11/24/2021	Gross Alpha/Beta	Gross Beta	4.76E-14	1.61E-14	1.80E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP243506	BALL FIELDS	11/24/2021	Gross Alpha/Beta	Gross Alpha	3.66E-15	5.50E-15	9.08E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243506	BALL FIELDS	11/24/2021	Gross Alpha/Beta	Gross Beta	4.68E-14	1.60E-14	1.80E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243507	BALL FIELDS	11/24/2021	Gross Alpha/Beta	Gross Alpha	3.66E-15	5.50E-15	9.08E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243507	BALL FIELDS	11/24/2021	Gross Alpha/Beta	Gross Beta	5.00E-14	1.63E-14	1.80E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243508	BALL FIELDS	11/29/2021	Gross Alpha/Beta	Gross Alpha	3.66E-15	5.50E-15	9.08E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243508	BALL FIELDS	11/29/2021	Gross Alpha/Beta	Gross Beta	4.36E-14	1.56E-14	1.80E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243518	BALL FIELDS	11/29/2021	Gross Alpha/Beta	Gross Alpha	4.37E-15	6.03E-15	9.66E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243518	BALL FIELDS	11/29/2021	Gross Alpha/Beta	Gross Beta	3.67E-14	1.52E-14	1.90E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243519	BALL FIELDS	11/29/2021	Gross Alpha/Beta	Gross Alpha	3.15E-15	5.51E-15	9.66E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243519	BALL FIELDS	11/29/2021	Gross Alpha/Beta	Gross Beta	2.55E-14	1.38E-14	1.90E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243520	BALL FIELDS	11/30/2021	Gross Alpha/Beta	Gross Alpha	4.37E-15	6.03E-15	9.66E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243520	BALL FIELDS	11/30/2021	Gross Alpha/Beta	Gross Beta	6.79E-14	1.87E-14	1.90E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243521	BALL FIELDS	11/30/2021	Gross Alpha/Beta	Gross Alpha	9.24E-15	7.78E-15	9.66E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243521	BALL FIELDS	11/30/2021	Gross Alpha/Beta	Gross Beta	7.43E-14	1.93E-14	1.90E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243522	BALL FIELDS	11/30/2021	Gross Alpha/Beta	Gross Alpha	8.02E-15	7.38E-15	9.66E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243522	BALL FIELDS	11/30/2021	Gross Alpha/Beta	Gross Beta	5.35E-14	1.71E-14	1.90E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243523	BALL FIELDS	12/1/2021	Gross Alpha/Beta	Gross Alpha	9.24E-15	7.78E-15	9.66E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243523	BALL FIELDS	12/1/2021	Gross Alpha/Beta	Gross Beta	5.51E-14	1.73E-14	1.90E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243524	BALL FIELDS	12/1/2021	Gross Alpha/Beta	Gross Alpha	1.29E-14	8.88E-15	9.66E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243524	BALL FIELDS	12/1/2021	Gross Alpha/Beta	Gross Beta	7.75E-14	1.97E-14	1.90E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243525	BALL FIELDS	12/1/2021	Gross Alpha/Beta	Gross Alpha	-2.95E-15	8.05E-16	9.66E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243525	BALL FIELDS	12/1/2021	Gross Alpha/Beta	Gross Beta	2.27E-15	1.06E-14	1.90E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243526	BALL FIELDS	12/2/2021	Gross Alpha/Beta	Gross Alpha	8.02E-15	7.38E-15	9.66E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243526	BALL FIELDS	12/2/2021	Gross Alpha/Beta	Gross Beta	3.27E-14	1.47E-14	1.90E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243527	BALL FIELDS	12/2/2021	Gross Alpha/Beta	Gross Alpha	7.11E-16	4.29E-15	9.66E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243527	BALL FIELDS	12/2/2021	Gross Alpha/Beta	Gross Beta	3.75E-14	1.53E-14	1.90E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243528	BALL FIELDS	12/2/2021	Gross Alpha/Beta	Gross Alpha	4.37E-15	6.03E-15	9.66E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243528	BALL FIELDS	12/2/2021	Gross Alpha/Beta	Gross Beta	4.47E-14	1.61E-14	1.90E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243529	BALL FIELDS	12/6/2021	Gross Alpha/Beta	Gross Alpha	9.24E-15	7.78E-15	9.66E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243529	BALL FIELDS	12/6/2021	Gross Alpha/Beta	Gross Beta	1.83E-14	1.28E-14	1.90E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243530	BALL FIELDS	12/6/2021	Gross Alpha/Beta	Gross Alpha	5.59E-15	6.51E-15	9.66E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243530	BALL FIELDS	12/6/2021	Gross Alpha/Beta	Gross Beta	1.35E-14	1.22E-14	1.90E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243531	BALL FIELDS	12/6/2021	Gross Alpha/Beta	Gross Alpha	7.11E-16	4.29E-15	9.66E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243531	BALL FIELDS	12/6/2021	Gross Alpha/Beta	Gross Beta	1.35E-14	1.22E-14	1.90E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243532	BALL FIELDS	12/7/2021	Gross Alpha/Beta	Gross Alpha	6.80E-15	6.96E-15	9.66E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243532	BALL FIELDS	12/7/2021	Gross Alpha/Beta	Gross Beta	2.79E-14	1.41E-14	1.90E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243533	BALL FIELDS	12/7/2021	Gross Alpha/Beta	Gross Alpha	5.59E-15	6.51E-15	9.66E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243533	BALL FIELDS	12/7/2021	Gross Alpha/Beta	Gross Beta	4.07E-14	1.56E-14	1.90E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243534	BALL FIELDS	12/7/2021	Gross Alpha/Beta	Gross Alpha	5.59E-15	6.51E-15	9.66E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243534	BALL FIELDS	12/7/2021	Gross Alpha/Beta	Gross Beta	1.03E-14	1.18E-14	1.90E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243535	BALL FIELDS	12/8/2021	Gross Alpha/Beta	Gross Alpha	3.15E-15	5.51E-15	9.66E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243535	BALL FIELDS	12/8/2021	Gross Alpha/Beta	Gross Beta	5.35E-14	1.71E-14	1.90E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243536	BALL FIELDS	12/8/2021	Gross Alpha/Beta	Gross Alpha	6.80E-15	6.96E-15	9.66E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243536	BALL FIELDS	12/8/2021	Gross Alpha/Beta	Gross Beta	3.75E-14	1.53E-14	1.90E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243537	BALL FIELDS	12/8/2021	Gross Alpha/Beta	Gross Alpha	6.80E-15	6.96E-15	9.66E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP243537	BALL FIELDS	12/8/2021	Gross Alpha/Beta	Gross Beta	3.83E-14	1.54E-14	1.90E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243538	BALL FIELDS	12/9/2021	Gross Alpha/Beta	Gross Alpha	8.15E-15	7.57E-15	1.03E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243538	BALL FIELDS	12/9/2021	Gross Alpha/Beta	Gross Beta	4.12E-14	1.81E-14	2.46E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243539	BALL FIELDS	12/9/2021	Gross Alpha/Beta	Gross Alpha	6.97E-15	7.19E-15	1.03E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243539	BALL FIELDS	12/9/2021	Gross Alpha/Beta	Gross Beta	5.49E-14	1.95E-14	2.46E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243540	BALL FIELDS	12/9/2021	Gross Alpha/Beta	Gross Alpha	1.17E-14	8.64E-15	1.03E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243540	BALL FIELDS	12/9/2021	Gross Alpha/Beta	Gross Beta	3.64E-14	1.76E-14	2.46E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243541	BALL FIELDS	12/13/2021	Gross Alpha/Beta	Gross Alpha	1.14E-14	8.39E-15	9.96E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243541	BALL FIELDS	12/13/2021	Gross Alpha/Beta	Gross Beta	5.33E-14	1.89E-14	2.39E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243542	BALL FIELDS	12/13/2021	Gross Alpha/Beta	Gross Alpha	3.31E-15	5.71E-15	9.96E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243542	BALL FIELDS	12/13/2021	Gross Alpha/Beta	Gross Beta	3.23E-14	1.68E-14	2.39E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243543	BALL FIELDS	12/13/2021	Gross Alpha/Beta	Gross Alpha	-1.44E-16	4.08E-15	9.96E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243543	BALL FIELDS	12/13/2021	Gross Alpha/Beta	Gross Beta	4.22E-15	1.38E-14	2.39E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243544	BALL FIELDS	12/14/2021	Gross Alpha/Beta	Gross Alpha	4.46E-15	6.16E-15	9.96E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243544	BALL FIELDS	12/14/2021	Gross Alpha/Beta	Gross Beta	3.38E-14	1.70E-14	2.39E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243545	BALL FIELDS	12/14/2021	Gross Alpha/Beta	Gross Alpha	4.46E-15	6.16E-15	9.96E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243545	BALL FIELDS	12/14/2021	Gross Alpha/Beta	Gross Beta	4.55E-14	1.82E-14	2.39E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243546	BALL FIELDS	12/14/2021	Gross Alpha/Beta	Gross Alpha	4.46E-15	6.16E-15	9.96E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243546	BALL FIELDS	12/14/2021	Gross Alpha/Beta	Gross Beta	1.20E-14	1.46E-14	2.39E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243547	BALL FIELDS	12/15/2021	Gross Alpha/Beta	Gross Alpha	1.02E-15	4.73E-15	1.01E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243547	BALL FIELDS	12/15/2021	Gross Alpha/Beta	Gross Beta	3.28E-16	1.34E-14	2.42E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243548	BALL FIELDS	12/15/2021	Gross Alpha/Beta	Gross Alpha	1.02E-15	4.73E-15	1.01E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243548	BALL FIELDS	12/15/2021	Gross Alpha/Beta	Gross Beta	1.53E-14	1.51E-14	2.42E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243549	BALL FIELDS	12/15/2021	Gross Alpha/Beta	Gross Alpha	8.00E-15	7.43E-15	1.01E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243549	BALL FIELDS	12/15/2021	Gross Alpha/Beta	Gross Beta	2.87E-14	1.66E-14	2.42E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243550	BALL FIELDS	12/16/2021	Gross Alpha/Beta	Gross Alpha	3.41E-15	5.88E-15	1.03E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243550	BALL FIELDS	12/16/2021	Gross Alpha/Beta	Gross Beta	5.89E-14	1.99E-14	2.46E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243551	BALL FIELDS	12/16/2021	Gross Alpha/Beta	Gross Alpha	5.78E-15	6.78E-15	1.03E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243551	BALL FIELDS	12/16/2021	Gross Alpha/Beta	Gross Beta	7.97E-14	2.19E-14	2.46E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243552	BALL FIELDS	12/16/2021	Gross Alpha/Beta	Gross Alpha	1.04E-15	4.82E-15	1.03E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243552	BALL FIELDS	12/16/2021	Gross Alpha/Beta	Gross Beta	3.34E-16	1.37E-14	2.46E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243553	BALL FIELDS	12/20/2021	Gross Alpha/Beta	Gross Alpha	-2.45E-15	2.46E-15	9.96E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243553	BALL FIELDS	12/20/2021	Gross Alpha/Beta	Gross Beta	-1.23E-15	1.31E-14	2.39E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243554	BALL FIELDS	12/20/2021	Gross Alpha/Beta	Gross Alpha	7.92E-15	7.36E-15	9.96E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243554	BALL FIELDS	12/20/2021	Gross Alpha/Beta	Gross Beta	5.18E-14	1.88E-14	2.39E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243555	BALL FIELDS	12/20/2021	Gross Alpha/Beta	Gross Alpha	-1.30E-15	3.36E-15	9.96E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243555	BALL FIELDS	12/20/2021	Gross Alpha/Beta	Gross Beta	4.79E-14	1.84E-14	2.39E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243556	BALL FIELDS	12/21/2021	Gross Alpha/Beta	Gross Alpha	8.82E-15	7.50E-15	9.68E-15	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243556	BALL FIELDS	12/21/2021	Gross Alpha/Beta	Gross Beta	8.74E-14	2.18E-14	2.33E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243557	BALL FIELDS	12/21/2021	Gross Alpha/Beta	Gross Alpha	2.10E-15	5.08E-15	9.68E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243557	BALL FIELDS	12/21/2021	Gross Alpha/Beta	Gross Beta	1.85E-14	1.50E-14	2.33E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243562	BALL FIELDS	12/21/2021	Gross Alpha/Beta	Gross Alpha	1.71E-14	9.35E-15	8.01E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243562	BALL FIELDS	12/21/2021	Gross Alpha/Beta	Gross Beta	1.02E-13	2.29E-14	2.27E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243563	BALL FIELDS	12/22/2021	Gross Alpha/Beta	Gross Alpha	2.59E-15	4.65E-15	8.23E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243563	BALL FIELDS	12/22/2021	Gross Alpha/Beta	Gross Beta	2.82E-14	1.61E-14	2.33E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP243564	BALL FIELDS	12/22/2021	Gross Alpha/Beta	Gross Alpha	9.50E-15	7.35E-15	8.23E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243564	BALL FIELDS	12/22/2021	Gross Alpha/Beta	Gross Beta	6.79E-14	2.01E-14	2.33E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243565	BALL FIELDS	12/22/2021	Gross Alpha/Beta	Gross Alpha	6.05E-15	6.14E-15	8.23E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243565	BALL FIELDS	12/22/2021	Gross Alpha/Beta	Gross Beta	4.68E-14	1.80E-14	2.33E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243566	BALL FIELDS	12/23/2021	Gross Alpha/Beta	Gross Alpha	-8.40E-16	2.32E-15	8.01E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243566	BALL FIELDS	12/23/2021	Gross Alpha/Beta	Gross Beta	2.28E-14	1.52E-14	2.27E-14	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243568	BALL FIELDS	12/23/2021	Gross Alpha/Beta	Gross Alpha	1.04E-14	7.50E-15	8.01E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243568	BALL FIELDS	12/23/2021	Gross Alpha/Beta	Gross Beta	6.60E-14	1.96E-14	2.27E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243569	BALL FIELDS	12/27/2021	Gross Alpha/Beta	Gross Alpha	1.37E-14	8.47E-15	8.01E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243569	BALL FIELDS	12/27/2021	Gross Alpha/Beta	Gross Beta	7.58E-14	2.05E-14	2.27E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243570	BALL FIELDS	12/27/2021	Gross Alpha/Beta	Gross Alpha	9.24E-15	7.14E-15	8.01E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243570	BALL FIELDS	12/27/2021	Gross Alpha/Beta	Gross Beta	6.83E-14	1.98E-14	2.27E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243571	BALL FIELDS	12/27/2021	Gross Alpha/Beta	Gross Alpha	-8.40E-16	2.32E-15	8.01E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243571	BALL FIELDS	12/27/2021	Gross Alpha/Beta	Gross Beta	1.90E-14	1.47E-14	2.27E-14	µCi/mL	UJ	T04, T05	Ballfields (General Area)-Perimeter Air
SVP243572	BALL FIELDS	12/29/2021	Gross Alpha/Beta	Gross Alpha	-8.89E-16	2.46E-15	8.48E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243572	BALL FIELDS	12/29/2021	Gross Alpha/Beta	Gross Beta	1.21E-14	1.47E-14	2.40E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243573	BALL FIELDS	12/29/2021	Gross Alpha/Beta	Gross Alpha	6.23E-15	6.33E-15	8.48E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243573	BALL FIELDS	12/29/2021	Gross Alpha/Beta	Gross Beta	6.11E-14	1.99E-14	2.40E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243574	BALL FIELDS	12/29/2021	Gross Alpha/Beta	Gross Alpha	9.78E-15	7.56E-15	8.48E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243574	BALL FIELDS	12/29/2021	Gross Alpha/Beta	Gross Beta	6.83E-14	2.06E-14	2.40E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243575	BALL FIELDS	12/30/2021	Gross Alpha/Beta	Gross Alpha	6.35E-15	6.45E-15	8.65E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243575	BALL FIELDS	12/30/2021	Gross Alpha/Beta	Gross Beta	5.41E-14	1.94E-14	2.45E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243576	BALL FIELDS	12/30/2021	Gross Alpha/Beta	Gross Alpha	1.12E-14	8.09E-15	8.65E-15	µCi/mL	J	T04, T20	Ballfields (General Area)-Perimeter Air
SVP243576	BALL FIELDS	12/30/2021	Gross Alpha/Beta	Gross Beta	6.96E-14	2.10E-14	2.45E-14	µCi/mL	=		Ballfields (General Area)-Perimeter Air
SVP243577	BALL FIELDS	12/30/2021	Gross Alpha/Beta	Gross Alpha	2.72E-15	4.89E-15	8.65E-15	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP243577	BALL FIELDS	12/30/2021	Gross Alpha/Beta	Gross Beta	1.16E-14	1.49E-14	2.45E-14	µCi/mL	UJ	T06	Ballfields (General Area)-Perimeter Air
SVP232272	I-270/Pershall Rd.	1/19/2021	Gross Alpha/Beta	Gross Alpha	2.71E-15	6.63E-15	1.30E-14	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP232272	I-270/Pershall Rd.	1/19/2021	Gross Alpha/Beta	Gross Beta	1.33E-14	1.94E-14	3.01E-14	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP232273	I-270/Pershall Rd.	1/20/2021	Gross Alpha/Beta	Gross Alpha	1.92E-15	9.24E-15	2.02E-14	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP232273	I-270/Pershall Rd.	1/20/2021	Gross Alpha/Beta	Gross Beta	4.51E-14	3.27E-14	4.69E-14	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP239275	1-270/PERSHALL RD.	5/17/2021	Gross Alpha/Beta	Gross Alpha	-1.54E-15	5.07E-15	1.35E-14	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP239275	1-270/PERSHALL RD.	5/17/2021	Gross Alpha/Beta	Gross Beta	1.20E-14	1.80E-14	3.00E-14	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP239276	1-270/PERSHALL RD.	5/18/2021	Gross Alpha/Beta	Gross Alpha	6.59E-15	1.71E-14	3.26E-14	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP239276	1-270/PERSHALL RD.	5/18/2021	Gross Alpha/Beta	Gross Beta	6.53E-15	4.11E-14	7.25E-14	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP239277	1-270/PERSHALL RD.	5/19/2021	Gross Alpha/Beta	Gross Alpha	-9.21E-15	1.31E-14	4.20E-14	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP239277	1-270/PERSHALL RD.	5/19/2021	Gross Alpha/Beta	Gross Beta	2.64E-15	5.23E-14	9.33E-14	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP239299	I-270/Pershall Rd.	6/14/2021	Gross Alpha/Beta	Gross Alpha	1.38E-14	1.67E-14	2.48E-14	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP239299	I-270/Pershall Rd.	6/14/2021	Gross Alpha/Beta	Gross Beta	3.75E-14	4.23E-14	6.86E-14	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243318	I-270/Pershall Rd.	8/10/2021	Gross Alpha/Beta	Gross Alpha	2.10E-15	4.53E-15	8.51E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243318	I-270/Pershall Rd.	8/10/2021	Gross Alpha/Beta	Gross Beta	7.25E-15	1.34E-14	2.26E-14	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243319	I-270/Pershall Rd.	8/10/2021	Gross Alpha/Beta	Gross Alpha	4.34E-15	5.54E-15	8.51E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243319	I-270/Pershall Rd.	8/10/2021	Gross Alpha/Beta	Gross Beta	1.63E-14	1.44E-14	2.26E-14	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243320	I-270/Pershall Rd.	8/10/2021	Gross Alpha/Beta	Gross Alpha	9.80E-16	3.94E-15	8.51E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243320	I-270/Pershall Rd.	8/10/2021	Gross Alpha/Beta	Gross Beta	2.16E-14	1.50E-14	2.26E-14	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243321	I-270/Pershall Rd.	8/11/2021	Gross Alpha/Beta	Gross Alpha	8.82E-15	7.15E-15	8.51E-15	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP243321	I-270/Pershall Rd.	8/11/2021	Gross Alpha/Beta	Gross Beta	1.78E-14	1.46E-14	2.26E-14	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243322	I-270/Pershall Rd.	8/11/2021	Gross Alpha/Beta	Gross Alpha	9.94E-15	7.50E-15	8.51E-15	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243322	I-270/Pershall Rd.	8/11/2021	Gross Alpha/Beta	Gross Beta	2.61E-14	1.55E-14	2.26E-14	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243323	I-270/Pershall Rd.	8/11/2021	Gross Alpha/Beta	Gross Alpha	6.58E-15	6.39E-15	8.51E-15	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243323	I-270/Pershall Rd.	8/11/2021	Gross Alpha/Beta	Gross Beta	3.28E-14	1.62E-14	2.26E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243324	I-270/Pershall Rd.	8/12/2021	Gross Alpha/Beta	Gross Alpha	1.22E-14	8.16E-15	8.51E-15	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243324	I-270/Pershall Rd.	8/12/2021	Gross Alpha/Beta	Gross Beta	2.53E-14	1.54E-14	2.26E-14	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243325	I-270/Pershall Rd.	8/12/2021	Gross Alpha/Beta	Gross Alpha	3.22E-15	5.06E-15	8.51E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243325	I-270/Pershall Rd.	8/12/2021	Gross Alpha/Beta	Gross Beta	2.38E-14	1.52E-14	2.26E-14	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243326	I-270/Pershall Rd.	8/12/2021	Gross Alpha/Beta	Gross Alpha	4.34E-15	5.54E-15	8.51E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243326	I-270/Pershall Rd.	8/12/2021	Gross Alpha/Beta	Gross Beta	2.61E-14	1.55E-14	2.26E-14	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243327	I-270/Pershall Rd.	8/16/2021	Gross Alpha/Beta	Gross Alpha	1.44E-14	8.77E-15	8.51E-15	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243327	I-270/Pershall Rd.	8/16/2021	Gross Alpha/Beta	Gross Beta	3.21E-14	1.61E-14	2.26E-14	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243328	I-270/Pershall Rd.	8/16/2021	Gross Alpha/Beta	Gross Alpha	2.10E-15	4.53E-15	8.51E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243328	I-270/Pershall Rd.	8/16/2021	Gross Alpha/Beta	Gross Beta	4.11E-14	1.70E-14	2.26E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243329	I-270/Pershall Rd.	8/16/2021	Gross Alpha/Beta	Gross Alpha	8.82E-15	7.15E-15	8.51E-15	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243329	I-270/Pershall Rd.	8/16/2021	Gross Alpha/Beta	Gross Beta	3.06E-14	1.59E-14	2.26E-14	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243330	I-270/Pershall Rd.	8/17/2021	Gross Alpha/Beta	Gross Alpha	1.58E-14	1.19E-14	1.35E-14	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243330	I-270/Pershall Rd.	8/17/2021	Gross Alpha/Beta	Gross Beta	5.22E-14	2.57E-14	3.59E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243331	I-270/Pershall Rd.	8/17/2021	Gross Alpha/Beta	Gross Alpha	1.60E-14	9.32E-15	8.76E-15	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243331	I-270/Pershall Rd.	8/17/2021	Gross Alpha/Beta	Gross Beta	3.15E-14	1.64E-14	2.33E-14	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243332	I-270/Pershall Rd.	8/17/2021	Gross Alpha/Beta	Gross Alpha	4.30E-15	5.49E-15	8.44E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243332	I-270/Pershall Rd.	8/17/2021	Gross Alpha/Beta	Gross Beta	5.12E-14	1.79E-14	2.24E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243333	I-270/Pershall Rd.	8/17/2021	Gross Alpha/Beta	Gross Alpha	1.12E-14	7.91E-15	8.59E-15	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243333	I-270/Pershall Rd.	8/17/2021	Gross Alpha/Beta	Gross Beta	3.39E-14	1.64E-14	2.28E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243334	I-270/Pershall Rd.	8/18/2021	Gross Alpha/Beta	Gross Alpha	4.62E-15	1.11E-14	1.94E-14	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243334	I-270/Pershall Rd.	8/18/2021	Gross Alpha/Beta	Gross Beta	8.72E-14	4.20E-14	6.57E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243335	I-270/Pershall Rd.	8/23/2021	Gross Alpha/Beta	Gross Alpha	6.58E-15	6.39E-15	8.51E-15	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243335	I-270/Pershall Rd.	8/23/2021	Gross Alpha/Beta	Gross Beta	2.53E-14	1.54E-14	2.26E-14	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243336	I-270/Pershall Rd.	8/23/2021	Gross Alpha/Beta	Gross Alpha	5.46E-15	5.98E-15	8.51E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243336	I-270/Pershall Rd.	8/23/2021	Gross Alpha/Beta	Gross Beta	5.32E-14	1.83E-14	2.26E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243337	I-270/Pershall Rd.	8/23/2021	Gross Alpha/Beta	Gross Alpha	7.70E-15	6.78E-15	8.51E-15	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243337	I-270/Pershall Rd.	8/23/2021	Gross Alpha/Beta	Gross Beta	3.13E-14	1.60E-14	2.26E-14	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243338	I-270/Pershall Rd.	8/24/2021	Gross Alpha/Beta	Gross Alpha	7.82E-15	6.97E-15	8.87E-15	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243338	I-270/Pershall Rd.	8/24/2021	Gross Alpha/Beta	Gross Beta	4.20E-14	1.76E-14	2.35E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243339	I-270/Pershall Rd.	8/24/2021	Gross Alpha/Beta	Gross Alpha	6.67E-15	6.57E-15	8.87E-15	µCi/mL	UJ	T04, T05	North County (General Area)-Perimeter Air
SVP243339	I-270/Pershall Rd.	8/24/2021	Gross Alpha/Beta	Gross Beta	2.96E-14	1.63E-14	2.35E-14	µCi/mL	J	T04, T20	North County (General Area)-Perimeter Air
SVP243340	I-270/Pershall Rd.	8/24/2021	Gross Alpha/Beta	Gross Alpha	7.82E-15	6.97E-15	8.87E-15	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243340	I-270/Pershall Rd.	8/24/2021	Gross Alpha/Beta	Gross Beta	4.36E-14	1.78E-14	2.35E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243341	I-270/Pershall Rd.	8/25/2021	Gross Alpha/Beta	Gross Alpha	5.37E-15	5.98E-15	8.62E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243341	I-270/Pershall Rd.	8/25/2021	Gross Alpha/Beta	Gross Beta	3.78E-14	1.68E-14	2.28E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243342	I-270/Pershall Rd.	8/25/2021	Gross Alpha/Beta	Gross Alpha	4.25E-15	5.54E-15	8.62E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243342	I-270/Pershall Rd.	8/25/2021	Gross Alpha/Beta	Gross Beta	4.39E-14	1.74E-14	2.28E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243343	I-270/Pershall Rd.	8/25/2021	Gross Alpha/Beta	Gross Alpha	5.37E-15	5.98E-15	8.62E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP243343	I-270/Pershall Rd.	8/25/2021	Gross Alpha/Beta	Gross Beta	4.08E-14	1.71E-14	2.28E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243344	I-270/Pershall Rd.	8/26/2021	Gross Alpha/Beta	Gross Alpha	1.14E-14	8.13E-15	8.95E-15	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243344	I-270/Pershall Rd.	8/26/2021	Gross Alpha/Beta	Gross Beta	6.66E-14	2.02E-14	2.37E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243345	I-270/Pershall Rd.	8/26/2021	Gross Alpha/Beta	Gross Alpha	2.08E-15	4.71E-15	8.95E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243345	I-270/Pershall Rd.	8/26/2021	Gross Alpha/Beta	Gross Beta	4.55E-14	1.81E-14	2.37E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243346	I-270/Pershall Rd.	8/26/2021	Gross Alpha/Beta	Gross Alpha	1.49E-14	9.11E-15	8.95E-15	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243346	I-270/Pershall Rd.	8/26/2021	Gross Alpha/Beta	Gross Beta	5.57E-14	1.91E-14	2.37E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243347	I-270/Pershall Rd.	8/27/2021	Gross Alpha/Beta	Gross Alpha	7.15E-15	7.04E-15	9.50E-15	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243347	I-270/Pershall Rd.	8/27/2021	Gross Alpha/Beta	Gross Beta	4.00E-14	1.83E-14	2.52E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243348	I-270/Pershall Rd.	8/27/2021	Gross Alpha/Beta	Gross Alpha	1.09E-14	8.26E-15	9.50E-15	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243348	I-270/Pershall Rd.	8/27/2021	Gross Alpha/Beta	Gross Beta	3.26E-14	1.76E-14	2.52E-14	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243349	I-270/Pershall Rd.	8/27/2021	Gross Alpha/Beta	Gross Alpha	1.07E-14	8.18E-15	9.40E-15	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243349	I-270/Pershall Rd.	8/27/2021	Gross Alpha/Beta	Gross Beta	5.03E-14	1.92E-14	2.49E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243350	I-270/Pershall Rd.	8/28/2021	Gross Alpha/Beta	Gross Alpha	1.18E-14	9.00E-15	1.03E-14	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243350	I-270/Pershall Rd.	8/28/2021	Gross Alpha/Beta	Gross Beta	4.90E-14	2.05E-14	2.74E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243351	I-270/Pershall Rd.	8/28/2021	Gross Alpha/Beta	Gross Alpha	9.13E-15	8.13E-15	1.03E-14	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243351	I-270/Pershall Rd.	8/28/2021	Gross Alpha/Beta	Gross Beta	4.18E-14	1.98E-14	2.74E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243352	I-270/Pershall Rd.	8/30/2021	Gross Alpha/Beta	Gross Alpha	8.89E-15	7.28E-15	8.78E-15	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243352	I-270/Pershall Rd.	8/30/2021	Gross Alpha/Beta	Gross Beta	1.32E-14	1.44E-14	2.33E-14	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243353	I-270/Pershall Rd.	8/30/2021	Gross Alpha/Beta	Gross Alpha	4.33E-15	5.64E-15	8.78E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243353	I-270/Pershall Rd.	8/30/2021	Gross Alpha/Beta	Gross Beta	2.09E-14	1.53E-14	2.33E-14	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243354	I-270/Pershall Rd.	8/30/2021	Gross Alpha/Beta	Gross Alpha	3.19E-15	5.16E-15	8.78E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243354	I-270/Pershall Rd.	8/30/2021	Gross Alpha/Beta	Gross Beta	3.78E-14	1.70E-14	2.33E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243355	I-270/Pershall Rd.	8/31/2021	Gross Alpha/Beta	Gross Alpha	4.25E-15	5.54E-15	8.62E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243355	I-270/Pershall Rd.	8/31/2021	Gross Alpha/Beta	Gross Beta	1.83E-14	1.47E-14	2.28E-14	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243356	I-270/Pershall Rd.	8/31/2021	Gross Alpha/Beta	Gross Alpha	3.13E-15	5.06E-15	8.62E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243356	I-270/Pershall Rd.	8/31/2021	Gross Alpha/Beta	Gross Beta	2.50E-14	1.55E-14	2.28E-14	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243357	I-270/Pershall Rd.	8/31/2021	Gross Alpha/Beta	Gross Alpha	6.49E-15	6.39E-15	8.62E-15	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243357	I-270/Pershall Rd.	8/31/2021	Gross Alpha/Beta	Gross Beta	2.28E-14	1.52E-14	2.28E-14	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243366	I-270/Pershall Rd.	9/1/2021	Gross Alpha/Beta	Gross Alpha	1.04E-14	7.64E-15	8.33E-15	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243366	I-270/Pershall Rd.	9/1/2021	Gross Alpha/Beta	Gross Beta	4.11E-14	1.76E-14	2.38E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243367	I-270/Pershall Rd.	9/1/2021	Gross Alpha/Beta	Gross Alpha	9.54E-15	7.49E-15	8.58E-15	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243367	I-270/Pershall Rd.	9/1/2021	Gross Alpha/Beta	Gross Beta	3.29E-14	1.72E-14	2.45E-14	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243368	I-270/Pershall Rd.	9/1/2021	Gross Alpha/Beta	Gross Alpha	6.02E-15	6.27E-15	8.58E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243368	I-270/Pershall Rd.	9/1/2021	Gross Alpha/Beta	Gross Beta	2.26E-14	1.61E-14	2.45E-14	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243369	I-270/Pershall Rd.	9/2/2021	Gross Alpha/Beta	Gross Alpha	9.27E-15	7.87E-15	9.50E-15	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243369	I-270/Pershall Rd.	9/2/2021	Gross Alpha/Beta	Gross Beta	2.68E-14	1.80E-14	2.72E-14	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243370	I-270/Pershall Rd.	9/2/2021	Gross Alpha/Beta	Gross Alpha	7.06E-15	6.57E-15	8.41E-15	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243370	I-270/Pershall Rd.	9/2/2021	Gross Alpha/Beta	Gross Beta	1.29E-14	1.48E-14	2.41E-14	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243371	I-270/Pershall Rd.	9/2/2021	Gross Alpha/Beta	Gross Alpha	1.28E-14	8.39E-15	8.41E-15	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243371	I-270/Pershall Rd.	9/2/2021	Gross Alpha/Beta	Gross Beta	1.37E-14	1.49E-14	2.41E-14	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243372	I-270/Pershall Rd.	9/3/2021	Gross Alpha/Beta	Gross Alpha	7.26E-15	6.76E-15	8.66E-15	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243372	I-270/Pershall Rd.	9/3/2021	Gross Alpha/Beta	Gross Beta	2.44E-14	1.64E-14	2.48E-14	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP243373	I-270/Pershall Rd.	9/3/2021	Gross Alpha/Beta	Gross Alpha	5.79E-15	6.03E-15	8.26E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243373	I-270/Pershall Rd.	9/3/2021	Gross Alpha/Beta	Gross Beta	2.71E-14	1.61E-14	2.36E-14	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243374	I-270/Pershall Rd.	9/3/2021	Gross Alpha/Beta	Gross Alpha	4.66E-15	5.59E-15	8.26E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243374	I-270/Pershall Rd.	9/3/2021	Gross Alpha/Beta	Gross Beta	3.32E-14	1.67E-14	2.36E-14	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243375	I-270/Pershall Rd.	9/4/2021	Gross Alpha/Beta	Gross Alpha	2.55E-15	4.84E-15	8.75E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243375	I-270/Pershall Rd.	9/4/2021	Gross Alpha/Beta	Gross Beta	2.14E-14	1.63E-14	2.50E-14	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243376	I-270/Pershall Rd.	9/4/2021	Gross Alpha/Beta	Gross Alpha	1.35E-15	4.20E-15	8.75E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243376	I-270/Pershall Rd.	9/4/2021	Gross Alpha/Beta	Gross Beta	4.24E-14	1.84E-14	2.50E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243377	I-270/Pershall Rd.	9/4/2021	Gross Alpha/Beta	Gross Alpha	4.89E-15	5.86E-15	8.66E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243377	I-270/Pershall Rd.	9/4/2021	Gross Alpha/Beta	Gross Beta	4.12E-14	1.82E-14	2.48E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243378	I-270/Pershall Rd.	9/7/2021	Gross Alpha/Beta	Gross Alpha	4.85E-15	7.00E-15	1.13E-14	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243378	I-270/Pershall Rd.	9/7/2021	Gross Alpha/Beta	Gross Beta	2.57E-14	2.08E-14	3.24E-14	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243379	I-270/Pershall Rd.	9/7/2021	Gross Alpha/Beta	Gross Alpha	4.62E-15	5.53E-15	8.18E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243379	I-270/Pershall Rd.	9/7/2021	Gross Alpha/Beta	Gross Beta	4.26E-14	1.75E-14	2.34E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243380	I-270/Pershall Rd.	9/7/2021	Gross Alpha/Beta	Gross Alpha	3.50E-15	5.06E-15	8.18E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243380	I-270/Pershall Rd.	9/7/2021	Gross Alpha/Beta	Gross Beta	2.23E-14	1.55E-14	2.34E-14	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243381	I-270/Pershall Rd.	9/7/2021	Gross Alpha/Beta	Gross Alpha	5.74E-15	5.98E-15	8.18E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243381	I-270/Pershall Rd.	9/7/2021	Gross Alpha/Beta	Gross Beta	4.94E-14	1.82E-14	2.34E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243382	I-270/Pershall Rd.	9/8/2021	Gross Alpha/Beta	Gross Alpha	1.68E-16	3.88E-15	9.82E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243382	I-270/Pershall Rd.	9/8/2021	Gross Alpha/Beta	Gross Beta	3.49E-14	1.94E-14	2.81E-14	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243383	I-270/Pershall Rd.	9/9/2021	Gross Alpha/Beta	Gross Alpha	5.54E-15	6.64E-15	9.82E-15	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243383	I-270/Pershall Rd.	9/9/2021	Gross Alpha/Beta	Gross Beta	2.04E-14	1.79E-14	2.81E-14	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243384	I-270/Pershall Rd.	9/13/2021	Gross Alpha/Beta	Gross Alpha	1.06E-14	8.30E-15	9.50E-15	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243384	I-270/Pershall Rd.	9/13/2021	Gross Alpha/Beta	Gross Beta	6.61E-14	2.20E-14	2.72E-14	µCi/mL	=		Pershall Road/I-270 (General Area)-Perimeter Air
SVP243385	I-270/Pershall Rd.	9/14/2021	Gross Alpha/Beta	Gross Alpha	2.07E-14	2.15E-14	2.95E-14	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243385	I-270/Pershall Rd.	9/14/2021	Gross Alpha/Beta	Gross Beta	2.34E-14	4.94E-14	8.42E-14	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243386	I-270/Pershall Rd.	9/16/2021	Gross Alpha/Beta	Gross Alpha	1.43E-14	1.04E-14	1.25E-14	µCi/mL	J	T04, T20	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243386	I-270/Pershall Rd.	9/16/2021	Gross Alpha/Beta	Gross Beta	2.90E-14	1.97E-14	3.00E-14	µCi/mL	UJ	T04, T05	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243387	I-270/Pershall Rd.	9/20/2021	Gross Alpha/Beta	Gross Alpha	4.05E-15	1.34E-14	2.68E-14	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243387	I-270/Pershall Rd.	9/20/2021	Gross Alpha/Beta	Gross Beta	-1.47E-14	3.43E-14	6.42E-14	µCi/mL	UJ	T06	Pershall Road/I-270 (General Area)-Perimeter Air
SVP243463	I-270	11/2/2021	Gross Alpha/Beta	Gross Alpha	0	4.42E-15	1.07E-14	µCi/mL	UJ	T06	Interstate I-270 (General Area)-Perimeter Air
SVP243463	I-270	11/2/2021	Gross Alpha/Beta	Gross Beta	1.27E-14	1.52E-14	2.48E-14	µCi/mL	UJ	T06	Interstate I-270 (General Area)-Perimeter Air
SVP243464	I-270	11/3/2021	Gross Alpha/Beta	Gross Alpha	6.07E-15	6.94E-15	1.03E-14	µCi/mL	UJ	T06	Interstate I-270 (General Area)-Perimeter Air
SVP243464	I-270	11/3/2021	Gross Alpha/Beta	Gross Beta	3.60E-14	1.73E-14	2.41E-14	µCi/mL	=		Interstate I-270 (General Area)-Perimeter Air
SVP243465	I-270	11/4/2021	Gross Alpha/Beta	Gross Alpha	0	9.73E-15	2.35E-14	µCi/mL	UJ	T06	Interstate I-270 (General Area)-Perimeter Air
SVP243465	I-270	11/4/2021	Gross Alpha/Beta	Gross Beta	3.68E-14	3.45E-14	5.46E-14	µCi/mL	UJ	T04, T05	Interstate I-270 (General Area)-Perimeter Air
SVP243509	I-270	12/14/2021	Gross Alpha/Beta	Gross Alpha	6.14E-15	1.05E-14	1.83E-14	µCi/mL	UJ	T06	Interstate I-270 (General Area)-Perimeter Air
SVP243509	I-270	12/14/2021	Gross Alpha/Beta	Gross Beta	4.29E-14	2.68E-14	3.98E-14	µCi/mL	J	T04, T20	Interstate I-270 (General Area)-Perimeter Air
SVP243510	I-270	12/15/2021	Gross Alpha/Beta	Gross Alpha	2.90E-15	1.17E-14	2.40E-14	µCi/mL	UJ	T06	Interstate I-270 (General Area)-Perimeter Air
SVP243510	I-270	12/15/2021	Gross Alpha/Beta	Gross Beta	3.61E-14	3.30E-14	5.23E-14	µCi/mL	UJ	T04, T05	Interstate I-270 (General Area)-Perimeter Air
SVP239300	VP-56	6/16/2021	Gross Alpha/Beta	Gross Alpha	8.75E-15	7.67E-15	9.18E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239300	VP-56	6/16/2021	Gross Alpha/Beta	Gross Beta	2.12E-14	1.28E-14	1.82E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239301	VP-56	6/16/2021	Gross Alpha/Beta	Gross Alpha	1.14E-14	8.58E-15	9.18E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP239301	VP-56	6/16/2021	Gross Alpha/Beta	Gross Beta	8.49E-15	1.11E-14	1.82E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239302	VP-56	6/16/2021	Gross Alpha/Beta	Gross Alpha	2.02E-15	4.71E-15	9.18E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239302	VP-56	6/16/2021	Gross Alpha/Beta	Gross Beta	2.43E-14	1.33E-14	1.82E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239303	VP-56	6/17/2021	Gross Alpha/Beta	Gross Alpha	4.76E-15	6.13E-15	9.27E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239303	VP-56	6/17/2021	Gross Alpha/Beta	Gross Beta	3.50E-14	1.47E-14	1.84E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239304	VP-56	6/17/2021	Gross Alpha/Beta	Gross Alpha	-6.80E-16	2.80E-15	9.27E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239304	VP-56	6/17/2021	Gross Alpha/Beta	Gross Beta	2.62E-14	1.36E-14	1.84E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239305	VP-56	6/17/2021	Gross Alpha/Beta	Gross Alpha	6.12E-15	6.71E-15	9.27E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239305	VP-56	6/17/2021	Gross Alpha/Beta	Gross Beta	2.38E-14	1.33E-14	1.84E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239306	VP-56	6/21/2021	Gross Alpha/Beta	Gross Alpha	-6.80E-16	2.80E-15	9.27E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239306	VP-56	6/21/2021	Gross Alpha/Beta	Gross Beta	1.58E-14	1.22E-14	1.84E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239307	VP-56	6/21/2021	Gross Alpha/Beta	Gross Alpha	4.76E-15	6.13E-15	9.27E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239307	VP-56	6/21/2021	Gross Alpha/Beta	Gross Beta	1.02E-14	1.14E-14	1.84E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239308	VP-56	6/21/2021	Gross Alpha/Beta	Gross Alpha	3.40E-15	5.49E-15	9.27E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239308	VP-56	6/21/2021	Gross Alpha/Beta	Gross Beta	6.97E-15	1.09E-14	1.84E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239309	VP-56	6/22/2021	Gross Alpha/Beta	Gross Alpha	6.80E-16	3.91E-15	9.27E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239309	VP-56	6/22/2021	Gross Alpha/Beta	Gross Beta	8.57E-15	1.12E-14	1.84E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239310	VP-56	6/22/2021	Gross Alpha/Beta	Gross Alpha	3.40E-15	5.49E-15	9.27E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239310	VP-56	6/22/2021	Gross Alpha/Beta	Gross Beta	1.74E-14	1.24E-14	1.84E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239311	VP-56	6/22/2021	Gross Alpha/Beta	Gross Alpha	4.76E-15	6.13E-15	9.27E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239311	VP-56	6/22/2021	Gross Alpha/Beta	Gross Beta	2.70E-14	1.37E-14	1.84E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239312	VP-56	6/23/2021	Gross Alpha/Beta	Gross Alpha	6.12E-15	6.71E-15	9.27E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239312	VP-56	6/23/2021	Gross Alpha/Beta	Gross Beta	2.54E-14	1.35E-14	1.84E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239313	VP-56	6/23/2021	Gross Alpha/Beta	Gross Alpha	6.12E-15	6.71E-15	9.27E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239313	VP-56	6/23/2021	Gross Alpha/Beta	Gross Beta	3.02E-14	1.41E-14	1.84E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239314	VP-56	6/23/2021	Gross Alpha/Beta	Gross Alpha	2.04E-15	4.76E-15	9.27E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239314	VP-56	6/23/2021	Gross Alpha/Beta	Gross Beta	2.30E-14	1.32E-14	1.84E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239315	VP-56	6/24/2021	Gross Alpha/Beta	Gross Alpha	-6.60E-16	2.72E-15	9.00E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239315	VP-56	6/24/2021	Gross Alpha/Beta	Gross Beta	2.62E-14	1.33E-14	1.78E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239316	VP-56	6/24/2021	Gross Alpha/Beta	Gross Alpha	3.30E-15	5.33E-15	9.00E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239316	VP-56	6/24/2021	Gross Alpha/Beta	Gross Beta	3.32E-14	1.42E-14	1.78E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239317	VP-56	6/24/2021	Gross Alpha/Beta	Gross Alpha	5.94E-15	6.52E-15	9.00E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239317	VP-56	6/24/2021	Gross Alpha/Beta	Gross Beta	2.93E-14	1.37E-14	1.78E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239318	VP-56	6/28/2021	Gross Alpha/Beta	Gross Alpha	9.08E-15	8.80E-15	1.13E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239318	VP-56	6/28/2021	Gross Alpha/Beta	Gross Beta	6.52E-15	1.30E-14	2.23E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239319	VP-56	6/28/2021	Gross Alpha/Beta	Gross Alpha	4.13E-15	6.66E-15	1.13E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239319	VP-56	6/28/2021	Gross Alpha/Beta	Gross Beta	1.04E-14	1.36E-14	2.23E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239340	VP-56	6/28/2021	Gross Alpha/Beta	Gross Alpha	5.47E-15	7.89E-15	1.30E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239340	VP-56	6/28/2021	Gross Alpha/Beta	Gross Beta	1.02E-14	1.78E-14	3.00E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239341	VP-56	6/29/2021	Gross Alpha/Beta	Gross Alpha	5.55E-15	6.74E-15	1.04E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239341	VP-56	6/29/2021	Gross Alpha/Beta	Gross Beta	2.20E-14	1.58E-14	2.40E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239342	VP-56	6/29/2021	Gross Alpha/Beta	Gross Alpha	3.19E-15	5.85E-15	1.04E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP239342	VP-56	6/29/2021	Gross Alpha/Beta	Gross Beta	1.89E-14	1.54E-14	2.40E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239343	VP-56	6/29/2021	Gross Alpha/Beta	Gross Alpha	4.37E-15	6.31E-15	1.04E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239343	VP-56	6/29/2021	Gross Alpha/Beta	Gross Beta	1.35E-14	1.49E-14	2.40E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239344	VP-56	6/30/2021	Gross Alpha/Beta	Gross Alpha	3.13E-15	5.74E-15	1.02E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239344	VP-56	6/30/2021	Gross Alpha/Beta	Gross Beta	4.21E-15	1.36E-14	2.36E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239345	VP-56	6/30/2021	Gross Alpha/Beta	Gross Alpha	-3.44E-16	4.18E-15	1.04E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239345	VP-56	6/30/2021	Gross Alpha/Beta	Gross Beta	4.29E-15	1.38E-14	2.40E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239346	VP-56	6/30/2021	Gross Alpha/Beta	Gross Alpha	6.70E-15	7.11E-15	1.03E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239346	VP-56	6/30/2021	Gross Alpha/Beta	Gross Beta	1.04E-14	1.45E-14	2.39E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239347	VP-56	7/1/2021	Gross Alpha/Beta	Gross Alpha	3.26E-15	5.96E-15	1.06E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239347	VP-56	7/1/2021	Gross Alpha/Beta	Gross Beta	1.69E-14	1.55E-14	2.45E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239348	VP-56	7/1/2021	Gross Alpha/Beta	Gross Alpha	-3.51E-16	4.26E-15	1.06E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239348	VP-56	7/1/2021	Gross Alpha/Beta	Gross Beta	1.06E-14	1.48E-14	2.45E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239349	VP-56	7/1/2021	Gross Alpha/Beta	Gross Alpha	8.47E-16	4.87E-15	1.05E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239349	VP-56	7/1/2021	Gross Alpha/Beta	Gross Beta	2.77E-14	1.66E-14	2.44E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239350	VP-56	7/6/2021	Gross Alpha/Beta	Gross Alpha	4.42E-15	6.37E-15	1.05E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239350	VP-56	7/6/2021	Gross Alpha/Beta	Gross Beta	1.29E-14	1.49E-14	2.43E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239351	VP-56	7/6/2021	Gross Alpha/Beta	Gross Alpha	2.03E-15	5.40E-15	1.05E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239351	VP-56	7/6/2021	Gross Alpha/Beta	Gross Beta	5.40E-14	1.91E-14	2.43E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239352	VP-56	7/6/2021	Gross Alpha/Beta	Gross Alpha	1.16E-14	8.67E-15	1.05E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239352	VP-56	7/6/2021	Gross Alpha/Beta	Gross Beta	2.60E-14	1.63E-14	2.43E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239353	VP-56	7/7/2021	Gross Alpha/Beta	Gross Alpha	2.00E-15	5.30E-15	1.03E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239353	VP-56	7/7/2021	Gross Alpha/Beta	Gross Beta	2.78E-14	1.62E-14	2.38E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239354	VP-56	7/7/2021	Gross Alpha/Beta	Gross Alpha	2.00E-15	5.30E-15	1.03E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239354	VP-56	7/7/2021	Gross Alpha/Beta	Gross Beta	3.09E-14	1.66E-14	2.38E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239355	VP-56	7/7/2021	Gross Alpha/Beta	Gross Alpha	7.84E-15	7.46E-15	1.03E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239355	VP-56	7/7/2021	Gross Alpha/Beta	Gross Beta	5.75E-14	1.92E-14	2.38E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239356	VP-56	7/8/2021	Gross Alpha/Beta	Gross Alpha	1.04E-14	8.33E-15	1.05E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239356	VP-56	7/8/2021	Gross Alpha/Beta	Gross Beta	4.93E-14	1.87E-14	2.43E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239357	VP-56	7/8/2021	Gross Alpha/Beta	Gross Alpha	3.22E-15	5.90E-15	1.05E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239357	VP-56	7/8/2021	Gross Alpha/Beta	Gross Beta	1.13E-14	1.47E-14	2.43E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239358	VP-56	7/8/2021	Gross Alpha/Beta	Gross Alpha	1.04E-14	8.33E-15	1.05E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239358	VP-56	7/8/2021	Gross Alpha/Beta	Gross Beta	6.64E-14	2.03E-14	2.43E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239359	VP-56	7/12/2021	Gross Alpha/Beta	Gross Alpha	3.22E-15	5.90E-15	1.05E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239359	VP-56	7/12/2021	Gross Alpha/Beta	Gross Beta	5.11E-15	1.41E-14	2.43E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239375	VP-56	7/13/2021	Gross Alpha/Beta	Gross Alpha	3.64E-15	5.32E-15	8.68E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239375	VP-56	7/13/2021	Gross Alpha/Beta	Gross Beta	2.32E-14	1.60E-14	2.42E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239376	VP-56	7/13/2021	Gross Alpha/Beta	Gross Alpha	1.27E-15	4.10E-15	8.59E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239376	VP-56	7/13/2021	Gross Alpha/Beta	Gross Beta	2.06E-14	1.56E-14	2.39E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239377	VP-56	7/14/2021	Gross Alpha/Beta	Gross Alpha	8.21E-15	7.70E-15	9.93E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239377	VP-56	7/14/2021	Gross Alpha/Beta	Gross Beta	4.75E-14	2.05E-14	2.77E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239378	VP-56	7/14/2021	Gross Alpha/Beta	Gross Alpha	1.13E-16	3.90E-15	9.93E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239378	VP-56	7/14/2021	Gross Alpha/Beta	Gross Beta	3.20E-14	1.89E-14	2.77E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP239379	VP-56	7/14/2021	Gross Alpha/Beta	Gross Alpha	2.81E-15	5.46E-15	9.93E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239379	VP-56	7/14/2021	Gross Alpha/Beta	Gross Beta	5.62E-15	1.60E-14	2.77E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239380	VP-56	7/15/2021	Gross Alpha/Beta	Gross Alpha	7.97E-15	6.80E-15	8.28E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239380	VP-56	7/15/2021	Gross Alpha/Beta	Gross Beta	2.59E-14	1.57E-14	2.31E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239381	VP-56	7/15/2021	Gross Alpha/Beta	Gross Alpha	5.72E-15	6.00E-15	8.28E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239381	VP-56	7/15/2021	Gross Alpha/Beta	Gross Beta	2.67E-14	1.57E-14	2.31E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239382	VP-56	7/15/2021	Gross Alpha/Beta	Gross Alpha	1.22E-15	3.95E-15	8.28E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239382	VP-56	7/15/2021	Gross Alpha/Beta	Gross Beta	3.28E-14	1.64E-14	2.31E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239383	VP-56	7/19/2021	Gross Alpha/Beta	Gross Alpha	9.60E-17	3.34E-15	8.51E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239383	VP-56	7/19/2021	Gross Alpha/Beta	Gross Beta	7.16E-15	1.40E-14	2.37E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239384	VP-56	7/19/2021	Gross Alpha/Beta	Gross Alpha	9.70E-17	3.37E-15	8.59E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239384	VP-56	7/19/2021	Gross Alpha/Beta	Gross Beta	2.22E-14	1.58E-14	2.39E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239385	VP-56	7/20/2021	Gross Alpha/Beta	Gross Alpha	7.25E-15	6.79E-15	8.76E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239385	VP-56	7/20/2021	Gross Alpha/Beta	Gross Beta	5.16E-14	1.90E-14	2.44E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239386	VP-56	7/20/2021	Gross Alpha/Beta	Gross Alpha	2.48E-15	4.82E-15	8.76E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239386	VP-56	7/20/2021	Gross Alpha/Beta	Gross Beta	1.46E-14	1.52E-14	2.44E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239387	VP-56	7/20/2021	Gross Alpha/Beta	Gross Alpha	4.87E-15	5.89E-15	8.76E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239387	VP-56	7/20/2021	Gross Alpha/Beta	Gross Beta	2.02E-14	1.58E-14	2.44E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239388	VP-56	7/21/2021	Gross Alpha/Beta	Gross Alpha	9.63E-15	7.59E-15	8.76E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239388	VP-56	7/21/2021	Gross Alpha/Beta	Gross Beta	3.71E-14	1.76E-14	2.44E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239389	VP-56	7/21/2021	Gross Alpha/Beta	Gross Alpha	1.20E-14	8.32E-15	8.76E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239389	VP-56	7/21/2021	Gross Alpha/Beta	Gross Beta	2.91E-14	1.67E-14	2.44E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239390	VP-56	7/21/2021	Gross Alpha/Beta	Gross Alpha	6.06E-15	6.35E-15	8.76E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239390	VP-56	7/21/2021	Gross Alpha/Beta	Gross Beta	4.03E-14	1.79E-14	2.44E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239391	VP-56	7/22/2021	Gross Alpha/Beta	Gross Alpha	7.25E-15	6.79E-15	8.76E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239391	VP-56	7/22/2021	Gross Alpha/Beta	Gross Beta	5.48E-14	1.93E-14	2.44E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239392	VP-56	7/22/2021	Gross Alpha/Beta	Gross Alpha	3.67E-15	5.38E-15	8.76E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239392	VP-56	7/22/2021	Gross Alpha/Beta	Gross Beta	2.35E-14	1.62E-14	2.44E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239393	VP-56	7/22/2021	Gross Alpha/Beta	Gross Alpha	6.06E-15	6.35E-15	8.76E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239393	VP-56	7/22/2021	Gross Alpha/Beta	Gross Beta	5.88E-14	1.97E-14	2.44E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239394	VP-56	7/26/2021	Gross Alpha/Beta	Gross Alpha	1.22E-15	3.95E-15	8.28E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239394	VP-56	7/26/2021	Gross Alpha/Beta	Gross Beta	3.73E-14	1.68E-14	2.31E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239395	VP-56	7/26/2021	Gross Alpha/Beta	Gross Alpha	5.56E-15	6.34E-15	9.04E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239395	VP-56	7/26/2021	Gross Alpha/Beta	Gross Beta	3.08E-14	1.38E-14	1.77E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239396	VP-56	7/26/2021	Gross Alpha/Beta	Gross Alpha	8.13E-15	7.32E-15	9.04E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239396	VP-56	7/26/2021	Gross Alpha/Beta	Gross Beta	4.29E-14	1.52E-14	1.77E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239397	VP-56	7/27/2021	Gross Alpha/Beta	Gross Alpha	1.81E-15	4.77E-15	9.57E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239397	VP-56	7/27/2021	Gross Alpha/Beta	Gross Beta	4.47E-14	1.60E-14	1.88E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239398	VP-56	7/27/2021	Gross Alpha/Beta	Gross Alpha	9.97E-15	8.22E-15	9.57E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239398	VP-56	7/27/2021	Gross Alpha/Beta	Gross Beta	4.55E-14	1.61E-14	1.88E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239399	VP-56	7/27/2021	Gross Alpha/Beta	Gross Alpha	5.89E-15	6.71E-15	9.57E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239399	VP-56	7/27/2021	Gross Alpha/Beta	Gross Beta	3.35E-14	1.47E-14	1.88E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239400	VP-56	7/28/2021	Gross Alpha/Beta	Gross Alpha	4.53E-16	3.91E-15	9.57E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP239400	VP-56	7/28/2021	Gross Alpha/Beta	Gross Beta	5.43E-14	1.71E-14	1.88E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239401	VP-56	7/28/2021	Gross Alpha/Beta	Gross Alpha	1.27E-14	9.10E-15	9.57E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239401	VP-56	7/28/2021	Gross Alpha/Beta	Gross Beta	5.43E-14	1.71E-14	1.88E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239402	VP-56	7/28/2021	Gross Alpha/Beta	Gross Alpha	1.54E-14	9.90E-15	9.57E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239402	VP-56	7/28/2021	Gross Alpha/Beta	Gross Beta	5.11E-14	1.68E-14	1.88E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239403	VP-56	7/29/2021	Gross Alpha/Beta	Gross Alpha	8.13E-15	7.32E-15	9.04E-15	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239403	VP-56	7/29/2021	Gross Alpha/Beta	Gross Beta	6.71E-14	1.79E-14	1.77E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239404	VP-56	7/29/2021	Gross Alpha/Beta	Gross Alpha	3.00E-15	5.19E-15	9.04E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239404	VP-56	7/29/2021	Gross Alpha/Beta	Gross Beta	6.18E-14	1.73E-14	1.77E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239405	VP-56	7/29/2021	Gross Alpha/Beta	Gross Alpha	4.28E-16	3.69E-15	9.04E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239405	VP-56	7/29/2021	Gross Alpha/Beta	Gross Beta	4.29E-14	1.52E-14	1.77E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239406	VP-56	8/2/2021	Gross Alpha/Beta	Gross Alpha	9.68E-15	7.99E-15	9.30E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239406	VP-56	8/2/2021	Gross Alpha/Beta	Gross Beta	1.38E-14	1.19E-14	1.82E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP239407	VP-56	8/3/2021	Gross Alpha/Beta	Gross Alpha	4.28E-15	5.79E-15	9.04E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239407	VP-56	8/3/2021	Gross Alpha/Beta	Gross Beta	2.63E-14	1.32E-14	1.77E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP239408	VP-56	8/3/2021	Gross Alpha/Beta	Gross Alpha	1.71E-15	4.50E-15	9.04E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP239408	VP-56	8/3/2021	Gross Alpha/Beta	Gross Beta	8.91E-15	1.09E-14	1.77E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP243309	VP-56	8/3/2021	Gross Alpha/Beta	Gross Alpha	4.28E-15	5.79E-15	9.04E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP243309	VP-56	8/3/2021	Gross Alpha/Beta	Gross Beta	1.95E-14	1.23E-14	1.77E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP243310	VP-56	8/4/2021	Gross Alpha/Beta	Gross Alpha	4.28E-15	5.79E-15	9.04E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP243310	VP-56	8/4/2021	Gross Alpha/Beta	Gross Beta	2.86E-14	1.35E-14	1.77E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP243311	VP-56	8/4/2021	Gross Alpha/Beta	Gross Alpha	4.28E-15	5.79E-15	9.04E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP243311	VP-56	8/4/2021	Gross Alpha/Beta	Gross Beta	3.24E-14	1.40E-14	1.77E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP243312	VP-56	8/5/2021	Gross Alpha/Beta	Gross Alpha	3.00E-15	5.19E-15	9.04E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP243312	VP-56	8/5/2021	Gross Alpha/Beta	Gross Beta	2.40E-14	1.29E-14	1.77E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP243313	VP-56	8/5/2021	Gross Alpha/Beta	Gross Alpha	6.47E-15	4.18E-15	5.96E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP243313	VP-56	8/5/2021	Gross Alpha/Beta	Gross Beta	4.25E-14	1.48E-14	2.24E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP243314	VP-56	8/5/2021	Gross Alpha/Beta	Gross Alpha	9.42E-15	7.77E-15	9.04E-15	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP243314	VP-56	8/5/2021	Gross Alpha/Beta	Gross Beta	1.04E-14	1.11E-14	1.77E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP243315	VP-56	8/9/2021	Gross Alpha/Beta	Gross Alpha	-2.28E-15	2.58E-15	1.02E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP243315	VP-56	8/9/2021	Gross Alpha/Beta	Gross Beta	2.61E-14	1.61E-14	2.37E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP243316	VP-56	8/9/2021	Gross Alpha/Beta	Gross Alpha	5.01E-15	6.49E-15	1.02E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP243316	VP-56	8/9/2021	Gross Alpha/Beta	Gross Beta	2.93E-14	1.64E-14	2.37E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP243317	VP-56	8/9/2021	Gross Alpha/Beta	Gross Alpha	9.86E-15	8.13E-15	1.02E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP243317	VP-56	8/9/2021	Gross Alpha/Beta	Gross Beta	3.16E-14	1.67E-14	2.37E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP243388	VP-56	9/27/2021	Gross Alpha/Beta	Gross Alpha	5.77E-15	6.94E-15	1.06E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP243388	VP-56	9/27/2021	Gross Alpha/Beta	Gross Beta	3.90E-14	1.80E-14	2.49E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP243389	VP-56	9/28/2021	Gross Alpha/Beta	Gross Alpha	3.78E-15	6.82E-15	1.21E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP243389	VP-56	9/28/2021	Gross Alpha/Beta	Gross Beta	4.87E-14	2.09E-14	2.83E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP243390	VP-56	9/29/2021	Gross Alpha/Beta	Gross Alpha	1.12E-14	8.93E-15	1.12E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP243390	VP-56	9/29/2021	Gross Alpha/Beta	Gross Beta	3.18E-14	1.80E-14	2.62E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP243391	VP-56	10/4/2021	Gross Alpha/Beta	Gross Alpha	-4.47E-15	1.07E-15	1.21E-14	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP243391	VP-56	10/4/2021	Gross Alpha/Beta	Gross Beta	2.98E-14	1.89E-14	2.83E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP243567	BALL FIELDS	12/29/2021	Gross Alpha/Beta	Gross Alpha	1.01E-14	9.54E-15	1.28E-14	µCi/mL	UJ	T04, T05	VP-56 (General Area)-Perimeter Air
SVP243567	BALL FIELDS	12/29/2021	Gross Alpha/Beta	Gross Beta	3.96E-14	2.11E-14	3.02E-14	µCi/mL	J	T04, T20	VP-56 (General Area)-Perimeter Air
SVP243602	VP-56	12/30/2021	Gross Alpha/Beta	Gross Alpha	5.43E-15	6.56E-15	9.95E-15	µCi/mL	UJ	T06	VP-56 (General Area)-Perimeter Air
SVP243602	VP-56	12/30/2021	Gross Alpha/Beta	Gross Beta	4.43E-14	1.79E-14	2.35E-14	µCi/mL	=		VP-56 (General Area)-Perimeter Air
SVP239194	FUTURA	4/7/2021	Gross Alpha/Beta	Gross Alpha	4.57E-15	5.89E-15	8.91E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239194	FUTURA	4/7/2021	Gross Alpha/Beta	Gross Beta	2.06E-14	1.73E-14	2.71E-14	µCi/mL	UJ	T04, T05	Futura (General Area)-Perimeter Air
SVP239195	FUTURA	4/7/2021	Gross Alpha/Beta	Gross Alpha	-6.53E-16	2.69E-15	8.91E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239195	FUTURA	4/7/2021	Gross Alpha/Beta	Gross Beta	1.71E-14	1.70E-14	2.71E-14	µCi/mL	UJ	T04, T05	Futura (General Area)-Perimeter Air
SVP239196	FUTURA	4/8/2021	Gross Alpha/Beta	Gross Alpha	3.26E-15	7.60E-15	1.48E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239196	FUTURA	4/8/2021	Gross Alpha/Beta	Gross Beta	7.81E-15	2.59E-14	4.50E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239197	FUTURA	4/8/2021	Gross Alpha/Beta	Gross Alpha	-1.13E-15	4.64E-15	1.53E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239197	FUTURA	4/8/2021	Gross Alpha/Beta	Gross Beta	-5.57E-15	2.52E-14	4.67E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239198	FUTURA	4/12/2021	Gross Alpha/Beta	Gross Alpha	6.44E-15	8.30E-15	1.26E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239198	FUTURA	4/12/2021	Gross Alpha/Beta	Gross Beta	1.53E-14	2.29E-14	3.82E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239199	FUTURA	4/12/2021	Gross Alpha/Beta	Gross Alpha	9.87E-15	8.65E-15	1.04E-14	µCi/mL	UJ	T04, T05	Futura (General Area)-Perimeter Air
SVP239199	FUTURA	4/12/2021	Gross Alpha/Beta	Gross Beta	1.47E-14	1.91E-14	3.15E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239200	FUTURA	4/13/2021	Gross Alpha/Beta	Gross Alpha	5.31E-15	5.82E-15	8.05E-15	µCi/mL	UJ	T06	North County (General Area)-Perimeter Air
SVP239200	FUTURA	4/13/2021	Gross Alpha/Beta	Gross Beta	1.70E-14	1.55E-14	2.45E-14	µCi/mL	UJ	T04, T05	North County (General Area)-Perimeter Air
SVP239201	FUTURA	4/13/2021	Gross Alpha/Beta	Gross Alpha	5.96E-16	3.42E-15	8.12E-15	µCi/mL	UJ	T06	North County (General Area)-Perimeter Air
SVP239201	FUTURA	4/13/2021	Gross Alpha/Beta	Gross Beta	4.29E-15	1.42E-14	2.47E-14	µCi/mL	UJ	T06	North County (General Area)-Perimeter Air
SVP239202	FUTURA	4/14/2021	Gross Alpha/Beta	Gross Alpha	2.95E-15	4.76E-15	8.05E-15	µCi/mL	UJ	T06	North County (General Area)-Perimeter Air
SVP239202	FUTURA	4/14/2021	Gross Alpha/Beta	Gross Beta	1.94E-14	1.57E-14	2.45E-14	µCi/mL	UJ	T04, T05	North County (General Area)-Perimeter Air
SVP239203	FUTURA	4/14/2021	Gross Alpha/Beta	Gross Alpha	-5.90E-16	2.43E-15	8.05E-15	µCi/mL	UJ	T06	North County (General Area)-Perimeter Air
SVP239203	FUTURA	4/14/2021	Gross Alpha/Beta	Gross Beta	2.34E-14	1.62E-14	2.45E-14	µCi/mL	UJ	T04, T05	North County (General Area)-Perimeter Air
SVP239204	FUTURA	4/15/2021	Gross Alpha/Beta	Gross Alpha	1.79E-15	4.17E-15	8.12E-15	µCi/mL	UJ	T06	North County (General Area)-Perimeter Air
SVP239204	FUTURA	4/15/2021	Gross Alpha/Beta	Gross Beta	2.04E-14	1.60E-14	2.47E-14	µCi/mL	UJ	T04, T05	North County (General Area)-Perimeter Air
SVP239205	FUTURA	4/15/2021	Gross Alpha/Beta	Gross Alpha	2.98E-15	4.81E-15	8.12E-15	µCi/mL	UJ	T06	North County (General Area)-Perimeter Air
SVP239205	FUTURA	4/15/2021	Gross Alpha/Beta	Gross Beta	7.50E-15	1.46E-14	2.47E-14	µCi/mL	UJ	T06	North County (General Area)-Perimeter Air
SVP239234	FUTURA	4/21/2021	Gross Alpha/Beta	Gross Alpha	4.19E-15	6.39E-15	1.07E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239234	FUTURA	4/21/2021	Gross Alpha/Beta	Gross Beta	2.67E-14	1.71E-14	2.54E-14	µCi/mL	J	T04, T20	Futura (General Area)-Perimeter Air
SVP239235	FUTURA	4/21/2021	Gross Alpha/Beta	Gross Alpha	3.95E-15	6.01E-15	1.00E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239235	FUTURA	4/21/2021	Gross Alpha/Beta	Gross Beta	3.86E-14	1.75E-14	2.39E-14	µCi/mL	=		Futura (General Area)-Perimeter Air
SVP239236	FUTURA	4/22/2021	Gross Alpha/Beta	Gross Alpha	2.90E-15	5.84E-15	1.07E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239236	FUTURA	4/22/2021	Gross Alpha/Beta	Gross Beta	2.58E-14	1.70E-14	2.54E-14	µCi/mL	J	T04, T20	Futura (General Area)-Perimeter Air
SVP239237	FUTURA	4/22/2021	Gross Alpha/Beta	Gross Alpha	2.86E-15	5.75E-15	1.05E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239237	FUTURA	4/22/2021	Gross Alpha/Beta	Gross Beta	3.37E-14	1.76E-14	2.50E-14	µCi/mL	J	T04, T20	Futura (General Area)-Perimeter Air
SVP239238	FUTURA	4/26/2021	Gross Alpha/Beta	Gross Alpha	2.87E-16	4.05E-15	9.49E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239238	FUTURA	4/26/2021	Gross Alpha/Beta	Gross Beta	4.46E-14	1.74E-14	2.26E-14	µCi/mL	=		Futura (General Area)-Perimeter Air
SVP239239	FUTURA	4/26/2021	Gross Alpha/Beta	Gross Alpha	1.06E-14	8.02E-15	9.49E-15	µCi/mL	J	T04, T20	Futura (General Area)-Perimeter Air
SVP239239	FUTURA	4/26/2021	Gross Alpha/Beta	Gross Beta	5.28E-14	1.82E-14	2.26E-14	µCi/mL	=		Futura (General Area)-Perimeter Air
SVP239240	FUTURA	5/3/2021	Gross Alpha/Beta	Gross Alpha	9.42E-15	1.03E-14	1.49E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239240	FUTURA	5/3/2021	Gross Alpha/Beta	Gross Beta	-3.80E-15	1.91E-14	3.54E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239241	FUTURA	5/3/2021	Gross Alpha/Beta	Gross Alpha	5.83E-15	8.89E-15	1.49E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP239241	FUTURA	5/3/2021	Gross Alpha/Beta	Gross Beta	1.61E-14	2.14E-14	3.54E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239242	FUTURA	5/4/2021	Gross Alpha/Beta	Gross Alpha	1.80E-15	5.84E-15	1.19E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239242	FUTURA	5/4/2021	Gross Alpha/Beta	Gross Beta	3.54E-14	1.97E-14	2.84E-14	µCi/mL	J	T04, T20	Futura (General Area)-Perimeter Air
SVP239243	FUTURA	5/4/2021	Gross Alpha/Beta	Gross Alpha	6.12E-15	7.69E-15	1.19E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239243	FUTURA	5/4/2021	Gross Alpha/Beta	Gross Beta	5.04E-14	2.12E-14	2.84E-14	µCi/mL	=		Futura (General Area)-Perimeter Air
SVP239261	FUTURA	5/6/2021	Gross Alpha/Beta	Gross Alpha	7.01E-15	7.00E-15	9.56E-15	µCi/mL	UJ	T04, T05	Futura (General Area)-Perimeter Air
SVP239261	FUTURA	5/6/2021	Gross Alpha/Beta	Gross Beta	2.75E-14	1.72E-14	2.56E-14	µCi/mL	J	T04, T20	Futura (General Area)-Perimeter Air
SVP239262	FUTURA	5/6/2021	Gross Alpha/Beta	Gross Alpha	8.69E-16	4.32E-15	9.56E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239262	FUTURA	5/6/2021	Gross Alpha/Beta	Gross Beta	1.34E-14	1.57E-14	2.56E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239263	FUTURA	5/10/2021	Gross Alpha/Beta	Gross Alpha	3.26E-15	5.44E-15	9.37E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239263	FUTURA	5/10/2021	Gross Alpha/Beta	Gross Beta	1.64E-14	1.58E-14	2.51E-14	µCi/mL	UJ	T04, T05	Futura (General Area)-Perimeter Air
SVP239264	FUTURA	5/10/2021	Gross Alpha/Beta	Gross Alpha	-3.51E-16	3.48E-15	9.37E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239264	FUTURA	5/10/2021	Gross Alpha/Beta	Gross Beta	1.40E-14	1.55E-14	2.51E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239265	FUTURA	5/11/2021	Gross Alpha/Beta	Gross Alpha	3.23E-15	5.38E-15	9.28E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239265	FUTURA	5/11/2021	Gross Alpha/Beta	Gross Beta	4.19E-15	1.43E-14	2.49E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239266	FUTURA	5/11/2021	Gross Alpha/Beta	Gross Alpha	8.44E-16	4.19E-15	9.28E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239266	FUTURA	5/11/2021	Gross Alpha/Beta	Gross Beta	2.11E-14	1.61E-14	2.49E-14	µCi/mL	UJ	T04, T05	Futura (General Area)-Perimeter Air
SVP239267	FUTURA	5/12/2021	Gross Alpha/Beta	Gross Alpha	-3.34E-16	3.32E-15	8.93E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239267	FUTURA	5/12/2021	Gross Alpha/Beta	Gross Beta	-2.93E-15	1.29E-14	2.40E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239268	FUTURA	5/12/2021	Gross Alpha/Beta	Gross Alpha	1.96E-15	4.64E-15	8.93E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239268	FUTURA	5/12/2021	Gross Alpha/Beta	Gross Beta	-2.16E-15	1.30E-14	2.40E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239269	FUTURA	5/24/2021	Gross Alpha/Beta	Gross Alpha	-1.51E-15	2.45E-15	9.10E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239269	FUTURA	5/24/2021	Gross Alpha/Beta	Gross Beta	2.70E-14	1.65E-14	2.44E-14	µCi/mL	J	T04, T20	Futura (General Area)-Perimeter Air
SVP239270	FUTURA	5/24/2021	Gross Alpha/Beta	Gross Alpha	4.33E-15	5.78E-15	9.10E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239270	FUTURA	5/24/2021	Gross Alpha/Beta	Gross Beta	2.78E-14	1.66E-14	2.44E-14	µCi/mL	J	T04, T20	Futura (General Area)-Perimeter Air
SVP239271	FUTURA	5/25/2021	Gross Alpha/Beta	Gross Alpha	8.20E-16	4.07E-15	9.02E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239271	FUTURA	5/25/2021	Gross Alpha/Beta	Gross Beta	2.44E-14	1.61E-14	2.42E-14	µCi/mL	J	T04, T20	Futura (General Area)-Perimeter Air
SVP239272	FUTURA	5/25/2021	Gross Alpha/Beta	Gross Alpha	1.98E-15	4.69E-15	9.02E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239272	FUTURA	5/25/2021	Gross Alpha/Beta	Gross Beta	2.59E-14	1.63E-14	2.42E-14	µCi/mL	J	T04, T20	Futura (General Area)-Perimeter Air
SVP239273	FUTURA	5/26/2021	Gross Alpha/Beta	Gross Alpha	2.14E-15	5.07E-15	9.76E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239273	FUTURA	5/26/2021	Gross Alpha/Beta	Gross Beta	1.20E-14	1.59E-14	2.62E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239274	FUTURA	5/26/2021	Gross Alpha/Beta	Gross Alpha	5.90E-15	6.69E-15	9.76E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239274	FUTURA	5/26/2021	Gross Alpha/Beta	Gross Beta	9.48E-15	1.56E-14	2.62E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239283	FUTURA	6/2/2021	Gross Alpha/Beta	Gross Alpha	7.60E-15	1.17E-14	1.92E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239283	FUTURA	6/2/2021	Gross Alpha/Beta	Gross Beta	1.50E-14	3.51E-14	6.03E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239284	FUTURA	6/2/2021	Gross Alpha/Beta	Gross Alpha	2.50E-14	1.84E-14	1.92E-14	µCi/mL	J	T04, T20	Futura (General Area)-Perimeter Air
SVP239284	FUTURA	6/2/2021	Gross Alpha/Beta	Gross Beta	3.84E-14	3.77E-14	6.03E-14	µCi/mL	UJ	T04, T05	Futura (General Area)-Perimeter Air
SVP239285	FUTURA	6/3/2021	Gross Alpha/Beta	Gross Alpha	2.95E-15	4.54E-15	7.48E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239285	FUTURA	6/3/2021	Gross Alpha/Beta	Gross Beta	1.80E-14	1.50E-14	2.34E-14	µCi/mL	UJ	T04, T05	Futura (General Area)-Perimeter Air
SVP239286	FUTURA	6/3/2021	Gross Alpha/Beta	Gross Alpha	2.95E-15	4.54E-15	7.48E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239286	FUTURA	6/3/2021	Gross Alpha/Beta	Gross Beta	3.01E-14	1.63E-14	2.34E-14	µCi/mL	J	T04, T20	Futura (General Area)-Perimeter Air
SVP239287	FUTURA	6/7/2021	Gross Alpha/Beta	Gross Alpha	1.86E-15	4.01E-15	7.62E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239287	FUTURA	6/7/2021	Gross Alpha/Beta	Gross Beta	4.93E-14	1.84E-14	2.39E-14	µCi/mL	=		Futura (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP239288	FUTURA	6/7/2021	Gross Alpha/Beta	Gross Alpha	-4.30E-16	2.36E-15	7.62E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239288	FUTURA	6/7/2021	Gross Alpha/Beta	Gross Beta	-1.03E-15	1.31E-14	2.39E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239289	FUTURA	6/8/2021	Gross Alpha/Beta	Gross Alpha	7.45E-16	3.42E-15	7.92E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239289	FUTURA	6/8/2021	Gross Alpha/Beta	Gross Beta	1.18E-14	1.51E-14	2.48E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239290	FUTURA	6/8/2021	Gross Alpha/Beta	Gross Alpha	7.45E-16	3.42E-15	7.92E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239290	FUTURA	6/8/2021	Gross Alpha/Beta	Gross Beta	1.42E-14	1.54E-14	2.48E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239291	FUTURA	6/10/2021	Gross Alpha/Beta	Gross Alpha	-1.64E-15	5.81E-16	7.92E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239291	FUTURA	6/10/2021	Gross Alpha/Beta	Gross Beta	1.26E-14	1.52E-14	2.48E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239292	FUTURA	6/10/2021	Gross Alpha/Beta	Gross Alpha	7.45E-16	3.42E-15	7.92E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239292	FUTURA	6/10/2021	Gross Alpha/Beta	Gross Beta	1.82E-14	1.58E-14	2.48E-14	µCi/mL	UJ	T04, T05	Futura (General Area)-Perimeter Air
SVP239293	FUTURA	6/14/2021	Gross Alpha/Beta	Gross Alpha	7.45E-16	3.42E-15	7.92E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239293	FUTURA	6/14/2021	Gross Alpha/Beta	Gross Beta	2.79E-14	1.68E-14	2.48E-14	µCi/mL	J	T04, T20	Futura (General Area)-Perimeter Air
SVP239294	FUTURA	6/14/2021	Gross Alpha/Beta	Gross Alpha	5.51E-15	5.88E-15	7.92E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239294	FUTURA	6/14/2021	Gross Alpha/Beta	Gross Beta	4.40E-14	1.84E-14	2.48E-14	µCi/mL	=		Futura (General Area)-Perimeter Air
SVP239295	FUTURA	6/15/2021	Gross Alpha/Beta	Gross Alpha	7.52E-16	3.45E-15	7.99E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239295	FUTURA	6/15/2021	Gross Alpha/Beta	Gross Beta	2.08E-14	1.62E-14	2.51E-14	µCi/mL	UJ	T04, T05	Futura (General Area)-Perimeter Air
SVP239296	FUTURA	6/15/2021	Gross Alpha/Beta	Gross Alpha	3.16E-15	4.85E-15	7.99E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239296	FUTURA	6/15/2021	Gross Alpha/Beta	Gross Beta	2.17E-14	1.63E-14	2.51E-14	µCi/mL	UJ	T04, T05	Futura (General Area)-Perimeter Air
SVP239297	FUTURA	6/16/2021	Gross Alpha/Beta	Gross Alpha	-1.67E-15	5.93E-16	8.07E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239297	FUTURA	6/16/2021	Gross Alpha/Beta	Gross Beta	1.78E-14	1.60E-14	2.53E-14	µCi/mL	UJ	T04, T05	Futura (General Area)-Perimeter Air
SVP239298	FUTURA	6/16/2021	Gross Alpha/Beta	Gross Alpha	6.84E-15	6.47E-15	8.07E-15	µCi/mL	UJ	T04, T05	Futura (General Area)-Perimeter Air
SVP239298	FUTURA	6/16/2021	Gross Alpha/Beta	Gross Beta	4.65E-15	1.46E-14	2.53E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239320	FUTURA	6/22/2021	Gross Alpha/Beta	Gross Alpha	2.28E-15	4.71E-15	8.73E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239320	FUTURA	6/22/2021	Gross Alpha/Beta	Gross Beta	2.09E-14	1.58E-14	2.43E-14	µCi/mL	UJ	T04, T05	Futura (General Area)-Perimeter Air
SVP239321	FUTURA	6/22/2021	Gross Alpha/Beta	Gross Alpha	1.12E-15	4.09E-15	8.73E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239321	FUTURA	6/22/2021	Gross Alpha/Beta	Gross Beta	-1.82E-15	1.33E-14	2.43E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239322	FUTURA	6/23/2021	Gross Alpha/Beta	Gross Alpha	3.47E-15	5.30E-15	8.81E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239322	FUTURA	6/23/2021	Gross Alpha/Beta	Gross Beta	2.03E-14	1.59E-14	2.45E-14	µCi/mL	UJ	T04, T05	Futura (General Area)-Perimeter Air
SVP239323	FUTURA	6/23/2021	Gross Alpha/Beta	Gross Alpha	1.13E-15	4.13E-15	8.81E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239323	FUTURA	6/23/2021	Gross Alpha/Beta	Gross Beta	1.55E-14	1.54E-14	2.45E-14	µCi/mL	UJ	T04, T05	Futura (General Area)-Perimeter Air
SVP239324	FUTURA	6/29/2021	Gross Alpha/Beta	Gross Alpha	2.69E-15	5.56E-15	1.03E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239324	FUTURA	6/29/2021	Gross Alpha/Beta	Gross Beta	2.93E-14	1.92E-14	2.87E-14	µCi/mL	J	T04, T20	Futura (General Area)-Perimeter Air
SVP239325	FUTURA	6/29/2021	Gross Alpha/Beta	Gross Alpha	5.44E-15	6.79E-15	1.03E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239325	FUTURA	6/29/2021	Gross Alpha/Beta	Gross Beta	1.54E-14	1.77E-14	2.87E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239326	FUTURA	6/30/2021	Gross Alpha/Beta	Gross Alpha	4.52E-15	5.64E-15	8.56E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239326	FUTURA	6/30/2021	Gross Alpha/Beta	Gross Beta	1.05E-14	1.44E-14	2.38E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239327	FUTURA	6/30/2021	Gross Alpha/Beta	Gross Alpha	3.38E-15	5.15E-15	8.56E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239327	FUTURA	6/30/2021	Gross Alpha/Beta	Gross Beta	1.36E-14	1.48E-14	2.38E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239328	FUTURA	7/7/2021	Gross Alpha/Beta	Gross Alpha	3.58E-15	5.46E-15	9.08E-15	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239328	FUTURA	7/7/2021	Gross Alpha/Beta	Gross Beta	2.49E-14	1.68E-14	2.53E-14	µCi/mL	UJ	T04, T05	Futura (General Area)-Perimeter Air
SVP239329	FUTURA	7/7/2021	Gross Alpha/Beta	Gross Alpha	1.08E-14	8.10E-15	9.08E-15	µCi/mL	J	T04, T20	Futura (General Area)-Perimeter Air
SVP239329	FUTURA	7/7/2021	Gross Alpha/Beta	Gross Beta	4.44E-14	1.88E-14	2.53E-14	µCi/mL	=		Futura (General Area)-Perimeter Air
SVP239365	FUTURA	7/8/2021	Gross Alpha/Beta	Gross Alpha	2.81E-14	1.30E-14	1.13E-14	µCi/mL	=		Futura (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SVP239365	FUTURA	7/8/2021	Gross Alpha/Beta	Gross Beta	4.60E-14	1.91E-14	2.57E-14	µCi/mL	=		Futura (General Area)-Perimeter Air
SVP239366	FUTURA	7/8/2021	Gross Alpha/Beta	Gross Alpha	5.73E-16	5.09E-15	1.13E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239366	FUTURA	7/8/2021	Gross Alpha/Beta	Gross Beta	3.30E-14	1.78E-14	2.57E-14	µCi/mL	J	T04, T20	Futura (General Area)-Perimeter Air
SVP239367	FUTURA	7/12/2021	Gross Alpha/Beta	Gross Alpha	8.12E-15	1.04E-14	1.64E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239367	FUTURA	7/12/2021	Gross Alpha/Beta	Gross Beta	2.43E-14	2.34E-14	3.74E-14	µCi/mL	UJ	T04, T05	Futura (General Area)-Perimeter Air
SVP239368	FUTURA	7/12/2021	Gross Alpha/Beta	Gross Alpha	8.12E-15	1.04E-14	1.64E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239368	FUTURA	7/12/2021	Gross Alpha/Beta	Gross Beta	3.03E-14	2.41E-14	3.74E-14	µCi/mL	UJ	T04, T05	Futura (General Area)-Perimeter Air
SVP239369	FUTURA	7/14/2021	Gross Alpha/Beta	Gross Alpha	1.00E-14	9.89E-15	1.40E-14	µCi/mL	UJ	T04, T05	Futura (General Area)-Perimeter Air
SVP239369	FUTURA	7/14/2021	Gross Alpha/Beta	Gross Beta	3.18E-14	2.11E-14	3.18E-14	µCi/mL	J	T04, T20	Futura (General Area)-Perimeter Air
SVP239370	FUTURA	7/14/2021	Gross Alpha/Beta	Gross Alpha	3.81E-15	7.68E-15	1.40E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239370	FUTURA	7/14/2021	Gross Alpha/Beta	Gross Beta	2.17E-14	2.00E-14	3.18E-14	µCi/mL	UJ	T04, T05	Futura (General Area)-Perimeter Air
SVP239371	FUTURA	7/15/2021	Gross Alpha/Beta	Gross Alpha	5.40E-16	4.80E-15	1.06E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239371	FUTURA	7/15/2021	Gross Alpha/Beta	Gross Beta	3.27E-14	1.69E-14	2.42E-14	µCi/mL	J	T04, T20	Futura (General Area)-Perimeter Air
SVP239372	FUTURA	7/15/2021	Gross Alpha/Beta	Gross Alpha	-6.39E-16	4.18E-15	1.06E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239372	FUTURA	7/15/2021	Gross Alpha/Beta	Gross Beta	1.34E-14	1.49E-14	2.42E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239373	FUTURA	7/19/2021	Gross Alpha/Beta	Gross Alpha	5.58E-15	7.15E-15	1.13E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239373	FUTURA	7/19/2021	Gross Alpha/Beta	Gross Beta	3.06E-14	1.76E-14	2.57E-14	µCi/mL	J	T04, T20	Futura (General Area)-Perimeter Air
SVP239374	FUTURA	7/19/2021	Gross Alpha/Beta	Gross Alpha	5.58E-15	7.15E-15	1.13E-14	µCi/mL	UJ	T06	Futura (General Area)-Perimeter Air
SVP239374	FUTURA	7/19/2021	Gross Alpha/Beta	Gross Beta	2.57E-14	1.71E-14	2.57E-14	µCi/mL	J	T04, T20	Futura (General Area)-Perimeter Air
SLA232104	SLAPS LOADOUT	1/4/2021	Gross Alpha/Beta	Gross Alpha	1.96E-15	1.02E-15	9.12E-16	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA232104	SLAPS LOADOUT	1/4/2021	Gross Alpha/Beta	Gross Beta	3.98E-14	4.56E-15	2.27E-15	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA232105	SLAPS LOADOUT	1/4/2021	Gross Alpha/Beta	Gross Alpha	3.25E-15	1.28E-15	9.12E-16	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA232105	SLAPS LOADOUT	1/4/2021	Gross Alpha/Beta	Gross Beta	3.75E-14	4.39E-15	2.27E-15	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA232106	SLAPS LOADOUT	1/4/2021	Gross Alpha/Beta	Gross Alpha	5.12E-15	6.93E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA232106	SLAPS LOADOUT	1/4/2021	Gross Alpha/Beta	Gross Beta	2.20E-14	1.71E-14	2.58E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA232107	SLAPS LOADOUT	1/4/2021	Gross Alpha/Beta	Gross Alpha	7.58E-15	7.76E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA232107	SLAPS LOADOUT	1/4/2021	Gross Alpha/Beta	Gross Beta	4.74E-14	1.96E-14	2.58E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA232108	SLAPS LOADOUT	1/4/2021	Gross Alpha/Beta	Gross Alpha	-2.25E-15	3.41E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA232108	SLAPS LOADOUT	1/4/2021	Gross Alpha/Beta	Gross Beta	2.77E-14	1.77E-14	2.58E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA232109	SLAPS LOADOUT	1/4/2021	Gross Alpha/Beta	Gross Alpha	2.54E-15	5.70E-15	9.92E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA232109	SLAPS LOADOUT	1/4/2021	Gross Alpha/Beta	Gross Beta	2.64E-14	1.69E-14	2.46E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA232110	SLAPS LOADOUT	1/5/2021	Gross Alpha/Beta	Gross Alpha	5.94E-15	6.88E-15	9.73E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA232110	SLAPS LOADOUT	1/5/2021	Gross Alpha/Beta	Gross Beta	2.06E-14	1.60E-14	2.42E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA232111	SLAPS LOADOUT	1/5/2021	Gross Alpha/Beta	Gross Alpha	4.79E-15	6.48E-15	9.73E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA232111	SLAPS LOADOUT	1/5/2021	Gross Alpha/Beta	Gross Beta	4.74E-14	1.86E-14	2.42E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237641	SLAPS LOADOUT	1/5/2021	Gross Alpha/Beta	Gross Alpha	6.05E-15	7.01E-15	9.92E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237641	SLAPS LOADOUT	1/5/2021	Gross Alpha/Beta	Gross Beta	2.72E-14	1.69E-14	2.46E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237642	SLAPS LOADOUT	1/5/2021	Gross Alpha/Beta	Gross Alpha	-9.94E-16	4.08E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237642	SLAPS LOADOUT	1/5/2021	Gross Alpha/Beta	Gross Beta	3.33E-14	1.78E-14	2.51E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237643	SLAPS LOADOUT	1/5/2021	Gross Alpha/Beta	Gross Alpha	7.05E-15	8.16E-15	1.16E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237643	SLAPS LOADOUT	1/5/2021	Gross Alpha/Beta	Gross Beta	1.99E-14	1.85E-14	2.87E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237644	SLAPS LOADOUT	1/4/2021	Gross Alpha/Beta	Gross Alpha	7.29E-15	7.46E-15	1.00E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237644	SLAPS LOADOUT	1/4/2021	Gross Alpha/Beta	Gross Beta	3.30E-14	1.76E-14	2.49E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA237645	SLAPS LOADOUT	1/6/2021	Gross Alpha/Beta	Gross Alpha	4.79E-15	6.48E-15	9.73E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237645	SLAPS LOADOUT	1/6/2021	Gross Alpha/Beta	Gross Beta	-1.15E-14	1.25E-14	2.42E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237646	SLAPS LOADOUT	1/6/2021	Gross Alpha/Beta	Gross Alpha	2.51E-15	5.65E-15	9.82E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237646	SLAPS LOADOUT	1/6/2021	Gross Alpha/Beta	Gross Beta	3.24E-14	1.73E-14	2.44E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237647	SLAPS LOADOUT	1/6/2021	Gross Alpha/Beta	Gross Alpha	2.01E-16	4.77E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237647	SLAPS LOADOUT	1/6/2021	Gross Alpha/Beta	Gross Beta	4.33E-14	1.89E-14	2.53E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237648	SLAPS LOADOUT	1/6/2021	Gross Alpha/Beta	Gross Alpha	2.05E-16	4.87E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237648	SLAPS LOADOUT	1/6/2021	Gross Alpha/Beta	Gross Beta	1.96E-14	1.69E-14	2.58E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237649	SLAPS LOADOUT	1/6/2021	Gross Alpha/Beta	Gross Alpha	7.81E-15	8.00E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237649	SLAPS LOADOUT	1/6/2021	Gross Alpha/Beta	Gross Beta	3.45E-14	1.88E-14	2.66E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237650	SLAPS LOADOUT	1/7/2021	Gross Alpha/Beta	Gross Alpha	-1.06E-15	4.33E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237650	SLAPS LOADOUT	1/7/2021	Gross Alpha/Beta	Gross Beta	1.43E-14	1.68E-14	2.66E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237651	SLAPS LOADOUT	1/7/2021	Gross Alpha/Beta	Gross Alpha	4.84E-15	7.12E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237651	SLAPS LOADOUT	1/7/2021	Gross Alpha/Beta	Gross Beta	3.32E-14	1.77E-14	2.08E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237652	SLAPS LOADOUT	1/7/2021	Gross Alpha/Beta	Gross Alpha	4.89E-15	7.20E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237652	SLAPS LOADOUT	1/7/2021	Gross Alpha/Beta	Gross Beta	4.56E-14	1.92E-14	2.10E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237653	SLAPS LOADOUT	1/7/2021	Gross Alpha/Beta	Gross Alpha	8.80E-16	5.45E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237653	SLAPS LOADOUT	1/7/2021	Gross Alpha/Beta	Gross Beta	2.30E-14	1.67E-14	2.08E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237654	SLAPS LOADOUT	1/7/2021	Gross Alpha/Beta	Gross Alpha	2.18E-15	6.00E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237654	SLAPS LOADOUT	1/7/2021	Gross Alpha/Beta	Gross Beta	3.63E-14	1.79E-14	2.05E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237655	SLAPS LOADOUT	1/11/2021	Gross Alpha/Beta	Gross Alpha	-3.99E-16	4.32E-15	9.49E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237655	SLAPS LOADOUT	1/11/2021	Gross Alpha/Beta	Gross Beta	2.62E-14	1.57E-14	1.88E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237656	SLAPS LOADOUT	1/11/2021	Gross Alpha/Beta	Gross Alpha	7.68E-16	4.76E-15	9.15E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237656	SLAPS LOADOUT	1/11/2021	Gross Alpha/Beta	Gross Beta	3.79E-14	1.64E-14	1.81E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237657	SLAPS LOADOUT	1/11/2021	Gross Alpha/Beta	Gross Alpha	2.01E-15	5.54E-15	9.58E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237657	SLAPS LOADOUT	1/11/2021	Gross Alpha/Beta	Gross Beta	2.03E-14	1.51E-14	1.90E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237658	SLAPS LOADOUT	1/11/2021	Gross Alpha/Beta	Gross Alpha	3.13E-15	5.88E-15	9.32E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237658	SLAPS LOADOUT	1/11/2021	Gross Alpha/Beta	Gross Beta	4.47E-14	1.73E-14	1.85E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237659	SLAPS LOADOUT	1/11/2021	Gross Alpha/Beta	Gross Alpha	1.98E-15	5.44E-15	9.40E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237659	SLAPS LOADOUT	1/11/2021	Gross Alpha/Beta	Gross Beta	3.36E-14	1.63E-14	1.86E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237660	SLAPS LOADOUT	1/12/2021	Gross Alpha/Beta	Gross Alpha	2.27E-15	6.25E-15	1.08E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237660	SLAPS LOADOUT	1/12/2021	Gross Alpha/Beta	Gross Beta	1.06E-13	2.53E-14	2.14E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237661	SLAPS LOADOUT	1/12/2021	Gross Alpha/Beta	Gross Alpha	2.32E-15	6.39E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237661	SLAPS LOADOUT	1/12/2021	Gross Alpha/Beta	Gross Beta	7.37E-14	2.26E-14	2.19E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237662	SLAPS LOADOUT	1/12/2021	Gross Alpha/Beta	Gross Alpha	-4.59E-16	4.98E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237662	SLAPS LOADOUT	1/12/2021	Gross Alpha/Beta	Gross Beta	5.87E-14	2.10E-14	2.17E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237663	SLAPS LOADOUT	1/12/2021	Gross Alpha/Beta	Gross Alpha	9.19E-16	5.69E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237663	SLAPS LOADOUT	1/12/2021	Gross Alpha/Beta	Gross Beta	4.36E-14	1.94E-14	2.17E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237664	SLAPS LOADOUT	1/12/2021	Gross Alpha/Beta	Gross Alpha	3.68E-15	6.90E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237664	SLAPS LOADOUT	1/12/2021	Gross Alpha/Beta	Gross Beta	4.00E-14	1.91E-14	2.17E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237665	SLAPS LOADOUT	1/12/2021	Gross Alpha/Beta	Gross Alpha	6.47E-15	6.97E-15	9.07E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237665	SLAPS LOADOUT	1/12/2021	Gross Alpha/Beta	Gross Beta	5.90E-14	1.84E-14	1.80E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237666	SLAPS LOADOUT	1/12/2021	Gross Alpha/Beta	Gross Alpha	7.61E-16	4.71E-15	9.07E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA237666	SLAPS LOADOUT	1/12/2021	Gross Alpha/Beta	Gross Beta	3.68E-15	1.26E-14	1.80E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237667	SLAPS LOADOUT	1/13/2021	Gross Alpha/Beta	Gross Alpha	2.13E-15	5.88E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237667	SLAPS LOADOUT	1/13/2021	Gross Alpha/Beta	Gross Beta	5.78E-14	1.98E-14	2.01E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237668	SLAPS LOADOUT	1/13/2021	Gross Alpha/Beta	Gross Alpha	5.69E-15	7.02E-15	9.68E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237668	SLAPS LOADOUT	1/13/2021	Gross Alpha/Beta	Gross Beta	8.10E-14	2.13E-14	1.92E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237669	SLAPS LOADOUT	1/13/2021	Gross Alpha/Beta	Gross Alpha	4.51E-15	6.64E-15	9.77E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237669	SLAPS LOADOUT	1/13/2021	Gross Alpha/Beta	Gross Beta	4.61E-14	1.81E-14	1.94E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237670	SLAPS LOADOUT	1/13/2021	Gross Alpha/Beta	Gross Alpha	4.34E-15	6.39E-15	9.40E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237670	SLAPS LOADOUT	1/13/2021	Gross Alpha/Beta	Gross Beta	6.65E-14	1.96E-14	1.86E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237671	SLAPS LOADOUT	1/13/2021	Gross Alpha/Beta	Gross Alpha	7.58E-15	6.88E-15	8.52E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237671	SLAPS LOADOUT	1/13/2021	Gross Alpha/Beta	Gross Beta	7.25E-14	1.84E-14	1.77E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237672	SLAPS LOADOUT	1/14/2021	Gross Alpha/Beta	Gross Alpha	4.97E-15	6.83E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237672	SLAPS LOADOUT	1/14/2021	Gross Alpha/Beta	Gross Beta	4.72E-14	1.82E-14	2.21E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237673	SLAPS LOADOUT	1/14/2021	Gross Alpha/Beta	Gross Alpha	1.03E-14	8.59E-15	1.00E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237673	SLAPS LOADOUT	1/14/2021	Gross Alpha/Beta	Gross Beta	3.91E-14	1.65E-14	2.09E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237674	SLAPS LOADOUT	1/14/2021	Gross Alpha/Beta	Gross Alpha	-2.37E-15	1.35E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237674	SLAPS LOADOUT	1/14/2021	Gross Alpha/Beta	Gross Beta	1.29E-14	1.32E-14	2.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237675	SLAPS LOADOUT	1/14/2021	Gross Alpha/Beta	Gross Alpha	1.92E-15	5.17E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237675	SLAPS LOADOUT	1/14/2021	Gross Alpha/Beta	Gross Beta	4.46E-14	1.74E-14	2.13E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237676	SLAPS LOADOUT	1/14/2021	Gross Alpha/Beta	Gross Alpha	8.92E-15	8.10E-15	1.00E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237676	SLAPS LOADOUT	1/14/2021	Gross Alpha/Beta	Gross Beta	5.82E-14	1.87E-14	2.09E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237677	SLAPS LOADOUT	1/14/2021	Gross Alpha/Beta	Gross Alpha	5.13E-15	5.92E-15	8.44E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237677	SLAPS LOADOUT	1/14/2021	Gross Alpha/Beta	Gross Beta	8.41E-15	1.06E-14	1.76E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237678	SLAPS LOADOUT	1/14/2021	Gross Alpha/Beta	Gross Alpha	9.87E-15	7.61E-15	8.44E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237678	SLAPS LOADOUT	1/14/2021	Gross Alpha/Beta	Gross Beta	6.65E-14	1.77E-14	1.76E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237679	SLAPS LOADOUT	1/19/2021	Gross Alpha/Beta	Gross Alpha	-8.05E-16	2.67E-15	8.61E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237679	SLAPS LOADOUT	1/19/2021	Gross Alpha/Beta	Gross Beta	2.26E-14	1.28E-14	1.79E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237680	SLAPS LOADOUT	1/19/2021	Gross Alpha/Beta	Gross Alpha	-8.13E-16	2.70E-15	8.69E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237680	SLAPS LOADOUT	1/19/2021	Gross Alpha/Beta	Gross Beta	3.30E-14	1.42E-14	1.81E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237681	SLAPS LOADOUT	1/19/2021	Gross Alpha/Beta	Gross Alpha	1.64E-15	4.42E-15	8.77E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237681	SLAPS LOADOUT	1/19/2021	Gross Alpha/Beta	Gross Beta	2.86E-14	1.37E-14	1.82E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237682	SLAPS LOADOUT	1/19/2021	Gross Alpha/Beta	Gross Alpha	3.95E-16	3.53E-15	8.44E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237682	SLAPS LOADOUT	1/19/2021	Gross Alpha/Beta	Gross Beta	3.90E-14	1.46E-14	1.76E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237683	SLAPS LOADOUT	1/19/2021	Gross Alpha/Beta	Gross Alpha	5.09E-15	5.87E-15	8.37E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237683	SLAPS LOADOUT	1/19/2021	Gross Alpha/Beta	Gross Beta	3.03E-14	1.35E-14	1.74E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237684	SLAPS LOADOUT	1/19/2021	Gross Alpha/Beta	Gross Alpha	2.77E-15	4.87E-15	8.44E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237684	SLAPS LOADOUT	1/19/2021	Gross Alpha/Beta	Gross Beta	4.59E-14	1.54E-14	1.76E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237685	SLAPS LOADOUT	1/19/2021	Gross Alpha/Beta	Gross Alpha	1.58E-15	4.26E-15	8.44E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237685	SLAPS LOADOUT	1/19/2021	Gross Alpha/Beta	Gross Beta	2.37E-14	1.27E-14	1.76E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237686	SLAPS LOADOUT	1/20/2021	Gross Alpha/Beta	Gross Alpha	2.77E-15	4.87E-15	8.44E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237686	SLAPS LOADOUT	1/20/2021	Gross Alpha/Beta	Gross Beta	1.68E-14	1.18E-14	1.76E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237687	SLAPS LOADOUT	1/20/2021	Gross Alpha/Beta	Gross Alpha	3.95E-15	5.42E-15	8.44E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237687	SLAPS LOADOUT	1/20/2021	Gross Alpha/Beta	Gross Beta	2.29E-14	1.26E-14	1.76E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA237688	SLAPS LOADOUT	1/20/2021	Gross Alpha/Beta	Gross Alpha	-2.11E-15	1.20E-15	9.04E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237688	SLAPS LOADOUT	1/20/2021	Gross Alpha/Beta	Gross Beta	1.15E-14	1.17E-14	1.88E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237689	SLAPS LOADOUT	1/20/2021	Gross Alpha/Beta	Gross Alpha	-8.37E-16	2.78E-15	8.95E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237689	SLAPS LOADOUT	1/20/2021	Gross Alpha/Beta	Gross Beta	3.97E-14	1.53E-14	1.86E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237690	SLAPS LOADOUT	1/20/2021	Gross Alpha/Beta	Gross Alpha	2.93E-15	5.16E-15	8.95E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237690	SLAPS LOADOUT	1/20/2021	Gross Alpha/Beta	Gross Beta	3.00E-14	1.41E-14	1.86E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237691	SLAPS LOADOUT	1/21/2021	Gross Alpha/Beta	Gross Alpha	-8.89E-16	3.78E-15	9.93E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237691	SLAPS LOADOUT	1/21/2021	Gross Alpha/Beta	Gross Beta	2.13E-14	1.33E-14	1.82E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237692	SLAPS LOADOUT	1/21/2021	Gross Alpha/Beta	Gross Alpha	7.85E-15	7.78E-15	1.05E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237692	SLAPS LOADOUT	1/21/2021	Gross Alpha/Beta	Gross Beta	3.39E-14	1.55E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237693	SLAPS LOADOUT	1/21/2021	Gross Alpha/Beta	Gross Alpha	7.85E-15	7.78E-15	1.05E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237693	SLAPS LOADOUT	1/21/2021	Gross Alpha/Beta	Gross Beta	3.71E-14	1.58E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237694	SLAPS LOADOUT	1/21/2021	Gross Alpha/Beta	Gross Alpha	6.34E-15	7.07E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237694	SLAPS LOADOUT	1/21/2021	Gross Alpha/Beta	Gross Beta	2.95E-14	1.45E-14	1.86E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237695	SLAPS LOADOUT	1/21/2021	Gross Alpha/Beta	Gross Alpha	3.08E-16	4.64E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237695	SLAPS LOADOUT	1/21/2021	Gross Alpha/Beta	Gross Beta	3.72E-14	1.56E-14	1.90E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237696	SLAPS LOADOUT	1/26/2021	Gross Alpha/Beta	Gross Alpha	4.00E-15	6.30E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237696	SLAPS LOADOUT	1/26/2021	Gross Alpha/Beta	Gross Beta	1.89E-14	1.34E-14	1.90E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237697	SLAPS LOADOUT	1/26/2021	Gross Alpha/Beta	Gross Alpha	3.08E-16	4.64E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237697	SLAPS LOADOUT	1/26/2021	Gross Alpha/Beta	Gross Beta	3.64E-14	1.55E-14	1.90E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237698	SLAPS LOADOUT	1/26/2021	Gross Alpha/Beta	Gross Alpha	1.57E-15	5.35E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237698	SLAPS LOADOUT	1/26/2021	Gross Alpha/Beta	Gross Beta	3.39E-14	1.55E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237699	SLAPS LOADOUT	1/26/2021	Gross Alpha/Beta	Gross Alpha	3.08E-16	4.64E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237699	SLAPS LOADOUT	1/26/2021	Gross Alpha/Beta	Gross Beta	1.42E-14	1.28E-14	1.90E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237700	SLAPS LOADOUT	1/26/2021	Gross Alpha/Beta	Gross Alpha	4.08E-15	6.43E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237700	SLAPS LOADOUT	1/26/2021	Gross Alpha/Beta	Gross Beta	8.77E-15	1.23E-14	1.93E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237701	SLAPS LOADOUT	1/26/2021	Gross Alpha/Beta	Gross Alpha	1.48E-15	5.05E-15	9.93E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237701	SLAPS LOADOUT	1/26/2021	Gross Alpha/Beta	Gross Beta	1.29E-14	1.23E-14	1.82E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237702	SLAPS LOADOUT	1/26/2021	Gross Alpha/Beta	Gross Alpha	6.28E-15	7.01E-15	1.00E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237702	SLAPS LOADOUT	1/26/2021	Gross Alpha/Beta	Gross Beta	1.99E-14	1.33E-14	1.84E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237703	SLAPS LOADOUT	1/27/2021	Gross Alpha/Beta	Gross Alpha	8.43E-15	7.58E-15	9.75E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237703	SLAPS LOADOUT	1/27/2021	Gross Alpha/Beta	Gross Beta	3.96E-14	1.53E-14	1.79E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237704	SLAPS LOADOUT	1/27/2021	Gross Alpha/Beta	Gross Alpha	4.90E-15	6.34E-15	9.66E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237704	SLAPS LOADOUT	1/27/2021	Gross Alpha/Beta	Gross Beta	1.36E-15	1.04E-14	1.77E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237705	SLAPS LOADOUT	1/27/2021	Gross Alpha/Beta	Gross Alpha	8.51E-15	7.65E-15	9.84E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237705	SLAPS LOADOUT	1/27/2021	Gross Alpha/Beta	Gross Beta	6.69E-15	1.13E-14	1.81E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237706	SLAPS LOADOUT	1/27/2021	Gross Alpha/Beta	Gross Alpha	7.48E-15	7.41E-15	1.00E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237706	SLAPS LOADOUT	1/27/2021	Gross Alpha/Beta	Gross Beta	4.54E-14	1.62E-14	1.84E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237707	SLAPS LOADOUT	1/28/2021	Gross Alpha/Beta	Gross Alpha	5.04E-15	6.52E-15	9.93E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237707	SLAPS LOADOUT	1/28/2021	Gross Alpha/Beta	Gross Beta	7.52E-15	1.16E-14	1.82E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237708	SLAPS LOADOUT	1/28/2021	Gross Alpha/Beta	Gross Alpha	3.14E-16	4.73E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237708	SLAPS LOADOUT	1/28/2021	Gross Alpha/Beta	Gross Beta	3.55E-14	1.56E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237709	SLAPS LOADOUT	1/28/2021	Gross Alpha/Beta	Gross Alpha	4.04E-15	6.37E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA237709	SLAPS LOADOUT	1/28/2021	Gross Alpha/Beta	Gross Beta	2.55E-14	1.44E-14	1.91E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237710	SLAPS LOADOUT	2/1/2021	Gross Alpha/Beta	Gross Alpha	-8.72E-16	3.71E-15	9.75E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237710	SLAPS LOADOUT	2/1/2021	Gross Alpha/Beta	Gross Beta	2.84E-14	1.40E-14	1.79E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237711	SLAPS LOADOUT	2/1/2021	Gross Alpha/Beta	Gross Alpha	4.34E-15	7.22E-15	9.40E-15	µCi/mL	UJ	T03, T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237711	SLAPS LOADOUT	2/1/2021	Gross Alpha/Beta	Gross Beta	1.19E-14	1.51E-14	1.89E-14	µCi/mL	UJ	T03, T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237712	SLAPS LOADOUT	2/1/2021	Gross Alpha/Beta	Gross Alpha	5.48E-15	7.53E-15	9.32E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237712	SLAPS LOADOUT	2/1/2021	Gross Alpha/Beta	Gross Beta	1.79E-14	1.56E-14	1.87E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237713	SLAPS LOADOUT	2/1/2021	Gross Alpha/Beta	Gross Alpha	7.83E-15	8.24E-15	9.32E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237713	SLAPS LOADOUT	2/1/2021	Gross Alpha/Beta	Gross Beta	5.80E-14	1.95E-14	1.87E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237714	SLAPS LOADOUT	2/1/2021	Gross Alpha/Beta	Gross Alpha	3.13E-15	6.75E-15	9.32E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237714	SLAPS LOADOUT	2/1/2021	Gross Alpha/Beta	Gross Beta	3.30E-14	1.71E-14	1.87E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237715	SLAPS LOADOUT	2/1/2021	Gross Alpha/Beta	Gross Alpha	6.65E-15	7.89E-15	9.32E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237715	SLAPS LOADOUT	2/1/2021	Gross Alpha/Beta	Gross Beta	3.98E-14	1.78E-14	1.87E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237716	SLAPS LOADOUT	2/1/2021	Gross Alpha/Beta	Gross Alpha	1.96E-15	6.33E-15	9.32E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237716	SLAPS LOADOUT	2/1/2021	Gross Alpha/Beta	Gross Beta	3.23E-14	1.70E-14	1.87E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237717	SLAPS LOADOUT	2/2/2021	Gross Alpha/Beta	Gross Alpha	7.04E-15	8.36E-15	9.86E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237717	SLAPS LOADOUT	2/2/2021	Gross Alpha/Beta	Gross Beta	4.78E-14	1.93E-14	1.98E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237718	SLAPS LOADOUT	2/2/2021	Gross Alpha/Beta	Gross Alpha	8.29E-16	6.22E-15	9.86E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237718	SLAPS LOADOUT	2/2/2021	Gross Alpha/Beta	Gross Beta	-5.15E-15	1.39E-14	1.98E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237719	SLAPS LOADOUT	2/2/2021	Gross Alpha/Beta	Gross Alpha	7.83E-16	5.87E-15	9.32E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237719	SLAPS LOADOUT	2/2/2021	Gross Alpha/Beta	Gross Beta	4.36E-14	1.81E-14	1.87E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237720	SLAPS LOADOUT	2/2/2021	Gross Alpha/Beta	Gross Alpha	-3.95E-16	5.43E-15	9.40E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237720	SLAPS LOADOUT	2/2/2021	Gross Alpha/Beta	Gross Beta	3.64E-14	1.76E-14	1.89E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237721	SLAPS LOADOUT	2/3/2021	Gross Alpha/Beta	Gross Alpha	3.13E-15	6.75E-15	9.32E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237721	SLAPS LOADOUT	2/3/2021	Gross Alpha/Beta	Gross Beta	3.15E-14	1.69E-14	1.87E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237722	SLAPS LOADOUT	2/3/2021	Gross Alpha/Beta	Gross Alpha	7.97E-16	5.99E-15	9.49E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237722	SLAPS LOADOUT	2/3/2021	Gross Alpha/Beta	Gross Beta	3.67E-14	1.77E-14	1.91E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237723	SLAPS LOADOUT	2/3/2021	Gross Alpha/Beta	Gross Alpha	5.53E-15	7.60E-15	9.40E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237723	SLAPS LOADOUT	2/3/2021	Gross Alpha/Beta	Gross Beta	4.10E-14	1.80E-14	1.89E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237724	SLAPS LOADOUT	2/3/2021	Gross Alpha/Beta	Gross Alpha	7.90E-16	5.93E-15	9.40E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237724	SLAPS LOADOUT	2/3/2021	Gross Alpha/Beta	Gross Beta	1.42E-14	1.53E-14	1.89E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237725	SLAPS LOADOUT	2/3/2021	Gross Alpha/Beta	Gross Alpha	7.75E-15	8.16E-15	9.23E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237725	SLAPS LOADOUT	2/3/2021	Gross Alpha/Beta	Gross Beta	3.35E-14	1.70E-14	1.86E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237726	SLAPS LOADOUT	2/4/2021	Gross Alpha/Beta	Gross Alpha	4.60E-15	7.65E-15	9.96E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237726	SLAPS LOADOUT	2/4/2021	Gross Alpha/Beta	Gross Beta	2.15E-14	1.69E-14	2.00E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237727	SLAPS LOADOUT	2/4/2021	Gross Alpha/Beta	Gross Alpha	2.01E-15	6.51E-15	9.58E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237727	SLAPS LOADOUT	2/4/2021	Gross Alpha/Beta	Gross Beta	1.68E-14	1.59E-14	1.93E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237728	SLAPS LOADOUT	2/8/2021	Gross Alpha/Beta	Gross Alpha	6.84E-15	8.12E-15	9.58E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237728	SLAPS LOADOUT	2/8/2021	Gross Alpha/Beta	Gross Beta	5.65E-14	1.97E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237729	SLAPS LOADOUT	2/8/2021	Gross Alpha/Beta	Gross Alpha	-4.02E-16	5.54E-15	9.58E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237729	SLAPS LOADOUT	2/8/2021	Gross Alpha/Beta	Gross Beta	4.72E-14	1.89E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237730	SLAPS LOADOUT	2/8/2021	Gross Alpha/Beta	Gross Alpha	1.12E-14	9.12E-15	9.23E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237730	SLAPS LOADOUT	2/8/2021	Gross Alpha/Beta	Gross Beta	4.40E-14	1.80E-14	1.86E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA237731	SLAPS LOADOUT	2/8/2021	Gross Alpha/Beta	Gross Alpha	1.35E-14	8.34E-15	7.41E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237731	SLAPS LOADOUT	2/8/2021	Gross Alpha/Beta	Gross Beta	6.41E-14	1.96E-14	2.34E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237732	SLAPS LOADOUT	2/8/2021	Gross Alpha/Beta	Gross Alpha	3.12E-15	4.58E-15	7.34E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237732	SLAPS LOADOUT	2/8/2021	Gross Alpha/Beta	Gross Beta	2.14E-14	1.52E-14	2.32E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237733	SLAPS LOADOUT	2/9/2021	Gross Alpha/Beta	Gross Alpha	1.50E-14	8.91E-15	7.62E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237733	SLAPS LOADOUT	2/9/2021	Gross Alpha/Beta	Gross Beta	5.49E-14	1.91E-14	2.41E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237734	SLAPS LOADOUT	2/9/2021	Gross Alpha/Beta	Gross Alpha	7.13E-15	6.02E-15	6.83E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237734	SLAPS LOADOUT	2/9/2021	Gross Alpha/Beta	Gross Beta	2.42E-14	1.46E-14	2.15E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237735	SLAPS LOADOUT	2/9/2021	Gross Alpha/Beta	Gross Alpha	-2.89E-16	2.37E-15	7.48E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237735	SLAPS LOADOUT	2/9/2021	Gross Alpha/Beta	Gross Beta	3.66E-14	1.71E-14	2.36E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237736	SLAPS LOADOUT	2/9/2021	Gross Alpha/Beta	Gross Alpha	7.74E-15	6.53E-15	7.41E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237736	SLAPS LOADOUT	2/9/2021	Gross Alpha/Beta	Gross Beta	3.55E-14	1.68E-14	2.34E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237737	SLAPS LOADOUT	2/9/2021	Gross Alpha/Beta	Gross Alpha	2.03E-15	4.05E-15	7.48E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237737	SLAPS LOADOUT	2/9/2021	Gross Alpha/Beta	Gross Beta	1.32E-14	1.46E-14	2.36E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237738	SLAPS LOADOUT	2/10/2021	Gross Alpha/Beta	Gross Alpha	1.10E-14	7.98E-15	8.09E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237738	SLAPS LOADOUT	2/10/2021	Gross Alpha/Beta	Gross Beta	5.23E-14	1.97E-14	2.55E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237739	SLAPS LOADOUT	2/10/2021	Gross Alpha/Beta	Gross Alpha	9.40E-16	3.59E-15	8.09E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237739	SLAPS LOADOUT	2/10/2021	Gross Alpha/Beta	Gross Beta	3.88E-14	1.84E-14	2.55E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237740	SLAPS LOADOUT	2/10/2021	Gross Alpha/Beta	Gross Alpha	4.47E-15	5.37E-15	7.70E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237740	SLAPS LOADOUT	2/10/2021	Gross Alpha/Beta	Gross Beta	5.38E-14	1.92E-14	2.43E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237741	SLAPS LOADOUT	2/10/2021	Gross Alpha/Beta	Gross Alpha	9.23E-15	7.20E-15	7.70E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237741	SLAPS LOADOUT	2/10/2021	Gross Alpha/Beta	Gross Beta	7.63E-14	2.13E-14	2.43E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237742	SLAPS LOADOUT	2/10/2021	Gross Alpha/Beta	Gross Alpha	3.28E-15	4.80E-15	7.70E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237742	SLAPS LOADOUT	2/10/2021	Gross Alpha/Beta	Gross Beta	3.85E-14	1.77E-14	2.43E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237743	SLAPS LOADOUT	2/10/2021	Gross Alpha/Beta	Gross Alpha	-3.01E-16	2.47E-15	7.77E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237743	SLAPS LOADOUT	2/10/2021	Gross Alpha/Beta	Gross Beta	-2.50E-15	1.33E-14	2.45E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237744	SLAPS LOADOUT	2/10/2021	Gross Alpha/Beta	Gross Alpha	4.51E-15	5.42E-15	7.77E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237744	SLAPS LOADOUT	2/10/2021	Gross Alpha/Beta	Gross Beta	4.95E-14	1.89E-14	2.45E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237745	SLAPS LOADOUT	2/11/2021	Gross Alpha/Beta	Gross Alpha	2.09E-15	4.17E-15	7.70E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237745	SLAPS LOADOUT	2/11/2021	Gross Alpha/Beta	Gross Beta	4.33E-14	1.81E-14	2.43E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237746	SLAPS LOADOUT	2/11/2021	Gross Alpha/Beta	Gross Alpha	4.47E-15	5.37E-15	7.70E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237746	SLAPS LOADOUT	2/11/2021	Gross Alpha/Beta	Gross Beta	4.98E-14	1.88E-14	2.43E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237747	SLAPS LOADOUT	2/11/2021	Gross Alpha/Beta	Gross Alpha	8.94E-16	3.41E-15	7.70E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237747	SLAPS LOADOUT	2/11/2021	Gross Alpha/Beta	Gross Beta	3.21E-14	1.70E-14	2.43E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237748	SLAPS LOADOUT	2/11/2021	Gross Alpha/Beta	Gross Alpha	8.94E-16	3.41E-15	7.70E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237748	SLAPS LOADOUT	2/11/2021	Gross Alpha/Beta	Gross Beta	2.89E-14	1.67E-14	2.43E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237749	SLAPS LOADOUT	2/11/2021	Gross Alpha/Beta	Gross Alpha	4.47E-15	5.37E-15	7.70E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237749	SLAPS LOADOUT	2/11/2021	Gross Alpha/Beta	Gross Beta	3.85E-14	1.77E-14	2.43E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237750	SLAPS LOADOUT	2/11/2021	Gross Alpha/Beta	Gross Alpha	3.18E-15	4.67E-15	7.48E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237750	SLAPS LOADOUT	2/11/2021	Gross Alpha/Beta	Gross Beta	4.45E-14	1.79E-14	2.36E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237751	SLAPS LOADOUT	2/11/2021	Gross Alpha/Beta	Gross Alpha	1.02E-14	8.02E-15	9.56E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237751	SLAPS LOADOUT	2/11/2021	Gross Alpha/Beta	Gross Beta	2.56E-14	1.35E-14	1.86E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237752	SLAPS LOADOUT	2/17/2021	Gross Alpha/Beta	Gross Alpha	2.96E-15	5.27E-15	9.29E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA237752	SLAPS LOADOUT	2/17/2021	Gross Alpha/Beta	Gross Beta	6.06E-15	1.06E-14	1.80E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237753	SLAPS LOADOUT	2/17/2021	Gross Alpha/Beta	Gross Alpha	4.05E-15	5.66E-15	9.12E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237753	SLAPS LOADOUT	2/17/2021	Gross Alpha/Beta	Gross Beta	3.70E-14	1.44E-14	1.77E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237754	SLAPS LOADOUT	2/17/2021	Gross Alpha/Beta	Gross Alpha	6.37E-16	4.14E-15	9.38E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237754	SLAPS LOADOUT	2/17/2021	Gross Alpha/Beta	Gross Beta	2.36E-14	1.31E-14	1.82E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237755	SLAPS LOADOUT	2/17/2021	Gross Alpha/Beta	Gross Alpha	6.46E-15	6.65E-15	9.29E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237755	SLAPS LOADOUT	2/17/2021	Gross Alpha/Beta	Gross Beta	2.42E-14	1.30E-14	1.80E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237756	SLAPS LOADOUT	2/17/2021	Gross Alpha/Beta	Gross Alpha	1.13E-14	8.30E-15	9.47E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237756	SLAPS LOADOUT	2/17/2021	Gross Alpha/Beta	Gross Beta	4.53E-14	1.57E-14	1.84E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237757	SLAPS LOADOUT	2/17/2021	Gross Alpha/Beta	Gross Alpha	8.79E-15	7.43E-15	9.29E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237757	SLAPS LOADOUT	2/17/2021	Gross Alpha/Beta	Gross Beta	3.32E-14	1.41E-14	1.80E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237758	SLAPS LOADOUT	2/17/2021	Gross Alpha/Beta	Gross Alpha	1.11E-14	8.14E-15	9.29E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237758	SLAPS LOADOUT	2/17/2021	Gross Alpha/Beta	Gross Beta	3.32E-14	1.41E-14	1.80E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237759	SLAPS LOADOUT	2/18/2021	Gross Alpha/Beta	Gross Alpha	3.14E-15	5.58E-15	9.84E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237759	SLAPS LOADOUT	2/18/2021	Gross Alpha/Beta	Gross Beta	3.91E-14	1.54E-14	1.91E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237760	SLAPS LOADOUT	2/18/2021	Gross Alpha/Beta	Gross Alpha	8.07E-15	7.47E-15	9.84E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237760	SLAPS LOADOUT	2/18/2021	Gross Alpha/Beta	Gross Beta	4.07E-14	1.56E-14	1.91E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237761	SLAPS LOADOUT	2/18/2021	Gross Alpha/Beta	Gross Alpha	4.37E-15	6.10E-15	9.84E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237761	SLAPS LOADOUT	2/18/2021	Gross Alpha/Beta	Gross Beta	3.83E-14	1.53E-14	1.91E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237762	SLAPS LOADOUT	2/18/2021	Gross Alpha/Beta	Gross Alpha	4.41E-15	6.16E-15	9.93E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237762	SLAPS LOADOUT	2/18/2021	Gross Alpha/Beta	Gross Beta	2.90E-14	1.43E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237763	SLAPS LOADOUT	2/18/2021	Gross Alpha/Beta	Gross Alpha	1.92E-15	5.05E-15	9.93E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237763	SLAPS LOADOUT	2/18/2021	Gross Alpha/Beta	Gross Beta	2.90E-14	1.43E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237764	SLAPS LOADOUT	2/18/2021	Gross Alpha/Beta	Gross Alpha	1.07E-14	8.34E-15	9.93E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237764	SLAPS LOADOUT	2/18/2021	Gross Alpha/Beta	Gross Beta	2.58E-14	1.39E-14	1.93E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237765	SLAPS LOADOUT	2/22/2021	Gross Alpha/Beta	Gross Alpha	6.91E-15	7.11E-15	9.93E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237765	SLAPS LOADOUT	2/22/2021	Gross Alpha/Beta	Gross Beta	3.47E-14	1.50E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237766	SLAPS LOADOUT	2/22/2021	Gross Alpha/Beta	Gross Alpha	1.92E-15	5.05E-15	9.93E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237766	SLAPS LOADOUT	2/22/2021	Gross Alpha/Beta	Gross Beta	8.09E-15	1.16E-14	1.93E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237767	SLAPS LOADOUT	2/22/2021	Gross Alpha/Beta	Gross Alpha	1.87E-15	4.90E-15	9.65E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237767	SLAPS LOADOUT	2/22/2021	Gross Alpha/Beta	Gross Beta	1.96E-14	1.29E-14	1.87E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237768	SLAPS LOADOUT	2/22/2021	Gross Alpha/Beta	Gross Alpha	-1.89E-15	2.73E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237768	SLAPS LOADOUT	2/22/2021	Gross Alpha/Beta	Gross Beta	1.01E-14	1.23E-14	2.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237769	SLAPS LOADOUT	2/22/2021	Gross Alpha/Beta	Gross Alpha	4.29E-15	5.99E-15	9.65E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237769	SLAPS LOADOUT	2/22/2021	Gross Alpha/Beta	Gross Beta	4.62E-14	1.60E-14	1.87E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237770	SLAPS LOADOUT	2/22/2021	Gross Alpha/Beta	Gross Alpha	5.29E-15	6.22E-15	9.29E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237770	SLAPS LOADOUT	2/22/2021	Gross Alpha/Beta	Gross Beta	4.22E-14	1.52E-14	1.80E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237771	SLAPS LOADOUT	2/22/2021	Gross Alpha/Beta	Gross Alpha	-2.22E-15	6.67E-16	8.41E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237771	SLAPS LOADOUT	2/22/2021	Gross Alpha/Beta	Gross Beta	6.74E-15	1.36E-14	2.32E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237772	SLAPS LOADOUT	2/23/2021	Gross Alpha/Beta	Gross Alpha	2.32E-15	4.59E-15	8.41E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237772	SLAPS LOADOUT	2/23/2021	Gross Alpha/Beta	Gross Beta	2.36E-14	1.55E-14	2.32E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237773	SLAPS LOADOUT	2/23/2021	Gross Alpha/Beta	Gross Alpha	-2.20E-15	6.60E-16	8.33E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237773	SLAPS LOADOUT	2/23/2021	Gross Alpha/Beta	Gross Beta	-3.20E-15	1.23E-14	2.30E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA237774	SLAPS LOADOUT	2/23/2021	Gross Alpha/Beta	Gross Alpha	2.34E-15	4.64E-15	8.49E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237774	SLAPS LOADOUT	2/23/2021	Gross Alpha/Beta	Gross Beta	3.16E-14	1.64E-14	2.34E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237775	SLAPS LOADOUT	2/23/2021	Gross Alpha/Beta	Gross Alpha	3.45E-15	5.13E-15	8.41E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237775	SLAPS LOADOUT	2/23/2021	Gross Alpha/Beta	Gross Beta	2.21E-14	1.53E-14	2.32E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237776	SLAPS LOADOUT	2/24/2021	Gross Alpha/Beta	Gross Alpha	5.62E-15	5.95E-15	8.26E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237776	SLAPS LOADOUT	2/24/2021	Gross Alpha/Beta	Gross Beta	3.07E-14	1.60E-14	2.28E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237777	SLAPS LOADOUT	2/24/2021	Gross Alpha/Beta	Gross Alpha	2.30E-15	4.55E-15	8.33E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237777	SLAPS LOADOUT	2/24/2021	Gross Alpha/Beta	Gross Beta	3.25E-14	1.63E-14	2.30E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237778	SLAPS LOADOUT	2/24/2021	Gross Alpha/Beta	Gross Alpha	6.86E-15	6.47E-15	8.41E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237778	SLAPS LOADOUT	2/24/2021	Gross Alpha/Beta	Gross Beta	3.28E-14	1.64E-14	2.32E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237779	SLAPS LOADOUT	2/24/2021	Gross Alpha/Beta	Gross Alpha	1.18E-15	3.99E-15	8.41E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237779	SLAPS LOADOUT	2/24/2021	Gross Alpha/Beta	Gross Beta	3.20E-14	1.64E-14	2.32E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237780	SLAPS LOADOUT	2/25/2021	Gross Alpha/Beta	Gross Alpha	4.55E-15	5.56E-15	8.33E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237780	SLAPS LOADOUT	2/25/2021	Gross Alpha/Beta	Gross Beta	1.73E-14	1.47E-14	2.30E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237781	SLAPS LOADOUT	2/25/2021	Gross Alpha/Beta	Gross Alpha	2.30E-15	4.55E-15	8.33E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237781	SLAPS LOADOUT	2/25/2021	Gross Alpha/Beta	Gross Beta	1.12E-14	1.40E-14	2.30E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237782	SLAPS LOADOUT	2/25/2021	Gross Alpha/Beta	Gross Alpha	2.28E-15	4.51E-15	8.26E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237782	SLAPS LOADOUT	2/25/2021	Gross Alpha/Beta	Gross Beta	1.49E-14	1.43E-14	2.28E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237783	SLAPS LOADOUT	2/25/2021	Gross Alpha/Beta	Gross Alpha	5.62E-15	5.95E-15	8.26E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237783	SLAPS LOADOUT	2/25/2021	Gross Alpha/Beta	Gross Beta	2.39E-14	1.53E-14	2.28E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237784	SLAPS LOADOUT	3/1/2021	Gross Alpha/Beta	Gross Alpha	3.49E-15	5.17E-15	8.49E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237784	SLAPS LOADOUT	3/1/2021	Gross Alpha/Beta	Gross Beta	3.77E-14	1.71E-14	2.34E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237785	SLAPS LOADOUT	3/1/2021	Gross Alpha/Beta	Gross Alpha	5.67E-15	6.00E-15	8.33E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237785	SLAPS LOADOUT	3/1/2021	Gross Alpha/Beta	Gross Beta	3.40E-14	1.64E-14	2.30E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237786	SLAPS LOADOUT	3/1/2021	Gross Alpha/Beta	Gross Alpha	2.30E-15	4.55E-15	8.33E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237786	SLAPS LOADOUT	3/1/2021	Gross Alpha/Beta	Gross Beta	3.33E-14	1.64E-14	2.30E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237787	SLAPS LOADOUT	3/1/2021	Gross Alpha/Beta	Gross Alpha	1.18E-15	3.99E-15	8.41E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237787	SLAPS LOADOUT	3/1/2021	Gross Alpha/Beta	Gross Beta	2.44E-14	1.56E-14	2.32E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237788	SLAPS LOADOUT	3/1/2021	Gross Alpha/Beta	Gross Alpha	3.49E-15	5.17E-15	8.49E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237788	SLAPS LOADOUT	3/1/2021	Gross Alpha/Beta	Gross Beta	2.85E-14	1.61E-14	2.34E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237789	SLAPS LOADOUT	3/1/2021	Gross Alpha/Beta	Gross Alpha	-2.25E-15	6.73E-16	8.49E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237789	SLAPS LOADOUT	3/1/2021	Gross Alpha/Beta	Gross Beta	-1.61E-16	1.29E-14	2.34E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237790	SLAPS LOADOUT	3/2/2021	Gross Alpha/Beta	Gross Alpha	5.73E-15	6.06E-15	8.41E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237790	SLAPS LOADOUT	3/2/2021	Gross Alpha/Beta	Gross Beta	2.59E-14	1.57E-14	2.32E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237791	SLAPS LOADOUT	3/2/2021	Gross Alpha/Beta	Gross Alpha	6.85E-15	6.82E-15	9.51E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237791	SLAPS LOADOUT	3/2/2021	Gross Alpha/Beta	Gross Beta	3.39E-14	1.65E-14	2.32E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237792	SLAPS LOADOUT	3/2/2021	Gross Alpha/Beta	Gross Alpha	6.92E-15	6.89E-15	9.60E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237792	SLAPS LOADOUT	3/2/2021	Gross Alpha/Beta	Gross Beta	3.72E-14	1.69E-14	2.34E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237793	SLAPS LOADOUT	3/2/2021	Gross Alpha/Beta	Gross Alpha	3.47E-15	5.58E-15	9.51E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237793	SLAPS LOADOUT	3/2/2021	Gross Alpha/Beta	Gross Beta	3.62E-14	1.67E-14	2.32E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237794	SLAPS LOADOUT	3/3/2021	Gross Alpha/Beta	Gross Alpha	5.73E-15	6.43E-15	9.51E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237794	SLAPS LOADOUT	3/3/2021	Gross Alpha/Beta	Gross Beta	2.95E-14	1.60E-14	2.32E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237795	SLAPS LOADOUT	3/3/2021	Gross Alpha/Beta	Gross Alpha	2.35E-15	5.10E-15	9.51E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA237795	SLAPS LOADOUT	3/3/2021	Gross Alpha/Beta	Gross Beta	2.73E-14	1.58E-14	2.32E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237796	SLAPS LOADOUT	3/3/2021	Gross Alpha/Beta	Gross Alpha	1.21E-15	4.53E-15	9.42E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237796	SLAPS LOADOUT	3/3/2021	Gross Alpha/Beta	Gross Beta	2.04E-14	1.50E-14	2.29E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237797	SLAPS LOADOUT	3/3/2021	Gross Alpha/Beta	Gross Alpha	4.64E-15	6.08E-15	9.60E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237797	SLAPS LOADOUT	3/3/2021	Gross Alpha/Beta	Gross Beta	2.15E-14	1.53E-14	2.34E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237798	SLAPS LOADOUT	3/4/2021	Gross Alpha/Beta	Gross Alpha	1.21E-15	4.53E-15	9.42E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237798	SLAPS LOADOUT	3/4/2021	Gross Alpha/Beta	Gross Beta	3.29E-14	1.62E-14	2.29E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237799	SLAPS LOADOUT	3/4/2021	Gross Alpha/Beta	Gross Alpha	9.19E-15	7.61E-15	9.60E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237799	SLAPS LOADOUT	3/4/2021	Gross Alpha/Beta	Gross Beta	5.30E-14	1.84E-14	2.34E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237800	SLAPS LOADOUT	3/4/2021	Gross Alpha/Beta	Gross Alpha	3.51E-15	5.63E-15	9.60E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237800	SLAPS LOADOUT	3/4/2021	Gross Alpha/Beta	Gross Beta	2.45E-14	1.56E-14	2.34E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237801	SLAPS LOADOUT	3/4/2021	Gross Alpha/Beta	Gross Alpha	7.91E-15	7.12E-15	9.42E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237801	SLAPS LOADOUT	3/4/2021	Gross Alpha/Beta	Gross Beta	2.48E-14	1.54E-14	2.29E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237802	SLAPS LOADOUT	3/8/2021	Gross Alpha/Beta	Gross Alpha	2.54E-15	5.51E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237802	SLAPS LOADOUT	3/8/2021	Gross Alpha/Beta	Gross Beta	5.44E-15	1.45E-14	2.50E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237803	SLAPS LOADOUT	3/8/2021	Gross Alpha/Beta	Gross Alpha	1.27E-15	4.75E-15	9.88E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237803	SLAPS LOADOUT	3/8/2021	Gross Alpha/Beta	Gross Beta	2.37E-14	1.59E-14	2.40E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237804	SLAPS LOADOUT	3/8/2021	Gross Alpha/Beta	Gross Alpha	1.31E-15	4.89E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237804	SLAPS LOADOUT	3/8/2021	Gross Alpha/Beta	Gross Beta	1.57E-14	1.55E-14	2.48E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237805	SLAPS LOADOUT	3/8/2021	Gross Alpha/Beta	Gross Alpha	2.67E-15	5.80E-15	1.08E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237805	SLAPS LOADOUT	3/8/2021	Gross Alpha/Beta	Gross Beta	2.34E-14	1.72E-14	2.63E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237806	SLAPS LOADOUT	3/8/2021	Gross Alpha/Beta	Gross Alpha	5.23E-15	6.85E-15	1.08E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237806	SLAPS LOADOUT	3/8/2021	Gross Alpha/Beta	Gross Beta	2.93E-14	1.78E-14	2.63E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237807	SLAPS LOADOUT	3/8/2021	Gross Alpha/Beta	Gross Alpha	4.97E-15	6.50E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237807	SLAPS LOADOUT	3/8/2021	Gross Alpha/Beta	Gross Beta	2.78E-14	1.69E-14	2.50E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237808	SLAPS LOADOUT	3/9/2021	Gross Alpha/Beta	Gross Alpha	3.47E-15	5.58E-15	9.51E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237808	SLAPS LOADOUT	3/9/2021	Gross Alpha/Beta	Gross Beta	3.25E-14	1.63E-14	2.32E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237809	SLAPS LOADOUT	3/9/2021	Gross Alpha/Beta	Gross Alpha	6.92E-15	6.89E-15	9.60E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237809	SLAPS LOADOUT	3/9/2021	Gross Alpha/Beta	Gross Beta	3.72E-14	1.69E-14	2.34E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237810	SLAPS LOADOUT	3/9/2021	Gross Alpha/Beta	Gross Alpha	8.45E-15	7.61E-15	1.01E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237810	SLAPS LOADOUT	3/9/2021	Gross Alpha/Beta	Gross Beta	4.06E-14	1.79E-14	2.45E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237811	SLAPS LOADOUT	3/9/2021	Gross Alpha/Beta	Gross Alpha	1.24E-15	4.03E-15	8.43E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237811	SLAPS LOADOUT	3/9/2021	Gross Alpha/Beta	Gross Beta	2.19E-14	1.60E-14	2.46E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237812	SLAPS LOADOUT	3/10/2021	Gross Alpha/Beta	Gross Alpha	2.37E-15	4.59E-15	8.35E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237812	SLAPS LOADOUT	3/10/2021	Gross Alpha/Beta	Gross Beta	2.02E-14	1.57E-14	2.43E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237813	SLAPS LOADOUT	3/10/2021	Gross Alpha/Beta	Gross Alpha	2.41E-15	4.68E-15	8.51E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237813	SLAPS LOADOUT	3/10/2021	Gross Alpha/Beta	Gross Beta	2.44E-14	1.64E-14	2.48E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237814	SLAPS LOADOUT	3/10/2021	Gross Alpha/Beta	Gross Alpha	2.39E-15	4.63E-15	8.43E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237814	SLAPS LOADOUT	3/10/2021	Gross Alpha/Beta	Gross Beta	1.18E-14	1.50E-14	2.46E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237815	SLAPS LOADOUT	3/11/2021	Gross Alpha/Beta	Gross Alpha	1.33E-16	4.61E-15	1.18E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237815	SLAPS LOADOUT	3/11/2021	Gross Alpha/Beta	Gross Beta	7.87E-15	1.99E-14	3.42E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237816	SLAPS LOADOUT	3/11/2021	Gross Alpha/Beta	Gross Alpha	5.00E-15	7.31E-15	1.19E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237816	SLAPS LOADOUT	3/11/2021	Gross Alpha/Beta	Gross Beta	3.20E-14	2.27E-14	3.47E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA237817	SLAPS LOADOUT	3/11/2021	Gross Alpha/Beta	Gross Alpha	6.13E-15	7.41E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237817	SLAPS LOADOUT	3/11/2021	Gross Alpha/Beta	Gross Beta	1.24E-14	1.92E-14	3.21E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237818	SLAPS LOADOUT	3/11/2021	Gross Alpha/Beta	Gross Alpha	-2.99E-15	9.04E-16	1.15E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237818	SLAPS LOADOUT	3/11/2021	Gross Alpha/Beta	Gross Beta	3.82E-14	2.26E-14	3.34E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237819	SLAPS LOADOUT	3/11/2021	Gross Alpha/Beta	Gross Alpha	1.71E-15	5.54E-15	1.16E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237819	SLAPS LOADOUT	3/11/2021	Gross Alpha/Beta	Gross Beta	-1.82E-15	1.86E-14	3.38E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237820	SLAPS LOADOUT	3/11/2021	Gross Alpha/Beta	Gross Alpha	3.33E-15	6.46E-15	1.18E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237820	SLAPS LOADOUT	3/11/2021	Gross Alpha/Beta	Gross Beta	2.41E-14	2.17E-14	3.42E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237821	SLAPS LOADOUT	3/15/2021	Gross Alpha/Beta	Gross Alpha	6.64E-15	6.97E-15	9.61E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237821	SLAPS LOADOUT	3/15/2021	Gross Alpha/Beta	Gross Beta	3.55E-14	1.93E-14	2.80E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237822	SLAPS LOADOUT	3/15/2021	Gross Alpha/Beta	Gross Alpha	1.39E-15	4.49E-15	9.41E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237822	SLAPS LOADOUT	3/15/2021	Gross Alpha/Beta	Gross Beta	2.79E-14	1.82E-14	2.74E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237823	SLAPS LOADOUT	3/15/2021	Gross Alpha/Beta	Gross Alpha	1.05E-16	3.65E-15	9.31E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237823	SLAPS LOADOUT	3/15/2021	Gross Alpha/Beta	Gross Beta	1.31E-14	1.65E-14	2.71E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237824	SLAPS LOADOUT	3/15/2021	Gross Alpha/Beta	Gross Alpha	1.05E-16	3.65E-15	9.31E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237824	SLAPS LOADOUT	3/15/2021	Gross Alpha/Beta	Gross Beta	3.36E-14	1.86E-14	2.71E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237825	SLAPS LOADOUT	3/15/2021	Gross Alpha/Beta	Gross Alpha	8.97E-15	7.65E-15	9.31E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237825	SLAPS LOADOUT	3/15/2021	Gross Alpha/Beta	Gross Beta	2.76E-14	1.80E-14	2.71E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237826	SLAPS LOADOUT	3/16/2021	Gross Alpha/Beta	Gross Alpha	1.42E-15	4.59E-15	9.61E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237826	SLAPS LOADOUT	3/16/2021	Gross Alpha/Beta	Gross Beta	1.14E-15	1.57E-14	2.80E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237827	SLAPS LOADOUT	3/16/2021	Gross Alpha/Beta	Gross Alpha	-2.22E-15	6.72E-16	8.51E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237827	SLAPS LOADOUT	3/16/2021	Gross Alpha/Beta	Gross Beta	1.74E-14	1.57E-14	2.48E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237828	SLAPS LOADOUT	3/16/2021	Gross Alpha/Beta	Gross Alpha	9.50E-17	3.28E-15	8.35E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237828	SLAPS LOADOUT	3/16/2021	Gross Alpha/Beta	Gross Beta	1.02E-14	1.47E-14	2.43E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237829	SLAPS LOADOUT	3/16/2021	Gross Alpha/Beta	Gross Alpha	1.22E-15	3.95E-15	8.28E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237829	SLAPS LOADOUT	3/16/2021	Gross Alpha/Beta	Gross Beta	1.24E-14	1.48E-14	2.41E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237830	SLAPS LOADOUT	3/16/2021	Gross Alpha/Beta	Gross Alpha	3.50E-15	5.13E-15	8.35E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237830	SLAPS LOADOUT	3/16/2021	Gross Alpha/Beta	Gross Beta	1.71E-14	1.54E-14	2.43E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237831	SLAPS LOADOUT	3/17/2021	Gross Alpha/Beta	Gross Alpha	2.62E-15	6.54E-15	1.27E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237831	SLAPS LOADOUT	3/17/2021	Gross Alpha/Beta	Gross Beta	9.74E-15	1.53E-14	2.57E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237832	SLAPS LOADOUT	3/17/2021	Gross Alpha/Beta	Gross Alpha	2.56E-15	6.37E-15	1.24E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237832	SLAPS LOADOUT	3/17/2021	Gross Alpha/Beta	Gross Beta	1.66E-14	1.59E-14	2.51E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237833	SLAPS LOADOUT	3/17/2021	Gross Alpha/Beta	Gross Alpha	2.62E-15	6.54E-15	1.27E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237833	SLAPS LOADOUT	3/17/2021	Gross Alpha/Beta	Gross Beta	2.44E-14	1.73E-14	2.57E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237834	SLAPS LOADOUT	3/17/2021	Gross Alpha/Beta	Gross Alpha	4.13E-15	7.11E-15	1.24E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237834	SLAPS LOADOUT	3/17/2021	Gross Alpha/Beta	Gross Beta	2.37E-14	1.68E-14	2.51E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237835	SLAPS LOADOUT	3/17/2021	Gross Alpha/Beta	Gross Alpha	1.06E-14	9.64E-15	1.26E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237835	SLAPS LOADOUT	3/17/2021	Gross Alpha/Beta	Gross Beta	3.43E-14	1.83E-14	2.54E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237836	SLAPS LOADOUT	3/17/2021	Gross Alpha/Beta	Gross Alpha	2.66E-15	6.62E-15	1.29E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237836	SLAPS LOADOUT	3/17/2021	Gross Alpha/Beta	Gross Beta	1.73E-14	1.65E-14	2.60E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237837	SLAPS LOADOUT	3/17/2021	Gross Alpha/Beta	Gross Alpha	1.07E-14	9.76E-15	1.27E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237837	SLAPS LOADOUT	3/17/2021	Gross Alpha/Beta	Gross Beta	1.70E-14	1.63E-14	2.57E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237838	SLAPS LOADOUT	3/22/2021	Gross Alpha/Beta	Gross Alpha	6.56E-15	6.65E-15	9.19E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA237838	SLAPS LOADOUT	3/22/2021	Gross Alpha/Beta	Gross Beta	1.99E-14	1.28E-14	1.86E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237839	SLAPS LOADOUT	3/22/2021	Gross Alpha/Beta	Gross Alpha	-4.50E-16	3.47E-15	9.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237839	SLAPS LOADOUT	3/22/2021	Gross Alpha/Beta	Gross Beta	1.11E-14	1.19E-14	1.91E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237840	SLAPS LOADOUT	3/22/2021	Gross Alpha/Beta	Gross Alpha	6.62E-15	6.71E-15	9.27E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237840	SLAPS LOADOUT	3/22/2021	Gross Alpha/Beta	Gross Beta	3.07E-14	1.42E-14	1.87E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237841	SLAPS LOADOUT	3/22/2021	Gross Alpha/Beta	Gross Alpha	7.42E-16	4.18E-15	9.36E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237841	SLAPS LOADOUT	3/22/2021	Gross Alpha/Beta	Gross Beta	3.94E-14	1.53E-14	1.89E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237842	SLAPS LOADOUT	3/22/2021	Gross Alpha/Beta	Gross Alpha	4.26E-15	5.82E-15	9.27E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237842	SLAPS LOADOUT	3/22/2021	Gross Alpha/Beta	Gross Beta	3.68E-14	1.49E-14	1.87E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237843	SLAPS LOADOUT	3/22/2021	Gross Alpha/Beta	Gross Alpha	9.14E-15	7.64E-15	9.45E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237843	SLAPS LOADOUT	3/22/2021	Gross Alpha/Beta	Gross Beta	4.44E-14	1.59E-14	1.91E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237844	SLAPS LOADOUT	3/22/2021	Gross Alpha/Beta	Gross Alpha	7.49E-16	4.22E-15	9.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237844	SLAPS LOADOUT	3/22/2021	Gross Alpha/Beta	Gross Beta	1.27E-14	1.21E-14	1.91E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237845	SLAPS LOADOUT	3/23/2021	Gross Alpha/Beta	Gross Alpha	5.39E-15	6.22E-15	9.19E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237845	SLAPS LOADOUT	3/23/2021	Gross Alpha/Beta	Gross Beta	1.68E-14	1.24E-14	1.86E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237846	SLAPS LOADOUT	3/23/2021	Gross Alpha/Beta	Gross Alpha	7.42E-16	4.18E-15	9.36E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237846	SLAPS LOADOUT	3/23/2021	Gross Alpha/Beta	Gross Beta	2.10E-14	1.31E-14	1.89E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237847	SLAPS LOADOUT	3/23/2021	Gross Alpha/Beta	Gross Alpha	7.49E-16	4.22E-15	9.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237847	SLAPS LOADOUT	3/23/2021	Gross Alpha/Beta	Gross Beta	1.81E-14	1.28E-14	1.91E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237848	SLAPS LOADOUT	3/24/2021	Gross Alpha/Beta	Gross Alpha	-4.45E-16	3.44E-15	9.36E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237848	SLAPS LOADOUT	3/24/2021	Gross Alpha/Beta	Gross Beta	1.10E-14	1.18E-14	1.89E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237849	SLAPS LOADOUT	3/24/2021	Gross Alpha/Beta	Gross Alpha	-4.37E-16	3.38E-15	9.19E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237849	SLAPS LOADOUT	3/24/2021	Gross Alpha/Beta	Gross Beta	2.89E-14	1.39E-14	1.86E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237850	SLAPS LOADOUT	3/10/2021	Gross Alpha/Beta	Gross Alpha	5.39E-15	6.22E-15	9.19E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237850	SLAPS LOADOUT	3/10/2021	Gross Alpha/Beta	Gross Beta	1.61E-14	1.23E-14	1.86E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237851	SLAPS LOADOUT	3/24/2021	Gross Alpha/Beta	Gross Alpha	7.22E-16	4.07E-15	9.10E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237851	SLAPS LOADOUT	3/24/2021	Gross Alpha/Beta	Gross Beta	-4.98E-16	9.88E-15	1.84E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237852	SLAPS LOADOUT	3/24/2021	Gross Alpha/Beta	Gross Alpha	-4.63E-16	3.58E-15	9.73E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237852	SLAPS LOADOUT	3/24/2021	Gross Alpha/Beta	Gross Beta	2.66E-15	1.10E-14	1.97E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237853	SLAPS LOADOUT	3/24/2021	Gross Alpha/Beta	Gross Alpha	8.03E-16	4.52E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237853	SLAPS LOADOUT	3/24/2021	Gross Alpha/Beta	Gross Beta	-5.54E-16	1.10E-14	2.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237854	SLAPS LOADOUT	3/24/2021	Gross Alpha/Beta	Gross Alpha	2.11E-15	5.26E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237854	SLAPS LOADOUT	3/24/2021	Gross Alpha/Beta	Gross Beta	3.64E-15	1.17E-14	2.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237855	SLAPS LOADOUT	3/24/2021	Gross Alpha/Beta	Gross Alpha	2.11E-15	5.26E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237855	SLAPS LOADOUT	3/24/2021	Gross Alpha/Beta	Gross Beta	1.54E-14	1.33E-14	2.07E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237856	SLAPS LOADOUT	3/25/2021	Gross Alpha/Beta	Gross Alpha	7.71E-16	4.35E-15	9.73E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237856	SLAPS LOADOUT	3/25/2021	Gross Alpha/Beta	Gross Beta	1.62E-14	1.29E-14	1.97E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237857	SLAPS LOADOUT	3/25/2021	Gross Alpha/Beta	Gross Alpha	-1.97E-15	3.00E-15	1.13E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237857	SLAPS LOADOUT	3/25/2021	Gross Alpha/Beta	Gross Beta	1.60E-14	1.46E-14	2.28E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237858	SLAPS LOADOUT	3/25/2021	Gross Alpha/Beta	Gross Alpha	-1.90E-15	2.90E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237858	SLAPS LOADOUT	3/25/2021	Gross Alpha/Beta	Gross Beta	1.46E-14	1.40E-14	2.20E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237859	SLAPS LOADOUT	3/25/2021	Gross Alpha/Beta	Gross Alpha	-1.92E-15	2.94E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237859	SLAPS LOADOUT	3/25/2021	Gross Alpha/Beta	Gross Beta	1.03E-14	1.35E-14	2.23E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA237860	SLAPS LOADOUT	3/29/2021	Gross Alpha/Beta	Gross Alpha	1.91E-15	4.77E-15	9.27E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237860	SLAPS LOADOUT	3/29/2021	Gross Alpha/Beta	Gross Beta	2.61E-14	1.36E-14	1.87E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237861	SLAPS LOADOUT	3/29/2021	Gross Alpha/Beta	Gross Alpha	7.49E-16	4.22E-15	9.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237861	SLAPS LOADOUT	3/29/2021	Gross Alpha/Beta	Gross Beta	2.89E-14	1.42E-14	1.91E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237862	SLAPS LOADOUT	3/29/2021	Gross Alpha/Beta	Gross Alpha	1.89E-15	4.72E-15	9.19E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237862	SLAPS LOADOUT	3/29/2021	Gross Alpha/Beta	Gross Beta	2.36E-14	1.32E-14	1.86E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237863	SLAPS LOADOUT	3/29/2021	Gross Alpha/Beta	Gross Alpha	-1.59E-15	2.42E-15	9.10E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237863	SLAPS LOADOUT	3/29/2021	Gross Alpha/Beta	Gross Beta	1.59E-14	1.22E-14	1.84E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237864	SLAPS LOADOUT	3/30/2021	Gross Alpha/Beta	Gross Alpha	-4.41E-16	3.41E-15	9.27E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237864	SLAPS LOADOUT	3/30/2021	Gross Alpha/Beta	Gross Beta	3.14E-14	1.43E-14	1.87E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237865	SLAPS LOADOUT	3/30/2021	Gross Alpha/Beta	Gross Alpha	6.62E-15	6.71E-15	9.27E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237865	SLAPS LOADOUT	3/30/2021	Gross Alpha/Beta	Gross Beta	2.76E-14	1.38E-14	1.87E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237866	SLAPS LOADOUT	3/30/2021	Gross Alpha/Beta	Gross Alpha	5.44E-15	6.28E-15	9.27E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237866	SLAPS LOADOUT	3/30/2021	Gross Alpha/Beta	Gross Beta	2.84E-14	1.39E-14	1.87E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237867	SLAPS LOADOUT	3/30/2021	Gross Alpha/Beta	Gross Alpha	-4.37E-16	3.38E-15	9.19E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237867	SLAPS LOADOUT	3/30/2021	Gross Alpha/Beta	Gross Beta	4.40E-14	1.56E-14	1.86E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237868	SLAPS LOADOUT	3/31/2021	Gross Alpha/Beta	Gross Alpha	-4.25E-16	3.29E-15	8.94E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237868	SLAPS LOADOUT	3/31/2021	Gross Alpha/Beta	Gross Beta	1.42E-14	1.18E-14	1.81E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237869	SLAPS LOADOUT	3/31/2021	Gross Alpha/Beta	Gross Alpha	4.11E-15	5.61E-15	8.94E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237869	SLAPS LOADOUT	3/31/2021	Gross Alpha/Beta	Gross Beta	2.00E-14	1.25E-14	1.81E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237870	SLAPS LOADOUT	3/31/2021	Gross Alpha/Beta	Gross Alpha	7.35E-16	4.14E-15	9.27E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237870	SLAPS LOADOUT	3/31/2021	Gross Alpha/Beta	Gross Beta	2.54E-14	1.35E-14	1.87E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237871	SLAPS LOADOUT	3/31/2021	Gross Alpha/Beta	Gross Alpha	3.61E-15	5.08E-15	8.10E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237871	SLAPS LOADOUT	3/31/2021	Gross Alpha/Beta	Gross Beta	3.23E-15	1.38E-14	2.41E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237872	SLAPS LOADOUT	3/31/2021	Gross Alpha/Beta	Gross Alpha	5.86E-16	6.00E-16	8.10E-16	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237872	SLAPS LOADOUT	3/31/2021	Gross Alpha/Beta	Gross Beta	1.08E-15	1.46E-15	2.41E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237873	SLAPS LOADOUT	3/31/2021	Gross Alpha/Beta	Gross Alpha	1.37E-15	3.98E-15	8.18E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237873	SLAPS LOADOUT	3/31/2021	Gross Alpha/Beta	Gross Beta	1.71E-14	1.54E-14	2.43E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237874	SLAPS LOADOUT	3/31/2021	Gross Alpha/Beta	Gross Alpha	6.99E-15	6.41E-15	8.10E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237874	SLAPS LOADOUT	3/31/2021	Gross Alpha/Beta	Gross Beta	1.99E-14	1.56E-14	2.41E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237875	SLAPS LOADOUT	4/1/2021	Gross Alpha/Beta	Gross Alpha	-8.83E-16	2.31E-15	8.03E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237875	SLAPS LOADOUT	4/1/2021	Gross Alpha/Beta	Gross Beta	1.07E-14	1.45E-14	2.39E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237876	SLAPS LOADOUT	4/1/2021	Gross Alpha/Beta	Gross Alpha	2.51E-15	4.59E-15	8.18E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237876	SLAPS LOADOUT	4/1/2021	Gross Alpha/Beta	Gross Beta	1.32E-14	1.50E-14	2.43E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237877	SLAPS LOADOUT	4/1/2021	Gross Alpha/Beta	Gross Alpha	-8.99E-16	2.36E-15	8.18E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237877	SLAPS LOADOUT	4/1/2021	Gross Alpha/Beta	Gross Beta	2.63E-14	1.63E-14	2.43E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237878	SLAPS LOADOUT	4/1/2021	Gross Alpha/Beta	Gross Alpha	2.61E-16	3.61E-15	9.02E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237878	SLAPS LOADOUT	4/1/2021	Gross Alpha/Beta	Gross Beta	3.66E-14	1.88E-14	2.68E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237879	SLAPS LOADOUT	4/5/2021	Gross Alpha/Beta	Gross Alpha	6.15E-15	6.29E-15	8.50E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237879	SLAPS LOADOUT	4/5/2021	Gross Alpha/Beta	Gross Beta	3.60E-14	1.78E-14	2.53E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237880	SLAPS LOADOUT	4/5/2021	Gross Alpha/Beta	Gross Alpha	2.51E-15	4.59E-15	8.18E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237880	SLAPS LOADOUT	4/5/2021	Gross Alpha/Beta	Gross Beta	2.55E-14	1.63E-14	2.43E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237881	SLAPS LOADOUT	4/5/2021	Gross Alpha/Beta	Gross Alpha	7.05E-15	6.47E-15	8.18E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA237881	SLAPS LOADOUT	4/5/2021	Gross Alpha/Beta	Gross Beta	3.77E-14	1.75E-14	2.43E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237882	SLAPS LOADOUT	4/5/2021	Gross Alpha/Beta	Gross Alpha	1.04E-14	7.52E-15	8.10E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237882	SLAPS LOADOUT	4/5/2021	Gross Alpha/Beta	Gross Beta	1.46E-14	1.50E-14	2.41E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237883	SLAPS LOADOUT	4/6/2021	Gross Alpha/Beta	Gross Alpha	7.19E-15	6.60E-15	8.33E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237883	SLAPS LOADOUT	4/6/2021	Gross Alpha/Beta	Gross Beta	3.46E-14	1.74E-14	2.48E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA237884	SLAPS LOADOUT	4/6/2021	Gross Alpha/Beta	Gross Alpha	2.56E-15	4.68E-15	8.33E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237884	SLAPS LOADOUT	4/6/2021	Gross Alpha/Beta	Gross Beta	2.21E-14	1.62E-14	2.48E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237885	SLAPS LOADOUT	4/6/2021	Gross Alpha/Beta	Gross Alpha	6.03E-15	6.17E-15	8.33E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237885	SLAPS LOADOUT	4/6/2021	Gross Alpha/Beta	Gross Beta	1.04E-14	1.49E-14	2.48E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237886	SLAPS LOADOUT	4/6/2021	Gross Alpha/Beta	Gross Alpha	2.80E-15	5.11E-15	9.12E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237886	SLAPS LOADOUT	4/6/2021	Gross Alpha/Beta	Gross Beta	1.82E-14	1.71E-14	2.71E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237887	SLAPS LOADOUT	4/7/2021	Gross Alpha/Beta	Gross Alpha	3.58E-15	5.03E-15	8.03E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237887	SLAPS LOADOUT	4/7/2021	Gross Alpha/Beta	Gross Beta	2.05E-14	1.55E-14	2.39E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237888	SLAPS LOADOUT	4/7/2021	Gross Alpha/Beta	Gross Alpha	7.05E-15	6.47E-15	8.18E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA237888	SLAPS LOADOUT	4/7/2021	Gross Alpha/Beta	Gross Beta	4.54E-14	1.82E-14	2.43E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA237889	SLAPS LOADOUT	4/7/2021	Gross Alpha/Beta	Gross Alpha	2.39E-16	3.30E-15	8.26E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237889	SLAPS LOADOUT	4/7/2021	Gross Alpha/Beta	Gross Beta	1.03E-14	1.48E-14	2.46E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237890	SLAPS LOADOUT	4/8/2021	Gross Alpha/Beta	Gross Alpha	5.81E-15	5.94E-15	8.03E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA237890	SLAPS LOADOUT	4/8/2021	Gross Alpha/Beta	Gross Beta	1.22E-14	1.46E-14	2.39E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240728	SLAPS LOADOUT	4/8/2021	Gross Alpha/Beta	Gross Alpha	-1.88E-15	6.14E-16	8.07E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240728	SLAPS LOADOUT	4/8/2021	Gross Alpha/Beta	Gross Beta	9.02E-15	1.13E-14	1.85E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240729	SLAPS LOADOUT	4/8/2021	Gross Alpha/Beta	Gross Alpha	3.32E-15	5.65E-15	9.77E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240729	SLAPS LOADOUT	4/8/2021	Gross Alpha/Beta	Gross Beta	1.00E-14	1.35E-14	2.23E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240730	SLAPS LOADOUT	4/8/2021	Gross Alpha/Beta	Gross Alpha	4.25E-16	3.26E-15	7.92E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240730	SLAPS LOADOUT	4/8/2021	Gross Alpha/Beta	Gross Beta	-2.14E-15	9.48E-15	1.81E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240731	SLAPS LOADOUT	4/12/2021	Gross Alpha/Beta	Gross Alpha	1.59E-15	4.05E-15	8.07E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240731	SLAPS LOADOUT	4/12/2021	Gross Alpha/Beta	Gross Beta	1.43E-14	1.20E-14	1.85E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240732	SLAPS LOADOUT	4/12/2021	Gross Alpha/Beta	Gross Alpha	6.33E-15	7.14E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240732	SLAPS LOADOUT	4/12/2021	Gross Alpha/Beta	Gross Beta	2.89E-15	1.29E-14	2.31E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240733	SLAPS LOADOUT	4/12/2021	Gross Alpha/Beta	Gross Alpha	3.48E-15	5.91E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240733	SLAPS LOADOUT	4/12/2021	Gross Alpha/Beta	Gross Beta	2.28E-14	1.58E-14	2.34E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240734	SLAPS LOADOUT	4/12/2021	Gross Alpha/Beta	Gross Alpha	3.56E-15	6.05E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240734	SLAPS LOADOUT	4/12/2021	Gross Alpha/Beta	Gross Beta	2.53E-14	1.64E-14	2.39E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240735	SLAPS LOADOUT	4/12/2021	Gross Alpha/Beta	Gross Alpha	3.93E-15	5.25E-15	8.14E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240735	SLAPS LOADOUT	4/12/2021	Gross Alpha/Beta	Gross Beta	1.14E-14	1.17E-14	1.86E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240736	SLAPS LOADOUT	4/12/2021	Gross Alpha/Beta	Gross Alpha	4.37E-16	3.35E-15	8.14E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240736	SLAPS LOADOUT	4/12/2021	Gross Alpha/Beta	Gross Beta	2.04E-14	1.29E-14	1.86E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240737	SLAPS LOADOUT	4/12/2021	Gross Alpha/Beta	Gross Alpha	-7.28E-16	2.41E-15	8.14E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240737	SLAPS LOADOUT	4/12/2021	Gross Alpha/Beta	Gross Beta	9.11E-15	1.14E-14	1.86E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240738	SLAPS LOADOUT	4/13/2021	Gross Alpha/Beta	Gross Alpha	7.50E-15	6.70E-15	8.22E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240738	SLAPS LOADOUT	4/13/2021	Gross Alpha/Beta	Gross Beta	1.45E-14	1.22E-14	1.88E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240739	SLAPS LOADOUT	4/13/2021	Gross Alpha/Beta	Gross Alpha	3.93E-15	5.25E-15	8.14E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240739	SLAPS LOADOUT	4/13/2021	Gross Alpha/Beta	Gross Beta	6.09E-15	1.10E-14	1.86E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA240740	SLAPS LOADOUT	4/13/2021	Gross Alpha/Beta	Gross Alpha	1.59E-15	4.05E-15	8.07E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240740	SLAPS LOADOUT	4/13/2021	Gross Alpha/Beta	Gross Beta	1.28E-14	1.18E-14	1.85E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240741	SLAPS LOADOUT	4/13/2021	Gross Alpha/Beta	Gross Alpha	1.59E-15	4.05E-15	8.07E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240741	SLAPS LOADOUT	4/13/2021	Gross Alpha/Beta	Gross Beta	9.77E-15	1.14E-14	1.85E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240742	SLAPS LOADOUT	4/14/2021	Gross Alpha/Beta	Gross Alpha	2.09E-15	5.31E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240742	SLAPS LOADOUT	4/14/2021	Gross Alpha/Beta	Gross Beta	1.38E-14	1.51E-14	2.42E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240743	SLAPS LOADOUT	4/14/2021	Gross Alpha/Beta	Gross Alpha	8.15E-15	8.08E-15	1.06E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240743	SLAPS LOADOUT	4/14/2021	Gross Alpha/Beta	Gross Beta	1.48E-14	1.52E-14	2.42E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240744	SLAPS LOADOUT	4/14/2021	Gross Alpha/Beta	Gross Alpha	5.12E-15	6.84E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240744	SLAPS LOADOUT	4/14/2021	Gross Alpha/Beta	Gross Beta	5.97E-15	1.40E-14	2.42E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240745	SLAPS LOADOUT	4/14/2021	Gross Alpha/Beta	Gross Alpha	-1.93E-15	6.32E-16	8.30E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240745	SLAPS LOADOUT	4/14/2021	Gross Alpha/Beta	Gross Beta	5.44E-15	1.11E-14	1.90E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240746	SLAPS LOADOUT	4/14/2021	Gross Alpha/Beta	Gross Alpha	9.76E-15	7.43E-15	8.14E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240746	SLAPS LOADOUT	4/14/2021	Gross Alpha/Beta	Gross Beta	2.12E-14	1.29E-14	1.86E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240747	SLAPS LOADOUT	4/14/2021	Gross Alpha/Beta	Gross Alpha	2.74E-15	4.66E-15	8.07E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240747	SLAPS LOADOUT	4/14/2021	Gross Alpha/Beta	Gross Beta	1.28E-14	1.18E-14	1.85E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240748	SLAPS LOADOUT	4/14/2021	Gross Alpha/Beta	Gross Alpha	1.45E-15	3.95E-15	7.98E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240748	SLAPS LOADOUT	4/14/2021	Gross Alpha/Beta	Gross Beta	1.34E-14	1.43E-14	2.30E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240749	SLAPS LOADOUT	4/15/2021	Gross Alpha/Beta	Gross Alpha	1.45E-15	3.95E-15	7.98E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240749	SLAPS LOADOUT	4/15/2021	Gross Alpha/Beta	Gross Beta	1.27E-15	1.29E-14	2.30E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240750	SLAPS LOADOUT	4/15/2021	Gross Alpha/Beta	Gross Alpha	-1.94E-15	6.20E-16	8.06E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240750	SLAPS LOADOUT	4/15/2021	Gross Alpha/Beta	Gross Beta	1.66E-14	1.47E-14	2.32E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240751	SLAPS LOADOUT	4/15/2021	Gross Alpha/Beta	Gross Alpha	2.58E-15	4.54E-15	7.98E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240751	SLAPS LOADOUT	4/15/2021	Gross Alpha/Beta	Gross Beta	-4.05E-15	1.22E-14	2.30E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240752	SLAPS LOADOUT	4/19/2021	Gross Alpha/Beta	Gross Alpha	3.70E-15	5.07E-15	7.98E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240752	SLAPS LOADOUT	4/19/2021	Gross Alpha/Beta	Gross Beta	9.62E-15	1.38E-14	2.30E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240753	SLAPS LOADOUT	4/19/2021	Gross Alpha/Beta	Gross Alpha	4.17E-16	4.12E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240753	SLAPS LOADOUT	4/19/2021	Gross Alpha/Beta	Gross Beta	2.77E-14	1.93E-14	2.92E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240754	SLAPS LOADOUT	4/19/2021	Gross Alpha/Beta	Gross Alpha	9.10E-15	8.24E-15	1.03E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240754	SLAPS LOADOUT	4/19/2021	Gross Alpha/Beta	Gross Beta	2.51E-14	1.92E-14	2.95E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240755	SLAPS LOADOUT	4/20/2021	Gross Alpha/Beta	Gross Alpha	6.70E-15	6.75E-15	8.98E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240755	SLAPS LOADOUT	4/20/2021	Gross Alpha/Beta	Gross Beta	2.11E-14	1.67E-14	2.59E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240756	SLAPS LOADOUT	4/20/2021	Gross Alpha/Beta	Gross Alpha	-2.16E-15	6.92E-16	8.98E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240756	SLAPS LOADOUT	4/20/2021	Gross Alpha/Beta	Gross Beta	1.25E-14	1.58E-14	2.59E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240757	SLAPS LOADOUT	4/20/2021	Gross Alpha/Beta	Gross Alpha	1.64E-15	4.44E-15	8.98E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240757	SLAPS LOADOUT	4/20/2021	Gross Alpha/Beta	Gross Beta	1.77E-14	1.63E-14	2.59E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240758	SLAPS LOADOUT	4/21/2021	Gross Alpha/Beta	Gross Alpha	1.48E-15	4.02E-15	8.13E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240758	SLAPS LOADOUT	4/21/2021	Gross Alpha/Beta	Gross Beta	2.60E-14	1.59E-14	2.34E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240759	SLAPS LOADOUT	4/21/2021	Gross Alpha/Beta	Gross Alpha	3.81E-15	5.22E-15	8.21E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240759	SLAPS LOADOUT	4/21/2021	Gross Alpha/Beta	Gross Beta	1.30E-14	1.46E-14	2.36E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240760	SLAPS LOADOUT	4/21/2021	Gross Alpha/Beta	Gross Alpha	2.63E-15	4.63E-15	8.13E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240760	SLAPS LOADOUT	4/21/2021	Gross Alpha/Beta	Gross Beta	2.30E-14	1.55E-14	2.34E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240761	SLAPS LOADOUT	4/21/2021	Gross Alpha/Beta	Gross Alpha	4.92E-15	5.66E-15	8.13E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA240761	SLAPS LOADOUT	4/21/2021	Gross Alpha/Beta	Gross Beta	1.83E-14	1.50E-14	2.34E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240762	SLAPS LOADOUT	4/21/2021	Gross Alpha/Beta	Gross Alpha	3.34E-16	3.30E-15	8.13E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240762	SLAPS LOADOUT	4/21/2021	Gross Alpha/Beta	Gross Beta	1.68E-14	1.49E-14	2.34E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240763	SLAPS LOADOUT	4/21/2021	Gross Alpha/Beta	Gross Alpha	3.34E-16	3.30E-15	8.13E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240763	SLAPS LOADOUT	4/21/2021	Gross Alpha/Beta	Gross Beta	1.29E-14	1.44E-14	2.34E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240764	SLAPS LOADOUT	4/21/2021	Gross Alpha/Beta	Gross Alpha	-2.19E-15	6.99E-16	9.08E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240764	SLAPS LOADOUT	4/21/2021	Gross Alpha/Beta	Gross Beta	3.34E-14	1.82E-14	2.61E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240765	SLAPS LOADOUT	4/22/2021	Gross Alpha/Beta	Gross Alpha	1.47E-15	3.98E-15	8.06E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240765	SLAPS LOADOUT	4/22/2021	Gross Alpha/Beta	Gross Beta	1.43E-14	1.45E-14	2.32E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240766	SLAPS LOADOUT	4/22/2021	Gross Alpha/Beta	Gross Alpha	1.16E-14	7.86E-15	7.98E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240766	SLAPS LOADOUT	4/22/2021	Gross Alpha/Beta	Gross Beta	4.68E-14	1.77E-14	2.30E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240767	SLAPS LOADOUT	4/22/2021	Gross Alpha/Beta	Gross Alpha	4.83E-15	5.56E-15	7.98E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240767	SLAPS LOADOUT	4/22/2021	Gross Alpha/Beta	Gross Beta	2.48E-14	1.55E-14	2.30E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240768	SLAPS LOADOUT	4/26/2021	Gross Alpha/Beta	Gross Alpha	1.26E-14	9.33E-15	9.81E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240768	SLAPS LOADOUT	4/26/2021	Gross Alpha/Beta	Gross Beta	4.54E-14	2.13E-14	2.94E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240769	SLAPS LOADOUT	4/26/2021	Gross Alpha/Beta	Gross Alpha	6.50E-16	3.20E-15	7.47E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240769	SLAPS LOADOUT	4/26/2021	Gross Alpha/Beta	Gross Beta	3.00E-14	1.58E-14	2.24E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240770	SLAPS LOADOUT	4/26/2021	Gross Alpha/Beta	Gross Alpha	6.50E-16	3.20E-15	7.47E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240770	SLAPS LOADOUT	4/26/2021	Gross Alpha/Beta	Gross Beta	3.08E-14	1.58E-14	2.24E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240771	SLAPS LOADOUT	4/26/2021	Gross Alpha/Beta	Gross Alpha	6.28E-15	6.00E-15	7.54E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240771	SLAPS LOADOUT	4/26/2021	Gross Alpha/Beta	Gross Beta	3.94E-14	1.68E-14	2.26E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240772	SLAPS LOADOUT	4/26/2021	Gross Alpha/Beta	Gross Alpha	9.40E-15	6.97E-15	7.34E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240772	SLAPS LOADOUT	4/26/2021	Gross Alpha/Beta	Gross Beta	2.14E-14	1.46E-14	2.20E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240773	SLAPS LOADOUT	4/26/2021	Gross Alpha/Beta	Gross Alpha	8.30E-15	6.62E-15	7.34E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240773	SLAPS LOADOUT	4/26/2021	Gross Alpha/Beta	Gross Beta	3.24E-14	1.58E-14	2.20E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240774	SLAPS LOADOUT	4/26/2021	Gross Alpha/Beta	Gross Alpha	2.91E-15	4.54E-15	7.54E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240774	SLAPS LOADOUT	4/26/2021	Gross Alpha/Beta	Gross Beta	3.56E-14	1.65E-14	2.26E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240775	SLAPS LOADOUT	4/27/2021	Gross Alpha/Beta	Gross Alpha	4.11E-15	5.17E-15	7.68E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240775	SLAPS LOADOUT	4/27/2021	Gross Alpha/Beta	Gross Beta	3.55E-14	1.67E-14	2.31E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240776	SLAPS LOADOUT	4/27/2021	Gross Alpha/Beta	Gross Alpha	8.08E-15	6.99E-15	8.23E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240776	SLAPS LOADOUT	4/27/2021	Gross Alpha/Beta	Gross Beta	3.14E-14	1.72E-14	2.47E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240777	SLAPS LOADOUT	4/27/2021	Gross Alpha/Beta	Gross Alpha	3.20E-15	5.00E-15	8.31E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240777	SLAPS LOADOUT	4/27/2021	Gross Alpha/Beta	Gross Beta	4.01E-14	1.82E-14	2.49E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240778	SLAPS LOADOUT	4/28/2021	Gross Alpha/Beta	Gross Alpha	4.03E-15	5.07E-15	7.54E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240778	SLAPS LOADOUT	4/28/2021	Gross Alpha/Beta	Gross Beta	3.79E-14	1.67E-14	2.26E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240779	SLAPS LOADOUT	4/28/2021	Gross Alpha/Beta	Gross Alpha	8.53E-15	6.80E-15	7.54E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240779	SLAPS LOADOUT	4/28/2021	Gross Alpha/Beta	Gross Beta	3.11E-14	1.60E-14	2.26E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240780	SLAPS LOADOUT	4/29/2021	Gross Alpha/Beta	Gross Alpha	6.56E-16	3.23E-15	7.54E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240780	SLAPS LOADOUT	4/29/2021	Gross Alpha/Beta	Gross Beta	1.82E-14	1.46E-14	2.26E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240781	SLAPS LOADOUT	4/29/2021	Gross Alpha/Beta	Gross Alpha	1.19E-14	7.86E-15	7.54E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240781	SLAPS LOADOUT	4/29/2021	Gross Alpha/Beta	Gross Beta	1.66E-14	1.44E-14	2.26E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240782	SLAPS LOADOUT	4/29/2021	Gross Alpha/Beta	Gross Alpha	4.11E-15	5.17E-15	7.68E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240782	SLAPS LOADOUT	4/29/2021	Gross Alpha/Beta	Gross Beta	2.24E-14	1.53E-14	2.31E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA240783	SLAPS LOADOUT	5/3/2021	Gross Alpha/Beta	Gross Alpha	7.16E-16	3.52E-15	8.23E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240783	SLAPS LOADOUT	5/3/2021	Gross Alpha/Beta	Gross Beta	1.82E-14	1.57E-14	2.47E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240784	SLAPS LOADOUT	5/3/2021	Gross Alpha/Beta	Gross Alpha	4.19E-15	6.54E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240784	SLAPS LOADOUT	5/3/2021	Gross Alpha/Beta	Gross Beta	2.62E-14	2.10E-14	3.26E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240785	SLAPS LOADOUT	5/3/2021	Gross Alpha/Beta	Gross Alpha	7.09E-16	3.49E-15	8.15E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240785	SLAPS LOADOUT	5/3/2021	Gross Alpha/Beta	Gross Beta	-4.99E-15	1.29E-14	2.44E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240786	SLAPS LOADOUT	5/3/2021	Gross Alpha/Beta	Gross Alpha	1.92E-15	4.25E-15	8.15E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240786	SLAPS LOADOUT	5/3/2021	Gross Alpha/Beta	Gross Beta	1.63E-14	1.54E-14	2.44E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240787	SLAPS LOADOUT	5/3/2021	Gross Alpha/Beta	Gross Alpha	6.79E-15	6.47E-15	8.15E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240787	SLAPS LOADOUT	5/3/2021	Gross Alpha/Beta	Gross Beta	2.70E-14	1.66E-14	2.44E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240788	SLAPS LOADOUT	5/3/2021	Gross Alpha/Beta	Gross Alpha	5.73E-16	5.09E-15	1.13E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240788	SLAPS LOADOUT	5/3/2021	Gross Alpha/Beta	Gross Beta	6.79E-15	1.49E-14	2.54E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240789	SLAPS LOADOUT	5/3/2021	Gross Alpha/Beta	Gross Alpha	3.04E-15	6.14E-15	1.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240789	SLAPS LOADOUT	5/3/2021	Gross Alpha/Beta	Gross Beta	5.11E-15	1.45E-14	2.51E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240790	SLAPS LOADOUT	5/4/2021	Gross Alpha/Beta	Gross Alpha	-6.71E-16	4.39E-15	1.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240790	SLAPS LOADOUT	5/4/2021	Gross Alpha/Beta	Gross Beta	1.96E-14	1.61E-14	2.51E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240791	SLAPS LOADOUT	5/4/2021	Gross Alpha/Beta	Gross Alpha	1.81E-15	5.62E-15	1.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240791	SLAPS LOADOUT	5/4/2021	Gross Alpha/Beta	Gross Beta	3.09E-14	1.73E-14	2.51E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240792	SLAPS LOADOUT	5/5/2021	Gross Alpha/Beta	Gross Alpha	5.46E-16	4.85E-15	1.08E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240792	SLAPS LOADOUT	5/5/2021	Gross Alpha/Beta	Gross Beta	1.42E-14	1.50E-14	2.41E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240793	SLAPS LOADOUT	5/5/2021	Gross Alpha/Beta	Gross Alpha	7.69E-15	7.61E-15	1.08E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240793	SLAPS LOADOUT	5/5/2021	Gross Alpha/Beta	Gross Beta	2.82E-14	1.65E-14	2.41E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240794	SLAPS LOADOUT	5/5/2021	Gross Alpha/Beta	Gross Alpha	2.93E-15	5.91E-15	1.08E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240794	SLAPS LOADOUT	5/5/2021	Gross Alpha/Beta	Gross Beta	2.28E-14	1.59E-14	2.41E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240795	SLAPS LOADOUT	5/6/2021	Gross Alpha/Beta	Gross Alpha	1.27E-14	9.18E-15	1.10E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240795	SLAPS LOADOUT	5/6/2021	Gross Alpha/Beta	Gross Beta	3.27E-14	1.72E-14	2.46E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240796	SLAPS LOADOUT	5/6/2021	Gross Alpha/Beta	Gross Alpha	5.56E-16	4.94E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240796	SLAPS LOADOUT	5/6/2021	Gross Alpha/Beta	Gross Beta	3.03E-14	1.70E-14	2.46E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240797	SLAPS LOADOUT	5/6/2021	Gross Alpha/Beta	Gross Alpha	3.89E-15	6.03E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240797	SLAPS LOADOUT	5/6/2021	Gross Alpha/Beta	Gross Beta	3.10E-14	1.60E-14	2.28E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240798	SLAPS LOADOUT	5/10/2021	Gross Alpha/Beta	Gross Alpha	1.77E-15	5.51E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240798	SLAPS LOADOUT	5/10/2021	Gross Alpha/Beta	Gross Beta	9.75E-15	1.48E-14	2.46E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240799	SLAPS LOADOUT	5/10/2021	Gross Alpha/Beta	Gross Alpha	9.14E-15	8.22E-15	1.11E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240799	SLAPS LOADOUT	5/10/2021	Gross Alpha/Beta	Gross Beta	3.14E-14	1.72E-14	2.49E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240800	SLAPS LOADOUT	5/10/2021	Gross Alpha/Beta	Gross Alpha	-6.58E-16	4.31E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240800	SLAPS LOADOUT	5/10/2021	Gross Alpha/Beta	Gross Beta	1.69E-14	1.56E-14	2.46E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240801	SLAPS LOADOUT	5/11/2021	Gross Alpha/Beta	Gross Alpha	5.41E-15	6.94E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240801	SLAPS LOADOUT	5/11/2021	Gross Alpha/Beta	Gross Beta	2.32E-14	1.62E-14	2.46E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240802	SLAPS LOADOUT	5/11/2021	Gross Alpha/Beta	Gross Alpha	4.20E-15	6.50E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240802	SLAPS LOADOUT	5/11/2021	Gross Alpha/Beta	Gross Beta	1.61E-14	1.55E-14	2.46E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240803	SLAPS LOADOUT	5/12/2021	Gross Alpha/Beta	Gross Alpha	5.75E-15	7.38E-15	1.16E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240803	SLAPS LOADOUT	5/12/2021	Gross Alpha/Beta	Gross Beta	1.04E-14	1.57E-14	2.62E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240804	SLAPS LOADOUT	5/12/2021	Gross Alpha/Beta	Gross Alpha	5.56E-16	4.94E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA240804	SLAPS LOADOUT	5/12/2021	Gross Alpha/Beta	Gross Beta	2.00E-14	1.59E-14	2.46E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240805	SLAPS LOADOUT	5/12/2021	Gross Alpha/Beta	Gross Alpha	4.51E-15	6.98E-15	1.18E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240805	SLAPS LOADOUT	5/12/2021	Gross Alpha/Beta	Gross Beta	1.22E-14	1.60E-14	2.64E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240806	SLAPS LOADOUT	5/12/2021	Gross Alpha/Beta	Gross Alpha	1.90E-15	5.92E-15	1.18E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240806	SLAPS LOADOUT	5/12/2021	Gross Alpha/Beta	Gross Beta	1.22E-14	1.60E-14	2.64E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240807	SLAPS LOADOUT	5/12/2021	Gross Alpha/Beta	Gross Alpha	4.24E-15	6.56E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240807	SLAPS LOADOUT	5/12/2021	Gross Alpha/Beta	Gross Beta	2.74E-14	1.68E-14	2.49E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240808	SLAPS LOADOUT	5/12/2021	Gross Alpha/Beta	Gross Alpha	1.98E-15	4.62E-15	9.00E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240808	SLAPS LOADOUT	5/12/2021	Gross Alpha/Beta	Gross Beta	1.68E-14	1.19E-14	1.74E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240809	SLAPS LOADOUT	5/13/2021	Gross Alpha/Beta	Gross Alpha	1.93E-15	4.50E-15	8.75E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240809	SLAPS LOADOUT	5/13/2021	Gross Alpha/Beta	Gross Beta	1.10E-14	1.08E-14	1.69E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240810	SLAPS LOADOUT	5/13/2021	Gross Alpha/Beta	Gross Alpha	1.08E-14	8.11E-15	8.67E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240810	SLAPS LOADOUT	5/13/2021	Gross Alpha/Beta	Gross Beta	2.14E-14	1.21E-14	1.68E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240811	SLAPS LOADOUT	5/13/2021	Gross Alpha/Beta	Gross Alpha	5.78E-15	6.34E-15	8.75E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240811	SLAPS LOADOUT	5/13/2021	Gross Alpha/Beta	Gross Beta	2.46E-14	1.27E-14	1.69E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240812	SLAPS LOADOUT	5/17/2021	Gross Alpha/Beta	Gross Alpha	6.60E-16	3.79E-15	9.00E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240812	SLAPS LOADOUT	5/17/2021	Gross Alpha/Beta	Gross Beta	1.52E-14	1.16E-14	1.74E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240813	SLAPS LOADOUT	5/17/2021	Gross Alpha/Beta	Gross Alpha	6.60E-16	3.79E-15	9.00E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240813	SLAPS LOADOUT	5/17/2021	Gross Alpha/Beta	Gross Beta	3.16E-14	1.38E-14	1.74E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240814	SLAPS LOADOUT	5/17/2021	Gross Alpha/Beta	Gross Alpha	1.93E-15	4.50E-15	8.75E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240814	SLAPS LOADOUT	5/17/2021	Gross Alpha/Beta	Gross Beta	1.56E-14	1.14E-14	1.69E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240815	SLAPS LOADOUT	5/17/2021	Gross Alpha/Beta	Gross Alpha	5.94E-15	6.52E-15	9.00E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240815	SLAPS LOADOUT	5/17/2021	Gross Alpha/Beta	Gross Beta	4.09E-14	1.50E-14	1.74E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240816	SLAPS LOADOUT	5/17/2021	Gross Alpha/Beta	Gross Alpha	9.90E-15	7.99E-15	9.00E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240816	SLAPS LOADOUT	5/17/2021	Gross Alpha/Beta	Gross Beta	1.91E-14	1.22E-14	1.74E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240817	SLAPS LOADOUT	5/17/2021	Gross Alpha/Beta	Gross Alpha	9.63E-15	7.76E-15	8.75E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240817	SLAPS LOADOUT	5/17/2021	Gross Alpha/Beta	Gross Beta	2.61E-14	1.28E-14	1.69E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240818	SLAPS LOADOUT	5/18/2021	Gross Alpha/Beta	Gross Alpha	3.21E-15	5.18E-15	8.75E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240818	SLAPS LOADOUT	5/18/2021	Gross Alpha/Beta	Gross Beta	-3.15E-16	9.00E-15	1.69E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240819	SLAPS LOADOUT	5/18/2021	Gross Alpha/Beta	Gross Alpha	1.93E-15	4.50E-15	8.75E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240819	SLAPS LOADOUT	5/18/2021	Gross Alpha/Beta	Gross Beta	1.56E-14	1.14E-14	1.69E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240820	SLAPS LOADOUT	5/18/2021	Gross Alpha/Beta	Gross Alpha	1.93E-15	4.50E-15	8.75E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240820	SLAPS LOADOUT	5/18/2021	Gross Alpha/Beta	Gross Beta	1.48E-14	1.13E-14	1.69E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240821	SLAPS LOADOUT	5/18/2021	Gross Alpha/Beta	Gross Alpha	-6.42E-16	2.65E-15	8.75E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240821	SLAPS LOADOUT	5/18/2021	Gross Alpha/Beta	Gross Beta	4.98E-15	9.86E-15	1.69E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240822	SLAPS LOADOUT	5/18/2021	Gross Alpha/Beta	Gross Alpha	4.49E-15	5.79E-15	8.75E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240822	SLAPS LOADOUT	5/18/2021	Gross Alpha/Beta	Gross Beta	2.39E-14	1.26E-14	1.69E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240823	SLAPS LOADOUT	5/19/2021	Gross Alpha/Beta	Gross Alpha	-6.60E-16	2.72E-15	9.00E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240823	SLAPS LOADOUT	5/19/2021	Gross Alpha/Beta	Gross Beta	2.77E-14	1.33E-14	1.74E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240824	SLAPS LOADOUT	5/19/2021	Gross Alpha/Beta	Gross Alpha	4.54E-15	5.84E-15	8.84E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240824	SLAPS LOADOUT	5/19/2021	Gross Alpha/Beta	Gross Beta	3.25E-14	1.37E-14	1.71E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240825	SLAPS LOADOUT	5/19/2021	Gross Alpha/Beta	Gross Alpha	-1.98E-15	6.77E-16	9.00E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240825	SLAPS LOADOUT	5/19/2021	Gross Alpha/Beta	Gross Beta	2.07E-14	1.24E-14	1.74E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240826	SLAPS LOADOUT	5/19/2021	Gross Alpha/Beta	Gross Alpha	-1.94E-15	6.64E-16	8.84E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA240826	SLAPS LOADOUT	5/19/2021	Gross Alpha/Beta	Gross Beta	3.17E-14	1.36E-14	1.71E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240827	SLAPS LOADOUT	5/19/2021	Gross Alpha/Beta	Gross Alpha	-6.60E-16	2.72E-15	9.00E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240827	SLAPS LOADOUT	5/19/2021	Gross Alpha/Beta	Gross Beta	2.53E-14	1.30E-14	1.74E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240828	SLAPS LOADOUT	5/20/2021	Gross Alpha/Beta	Gross Alpha	-2.86E-15	4.92E-15	1.54E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240828	SLAPS LOADOUT	5/20/2021	Gross Alpha/Beta	Gross Beta	3.17E-14	2.24E-14	3.40E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240829	SLAPS LOADOUT	5/20/2021	Gross Alpha/Beta	Gross Alpha	3.34E-16	4.67E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240829	SLAPS LOADOUT	5/20/2021	Gross Alpha/Beta	Gross Beta	3.10E-17	1.29E-14	2.33E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240830	SLAPS LOADOUT	5/20/2021	Gross Alpha/Beta	Gross Alpha	2.68E-15	5.80E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240830	SLAPS LOADOUT	5/20/2021	Gross Alpha/Beta	Gross Beta	2.31E-15	1.34E-14	2.37E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240831	SLAPS LOADOUT	5/20/2021	Gross Alpha/Beta	Gross Alpha	3.47E-16	4.85E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240831	SLAPS LOADOUT	5/20/2021	Gross Alpha/Beta	Gross Beta	1.71E-14	1.53E-14	2.42E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240832	SLAPS LOADOUT	5/24/2021	Gross Alpha/Beta	Gross Alpha	-8.51E-16	4.27E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240832	SLAPS LOADOUT	5/24/2021	Gross Alpha/Beta	Gross Beta	2.67E-14	1.65E-14	2.44E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240833	SLAPS LOADOUT	5/24/2021	Gross Alpha/Beta	Gross Alpha	-2.05E-15	3.53E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240833	SLAPS LOADOUT	5/24/2021	Gross Alpha/Beta	Gross Beta	1.26E-14	1.50E-14	2.44E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240834	SLAPS LOADOUT	5/24/2021	Gross Alpha/Beta	Gross Alpha	1.12E-14	8.76E-15	1.10E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240834	SLAPS LOADOUT	5/24/2021	Gross Alpha/Beta	Gross Beta	4.39E-14	1.82E-14	2.44E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240835	SLAPS LOADOUT	5/24/2021	Gross Alpha/Beta	Gross Alpha	4.00E-15	6.50E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240835	SLAPS LOADOUT	5/24/2021	Gross Alpha/Beta	Gross Beta	5.30E-14	1.93E-14	2.47E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240836	SLAPS LOADOUT	5/24/2021	Gross Alpha/Beta	Gross Alpha	8.94E-15	8.22E-15	1.12E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240836	SLAPS LOADOUT	5/24/2021	Gross Alpha/Beta	Gross Beta	6.63E-14	2.07E-14	2.49E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240837	SLAPS LOADOUT	5/24/2021	Gross Alpha/Beta	Gross Alpha	1.52E-14	1.00E-14	1.14E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240837	SLAPS LOADOUT	5/24/2021	Gross Alpha/Beta	Gross Beta	5.89E-14	2.01E-14	2.52E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240838	SLAPS LOADOUT	5/24/2021	Gross Alpha/Beta	Gross Alpha	-5.10E-17	4.34E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240838	SLAPS LOADOUT	5/24/2021	Gross Alpha/Beta	Gross Beta	1.33E-14	1.52E-14	2.46E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240839	SLAPS LOADOUT	5/25/2021	Gross Alpha/Beta	Gross Alpha	8.94E-15	8.22E-15	1.12E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240839	SLAPS LOADOUT	5/25/2021	Gross Alpha/Beta	Gross Beta	1.76E-14	1.58E-14	2.49E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240840	SLAPS LOADOUT	5/25/2021	Gross Alpha/Beta	Gross Alpha	1.49E-14	9.82E-15	1.11E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240840	SLAPS LOADOUT	5/25/2021	Gross Alpha/Beta	Gross Beta	2.46E-14	1.64E-14	2.47E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240841	SLAPS LOADOUT	5/25/2021	Gross Alpha/Beta	Gross Alpha	1.37E-14	9.51E-15	1.11E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240841	SLAPS LOADOUT	5/25/2021	Gross Alpha/Beta	Gross Beta	3.01E-14	1.70E-14	2.47E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240842	SLAPS LOADOUT	5/25/2021	Gross Alpha/Beta	Gross Alpha	7.64E-15	7.76E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240842	SLAPS LOADOUT	5/25/2021	Gross Alpha/Beta	Gross Beta	3.25E-14	1.72E-14	2.47E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240843	SLAPS LOADOUT	5/26/2021	Gross Alpha/Beta	Gross Alpha	5.21E-15	6.94E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240843	SLAPS LOADOUT	5/26/2021	Gross Alpha/Beta	Gross Beta	5.57E-15	1.43E-14	2.47E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240844	SLAPS LOADOUT	5/26/2021	Gross Alpha/Beta	Gross Alpha	-2.05E-15	3.53E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240844	SLAPS LOADOUT	5/26/2021	Gross Alpha/Beta	Gross Beta	2.20E-14	1.60E-14	2.44E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240845	SLAPS LOADOUT	5/26/2021	Gross Alpha/Beta	Gross Alpha	1.12E-14	8.76E-15	1.10E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240845	SLAPS LOADOUT	5/26/2021	Gross Alpha/Beta	Gross Beta	2.74E-14	1.66E-14	2.44E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240846	SLAPS LOADOUT	5/26/2021	Gross Alpha/Beta	Gross Alpha	1.01E-14	8.50E-15	1.11E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240846	SLAPS LOADOUT	5/26/2021	Gross Alpha/Beta	Gross Beta	4.43E-14	1.84E-14	2.47E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240847	SLAPS LOADOUT	5/26/2021	Gross Alpha/Beta	Gross Alpha	7.49E-15	7.61E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240847	SLAPS LOADOUT	5/26/2021	Gross Alpha/Beta	Gross Beta	1.79E-14	1.54E-14	2.42E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240848	SLAPS LOADOUT	5/26/2021	Gross Alpha/Beta	Gross Alpha	1.89E-15	4.67E-15	9.24E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240848	SLAPS LOADOUT	5/26/2021	Gross Alpha/Beta	Gross Beta	7.82E-15	1.18E-14	1.96E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA240849	SLAPS LOADOUT	5/26/2021	Gross Alpha/Beta	Gross Alpha	5.61E-16	3.87E-15	9.33E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240849	SLAPS LOADOUT	5/26/2021	Gross Alpha/Beta	Gross Beta	5.52E-15	1.15E-14	1.98E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240850	SLAPS LOADOUT	5/27/2021	Gross Alpha/Beta	Gross Alpha	6.02E-16	4.15E-15	1.00E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240850	SLAPS LOADOUT	5/27/2021	Gross Alpha/Beta	Gross Beta	1.53E-14	1.36E-14	2.13E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240851	SLAPS LOADOUT	5/27/2021	Gross Alpha/Beta	Gross Alpha	6.02E-16	4.15E-15	1.00E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240851	SLAPS LOADOUT	5/27/2021	Gross Alpha/Beta	Gross Beta	1.61E-14	1.38E-14	2.13E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240852	SLAPS LOADOUT	5/27/2021	Gross Alpha/Beta	Gross Alpha	6.02E-16	4.15E-15	1.00E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240852	SLAPS LOADOUT	5/27/2021	Gross Alpha/Beta	Gross Beta	8.15E-16	1.16E-14	2.13E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240853	SLAPS LOADOUT	6/1/2021	Gross Alpha/Beta	Gross Alpha	5.89E-15	6.58E-15	9.24E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240853	SLAPS LOADOUT	6/1/2021	Gross Alpha/Beta	Gross Beta	2.82E-14	1.44E-14	1.96E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240854	SLAPS LOADOUT	6/1/2021	Gross Alpha/Beta	Gross Alpha	1.91E-15	4.72E-15	9.33E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240854	SLAPS LOADOUT	6/1/2021	Gross Alpha/Beta	Gross Beta	1.58E-14	1.29E-14	1.98E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240855	SLAPS LOADOUT	6/1/2021	Gross Alpha/Beta	Gross Alpha	3.29E-15	5.49E-15	9.42E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240855	SLAPS LOADOUT	6/1/2021	Gross Alpha/Beta	Gross Beta	1.28E-14	1.26E-14	2.00E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240856	SLAPS LOADOUT	6/1/2021	Gross Alpha/Beta	Gross Alpha	5.78E-15	6.46E-15	9.07E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240856	SLAPS LOADOUT	6/1/2021	Gross Alpha/Beta	Gross Beta	2.92E-14	1.43E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240857	SLAPS LOADOUT	6/1/2021	Gross Alpha/Beta	Gross Alpha	-7.70E-16	2.73E-15	9.15E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240857	SLAPS LOADOUT	6/1/2021	Gross Alpha/Beta	Gross Beta	-3.20E-17	1.05E-14	1.94E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240858	SLAPS LOADOUT	6/1/2021	Gross Alpha/Beta	Gross Alpha	5.45E-16	3.76E-15	9.07E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240858	SLAPS LOADOUT	6/1/2021	Gross Alpha/Beta	Gross Beta	9.98E-15	1.18E-14	1.93E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240859	SLAPS LOADOUT	6/1/2021	Gross Alpha/Beta	Gross Alpha	1.10E-14	8.34E-15	9.07E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240859	SLAPS LOADOUT	6/1/2021	Gross Alpha/Beta	Gross Beta	2.92E-14	1.43E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240860	SLAPS LOADOUT	6/2/2021	Gross Alpha/Beta	Gross Alpha	5.35E-16	3.69E-15	8.90E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240860	SLAPS LOADOUT	6/2/2021	Gross Alpha/Beta	Gross Beta	1.28E-14	1.20E-14	1.89E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240861	SLAPS LOADOUT	6/2/2021	Gross Alpha/Beta	Gross Alpha	5.35E-16	3.69E-15	8.90E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240861	SLAPS LOADOUT	6/2/2021	Gross Alpha/Beta	Gross Beta	2.19E-14	1.32E-14	1.89E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240862	SLAPS LOADOUT	6/2/2021	Gross Alpha/Beta	Gross Alpha	5.50E-16	3.80E-15	9.15E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240862	SLAPS LOADOUT	6/2/2021	Gross Alpha/Beta	Gross Beta	1.63E-14	1.28E-14	1.94E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240863	SLAPS LOADOUT	6/3/2021	Gross Alpha/Beta	Gross Alpha	3.29E-15	5.49E-15	9.42E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240863	SLAPS LOADOUT	6/3/2021	Gross Alpha/Beta	Gross Beta	2.24E-14	1.39E-14	2.00E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240864	SLAPS LOADOUT	6/3/2021	Gross Alpha/Beta	Gross Alpha	-2.22E-15	7.39E-16	9.71E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240864	SLAPS LOADOUT	6/3/2021	Gross Alpha/Beta	Gross Beta	1.62E-15	1.14E-14	2.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240865	SLAPS LOADOUT	6/3/2021	Gross Alpha/Beta	Gross Alpha	6.00E-15	6.71E-15	9.42E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240865	SLAPS LOADOUT	6/3/2021	Gross Alpha/Beta	Gross Beta	3.20E-14	1.50E-14	2.00E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240866	SLAPS LOADOUT	6/7/2021	Gross Alpha/Beta	Gross Alpha	5.67E-15	6.34E-15	8.90E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240866	SLAPS LOADOUT	6/7/2021	Gross Alpha/Beta	Gross Beta	1.36E-14	1.21E-14	1.89E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240867	SLAPS LOADOUT	6/7/2021	Gross Alpha/Beta	Gross Alpha	-7.49E-16	2.65E-15	8.90E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240867	SLAPS LOADOUT	6/7/2021	Gross Alpha/Beta	Gross Beta	-6.84E-15	9.19E-15	1.89E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240868	SLAPS LOADOUT	6/7/2021	Gross Alpha/Beta	Gross Alpha	3.61E-15	5.83E-15	9.85E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240868	SLAPS LOADOUT	6/7/2021	Gross Alpha/Beta	Gross Beta	1.49E-14	1.28E-14	1.98E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240869	SLAPS LOADOUT	6/7/2021	Gross Alpha/Beta	Gross Alpha	7.63E-15	7.39E-15	9.45E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240869	SLAPS LOADOUT	6/7/2021	Gross Alpha/Beta	Gross Beta	1.67E-14	1.27E-14	1.90E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240870	SLAPS LOADOUT	6/7/2021	Gross Alpha/Beta	Gross Alpha	3.61E-15	5.83E-15	9.85E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240870	SLAPS LOADOUT	6/7/2021	Gross Alpha/Beta	Gross Beta	4.89E-14	1.71E-14	1.98E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240871	SLAPS LOADOUT	6/7/2021	Gross Alpha/Beta	Gross Alpha	6.93E-16	3.98E-15	9.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA240871	SLAPS LOADOUT	6/7/2021	Gross Alpha/Beta	Gross Beta	3.64E-15	1.08E-14	1.90E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240872	SLAPS LOADOUT	6/7/2021	Gross Alpha/Beta	Gross Alpha	-7.07E-16	2.92E-15	9.65E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240872	SLAPS LOADOUT	6/7/2021	Gross Alpha/Beta	Gross Beta	1.54E-14	1.27E-14	1.94E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240873	SLAPS LOADOUT	6/8/2021	Gross Alpha/Beta	Gross Alpha	7.06E-15	6.85E-15	8.75E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240873	SLAPS LOADOUT	6/8/2021	Gross Alpha/Beta	Gross Beta	1.55E-14	1.17E-14	1.76E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240874	SLAPS LOADOUT	6/8/2021	Gross Alpha/Beta	Gross Alpha	1.93E-15	4.50E-15	8.75E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240874	SLAPS LOADOUT	6/8/2021	Gross Alpha/Beta	Gross Beta	7.91E-15	1.07E-14	1.76E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240875	SLAPS LOADOUT	6/8/2021	Gross Alpha/Beta	Gross Alpha	7.00E-15	6.78E-15	8.67E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240875	SLAPS LOADOUT	6/8/2021	Gross Alpha/Beta	Gross Beta	8.58E-15	1.07E-14	1.74E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240876	SLAPS LOADOUT	6/9/2021	Gross Alpha/Beta	Gross Alpha	2.00E-15	4.67E-15	9.09E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240876	SLAPS LOADOUT	6/9/2021	Gross Alpha/Beta	Gross Beta	1.37E-14	1.19E-14	1.83E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240877	SLAPS LOADOUT	6/9/2021	Gross Alpha/Beta	Gross Alpha	-2.06E-15	7.04E-16	9.36E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240877	SLAPS LOADOUT	6/9/2021	Gross Alpha/Beta	Gross Beta	3.60E-15	1.07E-14	1.88E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240878	SLAPS LOADOUT	6/9/2021	Gross Alpha/Beta	Gross Alpha	7.00E-16	4.02E-15	9.55E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240878	SLAPS LOADOUT	6/9/2021	Gross Alpha/Beta	Gross Beta	-4.47E-16	1.02E-14	1.92E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240879	SLAPS LOADOUT	6/9/2021	Gross Alpha/Beta	Gross Alpha	-2.04E-15	6.97E-16	9.27E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240879	SLAPS LOADOUT	6/9/2021	Gross Alpha/Beta	Gross Beta	1.64E-14	1.24E-14	1.86E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240880	SLAPS LOADOUT	6/9/2021	Gross Alpha/Beta	Gross Alpha	-6.86E-16	2.83E-15	9.36E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240880	SLAPS LOADOUT	6/9/2021	Gross Alpha/Beta	Gross Beta	3.60E-15	1.07E-14	1.88E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240881	SLAPS LOADOUT	6/9/2021	Gross Alpha/Beta	Gross Alpha	-7.00E-16	2.89E-15	9.55E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240881	SLAPS LOADOUT	6/9/2021	Gross Alpha/Beta	Gross Beta	1.69E-14	1.28E-14	1.92E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240882	SLAPS LOADOUT	6/10/2021	Gross Alpha/Beta	Gross Alpha	6.87E-15	6.66E-15	8.52E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240882	SLAPS LOADOUT	6/10/2021	Gross Alpha/Beta	Gross Beta	2.31E-14	1.25E-14	1.71E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240883	SLAPS LOADOUT	6/10/2021	Gross Alpha/Beta	Gross Alpha	5.62E-15	6.17E-15	8.52E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240883	SLAPS LOADOUT	6/10/2021	Gross Alpha/Beta	Gross Beta	2.46E-14	1.27E-14	1.71E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240884	SLAPS LOADOUT	6/14/2021	Gross Alpha/Beta	Gross Alpha	6.73E-16	3.87E-15	9.18E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240884	SLAPS LOADOUT	6/14/2021	Gross Alpha/Beta	Gross Beta	2.74E-15	1.03E-14	1.85E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240885	SLAPS LOADOUT	6/14/2021	Gross Alpha/Beta	Gross Alpha	3.40E-15	5.49E-15	9.27E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240885	SLAPS LOADOUT	6/14/2021	Gross Alpha/Beta	Gross Beta	2.28E-14	1.33E-14	1.86E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240886	SLAPS LOADOUT	6/14/2021	Gross Alpha/Beta	Gross Alpha	3.33E-15	5.38E-15	9.09E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240886	SLAPS LOADOUT	6/14/2021	Gross Alpha/Beta	Gross Beta	4.20E-14	1.54E-14	1.83E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240887	SLAPS LOADOUT	6/14/2021	Gross Alpha/Beta	Gross Alpha	4.76E-15	6.13E-15	9.27E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240887	SLAPS LOADOUT	6/14/2021	Gross Alpha/Beta	Gross Beta	2.60E-14	1.37E-14	1.86E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240888	SLAPS LOADOUT	6/14/2021	Gross Alpha/Beta	Gross Alpha	5.06E-15	5.83E-15	8.37E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240888	SLAPS LOADOUT	6/14/2021	Gross Alpha/Beta	Gross Beta	9.99E-15	1.47E-14	2.44E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240889	SLAPS LOADOUT	6/15/2021	Gross Alpha/Beta	Gross Alpha	3.92E-15	5.37E-15	8.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240889	SLAPS LOADOUT	6/15/2021	Gross Alpha/Beta	Gross Beta	1.89E-14	1.58E-14	2.47E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240890	SLAPS LOADOUT	6/15/2021	Gross Alpha/Beta	Gross Alpha	3.96E-15	5.43E-15	8.54E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240890	SLAPS LOADOUT	6/15/2021	Gross Alpha/Beta	Gross Beta	1.42E-14	1.54E-14	2.49E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240891	SLAPS LOADOUT	6/15/2021	Gross Alpha/Beta	Gross Alpha	2.73E-15	4.81E-15	8.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240891	SLAPS LOADOUT	6/15/2021	Gross Alpha/Beta	Gross Beta	1.49E-14	1.54E-14	2.47E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240892	SLAPS LOADOUT	6/16/2021	Gross Alpha/Beta	Gross Alpha	1.43E-15	3.87E-15	7.84E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240892	SLAPS LOADOUT	6/16/2021	Gross Alpha/Beta	Gross Beta	1.31E-14	1.42E-14	2.29E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240893	SLAPS LOADOUT	6/16/2021	Gross Alpha/Beta	Gross Alpha	5.85E-15	5.89E-15	7.84E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240893	SLAPS LOADOUT	6/16/2021	Gross Alpha/Beta	Gross Beta	1.53E-14	1.44E-14	2.29E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA240894	SLAPS LOADOUT	6/16/2021	Gross Alpha/Beta	Gross Alpha	1.43E-15	3.87E-15	7.84E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240894	SLAPS LOADOUT	6/16/2021	Gross Alpha/Beta	Gross Beta	1.08E-14	1.39E-14	2.29E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240895	SLAPS LOADOUT	6/16/2021	Gross Alpha/Beta	Gross Alpha	3.64E-15	4.98E-15	7.84E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240895	SLAPS LOADOUT	6/16/2021	Gross Alpha/Beta	Gross Beta	3.77E-14	1.67E-14	2.29E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240896	SLAPS LOADOUT	6/16/2021	Gross Alpha/Beta	Gross Alpha	1.43E-15	3.87E-15	7.84E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240896	SLAPS LOADOUT	6/16/2021	Gross Alpha/Beta	Gross Beta	1.68E-14	1.46E-14	2.29E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240897	SLAPS LOADOUT	6/16/2021	Gross Alpha/Beta	Gross Alpha	3.19E-16	3.15E-15	7.77E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240897	SLAPS LOADOUT	6/16/2021	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
SLA240898	SLAPS LOADOUT	6/16/2021	Gross Alpha/Beta	Gross Alpha	6.89E-15	6.24E-15	7.77E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240898	SLAPS LOADOUT	6/16/2021	Gross Alpha/Beta	Gross Beta	2.33E-14	1.51E-14	2.27E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240899	SLAPS LOADOUT	6/21/2021	Gross Alpha/Beta	Gross Alpha	3.22E-16	3.18E-15	7.84E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240899	SLAPS LOADOUT	6/21/2021	Gross Alpha/Beta	Gross Beta	7.86E-15	1.36E-14	2.29E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240900	SLAPS LOADOUT	6/21/2021	Gross Alpha/Beta	Gross Alpha	2.53E-15	4.46E-15	7.84E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240900	SLAPS LOADOUT	6/21/2021	Gross Alpha/Beta	Gross Beta	1.46E-14	1.43E-14	2.29E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240901	SLAPS LOADOUT	6/21/2021	Gross Alpha/Beta	Gross Alpha	2.53E-15	4.46E-15	7.84E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240901	SLAPS LOADOUT	6/21/2021	Gross Alpha/Beta	Gross Beta	4.04E-16	1.27E-14	2.29E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240902	SLAPS LOADOUT	6/22/2021	Gross Alpha/Beta	Gross Alpha	3.25E-16	3.21E-15	7.91E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240902	SLAPS LOADOUT	6/22/2021	Gross Alpha/Beta	Gross Beta	1.40E-14	1.44E-14	2.31E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240903	SLAPS LOADOUT	6/22/2021	Gross Alpha/Beta	Gross Alpha	2.53E-15	4.46E-15	7.84E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240903	SLAPS LOADOUT	6/22/2021	Gross Alpha/Beta	Gross Beta	1.31E-14	1.42E-14	2.29E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240904	SLAPS LOADOUT	6/22/2021	Gross Alpha/Beta	Gross Alpha	2.53E-15	4.46E-15	7.84E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240904	SLAPS LOADOUT	6/22/2021	Gross Alpha/Beta	Gross Beta	1.53E-14	1.44E-14	2.29E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240905	SLAPS LOADOUT	6/23/2021	Gross Alpha/Beta	Gross Alpha	3.19E-16	3.15E-15	7.77E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240905	SLAPS LOADOUT	6/23/2021	Gross Alpha/Beta	Gross Beta	8.53E-15	1.36E-14	2.27E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240906	SLAPS LOADOUT	6/23/2021	Gross Alpha/Beta	Gross Alpha	7.98E-15	6.62E-15	7.77E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240906	SLAPS LOADOUT	6/23/2021	Gross Alpha/Beta	Gross Beta	3.14E-14	1.60E-14	2.27E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240907	SLAPS LOADOUT	6/23/2021	Gross Alpha/Beta	Gross Alpha	-7.75E-16	2.27E-15	7.77E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240907	SLAPS LOADOUT	6/23/2021	Gross Alpha/Beta	Gross Beta	1.74E-14	1.45E-14	2.27E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240908	SLAPS LOADOUT	6/24/2021	Gross Alpha/Beta	Gross Alpha	-1.08E-15	3.96E-15	1.13E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240908	SLAPS LOADOUT	6/24/2021	Gross Alpha/Beta	Gross Beta	2.35E-14	1.36E-14	1.91E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240909	SLAPS LOADOUT	6/24/2021	Gross Alpha/Beta	Gross Alpha	3.44E-15	7.05E-15	1.30E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240909	SLAPS LOADOUT	6/24/2021	Gross Alpha/Beta	Gross Beta	4.07E-14	1.73E-14	2.19E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240910	SLAPS LOADOUT	6/24/2021	Gross Alpha/Beta	Gross Alpha	7.08E-15	7.76E-15	1.13E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240910	SLAPS LOADOUT	6/24/2021	Gross Alpha/Beta	Gross Beta	3.47E-14	1.50E-14	1.91E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240911	SLAPS LOADOUT	6/28/2021	Gross Alpha/Beta	Gross Alpha	1.69E-15	5.69E-15	1.17E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240911	SLAPS LOADOUT	6/28/2021	Gross Alpha/Beta	Gross Beta	4.40E-15	1.13E-14	1.97E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240912	SLAPS LOADOUT	6/28/2021	Gross Alpha/Beta	Gross Alpha	3.40E-15	6.97E-15	1.28E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240912	SLAPS LOADOUT	6/28/2021	Gross Alpha/Beta	Gross Beta	3.02E-15	1.21E-14	2.16E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240913	SLAPS LOADOUT	6/28/2021	Gross Alpha/Beta	Gross Alpha	5.72E-15	7.27E-15	1.13E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240913	SLAPS LOADOUT	6/28/2021	Gross Alpha/Beta	Gross Beta	6.67E-15	1.13E-14	1.91E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240914	SLAPS LOADOUT	6/28/2021	Gross Alpha/Beta	Gross Alpha	3.06E-15	6.28E-15	1.15E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240914	SLAPS LOADOUT	6/28/2021	Gross Alpha/Beta	Gross Beta	7.62E-15	1.16E-14	1.95E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240915	SLAPS LOADOUT	6/28/2021	Gross Alpha/Beta	Gross Alpha	3.00E-15	6.15E-15	1.13E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240915	SLAPS LOADOUT	6/28/2021	Gross Alpha/Beta	Gross Beta	1.07E-14	1.19E-14	1.91E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240916	SLAPS LOADOUT	6/28/2021	Gross Alpha/Beta	Gross Alpha	9.80E-15	8.68E-15	1.13E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA240916	SLAPS LOADOUT	6/28/2021	Gross Alpha/Beta	Gross Beta	2.75E-14	1.41E-14	1.91E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240917	SLAPS LOADOUT	6/28/2021	Gross Alpha/Beta	Gross Alpha	4.94E-15	7.63E-15	1.28E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240917	SLAPS LOADOUT	6/28/2021	Gross Alpha/Beta	Gross Beta	1.48E-14	1.38E-14	2.16E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240918	SLAPS LOADOUT	6/29/2021	Gross Alpha/Beta	Gross Alpha	6.81E-15	7.47E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240918	SLAPS LOADOUT	6/29/2021	Gross Alpha/Beta	Gross Beta	1.18E-14	1.16E-14	1.84E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240919	SLAPS LOADOUT	6/29/2021	Gross Alpha/Beta	Gross Alpha	1.57E-15	5.26E-15	1.08E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240919	SLAPS LOADOUT	6/29/2021	Gross Alpha/Beta	Gross Beta	1.48E-14	1.19E-14	1.82E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240920	SLAPS LOADOUT	6/29/2021	Gross Alpha/Beta	Gross Alpha	2.73E-16	4.62E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240920	SLAPS LOADOUT	6/29/2021	Gross Alpha/Beta	Gross Beta	4.34E-14	1.56E-14	1.84E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240921	SLAPS LOADOUT	6/30/2021	Gross Alpha/Beta	Gross Alpha	8.97E-15	8.75E-15	1.20E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240921	SLAPS LOADOUT	6/30/2021	Gross Alpha/Beta	Gross Beta	8.79E-15	1.22E-14	2.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240922	SLAPS LOADOUT	6/30/2021	Gross Alpha/Beta	Gross Alpha	-1.03E-15	3.77E-15	1.08E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240922	SLAPS LOADOUT	6/30/2021	Gross Alpha/Beta	Gross Beta	1.63E-14	1.21E-14	1.82E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240923	SLAPS LOADOUT	6/30/2021	Gross Alpha/Beta	Gross Alpha	4.36E-15	6.73E-15	1.13E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240923	SLAPS LOADOUT	6/30/2021	Gross Alpha/Beta	Gross Beta	8.27E-15	1.15E-14	1.91E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240924	SLAPS LOADOUT	6/30/2021	Gross Alpha/Beta	Gross Alpha	1.55E-15	5.21E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240924	SLAPS LOADOUT	6/30/2021	Gross Alpha/Beta	Gross Beta	1.84E-14	1.23E-14	1.80E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240925	SLAPS LOADOUT	6/30/2021	Gross Alpha/Beta	Gross Alpha	7.15E-15	7.84E-15	1.14E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240925	SLAPS LOADOUT	6/30/2021	Gross Alpha/Beta	Gross Beta	2.94E-14	1.44E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240926	SLAPS LOADOUT	6/30/2021	Gross Alpha/Beta	Gross Alpha	9.90E-15	8.77E-15	1.14E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240926	SLAPS LOADOUT	6/30/2021	Gross Alpha/Beta	Gross Beta	3.66E-14	1.53E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240927	SLAPS LOADOUT	6/30/2021	Gross Alpha/Beta	Gross Alpha	1.55E-15	5.21E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240927	SLAPS LOADOUT	6/30/2021	Gross Alpha/Beta	Gross Beta	1.61E-14	1.20E-14	1.80E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240928	SLAPS LOADOUT	7/1/2021	Gross Alpha/Beta	Gross Alpha	3.77E-15	5.68E-15	9.44E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240928	SLAPS LOADOUT	7/1/2021	Gross Alpha/Beta	Gross Beta	1.56E-14	1.44E-14	2.27E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240929	SLAPS LOADOUT	7/1/2021	Gross Alpha/Beta	Gross Alpha	-1.96E-15	2.42E-15	9.44E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240929	SLAPS LOADOUT	7/1/2021	Gross Alpha/Beta	Gross Beta	1.18E-14	1.40E-14	2.27E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240930	SLAPS LOADOUT	7/1/2021	Gross Alpha/Beta	Gross Alpha	6.07E-15	6.55E-15	9.44E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240930	SLAPS LOADOUT	7/1/2021	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
SLA240931	SLAPS LOADOUT	7/6/2021	Gross Alpha/Beta	Gross Alpha	3.85E-15	5.78E-15	9.62E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240931	SLAPS LOADOUT	7/6/2021	Gross Alpha/Beta	Gross Beta	4.63E-14	1.78E-14	2.32E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240932	SLAPS LOADOUT	7/6/2021	Gross Alpha/Beta	Gross Alpha	1.18E-14	8.35E-15	9.44E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240932	SLAPS LOADOUT	7/6/2021	Gross Alpha/Beta	Gross Beta	5.96E-14	1.89E-14	2.27E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240933	SLAPS LOADOUT	7/6/2021	Gross Alpha/Beta	Gross Alpha	1.41E-14	8.98E-15	9.44E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240933	SLAPS LOADOUT	7/6/2021	Gross Alpha/Beta	Gross Beta	4.10E-14	1.70E-14	2.27E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240934	SLAPS LOADOUT	7/7/2021	Gross Alpha/Beta	Gross Alpha	1.37E-14	9.18E-15	9.99E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240934	SLAPS LOADOUT	7/7/2021	Gross Alpha/Beta	Gross Beta	6.47E-14	2.02E-14	2.41E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240935	SLAPS LOADOUT	7/7/2021	Gross Alpha/Beta	Gross Alpha	9.87E-15	7.97E-15	9.80E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240935	SLAPS LOADOUT	7/7/2021	Gross Alpha/Beta	Gross Beta	5.26E-14	1.87E-14	2.36E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240936	SLAPS LOADOUT	7/7/2021	Gross Alpha/Beta	Gross Alpha	1.02E-14	8.21E-15	1.01E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240936	SLAPS LOADOUT	7/7/2021	Gross Alpha/Beta	Gross Beta	5.18E-14	1.90E-14	2.43E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240937	SLAPS LOADOUT	7/7/2021	Gross Alpha/Beta	Gross Alpha	6.30E-15	6.80E-15	9.80E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240937	SLAPS LOADOUT	7/7/2021	Gross Alpha/Beta	Gross Beta	5.03E-14	1.85E-14	2.36E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240938	SLAPS LOADOUT	7/7/2021	Gross Alpha/Beta	Gross Alpha	2.10E-14	1.10E-14	9.99E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240938	SLAPS LOADOUT	7/7/2021	Gross Alpha/Beta	Gross Beta	7.58E-14	2.12E-14	2.41E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA240939	SLAPS LOADOUT	7/7/2021	Gross Alpha/Beta	Gross Alpha	2.46E-14	1.18E-14	9.99E-15	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240939	SLAPS LOADOUT	7/7/2021	Gross Alpha/Beta	Gross Beta	5.05E-14	1.88E-14	2.41E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240940	SLAPS LOADOUT	7/7/2021	Gross Alpha/Beta	Gross Alpha	1.01E-14	8.13E-15	9.99E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240940	SLAPS LOADOUT	7/7/2021	Gross Alpha/Beta	Gross Beta	4.49E-14	1.82E-14	2.41E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240941	SLAPS LOADOUT	7/8/2021	Gross Alpha/Beta	Gross Alpha	9.51E-15	7.68E-15	9.44E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240941	SLAPS LOADOUT	7/8/2021	Gross Alpha/Beta	Gross Beta	4.39E-14	1.73E-14	2.27E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240942	SLAPS LOADOUT	7/8/2021	Gross Alpha/Beta	Gross Alpha	1.44E-14	9.15E-15	9.62E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240942	SLAPS LOADOUT	7/8/2021	Gross Alpha/Beta	Gross Beta	4.32E-14	1.75E-14	2.32E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240943	SLAPS LOADOUT	7/8/2021	Gross Alpha/Beta	Gross Alpha	1.32E-14	8.83E-15	9.62E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240943	SLAPS LOADOUT	7/8/2021	Gross Alpha/Beta	Gross Beta	4.93E-14	1.81E-14	2.32E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240944	SLAPS LOADOUT	7/12/2021	Gross Alpha/Beta	Gross Alpha	-1.94E-15	2.40E-15	9.35E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240944	SLAPS LOADOUT	7/12/2021	Gross Alpha/Beta	Gross Beta	2.65E-14	1.54E-14	2.25E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240945	SLAPS LOADOUT	7/12/2021	Gross Alpha/Beta	Gross Alpha	3.77E-15	5.68E-15	9.44E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240945	SLAPS LOADOUT	7/12/2021	Gross Alpha/Beta	Gross Beta	1.93E-14	1.48E-14	2.27E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240946	SLAPS LOADOUT	7/12/2021	Gross Alpha/Beta	Gross Alpha	7.08E-15	6.82E-15	9.27E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240946	SLAPS LOADOUT	7/12/2021	Gross Alpha/Beta	Gross Beta	2.85E-14	1.55E-14	2.23E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240947	SLAPS LOADOUT	7/13/2021	Gross Alpha/Beta	Gross Alpha	2.63E-15	5.19E-15	9.44E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240947	SLAPS LOADOUT	7/13/2021	Gross Alpha/Beta	Gross Beta	3.80E-14	1.67E-14	2.27E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240948	LOADOUT	7/13/2021	Gross Alpha/Beta	Gross Alpha	2.46E-15	5.82E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240948	LOADOUT	7/13/2021	Gross Alpha/Beta	Gross Beta	3.50E-14	1.42E-14	1.76E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240949	LOADOUT	7/13/2021	Gross Alpha/Beta	Gross Alpha	1.03E-14	8.68E-15	1.12E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240949	LOADOUT	7/13/2021	Gross Alpha/Beta	Gross Beta	5.21E-14	1.63E-14	1.78E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240950	SLAPS LOADOUT	8/11/2021	Gross Alpha/Beta	Gross Alpha	4.34E-15	6.56E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240950	SLAPS LOADOUT	8/11/2021	Gross Alpha/Beta	Gross Beta	3.93E-14	1.78E-14	2.44E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240951	SLAPS LOADOUT	8/11/2021	Gross Alpha/Beta	Gross Alpha	4.30E-15	6.50E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240951	SLAPS LOADOUT	8/11/2021	Gross Alpha/Beta	Gross Beta	2.94E-14	1.67E-14	2.42E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240952	LOADOUT	7/14/2021	Gross Alpha/Beta	Gross Alpha	1.25E-15	5.53E-15	1.17E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240952	LOADOUT	7/14/2021	Gross Alpha/Beta	Gross Beta	2.00E-16	1.01E-14	1.87E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240953	LOADOUT	7/14/2021	Gross Alpha/Beta	Gross Alpha	-1.47E-15	3.97E-15	1.17E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240953	LOADOUT	7/14/2021	Gross Alpha/Beta	Gross Beta	8.20E-15	1.13E-14	1.87E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240954	LOADOUT	7/14/2021	Gross Alpha/Beta	Gross Alpha	1.25E-15	5.53E-15	1.17E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240954	LOADOUT	7/14/2021	Gross Alpha/Beta	Gross Beta	8.20E-15	1.13E-14	1.87E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240955	LOADOUT	7/14/2021	Gross Alpha/Beta	Gross Alpha	2.61E-15	6.16E-15	1.17E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240955	LOADOUT	7/14/2021	Gross Alpha/Beta	Gross Beta	-3.80E-15	9.42E-15	1.87E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240956	LOADOUT	7/15/2021	Gross Alpha/Beta	Gross Alpha	1.66E-14	1.04E-14	1.10E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240956	LOADOUT	7/15/2021	Gross Alpha/Beta	Gross Beta	3.87E-14	1.47E-14	1.76E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240957	LOADOUT	7/15/2021	Gross Alpha/Beta	Gross Alpha	1.66E-14	1.04E-14	1.10E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240957	LOADOUT	7/15/2021	Gross Alpha/Beta	Gross Beta	5.31E-14	1.63E-14	1.76E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240958	LOADOUT	7/15/2021	Gross Alpha/Beta	Gross Alpha	8.88E-15	8.20E-15	1.10E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240958	LOADOUT	7/15/2021	Gross Alpha/Beta	Gross Beta	5.54E-14	1.66E-14	1.76E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240959	LOADOUT	7/19/2021	Gross Alpha/Beta	Gross Alpha	6.68E-15	7.77E-15	1.17E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240959	LOADOUT	7/19/2021	Gross Alpha/Beta	Gross Beta	3.94E-14	1.54E-14	1.87E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240960	LOADOUT	7/19/2021	Gross Alpha/Beta	Gross Alpha	1.35E-14	9.90E-15	1.17E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240960	LOADOUT	7/19/2021	Gross Alpha/Beta	Gross Beta	5.46E-14	1.71E-14	1.87E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240961	LOADOUT	7/19/2021	Gross Alpha/Beta	Gross Alpha	1.48E-14	1.03E-14	1.17E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA240961	LOADOUT	7/19/2021	Gross Alpha/Beta	Gross Beta	3.54E-14	1.49E-14	1.87E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240962	LOADOUT	7/20/2021	Gross Alpha/Beta	Gross Alpha	1.02E-14	8.60E-15	1.10E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240962	LOADOUT	7/20/2021	Gross Alpha/Beta	Gross Beta	4.25E-14	1.51E-14	1.76E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240963	LOADOUT	7/20/2021	Gross Alpha/Beta	Gross Alpha	7.60E-15	7.78E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240963	LOADOUT	7/20/2021	Gross Alpha/Beta	Gross Beta	4.03E-14	1.49E-14	1.76E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240964	LOADOUT	7/20/2021	Gross Alpha/Beta	Gross Alpha	1.02E-14	8.60E-15	1.10E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240964	LOADOUT	7/20/2021	Gross Alpha/Beta	Gross Beta	3.72E-14	1.45E-14	1.76E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240965	LOADOUT	7/21/2021	Gross Alpha/Beta	Gross Alpha	8.88E-15	8.20E-15	1.10E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240965	LOADOUT	7/21/2021	Gross Alpha/Beta	Gross Beta	5.46E-14	1.65E-14	1.76E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240966	LOADOUT	7/21/2021	Gross Alpha/Beta	Gross Alpha	8.88E-15	8.20E-15	1.10E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240966	LOADOUT	7/21/2021	Gross Alpha/Beta	Gross Beta	3.95E-14	1.48E-14	1.76E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240967	LOADOUT	7/21/2021	Gross Alpha/Beta	Gross Alpha	5.03E-15	6.87E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240967	LOADOUT	7/21/2021	Gross Alpha/Beta	Gross Beta	4.48E-14	1.54E-14	1.76E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240968	SLAPS LOADOUT	7/22/2021	Gross Alpha/Beta	Gross Alpha	4.97E-15	6.38E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240968	SLAPS LOADOUT	7/22/2021	Gross Alpha/Beta	Gross Beta	4.59E-14	1.75E-14	2.28E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240969	SLAPS LOADOUT	7/22/2021	Gross Alpha/Beta	Gross Alpha	6.09E-15	6.76E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240969	SLAPS LOADOUT	7/22/2021	Gross Alpha/Beta	Gross Beta	4.30E-14	1.72E-14	2.28E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240970	SLAPS LOADOUT	7/22/2021	Gross Alpha/Beta	Gross Alpha	3.86E-15	5.97E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240970	SLAPS LOADOUT	7/22/2021	Gross Alpha/Beta	Gross Beta	4.01E-14	1.69E-14	2.28E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240971	SLAPS LOADOUT	7/26/2021	Gross Alpha/Beta	Gross Alpha	5.11E-15	6.56E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240971	SLAPS LOADOUT	7/26/2021	Gross Alpha/Beta	Gross Beta	3.15E-14	1.64E-14	2.34E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240972	SLAPS LOADOUT	7/26/2021	Gross Alpha/Beta	Gross Alpha	6.32E-15	7.02E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240972	SLAPS LOADOUT	7/26/2021	Gross Alpha/Beta	Gross Beta	3.03E-14	1.64E-14	2.37E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240973	SLAPS LOADOUT	7/26/2021	Gross Alpha/Beta	Gross Alpha	9.79E-15	8.10E-15	1.04E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240973	SLAPS LOADOUT	7/26/2021	Gross Alpha/Beta	Gross Beta	5.44E-14	1.88E-14	2.37E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA240974	SLAPS LOADOUT	7/27/2021	Gross Alpha/Beta	Gross Alpha	9.70E-15	8.03E-15	1.04E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240974	SLAPS LOADOUT	7/27/2021	Gross Alpha/Beta	Gross Beta	1.35E-14	1.45E-14	2.34E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240975	SLAPS LOADOUT	7/27/2021	Gross Alpha/Beta	Gross Alpha	2.82E-15	5.69E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240975	SLAPS LOADOUT	7/27/2021	Gross Alpha/Beta	Gross Beta	3.15E-14	1.64E-14	2.34E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA240976	SLAPS LOADOUT	7/27/2021	Gross Alpha/Beta	Gross Alpha	5.21E-15	6.68E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA240976	SLAPS LOADOUT	7/27/2021	Gross Alpha/Beta	Gross Beta	2.37E-14	1.59E-14	2.39E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240977	SLAPS LOADOUT	7/28/2021	Gross Alpha/Beta	Gross Alpha	7.69E-15	7.61E-15	1.08E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA240977	SLAPS LOADOUT	7/28/2021	Gross Alpha/Beta	Gross Beta	4.28E-14	1.81E-14	2.43E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243609	SLAPS LOADOUT	7/28/2021	Gross Alpha/Beta	Gross Alpha	5.26E-15	6.74E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243609	SLAPS LOADOUT	7/28/2021	Gross Alpha/Beta	Gross Beta	7.23E-14	2.08E-14	2.41E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243610	SLAPS LOADOUT	7/28/2021	Gross Alpha/Beta	Gross Alpha	3.20E-15	6.47E-15	1.18E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243610	SLAPS LOADOUT	7/28/2021	Gross Alpha/Beta	Gross Beta	8.59E-14	2.35E-14	2.66E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243611	SLAPS LOADOUT	7/28/2021	Gross Alpha/Beta	Gross Alpha	1.34E-14	9.66E-15	1.15E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243611	SLAPS LOADOUT	7/28/2021	Gross Alpha/Beta	Gross Beta	7.74E-14	2.24E-14	2.61E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243612	SLAPS LOADOUT	7/28/2021	Gross Alpha/Beta	Gross Alpha	3.11E-15	6.27E-15	1.14E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243612	SLAPS LOADOUT	7/28/2021	Gross Alpha/Beta	Gross Beta	4.54E-14	1.92E-14	2.58E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243613	SLAPS LOADOUT	7/28/2021	Gross Alpha/Beta	Gross Alpha	5.91E-16	5.25E-15	1.16E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243613	SLAPS LOADOUT	7/28/2021	Gross Alpha/Beta	Gross Beta	5.05E-14	2.00E-14	2.64E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243614	SLAPS LOADOUT	7/29/2021	Gross Alpha/Beta	Gross Alpha	7.40E-15	7.33E-15	1.04E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243614	SLAPS LOADOUT	7/29/2021	Gross Alpha/Beta	Gross Beta	1.17E-13	2.45E-14	2.34E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA243615	SLAPS LOADOUT	7/29/2021	Gross Alpha/Beta	Gross Alpha	5.11E-15	6.56E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243615	SLAPS LOADOUT	7/29/2021	Gross Alpha/Beta	Gross Beta	4.49E-14	1.78E-14	2.34E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243616	SLAPS LOADOUT	7/29/2021	Gross Alpha/Beta	Gross Alpha	9.62E-15	8.64E-15	1.16E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243616	SLAPS LOADOUT	7/29/2021	Gross Alpha/Beta	Gross Beta	6.14E-14	2.10E-14	2.64E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243617	SLAPS LOADOUT	8/2/2021	Gross Alpha/Beta	Gross Alpha	1.76E-14	1.04E-14	1.10E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243617	SLAPS LOADOUT	8/2/2021	Gross Alpha/Beta	Gross Beta	5.31E-14	1.93E-14	2.48E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243618	SLAPS LOADOUT	8/2/2021	Gross Alpha/Beta	Gross Alpha	4.20E-15	6.50E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243618	SLAPS LOADOUT	8/2/2021	Gross Alpha/Beta	Gross Beta	3.88E-14	1.79E-14	2.48E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243619	SLAPS LOADOUT	8/2/2021	Gross Alpha/Beta	Gross Alpha	5.11E-15	5.88E-15	8.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243619	SLAPS LOADOUT	8/2/2021	Gross Alpha/Beta	Gross Beta	1.34E-14	1.53E-14	2.48E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243620	SLAPS LOADOUT	8/2/2021	Gross Alpha/Beta	Gross Alpha	1.23E-14	8.32E-15	8.45E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243620	SLAPS LOADOUT	8/2/2021	Gross Alpha/Beta	Gross Beta	3.83E-14	1.79E-14	2.48E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243621	SLAPS LOADOUT	8/2/2021	Gross Alpha/Beta	Gross Alpha	7.50E-15	6.79E-15	8.45E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243621	SLAPS LOADOUT	8/2/2021	Gross Alpha/Beta	Gross Beta	6.97E-15	1.46E-14	2.48E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243622	SLAPS LOADOUT	8/2/2021	Gross Alpha/Beta	Gross Alpha	1.08E-14	7.74E-15	8.21E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243622	SLAPS LOADOUT	8/2/2021	Gross Alpha/Beta	Gross Beta	1.15E-14	1.47E-14	2.41E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243623	SLAPS LOADOUT	8/3/2021	Gross Alpha/Beta	Gross Alpha	7.08E-15	6.41E-15	7.98E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243623	SLAPS LOADOUT	8/3/2021	Gross Alpha/Beta	Gross Beta	3.62E-14	1.69E-14	2.34E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243624	SLAPS LOADOUT	8/3/2021	Gross Alpha/Beta	Gross Alpha	4.83E-15	5.56E-15	7.98E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243624	SLAPS LOADOUT	8/3/2021	Gross Alpha/Beta	Gross Beta	2.71E-14	1.60E-14	2.34E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243625	SLAPS LOADOUT	8/3/2021	Gross Alpha/Beta	Gross Alpha	3.25E-16	3.21E-15	7.91E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243625	SLAPS LOADOUT	8/3/2021	Gross Alpha/Beta	Gross Beta	3.59E-14	1.67E-14	2.32E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243626	SLAPS LOADOUT	8/4/2021	Gross Alpha/Beta	Gross Alpha	2.73E-15	4.81E-15	8.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243626	SLAPS LOADOUT	8/4/2021	Gross Alpha/Beta	Gross Beta	2.79E-14	1.68E-14	2.48E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243627	SLAPS LOADOUT	8/4/2021	Gross Alpha/Beta	Gross Alpha	-8.44E-16	2.47E-15	8.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243627	SLAPS LOADOUT	8/4/2021	Gross Alpha/Beta	Gross Beta	1.66E-14	1.56E-14	2.48E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243628	SLAPS LOADOUT	8/4/2021	Gross Alpha/Beta	Gross Alpha	-8.44E-16	2.47E-15	8.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243628	SLAPS LOADOUT	8/4/2021	Gross Alpha/Beta	Gross Beta	2.14E-15	1.40E-14	2.48E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243629	SLAPS LOADOUT	8/5/2021	Gross Alpha/Beta	Gross Alpha	2.56E-15	4.50E-15	7.91E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243629	SLAPS LOADOUT	8/5/2021	Gross Alpha/Beta	Gross Beta	2.98E-14	1.61E-14	2.32E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243630	SLAPS LOADOUT	8/5/2021	Gross Alpha/Beta	Gross Alpha	-7.90E-16	2.31E-15	7.91E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243630	SLAPS LOADOUT	8/5/2021	Gross Alpha/Beta	Gross Beta	3.51E-14	1.67E-14	2.32E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243631	SLAPS LOADOUT	8/5/2021	Gross Alpha/Beta	Gross Alpha	1.04E-14	7.45E-15	7.91E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243631	SLAPS LOADOUT	8/5/2021	Gross Alpha/Beta	Gross Beta	4.87E-14	1.80E-14	2.32E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243632	SLAPS LOADOUT	8/9/2021	Gross Alpha/Beta	Gross Alpha	4.83E-15	5.56E-15	7.98E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243632	SLAPS LOADOUT	8/9/2021	Gross Alpha/Beta	Gross Beta	1.34E-14	1.45E-14	2.34E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243633	SLAPS LOADOUT	8/9/2021	Gross Alpha/Beta	Gross Alpha	1.45E-15	3.95E-15	7.98E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243633	SLAPS LOADOUT	8/9/2021	Gross Alpha/Beta	Gross Beta	9.62E-15	1.41E-14	2.34E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243634	SLAPS LOADOUT	8/9/2021	Gross Alpha/Beta	Gross Alpha	4.83E-15	5.56E-15	7.98E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243634	SLAPS LOADOUT	8/9/2021	Gross Alpha/Beta	Gross Beta	1.19E-14	1.43E-14	2.34E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243635	SLAPS LOADOUT	8/10/2021	Gross Alpha/Beta	Gross Alpha	4.83E-15	5.56E-15	7.98E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243635	SLAPS LOADOUT	8/10/2021	Gross Alpha/Beta	Gross Beta	1.42E-14	1.46E-14	2.34E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243636	SLAPS LOADOUT	8/10/2021	Gross Alpha/Beta	Gross Alpha	2.58E-15	4.54E-15	7.98E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243636	SLAPS LOADOUT	8/10/2021	Gross Alpha/Beta	Gross Beta	2.78E-15	1.33E-14	2.34E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243637	SLAPS LOADOUT	8/10/2021	Gross Alpha/Beta	Gross Alpha	9.33E-15	7.17E-15	7.98E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA243637	SLAPS LOADOUT	8/10/2021	Gross Alpha/Beta	Gross Beta	2.71E-14	1.60E-14	2.34E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243638	SLAPS LOADOUT	8/11/2021	Gross Alpha/Beta	Gross Alpha	8.69E-15	7.20E-15	8.45E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243638	SLAPS LOADOUT	8/11/2021	Gross Alpha/Beta	Gross Beta	4.64E-14	1.87E-14	2.48E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243639	SLAPS LOADOUT	8/11/2021	Gross Alpha/Beta	Gross Alpha	6.71E-16	5.04E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243639	SLAPS LOADOUT	8/11/2021	Gross Alpha/Beta	Gross Beta	2.52E-14	1.65E-14	2.46E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243640	SLAPS LOADOUT	8/11/2021	Gross Alpha/Beta	Gross Alpha	6.58E-16	4.94E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243640	SLAPS LOADOUT	8/11/2021	Gross Alpha/Beta	Gross Beta	2.31E-14	1.60E-14	2.42E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243641	SLAPS LOADOUT	8/11/2021	Gross Alpha/Beta	Gross Alpha	1.40E-14	9.51E-15	1.09E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243641	SLAPS LOADOUT	8/11/2021	Gross Alpha/Beta	Gross Beta	2.94E-14	1.67E-14	2.42E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243642	SLAPS LOADOUT	8/12/2021	Gross Alpha/Beta	Gross Alpha	6.58E-16	4.94E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243642	SLAPS LOADOUT	8/12/2021	Gross Alpha/Beta	Gross Beta	3.02E-14	1.67E-14	2.42E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243643	SLAPS LOADOUT	8/12/2021	Gross Alpha/Beta	Gross Alpha	4.34E-15	6.56E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243643	SLAPS LOADOUT	8/12/2021	Gross Alpha/Beta	Gross Beta	2.89E-14	1.67E-14	2.44E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243644	SLAPS LOADOUT	8/12/2021	Gross Alpha/Beta	Gross Alpha	-5.56E-16	4.31E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243644	SLAPS LOADOUT	8/12/2021	Gross Alpha/Beta	Gross Beta	2.23E-14	1.59E-14	2.42E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243645	SLAPS LOADOUT	8/16/2021	Gross Alpha/Beta	Gross Alpha	1.99E-15	5.85E-15	1.15E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243645	SLAPS LOADOUT	8/16/2021	Gross Alpha/Beta	Gross Beta	2.96E-14	1.75E-14	2.57E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243646	SLAPS LOADOUT	8/16/2021	Gross Alpha/Beta	Gross Alpha	1.09E-14	8.35E-15	1.03E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243646	SLAPS LOADOUT	8/16/2021	Gross Alpha/Beta	Gross Beta	6.21E-14	1.92E-14	2.28E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243647	SLAPS LOADOUT	8/16/2021	Gross Alpha/Beta	Gross Alpha	4.06E-15	6.14E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243647	SLAPS LOADOUT	8/16/2021	Gross Alpha/Beta	Gross Beta	1.88E-14	1.48E-14	2.28E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243648	SLAPS LOADOUT	8/17/2021	Gross Alpha/Beta	Gross Alpha	4.18E-15	6.31E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243648	SLAPS LOADOUT	8/17/2021	Gross Alpha/Beta	Gross Beta	5.78E-14	1.91E-14	2.35E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243649	SLAPS LOADOUT	8/17/2021	Gross Alpha/Beta	Gross Alpha	4.06E-15	6.14E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243649	SLAPS LOADOUT	8/17/2021	Gross Alpha/Beta	Gross Beta	5.47E-14	1.85E-14	2.28E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243650	SLAPS LOADOUT	8/17/2021	Gross Alpha/Beta	Gross Alpha	5.21E-15	6.56E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243650	SLAPS LOADOUT	8/17/2021	Gross Alpha/Beta	Gross Beta	4.80E-14	1.78E-14	2.28E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243651	SLAPS LOADOUT	8/18/2021	Gross Alpha/Beta	Gross Alpha	1.77E-15	5.20E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243651	SLAPS LOADOUT	8/18/2021	Gross Alpha/Beta	Gross Beta	5.54E-14	1.85E-14	2.28E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243652	SLAPS LOADOUT	8/18/2021	Gross Alpha/Beta	Gross Alpha	5.36E-15	6.74E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243652	SLAPS LOADOUT	8/18/2021	Gross Alpha/Beta	Gross Beta	6.93E-14	2.02E-14	2.35E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243653	SLAPS LOADOUT	8/18/2021	Gross Alpha/Beta	Gross Alpha	6.47E-15	7.08E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243653	SLAPS LOADOUT	8/18/2021	Gross Alpha/Beta	Gross Beta	6.86E-14	2.01E-14	2.33E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243654	SLAPS LOADOUT	8/18/2021	Gross Alpha/Beta	Gross Alpha	2.97E-15	5.80E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243654	SLAPS LOADOUT	8/18/2021	Gross Alpha/Beta	Gross Beta	3.52E-14	1.67E-14	2.33E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243655	SLAPS LOADOUT	8/18/2021	Gross Alpha/Beta	Gross Alpha	-2.82E-15	2.46E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243655	SLAPS LOADOUT	8/18/2021	Gross Alpha/Beta	Gross Beta	4.94E-14	1.79E-14	2.28E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243656	SLAPS LOADOUT	8/18/2021	Gross Alpha/Beta	Gross Alpha	4.06E-15	6.14E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243656	SLAPS LOADOUT	8/18/2021	Gross Alpha/Beta	Gross Beta	4.50E-14	1.75E-14	2.28E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243657	SLAPS LOADOUT	8/18/2021	Gross Alpha/Beta	Gross Alpha	1.52E-15	5.36E-15	1.08E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243657	SLAPS LOADOUT	8/18/2021	Gross Alpha/Beta	Gross Beta	5.21E-14	1.88E-14	2.40E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243658	SLAPS LOADOUT	8/19/2021	Gross Alpha/Beta	Gross Alpha	3.58E-15	5.82E-15	9.96E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243658	SLAPS LOADOUT	8/19/2021	Gross Alpha/Beta	Gross Beta	1.62E-14	1.41E-14	2.21E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243659	SLAPS LOADOUT	8/19/2021	Gross Alpha/Beta	Gross Alpha	3.17E-16	4.43E-15	9.96E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243659	SLAPS LOADOUT	8/19/2021	Gross Alpha/Beta	Gross Beta	3.17E-14	1.57E-14	2.21E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA243660	SLAPS LOADOUT	8/19/2021	Gross Alpha/Beta	Gross Alpha	-7.69E-16	3.86E-15	9.96E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243660	SLAPS LOADOUT	8/19/2021	Gross Alpha/Beta	Gross Beta	1.40E-14	1.38E-14	2.21E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243661	SLAPS LOADOUT	8/24/2021	Gross Alpha/Beta	Gross Alpha	5.55E-16	1.95E-15	3.94E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243661	SLAPS LOADOUT	8/24/2021	Gross Alpha/Beta	Gross Beta	3.87E-15	5.29E-15	8.75E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243662	SLAPS LOADOUT	8/24/2021	Gross Alpha/Beta	Gross Alpha	2.28E-15	2.62E-15	3.96E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243662	SLAPS LOADOUT	8/24/2021	Gross Alpha/Beta	Gross Beta	2.53E-14	7.47E-15	8.78E-15	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243663	SLAPS LOADOUT	8/24/2021	Gross Alpha/Beta	Gross Alpha	4.00E-15	3.13E-15	3.94E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243663	SLAPS LOADOUT	8/24/2021	Gross Alpha/Beta	Gross Beta	1.76E-14	6.71E-15	8.75E-15	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243664	SLAPS LOADOUT	8/24/2021	Gross Alpha/Beta	Gross Alpha	3.58E-15	3.02E-15	3.96E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243664	SLAPS LOADOUT	8/24/2021	Gross Alpha/Beta	Gross Beta	2.38E-14	7.34E-15	8.78E-15	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243665	SLAPS LOADOUT	8/24/2021	Gross Alpha/Beta	Gross Alpha	2.71E-15	2.75E-15	3.94E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243665	SLAPS LOADOUT	8/24/2021	Gross Alpha/Beta	Gross Beta	3.27E-14	8.15E-15	8.75E-15	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243666	SLAPS LOADOUT	8/24/2021	Gross Alpha/Beta	Gross Alpha	2.72E-15	2.77E-15	3.97E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243666	SLAPS LOADOUT	8/24/2021	Gross Alpha/Beta	Gross Beta	1.52E-14	6.51E-15	8.81E-15	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243667	SLAPS LOADOUT	8/24/2021	Gross Alpha/Beta	Gross Alpha	6.42E-15	7.36E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243667	SLAPS LOADOUT	8/24/2021	Gross Alpha/Beta	Gross Beta	2.83E-14	1.68E-14	2.47E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243668	SLAPS LOADOUT	8/24/2021	Gross Alpha/Beta	Gross Alpha	1.52E-15	5.36E-15	1.08E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243668	SLAPS LOADOUT	8/24/2021	Gross Alpha/Beta	Gross Beta	3.75E-14	1.73E-14	2.40E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243669	SLAPS LOADOUT	8/24/2021	Gross Alpha/Beta	Gross Alpha	2.70E-15	5.85E-15	1.08E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243669	SLAPS LOADOUT	8/24/2021	Gross Alpha/Beta	Gross Beta	5.36E-14	1.89E-14	2.40E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243670	SLAPS LOADOUT	8/25/2021	Gross Alpha/Beta	Gross Alpha	3.73E-15	8.09E-15	1.49E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243670	SLAPS LOADOUT	8/25/2021	Gross Alpha/Beta	Gross Beta	4.76E-14	2.35E-14	3.31E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243671	SLAPS LOADOUT	8/25/2021	Gross Alpha/Beta	Gross Alpha	1.16E-14	1.06E-14	1.46E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243671	SLAPS LOADOUT	8/25/2021	Gross Alpha/Beta	Gross Beta	3.09E-14	2.13E-14	3.23E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243672	SLAPS LOADOUT	8/25/2021	Gross Alpha/Beta	Gross Alpha	4.69E-16	6.56E-15	1.48E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243672	SLAPS LOADOUT	8/25/2021	Gross Alpha/Beta	Gross Beta	3.13E-14	2.16E-14	3.27E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243673	SLAPS LOADOUT	8/25/2021	Gross Alpha/Beta	Gross Alpha	1.16E-14	1.06E-14	1.46E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243673	SLAPS LOADOUT	8/25/2021	Gross Alpha/Beta	Gross Beta	1.74E-14	1.99E-14	3.23E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243674	SLAPS LOADOUT	8/25/2021	Gross Alpha/Beta	Gross Alpha	5.01E-15	6.68E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243674	SLAPS LOADOUT	8/25/2021	Gross Alpha/Beta	Gross Beta	3.26E-14	1.67E-14	2.38E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243675	SLAPS LOADOUT	8/25/2021	Gross Alpha/Beta	Gross Alpha	2.12E-14	1.10E-14	1.06E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243675	SLAPS LOADOUT	8/25/2021	Gross Alpha/Beta	Gross Beta	6.24E-14	1.95E-14	2.35E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243676	SLAPS LOADOUT	8/26/2021	Gross Alpha/Beta	Gross Alpha	9.27E-15	9.42E-15	1.35E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243676	SLAPS LOADOUT	8/26/2021	Gross Alpha/Beta	Gross Beta	4.50E-14	2.15E-14	3.00E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243677	SLAPS LOADOUT	8/26/2021	Gross Alpha/Beta	Gross Alpha	5.24E-15	7.15E-15	1.14E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243677	SLAPS LOADOUT	8/26/2021	Gross Alpha/Beta	Gross Beta	4.94E-14	1.84E-14	2.17E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243678	SLAPS LOADOUT	8/26/2021	Gross Alpha/Beta	Gross Alpha	5.30E-15	7.23E-15	1.15E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243678	SLAPS LOADOUT	8/26/2021	Gross Alpha/Beta	Gross Beta	7.69E-14	2.16E-14	2.19E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243679	SLAPS LOADOUT	8/30/2021	Gross Alpha/Beta	Gross Alpha	2.06E-15	5.14E-15	1.00E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243679	SLAPS LOADOUT	8/30/2021	Gross Alpha/Beta	Gross Beta	1.42E-14	1.24E-14	1.90E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243680	SLAPS LOADOUT	8/30/2021	Gross Alpha/Beta	Gross Alpha	5.99E-15	6.91E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243680	SLAPS LOADOUT	8/30/2021	Gross Alpha/Beta	Gross Beta	1.62E-14	1.28E-14	1.94E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243681	SLAPS LOADOUT	8/30/2021	Gross Alpha/Beta	Gross Alpha	8.01E-16	4.51E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243681	SLAPS LOADOUT	8/30/2021	Gross Alpha/Beta	Gross Beta	2.28E-14	1.36E-14	1.92E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243682	SLAPS LOADOUT	8/30/2021	Gross Alpha/Beta	Gross Alpha	5.99E-15	6.91E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA243682	SLAPS LOADOUT	8/30/2021	Gross Alpha/Beta	Gross Beta	1.20E-14	1.22E-14	1.94E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243683	SLAPS LOADOUT	8/30/2021	Gross Alpha/Beta	Gross Alpha	8.09E-16	4.56E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243683	SLAPS LOADOUT	8/30/2021	Gross Alpha/Beta	Gross Beta	2.64E-14	1.42E-14	1.94E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243684	SLAPS LOADOUT	8/30/2021	Gross Alpha/Beta	Gross Alpha	3.40E-15	5.85E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243684	SLAPS LOADOUT	8/30/2021	Gross Alpha/Beta	Gross Beta	2.22E-14	1.37E-14	1.94E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243685	SLAPS LOADOUT	8/31/2021	Gross Alpha/Beta	Gross Alpha	1.87E-15	4.66E-15	9.07E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243685	SLAPS LOADOUT	8/31/2021	Gross Alpha/Beta	Gross Beta	2.50E-14	1.28E-14	1.73E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243686	SLAPS LOADOUT	8/31/2021	Gross Alpha/Beta	Gross Alpha	4.17E-15	5.69E-15	9.07E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243686	SLAPS LOADOUT	8/31/2021	Gross Alpha/Beta	Gross Beta	1.44E-14	1.14E-14	1.73E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243687	SLAPS LOADOUT	8/31/2021	Gross Alpha/Beta	Gross Alpha	4.17E-15	5.69E-15	9.07E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243687	SLAPS LOADOUT	8/31/2021	Gross Alpha/Beta	Gross Beta	1.07E-14	1.09E-14	1.73E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243688	SLAPS LOADOUT	9/1/2021	Gross Alpha/Beta	Gross Alpha	1.22E-14	8.38E-15	9.07E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243688	SLAPS LOADOUT	9/1/2021	Gross Alpha/Beta	Gross Beta	4.92E-14	1.58E-14	1.73E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243689	SLAPS LOADOUT	9/1/2021	Gross Alpha/Beta	Gross Alpha	5.32E-15	6.15E-15	9.07E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243689	SLAPS LOADOUT	9/1/2021	Gross Alpha/Beta	Gross Beta	5.52E-14	1.64E-14	1.73E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243690	SLAPS LOADOUT	9/1/2021	Gross Alpha/Beta	Gross Alpha	7.19E-16	4.05E-15	9.07E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243690	SLAPS LOADOUT	9/1/2021	Gross Alpha/Beta	Gross Beta	5.98E-14	1.69E-14	1.73E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243691	SLAPS LOADOUT	9/2/2021	Gross Alpha/Beta	Gross Alpha	6.47E-15	6.57E-15	9.07E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243691	SLAPS LOADOUT	9/2/2021	Gross Alpha/Beta	Gross Beta	3.33E-14	1.39E-14	1.73E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243692	SLAPS LOADOUT	9/2/2021	Gross Alpha/Beta	Gross Alpha	-4.32E-16	3.34E-15	9.07E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243692	SLAPS LOADOUT	9/2/2021	Gross Alpha/Beta	Gross Beta	2.20E-14	1.24E-14	1.73E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243693	SLAPS LOADOUT	9/2/2021	Gross Alpha/Beta	Gross Alpha	5.32E-15	6.15E-15	9.07E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243693	SLAPS LOADOUT	9/2/2021	Gross Alpha/Beta	Gross Beta	2.95E-14	1.34E-14	1.73E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243694	SLAPS LOADOUT	9/3/2021	Gross Alpha/Beta	Gross Alpha	-1.68E-15	2.56E-15	9.60E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243694	SLAPS LOADOUT	9/3/2021	Gross Alpha/Beta	Gross Beta	4.33E-14	1.57E-14	1.83E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243695	SLAPS LOADOUT	9/3/2021	Gross Alpha/Beta	Gross Alpha	4.42E-15	6.03E-15	9.60E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243695	SLAPS LOADOUT	9/3/2021	Gross Alpha/Beta	Gross Beta	5.45E-14	1.70E-14	1.83E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243696	SLAPS LOADOUT	9/3/2021	Gross Alpha/Beta	Gross Alpha	3.20E-15	5.51E-15	9.60E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243696	SLAPS LOADOUT	9/3/2021	Gross Alpha/Beta	Gross Beta	4.89E-14	1.63E-14	1.83E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243697	SLAPS LOADOUT	9/4/2021	Gross Alpha/Beta	Gross Alpha	9.14E-16	5.87E-15	1.25E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243697	SLAPS LOADOUT	9/4/2021	Gross Alpha/Beta	Gross Beta	5.57E-15	1.51E-14	2.61E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243698	SLAPS LOADOUT	9/4/2021	Gross Alpha/Beta	Gross Alpha	2.20E-15	6.41E-15	1.25E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243698	SLAPS LOADOUT	9/4/2021	Gross Alpha/Beta	Gross Beta	7.25E-15	1.53E-14	2.61E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243699	SLAPS LOADOUT	9/4/2021	Gross Alpha/Beta	Gross Alpha	-1.67E-15	4.60E-15	1.25E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243699	SLAPS LOADOUT	9/4/2021	Gross Alpha/Beta	Gross Beta	1.65E-14	1.63E-14	2.61E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243700	SLAPS LOADOUT	9/7/2021	Gross Alpha/Beta	Gross Alpha	6.93E-15	7.76E-15	1.17E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243700	SLAPS LOADOUT	9/7/2021	Gross Alpha/Beta	Gross Beta	4.08E-14	1.80E-14	2.46E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243701	SLAPS LOADOUT	9/7/2021	Gross Alpha/Beta	Gross Alpha	4.25E-15	6.57E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243701	SLAPS LOADOUT	9/7/2021	Gross Alpha/Beta	Gross Beta	3.86E-14	1.70E-14	2.32E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243702	SLAPS LOADOUT	9/7/2021	Gross Alpha/Beta	Gross Alpha	5.72E-15	7.37E-15	1.17E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243702	SLAPS LOADOUT	9/7/2021	Gross Alpha/Beta	Gross Beta	5.82E-14	1.97E-14	2.46E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243703	SLAPS LOADOUT	9/7/2021	Gross Alpha/Beta	Gross Alpha	-3.34E-16	4.69E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243703	SLAPS LOADOUT	9/7/2021	Gross Alpha/Beta	Gross Beta	3.18E-14	1.63E-14	2.32E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243704	SLAPS LOADOUT	9/7/2021	Gross Alpha/Beta	Gross Alpha	6.86E-15	7.69E-15	1.16E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243704	SLAPS LOADOUT	9/7/2021	Gross Alpha/Beta	Gross Beta	6.86E-14	2.06E-14	2.43E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA243705	SLAPS LOADOUT	9/7/2021	Gross Alpha/Beta	Gross Alpha	3.11E-15	6.15E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243705	SLAPS LOADOUT	9/7/2021	Gross Alpha/Beta	Gross Beta	5.50E-14	1.86E-14	2.32E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243706	SLAPS LOADOUT	9/8/2021	Gross Alpha/Beta	Gross Alpha	1.96E-15	5.70E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243706	SLAPS LOADOUT	9/8/2021	Gross Alpha/Beta	Gross Beta	2.74E-14	1.59E-14	2.32E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243707	SLAPS LOADOUT	9/8/2021	Gross Alpha/Beta	Gross Alpha	1.11E-14	8.68E-15	1.11E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243707	SLAPS LOADOUT	9/8/2021	Gross Alpha/Beta	Gross Beta	3.71E-14	1.69E-14	2.32E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243708	SLAPS LOADOUT	9/8/2021	Gross Alpha/Beta	Gross Alpha	8.84E-15	8.03E-15	1.11E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243708	SLAPS LOADOUT	9/8/2021	Gross Alpha/Beta	Gross Beta	1.99E-14	1.51E-14	2.32E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243709	SLAPS LOADOUT	9/9/2021	Gross Alpha/Beta	Gross Alpha	1.64E-14	1.08E-14	1.25E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243709	SLAPS LOADOUT	9/9/2021	Gross Alpha/Beta	Gross Beta	5.09E-14	1.99E-14	2.61E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243710	SLAPS LOADOUT	9/9/2021	Gross Alpha/Beta	Gross Alpha	9.04E-16	5.81E-15	1.23E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243710	SLAPS LOADOUT	9/9/2021	Gross Alpha/Beta	Gross Beta	1.88E-14	1.64E-14	2.58E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243711	SLAPS LOADOUT	9/9/2021	Gross Alpha/Beta	Gross Alpha	6.07E-15	7.83E-15	1.25E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243711	SLAPS LOADOUT	9/9/2021	Gross Alpha/Beta	Gross Beta	3.58E-14	1.84E-14	2.61E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243712	SLAPS LOADOUT	9/13/2021	Gross Alpha/Beta	Gross Alpha	1.12E-14	9.40E-15	1.25E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243712	SLAPS LOADOUT	9/13/2021	Gross Alpha/Beta	Gross Beta	5.68E-14	2.05E-14	2.61E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243713	SLAPS LOADOUT	9/13/2021	Gross Alpha/Beta	Gross Alpha	7.29E-15	8.16E-15	1.23E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243713	SLAPS LOADOUT	9/13/2021	Gross Alpha/Beta	Gross Beta	4.29E-14	1.90E-14	2.58E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243714	SLAPS LOADOUT	9/13/2021	Gross Alpha/Beta	Gross Alpha	1.02E-14	9.23E-15	1.27E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243714	SLAPS LOADOUT	9/13/2021	Gross Alpha/Beta	Gross Beta	6.15E-14	2.13E-14	2.67E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243715	SLAPS LOADOUT	9/13/2021	Gross Alpha/Beta	Gross Alpha	9.33E-16	6.00E-15	1.27E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243715	SLAPS LOADOUT	9/13/2021	Gross Alpha/Beta	Gross Beta	4.26E-14	1.94E-14	2.67E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243716	SLAPS LOADOUT	9/13/2021	Gross Alpha/Beta	Gross Alpha	3.57E-15	7.06E-15	1.27E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243716	SLAPS LOADOUT	9/13/2021	Gross Alpha/Beta	Gross Beta	6.57E-14	2.17E-14	2.67E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243717	SLAPS LOADOUT	9/13/2021	Gross Alpha/Beta	Gross Alpha	5.83E-15	7.62E-15	1.21E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243717	SLAPS LOADOUT	9/13/2021	Gross Alpha/Beta	Gross Beta	2.02E-14	1.83E-14	2.90E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243718	SLAPS LOADOUT	9/14/2021	Gross Alpha/Beta	Gross Alpha	4.55E-16	4.95E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243718	SLAPS LOADOUT	9/14/2021	Gross Alpha/Beta	Gross Beta	4.22E-15	1.52E-14	2.64E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243719	SLAPS LOADOUT	9/14/2021	Gross Alpha/Beta	Gross Alpha	4.55E-16	4.95E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243719	SLAPS LOADOUT	9/14/2021	Gross Alpha/Beta	Gross Beta	5.01E-15	1.53E-14	2.64E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243720	SLAPS LOADOUT	9/14/2021	Gross Alpha/Beta	Gross Alpha	1.12E-14	8.68E-15	1.08E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243720	SLAPS LOADOUT	9/14/2021	Gross Alpha/Beta	Gross Beta	1.19E-14	1.57E-14	2.59E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243721	SLAPS LOADOUT	9/15/2021	Gross Alpha/Beta	Gross Alpha	-7.37E-16	4.19E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243721	SLAPS LOADOUT	9/15/2021	Gross Alpha/Beta	Gross Beta	1.26E-14	1.57E-14	2.57E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243722	SLAPS LOADOUT	9/15/2021	Gross Alpha/Beta	Gross Alpha	6.34E-15	7.15E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243722	SLAPS LOADOUT	9/15/2021	Gross Alpha/Beta	Gross Beta	1.49E-14	1.59E-14	2.57E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243723	SLAPS LOADOUT	9/15/2021	Gross Alpha/Beta	Gross Alpha	2.80E-15	5.85E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243723	SLAPS LOADOUT	9/15/2021	Gross Alpha/Beta	Gross Beta	7.94E-15	1.52E-14	2.57E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243724	SLAPS LOADOUT	9/16/2021	Gross Alpha/Beta	Gross Alpha	7.52E-15	7.54E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243724	SLAPS LOADOUT	9/16/2021	Gross Alpha/Beta	Gross Beta	2.41E-14	1.68E-14	2.57E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243725	SLAPS LOADOUT	9/16/2021	Gross Alpha/Beta	Gross Alpha	1.64E-15	5.41E-15	1.08E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243725	SLAPS LOADOUT	9/16/2021	Gross Alpha/Beta	Gross Beta	3.52E-14	1.81E-14	2.59E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243726	SLAPS LOADOUT	9/16/2021	Gross Alpha/Beta	Gross Alpha	5.31E-15	6.94E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243726	SLAPS LOADOUT	9/16/2021	Gross Alpha/Beta	Gross Beta	2.95E-14	1.78E-14	2.64E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243727	SLAPS LOADOUT	9/16/2021	Gross Alpha/Beta	Gross Alpha	1.65E-15	5.46E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA243727	SLAPS LOADOUT	9/16/2021	Gross Alpha/Beta	Gross Beta	2.45E-14	1.72E-14	2.62E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243728	SLAPS LOADOUT	9/16/2021	Gross Alpha/Beta	Gross Alpha	4.55E-16	4.95E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243728	SLAPS LOADOUT	9/16/2021	Gross Alpha/Beta	Gross Beta	1.21E-14	1.60E-14	2.64E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243729	SLAPS LOADOUT	9/16/2021	Gross Alpha/Beta	Gross Alpha	3.91E-15	6.20E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243729	SLAPS LOADOUT	9/16/2021	Gross Alpha/Beta	Gross Beta	2.36E-14	1.65E-14	2.52E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243730	SLAPS LOADOUT	9/20/2021	Gross Alpha/Beta	Gross Alpha	-7.51E-16	4.27E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243730	SLAPS LOADOUT	9/20/2021	Gross Alpha/Beta	Gross Beta	1.04E-14	1.57E-14	2.62E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243731	SLAPS LOADOUT	9/20/2021	Gross Alpha/Beta	Gross Alpha	5.16E-15	6.75E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243731	SLAPS LOADOUT	9/20/2021	Gross Alpha/Beta	Gross Beta	4.87E-15	1.49E-14	2.57E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243732	SLAPS LOADOUT	9/20/2021	Gross Alpha/Beta	Gross Alpha	-7.59E-16	4.31E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243732	SLAPS LOADOUT	9/20/2021	Gross Alpha/Beta	Gross Beta	-4.48E-15	1.43E-14	2.64E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243733	SLAPS LOADOUT	9/21/2021	Gross Alpha/Beta	Gross Alpha	3.98E-15	6.31E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243733	SLAPS LOADOUT	9/21/2021	Gross Alpha/Beta	Gross Beta	2.56E-14	1.70E-14	2.57E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243734	SLAPS LOADOUT	9/21/2021	Gross Alpha/Beta	Gross Alpha	7.52E-15	7.54E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243734	SLAPS LOADOUT	9/21/2021	Gross Alpha/Beta	Gross Beta	3.41E-14	1.78E-14	2.57E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243735	SLAPS LOADOUT	9/22/2021	Gross Alpha/Beta	Gross Alpha	1.65E-15	5.46E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243735	SLAPS LOADOUT	9/22/2021	Gross Alpha/Beta	Gross Beta	9.66E-15	1.56E-14	2.62E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243736	SLAPS LOADOUT	9/22/2021	Gross Alpha/Beta	Gross Alpha	3.87E-15	6.14E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243736	SLAPS LOADOUT	9/22/2021	Gross Alpha/Beta	Gross Beta	1.52E-14	1.55E-14	2.50E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243737	SLAPS LOADOUT	9/22/2021	Gross Alpha/Beta	Gross Alpha	1.82E-15	4.49E-15	8.88E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243737	SLAPS LOADOUT	9/22/2021	Gross Alpha/Beta	Gross Beta	8.10E-15	1.32E-14	2.21E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243738	SLAPS LOADOUT	9/22/2021	Gross Alpha/Beta	Gross Alpha	5.13E-16	3.54E-15	8.53E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243738	SLAPS LOADOUT	9/22/2021	Gross Alpha/Beta	Gross Beta	1.10E-14	1.31E-14	2.13E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243739	SLAPS LOADOUT	9/22/2021	Gross Alpha/Beta	Gross Alpha	1.73E-15	4.27E-15	8.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243739	SLAPS LOADOUT	9/22/2021	Gross Alpha/Beta	Gross Beta	1.97E-14	1.40E-14	2.11E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243740	SLAPS LOADOUT	9/22/2021	Gross Alpha/Beta	Gross Alpha	4.16E-15	5.49E-15	8.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243740	SLAPS LOADOUT	9/22/2021	Gross Alpha/Beta	Gross Beta	2.21E-14	1.43E-14	2.11E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243741	SLAPS LOADOUT	9/23/2021	Gross Alpha/Beta	Gross Alpha	5.13E-16	3.54E-15	8.53E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243741	SLAPS LOADOUT	9/23/2021	Gross Alpha/Beta	Gross Beta	1.34E-14	1.34E-14	2.13E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243742	SLAPS LOADOUT	9/23/2021	Gross Alpha/Beta	Gross Alpha	4.93E-16	3.40E-15	8.20E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243742	SLAPS LOADOUT	9/23/2021	Gross Alpha/Beta	Gross Beta	1.53E-14	1.32E-14	2.05E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243743	SLAPS LOADOUT	9/23/2021	Gross Alpha/Beta	Gross Alpha	5.38E-15	6.02E-15	8.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243743	SLAPS LOADOUT	9/23/2021	Gross Alpha/Beta	Gross Beta	1.41E-14	1.34E-14	2.11E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243744	SLAPS LOADOUT	9/27/2021	Gross Alpha/Beta	Gross Alpha	7.67E-15	6.81E-15	8.28E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243744	SLAPS LOADOUT	9/27/2021	Gross Alpha/Beta	Gross Beta	5.15E-14	1.74E-14	2.07E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243745	SLAPS LOADOUT	9/27/2021	Gross Alpha/Beta	Gross Alpha	4.16E-15	5.49E-15	8.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243745	SLAPS LOADOUT	9/27/2021	Gross Alpha/Beta	Gross Beta	4.21E-14	1.66E-14	2.11E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243746	SLAPS LOADOUT	9/27/2021	Gross Alpha/Beta	Gross Alpha	4.04E-15	5.34E-15	8.20E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243746	SLAPS LOADOUT	9/27/2021	Gross Alpha/Beta	Gross Beta	3.70E-14	1.57E-14	2.05E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243747	SLAPS LOADOUT	9/27/2021	Gross Alpha/Beta	Gross Alpha	8.95E-15	7.30E-15	8.36E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243747	SLAPS LOADOUT	9/27/2021	Gross Alpha/Beta	Gross Beta	7.02E-14	1.95E-14	2.09E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243748	SLAPS LOADOUT	9/27/2021	Gross Alpha/Beta	Gross Alpha	2.95E-15	4.92E-15	8.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243748	SLAPS LOADOUT	9/27/2021	Gross Alpha/Beta	Gross Beta	3.89E-14	1.63E-14	2.11E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243749	SLAPS LOADOUT	9/27/2021	Gross Alpha/Beta	Gross Alpha	4.47E-15	5.90E-15	9.07E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243749	SLAPS LOADOUT	9/27/2021	Gross Alpha/Beta	Gross Beta	5.04E-14	1.84E-14	2.26E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA243750	SLAPS LOADOUT	9/28/2021	Gross Alpha/Beta	Gross Alpha	6.60E-15	6.50E-15	8.45E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243750	SLAPS LOADOUT	9/28/2021	Gross Alpha/Beta	Gross Beta	4.29E-14	1.67E-14	2.11E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243751	SLAPS LOADOUT	9/28/2021	Gross Alpha/Beta	Gross Alpha	1.73E-15	4.27E-15	8.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243751	SLAPS LOADOUT	9/28/2021	Gross Alpha/Beta	Gross Beta	4.85E-14	1.73E-14	2.11E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243752	SLAPS LOADOUT	9/28/2021	Gross Alpha/Beta	Gross Alpha	6.60E-15	6.50E-15	8.45E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243752	SLAPS LOADOUT	9/28/2021	Gross Alpha/Beta	Gross Beta	5.25E-14	1.78E-14	2.11E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243753	SLAPS LOADOUT	9/29/2021	Gross Alpha/Beta	Gross Alpha	2.24E-14	1.07E-14	7.98E-15	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243753	SLAPS LOADOUT	9/29/2021	Gross Alpha/Beta	Gross Beta	6.17E-14	1.81E-14	1.99E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243754	SLAPS LOADOUT	9/29/2021	Gross Alpha/Beta	Gross Alpha	1.43E-14	8.70E-15	7.98E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243754	SLAPS LOADOUT	9/29/2021	Gross Alpha/Beta	Gross Beta	5.41E-14	1.73E-14	1.99E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243755	SLAPS LOADOUT	9/29/2021	Gross Alpha/Beta	Gross Alpha	6.23E-15	6.14E-15	7.98E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243755	SLAPS LOADOUT	9/29/2021	Gross Alpha/Beta	Gross Beta	4.36E-14	1.61E-14	1.99E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243756	SLAPS LOADOUT	9/30/2021	Gross Alpha/Beta	Gross Alpha	1.63E-15	4.03E-15	7.98E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243756	SLAPS LOADOUT	9/30/2021	Gross Alpha/Beta	Gross Beta	2.24E-14	1.37E-14	1.99E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243757	SLAPS LOADOUT	9/30/2021	Gross Alpha/Beta	Gross Alpha	5.50E-15	6.61E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243757	SLAPS LOADOUT	9/30/2021	Gross Alpha/Beta	Gross Beta	2.96E-14	1.64E-14	2.38E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243758	SLAPS LOADOUT	9/30/2021	Gross Alpha/Beta	Gross Alpha	3.15E-15	5.68E-15	1.00E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243758	SLAPS LOADOUT	9/30/2021	Gross Alpha/Beta	Gross Beta	3.16E-14	1.65E-14	2.36E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243759	SLAPS LOADOUT	10/4/2021	Gross Alpha/Beta	Gross Alpha	4.46E-15	6.37E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243759	SLAPS LOADOUT	10/4/2021	Gross Alpha/Beta	Gross Beta	3.51E-14	1.73E-14	2.45E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243760	SLAPS LOADOUT	10/4/2021	Gross Alpha/Beta	Gross Alpha	4.51E-15	6.43E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243760	SLAPS LOADOUT	10/4/2021	Gross Alpha/Beta	Gross Beta	3.31E-14	1.73E-14	2.47E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243761	SLAPS LOADOUT	10/4/2021	Gross Alpha/Beta	Gross Alpha	-2.68E-15	2.55E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243761	SLAPS LOADOUT	10/4/2021	Gross Alpha/Beta	Gross Beta	5.53E-14	1.93E-14	2.45E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243762	SLAPS LOADOUT	10/5/2021	Gross Alpha/Beta	Gross Alpha	-3.06E-16	4.34E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243762	SLAPS LOADOUT	10/5/2021	Gross Alpha/Beta	Gross Beta	3.06E-14	1.73E-14	2.52E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243763	SLAPS LOADOUT	10/5/2021	Gross Alpha/Beta	Gross Alpha	8.19E-15	7.75E-15	1.06E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243763	SLAPS LOADOUT	10/5/2021	Gross Alpha/Beta	Gross Beta	2.55E-14	1.66E-14	2.49E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243764	SLAPS LOADOUT	10/5/2021	Gross Alpha/Beta	Gross Alpha	4.55E-15	6.49E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243764	SLAPS LOADOUT	10/5/2021	Gross Alpha/Beta	Gross Beta	2.95E-14	1.70E-14	2.49E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243765	SLAPS LOADOUT	10/6/2021	Gross Alpha/Beta	Gross Alpha	4.89E-15	6.97E-15	1.14E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243765	SLAPS LOADOUT	10/6/2021	Gross Alpha/Beta	Gross Beta	4.69E-14	1.98E-14	2.68E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243766	SLAPS LOADOUT	10/6/2021	Gross Alpha/Beta	Gross Alpha	-2.87E-15	2.73E-15	1.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243766	SLAPS LOADOUT	10/6/2021	Gross Alpha/Beta	Gross Beta	2.02E-14	1.68E-14	2.62E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243767	SLAPS LOADOUT	10/6/2021	Gross Alpha/Beta	Gross Alpha	4.69E-15	6.69E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243767	SLAPS LOADOUT	10/6/2021	Gross Alpha/Beta	Gross Beta	4.02E-14	1.86E-14	2.57E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243768	SLAPS LOADOUT	10/6/2021	Gross Alpha/Beta	Gross Alpha	3.51E-15	6.33E-15	1.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243768	SLAPS LOADOUT	10/6/2021	Gross Alpha/Beta	Gross Beta	1.94E-14	1.67E-14	2.62E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243769	SLAPS LOADOUT	10/6/2021	Gross Alpha/Beta	Gross Alpha	9.57E-16	5.19E-15	1.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243769	SLAPS LOADOUT	10/6/2021	Gross Alpha/Beta	Gross Beta	3.60E-14	1.84E-14	2.62E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243770	SLAPS LOADOUT	10/6/2021	Gross Alpha/Beta	Gross Alpha	3.51E-15	6.33E-15	1.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243770	SLAPS LOADOUT	10/6/2021	Gross Alpha/Beta	Gross Beta	2.77E-14	1.76E-14	2.62E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243771	SLAPS LOADOUT	10/7/2021	Gross Alpha/Beta	Gross Alpha	1.03E-14	8.25E-15	1.03E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243771	SLAPS LOADOUT	10/7/2021	Gross Alpha/Beta	Gross Beta	3.79E-14	1.75E-14	2.42E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243772	SLAPS LOADOUT	10/7/2021	Gross Alpha/Beta	Gross Alpha	-1.47E-15	3.45E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA243772	SLAPS LOADOUT	10/7/2021	Gross Alpha/Beta	Gross Beta	2.02E-14	1.57E-14	2.42E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243773	SLAPS LOADOUT	10/7/2021	Gross Alpha/Beta	Gross Alpha	2.06E-15	5.35E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243773	SLAPS LOADOUT	10/7/2021	Gross Alpha/Beta	Gross Beta	3.17E-14	1.69E-14	2.42E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243774	SLAPS LOADOUT	10/11/2021	Gross Alpha/Beta	Gross Alpha	7.74E-15	7.32E-15	1.00E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243774	SLAPS LOADOUT	10/11/2021	Gross Alpha/Beta	Gross Beta	2.19E-14	1.55E-14	2.36E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243775	SLAPS LOADOUT	10/11/2021	Gross Alpha/Beta	Gross Alpha	5.66E-15	6.81E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243775	SLAPS LOADOUT	10/11/2021	Gross Alpha/Beta	Gross Beta	1.96E-14	1.57E-14	2.45E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243776	SLAPS LOADOUT	10/11/2021	Gross Alpha/Beta	Gross Alpha	7.09E-15	8.53E-15	1.31E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243776	SLAPS LOADOUT	10/11/2021	Gross Alpha/Beta	Gross Beta	6.35E-14	2.37E-14	3.06E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243777	SLAPS LOADOUT	10/11/2021	Gross Alpha/Beta	Gross Alpha	-3.95E-16	3.43E-15	9.27E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243777	SLAPS LOADOUT	10/11/2021	Gross Alpha/Beta	Gross Beta	1.68E-14	1.26E-14	1.89E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243778	SLAPS LOADOUT	10/12/2021	Gross Alpha/Beta	Gross Alpha	7.67E-15	6.97E-15	9.02E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243778	SLAPS LOADOUT	10/12/2021	Gross Alpha/Beta	Gross Beta	5.86E-14	1.72E-14	1.84E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243779	SLAPS LOADOUT	10/12/2021	Gross Alpha/Beta	Gross Alpha	6.52E-15	6.57E-15	9.02E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243779	SLAPS LOADOUT	10/12/2021	Gross Alpha/Beta	Gross Beta	5.71E-14	1.70E-14	1.84E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243780	SLAPS LOADOUT	10/12/2021	Gross Alpha/Beta	Gross Alpha	7.89E-16	4.17E-15	9.27E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243780	SLAPS LOADOUT	10/12/2021	Gross Alpha/Beta	Gross Beta	5.26E-14	1.68E-14	1.89E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243781	SLAPS LOADOUT	10/13/2021	Gross Alpha/Beta	Gross Alpha	8.12E-15	7.38E-15	9.55E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243781	SLAPS LOADOUT	10/13/2021	Gross Alpha/Beta	Gross Beta	3.41E-14	1.50E-14	1.95E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243782	SLAPS LOADOUT	10/13/2021	Gross Alpha/Beta	Gross Alpha	8.12E-16	4.29E-15	9.55E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243782	SLAPS LOADOUT	10/13/2021	Gross Alpha/Beta	Gross Beta	3.09E-14	1.47E-14	1.95E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243783	SLAPS LOADOUT	10/13/2021	Gross Alpha/Beta	Gross Alpha	8.12E-16	4.29E-15	9.55E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243783	SLAPS LOADOUT	10/13/2021	Gross Alpha/Beta	Gross Beta	5.33E-14	1.73E-14	1.95E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243784	SLAPS LOADOUT	10/13/2021	Gross Alpha/Beta	Gross Alpha	2.03E-15	4.94E-15	9.55E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243784	SLAPS LOADOUT	10/13/2021	Gross Alpha/Beta	Gross Beta	3.57E-14	1.52E-14	1.95E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243785	SLAPS LOADOUT	10/13/2021	Gross Alpha/Beta	Gross Alpha	3.25E-15	5.51E-15	9.55E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243785	SLAPS LOADOUT	10/13/2021	Gross Alpha/Beta	Gross Beta	4.05E-14	1.58E-14	1.95E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243786	SLAPS LOADOUT	10/13/2021	Gross Alpha/Beta	Gross Alpha	4.47E-15	6.03E-15	9.55E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243786	SLAPS LOADOUT	10/13/2021	Gross Alpha/Beta	Gross Beta	5.17E-14	1.71E-14	1.95E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243787	SLAPS LOADOUT	10/14/2021	Gross Alpha/Beta	Gross Alpha	3.45E-15	5.85E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243787	SLAPS LOADOUT	10/14/2021	Gross Alpha/Beta	Gross Beta	3.03E-14	1.53E-14	2.07E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243788	SLAPS LOADOUT	10/14/2021	Gross Alpha/Beta	Gross Alpha	3.45E-15	5.85E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243788	SLAPS LOADOUT	10/14/2021	Gross Alpha/Beta	Gross Beta	3.03E-14	1.53E-14	2.07E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243789	SLAPS LOADOUT	10/14/2021	Gross Alpha/Beta	Gross Alpha	8.63E-16	4.56E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243789	SLAPS LOADOUT	10/14/2021	Gross Alpha/Beta	Gross Beta	2.26E-14	1.43E-14	2.07E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243790	SLAPS LOADOUT	10/18/2021	Gross Alpha/Beta	Gross Alpha	7.67E-16	4.05E-15	9.02E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243790	SLAPS LOADOUT	10/18/2021	Gross Alpha/Beta	Gross Beta	3.75E-14	1.48E-14	1.84E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243791	SLAPS LOADOUT	10/18/2021	Gross Alpha/Beta	Gross Alpha	5.37E-15	6.15E-15	9.02E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243791	SLAPS LOADOUT	10/18/2021	Gross Alpha/Beta	Gross Beta	4.88E-14	1.61E-14	1.84E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243792	SLAPS LOADOUT	10/18/2021	Gross Alpha/Beta	Gross Alpha	3.07E-15	5.20E-15	9.02E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243792	SLAPS LOADOUT	10/18/2021	Gross Alpha/Beta	Gross Beta	4.66E-14	1.59E-14	1.84E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243793	SLAPS LOADOUT	10/19/2021	Gross Alpha/Beta	Gross Alpha	-4.10E-16	3.56E-15	9.64E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243793	SLAPS LOADOUT	10/19/2021	Gross Alpha/Beta	Gross Beta	2.55E-14	1.41E-14	1.97E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243794	SLAPS LOADOUT	10/19/2021	Gross Alpha/Beta	Gross Alpha	8.04E-16	4.25E-15	9.45E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243794	SLAPS LOADOUT	10/19/2021	Gross Alpha/Beta	Gross Beta	4.56E-14	1.63E-14	1.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA243795	SLAPS LOADOUT	10/19/2021	Gross Alpha/Beta	Gross Alpha	5.58E-15	6.38E-15	9.36E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243795	SLAPS LOADOUT	10/19/2021	Gross Alpha/Beta	Gross Beta	1.93E-14	1.30E-14	1.91E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243796	SLAPS LOADOUT	10/20/2021	Gross Alpha/Beta	Gross Alpha	3.07E-15	5.20E-15	9.02E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243796	SLAPS LOADOUT	10/20/2021	Gross Alpha/Beta	Gross Beta	2.99E-14	1.39E-14	1.84E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243797	SLAPS LOADOUT	10/20/2021	Gross Alpha/Beta	Gross Alpha	1.39E-14	8.98E-15	9.68E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243797	SLAPS LOADOUT	10/20/2021	Gross Alpha/Beta	Gross Beta	3.36E-14	1.67E-14	2.36E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243798	SLAPS LOADOUT	10/20/2021	Gross Alpha/Beta	Gross Alpha	9.75E-15	8.79E-15	1.16E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243798	SLAPS LOADOUT	10/20/2021	Gross Alpha/Beta	Gross Beta	4.57E-14	2.06E-14	2.83E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243799	SLAPS LOADOUT	10/20/2021	Gross Alpha/Beta	Gross Alpha	1.40E-14	1.01E-14	1.17E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243799	SLAPS LOADOUT	10/20/2021	Gross Alpha/Beta	Gross Beta	3.80E-14	2.00E-14	2.86E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243800	SLAPS LOADOUT	10/20/2021	Gross Alpha/Beta	Gross Alpha	2.87E-15	6.23E-15	1.16E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243800	SLAPS LOADOUT	10/20/2021	Gross Alpha/Beta	Gross Beta	1.43E-14	1.73E-14	2.83E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243801	SLAPS LOADOUT	10/20/2021	Gross Alpha/Beta	Gross Alpha	2.69E-15	5.84E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243801	SLAPS LOADOUT	10/20/2021	Gross Alpha/Beta	Gross Beta	3.36E-14	1.84E-14	2.66E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243802	SLAPS LOADOUT	10/21/2021	Gross Alpha/Beta	Gross Alpha	3.54E-15	5.68E-15	9.68E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243802	SLAPS LOADOUT	10/21/2021	Gross Alpha/Beta	Gross Beta	1.12E-14	1.44E-14	2.36E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243803	SLAPS LOADOUT	10/21/2021	Gross Alpha/Beta	Gross Alpha	9.27E-15	7.68E-15	9.68E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243803	SLAPS LOADOUT	10/21/2021	Gross Alpha/Beta	Gross Beta	5.20E-15	1.37E-14	2.36E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243804	SLAPS LOADOUT	10/21/2021	Gross Alpha/Beta	Gross Alpha	4.73E-15	6.19E-15	9.77E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243804	SLAPS LOADOUT	10/21/2021	Gross Alpha/Beta	Gross Beta	3.74E-15	1.37E-14	2.38E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243805	SLAPS LOADOUT	10/25/2021	Gross Alpha/Beta	Gross Alpha	2.37E-15	5.14E-15	9.59E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243805	SLAPS LOADOUT	10/25/2021	Gross Alpha/Beta	Gross Beta	-1.04E-14	1.18E-14	2.34E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243806	SLAPS LOADOUT	10/25/2021	Gross Alpha/Beta	Gross Alpha	1.24E-15	4.66E-15	9.68E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243806	SLAPS LOADOUT	10/25/2021	Gross Alpha/Beta	Gross Beta	9.68E-15	1.42E-14	2.36E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243807	SLAPS LOADOUT	10/25/2021	Gross Alpha/Beta	Gross Alpha	2.39E-15	5.19E-15	9.68E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243807	SLAPS LOADOUT	10/25/2021	Gross Alpha/Beta	Gross Beta	5.20E-15	1.37E-14	2.36E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243808	SLAPS LOADOUT	10/26/2021	Gross Alpha/Beta	Gross Alpha	2.39E-15	5.19E-15	9.68E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243808	SLAPS LOADOUT	10/26/2021	Gross Alpha/Beta	Gross Beta	1.27E-14	1.45E-14	2.36E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243809	SLAPS LOADOUT	10/26/2021	Gross Alpha/Beta	Gross Alpha	1.24E-15	4.66E-15	9.68E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243809	SLAPS LOADOUT	10/26/2021	Gross Alpha/Beta	Gross Beta	2.31E-14	1.56E-14	2.36E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243810	SLAPS LOADOUT	10/26/2021	Gross Alpha/Beta	Gross Alpha	2.35E-15	5.10E-15	9.50E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243810	SLAPS LOADOUT	10/26/2021	Gross Alpha/Beta	Gross Beta	1.61E-14	1.47E-14	2.32E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243811	SLAPS LOADOUT	10/27/2021	Gross Alpha/Beta	Gross Alpha	5.88E-15	6.61E-15	9.77E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243811	SLAPS LOADOUT	10/27/2021	Gross Alpha/Beta	Gross Beta	2.33E-14	1.58E-14	2.38E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243812	SLAPS LOADOUT	10/27/2021	Gross Alpha/Beta	Gross Alpha	9.60E-17	4.05E-15	9.68E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243812	SLAPS LOADOUT	10/27/2021	Gross Alpha/Beta	Gross Beta	1.49E-14	1.48E-14	2.36E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243813	SLAPS LOADOUT	10/27/2021	Gross Alpha/Beta	Gross Alpha	1.04E-16	4.42E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243813	SLAPS LOADOUT	10/27/2021	Gross Alpha/Beta	Gross Beta	-8.18E-15	1.34E-14	2.57E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243814	SLAPS LOADOUT	10/27/2021	Gross Alpha/Beta	Gross Alpha	5.11E-15	6.69E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243814	SLAPS LOADOUT	10/27/2021	Gross Alpha/Beta	Gross Beta	2.20E-14	1.67E-14	2.57E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243815	SLAPS LOADOUT	10/27/2021	Gross Alpha/Beta	Gross Alpha	1.03E-16	4.38E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243815	SLAPS LOADOUT	10/27/2021	Gross Alpha/Beta	Gross Beta	1.29E-14	1.56E-14	2.55E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243816	SLAPS LOADOUT	10/27/2021	Gross Alpha/Beta	Gross Alpha	6.97E-15	6.95E-15	9.68E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243816	SLAPS LOADOUT	10/27/2021	Gross Alpha/Beta	Gross Beta	1.04E-14	1.43E-14	2.36E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243817	SLAPS LOADOUT	10/28/2021	Gross Alpha/Beta	Gross Alpha	1.89E-14	1.05E-14	9.39E-15	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA243817	SLAPS LOADOUT	10/28/2021	Gross Alpha/Beta	Gross Beta	3.22E-14	1.77E-14	2.54E-14	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air
SLA243818	SLAPS LOADOUT	10/28/2021	Gross Alpha/Beta	Gross Alpha	5.04E-15	6.23E-15	9.39E-15	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA243818	SLAPS LOADOUT	10/28/2021	Gross Alpha/Beta	Gross Beta	1.94E-14	1.63E-14	2.54E-14	µCi/mL	UJ	T04, T05	SLAPS (General Area)-Perimeter Air
SLA243819	SLAPS LOADOUT	11/1/2021	Gross Alpha/Beta	Gross Alpha	6.37E-15	6.05E-15	7.91E-15	µCi/mL	UJ	T04, T05	SLAPS (General Area)-Perimeter Air
SLA243819	SLAPS LOADOUT	11/1/2021	Gross Alpha/Beta	Gross Beta	2.28E-14	1.44E-14	2.14E-14	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air
SLA243820	SLAPS LOADOUT	11/1/2021	Gross Alpha/Beta	Gross Alpha	7.43E-15	6.42E-15	7.91E-15	µCi/mL	UJ	T04, T05	SLAPS (General Area)-Perimeter Air
SLA243820	SLAPS LOADOUT	11/1/2021	Gross Alpha/Beta	Gross Beta	2.57E-14	1.48E-14	2.14E-14	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air
SLA243821	SLAPS LOADOUT	11/1/2021	Gross Alpha/Beta	Gross Alpha	3.36E-15	5.06E-15	8.35E-15	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA243821	SLAPS LOADOUT	11/1/2021	Gross Alpha/Beta	Gross Beta	2.56E-14	1.54E-14	2.26E-14	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air
SLA243822	SLAPS LOADOUT	11/2/2021	Gross Alpha/Beta	Gross Alpha	4.65E-15	5.75E-15	8.67E-15	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA243822	SLAPS LOADOUT	11/2/2021	Gross Alpha/Beta	Gross Beta	2.82E-14	1.62E-14	2.35E-14	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air
SLA243823	SLAPS LOADOUT	11/2/2021	Gross Alpha/Beta	Gross Alpha	4.65E-15	5.75E-15	8.67E-15	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA243823	SLAPS LOADOUT	11/2/2021	Gross Alpha/Beta	Gross Beta	2.82E-14	1.62E-14	2.35E-14	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air
SLA243824	SLAPS LOADOUT	11/2/2021	Gross Alpha/Beta	Gross Alpha	8.14E-15	7.04E-15	8.67E-15	µCi/mL	UJ	T04, T05	SLAPS (General Area)-Perimeter Air
SLA243824	SLAPS LOADOUT	11/2/2021	Gross Alpha/Beta	Gross Beta	1.40E-14	1.46E-14	2.35E-14	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA243825	SLAPS LOADOUT	11/3/2021	Gross Alpha/Beta	Gross Alpha	5.93E-15	6.33E-15	8.84E-15	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA243825	SLAPS LOADOUT	11/3/2021	Gross Alpha/Beta	Gross Beta	3.99E-14	1.77E-14	2.39E-14	µCi/mL	=		SLAPS (General Area)-Perimeter Air
SLA243826	SLAPS LOADOUT	11/3/2021	Gross Alpha/Beta	Gross Alpha	-1.27E-15	2.65E-15	9.49E-15	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA243826	SLAPS LOADOUT	11/3/2021	Gross Alpha/Beta	Gross Beta	3.51E-14	1.82E-14	2.57E-14	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air
SLA243827	SLAPS LOADOUT	11/3/2021	Gross Alpha/Beta	Gross Alpha	9.30E-15	1.15E-14	1.73E-14	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA243827	SLAPS LOADOUT	11/3/2021	Gross Alpha/Beta	Gross Beta	7.20E-14	3.40E-14	4.69E-14	µCi/mL	=		SLAPS (General Area)-Perimeter Air
SLA243828	SLAPS LOADOUT	11/3/2021	Gross Alpha/Beta	Gross Alpha	0	3.68E-15	9.49E-15	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA243828	SLAPS LOADOUT	11/3/2021	Gross Alpha/Beta	Gross Beta	3.43E-14	1.81E-14	2.57E-14	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air
SLA243829	SLAPS LOADOUT	11/3/2021	Gross Alpha/Beta	Gross Alpha	5.26E-15	7.92E-15	1.31E-14	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA243829	SLAPS LOADOUT	11/3/2021	Gross Alpha/Beta	Gross Beta	1.16E-14	2.09E-14	3.54E-14	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA243830	SLAPS LOADOUT	11/3/2021	Gross Alpha/Beta	Gross Alpha	5.15E-15	6.36E-15	9.59E-15	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA243830	SLAPS LOADOUT	11/3/2021	Gross Alpha/Beta	Gross Beta	4.51E-14	1.94E-14	2.60E-14	µCi/mL	=		SLAPS (General Area)-Perimeter Air
SLA243831	SLAPS LOADOUT	11/4/2021	Gross Alpha/Beta	Gross Alpha	5.04E-15	6.23E-15	9.39E-15	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA243831	SLAPS LOADOUT	11/4/2021	Gross Alpha/Beta	Gross Beta	3.05E-14	1.75E-14	2.54E-14	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air
SLA243832	SLAPS LOADOUT	11/4/2021	Gross Alpha/Beta	Gross Alpha	9.58E-15	7.64E-15	8.93E-15	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air
SLA243832	SLAPS LOADOUT	11/4/2021	Gross Alpha/Beta	Gross Beta	2.82E-14	1.66E-14	2.42E-14	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air
SLA243833	SLAPS LOADOUT	11/4/2021	Gross Alpha/Beta	Gross Alpha	1.07E-14	7.94E-15	8.84E-15	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air
SLA243833	SLAPS LOADOUT	11/4/2021	Gross Alpha/Beta	Gross Beta	2.87E-14	1.65E-14	2.39E-14	µCi/mL	J	T04, T20	SLAPS (General Area)-Perimeter Air
SLA243834	SLAPS LOADOUT	11/8/2021	Gross Alpha/Beta	Gross Alpha	3.56E-15	5.35E-15	8.84E-15	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA243834	SLAPS LOADOUT	11/8/2021	Gross Alpha/Beta	Gross Beta	1.35E-14	1.48E-14	2.39E-14	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA243835	SLAPS LOADOUT	11/8/2021	Gross Alpha/Beta	Gross Alpha	3.56E-15	5.35E-15	8.84E-15	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA243835	SLAPS LOADOUT	11/8/2021	Gross Alpha/Beta	Gross Beta	4.39E-14	1.81E-14	2.39E-14	µCi/mL	=		SLAPS (General Area)-Perimeter Air
SLA243836	SLAPS LOADOUT	11/8/2021	Gross Alpha/Beta	Gross Alpha	3.49E-15	5.25E-15	8.67E-15	µCi/mL	UJ	T06	SLAPS (General Area)-Perimeter Air
SLA243836	SLAPS LOADOUT	11/8/2021	Gross Alpha/Beta	Gross Beta	5.65E-14	1.91E-14	2.35E-14	µCi/mL	=		SLAPS (General Area)-Perimeter Air
SLA243837	SLAPS LOADOUT	11/9/2021	Gross Alpha/Beta	Gross Alpha	1.10E-14	8.58E-15	1.05E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243837	SLAPS LOADOUT	11/9/2021	Gross Alpha/Beta	Gross Beta	4.47E-14	1.86E-14	2.49E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243838	SLAPS LOADOUT	11/9/2021	Gross Alpha/Beta	Gross Alpha	7.23E-15	7.36E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243838	SLAPS LOADOUT	11/9/2021	Gross Alpha/Beta	Gross Beta	4.90E-14	1.89E-14	2.47E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243839	SLAPS LOADOUT	11/9/2021	Gross Alpha/Beta	Gross Alpha	2.38E-15	5.50E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243839	SLAPS LOADOUT	11/9/2021	Gross Alpha/Beta	Gross Beta	4.74E-14	1.87E-14	2.47E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA243840	SLAPS LOADOUT	11/10/2021	Gross Alpha/Beta	Gross Alpha	5.98E-15	8.08E-15	1.29E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243840	SLAPS LOADOUT	11/10/2021	Gross Alpha/Beta	Gross Beta	6.10E-14	2.35E-14	3.07E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243841	SLAPS LOADOUT	11/10/2021	Gross Alpha/Beta	Gross Alpha	7.40E-15	8.52E-15	1.28E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243841	SLAPS LOADOUT	11/10/2021	Gross Alpha/Beta	Gross Beta	5.34E-14	2.25E-14	3.03E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243842	SLAPS LOADOUT	11/10/2021	Gross Alpha/Beta	Gross Alpha	1.45E-15	6.14E-15	1.29E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243842	SLAPS LOADOUT	11/10/2021	Gross Alpha/Beta	Gross Beta	2.07E-14	1.93E-14	3.07E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243843	SLAPS LOADOUT	11/10/2021	Gross Alpha/Beta	Gross Alpha	5.85E-15	6.74E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243843	SLAPS LOADOUT	11/10/2021	Gross Alpha/Beta	Gross Beta	5.22E-14	1.88E-14	2.40E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243844	SLAPS LOADOUT	11/10/2021	Gross Alpha/Beta	Gross Alpha	2.38E-15	5.50E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243844	SLAPS LOADOUT	11/10/2021	Gross Alpha/Beta	Gross Beta	2.21E-14	1.61E-14	2.47E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243845	SLAPS LOADOUT	11/10/2021	Gross Alpha/Beta	Gross Alpha	5.96E-15	6.87E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243845	SLAPS LOADOUT	11/10/2021	Gross Alpha/Beta	Gross Beta	4.86E-14	1.87E-14	2.44E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243846	SLAPS LOADOUT	11/15/2021	Gross Alpha/Beta	Gross Alpha	5.84E-15	7.88E-15	1.26E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243846	SLAPS LOADOUT	11/15/2021	Gross Alpha/Beta	Gross Beta	3.36E-14	2.03E-14	3.00E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243847	SLAPS LOADOUT	11/15/2021	Gross Alpha/Beta	Gross Alpha	4.41E-15	7.39E-15	1.28E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243847	SLAPS LOADOUT	11/15/2021	Gross Alpha/Beta	Gross Beta	1.46E-14	1.85E-14	3.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243848	SLAPS LOADOUT	11/15/2021	Gross Alpha/Beta	Gross Alpha	3.46E-15	5.79E-15	1.00E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243848	SLAPS LOADOUT	11/15/2021	Gross Alpha/Beta	Gross Beta	1.22E-14	1.46E-14	2.37E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243849	SLAPS LOADOUT	11/15/2021	Gross Alpha/Beta	Gross Alpha	7.40E-15	8.52E-15	1.28E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243849	SLAPS LOADOUT	11/15/2021	Gross Alpha/Beta	Gross Beta	2.62E-14	1.97E-14	3.03E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243850	SLAPS LOADOUT	11/15/2021	Gross Alpha/Beta	Gross Alpha	1.11E-15	4.70E-15	9.91E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243850	SLAPS LOADOUT	11/15/2021	Gross Alpha/Beta	Gross Beta	2.26E-14	1.55E-14	2.35E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243851	SLAPS LOADOUT	11/15/2021	Gross Alpha/Beta	Gross Alpha	2.27E-15	5.24E-15	9.91E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243851	SLAPS LOADOUT	11/15/2021	Gross Alpha/Beta	Gross Beta	3.02E-15	1.34E-14	2.35E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243852	SLAPS LOADOUT	11/16/2021	Gross Alpha/Beta	Gross Alpha	4.81E-15	6.49E-15	1.04E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243852	SLAPS LOADOUT	11/16/2021	Gross Alpha/Beta	Gross Beta	4.59E-14	1.86E-14	2.47E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243853	SLAPS LOADOUT	11/16/2021	Gross Alpha/Beta	Gross Alpha	-4.80E-17	4.09E-15	9.91E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243853	SLAPS LOADOUT	11/16/2021	Gross Alpha/Beta	Gross Beta	3.69E-14	1.70E-14	2.35E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243854	SLAPS LOADOUT	11/16/2021	Gross Alpha/Beta	Gross Alpha	7.03E-15	7.15E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243854	SLAPS LOADOUT	11/16/2021	Gross Alpha/Beta	Gross Beta	4.07E-14	1.77E-14	2.40E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243855	SLAPS LOADOUT	11/17/2021	Gross Alpha/Beta	Gross Alpha	2.33E-15	5.39E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243855	SLAPS LOADOUT	11/17/2021	Gross Alpha/Beta	Gross Beta	7.76E-16	1.35E-14	2.42E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243856	SLAPS LOADOUT	11/17/2021	Gross Alpha/Beta	Gross Alpha	4.71E-15	6.37E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243856	SLAPS LOADOUT	11/17/2021	Gross Alpha/Beta	Gross Beta	3.34E-14	1.70E-14	2.42E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243857	SLAPS LOADOUT	11/17/2021	Gross Alpha/Beta	Gross Alpha	8.60E-15	7.68E-15	1.03E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243857	SLAPS LOADOUT	11/17/2021	Gross Alpha/Beta	Gross Beta	3.41E-14	1.68E-14	2.36E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243858	SLAPS LOADOUT	11/18/2021	Gross Alpha/Beta	Gross Alpha	1.40E-14	9.51E-15	1.09E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243858	SLAPS LOADOUT	11/18/2021	Gross Alpha/Beta	Gross Beta	4.80E-14	1.89E-14	2.50E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243859	SLAPS LOADOUT	11/18/2021	Gross Alpha/Beta	Gross Alpha	5.46E-15	6.94E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243859	SLAPS LOADOUT	11/18/2021	Gross Alpha/Beta	Gross Beta	1.08E-14	1.51E-14	2.50E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243860	SLAPS LOADOUT	11/18/2021	Gross Alpha/Beta	Gross Alpha	7.74E-15	7.61E-15	1.07E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243860	SLAPS LOADOUT	11/18/2021	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
SLA243861	SLAPS LOADOUT	11/22/2021	Gross Alpha/Beta	Gross Alpha	4.01E-15	6.14E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243861	SLAPS LOADOUT	11/22/2021	Gross Alpha/Beta	Gross Beta	1.25E-14	1.45E-14	2.36E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243862	SLAPS LOADOUT	11/22/2021	Gross Alpha/Beta	Gross Alpha	1.72E-15	5.20E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA243862	SLAPS LOADOUT	11/22/2021	Gross Alpha/Beta	Gross Beta	2.00E-14	1.53E-14	2.36E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243863	SLAPS LOADOUT	11/22/2021	Gross Alpha/Beta	Gross Alpha	-5.73E-16	4.07E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243863	SLAPS LOADOUT	11/22/2021	Gross Alpha/Beta	Gross Beta	1.77E-14	1.51E-14	2.36E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243864	SLAPS LOADOUT	11/23/2021	Gross Alpha/Beta	Gross Alpha	6.68E-15	7.36E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243864	SLAPS LOADOUT	11/23/2021	Gross Alpha/Beta	Gross Beta	4.25E-14	1.84E-14	2.50E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243865	SLAPS LOADOUT	11/23/2021	Gross Alpha/Beta	Gross Alpha	-4.25E-15	9.81E-16	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243865	SLAPS LOADOUT	11/23/2021	Gross Alpha/Beta	Gross Beta	-1.13E-14	1.26E-14	2.50E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243866	SLAPS LOADOUT	11/23/2021	Gross Alpha/Beta	Gross Alpha	4.25E-15	6.50E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243866	SLAPS LOADOUT	11/23/2021	Gross Alpha/Beta	Gross Beta	2.19E-14	1.63E-14	2.50E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243867	SLAPS LOADOUT	11/24/2021	Gross Alpha/Beta	Gross Alpha	5.31E-15	6.74E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243867	SLAPS LOADOUT	11/24/2021	Gross Alpha/Beta	Gross Beta	1.59E-14	1.53E-14	2.43E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243868	SLAPS LOADOUT	11/24/2021	Gross Alpha/Beta	Gross Alpha	1.02E-14	8.41E-15	1.08E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243868	SLAPS LOADOUT	11/24/2021	Gross Alpha/Beta	Gross Beta	4.99E-14	1.90E-14	2.48E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243869	SLAPS LOADOUT	11/24/2021	Gross Alpha/Beta	Gross Alpha	5.41E-15	6.87E-15	1.08E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243869	SLAPS LOADOUT	11/24/2021	Gross Alpha/Beta	Gross Beta	3.42E-14	1.74E-14	2.48E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243870	SLAPS LOADOUT	11/24/2021	Gross Alpha/Beta	Gross Alpha	-1.82E-15	3.56E-15	1.09E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243870	SLAPS LOADOUT	11/24/2021	Gross Alpha/Beta	Gross Beta	1.24E-14	1.53E-14	2.50E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243871	SLAPS LOADOUT	11/24/2021	Gross Alpha/Beta	Gross Alpha	2.95E-15	5.85E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243871	SLAPS LOADOUT	11/24/2021	Gross Alpha/Beta	Gross Beta	4.74E-14	1.85E-14	2.43E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243872	SLAPS LOADOUT	11/24/2021	Gross Alpha/Beta	Gross Alpha	2.92E-15	5.80E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243872	SLAPS LOADOUT	11/24/2021	Gross Alpha/Beta	Gross Beta	4.09E-14	1.77E-14	2.41E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243873	SLAPS LOADOUT	11/29/2021	Gross Alpha/Beta	Gross Alpha	3.56E-15	7.06E-15	1.28E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243873	SLAPS LOADOUT	11/29/2021	Gross Alpha/Beta	Gross Beta	4.52E-14	2.11E-14	2.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243874	SLAPS LOADOUT	11/29/2021	Gross Alpha/Beta	Gross Alpha	7.83E-15	8.63E-15	1.28E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243874	SLAPS LOADOUT	11/29/2021	Gross Alpha/Beta	Gross Beta	4.61E-14	2.12E-14	2.93E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243875	SLAPS LOADOUT	11/29/2021	Gross Alpha/Beta	Gross Alpha	2.14E-15	6.46E-15	1.28E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243875	SLAPS LOADOUT	11/29/2021	Gross Alpha/Beta	Gross Beta	1.83E-14	1.83E-14	2.93E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243876	SLAPS LOADOUT	11/29/2021	Gross Alpha/Beta	Gross Alpha	6.56E-15	8.33E-15	1.31E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243876	SLAPS LOADOUT	11/29/2021	Gross Alpha/Beta	Gross Beta	5.29E-14	2.23E-14	3.00E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243877	SLAPS LOADOUT	11/29/2021	Gross Alpha/Beta	Gross Alpha	1.79E-15	5.01E-15	1.02E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243877	SLAPS LOADOUT	11/29/2021	Gross Alpha/Beta	Gross Beta	3.04E-14	1.65E-14	2.29E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243878	SLAPS LOADOUT	11/29/2021	Gross Alpha/Beta	Gross Alpha	7.68E-15	7.80E-15	1.05E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243878	SLAPS LOADOUT	11/29/2021	Gross Alpha/Beta	Gross Beta	3.79E-14	1.77E-14	2.34E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243879	SLAPS LOADOUT	11/30/2021	Gross Alpha/Beta	Gross Alpha	1.38E-14	8.54E-15	8.08E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243879	SLAPS LOADOUT	11/30/2021	Gross Alpha/Beta	Gross Beta	5.75E-14	1.69E-14	1.81E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243880	SLAPS LOADOUT	11/30/2021	Gross Alpha/Beta	Gross Alpha	4.89E-15	5.68E-15	8.23E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243880	SLAPS LOADOUT	11/30/2021	Gross Alpha/Beta	Gross Beta	4.79E-14	1.60E-14	1.84E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243881	SLAPS LOADOUT	11/30/2021	Gross Alpha/Beta	Gross Alpha	8.34E-15	6.96E-15	8.23E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243881	SLAPS LOADOUT	11/30/2021	Gross Alpha/Beta	Gross Beta	5.63E-14	1.70E-14	1.84E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243882	SLAPS LOADOUT	12/1/2021	Gross Alpha/Beta	Gross Alpha	3.71E-15	5.14E-15	8.15E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243882	SLAPS LOADOUT	12/1/2021	Gross Alpha/Beta	Gross Beta	7.22E-14	1.85E-14	1.82E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243883	SLAPS LOADOUT	12/1/2021	Gross Alpha/Beta	Gross Alpha	6.04E-15	6.14E-15	8.23E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243883	SLAPS LOADOUT	12/1/2021	Gross Alpha/Beta	Gross Beta	7.06E-14	1.85E-14	1.84E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243884	SLAPS LOADOUT	12/1/2021	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
SLA243884	SLAPS LOADOUT	12/1/2021	Gross Alpha/Beta	Gross Beta	6.99E-14	1.84E-14	1.84E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA243885	SLAPS LOADOUT	12/1/2021	Gross Alpha/Beta	Gross Alpha	1.16E-14	7.90E-15	8.08E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243885	SLAPS LOADOUT	12/1/2021	Gross Alpha/Beta	Gross Beta	6.93E-14	1.81E-14	1.81E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243886	SLAPS LOADOUT	12/1/2021	Gross Alpha/Beta	Gross Alpha	2.57E-15	4.61E-15	8.15E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243886	SLAPS LOADOUT	12/1/2021	Gross Alpha/Beta	Gross Beta	2.35E-14	1.31E-14	1.82E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243887	SLAPS LOADOUT	12/1/2021	Gross Alpha/Beta	Gross Alpha	8.19E-15	6.84E-15	8.08E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243887	SLAPS LOADOUT	12/1/2021	Gross Alpha/Beta	Gross Beta	6.93E-14	1.81E-14	1.81E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243888	SLAPS LOADOUT	12/2/2021	Gross Alpha/Beta	Gross Alpha	6.94E-15	6.33E-15	7.93E-15	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243888	SLAPS LOADOUT	12/2/2021	Gross Alpha/Beta	Gross Beta	3.31E-14	1.40E-14	1.78E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243889	SLAPS LOADOUT	12/2/2021	Gross Alpha/Beta	Gross Alpha	4.80E-15	5.58E-15	8.08E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243889	SLAPS LOADOUT	12/2/2021	Gross Alpha/Beta	Gross Beta	3.59E-14	1.45E-14	1.81E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243890	SLAPS LOADOUT	12/2/2021	Gross Alpha/Beta	Gross Alpha	2.52E-15	4.52E-15	8.00E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243890	SLAPS LOADOUT	12/2/2021	Gross Alpha/Beta	Gross Beta	6.93E-15	1.07E-14	1.79E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243891	SLAPS LOADOUT	12/6/2021	Gross Alpha/Beta	Gross Alpha	6.04E-15	6.14E-15	8.23E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243891	SLAPS LOADOUT	12/6/2021	Gross Alpha/Beta	Gross Beta	2.58E-15	1.03E-14	1.84E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243892	SLAPS LOADOUT	12/6/2021	Gross Alpha/Beta	Gross Alpha	2.59E-15	4.65E-15	8.23E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243892	SLAPS LOADOUT	12/6/2021	Gross Alpha/Beta	Gross Beta	1.92E-14	1.26E-14	1.84E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243893	SLAPS LOADOUT	12/6/2021	Gross Alpha/Beta	Gross Alpha	-8.63E-16	2.39E-15	8.23E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243893	SLAPS LOADOUT	12/6/2021	Gross Alpha/Beta	Gross Beta	9.39E-15	1.13E-14	1.84E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243894	SLAPS LOADOUT	12/7/2021	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
SLA243894	SLAPS LOADOUT	12/7/2021	Gross Alpha/Beta	Gross Beta	7.54E-15	1.16E-14	1.95E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243895	SLAPS LOADOUT	12/7/2021	Gross Alpha/Beta	Gross Alpha	1.54E-15	4.32E-15	8.80E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243895	SLAPS LOADOUT	12/7/2021	Gross Alpha/Beta	Gross Beta	-2.09E-15	1.03E-14	1.97E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243896	SLAPS LOADOUT	12/7/2021	Gross Alpha/Beta	Gross Alpha	2.61E-15	4.69E-15	8.30E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243896	SLAPS LOADOUT	12/7/2021	Gross Alpha/Beta	Gross Beta	1.71E-14	1.24E-14	1.86E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243897	SLAPS LOADOUT	12/7/2021	Gross Alpha/Beta	Gross Alpha	7.44E-15	7.76E-15	1.13E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243897	SLAPS LOADOUT	12/7/2021	Gross Alpha/Beta	Gross Beta	1.43E-14	1.50E-14	2.42E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243898	SLAPS LOADOUT	12/7/2021	Gross Alpha/Beta	Gross Alpha	-1.00E-15	4.08E-15	1.07E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243898	SLAPS LOADOUT	12/7/2021	Gross Alpha/Beta	Gross Beta	2.27E-15	1.29E-14	2.28E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243899	SLAPS LOADOUT	12/7/2021	Gross Alpha/Beta	Gross Alpha	3.62E-15	6.20E-15	1.08E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243899	SLAPS LOADOUT	12/7/2021	Gross Alpha/Beta	Gross Beta	3.02E-14	1.61E-14	2.31E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243900	SLAPS LOADOUT	12/8/2021	Gross Alpha/Beta	Gross Alpha	-2.28E-15	3.57E-15	1.13E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243900	SLAPS LOADOUT	12/8/2021	Gross Alpha/Beta	Gross Beta	3.20E-15	1.38E-14	2.42E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243901	SLAPS LOADOUT	12/8/2021	Gross Alpha/Beta	Gross Alpha	9.86E-15	8.50E-15	1.13E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243901	SLAPS LOADOUT	12/8/2021	Gross Alpha/Beta	Gross Beta	3.72E-14	1.75E-14	2.42E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243902	SLAPS LOADOUT	12/8/2021	Gross Alpha/Beta	Gross Alpha	1.50E-16	4.90E-15	1.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243902	SLAPS LOADOUT	12/8/2021	Gross Alpha/Beta	Gross Beta	2.59E-14	1.62E-14	2.40E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243903	SLAPS LOADOUT	12/27/2021	Gross Alpha/Beta	Gross Alpha	1.47E-16	4.81E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243903	SLAPS LOADOUT	12/27/2021	Gross Alpha/Beta	Gross Beta	7.99E-14	2.13E-14	2.35E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243904	SLAPS LOADOUT	12/9/2021	Gross Alpha/Beta	Gross Alpha	2.61E-15	6.09E-15	1.14E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243904	SLAPS LOADOUT	12/9/2021	Gross Alpha/Beta	Gross Beta	4.64E-14	1.85E-14	2.44E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243905	SLAPS LOADOUT	12/9/2021	Gross Alpha/Beta	Gross Alpha	3.79E-15	6.50E-15	1.13E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243905	SLAPS LOADOUT	12/9/2021	Gross Alpha/Beta	Gross Beta	3.01E-14	1.67E-14	2.42E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243906	SLAPS LOADOUT	12/9/2021	Gross Alpha/Beta	Gross Alpha	1.68E-14	1.02E-14	1.11E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA243906	SLAPS LOADOUT	12/9/2021	Gross Alpha/Beta	Gross Beta	5.51E-14	1.90E-14	2.37E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA243907	SLAPS LOADOUT	12/13/2021	Gross Alpha/Beta	Gross Alpha	7.29E-15	7.61E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA243907	SLAPS LOADOUT	12/13/2021	Gross Alpha/Beta	Gross Beta	1.94E-14	1.53E-14	2.37E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA243908	SLAPS LOADOUT	12/13/2021	Gross Alpha/Beta	Gross Alpha	3.76E-15	6.44E-15	1.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA243908	SLAPS LOADOUT	12/13/2021	Gross Alpha/Beta	Gross Beta	2.35E-14	1.59E-14	2.40E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250391	SLAPS LOADOUT	12/13/2021	Gross Alpha/Beta	Gross Alpha	3.76E-15	6.44E-15	1.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250391	SLAPS LOADOUT	12/13/2021	Gross Alpha/Beta	Gross Beta	1.02E-14	1.45E-14	2.40E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250392	SLAPS LOADOUT	12/13/2021	Gross Alpha/Beta	Gross Alpha	-1.06E-15	4.32E-15	1.13E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250392	SLAPS LOADOUT	12/13/2021	Gross Alpha/Beta	Gross Beta	1.59E-14	1.52E-14	2.42E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250393	SLAPS LOADOUT	12/13/2021	Gross Alpha/Beta	Gross Alpha	-3.52E-15	2.66E-15	1.14E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250393	SLAPS LOADOUT	12/13/2021	Gross Alpha/Beta	Gross Beta	1.44E-14	1.52E-14	2.44E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250394	SLAPS LOADOUT	12/13/2021	Gross Alpha/Beta	Gross Alpha	2.61E-15	6.09E-15	1.14E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250394	SLAPS LOADOUT	12/13/2021	Gross Alpha/Beta	Gross Beta	3.04E-14	1.69E-14	2.44E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250395	SLAPS LOADOUT	12/14/2021	Gross Alpha/Beta	Gross Alpha	2.53E-15	5.91E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250395	SLAPS LOADOUT	12/14/2021	Gross Alpha/Beta	Gross Beta	1.17E-14	1.45E-14	2.37E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250396	SLAPS LOADOUT	12/14/2021	Gross Alpha/Beta	Gross Alpha	2.53E-15	5.91E-15	1.11E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250396	SLAPS LOADOUT	12/14/2021	Gross Alpha/Beta	Gross Beta	2.18E-14	1.56E-14	2.37E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250397	SLAPS LOADOUT	12/14/2021	Gross Alpha/Beta	Gross Alpha	2.58E-15	6.03E-15	1.13E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250397	SLAPS LOADOUT	12/14/2021	Gross Alpha/Beta	Gross Beta	4.19E-14	1.80E-14	2.42E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250398	SLAPS LOADOUT	12/15/2021	Gross Alpha/Beta	Gross Alpha	7.36E-15	7.68E-15	1.12E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250398	SLAPS LOADOUT	12/15/2021	Gross Alpha/Beta	Gross Beta	2.82E-14	1.64E-14	2.40E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250399	SLAPS LOADOUT	12/15/2021	Gross Alpha/Beta	Gross Alpha	2.77E-15	4.79E-15	8.35E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250399	SLAPS LOADOUT	12/15/2021	Gross Alpha/Beta	Gross Beta	1.63E-14	1.60E-14	2.56E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250400	SLAPS LOADOUT	12/15/2021	Gross Alpha/Beta	Gross Alpha	5.14E-15	5.86E-15	8.35E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250400	SLAPS LOADOUT	12/15/2021	Gross Alpha/Beta	Gross Beta	1.55E-14	1.59E-14	2.56E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250401	SLAPS LOADOUT	12/16/2021	Gross Alpha/Beta	Gross Alpha	1.06E-14	7.56E-15	7.96E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250401	SLAPS LOADOUT	12/16/2021	Gross Alpha/Beta	Gross Beta	6.15E-14	1.98E-14	2.44E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250402	SLAPS LOADOUT	12/16/2021	Gross Alpha/Beta	Gross Alpha	1.49E-15	3.93E-15	7.89E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250402	SLAPS LOADOUT	12/16/2021	Gross Alpha/Beta	Gross Beta	6.01E-14	1.96E-14	2.42E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250403	SLAPS LOADOUT	12/16/2021	Gross Alpha/Beta	Gross Alpha	1.39E-14	8.90E-15	8.60E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250403	SLAPS LOADOUT	12/16/2021	Gross Alpha/Beta	Gross Beta	5.57E-14	2.04E-14	2.64E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250404	SLAPS LOADOUT	12/20/2021	Gross Alpha/Beta	Gross Alpha	5.97E-15	5.97E-15	7.89E-15	µCi/mL	U		SLAPS Loadout (General Area)-Perimeter Air
SLA250404	SLAPS LOADOUT	12/20/2021	Gross Alpha/Beta	Gross Beta	3.06E-14	1.67E-14	2.42E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250405	SLAPS LOADOUT	12/20/2021	Gross Alpha/Beta	Gross Alpha	1.58E-15	4.16E-15	8.35E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250405	SLAPS LOADOUT	12/20/2021	Gross Alpha/Beta	Gross Beta	3.01E-16	1.43E-14	2.56E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250406	SLAPS LOADOUT	12/20/2021	Gross Alpha/Beta	Gross Alpha	5.19E-15	5.91E-15	8.43E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250406	SLAPS LOADOUT	12/20/2021	Gross Alpha/Beta	Gross Beta	1.73E-14	1.63E-14	2.58E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250407	SLAPS LOADOUT	12/21/2021	Gross Alpha/Beta	Gross Alpha	1.38E-14	8.47E-15	7.89E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250407	SLAPS LOADOUT	12/21/2021	Gross Alpha/Beta	Gross Beta	7.00E-14	2.05E-14	2.42E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250408	SLAPS LOADOUT	12/21/2021	Gross Alpha/Beta	Gross Alpha	2.61E-15	4.52E-15	7.89E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250408	SLAPS LOADOUT	12/21/2021	Gross Alpha/Beta	Gross Beta	5.03E-14	1.87E-14	2.42E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250409	SLAPS LOADOUT	12/21/2021	Gross Alpha/Beta	Gross Alpha	1.16E-14	7.83E-15	7.89E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250409	SLAPS LOADOUT	12/21/2021	Gross Alpha/Beta	Gross Beta	7.22E-14	2.07E-14	2.42E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250410	SLAPS LOADOUT	12/22/2021	Gross Alpha/Beta	Gross Alpha	-8.40E-16	2.61E-15	8.87E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250410	SLAPS LOADOUT	12/22/2021	Gross Alpha/Beta	Gross Beta	-1.16E-14	1.38E-14	2.72E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250411	SLAPS LOADOUT	12/22/2021	Gross Alpha/Beta	Gross Alpha	2.91E-15	5.04E-15	8.78E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250411	SLAPS LOADOUT	12/22/2021	Gross Alpha/Beta	Gross Beta	2.73E-14	1.79E-14	2.69E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air

Table C-4. SLAPS Perimeter Air Data Results for CY 2021 (Continued)

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
SLA250412	SLAPS LOADOUT	12/22/2021	Gross Alpha/Beta	Gross Alpha	4.34E-15	5.87E-15	9.16E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250412	SLAPS LOADOUT	12/22/2021	Gross Alpha/Beta	Gross Beta	2.32E-14	1.81E-14	2.81E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250413	SLAPS LOADOUT	12/22/2021	Gross Alpha/Beta	Gross Alpha	4.38E-15	5.93E-15	9.26E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250413	SLAPS LOADOUT	12/22/2021	Gross Alpha/Beta	Gross Beta	2.97E-14	1.90E-14	2.84E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250414	SLAPS LOADOUT	12/22/2021	Gross Alpha/Beta	Gross Alpha	2.94E-15	5.09E-15	8.87E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250414	SLAPS LOADOUT	12/22/2021	Gross Alpha/Beta	Gross Beta	3.10E-14	1.84E-14	2.72E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250415	SLAPS LOADOUT	12/22/2021	Gross Alpha/Beta	Gross Alpha	4.29E-15	5.80E-15	9.06E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250415	SLAPS LOADOUT	12/22/2021	Gross Alpha/Beta	Gross Beta	3.81E-15	1.59E-14	2.78E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250416	SLAPS LOADOUT	12/23/2021	Gross Alpha/Beta	Gross Alpha	5.97E-15	5.97E-15	7.89E-15	µCi/mL	U		SLAPS Loadout (General Area)-Perimeter Air
SLA250416	SLAPS LOADOUT	12/23/2021	Gross Alpha/Beta	Gross Beta	4.88E-14	1.85E-14	2.42E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250417	SLAPS LOADOUT	12/23/2021	Gross Alpha/Beta	Gross Alpha	3.73E-15	5.05E-15	7.89E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250417	SLAPS LOADOUT	12/23/2021	Gross Alpha/Beta	Gross Beta	5.26E-14	1.89E-14	2.42E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250418	SLAPS LOADOUT	12/23/2021	Gross Alpha/Beta	Gross Alpha	8.21E-15	6.77E-15	7.89E-15	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250418	SLAPS LOADOUT	12/23/2021	Gross Alpha/Beta	Gross Beta	6.92E-14	2.05E-14	2.42E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250419	SLAPS LOADOUT	12/27/2021	Gross Alpha/Beta	Gross Alpha	4.96E-15	6.47E-15	1.01E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250419	SLAPS LOADOUT	12/27/2021	Gross Alpha/Beta	Gross Beta	5.61E-14	1.79E-14	1.96E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250420	SLAPS LOADOUT	12/27/2021	Gross Alpha/Beta	Gross Alpha	4.81E-15	6.27E-15	9.76E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250420	SLAPS LOADOUT	12/27/2021	Gross Alpha/Beta	Gross Beta	6.27E-14	1.83E-14	1.90E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250421	SLAPS LOADOUT	12/29/2021	Gross Alpha/Beta	Gross Alpha	2.18E-15	4.93E-15	9.38E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250421	SLAPS LOADOUT	12/29/2021	Gross Alpha/Beta	Gross Beta	4.35E-14	1.57E-14	1.82E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250422	SLAPS LOADOUT	12/29/2021	Gross Alpha/Beta	Gross Alpha	1.13E-15	5.03E-15	1.10E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250422	SLAPS LOADOUT	12/29/2021	Gross Alpha/Beta	Gross Beta	5.00E-14	1.83E-14	2.14E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250423	SLAPS LOADOUT	12/29/2021	Gross Alpha/Beta	Gross Alpha	7.26E-15	8.09E-15	1.17E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250423	SLAPS LOADOUT	12/29/2021	Gross Alpha/Beta	Gross Beta	5.51E-14	1.96E-14	2.27E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250424	SLAPS LOADOUT	12/29/2021	Gross Alpha/Beta	Gross Alpha	2.18E-15	4.93E-15	9.38E-15	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250424	SLAPS LOADOUT	12/29/2021	Gross Alpha/Beta	Gross Beta	1.70E-14	1.23E-14	1.82E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250425	SLAPS LOADOUT	12/29/2021	Gross Alpha/Beta	Gross Alpha	9.82E-15	8.75E-15	1.11E-14	µCi/mL	UJ	T04, T05	SLAPS Loadout (General Area)-Perimeter Air
SLA250425	SLAPS LOADOUT	12/29/2021	Gross Alpha/Beta	Gross Beta	5.34E-14	1.88E-14	2.16E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250426	SLAPS LOADOUT	12/29/2021	Gross Alpha/Beta	Gross Alpha	1.29E-14	9.79E-15	1.13E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250426	SLAPS LOADOUT	12/29/2021	Gross Alpha/Beta	Gross Beta	6.46E-14	2.02E-14	2.19E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250427	SLAPS LOADOUT	12/30/2021	Gross Alpha/Beta	Gross Alpha	5.24E-15	6.83E-15	1.06E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250427	SLAPS LOADOUT	12/30/2021	Gross Alpha/Beta	Gross Beta	5.92E-14	1.89E-14	2.07E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250428	SLAPS LOADOUT	12/30/2021	Gross Alpha/Beta	Gross Alpha	1.06E-15	4.70E-15	1.03E-14	µCi/mL	UJ	T06	SLAPS Loadout (General Area)-Perimeter Air
SLA250428	SLAPS LOADOUT	12/30/2021	Gross Alpha/Beta	Gross Beta	4.50E-14	1.69E-14	2.00E-14	µCi/mL	=		SLAPS Loadout (General Area)-Perimeter Air
SLA250429	SLAPS LOADOUT	12/30/2021	Gross Alpha/Beta	Gross Alpha	1.06E-14	8.72E-15	1.05E-14	µCi/mL	J	T04, T20	SLAPS Loadout (General Area)-Perimeter Air
SLA250429	SLAPS LOADOUT	12/30/2021	Gross Alpha/Beta	Gross Beta	5.86E-14	1.87E-14	2.04E-14	µCi/mL	=		SLAPS Loadout (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 2021

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code
SVP234086	NPDES Outfall 002	01/25/21	ML-003	Ac-227	6.87	6.85	12.7	pCi/L		
SVP234086	NPDES Outfall 002	01/25/21	ML-003	Pa-231	9.39	26	45.7	pCi/L		
SVP234086	NPDES Outfall 002	01/25/21	ML-005	Th-228	0.934	0.575	0.723	pCi/L	J	T04, T20
SVP234086	NPDES Outfall 002	01/25/21	ML-005	Th-230	1.73	0.743	0.529	pCi/L	J	F01
SVP234086	NPDES Outfall 002	01/25/21	ML-005	Th-232	0.538	0.413	0.458	pCi/L	J	T04, T20
SVP234086	NPDES Outfall 002	01/25/21	ML-006	Ra-226	0.315	0.432	0.872	pCi/L	UJ	T06
SVP234086	NPDES Outfall 002	01/25/21	ML-003	Ac-227	0.833	7.49	13	pCi/L	UJ	T04, T06
SVP234086	NPDES Outfall 002	01/25/21	ML-003	Pa-231	5.51	27.4	47.1	pCi/L	UJ	T04, T06
SVP234086	NPDES Outfall 002	01/25/21	ML-018	Gross Alpha	12.4	7.41	11.1	pCi/L	J	T04, T20
SVP234086	NPDES Outfall 002	01/25/21	ML-018	Gross Beta	-0.657	8.66	14.8	pCi/L	UJ	T06
SVP234086	NPDES Outfall 002	01/25/21	ML-021	Total U	0.314	0.0286	5.05	pCi/L	U	T04, T05
SVP234086	NPDES Outfall 002	01/25/21	ML-024	pH	7.46		0.1	No Units	J	A03
SVP234086	NPDES Outfall 002	01/25/21	EPA 160.5	SS	0		0.1	mL/L/hour	U	
SVP234087	NPDES Outfall 002	03/18/21	ML-003	Ac-227	-3.86	6.95	11.5	pCi/L		
SVP234087	NPDES Outfall 002	03/18/21	ML-003	Pa-231	15	26.3	46.7	pCi/L		
SVP234087	NPDES Outfall 002	03/18/21	ML-005	Th-228	0.672	0.443	0.366	pCi/L	J	T04, T20
SVP234087	NPDES Outfall 002	03/18/21	ML-005	Th-230	1.59	0.697	0.508	pCi/L	J	F01
SVP234087	NPDES Outfall 002	03/18/21	ML-005	Th-232	0	0.195	0.507	pCi/L	UJ	T06
SVP234087	NPDES Outfall 002	03/18/21	ML-006	Ra-226	-0.11	0.284	0.981	pCi/L	UJ	T06
SVP234087	NPDES Outfall 002	03/18/21	ML-003	Ac-227	1.76	6.58	11.7	pCi/L	UJ	T04, T06
SVP234087	NPDES Outfall 002	03/18/21	ML-003	Pa-231	-3.49	28.5	48.5	pCi/L	UJ	T04, T06
SVP234087	NPDES Outfall 002	03/18/21	ML-018	Gross Alpha	0	6.5	11.5	pCi/L	UJ	T06
SVP234087	NPDES Outfall 002	03/18/21	ML-018	Gross Beta	5.12	7.92	13.1	pCi/L	UJ	H06, T06
SVP234087	NPDES Outfall 002	03/18/21	ML-021	Total U	0.474	0.0432	5.05	pCi/L	U	H06, T04, T05
SVP234087	NPDES Outfall 002	03/18/21	ML-024	pH	7.23		0.1	No Units	J	A03
SVP234087	NPDES Outfall 002	03/18/21	EPA 160.5	SS	0		0.1	mL/L/hour	U	
SVP234088	NPDES Outfall 002	03/25/21	ML-005	Th-230	0.586	0.434	0.401	pCi/L	J	F01, T04, T20
SVP234088	NPDES Outfall 002	03/25/21	ML-005	Th-228	0.453	0.443	0.759	pCi/L	UJ	T04, T05
SVP234088	NPDES Outfall 002	03/25/21	ML-005	Th-232	0.0566	0.156	0.401	pCi/L	UJ	T06

Table D-1. NPDES Analytical Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code
SVP234088	NPDES Outfall 002	03/25/21	ML-006	Ra-226	-0.31	0.38	1.56	pCi/L	UJ	T06
SVP234088	NPDES Outfall 002	03/25/21	ML-003	Ac-227	6.18	9.57	17.4	pCi/L	UJ	T04, T06
SVP234088	NPDES Outfall 002	03/25/21	ML-003	Pa-231	9.64	38.2	66.7	pCi/L	UJ	T04, T06
SVP234088	NPDES Outfall 002	03/25/21	ML-018	Gross Alpha	-6.26	6.4	12.2	pCi/L	UJ	H06, T06
SVP234088	NPDES Outfall 002	03/25/21	ML-018	Gross Beta	5.78	8	13.2	pCi/L	UJ	T06
SVP234088	NPDES Outfall 002	03/25/21	ML-021	Total U	1.56	0.142	5.05	pCi/L	U	T04, T05
SVP234088	NPDES Outfall 002	03/25/21	ML-024	pH	7.18		0.1	No Units	=	A04
SVP234088	NPDES Outfall 002	03/25/21	EPA 160.5	SS	0		0.1	mL/L/hour	UJ	A03
SVP234089	NPDES Outfall 002	03/27/21	ML-003	Ac-227	0.66	9.68	16.7	pCi/L		
SVP234089	NPDES Outfall 002	03/27/21	ML-003	Pa-231	38.8	36.9	67.8	pCi/L		
SVP234089	NPDES Outfall 002	03/27/21	ML-005	Th-228	0.611	0.438	0.584	pCi/L	J	T04, T20
SVP234089	NPDES Outfall 002	03/27/21	ML-005	Th-230	1.37	0.623	0.464	pCi/L	J	F01
SVP234089	NPDES Outfall 002	03/27/21	ML-005	Th-232	0.289	0.293	0.41	pCi/L	UJ	T06
SVP234089	NPDES Outfall 002	03/27/21	ML-006	Ra-226	0.109	0.444	1.24	pCi/L	UJ	T06
SVP234089	NPDES Outfall 002	03/27/21	ML-003	Ac-227	4.77	10.1	18.1	pCi/L	UJ	T04, T06
SVP234089	NPDES Outfall 002	03/27/21	ML-003	Pa-231	-11.6	40.4	68.1	pCi/L	UJ	T04, T06
SVP234089	NPDES Outfall 002	03/27/21	ML-018	Gross Beta	33.3	9.59	13.2	pCi/L	=	
SVP234089	NPDES Outfall 002	03/27/21	ML-018	Gross Alpha	5.68	7.4	12.2	pCi/L	UJ	H06, T06
SVP234089	NPDES Outfall 002	03/27/21	ML-021	Total U	-0.103	0.00939	5.05	pCi/L	UJ	T06
SVP234089	NPDES Outfall 002	03/27/21	ML-024	pH	6.96		0.1	No Units	=	A03
SVP234089	NPDES Outfall 002	03/27/21	EPA 160.5	SS	0.1		0.1	mL/L/hour	U	
SVP234090	NPDES Outfall 002	04/07/21	ML-005	Th-230	0.616	0.511	0.605	pCi/L	J	F01, T04, T20
SVP234090	NPDES Outfall 002	04/07/21	ML-005	Th-228	0.426	0.432	0.605	pCi/L	UJ	T06
SVP234090	NPDES Outfall 002	04/07/21	ML-005	Th-232	0.0946	0.268	0.696	pCi/L	UJ	T06
SVP234090	NPDES Outfall 002	04/07/21	ML-006	Ra-226	0.656	0.474	0.669	pCi/L	UJ	T04, T05
SVP234090	NPDES Outfall 002	04/07/21	ML-003	Ac-227	1.94	10.4	18.3	pCi/L	UJ	T04, T06
SVP234090	NPDES Outfall 002	04/07/21	ML-003	Pa-231	-13.4	43.7	73.5	pCi/L	UJ	T04, T06
SVP234090	NPDES Outfall 002	04/07/21	ML-018	Gross Beta	21.1	9.05	13.6	pCi/L	=	
SVP234090	NPDES Outfall 002	04/07/21	ML-018	Gross Alpha	-4.83	5.82	11	pCi/L	UJ	T06
SVP234090	NPDES Outfall 002	04/07/21	ML-021	Total U	-0.801	0.0731	10.1	pCi/L	UJ	T06

Table D-1. NPDES Analytical Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code
SVP234090	NPDES Outfall 002	04/07/21	ML-024	pH	7.14		0.1	No Units	J	A03
SVP234090	NPDES Outfall 002	04/07/21	EPA 160.5	SS	0		0.1	mL/L/hour	U	
SVP234091	NPDES Outfall 002	04/10/21	ML-005	Th-228	0.551	0.408	0.377	pCi/L	J	T04, T20
SVP234091	NPDES Outfall 002	04/10/21	ML-005	Th-230	0.498	0.406	0.524	pCi/L	UJ	T04, T05
SVP234091	NPDES Outfall 002	04/10/21	ML-005	Th-232	0.0533	0.147	0.377	pCi/L	UJ	T06
SVP234091	NPDES Outfall 002	04/10/21	ML-006	Ra-226	0.187	0.305	0.671	pCi/L	UJ	T06
SVP234091	NPDES Outfall 002	04/10/21	ML-003	Ac-227	-1.12	10.6	18.2	pCi/L	UJ	T04, T06
SVP234091	NPDES Outfall 002	04/10/21	ML-003	Pa-231	1.47	42.3	72.4	pCi/L	UJ	T04, T06
SVP234091	NPDES Outfall 002	04/10/21	ML-018	Gross Beta	26.3	9.35	13.6	pCi/L	=	
SVP234091	NPDES Outfall 002	04/10/21	ML-018	Gross Alpha	-0.138	6.24	11	pCi/L	UJ	T06
SVP234091	NPDES Outfall 002	04/10/21	ML-021	Total U	-0.723	0.0659	10.1	pCi/L	UJ	T06
SVP234091	NPDES Outfall 002	04/10/21	EPA 160.5	SS	0.4		0.1	mL/L/hour	J	A03
SVP234091	NPDES Outfall 002	04/10/21	ML-024	pH	7.16		0.1	No Units	J	A04
SVP234092	NPDES Outfall 002	04/11/21	ML-003	Ac-227	5.85	10	18.2	pCi/L		
SVP234092	NPDES Outfall 002	04/11/21	ML-003	Pa-231	20.8	38	67.8	pCi/L		
SVP234092	NPDES Outfall 002	04/11/21	ML-005	Th-228	0.496	0.394	0.39	pCi/L	J	T04, T20
SVP234092	NPDES Outfall 002	04/11/21	ML-005	Th-230	0.735	0.494	0.541	pCi/L	J	F01, T04, T20
SVP234092	NPDES Outfall 002	04/11/21	ML-005	Th-232	0.147	0.255	0.54	pCi/L	UJ	T06
SVP234092	NPDES Outfall 002	04/11/21	ML-006	Ra-226	0.372	0.339	0.456	pCi/L	UJ	T04, T05
SVP234092	NPDES Outfall 002	04/11/21	ML-003	Ac-227	-0.241	10.8	18.5	pCi/L	UJ	T04, T06
SVP234092	NPDES Outfall 002	04/11/21	ML-003	Pa-231	32.7	41	73.5	pCi/L	UJ	T04, T06
SVP234092	NPDES Outfall 002	04/11/21	ML-018	Gross Beta	17.3	8.84	13.6	pCi/L	J	T04, T20
SVP234092	NPDES Outfall 002	04/11/21	ML-018	Gross Alpha	2.35	6.46	11	pCi/L	UJ	T06
SVP234092	NPDES Outfall 002	04/11/21	ML-021	Total U	-0.864	0.0788	10.1	pCi/L	UJ	T06
SVP234092	NPDES Outfall 002	04/11/21	ML-024	pH	6.86		0.1	No Units	J	A03
SVP234092	NPDES Outfall 002	04/11/21	EPA 160.5	SS	0		0.1	mL/L/hour	U	
SVP234093	NPDES Outfall 002	04/24/21	ML-003	Ac-227	5.79	9.38	16.8	pCi/L		
SVP234093	NPDES Outfall 002	04/24/21	ML-003	Pa-231	-8.2	38.6	65.2	pCi/L		
SVP234093	NPDES Outfall 002	04/24/21	ML-005	Th-228	0.394	0.376	0.44	pCi/L	UJ	T04, T05

Table D-1. NPDES Analytical Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code
SVP234093	NPDES Outfall 002	04/24/21	ML-005	Th-230	0.415	0.409	0.611	pCi/L	UJ	T04, T05
SVP234093	NPDES Outfall 002	04/24/21	ML-005	Th-232	0.145	0.238	0.44	pCi/L	UJ	T06
SVP234093	NPDES Outfall 002	04/24/21	ML-006	Ra-226	0.161	0.232	0.434	pCi/L	UJ	T06
SVP234093	NPDES Outfall 002	04/24/21	ML-003	Ac-227	3.39	9.83	17.5	pCi/L	UJ	T04, T06
SVP234093	NPDES Outfall 002	04/24/21	ML-003	Pa-231	-51.3	40.5	63.5	pCi/L	UJ	T04, T06
SVP234093	NPDES Outfall 002	04/24/21	ML-018	Gross Alpha	1.52	5.42	9.39	pCi/L	UJ	T06
SVP234093	NPDES Outfall 002	04/24/21	ML-018	Gross Beta	4.16	8.74	14.6	pCi/L	UJ	T06
SVP234093	NPDES Outfall 002	04/24/21	ML-021	Total U	0.225	0.0205	0.505	pCi/L	U	T04, T05
SVP234093	NPDES Outfall 002	04/24/21	ML-024	pH	6.92		0.1	No Units	J	A04
SVP234093	NPDES Outfall 002	04/24/21	EPA 160.5	SS	0		0.1	mL/L/hour	UJ	
SVP234094	NPDES Outfall 002	05/27/21	ML-003	Ac-227	1.9	6.28	11.2	pCi/L		
SVP234094	NPDES Outfall 002	05/27/21	ML-003	Pa-231	2.74	23.5	40.9	pCi/L		
SVP234094	NPDES Outfall 002	05/27/21	ML-005	Th-230	1.34	0.66	0.392	pCi/L	=	
SVP234094	NPDES Outfall 002	05/27/21	ML-005	Th-228	0.217	0.264	0.337	pCi/L	UJ	T06
SVP234094	NPDES Outfall 002	05/27/21	ML-005	Th-232	0.151	0.262	0.556	pCi/L	UJ	T06
SVP234094	NPDES Outfall 002	05/27/21	ML-006	Ra-226	0.286	0.499	1.11	pCi/L	UJ	T06
SVP234094	NPDES Outfall 002	05/27/21	ML-003	Ac-227	-0.109	6.33	11	pCi/L	UJ	T04, T06
SVP234094	NPDES Outfall 002	05/27/21	ML-003	Pa-231	8.59	24.3	42.9	pCi/L	UJ	T04, T06
SVP234094	NPDES Outfall 002	05/27/21	ML-018	Gross Alpha	4.8	6.4	10.6	pCi/L	UJ	T06
SVP234094	NPDES Outfall 002	05/27/21	ML-018	Gross Beta	1.31	8.9	15.1	pCi/L	UJ	T06
SVP234094	NPDES Outfall 002	05/27/21	ML-021	Total U	0.338	0.0308	5.05	pCi/L	U	T04, T05
SVP234094	NPDES Outfall 002	05/27/21	ML-024	pH	6.76		0.1	No Units	J	A03
SVP234094	NPDES Outfall 002	05/27/21	EPA 160.5	SS	0.1		0.1	mL/L/hour	U	
SVP234095	NPDES Outfall 002	06/25/21	ML-005	Th-230	2.2	0.854	0.477	pCi/L	J	F01
SVP234095	NPDES Outfall 002	06/25/21	ML-005	Th-228	0.354	0.338	0.396	pCi/L	UJ	T04, T05
SVP234095	NPDES Outfall 002	06/25/21	ML-005	Th-232	0.13	0.214	0.396	pCi/L	UJ	T06
SVP234095	NPDES Outfall 002	06/25/21	ML-006	Ra-226	0.239	0.318	0.585	pCi/L	UJ	T06
SVP234095	NPDES Outfall 002	06/25/21	ML-003	Ac-227	2.52	9.77	16.9	pCi/L	UJ	T04, T06
SVP234095	NPDES Outfall 002	06/25/21	ML-003	Pa-231	27.7	35.3	62.8	pCi/L	UJ	T04, T06

Table D-1. NPDES Analytical Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code
SVP234095	NPDES Outfall 002	06/25/21	ML-018	Gross Alpha	-5.7	5.33	10.6	pCi/L	UJ	T06
SVP234095	NPDES Outfall 002	06/25/21	ML-018	Gross Beta	7.04	9.03	14.8	pCi/L	UJ	T06
SVP234095	NPDES Outfall 002	06/25/21	ML-021	Total U	-0.01	0.000912	5.05	pCi/L	UJ	T06
SVP234095	NPDES Outfall 002	06/25/21	EPA 160.5	SS	0.5		0.1	mL/L/hour	J	A03
SVP234095	NPDES Outfall 002	06/25/21	ML-024	pH	7.05		0.1	No Units	J	A04
SVP234096	NPDES Outfall 002	06/26/21	ML-003	Ac-227	3.09	9.23	16.2	pCi/L		
SVP234096	NPDES Outfall 002	06/26/21	ML-003	Pa-231	0.484	34.9	59.6	pCi/L		
SVP234096	NPDES Outfall 002	06/26/21	ML-005	Th-228	0.246	0.287	0.449	pCi/L	UJ	T06
SVP234096	NPDES Outfall 002	06/26/21	ML-005	Th-230	0.335	0.319	0.374	pCi/L	UJ	T04, T05
SVP234096	NPDES Outfall 002	06/26/21	ML-005	Th-232	0.281	0.316	0.518	pCi/L	UJ	T06
SVP234096	NPDES Outfall 002	06/26/21	ML-006	Ra-226	0.0761	0.241	0.64	pCi/L	UJ	T06
SVP234096	NPDES Outfall 002	06/26/21	ML-003	Ac-227	-9.35	10.1	16.3	pCi/L	UJ	T04, T06
SVP234096	NPDES Outfall 002	06/26/21	ML-003	Pa-231	7.15	36.1	62	pCi/L	UJ	T04, T06
SVP234096	NPDES Outfall 002	06/26/21	ML-018	Gross Alpha	6	6.52	10.6	pCi/L	UJ	T06
SVP234096	NPDES Outfall 002	06/26/21	ML-018	Gross Beta	7.61	9.05	14.8	pCi/L	UJ	T06
SVP234096	NPDES Outfall 002	06/26/21	ML-021	Total U	0.096	0.00876	5.05	pCi/L	U	T04, T05
SVP234096	NPDES Outfall 002	06/26/21	ML-024	pH	6.93		0.1	No Units	J	A04
SVP234096	NPDES Outfall 002	06/26/21	EPA 160.5	SS	0.1		0.1	mL/L/hour	UJ	A03
SVP234097	VP-56	06/28/21	ML-005	Th-228	0.917	0.537	0.519	pCi/L	J	T04, T20
SVP234097	VP-56	06/28/21	ML-005	Th-230	3.87	1.13	0.375	pCi/L	=	
SVP234097	VP-56	06/28/21	ML-005	Th-232	0.705	0.474	0.519	pCi/L	J	T04, T20
SVP234097	VP-56	06/28/21	ML-006	Ra-226	1.03	0.553	0.507	pCi/L	J	T04, T20
SVP234097	VP-56	06/28/21	ML-003	Ac-227	-1.43	9.87	16.8	pCi/L	UJ	T04, T06
SVP234097	VP-56	06/28/21	ML-003	Pa-231	-33.8	36.7	59.2	pCi/L	UJ	T04, T06
SVP234097	VP-56	06/28/21	ML-018	Gross Beta	17.6	9.55	14.8	pCi/L	J	T04, T20
SVP234097	VP-56	06/28/21	ML-018	Gross Alpha	6.9	6.6	10.6	pCi/L	UJ	T04, T05
SVP234097	VP-56	06/28/21	ML-021	Total U	0.945	0.0862	5.05	pCi/L	U	T04, T05
SVP234097	VP-56	06/28/21	ML-024	pH	6.69		0.1	No Units	J	A03
SVP234097	VP-56	06/28/21	EPA 160.5	SS	0		0.1	mL/L/hour	U	

Table D-1. NPDES Analytical Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code
SVP234098	NPDES Outfall 002	06/28/21	ML-005	Th-228	0.812	0.451	0.314	pCi/L	J	T04, T20
SVP234098	NPDES Outfall 002	06/28/21	ML-005	Th-230	1.27	0.571	0.378	pCi/L	J	F01
SVP234098	NPDES Outfall 002	06/28/21	ML-005	Th-232	0.59	0.396	0.434	pCi/L	J	T04, T20
SVP234098	NPDES Outfall 002	06/28/21	ML-006	Ra-226	0.384	0.474	0.966	pCi/L	UJ	T06
SVP234098	NPDES Outfall 002	06/28/21	ML-003	Ac-227	1.74	9.91	17.2	pCi/L	UJ	T04, T06
SVP234098	NPDES Outfall 002	06/28/21	ML-003	Pa-231	-4.98	37.3	62.9	pCi/L	UJ	T04, T06
SVP234098	NPDES Outfall 002	06/28/21	ML-018	Gross Alpha	5.4	6.46	10.6	pCi/L	UJ	T06
SVP234098	NPDES Outfall 002	06/28/21	ML-018	Gross Beta	10.6	9.2	14.8	pCi/L	UJ	T04, T05
SVP234098	NPDES Outfall 002	06/28/21	ML-021	Total U	1.05	0.0953	5.05	pCi/L	U	T04, T05
SVP234098	NPDES Outfall 002	06/28/21	ML-024	pH	6.97		0.1	No Units	J	A03
SVP234098	NPDES Outfall 002	06/28/21	EPA 160.5	SS	0		0.1	mL/L/hour	U	
SVP234099	NPDES Outfall 002	07/01/21	ML-005	Th-230	1.22	0.637	0.542	pCi/L	J	F01, T04, T20
SVP234099	NPDES Outfall 002	07/01/21	ML-005	Th-228	0.356	0.34	0.398	pCi/L	UJ	T04, T05
SVP234099	NPDES Outfall 002	07/01/21	ML-005	Th-232	0.131	0.216	0.398	pCi/L	UJ	T06
SVP234099	NPDES Outfall 002	07/01/21	ML-006	Ra-226	0.0846	0.338	0.91	pCi/L	UJ	T06
SVP234099	NPDES Outfall 002	07/01/21	ML-003	Ac-227	-22.8	54.2	90.7	pCi/L	UJ	T04, T06
SVP234099	NPDES Outfall 002	07/01/21	ML-003	Pa-231	233	190	351	pCi/L	UJ	T04, T05
SVP234099	NPDES Outfall 002	07/01/21	ML-018	Gross Alpha	-0.6	5.86	10.6	pCi/L	UJ	T06
SVP234099	NPDES Outfall 002	07/01/21	ML-018	Gross Beta	4.79	8.92	14.8	pCi/L	UJ	T06
SVP234099	NPDES Outfall 002	07/01/21	ML-021	Total U	0.169	0.0154	5.05	pCi/L	U	T04, T05
SVP234099	NPDES Outfall 002	07/01/21	ML-024	pH	6.95		0.1	No Units	J	A03
SVP234099	NPDES Outfall 002	07/01/21	EPA 160.5	SS	0		0.1	mL/L/hour	U	
SVP234100	NPDES Outfall 002	07/09/21	ML-005	Th-228	0.642	0.487	0.59	pCi/L	J	T04, T20
SVP234100	NPDES Outfall 002	07/09/21	ML-005	Th-230	3.73	1.18	0.513	pCi/L	J	F01
SVP234100	NPDES Outfall 002	07/09/21	ML-005	Th-232	0	0.227	0.59	pCi/L	UJ	T06
SVP234100	NPDES Outfall 002	07/09/21	ML-006	Ra-226	0.279	0.312	0.513	pCi/L	UJ	T06
SVP234100	NPDES Outfall 002	07/09/21	ML-003	Ac-227	-0.716	9.66	16.5	pCi/L	UJ	T04, T06
SVP234100	NPDES Outfall 002	07/09/21	ML-003	Pa-231	0.771	35.9	61.3	pCi/L	UJ	T04, T06
SVP234100	NPDES Outfall 002	07/09/21	ML-018	Gross Alpha	-2.9	5.52	10.3	pCi/L	UJ	T06

Table D-1. NPDES Analytical Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code
SVP234100	NPDES Outfall 002	07/09/21	ML-018	Gross Beta	7.05	8.45	13.8	pCi/L	UJ	T06
SVP234100	NPDES Outfall 002	07/09/21	ML-021	Total U	-0.275	0.0251	5.05	pCi/L	UJ	T06
SVP234100	NPDES Outfall 002	07/09/21	EPA 160.5	SS	0.5		0.1	mL/L/hour	J	A03
SVP234100	NPDES Outfall 002	07/09/21	ML-024	pH	7.18		0.1	No Units	J	A04
SVP234101	NPDES Outfall 002	07/10/21	ML-003	Ac-227	4.51	12.1	21.2	pCi/L		
SVP234101	NPDES Outfall 002	07/10/21	ML-003	Pa-231	-15.6	46	76.6	pCi/L		
SVP234101	NPDES Outfall 002	07/10/21	ML-005	Th-230	3.02	0.915	0.323	pCi/L	J	F01
SVP234101	NPDES Outfall 002	07/10/21	ML-006	Ra-226	0.906	0.529	0.488	pCi/L	J	T04, T20
SVP234101	NPDES Outfall 002	07/10/21	ML-005	Th-228	0.425	0.346	0.447	pCi/L	UJ	T04, T05
SVP234101	NPDES Outfall 002	07/10/21	ML-005	Th-232	0.0455	0.125	0.322	pCi/L	UJ	T06
SVP234101	NPDES Outfall 002	07/10/21	ML-003	Ac-227	7.65	12.3	21.9	pCi/L	UJ	T04, T06
SVP234101	NPDES Outfall 002	07/10/21	ML-003	Pa-231	-53.5	27.5	80	pCi/L	UJ	T04, T06
SVP234101	NPDES Outfall 002	07/10/21	ML-018	Gross Alpha	3.45	6.12	10.3	pCi/L	UJ	T06
SVP234101	NPDES Outfall 002	07/10/21	ML-018	Gross Beta	13.4	8.77	13.8	pCi/L	UJ	T04, T05
SVP234101	NPDES Outfall 002	07/10/21	ML-021	Total U	-0.134	0.0122	5.05	pCi/L	UJ	T06
SVP234101	NPDES Outfall 002	07/10/21	EPA 160.5	SS	0.6		0.1	mL/L/hour	J	A03
SVP234101	NPDES Outfall 002	07/10/21	ML-024	pH	7.5		0.1	No Units	J	A03
SVP234102	NPDES Outfall 002	07/16/21	ML-003	Ac-227	3.33	10.2	18.1	pCi/L		
SVP234102	NPDES Outfall 002	07/16/21	ML-003	Pa-231	-43	39.2	62.3	pCi/L		
SVP234102	NPDES Outfall 002	07/16/21	ML-005	Th-230	0.902	0.528	0.511	pCi/L	J	F01, T04, T20
SVP234102	NPDES Outfall 002	07/16/21	ML-005	Th-228	0.0346	0.214	0.629	pCi/L	UJ	T06
SVP234102	NPDES Outfall 002	07/16/21	ML-005	Th-232	0.138	0.24	0.51	pCi/L	UJ	T06
SVP234102	NPDES Outfall 002	07/16/21	ML-006	Ra-226	0.0427	0.283	0.827	pCi/L	UJ	T06
SVP234102	NPDES Outfall 002	07/16/21	ML-003	Ac-227	0.388	9.39	16.3	pCi/L	UJ	T04, T06
SVP234102	NPDES Outfall 002	07/16/21	ML-003	Pa-231	3.67	36.1	62.6	pCi/L	UJ	T04, T06
SVP234102	NPDES Outfall 002	07/16/21	ML-018	Gross Alpha	4.08	5.81	9.64	pCi/L	UJ	T06
SVP234102	NPDES Outfall 002	07/16/21	ML-018	Gross Beta	4.93	8.21	13.6	pCi/L	UJ	T06
SVP234102	NPDES Outfall 002	07/16/21	ML-021	Total U	0.506	0.0461	5.05	pCi/L	U	T04, T05
SVP234102	NPDES Outfall 002	07/16/21	ML-024	pH	7.52		0.1	No Units	J	A04

Table D-1. NPDES Analytical Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code
SVP234102	NPDES Outfall 002	07/16/21	EPA 160.5	SS	0		0.1	mL/L/hour	UJ	A03
SVP234103	NPDES Outfall 002	07/25/21	ML-003	Ac-227	13.2	10.5	19.7	pCi/L		
SVP234103	NPDES Outfall 002	07/25/21	ML-003	Pa-231	24	42.3	74.8	pCi/L		
SVP234103	NPDES Outfall 002	07/25/21	ML-005	Th-228	0.475	0.394	0.467	pCi/L	J	T04, T20
SVP234103	NPDES Outfall 002	07/25/21	ML-005	Th-230	0.677	0.473	0.528	pCi/L	J	F01, T04, T20
SVP234103	NPDES Outfall 002	07/25/21	ML-005	Th-232	0.0913	0.216	0.527	pCi/L	UJ	T06
SVP234103	NPDES Outfall 002	07/25/21	ML-006	Ra-226	0.181	0.295	0.649	pCi/L	UJ	T06
SVP234103	NPDES Outfall 002	07/25/21	ML-003	Ac-227	3.81	11.5	20.3	pCi/L	UJ	T04, T06
SVP234103	NPDES Outfall 002	07/25/21	ML-003	Pa-231	-0.798	41.2	70.4	pCi/L	UJ	T04, T06
SVP234103	NPDES Outfall 002	07/25/21	ML-018	Gross Alpha	-0.873	5.29	9.64	pCi/L	UJ	T06
SVP234103	NPDES Outfall 002	07/25/21	ML-018	Gross Beta	-2.08	7.88	13.6	pCi/L	UJ	T06
SVP234103	NPDES Outfall 002	07/25/21	ML-021	Total U	0.339	0.0309	5.05	pCi/L	U	T04, T05
SVP234103	NPDES Outfall 002	07/25/21	ML-024	pH	7.15		0.1	No Units	J	A03
SVP234103	NPDES Outfall 002	07/25/21	EPA 160.5	SS	0.1		0.1	mL/L/hour	U	
SVP234104	NPDES Outfall 002	08/08/21	ML-005	Th-230	1.06	0.72	0.691	pCi/L	J	F01, T04, T20
SVP234104	NPDES Outfall 002	08/08/21	ML-005	Th-228	-0.153	0.254	1.15	pCi/L	UJ	T06
SVP234104	NPDES Outfall 002	08/08/21	ML-005	Th-232	0	0.315	0.819	pCi/L	UJ	T06
SVP234104	NPDES Outfall 002	08/08/21	ML-006	Ra-226	0.353	0.433	0.857	pCi/L	UJ	T06
SVP234104	NPDES Outfall 002	08/08/21	ML-003	Ac-227	-4.29	9.36	15.6	pCi/L	UJ	T04, T06
SVP234104	NPDES Outfall 002	08/08/21	ML-003	Pa-231	12.2	37.7	64.7	pCi/L	UJ	T04, T06
SVP234104	NPDES Outfall 002	08/08/21	ML-018	Gross Alpha	4.41	5.97	9.85	pCi/L	UJ	T06
SVP234104	NPDES Outfall 002	08/08/21	ML-018	Gross Beta	12	9	14.4	pCi/L	UJ	T04, T05
SVP234104	NPDES Outfall 002	08/08/21	ML-021	Total U	1.02	0.0928	5.05	pCi/L	U	T04, T05
SVP234104	NPDES Outfall 002	08/08/21	EPA 160.5	SS	0.2		0.1	mL/L/hour	=	
SVP234104	NPDES Outfall 002	08/08/21	ML-024	pH	6.61		0.1	No Units	J	A03
SVP234105	NPDES Outfall 002	08/09/21	ML-003	Ac-227	-0.104	9.84	16.7	pCi/L		
SVP234105	NPDES Outfall 002	08/09/21	ML-003	Pa-231	35.1	36.8	64.8	pCi/L		
SVP234105	NPDES Outfall 002	08/09/21	ML-005	Th-230	1.1	0.607	0.506	pCi/L	J	F01, T04, T20
SVP234105	NPDES Outfall 002	08/09/21	ML-005	Th-228	0.42	0.443	0.803	pCi/L	UJ	T06

Table D-1. NPDES Analytical Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code
SVP234105	NPDES Outfall 002	08/09/21	ML-005	Th-232	0.286	0.308	0.395	pCi/L	UJ	T06
SVP234105	NPDES Outfall 002	08/09/21	ML-006	Ra-226	0.277	0.441	0.965	pCi/L	UJ	T06
SVP234105	NPDES Outfall 002	08/09/21	ML-003	Ac-227	-5.43	11.4	18.6	pCi/L	UJ	T04, T06
SVP234105	NPDES Outfall 002	08/09/21	ML-003	Pa-231	-12	43.8	72.8	pCi/L	UJ	T04, T06
SVP234105	NPDES Outfall 002	08/09/21	ML-018	Gross Alpha	-0.276	5.5	9.85	pCi/L	UJ	T06
SVP234105	NPDES Outfall 002	08/09/21	ML-018	Gross Beta	5.88	8.71	14.4	pCi/L	UJ	T06
SVP234105	NPDES Outfall 002	08/09/21	ML-021	Total U	1.05	0.0959	5.05	pCi/L	U	T04, T05
SVP234105	NPDES Outfall 002	08/09/21	EPA 160.5	SS	0.4		0.1	mL/L/hour	=	
SVP234105	NPDES Outfall 002	08/09/21	ML-024	pH	6.75		0.1	No Units	J	A03
SVP234106	NPDES Outfall 002	08/12/21	ML-003	Ac-227	-0.815	11.3	19.4	pCi/L		
SVP234106	NPDES Outfall 002	08/12/21	ML-003	Pa-231	1.67	43.8	75	pCi/L		
SVP234106	NPDES Outfall 002	08/12/21	ML-005	Th-228	0.579	0.415	0.553	pCi/L	J	T04, T20
SVP234106	NPDES Outfall 002	08/12/21	ML-005	Th-230	1.83	0.705	0.449	pCi/L	J	F01
SVP234106	NPDES Outfall 002	08/12/21	ML-005	Th-232	0.411	0.327	0.323	pCi/L	J	T04, T20
SVP234106	NPDES Outfall 002	08/12/21	ML-006	Ra-226	0.395	0.361	0.554	pCi/L	UJ	T04, T05
SVP234106	NPDES Outfall 002	08/12/21	ML-003	Ac-227	-2.32	12.2	20.7	pCi/L	UJ	T04, T06
SVP234106	NPDES Outfall 002	08/12/21	ML-003	Pa-231	16.6	44.5	77.5	pCi/L	UJ	T04, T06
SVP234106	NPDES Outfall 002	08/12/21	ML-018	Gross Alpha	-5.39	5.68	11	pCi/L	UJ	T06
SVP234106	NPDES Outfall 002	08/12/21	ML-018	Gross Beta	12.4	8.86	14.1	pCi/L	UJ	T04, T05
SVP234106	NPDES Outfall 002	08/12/21	ML-021	Total U	0.089	0.00812	10.1	pCi/L	U	T04, T05
SVP234106	NPDES Outfall 002	08/12/21	EPA 160.5	SS	1.2		0.1	mL/L/hour	J	A04
SVP234106	NPDES Outfall 002	08/12/21	ML-024	pH	6.36		0.1	No Units	J	A04
SVP234107	NPDES Outfall 002	09/04/21	ML-003	Ac-227	2.46	12.9	22.6	pCi/L		
SVP234107	NPDES Outfall 002	09/04/21	ML-003	Pa-231	27.5	51.2	89.6	pCi/L		
SVP234107	NPDES Outfall 002	09/04/21	ML-005	Th-230	2.19	0.923	0.47	pCi/L	J	F01
SVP234107	NPDES Outfall 002	09/04/21	ML-005	Th-228	0.619	0.505	0.651	pCi/L	UJ	T04, T05
SVP234107	NPDES Outfall 002	09/04/21	ML-005	Th-232	0.353	0.397	0.65	pCi/L	UJ	T06
SVP234107	NPDES Outfall 002	09/04/21	ML-006	Ra-226	0.12	0.224	0.502	pCi/L	UJ	T06
SVP234107	NPDES Outfall 002	09/04/21	ML-003	Ac-227	-0.746	12.9	22.3	pCi/L	UJ	T04, T06

Table D-1. NPDES Analytical Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code
SVP234107	NPDES Outfall 002	09/04/21	ML-003	Pa-231	3.82	50.1	86	pCi/L	UJ	T04, T06
SVP234107	NPDES Outfall 002	09/04/21	ML-018	Gross Alpha	1.31	6.24	10.8	pCi/L	UJ	T06
SVP234107	NPDES Outfall 002	09/04/21	ML-018	Gross Beta	11.2	8.59	13.7	pCi/L	UJ	T04, T05
SVP234107	NPDES Outfall 002	09/04/21	ML-021	Total U	0.622	0.0567	5.05	pCi/L	U	T04, T05
SVP234107	NPDES Outfall 002	09/04/21	EPA 160.5	SS	0.7		0.1	mL/L/hour	J	A03
SVP234107	NPDES Outfall 002	09/04/21	ML-024	pH	7.32		0.1	No Units	J	A04
SVP234108	NPDES Outfall 002	09/21/21	ML-003	Ac-227	5.77	7.91	14.3	pCi/L		
SVP234108	NPDES Outfall 002	09/21/21	ML-003	Pa-231	10.2	26.4	46.5	pCi/L		
SVP234108	NPDES Outfall 002	09/21/21	ML-005	Th-230	0.93	0.483	0.314	pCi/L	J	F01, T04, T20
SVP234108	NPDES Outfall 002	09/21/21	ML-005	Th-228	0.472	0.385	0.594	pCi/L	UJ	T04, T05
SVP234108	NPDES Outfall 002	09/21/21	ML-005	Th-232	0.118	0.205	0.434	pCi/L	UJ	T06
SVP234108	NPDES Outfall 002	09/21/21	ML-006	Ra-226	1.89E-08	0.194	0.666	pCi/L	UJ	T06
SVP234108	NPDES Outfall 002	09/21/21	ML-003	Ac-227	-4.59	7.29	12	pCi/L	UJ	T04, T06
SVP234108	NPDES Outfall 002	09/21/21	ML-003	Pa-231	25.8	25.7	47	pCi/L	UJ	T04, T05
SVP234108	NPDES Outfall 002	09/21/21	ML-018	Gross Alpha	-1.5	5.91	10.8	pCi/L	UJ	T06
SVP234108	NPDES Outfall 002	09/21/21	ML-018	Gross Beta	5.63	9.08	15	pCi/L	UJ	T06
SVP234108	NPDES Outfall 002	09/21/21	ML-021	Total U	-0.318	0.029	5.05	pCi/L	UJ	T06
SVP234108	NPDES Outfall 002	09/21/21	ML-024	pH	6.36		0.1	No Units	J	A03
SVP234108	NPDES Outfall 002	09/21/21	EPA 160.5	SS	0		0.1	mL/L/hour	U	
SVP234109	NPDES Outfall 002	12/10/21	ML-003	Ac-227	0.971	6.9	11.9	pCi/L		
SVP234109	NPDES Outfall 002	12/10/21	ML-003	Pa-231	0.673	26.7	45.3	pCi/L		
SVP234109	NPDES Outfall 002	12/10/21	ML-005	Th-228	1.21	0.814	0.893	pCi/L	J	T04, T20
SVP234109	NPDES Outfall 002	12/10/21	ML-005	Th-230	2	1.03	0.818	pCi/L	J	F01, T04, T20
SVP234109	NPDES Outfall 002	12/10/21	ML-005	Th-232	0.485	0.544	0.892	pCi/L	UJ	T06
SVP234109	NPDES Outfall 002	12/10/21	ML-006	Ra-226	0.193	0.336	0.747	pCi/L	UJ	T06
SVP234109	NPDES Outfall 002	12/10/21	ML-003	Ac-227	-1.26	7.41	12.6	pCi/L	UJ	T04, T06
SVP234109	NPDES Outfall 002	12/10/21	ML-003	Pa-231	23.1	27.1	48.6	pCi/L	UJ	T04, T06
SVP234109	NPDES Outfall 002	12/10/21	ML-018	Gross Alpha	-1.3	6.07	11	pCi/L	UJ	T06
SVP234109	NPDES Outfall 002	12/10/21	ML-018	Gross Beta	-7.62	7.76	13.8	pCi/L	UJ	T06

Table D-1. NPDES Analytical Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code
SVP234109	NPDES Outfall 002	12/10/21	ML-021	Total U	0.137	0.0125	0.505	pCi/L	U	T04, T05
SVP234109	NPDES Outfall 002	12/10/21	EPA 160.5	SS	0.2		0.1	mL/L/hour	J	A03
SVP234109	NPDES Outfall 002	12/10/21	ML-024	pH	6.71		0.1	No Units	J	A04
SVP234110	NPDES Outfall 002	12/28/21	ML-003	Ac-227	-3.72	7.04	11.7	pCi/L		
SVP234110	NPDES Outfall 002	12/28/21	ML-003	Pa-231	-8.85	27.9	46.9	pCi/L		
SVP234110	NPDES Outfall 002	12/28/21	ML-005	Th-228	0.641	0.45	0.508	pCi/L	J	T04, T20
SVP234110	NPDES Outfall 002	12/28/21	ML-005	Th-230	1.29	0.625	0.45	pCi/L	=	
SVP234110	NPDES Outfall 002	12/28/21	ML-005	Th-232	0.208	0.279	0.511	pCi/L	UJ	T06
SVP234110	NPDES Outfall 002	12/28/21	ML-006	Ra-226	1.1	0.872	1.6	pCi/L	UJ	T04, T05
SVP234110	NPDES Outfall 002	12/28/21	ML-003	Ac-227	-1.24	7.14	12.2	pCi/L	UJ	T04, T06
SVP234110	NPDES Outfall 002	12/28/21	ML-003	Pa-231	-30.4	26.3	41.8	pCi/L	UJ	T04, T06
SVP234110	NPDES Outfall 002	12/28/21	ML-018	Gross Alpha	0.722	6.13	10.8	pCi/L	UJ	T06
SVP234110	NPDES Outfall 002	12/28/21	ML-018	Gross Beta	9	7.92	12.8	pCi/L	UJ	T04, T05
SVP234110	NPDES Outfall 002	12/28/21	ML-021	Total U	0.308	0.0281	2.53	pCi/L	U	T04, T05
SVP234110	NPDES Outfall 002	12/28/21	EPA 160.5	SS	0		0.1	mL/L/hour	U	
SVP234110	NPDES Outfall 002	12/28/21	ML-024	pH	6.79		0.1	No Units	J	A03

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:

A03 - Analysis hold times were exceeded.

A04 - Analysis holding times were grossly exceeded.

C05 - Continuing calibration percent difference was greater than 25 percent.

F01 - Blanks: Sample data were qualified as a result of the method blank.

H06 - Professional judgment was used to qualify the data.

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 2021
First Quarter

Date	Rainfall (inches)	Outfall	Date	Rainfall (inches)	Outfall	Date	Rainfall (inches)	Outfall
2021	**24-Hour Total**	**002[a]**	**2021**	**Total**	**002[a]**	**2021**	**24-Hour Total**	**002[a]**
1-Jan	0.39		1-Feb	0.03		1-Mar		
2-Jan	0.40		2-Feb			2-Mar		
3-Jan			3-Feb			3-Mar		
4-Jan			4-Feb			4-Mar		
5-Jan			5-Feb	0.22		5-Mar		
6-Jan			6-Feb			6-Mar		
7-Jan			7-Feb	0.04		7-Mar		
8-Jan			8-Feb			8-Mar		
9-Jan			9-Feb	0.10		9-Mar		
10-Jan			10-Feb	0.04		10-Mar		
11-Jan			11-Feb	0.01		11-Mar	0.03	
12-Jan			12-Feb	0.02		12-Mar	0.45	
13-Jan			13-Feb	0.01		13-Mar	0.05	
14-Jan			14-Feb	0.01		14-Mar		
15-Jan	0.11		15-Feb	0.07		15-Mar	0.16	
16-Jan	0.11		16-Feb	0.46		16-Mar	0.29	
17-Jan			17-Feb			17-Mar		
18-Jan	0.04		18-Feb	0.04		18-Mar	2.26	0.365
19-Jan	0.01		19-Feb			19-Mar	0.65	
20-Jan			20-Feb			20-Mar		
21-Jan			21-Feb			21-Mar		
22-Jan			22-Feb	0.01		22-Mar		
23-Jan			23-Feb			23-Mar		
24-Jan			24-Feb			24-Mar	0.46	
25-Jan	0.41	0.195	25-Feb			25-Mar		0.074
26-Jan	0.80		26-Feb			26-Mar	0.54	
27-Jan			27-Feb			27-Mar		0.087
28-Jan	0.26		28-Feb	0.60		28-Mar	0.28	
29-Jan						29-Mar		
30-Jan						30-Mar		
31-Jan	1.27					31-Mar		
Monthly Total	**3.80**	**0.195**	**Monthly Total**	**1.66**	**0.000**	**Monthly Total**	**5.17**	**0.526**

[a] Per a USACE email dated April 19, 2018, sampling at Outfall 002 has been increased to once per month.

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. 2021).

Table D-2. Rainfall Data for CY 2021 (Continued)
Second Quarter

2021 Date	24-Hour Total Rainfall (inches)	002[a] Outfall	Un-named[b,c] Outfall HISS/ Futura
1-Apr			
2-Apr			
3-Apr			
4-Apr			
5-Apr			
6-Apr			
7-Apr		0.16	
8-Apr	1.01		
9-Apr	0.03		
10-Apr	0.66	0.11	
11-Apr	0.45	0.07	
12-Apr			
13-Apr	0.07		
14-Apr			
15-Apr			
16-Apr			
17-Apr	0.01		
18-Apr	0.07		
19-Apr			
20-Apr			
21-Apr	0.33		
22-Apr	0.01		
23-Apr	0.02		
24-Apr	0.03	0.07	
25-Apr	0.41		
26-Apr			
27-Apr			
28-Apr			
29-Apr	0.77		
30-Apr			
Monthly Total	**3.87**	**0.408**	**0.000**

2021 Date	24-Hour Total Rainfall (inches)	002[a] Outfall	Un-named[b,c] Outfall HISS/ Futura
1-May			
2-May			
3-May	0.13		
4-May	0.01		
5-May	0.07		
6-May			
7-May			
8-May			
9-May	0.04		
10-May	0.13		
11-May			
12-May			
13-May			
14-May			
15-May			
16-May			
17-May	0.02		
18-May	0.56		
19-May	0.40		
20-May			
21-May			
22-May			
23-May			
24-May			
25-May			
26-May	0.16		
27-May			
28-May	1.29	0.208	
29-May	0.04		
30-May			
31-May			
Monthly Total	**2.85**	**0.208**	**0.000**

2021 Date	24-Hour Total Rainfall (inches)	002[a] Outfall	Un-named[b,c] Outfall HISS/ Futura	Un-named[b,d] Outfall VP-56/ VP-57/VP-58 and I-270/Pershall Road
1-Jun				
2-Jun				
3-Jun	0.03			
4-Jun				
5-Jun				
6-Jun				
7-Jun				
8-Jun				
9-Jun	0.10			
10-Jun				
11-Jun				
12-Jun				
13-Jun				
14-Jun				
15-Jun				
16-Jun				
17-Jun				
18-Jun				
19-Jun				
20-Jun	0.36			
21-Jun	0.20			
22-Jun	0.01			
23-Jun				
24-Jun				
25-Jun	1.18	0.191		
26-Jun	1.46	0.236		
27-Jun	0.06			
28-Jun	0.24	0.039		0.128
29-Jun	1.58			
30-Jun				
Monthly Total	**5.22**	**0.466**	**0.000**	**0.128**

[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 HISS/Futura on April 7, 2021.

[d] Remediation work started at the Un-Named Outfall VP-56/VP-57/VP-58 and I-270/Pershall Road 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. 2021).

Table D-2. Rainfall Data for CY 2021 (Continued)
Third Quarter

Date 2021	Rainfall (inches) 24-Hour Total	Outfall 002[a]	Outfall HISS/ Futura Un-Named[b,c]	Outfall VP-56/ VP-57/VP-58 and I-270/Pershall Road Un-Named[b,d]
1-Jul	0.74	0.120		
2-Jul	0.02			
3-Jul				
4-Jul				
5-Jul				
6-Jul				
7-Jul				
8-Jul	0.02			
9-Jul		0.389		
10-Jul	2.41	0.144		
11-Jul	0.89			
12-Jul	0.01			
13-Jul	0.11			
14-Jul				
15-Jul				
16-Jul	0.76	0.123		
17-Jul	0.22			
18-Jul				
19-Jul				
20-Jul				
21-Jul				
22-Jul				
23-Jul				
24-Jul				
25-Jul		0.103		
26-Jul	0.64			
27-Jul				
28-Jul				0.128
29-Jul				
30-Jul	0.18			
31-Jul				
Monthly Total	**6.00**	**0.879**	**0.000**	**0.128**

Date 2021	Rainfall (inches) 24-Hour Total	Outfall 002[a]	Outfall HISS/ Futura Un-Named[b,c]	Outfall VP-56/ VP-57/VP-58 and I-270/Pershall Road Un-Named[b,d]
1-Aug	0.06			
2-Aug				
3-Aug				
4-Aug				
5-Aug				
6-Aug				
7-Aug				
8-Aug		0.257		
9-Aug	1.59	0.032		
10-Aug	0.02			
11-Aug	0.39			
12-Aug		0.147		
13-Aug	0.91			
14-Aug				
15-Aug				
16-Aug				
17-Aug				
18-Aug				
19-Aug				
20-Aug				
21-Aug				
22-Aug				
23-Aug				
24-Aug	0.52			
25-Aug				
26-Aug				
27-Aug	0.08			
28-Aug				
29-Aug				
30-Aug				
31-Aug	0.12			
Monthly Total	**3.69**	**0.436**	**0.000**	**0.000**

Date 2021	Rainfall (inches) 24-Hour Total	Outfall 002[a]	Outfall VP-56/ VP-57/VP-58 and I-270/Pershall Road Un-named[b,d]
1-Sep	1.22		
2-Sep			
3-Sep			
4-Sep	0.75	0.121	
5-Sep	0.14		
6-Sep			
7-Sep			
8-Sep			
9-Sep			
10-Sep			
10-Sep			
10-Sep			
10-Sep			
10-Sep	0.36		
10-Sep			
16-Sep			
10-Sep			
10-Sep			
10-Sep			
20-Sep	0.03		
21-Sep	1.68	0.271	
22-Sep	0.02		
23-Sep			
24-Sep			
25-Sep	0.06		
26-Sep			
27-Sep			
28-Sep			
29-Sep			
30-Sep			
Monthly Total	**4.26**	**0.392**	**0.000**

[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 finished at the Un-Named Outfall HISS/Futura on August 24, 2021.

[d] Remediation work started at the Un-Named Outfall VP-56/VP-57/VP-58 and I-270/Pershall Road 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. 2021).

Table D-2. Rainfall Data for CY 2021 (Continued)
Fourth Quarter

Date 2021	Rainfall (inches) 24-Hour Total	Outfall 002[a]	Outfall VP-56/ VP-57/VP-58 and I-270/Pershall Road Un-Named[b,c]	Date 2021	Rainfall (inches) 24-Hour Total	Outfall 002[a]	Outfall VP-56/ VP-57/VP-58 and I-270/Pershall Road Un-Named[b,c]	Date 2021	Rainfall (inches) 24-Hour Total	Outfall 002[a]	Outfall VP-56/ VP-57/VP-58 and I-270/Pershall Road Un-Named[b,c]
1-Oct				1-Nov	0.01			1-Dec	0.01		
2-Oct	0.14			2-Nov				2-Dec			
3-Oct	0.32			3-Nov				3-Dec			
4-Oct				4-Nov				4-Dec			
5-Oct				5-Nov				5-Dec			
6-Oct	0.02			6-Nov				6-Dec	0.01		
7-Oct				7-Nov				7-Dec			
8-Oct				8-Nov				8-Dec			
9-Oct				9-Nov				9-Dec			
10-Oct				10-Nov				10-Dec	0.92	0.149	
11-Oct	0.44			11-Nov	0.07			11-Dec			
12-Oct				12-Nov				12-Dec			
13-Oct	0.02			13-Nov				13-Dec			
14-Oct	0.82			14-Nov	0.09			14-Dec			
15-Oct	0.10			15-Nov				15-Dec			
16-Oct				16-Nov				16-Dec	0.09		
17-Oct				17-Nov				17-Dec	0.22		
18-Oct				18-Nov				18-Dec	0.30		
19-Oct				19-Nov				19-Dec			
20-Oct	0.05			20-Nov				20-Dec			
21-Oct				21-Nov				21-Dec			
22-Oct				22-Nov				22-Dec			
23-Oct	0.02			23-Nov				23-Dec			
24-Oct				24-Nov	0.01			24-Dec			
25-Oct				25-Nov	0.17			25-Dec			
26-Oct				26-Nov				26-Dec	0.01		
27-Oct				27-Nov				27-Dec	0.01		
28-Oct	0.59			28-Nov				28-Dec	0.04	0.17	
29-Oct	0.10			29-Nov				29-Dec	1.04		
30-Oct				30-Nov				30-Dec	0.06		
31-Oct								31-Dec			
Monthly Total	**2.62**	**0.000**	**0.000**	**Monthly Total**	**0.35**	**0.000**	**0.000**	**Monthly Total**	**2.71**	**0.323**	**0.000**

[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 and I-270/Pershall Road 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. 2021).

Table D-3. Self-Monitoring Report for Excavation Water Discharge During CY 2021 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-340	01/13/21 - 01/14/21 (I-270/ Pershall Road)	<14.5	pCi/L	121,633	3.3E-06	3,000	pCi/L	0.00
Gross Beta			<15.4	pCi/L		3.5E-06	NA		
Th-228			<0.8	pCi/L		1.9E-07	2,000	pCi/L	
Th-230			0.9	pCi/L		4.1E-07	1,000	pCi/L	
Uranium (KPA)			<5.1	pCi/L		1.2E-06	3,000	pCi/L	
Ra-226[c]			<0.9	pCi/L		2.1E-07	10	pCi/L	
Ra-228[d,e]			<0.8	pCi/L		1.9E-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)			<14.5	pCi/L			-		
TSS			10.5	mg/L			-		
Gross Alpha (raw water)	SLAPS-341	02/23/21 - 02/25/21 (I-270/ Pershall Road)	<11.1	pCi/L	194,346	4.1E-06	3,000	pCi/L	0.00
Gross Beta			<14.8	pCi/L		5.4E-06	NA		
Th-228			<1	pCi/L		3.7E-07	2,000	pCi/L	
Th-230			1.0	pCi/L		7.3E-07	1,000	pCi/L	
Uranium (KPA)			<5.1	pCi/L		1.9E-06	3,000	pCi/L	
Ra-226[c]			<1	pCi/L		3.8E-07	10	pCi/L	
Ra-228[d,e]			<1	pCi/L		3.7E-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			<5.3	mg/L			-		

Table D-3. Self-Monitoring Report for Excavation Water Discharge During CY 2021 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-342	03/01/21 - 03/30/21 (I-270/ Pershall Road)	<12.3	pCi/L	721,463	1.7E-05	3,000	pCi/L	0.01
Gross Beta			<14.7	pCi/L		2.0E-05	NA		
Th-228			<0.9	pCi/L		1.2E-06	2,000	pCi/L	
Th-230			<1.1	pCi/L		1.5E-06	1,000	pCi/L	
Uranium (KPA)			<5.1	pCi/L		6.9E-06	3,000	pCi/L	
Ra-226[c]			<1.8	pCi/L		2.4E-06	10	pCi/L	
Ra-228[d,e]			<0.9	pCi/L		1.2E-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)			<12.3	pCi/L			-		
TSS			14.8	mg/L			-		

Total Activity Discharged in First Quarter of CY 2021 (Ci)		Total Activity Discharged through 03/31/21 (Ci)	
Th-228	1.8E-06	**Th-228**	1.8E-06
Th-230	2.6E-06	**Th-230**	2.6E-06
Uranium (KPA)	9.9E-06	**Uranium (KPA)**	9.9E-06
Ra-226	3.0E-06	**Ra-226**	3.0E-06
Ra-228[d]	1.8E-06	**Ra-228[d]**	1.8E-06

Total Volume for First Quarter of CY 2021 (gallons)		Total Volume Discharged through 03/31/21 (gallons)	
Gallons	1,037,442	**Gallons**	1,037,442

[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 2021 (Continued)
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-343	04/05/21 (I-270/Pershall Road)	<11	pCi/L	96,537	2.0E-06	3,000	pCi/L	0.00
Gross Beta			22.5	pCi/L		8.2E-06	NA		
Th-228			<0.6	pCi/L		1.1E-07	2,000	pCi/L	
Th-230			1.2	pCi/L		4.3E-07	1,000	pCi/L	
Uranium (KPA)			<10.1	pCi/L		1.8E-06	3,000	pCi/L	
Ra-226[c]			<0.7	pCi/L		1.3E-07	10	pCi/L	
Ra-228[d,e]			<0.6	pCi/L		1.1E-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	pCi/L			-		
TSS			<5.3	mg/L			-		
Gross Alpha (raw water)	SLAPS-344	04/13/21 - 04/27/21 (I-270/Pershall Road)	<11	pCi/L	23,200	4.8E-07	3,000	pCi/L	0.01
Gross Beta			15.7	pCi/L		1.4E-06	NA		
Th-228			0.6	pCi/L		4.9E-08	2,000	pCi/L	
Th-230			2.4	pCi/L		2.1E-07	1,000	pCi/L	
Uranium (KPA)			<10.1	pCi/L		4.4E-07	3,000	pCi/L	
Ra-226[c]			<1.4	pCi/L		6.1E-08	10	pCi/L	
Ra-228[d,e]			0.6	pCi/L		4.9E-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			185	mg/L			-		
Gross Alpha (raw water)	SLAPS-345	05/03/21 - 05/06/21 (I-270/Pershall Road)	18.9	pCi/L	295,339	2.1E-05	3,000	pCi/L	0.01
Gross Beta			<14.2	pCi/L		7.9E-06	NA		
Th-228			<0.7	pCi/L		4.0E-07	2,000	pCi/L	
Th-230			6.9	pCi/L		7.8E-06	1,000	pCi/L	
Uranium (KPA)			8.0	pCi/L		8.9E-06	3,000	pCi/L	
Ra-226[c]			<1.3	pCi/L		7.3E-07	10	pCi/L	
Ra-228[d,e]			<0.7	pCi/L		4.0E-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)			<9.5	pCi/L			-		
TSS			25.6	mg/L			-		

Table D-3. Self-Monitoring Report for Excavation Water Discharge During CY 2021 (Continued)
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-346	05/05/21 - 05/26/21 (HISS/Futura)	14.4	pCi/L	11,875	6.5E-07	3,000	pCi/L	0.01
Gross Beta			<15.1	pCi/L		3.4E-07	NA		
Th-228			0.5	pCi/L		2.4E-08	2,000	pCi/L	
Th-230			2.1	pCi/L		9.4E-08	1,000	pCi/L	
Uranium (KPA)			10.4	pCi/L		4.7E-07	3,000	pCi/L	
Ra-226[c]			<1.5	pCi/L		3.3E-08	10	pCi/L	
Ra-228[d,e]			0.5	pCi/L		2.4E-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)			11.2	pCi/L			-		
TSS			33.5	mg/L			-		
Gross Alpha (raw water)	SLAPS-347	06/07/21 - 06/30/21 (HISS/Futura)	26.2	pCi/L	5,300	5.3E-07	3,000	pCi/L	0.01
Gross Beta			<14.8	pCi/L		1.5E-07	NA		
Th-228			<0.9	pCi/L		9.2E-09	2,000	pCi/L	
Th-230			1.1	pCi/L		2.2E-08	1,000	pCi/L	
Uranium (KPA)			29	pCi/L		5.8E-07	3,000	pCi/L	
Ra-226[c]			<0.7	pCi/L		7.1E-09	10	pCi/L	
Ra-228[d,e]			<0.9	pCi/L		9.2E-09	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)			24.7	pCi/L			-		
TSS			38.8	mg/L			-		

Total Activity Discharged in Second Quarter of CY 2021 (Ci)		Total Activity Discharged through 06/30/21 (Ci)	
Th-228	5.9E-07	**Th-228**	2.4E-06
Th-230	8.5E-06	**Th-230**	1.1E-05
Uranium (KPA)	1.2E-05	**Uranium (KPA)**	2.2E-05
Ra-226	9.6E-07	**Ra-226**	4.0E-06
Ra-228[d]	5.9E-07	**Ra-228[d]**	2.4E-06

Total Volume for Second Quarter of CY 2021 (gallons)		Total Volume Discharged through 06/30/21 (gallons)	
Gallons	432,251	**Gallons**	1,469,693

[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 2021 (Continued)
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-348	07/01/21 (HISS/Futura)	11	pCi/L	6,750	2.8E-07	3,000	pCi/L	0.01
Gross Beta			<14.8	pCi/L		1.9E-07	NA		
Th-228			0.4	pCi/L		1.1E-08	2,000	pCi/L	
Th-230			2.8	pCi/L		7.2E-08	1,000	pCi/L	
Uranium (KPA)			<5.1	pCi/L		6.5E-08	3,000	pCi/L	
Ra-226[c]			<0.6	pCi/L		7.9E-09	10	pCi/L	
Ra-228[d,e]			0.4	pCi/L		1.1E-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)			<10.6	pCi/L			-		
TSS			270.0	mg/L			-		
Gross Alpha (raw water)	SLAPS-349	07/12/21 - 07/20/21 (I-270/Pershall Road)	<10.3	pCi/L	431,183	8.4E-06	3,000	pCi/L	0.00
Gross Beta			<13.8	pCi/L		1.1E-05	NA		
Th-228			<0.7	pCi/L		5.8E-07	2,000	pCi/L	
Th-230			2.0	pCi/L		3.2E-06	1,000	pCi/L	
Uranium (KPA)			<5.1	pCi/L		4.1E-06	3,000	pCi/L	
Ra-226[c]			<0.7	pCi/L		6.0E-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)			<10.3	pCi/L			-		
TSS			12.7	mg/L			-		
Gross Alpha (raw water)	SLAPS-350	07/12/21 - 07/29/21 (VP-56, VP-57, VP-58, I-270/Pershall Road)	<10.3	pCi/L	105,500	2.1E-06	3,000	pCi/L	0.01
Gross Beta			<13.8	pCi/L		2.8E-06	NA		
Th-228			<0.9	pCi/L		1.7E-07	2,000	pCi/L	
Th-230			3.0	pCi/L		1.2E-06	1,000	pCi/L	
Uranium (KPA)			<5.1	pCi/L		1.0E-06	3,000	pCi/L	
Ra-226[c]			<1.4	pCi/L		2.7E-07	10	pCi/L	
Ra-228[d,e]			<0.9	pCi/L		1.7E-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)			<10.3	pCi/L			-		
TSS			109.3	mg/L			-		

Table D-3. Self-Monitoring Report for Excavation Water Discharge During CY 2021 (Continued)
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-351	08/04/21 - 08/17/21 (VP-56, VP-57, VP-58, I-270/Pershall Road)	<11	pCi/L	68,025	1.4E-06	3,000	pCi/L	0.01
Gross Beta			<15	pCi/L		1.9E-06	NA		
Th-228			0.8	pCi/L		2.1E-07	2,000	pCi/L	
Th-230			1.9	pCi/L		4.8E-07	1,000	pCi/L	
Uranium (KPA)			<5.1	pCi/L		6.5E-07	3,000	pCi/L	
Ra-226[c]			1.0	pCi/L		2.6E-07	10	pCi/L	
Ra-228[d,e]			0.8	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	pCi/L			-		
TSS			328.2	mg/L			-		
Gross Alpha (raw water)	SLAPS-352	08/10/21 - 08/12/21 (I-270/Pershall Road)	<10.8	pCi/L	186,533	3.8E-06	3,000	pCi/L	0.01
Gross Beta			<15	pCi/L		5.3E-06	NA		
Th-228			<0.9	pCi/L		3.1E-07	2,000	pCi/L	
Th-230			2.0	pCi/L		1.4E-06	1,000	pCi/L	
Uranium (KPA)			<20.2	pCi/L		7.1E-06	3,000	pCi/L	
Ra-226[c]			<1.4	pCi/L		4.8E-07	10	pCi/L	
Ra-228[d,e]			<0.9	pCi/L		3.1E-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)			<10.8	pCi/L			-		
TSS			38.3	mg/L			-		
Gross Alpha (raw water)	SLAPS-353	09/01/21 - 09/07/21 VP-56, VP-57, VP-58, I-270/Pershall Road)	<10.8	pCi/L	31,200	6.4E-07	3,000	pCi/L	0.00
Gross Beta			<13.7	pCi/L		8.1E-07	NA		
Th-228			<0.9	pCi/L		5.6E-08	2,000	pCi/L	
Th-230			1.0	pCi/L		1.2E-07	1,000	pCi/L	
Uranium (KPA)			<5.1	pCi/L		3.0E-07	3,000	pCi/L	
Ra-226[c]			<1	pCi/L		6.1E-08	10	pCi/L	
Ra-228[d,e]			<0.9	pCi/L		5.6E-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)			<10.8	pCi/L			-		
TSS			100.1	mg/L			-		

Table D-3. Self-Monitoring Report for Excavation Water Discharge During CY 2021 (Continued)
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-354	09/20/21 - 09/21/21 (I-270/Pershall Road)	<10.8	pCi/L	187,356	3.8E-06	3,000	pCi/L	0.01
Gross Beta			<15	pCi/L		5.3E-06	NA		
Th-228			<0.8	pCi/L		3.0E-07	2,000	pCi/L	
Th-230			3.6	pCi/L		2.6E-06	1,000	pCi/L	
Uranium (KPA)			<5.1	pCi/L		1.8E-06	3,000	pCi/L	
Ra-226[c]			<0.7	pCi/L		2.4E-07	10	pCi/L	
Ra-228[d,e]			<0.8	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)			<10.8	pCi/L			-		
TSS			221.8	mg/L			-		

Total Activity Discharged in Third Quarter of CY 2021 (Ci)		Total Activity Discharged through 09/30/21 (Ci)	
Th-228	1.6E-06	**Th-228**	4.0E-06
Th-230	9.1E-06	**Th-230**	2.0E-05
Uranium (KPA)	1.5E-05	**Uranium (KPA)**	3.7E-05
Ra-226	1.9E-06	**Ra-226**	5.9E-06
Ra-228[d]	1.6E-06	**Ra-228[d]**	4.0E-06

Total Volume for Third Quarter of CY 2021 (gallons)		Total Volume Discharged through 09/30/21 (gallons)	
Gallons	1,016,547	**Gallons**	2,486,240

[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 2021 (Continued)
Fourth Quarter

Parameter	Batch Number	Date of Discharge	Batch Results	Amount Discharged (Gallons)	Total Activity per Discharge (Ci)[a]	MSD Discharge Limit	SOR

During the fourth quarter, no wastewater was discharged to the MSD from the SLAPS, SLAPS VPs, or Latty Avenue VPs.

Total Activity Discharged in Fourth Quarter of CY 2021 (Ci)

Th-228	0.0E+00
Th-230	0.0E+00
Uranium (KPA)	0.0E+00
Ra-226	0.0E+00
Ra-228[b]	0.0E+00

Total Activity Discharged through 12/31/21 (Ci)

Th-228	4.0E-06
Th-230	2.0E-05
Uranium (KPA)	3.7E-05
Ra-226	5.9E-06
Ra-228[b]	4.0E-06

Total Volume for Fourth Quarter of CY 2021 (gallons)

Gallons	0

Total Volume Discharged through 12/31/21 (gallons)

Gallons	2,486,240

[a] The weighted average was used to calculate the total activity.
[b] Ra-228 assumed to be in equilibrium with Th-228.

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ATTACHMENT D-1

PN02 ANNUAL SAMPLING FREQUENCY SCHEDULE EMAIL, DATED APRIL 19, 2018

(On the CD-ROM on the Back Cover of this Report)

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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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APPENDIX E

COLDWATER CREEK SURFACE WATER AND SEDIMENT DATA

(On the CD-ROM on the Back Cover of this Report)

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Table E-1. CWC Surface Water Data for CY 2021

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Error	Units	VQ
CWC239135	CWC002	03/31/21	Metals	Barium	120	2.3		µg/L	=
CWC239135	CWC002	03/31/21	Metals	Molybdenum	7.9	2		µg/L	=
CWC239135	CWC002	03/31/21	Metals	Selenium	2	2		µg/L	=
CWC239135	CWC002	03/31/21	Metals	Antimony	2	2		µg/L	U
CWC239135	CWC002	03/31/21	Metals	Arsenic	4	4		µg/L	U
CWC239135	CWC002	03/31/21	Metals	Chromium	4	4		µg/L	U
CWC239135	CWC002	03/31/21	Metals	Nickel	2	2		µg/L	U
CWC239135	CWC002	03/31/21	Metals	Thallium	0.9	0.9		µg/L	U
CWC239135	CWC002	03/31/21	Metals	Vanadium	4	4		µg/L	U
CWC239135	CWC002	03/31/21	Metals	Cadmium	0.2	0.2		µg/L	U
CWC239135	CWC002	03/31/21	Alpha Spectroscopy	Th-230	0.568	0.431	0.479	pCi/L	J
CWC239135	CWC002	03/31/21	Alpha Spectroscopy	U-234	0.363	0.332	0.336	pCi/L	J
CWC239135	CWC002	03/31/21	Alpha Spectroscopy	Th-228	0.483	0.711	0.477	pCi/L	UJ
CWC239135	CWC002	03/31/21	Alpha Spectroscopy	Th-232	0	0.71	0.273	pCi/L	UJ
CWC239135	CWC002	03/31/21	Alpha Spectroscopy	Ra-226	0.102	0.588	0.241	pCi/L	UJ
CWC239135	CWC002	03/31/21	Alpha Spectroscopy	U-235	0.0804	0.409	0.185	pCi/L	UJ
CWC239135	CWC002	03/31/21	Alpha Spectroscopy	U-238	0.445	0.546	0.395	pCi/L	UJ
CWC239137	CWC003	03/31/21	Metals	Barium	120	0.9		µg/L	=
CWC239137	CWC003	03/31/21	Metals	Molybdenum	8	2		µg/L	=
CWC239137	CWC003	03/31/21	Metals	Selenium	2.6	2		µg/L	=
CWC239137	CWC003	03/31/21	Metals	Antimony	2	2		µg/L	U
CWC239137	CWC003	03/31/21	Metals	Arsenic	4	4		µg/L	U
CWC239137	CWC003	03/31/21	Metals	Chromium	4	4		µg/L	U
CWC239137	CWC003	03/31/21	Metals	Nickel	2	2		µg/L	U
CWC239137	CWC003	03/31/21	Metals	Thallium	0.9	0.9		µg/L	U
CWC239137	CWC003	03/31/21	Metals	Vanadium	4	4		µg/L	U
CWC239137	CWC003	03/31/21	Metals	Cadmium	0.2	0.2		µg/L	U
CWC239137	CWC003	03/31/21	Alpha Spectroscopy	Th-230	0.732	0.414	0.534	pCi/L	J
CWC239137	CWC003	03/31/21	Alpha Spectroscopy	U-234	1.61	0.351	0.684	pCi/L	=
CWC239137	CWC003	03/31/21	Alpha Spectroscopy	U-238	0.936	0.301	0.514	pCi/L	J
CWC239137	CWC003	03/31/21	Alpha Spectroscopy	Th-228	0.174	0.414	0.265	pCi/L	UJ
CWC239137	CWC003	03/31/21	Alpha Spectroscopy	Th-232	-0.0232	0.481	0.189	pCi/L	UJ
CWC239137	CWC003	03/31/21	Alpha Spectroscopy	Ra-226	6.806E-08	0.602	0.17	pCi/L	UJ
CWC239137	CWC003	03/31/21	Alpha Spectroscopy	U-235	-0.0105	0.372	0.169	pCi/L	UJ

Table E-1. CWC Surface Water Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Error	Units	VQ
CWC239139	CWC004	03/31/21	Metals	Barium	130	0.9		µg/L	=
CWC239139	CWC004	03/31/21	Metals	Molybdenum	7.9	2		µg/L	=
CWC239139	CWC004	03/31/21	Metals	Selenium	2.7	2		µg/L	=
CWC239139	CWC004	03/31/21	Metals	Antimony	2	2		µg/L	U
CWC239139	CWC004	03/31/21	Metals	Arsenic	4	4		µg/L	U
CWC239139	CWC004	03/31/21	Metals	Chromium	4	4		µg/L	U
CWC239139	CWC004	03/31/21	Metals	Nickel	2	2		µg/L	U
CWC239139	CWC004	03/31/21	Metals	Thallium	0.9	0.9		µg/L	U
CWC239139	CWC004	03/31/21	Metals	Vanadium	4	4		µg/L	U
CWC239139	CWC004	03/31/21	Metals	Cadmium	0.2	0.2		µg/L	U
CWC239139	CWC004	03/31/21	Alpha Spectroscopy	Th-230	0.507	0.384	0.427	pCi/L	J
CWC239139	CWC004	03/31/21	Alpha Spectroscopy	Ra-226	0.723	0.486	0.485	pCi/L	J
CWC239139	CWC004	03/31/21	Alpha Spectroscopy	U-234	1.5	0.526	0.687	pCi/L	=
CWC239139	CWC004	03/31/21	Alpha Spectroscopy	U-238	0.64	0.523	0.454	pCi/L	J
CWC239139	CWC004	03/31/21	Alpha Spectroscopy	Th-228	0.409	0.446	0.389	pCi/L	UJ
CWC239139	CWC004	03/31/21	Alpha Spectroscopy	Th-232	0.172	0.633	0.299	pCi/L	UJ
CWC239139	CWC004	03/31/21	Alpha Spectroscopy	U-235	0.0881	0.648	0.249	pCi/L	UJ
CWC239141	CWC005	03/30/21	Metals	Barium	120	0.9		µg/L	=
CWC239141	CWC005	03/30/21	Metals	Molybdenum	7.8	2		µg/L	=
CWC239141	CWC005	03/30/21	Metals	Selenium	2.8	2		µg/L	=
CWC239141	CWC005	03/30/21	Metals	Antimony	2	2		µg/L	U
CWC239141	CWC005	03/30/21	Metals	Arsenic	4	4		µg/L	U
CWC239141	CWC005	03/30/21	Metals	Chromium	4	4		µg/L	U
CWC239141	CWC005	03/30/21	Metals	Nickel	2	2		µg/L	U
CWC239141	CWC005	03/30/21	Metals	Thallium	0.9	0.9		µg/L	U
CWC239141	CWC005	03/30/21	Metals	Vanadium	4	4		µg/L	U
CWC239141	CWC005	03/30/21	Metals	Cadmium	0.2	0.2		µg/L	U
CWC239141	CWC005	03/30/21	Alpha Spectroscopy	Th-228	0.467	0.354	0.393	pCi/L	J
CWC239141	CWC005	03/30/21	Alpha Spectroscopy	U-234	1.13	0.339	0.601	pCi/L	J
CWC239141	CWC005	03/30/21	Alpha Spectroscopy	U-238	0.976	0.338	0.556	pCi/L	J
CWC239141	CWC005	03/30/21	Alpha Spectroscopy	Th-230	0.448	0.456	0.395	pCi/L	UJ
CWC239141	CWC005	03/30/21	Alpha Spectroscopy	Th-232	-0.00993	0.354	0.16	pCi/L	UJ
CWC239141	CWC005	03/30/21	Alpha Spectroscopy	Ra-226	0.174	0.557	0.276	pCi/L	UJ
CWC239141	CWC005	03/30/21	Alpha Spectroscopy	U-235	0.0822	0.418	0.189	pCi/L	UJ
CWC239143	CWC006	03/30/21	Metals	Barium	120	0.9		µg/L	=
CWC239143	CWC006	03/30/21	Metals	Molybdenum	8	2		µg/L	=

Table E-1. CWC Surface Water Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Error	Units	VQ
CWC239143	CWC006	03/30/21	Metals	Nickel	2	2		µg/L	=
CWC239143	CWC006	03/30/21	Metals	Selenium	2.8	2		µg/L	=
CWC239143	CWC006	03/30/21	Metals	Antimony	2	2		µg/L	U
CWC239143	CWC006	03/30/21	Metals	Arsenic	4	4		µg/L	U
CWC239143	CWC006	03/30/21	Metals	Chromium	4	4		µg/L	U
CWC239143	CWC006	03/30/21	Metals	Thallium	0.9	0.9		µg/L	U
CWC239143	CWC006	03/30/21	Metals	Vanadium	4	4		µg/L	U
CWC239143	CWC006	03/30/21	Metals	Cadmium	0.2	0.2		µg/L	U
CWC239143	CWC006	03/30/21	Alpha Spectroscopy	U-234	1.02	0.305	0.541	pCi/L	J
CWC239143	CWC006	03/30/21	Alpha Spectroscopy	U-238	0.529	0.354	0.391	pCi/L	J
CWC239143	CWC006	03/30/21	Alpha Spectroscopy	Th-228	0.332	0.381	0.345	pCi/L	UJ
CWC239143	CWC006	03/30/21	Alpha Spectroscopy	Th-230	0.407	0.443	0.387	pCi/L	UJ
CWC239143	CWC006	03/30/21	Alpha Spectroscopy	Th-232	0.0855	0.629	0.242	pCi/L	UJ
CWC239143	CWC006	03/30/21	Alpha Spectroscopy	Ra-226	0.128	0.388	0.21	pCi/L	UJ
CWC239143	CWC006	03/30/21	Alpha Spectroscopy	U-235	0	0.623	0.239	pCi/L	UJ
CWC239145	CWC007	03/30/21	Metals	Barium	120	0.9		µg/L	=
CWC239145	CWC007	03/30/21	Metals	Molybdenum	11	2		µg/L	=
CWC239145	CWC007	03/30/21	Metals	Nickel	2	2		µg/L	=
CWC239145	CWC007	03/30/21	Metals	Selenium	3.8	2		µg/L	=
CWC239145	CWC007	03/30/21	Metals	Antimony	2	2		µg/L	U
CWC239145	CWC007	03/30/21	Metals	Arsenic	4	4		µg/L	U
CWC239145	CWC007	03/30/21	Metals	Chromium	4	4		µg/L	U
CWC239145	CWC007	03/30/21	Metals	Thallium	0.9	0.9		µg/L	U
CWC239145	CWC007	03/30/21	Metals	Vanadium	4	4		µg/L	U
CWC239145	CWC007	03/30/21	Metals	Cadmium	0.2	0.2		µg/L	U
CWC239145	CWC007	03/30/21	Alpha Spectroscopy	U-234	1.2	0.317	0.601	pCi/L	=
CWC239145	CWC007	03/30/21	Alpha Spectroscopy	U-238	0.772	0.316	0.478	pCi/L	J
CWC239145	CWC007	03/30/21	Alpha Spectroscopy	Th-228	0.0939	0.648	0.255	pCi/L	UJ
CWC239145	CWC007	03/30/21	Alpha Spectroscopy	Th-230	0.752	0.923	0.671	pCi/L	UJ
CWC239145	CWC007	03/30/21	Alpha Spectroscopy	Th-232	0.11	0.557	0.253	pCi/L	UJ
CWC239145	CWC007	03/30/21	Alpha Spectroscopy	Ra-226	0.174	0.444	0.246	pCi/L	UJ
CWC239145	CWC007	03/30/21	Alpha Spectroscopy	U-235	0.165	0.392	0.25	pCi/L	UJ
CWC239147	CWC008	03/30/21	Metals	Barium	110	0.9		µg/L	=
CWC239147	CWC008	03/30/21	Metals	Molybdenum	7.6	2		µg/L	=
CWC239147	CWC008	03/30/21	Metals	Selenium	2.6	2		µg/L	=
CWC239147	CWC008	03/30/21	Metals	Vanadium	4.1	4		µg/L	=

Table E-1. CWC Surface Water Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Error	Units	VQ
CWC239147	CWC008	03/30/21	Metals	Antimony	2	2		µg/L	U
CWC239147	CWC008	03/30/21	Metals	Arsenic	4	4		µg/L	U
CWC239147	CWC008	03/30/21	Metals	Chromium	4	4		µg/L	U
CWC239147	CWC008	03/30/21	Metals	Nickel	2	2		µg/L	U
CWC239147	CWC008	03/30/21	Metals	Thallium	0.9	0.9		µg/L	U
CWC239147	CWC008	03/30/21	Metals	Cadmium	0.2	0.2		µg/L	U
CWC239147	CWC008	03/30/21	Alpha Spectroscopy	Th-228	0.75	0.613	0.534	pCi/L	J
CWC239147	CWC008	03/30/21	Alpha Spectroscopy	Th-230	0.667	0.614	0.506	pCi/L	J
CWC239147	CWC008	03/30/21	Alpha Spectroscopy	U-234	0.7	0.572	0.497	pCi/L	J
CWC239147	CWC008	03/30/21	Alpha Spectroscopy	U-238	1.37	0.401	0.673	pCi/L	=
CWC239147	CWC008	03/30/21	Alpha Spectroscopy	Th-232	-0.0208	0.431	0.169	pCi/L	UJ
CWC239147	CWC008	03/30/21	Alpha Spectroscopy	Ra-226	0.111	0.472	0.215	pCi/L	UJ
CWC239147	CWC008	03/30/21	Alpha Spectroscopy	U-235	-0.012	0.427	0.193	pCi/L	UJ
CWC239149	CWC009	03/30/21	Metals	Barium	110	0.9		µg/L	=
CWC239149	CWC009	03/30/21	Metals	Molybdenum	7.2	2		µg/L	=
CWC239149	CWC009	03/30/21	Metals	Selenium	2.5	2		µg/L	=
CWC239149	CWC009	03/30/21	Metals	Vanadium	4.1	4		µg/L	=
CWC239149	CWC009	03/30/21	Metals	Antimony	2	2		µg/L	U
CWC239149	CWC009	03/30/21	Metals	Arsenic	4	4		µg/L	U
CWC239149	CWC009	03/30/21	Metals	Chromium	4	4		µg/L	U
CWC239149	CWC009	03/30/21	Metals	Nickel	2	2		µg/L	U
CWC239149	CWC009	03/30/21	Metals	Thallium	0.9	0.9		µg/L	U
CWC239149	CWC009	03/30/21	Metals	Cadmium	0.2	0.2		µg/L	U
CWC239149	CWC009	03/30/21	Alpha Spectroscopy	Th-230	0.994	0.61	0.608	pCi/L	J
CWC239149	CWC009	03/30/21	Alpha Spectroscopy	U-234	1.03	0.357	0.589	pCi/L	J
CWC239149	CWC009	03/30/21	Alpha Spectroscopy	U-238	0.629	0.356	0.457	pCi/L	J
CWC239149	CWC009	03/30/21	Alpha Spectroscopy	Th-228	0.321	0.368	0.334	pCi/L	UJ
CWC239149	CWC009	03/30/21	Alpha Spectroscopy	Th-232	0	0.609	0.234	pCi/L	UJ
CWC239149	CWC009	03/30/21	Alpha Spectroscopy	Ra-226	0.0771	0.61	0.231	pCi/L	UJ
CWC239149	CWC009	03/30/21	Alpha Spectroscopy	U-235	0.0742	0.512	0.201	pCi/L	UJ
CWC239151	CWC010	03/30/21	Metals	Barium	110	0.9		µg/L	=
CWC239151	CWC010	03/30/21	Metals	Molybdenum	5.9	2		µg/L	=
CWC239151	CWC010	03/30/21	Metals	Selenium	2.1	2		µg/L	=
CWC239151	CWC010	03/30/21	Metals	Antimony	2	2		µg/L	U
CWC239151	CWC010	03/30/21	Metals	Arsenic	4	4		µg/L	U
CWC239151	CWC010	03/30/21	Metals	Chromium	4	4		µg/L	U

Table E-1. CWC Surface Water Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Error	Units	VQ
CWC239151	CWC010	03/30/21	Metals	Nickel	2	2		µg/L	U
CWC239151	CWC010	03/30/21	Metals	Thallium	0.9	0.9		µg/L	U
CWC239151	CWC010	03/30/21	Metals	Vanadium	4	4		µg/L	U
CWC239151	CWC010	03/30/21	Metals	Cadmium	0.2	0.2		µg/L	U
CWC239151	CWC010	03/30/21	Alpha Spectroscopy	Th-230	0.626	0.354	0.456	pCi/L	J
CWC239151	CWC010	03/30/21	Alpha Spectroscopy	U-234	0.667	0.335	0.456	pCi/L	J
CWC239151	CWC010	03/30/21	Alpha Spectroscopy	U-238	0.814	0.333	0.504	pCi/L	J
CWC239151	CWC010	03/30/21	Alpha Spectroscopy	Th-228	0.476	0.584	0.424	pCi/L	UJ
CWC239151	CWC010	03/30/21	Alpha Spectroscopy	Th-232	-0.0198	0.411	0.161	pCi/L	UJ
CWC239151	CWC010	03/30/21	Alpha Spectroscopy	Ra-226	-0.0403	0.515	0.171	pCi/L	UJ
CWC239151	CWC010	03/30/21	Alpha Spectroscopy	U-235	0.0811	0.413	0.187	pCi/L	UJ
CWC239153	CWC011	03/30/21	Metals	Barium	96	0.9		µg/L	=
CWC239153	CWC011	03/30/21	Metals	Molybdenum	4.6	2		µg/L	=
CWC239153	CWC011	03/30/21	Metals	Nickel	2.1	2		µg/L	=
CWC239153	CWC011	03/30/21	Metals	Vanadium	4.6	4		µg/L	=
CWC239153	CWC011	03/30/21	Metals	Antimony	2	2		µg/L	U
CWC239153	CWC011	03/30/21	Metals	Arsenic	4	4		µg/L	U
CWC239153	CWC011	03/30/21	Metals	Chromium	4	4		µg/L	U
CWC239153	CWC011	03/30/21	Metals	Selenium	2	2		µg/L	U
CWC239153	CWC011	03/30/21	Metals	Thallium	0.9	0.9		µg/L	U
CWC239153	CWC011	03/30/21	Metals	Cadmium	0.2	0.2		µg/L	U
CWC239153	CWC011	03/30/21	Alpha Spectroscopy	Th-228	0.862	0.705	0.615	pCi/L	J
CWC239153	CWC011	03/30/21	Alpha Spectroscopy	Th-230	0.755	0.427	0.551	pCi/L	J
CWC239153	CWC011	03/30/21	Alpha Spectroscopy	U-234	0.843	0.564	0.538	pCi/L	J
CWC239153	CWC011	03/30/21	Alpha Spectroscopy	U-238	0.448	0.34	0.377	pCi/L	J
CWC239153	CWC011	03/30/21	Alpha Spectroscopy	Th-232	0.18	0.427	0.273	pCi/L	UJ
CWC239153	CWC011	03/30/21	Alpha Spectroscopy	Ra-226	0.274	0.499	0.318	pCi/L	UJ
CWC239153	CWC011	03/30/21	Alpha Spectroscopy	U-235	-0.0118	0.421	0.19	pCi/L	UJ
CWC248038	CWC002	10/13/21	Metals	Barium	87	0.9		µg/L	=
CWC248038	CWC002	10/13/21	Metals	Molybdenum	11	2		µg/L	=
CWC248038	CWC002	10/13/21	Metals	Antimony	2	2		µg/L	U
CWC248038	CWC002	10/13/21	Metals	Arsenic	4	4		µg/L	U
CWC248038	CWC002	10/13/21	Metals	Chromium	4	4		µg/L	U
CWC248038	CWC002	10/13/21	Metals	Selenium	2	2		µg/L	U
CWC248038	CWC002	10/13/21	Metals	Thallium	0.9	0.9		µg/L	U
CWC248038	CWC002	10/13/21	Metals	Vanadium	4	4		µg/L	U

Table E-1. CWC Surface Water Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Error	Units	VQ
CWC248038	CWC002	10/13/21	Metals	Nickel	2	2		µg/L	U
CWC248038	CWC002	10/13/21	Metals	Cadmium	0.2	0.2		µg/L	U
CWC248038	CWC002	10/13/21	Alpha Spectroscopy	Th-230	1.07	0.446	0.62	pCi/L	J
CWC248038	CWC002	10/13/21	Alpha Spectroscopy	U-234	0.592	0.544	0.448	pCi/L	J
CWC248038	CWC002	10/13/21	Alpha Spectroscopy	U-238	0.92	0.47	0.542	pCi/L	J
CWC248038	CWC002	10/13/21	Alpha Spectroscopy	Th-228	0.378	0.918	0.466	pCi/L	UJ
CWC248038	CWC002	10/13/21	Alpha Spectroscopy	Th-232	0.0839	0.618	0.238	pCi/L	UJ
CWC248038	CWC002	10/13/21	Alpha Spectroscopy	Ra-226	0.174	0.641	0.302	pCi/L	UJ
CWC248038	CWC002	10/13/21	Alpha Spectroscopy	U-235	0	0.671	0.258	pCi/L	UJ
CWC248040	CWC003	10/13/21	Metals	Barium	89	0.9		µg/L	=
CWC248040	CWC003	10/13/21	Metals	Molybdenum	12	2		µg/L	=
CWC248040	CWC003	10/13/21	Metals	Antimony	2	2		µg/L	U
CWC248040	CWC003	10/13/21	Metals	Arsenic	4	4		µg/L	U
CWC248040	CWC003	10/13/21	Metals	Chromium	4	4		µg/L	U
CWC248040	CWC003	10/13/21	Metals	Selenium	2	2		µg/L	U
CWC248040	CWC003	10/13/21	Metals	Thallium	0.9	0.9		µg/L	U
CWC248040	CWC003	10/13/21	Metals	Vanadium	4	4		µg/L	U
CWC248040	CWC003	10/13/21	Metals	Nickel	2	2		µg/L	U
CWC248040	CWC003	10/13/21	Metals	Cadmium	0.2	0.2		µg/L	U
CWC248040	CWC003	10/13/21	Alpha Spectroscopy	Th-230	1.21	0.469	0.622	pCi/L	J
CWC248040	CWC003	10/13/21	Alpha Spectroscopy	U-234	0.364	0.336	0.314	pCi/L	J
CWC248040	CWC003	10/13/21	Alpha Spectroscopy	Th-228	0.642	0.771	0.504	pCi/L	UJ
CWC248040	CWC003	10/13/21	Alpha Spectroscopy	Th-232	0.202	0.389	0.258	pCi/L	UJ
CWC248040	CWC003	10/13/21	Alpha Spectroscopy	Ra-226	0.347	1.09	0.506	pCi/L	UJ
CWC248040	CWC003	10/13/21	Alpha Spectroscopy	U-235	-0.0195	0.415	0.161	pCi/L	UJ
CWC248040	CWC003	10/13/21	Alpha Spectroscopy	U-238	0.378	0.464	0.336	pCi/L	UJ
CWC248042	CWC004	10/13/21	Metals	Barium	92	0.9		µg/L	=
CWC248042	CWC004	10/13/21	Metals	Molybdenum	11	2		µg/L	=
CWC248042	CWC004	10/13/21	Metals	Selenium	2	2		µg/L	=
CWC248042	CWC004	10/13/21	Metals	Antimony	2	2		µg/L	U
CWC248042	CWC004	10/13/21	Metals	Arsenic	4	4		µg/L	U
CWC248042	CWC004	10/13/21	Metals	Chromium	4	4		µg/L	U
CWC248042	CWC004	10/13/21	Metals	Thallium	0.9	0.9		µg/L	U
CWC248042	CWC004	10/13/21	Metals	Vanadium	4	4		µg/L	U
CWC248042	CWC004	10/13/21	Metals	Nickel	2	2		µg/L	U
CWC248042	CWC004	10/13/21	Metals	Cadmium	0.2	0.2		µg/L	U

Table E-1. CWC Surface Water Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Error	Units	VQ
CWC248042	CWC004	10/13/21	Alpha Spectroscopy	Th-230	0.718	0.528	0.483	pCi/L	J
CWC248042	CWC004	10/13/21	Alpha Spectroscopy	Th-228	0.466	0.651	0.418	pCi/L	UJ
CWC248042	CWC004	10/13/21	Alpha Spectroscopy	Th-232	0.0717	0.528	0.203	pCi/L	UJ
CWC248042	CWC004	10/13/21	Alpha Spectroscopy	Ra-226	0.171	0.628	0.296	pCi/L	UJ
CWC248042	CWC004	10/13/21	Alpha Spectroscopy	U-234	0.241	0.341	0.26	pCi/L	UJ
CWC248042	CWC004	10/13/21	Alpha Spectroscopy	U-235	0.0594	0.42	0.163	pCi/L	UJ
CWC248042	CWC004	10/13/21	Alpha Spectroscopy	U-238	0.399	0.461	0.345	pCi/L	UJ
CWC248044	CWC005	10/12/21	Metals	Barium	72	0.9		µg/L	=
CWC248044	CWC005	10/12/21	Metals	Molybdenum	8.3	2		µg/L	=
CWC248044	CWC005	10/12/21	Metals	Antimony	2	2		µg/L	U
CWC248044	CWC005	10/12/21	Metals	Arsenic	4	4		µg/L	U
CWC248044	CWC005	10/12/21	Metals	Chromium	4	4		µg/L	U
CWC248044	CWC005	10/12/21	Metals	Selenium	2	2		µg/L	U
CWC248044	CWC005	10/12/21	Metals	Thallium	0.9	0.9		µg/L	U
CWC248044	CWC005	10/12/21	Metals	Vanadium	4	4		µg/L	U
CWC248044	CWC005	10/12/21	Metals	Nickel	2	2		µg/L	U
CWC248044	CWC005	10/12/21	Metals	Cadmium	0.2	0.2		µg/L	U
CWC248044	CWC005	10/12/21	Alpha Spectroscopy	Th-230	0.988	0.381	0.55	pCi/L	J
CWC248044	CWC005	10/12/21	Alpha Spectroscopy	U-234	0.503	0.463	0.381	pCi/L	J
CWC248044	CWC005	10/12/21	Alpha Spectroscopy	Th-228	0.664	0.813	0.516	pCi/L	UJ
CWC248044	CWC005	10/12/21	Alpha Spectroscopy	Th-232	0.179	0.458	0.254	pCi/L	UJ
CWC248044	CWC005	10/12/21	Alpha Spectroscopy	Ra-226	0.157	0.662	0.295	pCi/L	UJ
CWC248044	CWC005	10/12/21	Alpha Spectroscopy	U-235	0.116	0.496	0.227	pCi/L	UJ
CWC248044	CWC005	10/12/21	Alpha Spectroscopy	U-238	0.376	0.461	0.333	pCi/L	UJ
CWC248046	CWC006	10/12/21	Metals	Barium	62	0.9		µg/L	=
CWC248046	CWC006	10/12/21	Metals	Molybdenum	7.5	2		µg/L	=
CWC248046	CWC006	10/12/21	Metals	Antimony	2	2		µg/L	U
CWC248046	CWC006	10/12/21	Metals	Arsenic	4	4		µg/L	U
CWC248046	CWC006	10/12/21	Metals	Chromium	4	4		µg/L	U
CWC248046	CWC006	10/12/21	Metals	Selenium	2	2		µg/L	U
CWC248046	CWC006	10/12/21	Metals	Thallium	0.9	0.9		µg/L	U
CWC248046	CWC006	10/12/21	Metals	Vanadium	4	4		µg/L	U
CWC248046	CWC006	10/12/21	Metals	Nickel	2	2		µg/L	U
CWC248046	CWC006	10/12/21	Metals	Cadmium	0.2	0.2		µg/L	U
CWC248046	CWC006	10/12/21	Alpha Spectroscopy	Th-230	0.48	0.471	0.398	pCi/L	J
CWC248046	CWC006	10/12/21	Alpha Spectroscopy	U-238	0.368	0.34	0.318	pCi/L	J

Table E-1. CWC Surface Water Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Error	Units	VQ
CWC248046	CWC006	10/12/21	Alpha Spectroscopy	Th-228	0.277	0.392	0.299	pCi/L	UJ
CWC248046	CWC006	10/12/21	Alpha Spectroscopy	Th-232	0.129	0.391	0.212	pCi/L	UJ
CWC248046	CWC006	10/12/21	Alpha Spectroscopy	Ra-226	0.0824	0.693	0.261	pCi/L	UJ
CWC248046	CWC006	10/12/21	Alpha Spectroscopy	U-234	0.338	0.464	0.322	pCi/L	UJ
CWC248046	CWC006	10/12/21	Alpha Spectroscopy	U-235	0.198	0.507	0.281	pCi/L	UJ
CWC248050	CWC008	10/12/21	Metals	Barium	51	0.9		µg/L	=
CWC248050	CWC008	10/12/21	Metals	Molybdenum	4.8	2		µg/L	=
CWC248050	CWC008	10/12/21	Metals	Antimony	2	2		µg/L	U
CWC248050	CWC008	10/12/21	Metals	Arsenic	4	4		µg/L	U
CWC248050	CWC008	10/12/21	Metals	Chromium	4	4		µg/L	U
CWC248050	CWC008	10/12/21	Metals	Selenium	2	2		µg/L	U
CWC248050	CWC008	10/12/21	Metals	Thallium	0.9	0.9		µg/L	U
CWC248050	CWC008	10/12/21	Metals	Vanadium	4	4		µg/L	U
CWC248050	CWC008	10/12/21	Metals	Nickel	2	2		µg/L	U
CWC248050	CWC008	10/12/21	Metals	Cadmium	0.2	0.2		µg/L	U
CWC248050	CWC008	10/12/21	Alpha Spectroscopy	Th-228	0.463	0.427	0.4	pCi/L	J
CWC248050	CWC008	10/12/21	Alpha Spectroscopy	Th-230	0.887	0.593	0.567	pCi/L	J
CWC248050	CWC008	10/12/21	Alpha Spectroscopy	Th-232	0.0805	0.592	0.228	pCi/L	UJ
CWC248050	CWC008	10/12/21	Alpha Spectroscopy	Ra-226	-0.0727	0.783	0.206	pCi/L	UJ
CWC248050	CWC008	10/12/21	Alpha Spectroscopy	U-234	0.109	0.462	0.211	pCi/L	UJ
CWC248050	CWC008	10/12/21	Alpha Spectroscopy	U-235	0	0.657	0.253	pCi/L	UJ
CWC248050	CWC008	10/12/21	Alpha Spectroscopy	U-238	0.342	0.383	0.326	pCi/L	UJ
CWC248052	CWC009	10/12/21	Metals	Barium	46	0.9		µg/L	=
CWC248052	CWC009	10/12/21	Metals	Molybdenum	3.4	2		µg/L	=
CWC248052	CWC009	10/12/21	Metals	Vanadium	4.1	4		µg/L	=
CWC248052	CWC009	10/12/21	Metals	Antimony	2	2		µg/L	U
CWC248052	CWC009	10/12/21	Metals	Arsenic	4	4		µg/L	U
CWC248052	CWC009	10/12/21	Metals	Chromium	4	4		µg/L	U
CWC248052	CWC009	10/12/21	Metals	Selenium	2	2		µg/L	U
CWC248052	CWC009	10/12/21	Metals	Thallium	0.9	0.9		µg/L	U
CWC248052	CWC009	10/12/21	Metals	Nickel	2	2		µg/L	U
CWC248052	CWC009	10/12/21	Metals	Cadmium	0.2	0.2		µg/L	U
CWC248052	CWC009	10/12/21	Alpha Spectroscopy	Th-228	0.877	0.448	0.517	pCi/L	J
CWC248052	CWC009	10/12/21	Alpha Spectroscopy	Th-230	1.12	0.556	0.596	pCi/L	J
CWC248052	CWC009	10/12/21	Alpha Spectroscopy	U-238	0.459	0.451	0.38	pCi/L	J
CWC248052	CWC009	10/12/21	Alpha Spectroscopy	Th-232	0.14	0.516	0.243	pCi/L	UJ

Table E-1. CWC Surface Water Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Error	Units	VQ
CWC248052	CWC009	10/12/21	Alpha Spectroscopy	Ra-226	6.693E-08	0.674	0.196	pCi/L	UJ
CWC248052	CWC009	10/12/21	Alpha Spectroscopy	U-234	0.142	0.522	0.246	pCi/L	UJ
CWC248052	CWC009	10/12/21	Alpha Spectroscopy	U-235	0	0.644	0.247	pCi/L	UJ
CWC248054	CWC010	10/12/21	Metals	Barium	45	0.9		µg/L	=
CWC248054	CWC010	10/12/21	Metals	Molybdenum	2.7	2		µg/L	=
CWC248054	CWC010	10/12/21	Metals	Vanadium	4.4	4		µg/L	=
CWC248054	CWC010	10/12/21	Metals	Antimony	2	2		µg/L	U
CWC248054	CWC010	10/12/21	Metals	Arsenic	4	4		µg/L	U
CWC248054	CWC010	10/12/21	Metals	Chromium	4	4		µg/L	U
CWC248054	CWC010	10/12/21	Metals	Selenium	2	2		µg/L	U
CWC248054	CWC010	10/12/21	Metals	Thallium	0.9	0.9		µg/L	U
CWC248054	CWC010	10/12/21	Metals	Nickel	2	2		µg/L	U
CWC248054	CWC010	10/12/21	Metals	Cadmium	0.2	0.2		µg/L	U
CWC248054	CWC010	10/12/21	Alpha Spectroscopy	Th-228	0.611	0.459	0.439	pCi/L	J
CWC248054	CWC010	10/12/21	Alpha Spectroscopy	Th-230	0.882	0.519	0.532	pCi/L	J
CWC248054	CWC010	10/12/21	Alpha Spectroscopy	Th-232	0.0539	0.382	0.148	pCi/L	UJ
CWC248054	CWC010	10/12/21	Alpha Spectroscopy	Ra-226	0.0424	0.821	0.281	pCi/L	UJ
CWC248054	CWC010	10/12/21	Alpha Spectroscopy	U-234	0.139	0.445	0.221	pCi/L	UJ
CWC248054	CWC010	10/12/21	Alpha Spectroscopy	U-235	0	0.561	0.215	pCi/L	UJ
CWC248054	CWC010	10/12/21	Alpha Spectroscopy	U-238	0.0461	0.326	0.127	pCi/L	UJ
CWC248056	CWC011	10/12/21	Metals	Barium	57	0.9		µg/L	=
CWC248056	CWC011	10/12/21	Metals	Molybdenum	2.6	2		µg/L	=
CWC248056	CWC011	10/12/21	Metals	Vanadium	4.5	4		µg/L	=
CWC248056	CWC011	10/12/21	Metals	Antimony	2	2		µg/L	U
CWC248056	CWC011	10/12/21	Metals	Arsenic	4	4		µg/L	U
CWC248056	CWC011	10/12/21	Metals	Chromium	4	4		µg/L	U
CWC248056	CWC011	10/12/21	Metals	Selenium	2	2		µg/L	U
CWC248056	CWC011	10/12/21	Metals	Thallium	0.9	0.9		µg/L	U
CWC248056	CWC011	10/12/21	Metals	Nickel	2	2		µg/L	U
CWC248056	CWC011	10/12/21	Metals	Cadmium	0.2	0.2		µg/L	U
CWC248056	CWC011	10/12/21	Alpha Spectroscopy	Th-230	0.88	0.589	0.563	pCi/L	J
CWC248056	CWC011	10/12/21	Alpha Spectroscopy	Th-228	0.4	0.632	0.402	pCi/L	UJ
CWC248056	CWC011	10/12/21	Alpha Spectroscopy	Th-232	0.02	0.576	0.174	pCi/L	UJ
CWC248056	CWC011	10/12/21	Alpha Spectroscopy	Ra-226	0.0781	0.841	0.312	pCi/L	UJ
CWC248056	CWC011	10/12/21	Alpha Spectroscopy	U-234	0.27	0.382	0.291	pCi/L	UJ
CWC248056	CWC011	10/12/21	Alpha Spectroscopy	U-235	0	0.653	0.251	pCi/L	UJ

Table E-1. CWC Surface Water Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Error	Units	VQ
CWC248056	CWC011	10/12/21	Alpha Spectroscopy	U-238	0.0537	0.38	0.148	pCi/L	UJ
CWC231027	CWC010	10/06/20	Alpha Spectroscopy	U-235	0	0.288	0.751	pCi/L	UJ
CWC231027	CWC010	10/06/20	Alpha Spectroscopy	U-238	0.391	0.372	0.426	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 2021

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC239136	CWC002	03/31/21	Gamma Spectroscopy	Ac-227	-0.0663	0.118	pCi/g	UJ	
CWC239136	CWC002	03/31/21	Gamma Spectroscopy	Am-241	0.00332	0.0224	pCi/g	UJ	
CWC239136	CWC002	03/31/21	Metals	Antimony	0.67		mg/kg	U	
CWC239136	CWC002	03/31/21	Metals	Arsenic	4		mg/kg	=	
CWC239136	CWC002	03/31/21	Metals	Barium	320		mg/kg	=	
CWC239136	CWC002	03/31/21	Metals	Cadmium	0.35		mg/kg	J	E01
CWC239136	CWC002	03/31/21	Gamma Spectroscopy	Cs-137	-0.000165	0.0119	pCi/g	UJ	
CWC239136	CWC002	03/31/21	Metals	Chromium	15		mg/kg	=	
CWC239136	CWC002	03/31/21	Metals	Molybdenum	1.3		mg/kg	=	
CWC239136	CWC002	03/31/21	Metals	Nickel	11		mg/kg	=	
CWC239136	CWC002	03/31/21	Gamma Spectroscopy	K-40	8.91	1.22	pCi/g	=	T04, T20
CWC239136	CWC002	03/31/21	Gamma Spectroscopy	Pa-231	-0.198	0.47	pCi/g	UJ	F01
CWC239136	CWC002	03/31/21	Gamma Spectroscopy	Ra-226	0.826	0.216	pCi/g	=	T04, T05
CWC239136	CWC002	03/31/21	Gamma Spectroscopy	Ra-228	0.336	0.0553	pCi/g	=	
CWC239136	CWC002	03/31/21	Metals	Selenium	1.1		mg/kg	=	
CWC239136	CWC002	03/31/21	Metals	Thallium	0.67		mg/kg	U	
CWC239136	CWC002	03/31/21	Alpha Spectroscopy	Th-228	0.326	0.236	pCi/g	J	
CWC239136	CWC002	03/31/21	Gamma Spectroscopy	Th-228	0.336	0.0553	pCi/g	=	
CWC239136	CWC002	03/31/21	Alpha Spectroscopy	Th-230	1.35	0.474	pCi/g	J	F01
CWC239136	CWC002	03/31/21	Gamma Spectroscopy	Th-230	1.43	2.18	pCi/g	UJ	T04, T06
CWC239136	CWC002	03/31/21	Alpha Spectroscopy	Th-232	0.219	0.195	pCi/g	UJ	T04, T06
CWC239136	CWC002	03/31/21	Gamma Spectroscopy	Th-232	0.336	0.0553	pCi/g	=	T04, T06
CWC239136	CWC002	03/31/21	Gamma Spectroscopy	U-235	0.0982	0.149	pCi/g	UJ	T04, T06
CWC239136	CWC002	03/31/21	Gamma Spectroscopy	U-238	0.62	0.125	pCi/g	J	T04, T06
CWC239136	CWC002	03/31/21	Metals	Vanadium	9.8		mg/kg	=	T04, T06
CWC248039	CWC002	10/13/21	Gamma Spectroscopy	Ac-227	0.00762	0.112	pCi/g	UJ	
CWC248039	CWC002	10/13/21	Gamma Spectroscopy	Am-241	-0.00726	0.0224	pCi/g	UJ	
CWC248039	CWC002	10/13/21	Metals	Antimony	0.26		mg/kg	=	
CWC248039	CWC002	10/13/21	Metals	Arsenic	2.4		mg/kg	=	
CWC248039	CWC002	10/13/21	Metals	Barium	2,000		mg/kg	=	
CWC248039	CWC002	10/13/21	Metals	Cadmium	0.29		mg/kg	=	E01
CWC248039	CWC002	10/13/21	Gamma Spectroscopy	Cs-137	0.00158	0.0103	pCi/g	UJ	
CWC248039	CWC002	10/13/21	Metals	Chromium	24		mg/kg	=	
CWC248039	CWC002	10/13/21	Metals	Molybdenum	5.3		mg/kg	=	
CWC248039	CWC002	10/13/21	Metals	Nickel	7.1		mg/kg	=	

Table E-2. CWC Sediment Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC248039	CWC002	10/13/21	Gamma Spectroscopy	K-40	9.94	1.32	pCi/g	=	
CWC248039	CWC002	10/13/21	Gamma Spectroscopy	Pa-231	-0.118	0.42	pCi/g	UJ	F01
CWC248039	CWC002	10/13/21	Gamma Spectroscopy	Ra-226	0.967	0.25	pCi/g	=	
CWC248039	CWC002	10/13/21	Gamma Spectroscopy	Ra-228	0.305	0.0466	pCi/g	J	T04, T20
CWC248039	CWC002	10/13/21	Metals	Selenium	0.64		mg/kg	=	
CWC248039	CWC002	10/13/21	Metals	Thallium	0.17		mg/kg	U	
CWC248039	CWC002	10/13/21	Alpha Spectroscopy	Th-228	0.495	0.237	pCi/g	=	
CWC248039	CWC002	10/13/21	Gamma Spectroscopy	Th-228	0.305	0.0466	pCi/g	J	
CWC248039	CWC002	10/13/21	Alpha Spectroscopy	Th-230	0.92	0.336	pCi/g	J	
CWC248039	CWC002	10/13/21	Gamma Spectroscopy	Th-230	0.496	2.11	pCi/g	UJ	
CWC248039	CWC002	10/13/21	Alpha Spectroscopy	Th-232	0.516	0.244	pCi/g	=	T04, T06
CWC248039	CWC002	10/13/21	Gamma Spectroscopy	Th-232	0.305	0.0466	pCi/g	J	T04, T06
CWC248039	CWC002	10/13/21	Gamma Spectroscopy	U-235	-0.148	0.141	pCi/g	UJ	T04, T06
CWC248039	CWC002	10/13/21	Gamma Spectroscopy	U-238	0.615	0.124	pCi/g	=	T04, T06
CWC248039	CWC002	10/13/21	Metals	Vanadium	6.6		mg/kg	=	T04, T06
CWC239138	CWC003	03/31/21	Gamma Spectroscopy	Ac-227	0.109	0.163	pCi/g	UJ	
CWC239138	CWC003	03/31/21	Gamma Spectroscopy	Am-241	0.0112	0.0311	pCi/g	UJ	
CWC239138	CWC003	03/31/21	Metals	Antimony	0.7		mg/kg	U	
CWC239138	CWC003	03/31/21	Metals	Arsenic	5.3		mg/kg	=	
CWC239138	CWC003	03/31/21	Metals	Barium	160		mg/kg	=	
CWC239138	CWC003	03/31/21	Metals	Cadmium	0.69		mg/kg	J	E01
CWC239138	CWC003	03/31/21	Gamma Spectroscopy	Cs-137	0.0396	0.0216	pCi/g	J	
CWC239138	CWC003	03/31/21	Metals	Chromium	21		mg/kg	=	
CWC239138	CWC003	03/31/21	Metals	Molybdenum	1.1		mg/kg	=	
CWC239138	CWC003	03/31/21	Metals	Nickel	18		mg/kg	=	
CWC239138	CWC003	03/31/21	Gamma Spectroscopy	K-40	14	1.88	pCi/g	=	
CWC239138	CWC003	03/31/21	Gamma Spectroscopy	Pa-231	-0.292	0.61	pCi/g	UJ	F01
CWC239138	CWC003	03/31/21	Gamma Spectroscopy	Ra-226	1.06	0.276	pCi/g	=	
CWC239138	CWC003	03/31/21	Gamma Spectroscopy	Ra-228	0.843	0.115	pCi/g	=	
CWC239138	CWC003	03/31/21	Metals	Selenium	1.6		mg/kg	=	
CWC239138	CWC003	03/31/21	Metals	Thallium	0.7		mg/kg	U	
CWC239138	CWC003	03/31/21	Alpha Spectroscopy	Th-228	1.13	0.422	pCi/g	=	
CWC239138	CWC003	03/31/21	Gamma Spectroscopy	Th-228	0.843	0.115	pCi/g	=	
CWC239138	CWC003	03/31/21	Alpha Spectroscopy	Th-230	1.61	0.513	pCi/g	J	
CWC239138	CWC003	03/31/21	Gamma Spectroscopy	Th-230	0.861	3.04	pCi/g	UJ	T04, T06

Table E-2. CWC Sediment Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC239138	CWC003	03/31/21	Alpha Spectroscopy	Th-232	1.05	0.407	pCi/g	=	T04, T06
CWC239138	CWC003	03/31/21	Gamma Spectroscopy	Th-232	0.843	0.115	pCi/g	=	T04, T06
CWC239138	CWC003	03/31/21	Gamma Spectroscopy	U-235	0.166	0.186	pCi/g	UJ	T04, T06
CWC239138	CWC003	03/31/21	Gamma Spectroscopy	U-238	1.2	0.207	pCi/g	=	T04, T06
CWC239138	CWC003	03/31/21	Metals	Vanadium	19		mg/kg	=	T04, T06
CWC248041	CWC003	10/13/21	Gamma Spectroscopy	Ac-227	0.0489	0.128	pCi/g	UJ	
CWC248041	CWC003	10/13/21	Gamma Spectroscopy	Am-241	0.00297	0.025	pCi/g	UJ	
CWC248041	CWC003	10/13/21	Metals	Antimony	0.27		mg/kg	=	
CWC248041	CWC003	10/13/21	Metals	Arsenic	3.1		mg/kg	=	
CWC248041	CWC003	10/13/21	Metals	Barium	110		mg/kg	=	
CWC248041	CWC003	10/13/21	Metals	Cadmium	0.44		mg/kg	=	E01
CWC248041	CWC003	10/13/21	Gamma Spectroscopy	Cs-137	0.00409	0.0124	pCi/g	UJ	
CWC248041	CWC003	10/13/21	Metals	Chromium	16		mg/kg	=	
CWC248041	CWC003	10/13/21	Metals	Molybdenum	0.72		mg/kg	=	
CWC248041	CWC003	10/13/21	Metals	Nickel	9.5		mg/kg	=	
CWC248041	CWC003	10/13/21	Gamma Spectroscopy	K-40	11.8	1.55	pCi/g	=	
CWC248041	CWC003	10/13/21	Gamma Spectroscopy	Pa-231	0.175	0.465	pCi/g	UJ	
CWC248041	CWC003	10/13/21	Gamma Spectroscopy	Ra-226	1.02	0.259	pCi/g	=	
CWC248041	CWC003	10/13/21	Gamma Spectroscopy	Ra-228	0.551	0.0719	pCi/g	=	
CWC248041	CWC003	10/13/21	Metals	Selenium	1.6		mg/kg	=	
CWC248041	CWC003	10/13/21	Metals	Thallium	0.18		mg/kg	U	
CWC248041	CWC003	10/13/21	Alpha Spectroscopy	Th-228	0.763	0.289	pCi/g	=	
CWC248041	CWC003	10/13/21	Gamma Spectroscopy	Th-228	0.551	0.0719	pCi/g	=	
CWC248041	CWC003	10/13/21	Alpha Spectroscopy	Th-230	1.75	0.467	pCi/g	=	
CWC248041	CWC003	10/13/21	Gamma Spectroscopy	Th-230	1.39	2.46	pCi/g	UJ	T04, T06
CWC248041	CWC003	10/13/21	Alpha Spectroscopy	Th-232	0.912	0.318	pCi/g	=	T04, T06
CWC248041	CWC003	10/13/21	Gamma Spectroscopy	Th-232	0.551	0.0719	pCi/g	=	T04, T06
CWC248041	CWC003	10/13/21	Gamma Spectroscopy	U-235	0.0267	0.155	pCi/g	UJ	T04, T06
CWC248041	CWC003	10/13/21	Gamma Spectroscopy	U-238	0.755	0.132	pCi/g	=	T04, T06
CWC248041	CWC003	10/13/21	Metals	Vanadium	12		mg/kg	=	T04, T06
CWC239140	CWC004	03/31/21	Gamma Spectroscopy	Ac-227	-0.0279	0.148	pCi/g	UJ	
CWC239140	CWC004	03/31/21	Gamma Spectroscopy	Am-241	-0.0148	0.0289	pCi/g	UJ	
CWC239140	CWC004	03/31/21	Metals	Antimony	0.73		mg/kg	U	
CWC239140	CWC004	03/31/21	Metals	Arsenic	4.2		mg/kg	=	
CWC239140	CWC004	03/31/21	Metals	Barium	120		mg/kg	=	E01

Table E-2. CWC Sediment Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC239140	CWC004	03/31/21	Metals	Cadmium	0.44		mg/kg	J	
CWC239140	CWC004	03/31/21	Gamma Spectroscopy	Cs-137	3.78E-05	0.0152	pCi/g	UJ	
CWC239140	CWC004	03/31/21	Metals	Chromium	14		mg/kg	=	
CWC239140	CWC004	03/31/21	Metals	Molybdenum	0.73		mg/kg	U	
CWC239140	CWC004	03/31/21	Metals	Nickel	15		mg/kg	=	
CWC239140	CWC004	03/31/21	Gamma Spectroscopy	K-40	13.4	1.78	pCi/g	=	
CWC239140	CWC004	03/31/21	Gamma Spectroscopy	Pa-231	-0.23	0.532	pCi/g	UJ	F01
CWC239140	CWC004	03/31/21	Gamma Spectroscopy	Ra-226	1.1	0.282	pCi/g	=	
CWC239140	CWC004	03/31/21	Gamma Spectroscopy	Ra-228	0.746	0.0929	pCi/g	=	
CWC239140	CWC004	03/31/21	Metals	Selenium	1.3		mg/kg	=	
CWC239140	CWC004	03/31/21	Metals	Thallium	0.73		mg/kg	U	
CWC239140	CWC004	03/31/21	Alpha Spectroscopy	Th-228	1.72	0.542	pCi/g	=	
CWC239140	CWC004	03/31/21	Gamma Spectroscopy	Th-228	0.746	0.0929	pCi/g	=	
CWC239140	CWC004	03/31/21	Alpha Spectroscopy	Th-230	2.06	0.599	pCi/g	J	
CWC239140	CWC004	03/31/21	Gamma Spectroscopy	Th-230	0.404	2.75	pCi/g	UJ	T04, T06
CWC239140	CWC004	03/31/21	Alpha Spectroscopy	Th-232	1.14	0.427	pCi/g	=	T04, T06
CWC239140	CWC004	03/31/21	Gamma Spectroscopy	Th-232	0.746	0.0929	pCi/g	=	T04, T06
CWC239140	CWC004	03/31/21	Gamma Spectroscopy	U-235	-0.159	0.177	pCi/g	UJ	T04, T06
CWC239140	CWC004	03/31/21	Gamma Spectroscopy	U-238	0.897	0.165	pCi/g	=	T04, T06
CWC239140	CWC004	03/31/21	Metals	Vanadium	16		mg/kg	=	T04, T06
CWC248043	CWC004	10/13/21	Gamma Spectroscopy	Ac-227	0.0349	0.136	pCi/g	UJ	
CWC248043	CWC004	10/13/21	Gamma Spectroscopy	Am-241	0.00571	0.0276	pCi/g	UJ	
CWC248043	CWC004	10/13/21	Metals	Antimony	0.2		mg/kg	=	
CWC248043	CWC004	10/13/21	Metals	Arsenic	3.1		mg/kg	=	
CWC248043	CWC004	10/13/21	Metals	Barium	69		mg/kg	=	
CWC248043	CWC004	10/13/21	Metals	Cadmium	0.25		mg/kg	=	
CWC248043	CWC004	10/13/21	Gamma Spectroscopy	Cs-137	-0.0091	0.0127	pCi/g	UJ	
CWC248043	CWC004	10/13/21	Metals	Chromium	9.6		mg/kg	=	E01
CWC248043	CWC004	10/13/21	Metals	Molybdenum	0.32		mg/kg	=	
CWC248043	CWC004	10/13/21	Metals	Nickel	8		mg/kg	=	
CWC248043	CWC004	10/13/21	Gamma Spectroscopy	K-40	13.6	1.77	pCi/g	=	
CWC248043	CWC004	10/13/21	Gamma Spectroscopy	Pa-231	-0.0962	0.486	pCi/g	UJ	
CWC248043	CWC004	10/13/21	Gamma Spectroscopy	Ra-226	1.14	0.286	pCi/g	=	
CWC248043	CWC004	10/13/21	Gamma Spectroscopy	Ra-228	0.793	0.096	pCi/g	=	
CWC248043	CWC004	10/13/21	Metals	Selenium	0.71		mg/kg	=	

Table E-2. CWC Sediment Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC248043	CWC004	10/13/21	Metals	Thallium	0.19		mg/kg	U	
CWC248043	CWC004	10/13/21	Alpha Spectroscopy	Th-228	1.15	0.363	pCi/g	=	
CWC248043	CWC004	10/13/21	Gamma Spectroscopy	Th-228	0.793	0.096	pCi/g	=	
CWC248043	CWC004	10/13/21	Alpha Spectroscopy	Th-230	1.69	0.454	pCi/g	=	
CWC248043	CWC004	10/13/21	Gamma Spectroscopy	Th-230	2.6	2.7	pCi/g	UJ	T04, T20
CWC248043	CWC004	10/13/21	Alpha Spectroscopy	Th-232	0.749	0.288	pCi/g	=	
CWC248043	CWC004	10/13/21	Gamma Spectroscopy	Th-232	0.793	0.096	pCi/g	=	
CWC248043	CWC004	10/13/21	Gamma Spectroscopy	U-235	0.12	0.164	pCi/g	UJ	T04, T06
CWC248043	CWC004	10/13/21	Gamma Spectroscopy	U-238	1.03	0.178	pCi/g	=	T04, T06
CWC248043	CWC004	10/13/21	Metals	Vanadium	11		mg/kg	=	T04, T06
CWC239142	CWC005	03/30/21	Gamma Spectroscopy	Ac-227	-0.0308	0.144	pCi/g	UJ	
CWC239142	CWC005	03/30/21	Gamma Spectroscopy	Am-241	-0.0262	0.031	pCi/g	UJ	
CWC239142	CWC005	03/30/21	Metals	Antimony	0.7		mg/kg	U	
CWC239142	CWC005	03/30/21	Metals	Arsenic	4.2		mg/kg	=	
CWC239142	CWC005	03/30/21	Metals	Barium	160		mg/kg	=	
CWC239142	CWC005	03/30/21	Metals	Cadmium	0.26		mg/kg	J	E01
CWC239142	CWC005	03/30/21	Gamma Spectroscopy	Cs-137	-0.00504	0.0148	pCi/g	UJ	
CWC239142	CWC005	03/30/21	Metals	Chromium	15		mg/kg	=	
CWC239142	CWC005	03/30/21	Metals	Molybdenum	0.7		mg/kg	U	
CWC239142	CWC005	03/30/21	Metals	Nickel	17		mg/kg	=	
CWC239142	CWC005	03/30/21	Gamma Spectroscopy	K-40	16.1	2.12	pCi/g	=	
CWC239142	CWC005	03/30/21	Gamma Spectroscopy	Pa-231	-0.167	0.541	pCi/g	UJ	
CWC239142	CWC005	03/30/21	Gamma Spectroscopy	Ra-226	1.07	0.275	pCi/g	=	
CWC239142	CWC005	03/30/21	Gamma Spectroscopy	Ra-228	0.943	0.125	pCi/g	=	
CWC239142	CWC005	03/30/21	Metals	Selenium	1.6		mg/kg	=	
CWC239142	CWC005	03/30/21	Metals	Thallium	0.7		mg/kg	U	
CWC239142	CWC005	03/30/21	Alpha Spectroscopy	Th-228	1.29	0.459	pCi/g	=	
CWC239142	CWC005	03/30/21	Gamma Spectroscopy	Th-228	0.943	0.125	pCi/g	=	
CWC239142	CWC005	03/30/21	Alpha Spectroscopy	Th-230	2.1	0.598	pCi/g	=	
CWC239142	CWC005	03/30/21	Gamma Spectroscopy	Th-230	0.97	2.94	pCi/g	UJ	T04, T06
CWC239142	CWC005	03/30/21	Alpha Spectroscopy	Th-232	1.08	0.41	pCi/g	=	T04, T06
CWC239142	CWC005	03/30/21	Gamma Spectroscopy	Th-232	0.943	0.125	pCi/g	=	T04, T06
CWC239142	CWC005	03/30/21	Gamma Spectroscopy	U-235	0.0688	0.181	pCi/g	UJ	T04, T06
CWC239142	CWC005	03/30/21	Gamma Spectroscopy	U-238	1.01	0.181	pCi/g	=	T04, T06
CWC239142	CWC005	03/30/21	Metals	Vanadium	17		mg/kg	=	T04, T06

Table E-2. CWC Sediment Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC248045	CWC005	10/12/21	Gamma Spectroscopy	Ac-227	-0.0324	0.139	pCi/g	UJ	
CWC248045	CWC005	10/12/21	Gamma Spectroscopy	Am-241	-0.0131	0.0307	pCi/g	UJ	
CWC248045	CWC005	10/12/21	Metals	Antimony	0.19		mg/kg	U	
CWC248045	CWC005	10/12/21	Metals	Arsenic	3.3		mg/kg	=	
CWC248045	CWC005	10/12/21	Metals	Barium	93		mg/kg	=	
CWC248045	CWC005	10/12/21	Metals	Cadmium	0.2		mg/kg	=	E01
CWC248045	CWC005	10/12/21	Gamma Spectroscopy	Cs-137	0.000773	0.0145	pCi/g	UJ	
CWC248045	CWC005	10/12/21	Metals	Chromium	9.1		mg/kg	=	
CWC248045	CWC005	10/12/21	Metals	Molybdenum	0.2		mg/kg	=	
CWC248045	CWC005	10/12/21	Metals	Nickel	9.3		mg/kg	=	
CWC248045	CWC005	10/12/21	Gamma Spectroscopy	K-40	15.1	1.97	pCi/g	=	
CWC248045	CWC005	10/12/21	Gamma Spectroscopy	Pa-231	0.0584	0.538	pCi/g	UJ	
CWC248045	CWC005	10/12/21	Gamma Spectroscopy	Ra-226	1.14	0.289	pCi/g	=	
CWC248045	CWC005	10/12/21	Gamma Spectroscopy	Ra-228	0.863	0.107	pCi/g	=	
CWC248045	CWC005	10/12/21	Metals	Selenium	0.8		mg/kg	=	
CWC248045	CWC005	10/12/21	Metals	Thallium	0.19		mg/kg	U	
CWC248045	CWC005	10/12/21	Alpha Spectroscopy	Th-228	1.24	0.367	pCi/g	=	
CWC248045	CWC005	10/12/21	Gamma Spectroscopy	Th-228	0.863	0.107	pCi/g	=	
CWC248045	CWC005	10/12/21	Alpha Spectroscopy	Th-230	1.99	0.489	pCi/g	=	
CWC248045	CWC005	10/12/21	Gamma Spectroscopy	Th-230	-1.66	1.42	pCi/g	UJ	T04, T06
CWC248045	CWC005	10/12/21	Alpha Spectroscopy	Th-232	1.33	0.384	pCi/g	=	T04, T06
CWC248045	CWC005	10/12/21	Gamma Spectroscopy	Th-232	0.863	0.107	pCi/g	=	T04, T06
CWC248045	CWC005	10/12/21	Gamma Spectroscopy	U-235	0.127	0.177	pCi/g	UJ	T04, T06
CWC248045	CWC005	10/12/21	Gamma Spectroscopy	U-238	1.22	0.21	pCi/g	=	T04, T05
CWC248045	CWC005	10/12/21	Metals	Vanadium	13		mg/kg	=	T04, T05
CWC239144	CWC006	03/30/21	Gamma Spectroscopy	Ac-227	-0.163	0.157	pCi/g	UJ	
CWC239144	CWC006	03/30/21	Gamma Spectroscopy	Am-241	0.00749	0.0325	pCi/g	UJ	
CWC239144	CWC006	03/30/21	Metals	Antimony	0.68		mg/kg	U	
CWC239144	CWC006	03/30/21	Metals	Arsenic	2.9		mg/kg	=	
CWC239144	CWC006	03/30/21	Metals	Barium	130		mg/kg	=	
CWC239144	CWC006	03/30/21	Metals	Cadmium	0.21		mg/kg	J	E01
CWC239144	CWC006	03/30/21	Gamma Spectroscopy	Cs-137	-0.00251	0.0155	pCi/g	UJ	
CWC239144	CWC006	03/30/21	Metals	Chromium	13		mg/kg	=	
CWC239144	CWC006	03/30/21	Metals	Molybdenum	0.68		mg/kg	U	
CWC239144	CWC006	03/30/21	Metals	Nickel	15		mg/kg	=	

Table E-2. CWC Sediment Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC239144	CWC006	03/30/21	Gamma Spectroscopy	K-40	15.1	2	pCi/g	=	
CWC239144	CWC006	03/30/21	Gamma Spectroscopy	Pa-231	0.000362	0.606	pCi/g	UJ	F01
CWC239144	CWC006	03/30/21	Gamma Spectroscopy	Ra-226	1.12	0.287	pCi/g	=	
CWC239144	CWC006	03/30/21	Gamma Spectroscopy	Ra-228	0.918	0.114	pCi/g	=	
CWC239144	CWC006	03/30/21	Metals	Selenium	1.4		mg/kg	=	
CWC239144	CWC006	03/30/21	Metals	Thallium	0.68		mg/kg	U	
CWC239144	CWC006	03/30/21	Alpha Spectroscopy	Th-228	1.24	0.478	pCi/g	=	
CWC239144	CWC006	03/30/21	Gamma Spectroscopy	Th-228	0.918	0.114	pCi/g	=	
CWC239144	CWC006	03/30/21	Alpha Spectroscopy	Th-230	2.17	0.651	pCi/g	J	
CWC239144	CWC006	03/30/21	Gamma Spectroscopy	Th-230	0.343	2.96	pCi/g	UJ	T04, T06
CWC239144	CWC006	03/30/21	Alpha Spectroscopy	Th-232	1.02	0.427	pCi/g	=	T04, T06
CWC239144	CWC006	03/30/21	Gamma Spectroscopy	Th-232	0.918	0.114	pCi/g	=	T04, T06
CWC239144	CWC006	03/30/21	Gamma Spectroscopy	U-235	0.0705	0.188	pCi/g	UJ	T04, T06
CWC239144	CWC006	03/30/21	Gamma Spectroscopy	U-238	1.16	0.201	pCi/g	=	T04, T06
CWC239144	CWC006	03/30/21	Metals	Vanadium	14		mg/kg	=	T04, T06
CWC248047	CWC006	10/12/21	Gamma Spectroscopy	Ac-227	0.0759	0.144	pCi/g	UJ	
CWC248047	CWC006	10/12/21	Gamma Spectroscopy	Am-241	-0.0292	0.0288	pCi/g	UJ	
CWC248047	CWC006	10/12/21	Metals	Antimony	0.21		mg/kg	=	
CWC248047	CWC006	10/12/21	Metals	Arsenic	2.8		mg/kg	=	
CWC248047	CWC006	10/12/21	Metals	Barium	95		mg/kg	=	
CWC248047	CWC006	10/12/21	Metals	Cadmium	0.66		mg/kg	=	E01
CWC248047	CWC006	10/12/21	Gamma Spectroscopy	Cs-137	0.00735	0.0133	pCi/g	UJ	
CWC248047	CWC006	10/12/21	Metals	Chromium	11		mg/kg	=	
CWC248047	CWC006	10/12/21	Metals	Molybdenum	1.4		mg/kg	=	
CWC248047	CWC006	10/12/21	Metals	Nickel	14		mg/kg	=	
CWC248047	CWC006	10/12/21	Gamma Spectroscopy	K-40	14.7	1.92	pCi/g	=	
CWC248047	CWC006	10/12/21	Gamma Spectroscopy	Pa-231	-0.283	0.538	pCi/g	UJ	
CWC248047	CWC006	10/12/21	Gamma Spectroscopy	Ra-226	1.08	0.273	pCi/g	=	
CWC248047	CWC006	10/12/21	Gamma Spectroscopy	Ra-228	0.867	0.112	pCi/g	=	
CWC248047	CWC006	10/12/21	Metals	Selenium	0.7		mg/kg	=	
CWC248047	CWC006	10/12/21	Metals	Thallium	0.17		mg/kg	U	
CWC248047	CWC006	10/12/21	Alpha Spectroscopy	Th-228	1.09	0.343	pCi/g	=	
CWC248047	CWC006	10/12/21	Gamma Spectroscopy	Th-228	0.867	0.112	pCi/g	=	
CWC248047	CWC006	10/12/21	Alpha Spectroscopy	Th-230	1.87	0.471	pCi/g	=	
CWC248047	CWC006	10/12/21	Gamma Spectroscopy	Th-230	1.47	2.86	pCi/g	UJ	T04, T06

Table E-2. CWC Sediment Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC248047	CWC006	10/12/21	Alpha Spectroscopy	Th-232	1.23	0.367	pCi/g	=	T04, T06
CWC248047	CWC006	10/12/21	Gamma Spectroscopy	Th-232	0.867	0.112	pCi/g	=	T04, T06
CWC248047	CWC006	10/12/21	Gamma Spectroscopy	U-235	0.0471	0.172	pCi/g	UJ	T04, T06
CWC248047	CWC006	10/12/21	Gamma Spectroscopy	U-238	1.2	0.198	pCi/g	=	T04, T05
CWC248047	CWC006	10/12/21	Metals	Vanadium	12		mg/kg	=	T04, T06
CWC239146	CWC007	03/30/21	Gamma Spectroscopy	Ac-227	0.158	0.0569	pCi/g	=	
CWC239146	CWC007	03/30/21	Gamma Spectroscopy	Am-241	-0.000211	0.0312	pCi/g	UJ	
CWC239146	CWC007	03/30/21	Metals	Antimony	0.68		mg/kg	U	
CWC239146	CWC007	03/30/21	Metals	Arsenic	8.3		mg/kg	=	
CWC239146	CWC007	03/30/21	Metals	Barium	200		mg/kg	=	
CWC239146	CWC007	03/30/21	Metals	Cadmium	2.4		mg/kg	J	
CWC239146	CWC007	03/30/21	Gamma Spectroscopy	Cs-137	0.0291	0.012	pCi/g	=	E01, E08
CWC239146	CWC007	03/30/21	Metals	Chromium	30		mg/kg	=	E08, H02, H05
CWC239146	CWC007	03/30/21	Metals	Molybdenum	2		mg/kg	=	
CWC239146	CWC007	03/30/21	Metals	Nickel	26		mg/kg	=	
CWC239146	CWC007	03/30/21	Gamma Spectroscopy	K-40	12.4	1.67	pCi/g	=	
CWC239146	CWC007	03/30/21	Gamma Spectroscopy	Pa-231	0.301	0.587	pCi/g	UJ	F01
CWC239146	CWC007	03/30/21	Gamma Spectroscopy	Ra-226	1.2	0.314	pCi/g	=	
CWC239146	CWC007	03/30/21	Gamma Spectroscopy	Ra-228	0.75	0.0956	pCi/g	=	
CWC239146	CWC007	03/30/21	Metals	Selenium	1.9		mg/kg	=	
CWC239146	CWC007	03/30/21	Metals	Thallium	0.68		mg/kg	U	F01
CWC239146	CWC007	03/30/21	Alpha Spectroscopy	Th-228	1.02	0.429	pCi/g	=	F01
CWC239146	CWC007	03/30/21	Gamma Spectroscopy	Th-228	0.75	0.0956	pCi/g	=	F01
CWC239146	CWC007	03/30/21	Alpha Spectroscopy	Th-230	7.3	1.41	pCi/g	=	
CWC239146	CWC007	03/30/21	Gamma Spectroscopy	Th-230	5.75	3.54	pCi/g	J	T04, T06
CWC239146	CWC007	03/30/21	Alpha Spectroscopy	Th-232	0.852	0.384	pCi/g	=	T04, T06
CWC239146	CWC007	03/30/21	Gamma Spectroscopy	Th-232	0.75	0.0956	pCi/g	=	T04, T06
CWC239146	CWC007	03/30/21	Gamma Spectroscopy	U-235	-0.0866	0.182	pCi/g	UJ	T04, T06
CWC239146	CWC007	03/30/21	Gamma Spectroscopy	U-238	1.16	0.205	pCi/g	=	T04, T06
CWC239146	CWC007	03/30/21	Metals	Vanadium	22		mg/kg	=	T04, T06
CWC239148	CWC008	03/30/21	Gamma Spectroscopy	Ac-227	0.0388	0.156	pCi/g	UJ	
CWC239148	CWC008	03/30/21	Gamma Spectroscopy	Am-241	-0.0191	0.0309	pCi/g	UJ	
CWC239148	CWC008	03/30/21	Metals	Antimony	0.84		mg/kg	U	
CWC239148	CWC008	03/30/21	Metals	Arsenic	4.4		mg/kg	=	
CWC239148	CWC008	03/30/21	Metals	Barium	140		mg/kg	=	

Table E-2. CWC Sediment Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC239148	CWC008	03/30/21	Metals	Cadmium	0.37		mg/kg	J	
CWC239148	CWC008	03/30/21	Gamma Spectroscopy	Cs-137	-0.00337	0.0161	pCi/g	UJ	
CWC239148	CWC008	03/30/21	Metals	Chromium	14		mg/kg	=	E01, E08
CWC239148	CWC008	03/30/21	Metals	Molybdenum	0.84		mg/kg	U	
CWC239148	CWC008	03/30/21	Metals	Nickel	16		mg/kg	=	
CWC239148	CWC008	03/30/21	Gamma Spectroscopy	K-40	14.5	1.92	pCi/g	=	
CWC239148	CWC008	03/30/21	Gamma Spectroscopy	Pa-231	-0.673	0.618	pCi/g	UJ	
CWC239148	CWC008	03/30/21	Gamma Spectroscopy	Ra-226	1.07	0.279	pCi/g	=	
CWC239148	CWC008	03/30/21	Gamma Spectroscopy	Ra-228	0.919	0.112	pCi/g	=	
CWC239148	CWC008	03/30/21	Metals	Selenium	1.6		mg/kg	=	
CWC239148	CWC008	03/30/21	Metals	Thallium	0.84		mg/kg	U	
CWC239148	CWC008	03/30/21	Alpha Spectroscopy	Th-228	1.74	0.567	pCi/g	=	
CWC239148	CWC008	03/30/21	Gamma Spectroscopy	Th-228	0.919	0.112	pCi/g	=	
CWC239148	CWC008	03/30/21	Alpha Spectroscopy	Th-230	2.7	0.728	pCi/g	=	
CWC239148	CWC008	03/30/21	Gamma Spectroscopy	Th-230	-0.349	3.09	pCi/g	UJ	T04, T06
CWC239148	CWC008	03/30/21	Alpha Spectroscopy	Th-232	1	0.42	pCi/g	=	T04, T06
CWC239148	CWC008	03/30/21	Gamma Spectroscopy	Th-232	0.919	0.112	pCi/g	=	T04, T06
CWC239148	CWC008	03/30/21	Gamma Spectroscopy	U-235	0.0103	0.188	pCi/g	UJ	T04, T06
CWC239148	CWC008	03/30/21	Gamma Spectroscopy	U-238	1.14	0.2	pCi/g	=	T04, T06
CWC239148	CWC008	03/30/21	Metals	Vanadium	15		mg/kg	=	T04, T06
CWC248051	CWC008	10/12/21	Gamma Spectroscopy	Ac-227	0.0716	0.0393	pCi/g	UJ	
CWC248051	CWC008	10/12/21	Gamma Spectroscopy	Am-241	0.00316	0.0286	pCi/g	UJ	
CWC248051	CWC008	10/12/21	Metals	Antimony	0.18		mg/kg	U	
CWC248051	CWC008	10/12/21	Metals	Arsenic	2.3		mg/kg	=	
CWC248051	CWC008	10/12/21	Metals	Barium	72		mg/kg	=	
CWC248051	CWC008	10/12/21	Metals	Cadmium	0.23		mg/kg	=	
CWC248051	CWC008	10/12/21	Gamma Spectroscopy	Cs-137	-6.83E-05	0.0135	pCi/g	UJ	E01, E08
CWC248051	CWC008	10/12/21	Metals	Chromium	9.2		mg/kg	=	
CWC248051	CWC008	10/12/21	Metals	Molybdenum	0.27		mg/kg	=	
CWC248051	CWC008	10/12/21	Metals	Nickel	7.5		mg/kg	=	
CWC248051	CWC008	10/12/21	Gamma Spectroscopy	K-40	14.3	1.86	pCi/g	=	
CWC248051	CWC008	10/12/21	Gamma Spectroscopy	Pa-231	0.0441	0.523	pCi/g	UJ	
CWC248051	CWC008	10/12/21	Gamma Spectroscopy	Ra-226	1.17	0.3	pCi/g	=	
CWC248051	CWC008	10/12/21	Gamma Spectroscopy	Ra-228	0.869	0.106	pCi/g	=	
CWC248051	CWC008	10/12/21	Metals	Selenium	0.63		mg/kg	=	

Table E-2. CWC Sediment Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC248051	CWC008	10/12/21	Metals	Thallium	0.18		mg/kg	U	
CWC248051	CWC008	10/12/21	Alpha Spectroscopy	Th-228	1.17	0.38	pCi/g	=	
CWC248051	CWC008	10/12/21	Gamma Spectroscopy	Th-228	0.869	0.106	pCi/g	=	
CWC248051	CWC008	10/12/21	Alpha Spectroscopy	Th-230	2.53	0.604	pCi/g	=	
CWC248051	CWC008	10/12/21	Gamma Spectroscopy	Th-230	1.63	2.76	pCi/g	UJ	T04, T06
CWC248051	CWC008	10/12/21	Alpha Spectroscopy	Th-232	1.12	0.373	pCi/g	=	T04, T06
CWC248051	CWC008	10/12/21	Gamma Spectroscopy	Th-232	0.869	0.106	pCi/g	=	T04, T06
CWC248051	CWC008	10/12/21	Gamma Spectroscopy	U-235	0.111	0.168	pCi/g	UJ	T04, T06
CWC248051	CWC008	10/12/21	Gamma Spectroscopy	U-238	1.14	0.203	pCi/g	=	T04, T06
CWC248051	CWC008	10/12/21	Metals	Vanadium	10		mg/kg	=	T04, T06
CWC239150	CWC009	03/30/21	Gamma Spectroscopy	Ac-227	0.0948	0.146	pCi/g	UJ	
CWC239150	CWC009	03/30/21	Gamma Spectroscopy	Am-241	-0.000563	0.0295	pCi/g	UJ	
CWC239150	CWC009	03/30/21	Metals	Antimony	0.66		mg/kg	U	
CWC239150	CWC009	03/30/21	Metals	Arsenic	5.7		mg/kg	=	
CWC239150	CWC009	03/30/21	Metals	Barium	130		mg/kg	=	
CWC239150	CWC009	03/30/21	Metals	Cadmium	0.52		mg/kg	J	
CWC239150	CWC009	03/30/21	Gamma Spectroscopy	Cs-137	-0.00819	0.0146	pCi/g	UJ	E01, E08
CWC239150	CWC009	03/30/21	Metals	Chromium	24		mg/kg	=	
CWC239150	CWC009	03/30/21	Metals	Molybdenum	0.69		mg/kg	=	
CWC239150	CWC009	03/30/21	Metals	Nickel	16		mg/kg	=	
CWC239150	CWC009	03/30/21	Gamma Spectroscopy	K-40	11.8	1.58	pCi/g	=	
CWC239150	CWC009	03/30/21	Gamma Spectroscopy	Pa-231	-0.078	0.563	pCi/g	UJ	
CWC239150	CWC009	03/30/21	Gamma Spectroscopy	Ra-226	1.13	0.29	pCi/g	=	
CWC239150	CWC009	03/30/21	Gamma Spectroscopy	Ra-228	0.801	0.0988	pCi/g	=	
CWC239150	CWC009	03/30/21	Metals	Selenium	1.5		mg/kg	=	
CWC239150	CWC009	03/30/21	Metals	Thallium	0.66		mg/kg	U	
CWC239150	CWC009	03/30/21	Alpha Spectroscopy	Th-228	1.18	0.423	pCi/g	=	
CWC239150	CWC009	03/30/21	Gamma Spectroscopy	Th-228	0.801	0.0988	pCi/g	=	
CWC239150	CWC009	03/30/21	Alpha Spectroscopy	Th-230	4.43	0.934	pCi/g	=	
CWC239150	CWC009	03/30/21	Gamma Spectroscopy	Th-230	3.51	2.89	pCi/g	UJ	T04, T06
CWC239150	CWC009	03/30/21	Alpha Spectroscopy	Th-232	1.01	0.389	pCi/g	=	T04, T06
CWC239150	CWC009	03/30/21	Gamma Spectroscopy	Th-232	0.801	0.0988	pCi/g	=	T04, T06
CWC239150	CWC009	03/30/21	Gamma Spectroscopy	U-235	0.225	0.181	pCi/g	UJ	T04, T06
CWC239150	CWC009	03/30/21	Gamma Spectroscopy	U-238	1.37	0.217	pCi/g	=	T04, T06
CWC239150	CWC009	03/30/21	Metals	Vanadium	17		mg/kg	=	T04, T06
CWC248053	CWC009	10/12/21	Gamma Spectroscopy	Ac-227	0.0479	0.141	pCi/g	UJ	
CWC248053	CWC009	10/12/21	Gamma Spectroscopy	Am-241	-0.00103	0.0297	pCi/g	UJ	

Table E-2. CWC Sediment Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC248053	CWC009	10/12/21	Metals	Antimony	0.34		mg/kg	=	
CWC248053	CWC009	10/12/21	Metals	Arsenic	3.8		mg/kg	=	
CWC248053	CWC009	10/12/21	Metals	Barium	97		mg/kg	=	
CWC248053	CWC009	10/12/21	Metals	Cadmium	0.37		mg/kg	=	
CWC248053	CWC009	10/12/21	Gamma Spectroscopy	Cs-137	0.0121	0.0132	pCi/g	UJ	
CWC248053	CWC009	10/12/21	Metals	Chromium	17		mg/kg	=	E01, E08
CWC248053	CWC009	10/12/21	Metals	Molybdenum	0.56		mg/kg	=	
CWC248053	CWC009	10/12/21	Metals	Nickel	10		mg/kg	=	
CWC248053	CWC009	10/12/21	Gamma Spectroscopy	K-40	13.7	1.79	pCi/g	=	
CWC248053	CWC009	10/12/21	Gamma Spectroscopy	Pa-231	-0.188	0.529	pCi/g	UJ	
CWC248053	CWC009	10/12/21	Gamma Spectroscopy	Ra-226	1.15	0.29	pCi/g	=	
CWC248053	CWC009	10/12/21	Gamma Spectroscopy	Ra-228	0.781	0.0962	pCi/g	=	
CWC248053	CWC009	10/12/21	Metals	Selenium	1.1		mg/kg	=	
CWC248053	CWC009	10/12/21	Metals	Thallium	0.17		mg/kg	U	
CWC248053	CWC009	10/12/21	Alpha Spectroscopy	Th-228	0.995	0.338	pCi/g	=	
CWC248053	CWC009	10/12/21	Gamma Spectroscopy	Th-228	0.781	0.0962	pCi/g	=	
CWC248053	CWC009	10/12/21	Alpha Spectroscopy	Th-230	3.44	0.72	pCi/g	=	
CWC248053	CWC009	10/12/21	Gamma Spectroscopy	Th-230	3.25	2.92	pCi/g	UJ	T04, T06
CWC248053	CWC009	10/12/21	Alpha Spectroscopy	Th-232	0.8	0.3	pCi/g	=	T04, T06
CWC248053	CWC009	10/12/21	Gamma Spectroscopy	Th-232	0.781	0.0962	pCi/g	=	T04, T06
CWC248053	CWC009	10/12/21	Gamma Spectroscopy	U-235	0.0896	0.168	pCi/g	UJ	T04, T06
CWC248053	CWC009	10/12/21	Gamma Spectroscopy	U-238	0.874	0.163	pCi/g	=	T04, T06
CWC248053	CWC009	10/12/21	Metals	Vanadium	13		mg/kg	=	T04, T06
CWC239152	CWC010	03/30/21	Gamma Spectroscopy	Ac-227	0.0542	0.149	pCi/g	UJ	
CWC239152	CWC010	03/30/21	Gamma Spectroscopy	Am-241	-0.0121	0.0281	pCi/g	UJ	
CWC239152	CWC010	03/30/21	Metals	Antimony	0.64		mg/kg	U	
CWC239152	CWC010	03/30/21	Metals	Arsenic	7.3		mg/kg	=	
CWC239152	CWC010	03/30/21	Metals	Barium	160		mg/kg	=	
CWC239152	CWC010	03/30/21	Metals	Cadmium	0.48		mg/kg	J	
CWC239152	CWC010	03/30/21	Gamma Spectroscopy	Cs-137	-0.006	0.0133	pCi/g	UJ	E01, E08
CWC239152	CWC010	03/30/21	Metals	Chromium	17		mg/kg	=	
CWC239152	CWC010	03/30/21	Metals	Molybdenum	0.64		mg/kg	U	
CWC239152	CWC010	03/30/21	Metals	Nickel	20		mg/kg	=	
CWC239152	CWC010	03/30/21	Gamma Spectroscopy	K-40	9.93	1.35	pCi/g	=	
CWC239152	CWC010	03/30/21	Gamma Spectroscopy	Pa-231	-0.265	0.538	pCi/g	UJ	
CWC239152	CWC010	03/30/21	Gamma Spectroscopy	Ra-226	1.19	0.301	pCi/g	=	
CWC239152	CWC010	03/30/21	Gamma Spectroscopy	Ra-228	0.653	0.0832	pCi/g	=	

Table E-2. CWC Sediment Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC239152	CWC010	03/30/21	Metals	Selenium	1.3		mg/kg	=	
CWC239152	CWC010	03/30/21	Metals	Thallium	0.64		mg/kg	U	
CWC239152	CWC010	03/30/21	Alpha Spectroscopy	Th-228	0.857	0.371	pCi/g	=	
CWC239152	CWC010	03/30/21	Gamma Spectroscopy	Th-228	0.653	0.0832	pCi/g	=	
CWC239152	CWC010	03/30/21	Alpha Spectroscopy	Th-230	1.63	0.525	pCi/g	J	
CWC239152	CWC010	03/30/21	Gamma Spectroscopy	Th-230	2.29	2.74	pCi/g	UJ	T04, T05
CWC239152	CWC010	03/30/21	Alpha Spectroscopy	Th-232	0.941	0.387	pCi/g	=	T04, T06
CWC239152	CWC010	03/30/21	Gamma Spectroscopy	Th-232	0.653	0.0832	pCi/g	=	T04, T06
CWC239152	CWC010	03/30/21	Gamma Spectroscopy	U-235	-0.00397	0.167	pCi/g	UJ	T04, T06
CWC239152	CWC010	03/30/21	Gamma Spectroscopy	U-238	0.933	0.171	pCi/g	=	T04, T06
CWC239152	CWC010	03/30/21	Metals	Vanadium	19		mg/kg	=	T04, T06
CWC248055	CWC010	10/12/21	Gamma Spectroscopy	Ac-227	0.0667	0.118	pCi/g	UJ	
CWC248055	CWC010	10/12/21	Gamma Spectroscopy	Am-241	0.00546	0.0238	pCi/g	UJ	
CWC248055	CWC010	10/12/21	Metals	Antimony	0.21		mg/kg	=	
CWC248055	CWC010	10/12/21	Metals	Arsenic	10		mg/kg	=	
CWC248055	CWC010	10/12/21	Metals	Barium	97		mg/kg	=	
CWC248055	CWC010	10/12/21	Metals	Cadmium	0.52		mg/kg	=	
CWC248055	CWC010	10/12/21	Gamma Spectroscopy	Cs-137	-0.00526	0.0111	pCi/g	UJ	
CWC248055	CWC010	10/12/21	Metals	Chromium	28		mg/kg	=	E01, E08
CWC248055	CWC010	10/12/21	Metals	Molybdenum	0.43		mg/kg	=	
CWC248055	CWC010	10/12/21	Metals	Nickel	11		mg/kg	=	
CWC248055	CWC010	10/12/21	Gamma Spectroscopy	K-40	9.17	1.22	pCi/g	=	
CWC248055	CWC010	10/12/21	Gamma Spectroscopy	Pa-231	-0.294	0.453	pCi/g	UJ	
CWC248055	CWC010	10/12/21	Gamma Spectroscopy	Ra-226	1.13	0.289	pCi/g	=	
CWC248055	CWC010	10/12/21	Gamma Spectroscopy	Ra-228	0.394	0.0562	pCi/g	=	
CWC248055	CWC010	10/12/21	Metals	Selenium	0.79		mg/kg	=	
CWC248055	CWC010	10/12/21	Metals	Thallium	0.19		mg/kg	U	
CWC248055	CWC010	10/12/21	Alpha Spectroscopy	Th-228	0.608	0.264	pCi/g	=	
CWC248055	CWC010	10/12/21	Gamma Spectroscopy	Th-228	0.394	0.0562	pCi/g	=	
CWC248055	CWC010	10/12/21	Alpha Spectroscopy	Th-230	3.52	0.747	pCi/g	=	
CWC248055	CWC010	10/12/21	Gamma Spectroscopy	Th-230	5.03	2.16	pCi/g	=	T04, T06

Table E-2. CWC Sediment Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC248055	CWC010	10/12/21	Alpha Spectroscopy	Th-232	0.369	0.201	pCi/g	J	T04, T06
CWC248055	CWC010	10/12/21	Gamma Spectroscopy	Th-232	0.394	0.0562	pCi/g	=	T04, T06
CWC248055	CWC010	10/12/21	Gamma Spectroscopy	U-235	0.191	0.147	pCi/g	UJ	T04, T06
CWC248055	CWC010	10/12/21	Gamma Spectroscopy	U-238	0.726	0.131	pCi/g	=	T04, T05
CWC248055	CWC010	10/12/21	Metals	Vanadium	18		mg/kg	=	T04, T06
CWC239154	CWC011	03/30/21	Gamma Spectroscopy	Ac-227	-0.0216	0.176	pCi/g	UJ	
CWC239154	CWC011	03/30/21	Gamma Spectroscopy	Am-241	-0.0211	0.0334	pCi/g	UJ	
CWC239154	CWC011	03/30/21	Metals	Antimony	0.73		mg/kg	U	
CWC239154	CWC011	03/30/21	Metals	Arsenic	7		mg/kg	=	
CWC239154	CWC011	03/30/21	Metals	Barium	150		mg/kg	=	
CWC239154	CWC011	03/30/21	Metals	Cadmium	0.65		mg/kg	J	
CWC239154	CWC011	03/30/21	Gamma Spectroscopy	Cs-137	0.00947	0.0117	pCi/g	UJ	E01, E08
CWC239154	CWC011	03/30/21	Metals	Chromium	16		mg/kg	=	
CWC239154	CWC011	03/30/21	Metals	Molybdenum	0.73		mg/kg	U	
CWC239154	CWC011	03/30/21	Metals	Nickel	17		mg/kg	=	
CWC239154	CWC011	03/30/21	Gamma Spectroscopy	K-40	13.9	1.85	pCi/g	=	
CWC239154	CWC011	03/30/21	Gamma Spectroscopy	Pa-231	-0.0754	0.601	pCi/g	UJ	
CWC239154	CWC011	03/30/21	Gamma Spectroscopy	Ra-226	1.16	0.299	pCi/g	=	T04, T20
CWC239154	CWC011	03/30/21	Gamma Spectroscopy	Ra-228	0.838	0.105	pCi/g	=	
CWC239154	CWC011	03/30/21	Metals	Selenium	1.7		mg/kg	=	
CWC239154	CWC011	03/30/21	Metals	Thallium	0.73		mg/kg	U	
CWC239154	CWC011	03/30/21	Alpha Spectroscopy	Th-228	1.15	0.445	pCi/g	=	
CWC239154	CWC011	03/30/21	Gamma Spectroscopy	Th-228	0.838	0.105	pCi/g	=	
CWC239154	CWC011	03/30/21	Alpha Spectroscopy	Th-230	3.86	0.898	pCi/g	=	
CWC239154	CWC011	03/30/21	Gamma Spectroscopy	Th-230	3.34	2.55	pCi/g	UJ	
CWC239154	CWC011	03/30/21	Alpha Spectroscopy	Th-232	1.51	0.518	pCi/g	=	T04, T06
CWC239154	CWC011	03/30/21	Gamma Spectroscopy	Th-232	0.838	0.105	pCi/g	=	T04, T06
CWC239154	CWC011	03/30/21	Gamma Spectroscopy	U-235	-0.0372	0.193	pCi/g	UJ	T04, T06
CWC239154	CWC011	03/30/21	Gamma Spectroscopy	U-238	1.2	0.21	pCi/g	=	T04, T06
CWC239154	CWC011	03/30/21	Metals	Vanadium	18		mg/kg	=	T04, T05
CWC248057	CWC011	10/12/21	Gamma Spectroscopy	Ac-227	0.126	0.0671	pCi/g	UJ	
CWC248057	CWC011	10/12/21	Gamma Spectroscopy	Am-241	-0.0171	0.0356	pCi/g	UJ	
CWC248057	CWC011	10/12/21	Metals	Antimony	0.19		mg/kg	U	
CWC248057	CWC011	10/12/21	Metals	Arsenic	4.1		mg/kg	=	
CWC248057	CWC011	10/12/21	Metals	Barium	100		mg/kg	=	

Table E-2. CWC Sediment Data for CY 2021 (Continued)

Sample Name	Station Name	Collection Date	Method	Analyte	Result	DL	Units	VQ	Validation Reason Code
CWC248057	CWC011	10/12/21	Metals	Cadmium	0.44		mg/kg	=	
CWC248057	CWC011	10/12/21	Gamma Spectroscopy	Cs-137	-0.00122	0.0194	pCi/g	UJ	E01, E08
CWC248057	CWC011	10/12/21	Metals	Chromium	25		mg/kg	=	
CWC248057	CWC011	10/12/21	Metals	Molybdenum	0.33		mg/kg	=	
CWC248057	CWC011	10/12/21	Metals	Nickel	11		mg/kg	=	
CWC248057	CWC011	10/12/21	Gamma Spectroscopy	K-40	9.55	1.38	pCi/g	=	
CWC248057	CWC011	10/12/21	Gamma Spectroscopy	Pa-231	0.762	0.771	pCi/g	UJ	
CWC248057	CWC011	10/12/21	Gamma Spectroscopy	Ra-226	1.09	0.299	pCi/g	=	
CWC248057	CWC011	10/12/21	Gamma Spectroscopy	Ra-228	0.599	0.0925	pCi/g	=	
CWC248057	CWC011	10/12/21	Metals	Selenium	0.71		mg/kg	=	
CWC248057	CWC011	10/12/21	Metals	Thallium	0.19		mg/kg	U	
CWC248057	CWC011	10/12/21	Alpha Spectroscopy	Th-228	0.915	0.325	pCi/g	=	
CWC248057	CWC011	10/12/21	Gamma Spectroscopy	Th-228	0.599	0.0925	pCi/g	=	
CWC248057	CWC011	10/12/21	Alpha Spectroscopy	Th-230	12.1	1.87	pCi/g	=	
CWC248057	CWC011	10/12/21	Gamma Spectroscopy	Th-230	7.02	3.87	pCi/g	UJ	T04, T05
CWC248057	CWC011	10/12/21	Alpha Spectroscopy	Th-232	1.07	0.353	pCi/g	=	T04, T06
CWC248057	CWC011	10/12/21	Gamma Spectroscopy	Th-232	0.599	0.0925	pCi/g	=	T04, T06
CWC248057	CWC011	10/12/21	Gamma Spectroscopy	U-235	0.176	0.249	pCi/g	UJ	T04, T06
CWC248057	CWC011	10/12/21	Gamma Spectroscopy	U-238	0.693	0.175	pCi/g	=	T04
CWC248057	CWC011	10/12/21	Metals	Vanadium	13		mg/kg	=	T04, T06

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.

H02 - Matrix spike/matrix spike duplicate recovery was below the lower control limit.

H05 - No action was taken on matrix spike/matrix spike duplicate results.

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.

APPENDIX F

GROUNDWATER FIELD PARAMETER DATA AND ANALYTICAL DATA RESULTS FOR CALENDAR YEAR 2021

(On the CD-ROM on the Back Cover of this Report)

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**Table F-1. Groundwater Monitoring Field Parameters for the Latty Avenue Properties
First Quarter 2021**

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) 02/08/21
HISS-01	---	---	---	---	---	---	---	---	---	---	7.59
HISS-06A	---	---	---	---	---	---	---	---	---	---	7.52
HISS-10	---	---	---	---	---	---	---	---	---	---	5.25
HISS-11A	---	---	---	---	---	---	---	---	---	---	10.92
HISS-17S	---	---	---	---	---	---	---	---	---	---	5.23
HISS-19S	---	---	---	---	---	---	---	---	---	---	14.46
HW22	---	---	---	---	---	---	---	---	---	---	12.43
HW23	---	---	---	---	---	---	---	---	---	---	9.25

Table F-1. Groundwater Monitoring Field Parameters for the Latty Avenue Properties (Continued)
Second Quarter 2021

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) 05/10/21
HISS-01	---	---	---	---	---	---	---	---	---	---	8.52
HISS-06A	---	---	---	---	---	---	---	---	---	---	8.00
HISS-10	05/12/21	150	1,800	7.27	0.930	12.2	0.00	14.08	288	7.63	7.33
HISS-11A	---	---	---	---	---	---	---	---	---	---	12.73
HISS-17S	---	---	---	---	---	---	---	---	---	---	6.89
HISS-19S	---	---	---	---	---	---	---	---	---	---	14.81
HW22	05/12/21	35	420	6.75	2.09	0.0	0.00	15.87	221	13.82	13.13
HW23	05/12/21	75	1,125	7.47	1.08	85.0	1.19	14.79	-104	9.63	9.35

Table F-1. Groundwater Monitoring Field Parameters for the Latty Avenue Properties (Continued)
Third Quarter 2021

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) 08/02/21
HISS-01	08/04/21	120	1,800	7.13	1.52	0.0	1.21	20.71	216	9.22	8.89
HISS-06A	---	---	---	---	---	---	---	---	---	---	8.21
HISS-10	---	---	---	---	---	---	---	---	---	---	6.26
HISS-11A	08/04/21	50	600	7.20	0.788	0.1	0.23	23.22	232	13.63	12.84
HISS-17S	---	---	---	---	---	---	---	---	---	---	6.90
HISS-19S	---	---	---	---	---	---	---	---	---	---	14.64
HW22	---	---	---	---	---	---	---	---	---	---	14.37
HW23	---	---	---	---	---	---	---	---	---	---	9.42

Table F-1. Groundwater Monitoring Field Parameters for the Latty Avenue Properties (Continued)
Fourth Quarter 2021

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) 11/08/21
HISS-01	---	---	---	---	---	---	---	---	---	---	11.53
HISS-06A	---	---	---	---	---	---	---	---	---	---	9.53
HISS-10	11/09/21	150	1,800	7.02	1.48	0.0	0.00	17.22	315	9.27	8.96
HISS-11A	---	---	---	---	---	---	---	---	---	---	13.38
HISS-17S	11/09/21	80	960	7.37	0.445	1.2	0.00	17.56	290	8.79	8.29
HISS-19S	11/09/21	60	900	6.85	1.16	7.2	0.00	18.05	-97	15.15	14.79
HW22	---	---	---	---	---	---	---	---	---	---	14.35
HW23	---	---	---	---	---	---	---	---	---	---	9.53

--- 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 2021

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) 02/08/21
B53W01D	---	---	---	---	---	---	---	---	---	---	10.03
B53W01S	---	---	---	---	---	---	---	---	---	---	10.40
B53W06S	02/09/21	25	375	6.15	19.3	144.0	0.0	10.4	226	16.03	13.71
B53W07D	---	---	---	---	---	---	---	---	---	---	10.18
B53W07S	---	---	---	---	---	---	---	---	---	---	17.88
B53W09S	---	---	---	---	---	---	---	---	---	---	14.31
B53W17S	---	---	---	---	---	---	---	---	---	---	9.06
MW31-98	---	---	---	---	---	---	---	---	---	---	9.82
MW32-98	---	---	---	---	---	---	---	---	---	---	12.89
PW35	---	---	---	---	---	---	---	---	---	---	9.38
PW36	---	---	---	---	---	---	---	---	---	---	9.40
PW42	---	---	---	---	---	---	---	---	---	---	10.08
PW43	---	---	---	---	---	---	---	---	---	---	13.73
PW44	---	---	---	---	---	---	---	---	---	---	3.54
PW45	---	---	---	---	---	---	---	---	---	---	6.45
PW46	02/09/21	50	450	6.36	0.264	150.0	0.0	9.0	251	11.56	11.00

Table F-2. Groundwater Monitoring Field Parameters for SLAPS and SLAPS VPs (Continued)
Second Quarter 2021

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) 05/10/21
B53W01D	---	---	---	---	---	---	---	---	---	---	10.05
B53W01S	---	---	---	---	---	---	---	---	---	---	12.40
B53W06S	---	---	---	---	---	---	---	---	---	---	13.00
B53W07D	---	---	---	---	---	---	---	---	---	---	10.21
B53W07S	---	---	---	---	---	---	---	---	---	---	18.62
B53W09S	---	---	---	---	---	---	---	---	---	---	*
B53W17S	05/11/21	50	600	6.80	4.05	0.0	1.67	14.38	302	10.09	9.48
MW31-98	05/11/21	60	540	7.11	2.69	0.0	0.00	14.28	337	11.99	11.37
MW32-98	---	---	---	---	---	---	---	---	---	---	12.36
PW35	05/11/21	40	600	8.09	1.22	27.9	2.54	16.48	-87	11.80	9.56
PW36	---	---	---	---	---	---	---	---	---	---	9.41
PW42	---	---	---	---	---	---	---	---	---	---	*
PW43	05/11/21	50	750	7.28	0.780	3.6	0.78	15.36	101	15.82	14.70
PW44	---	---	---	---	---	---	---	---	---	---	4.63
PW45	---	---	---	---	---	---	---	---	---	---	6.71
PW46	---	---	---	---	---	---	---	---	---	---	11.58

Table F-2. Groundwater Monitoring Field Parameters for SLAPS and SLAPS VPs (Continued)
Third Quarter 2021

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) 08/02/21
B53W01D	---	---	---	---	---	---	---	---	---	---	9.99
B53W01S	---	---	---	---	---	---	---	---	---	---	14.12
B53W06S	---	---	---	---	---	---	---	---	---	---	14.40
B53W07D	08/03/21	50	900	7.20	1.03	59.1	0.0	18.04	-127	10.09	10.03
B53W07S	08/03/21	15	180	6.93	1.40	0.9	0.10	18.73	220	20.01	19.32
B53W09S	08/25/21	30	630	6.98	1.05	10.7	0.62	23.27	52	16.15	*
B53W17S	---	---	---	---	---	---	---	---	---	---	9.92
MW31-98	---	---	---	---	---	---	---	---	---	---	13.30
MW32-98	---	---	---	---	---	---	---	---	---	---	14.52
PW35	---	---	---	---	---	---	---	---	---	---	10.12
PW36	---	---	---	---	---	---	---	---	---	---	9.25
PW42	08/25/21	35	630	7.68	0.809	9.9	0.83	27.95	-113	11.24	*
PW43	---	---	---	---	---	---	---	---	---	---	15.64
PW44	---	---	---	---	---	---	---	---	---	---	5.30
PW45	---	---	---	---	---	---	---	---	---	---	7.00
PW46	08/02/21	50	750	6.65	2.60	0.9	0.11	21.36	143	12.84	12.35

Table F-2. Groundwater Monitoring Field Parameters for SLAPS and SLAPS VPs (Continued)
Fourth Quarter 2021

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) 11/08/21
B53W01D	---	---	---	---	---	---	---	---	---	---	10.71
B53W01S	---	---	---	---	---	---	---	---	---	---	16.07
B53W06S	---	---	---	---	---	---	---	---	---	---	15.45
B53W07D	---	---	---	---	---	---	---	---	---	---	10.22
B53W07S	---	---	---	---	---	---	---	---	---	---	19.90
B53W09S	---	---	---	---	---	---	---	---	---	---	10.27
B53W17S	---	---	---	---	---	---	---	---	---	---	13.12
MW31-98	---	---	---	---	---	---	---	---	---	---	16.24
MW32-98	11/08/21	90	1,080	6.87	1.12	0.0	0.20	18.32	291	16.29	16.10
PW35	---	---	---	---	---	---	---	---	---	---	9.70
PW36	---	---	---	---	---	---	---	---	---	---	9.40
PW42	---	---	---	---	---	---	---	---	---	---	10.34
PW43	---	---	---	---	---	---	---	---	---	---	16.98
PW44	---	---	---	---	---	---	---	---	---	---	6.25
PW45	---	---	---	---	---	---	---	---	---	---	8.15
PW46	---	---	---	---	---	---	---	---	---	---	12.30

* No water level measurement was taken at monitoring wells B53W09S and PW42 during the second and thrird quarter 2021 sampling events because they were inaccessible (adjacent to active excavation).

--- Monitoring well was not sampled during this event.

Table F-3. CY 2021 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
HIS243239	HISS-01	08/04/21	ML-006	Ra-226	0	0.594	1.55	pCi/L	UJ	T06	No
HIS243239	HISS-01	08/04/21	ML-005	Th-228	0.557	0.413	0.487	pCi/L	J	T04, T20	No
HIS243239	HISS-01	08/04/21	ML-005	Th-230	0.523	0.388	0.359	pCi/L	J	F01, T04, T20	No
HIS243239	HISS-01	08/04/21	ML-005	Th-232	0	0.191	0.496	pCi/L	UJ	T06	No
HIS243239	HISS-01	08/04/21	ML-015	U-234	12.4	2.32	0.545	pCi/L	=		No
HIS243239	HISS-01	08/04/21	ML-015	U-235	0.525	0.453	0.485	pCi/L	J	T04, T20	No
HIS243239	HISS-01	08/04/21	ML-015	U-238	12.6	2.33	0.392	pCi/L	=		No
HIS241591	HISS-10	05/12/21	SW846 6020	Antimony	2		2	µg/L	U		No
HIS241591	HISS-10	05/12/21	SW846 6020	Arsenic	4		4	µg/L	U		No
HIS241591	HISS-10	05/12/21	SW846 6020	Barium	89		0.9	µg/L	=		No
HIS241591	HISS-10	05/12/21	SW846 6020	Cadmium	1		0.2	µg/L	=		No
HIS241591	HISS-10	05/12/21	SW846 6020	Chromium	4		4	µg/L	U		No
HIS241591	HISS-10	05/12/21	SW846 6020	Molybdenum	23		2	µg/L	=		No
HIS241591	HISS-10	05/12/21	SW846 6020	Nickel	2.4		2	µg/L	=		No
HIS241591	HISS-10	05/12/21	SW846 6020	Selenium	39		2	µg/L	=		No
HIS241591	HISS-10	05/12/21	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
HIS241591	HISS-10	05/12/21	SW846 6020	Vanadium	5.3		4	µg/L	J	D04, F01	No
HIS249080	HISS-10	11/09/21	SW846 6020	Antimony	2		2	µg/L	U		No
HIS249080	HISS-10	11/09/21	SW846 6020	Arsenic	4		4	µg/L	U		No
HIS249080	HISS-10	11/09/21	SW846 6020	Barium	170		0.9	µg/L	=		No
HIS249080	HISS-10	11/09/21	SW846 6020	Cadmium	0.89		0.2	µg/L	=		No
HIS249080	HISS-10	11/09/21	SW846 6020	Chromium	4		4	µg/L	U		No
HIS249080	HISS-10	11/09/21	SW846 6020	Molybdenum	59		2	µg/L	=		No
HIS249080	HISS-10	11/09/21	SW846 6020	Nickel	5.6		2	µg/L	=		No
HIS249080	HISS-10	11/09/21	SW846 6020	Selenium	7.6		2	µg/L	=		No
HIS249080	HISS-10	11/09/21	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
HIS249080	HISS-10	11/09/21	SW846 6020	Vanadium	4		4	µg/L	U		No
HIS243240	HISS-11A	08/04/21	SW846 6020	Antimony	2		2	µg/L	U		No
HIS243240	HISS-11A	08/04/21	SW846 6020	Arsenic	4		4	µg/L	U		No
HIS243240	HISS-11A	08/04/21	SW846 6020	Barium	110		0.9	µg/L	=		No
HIS243240	HISS-11A	08/04/21	SW846 6020	Cadmium	0.33		0.2	µg/L	J	E01	No
HIS243240	HISS-11A	08/04/21	SW846 6020	Chromium	4		4	µg/L	U		No
HIS243240	HISS-11A	08/04/21	SW846 6020	Molybdenum	4.3		2	µg/L	=		No

Table F-3. CY 2021 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
HIS243240	HISS-11A	08/04/21	SW846 6020	Nickel	2.2		2	µg/L	=		No
HIS243240	HISS-11A	08/04/21	SW846 6020	Selenium	9.4		2	µg/L	=		No
HIS243240	HISS-11A	08/04/21	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
HIS243240	HISS-11A	08/04/21	SW846 6020	Vanadium	4		4	µg/L	U		No
HIS249081	HISS-17S	11/09/21	ML-006	Ra-226	0.0656	0.262	0.706	pCi/L	UJ	T06	No
HIS249081	HISS-17S	11/09/21	ML-005	Th-228	0.537	0.375	0.419	pCi/L	J	T04, T20	No
HIS249081	HISS-17S	11/09/21	ML-005	Th-230	0.451	0.333	0.309	pCi/L	J	F01, T04, T20	No
HIS249081	HISS-17S	11/09/21	ML-005	Th-232	0.174	0.233	0.427	pCi/L	UJ	T06	No
HIS249081	HISS-17S	11/09/21	ML-015	U-234	0.612	0.453	0.419	pCi/L	J	T04, T20	No
HIS249081	HISS-17S	11/09/21	ML-015	U-235	-0.0243	0.201	0.517	pCi/L	UJ	T06	No
HIS249081	HISS-17S	11/09/21	ML-015	U-238	0.531	0.421	0.417	pCi/L	J	T04, T20	No
HIS249081	HISS-17S	11/09/21	SW846 6020	Antimony	2		2	µg/L	U		No
HIS249081	HISS-17S	11/09/21	SW846 6020	Arsenic	4		4	µg/L	U		No
HIS249081	HISS-17S	11/09/21	SW846 6020	Barium	76		0.9	µg/L	=		No
HIS249081	HISS-17S	11/09/21	SW846 6020	Cadmium	0.48		0.2	µg/L	=		No
HIS249081	HISS-17S	11/09/21	SW846 6020	Chromium	4		4	µg/L	U		No
HIS249081	HISS-17S	11/09/21	SW846 6020	Molybdenum	6		2	µg/L	=		No
HIS249081	HISS-17S	11/09/21	SW846 6020	Nickel	2.8		2	µg/L	=		No
HIS249081	HISS-17S	11/09/21	SW846 6020	Selenium	11		2	µg/L	=		No
HIS249081	HISS-17S	11/09/21	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
HIS249081	HISS-17S	11/09/21	SW846 6020	Vanadium	4		4	µg/L	U		No
HIS249082	HISS-19S	11/09/21	ML-006	Ra-226	0.258	0.376	0.811	pCi/L	UJ	T06	No
HIS249082	HISS-19S	11/09/21	ML-005	Th-228	0.197	0.261	0.51	pCi/L	UJ	T06	No
HIS249082	HISS-19S	11/09/21	ML-005	Th-230	0.971	0.49	0.406	pCi/L	J	F01, T04, T20	No
HIS249082	HISS-19S	11/09/21	ML-005	Th-232	-0.014	0.116	0.298	pCi/L	UJ	T06	No
HIS249082	HISS-19S	11/09/21	ML-015	U-234	0.14	0.254	0.555	pCi/L	UJ	T06	No
HIS249082	HISS-19S	11/09/21	ML-015	U-235	0	0.245	0.637	pCi/L	UJ	T06	No
HIS249082	HISS-19S	11/09/21	ML-015	U-238	-0.0175	0.144	0.371	pCi/L	UJ	T06	No
HIS249082	HISS-19S	11/09/21	SW846 6020	Antimony	2		2	µg/L	U		No
HIS249082	HISS-19S	11/09/21	SW846 6020	Arsenic	340		4	µg/L	=		No
HIS249082	HISS-19S	11/09/21	SW846 6020	Barium	560		0.9	µg/L	=		No
HIS249082	HISS-19S	11/09/21	SW846 6020	Cadmium	0.47		0.2	µg/L	=		No
HIS249082	HISS-19S	11/09/21	SW846 6020	Chromium	4		4	µg/L	U		No
HIS249082	HISS-19S	11/09/21	SW846 6020	Molybdenum	7.6		2	µg/L	=		No
HIS249082	HISS-19S	11/09/21	SW846 6020	Nickel	3		2	µg/L	=		No

Table F-3. CY 2021 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
HIS249082	HISS-19S	11/09/21	SW846 6020	Selenium	2		2	µg/L	U		No
HIS249082	HISS-19S	11/09/21	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
HIS249082	HISS-19S	11/09/21	SW846 6020	Vanadium	4		4	µg/L	U		No
HIS241592	HW22	05/12/21	SW846 6020	Antimony	2		2	µg/L	U		No
HIS241592	HW22	05/12/21	SW846 6020	Arsenic	4		4	µg/L	U		No
HIS241592	HW22	05/12/21	SW846 6020	Barium	140		0.9	µg/L	=		No
HIS241592	HW22	05/12/21	SW846 6020	Cadmium	2		0.2	µg/L	=		No
HIS241592	HW22	05/12/21	SW846 6020	Chromium	4		4	µg/L	U		No
HIS241592	HW22	05/12/21	SW846 6020	Molybdenum	2		2	µg/L	U		No
HIS241592	HW22	05/12/21	SW846 6020	Nickel	2.3		2	µg/L	=		No
HIS241592	HW22	05/12/21	SW846 6020	Selenium	17		2	µg/L	=		No
HIS241592	HW22	05/12/21	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
HIS241592	HW22	05/12/21	SW846 6020	Vanadium	6.3		4	µg/L	J	D04, F01	No
HIS241593	HW23	05/12/21	ML-006	Ra-226	0.596	0.679	1.23	pCi/L	UJ	T06	No
HIS241593	HW23	05/12/21	ML-005	Th-228	0.318	0.35	0.641	pCi/L	UJ	T06	No
HIS241593	HW23	05/12/21	ML-005	Th-230	0.558	0.388	0.339	pCi/L	J	F01, T04, T20	No
HIS241593	HW23	05/12/21	ML-005	Th-232	0.0636	0.18	0.468	pCi/L	UJ	T06	No
HIS241593	HW23	05/12/21	ML-015	U-234	0.371	0.354	0.415	pCi/L	UJ	T04, T05	No
HIS241593	HW23	05/12/21	ML-015	U-235	0	0.273	0.71	pCi/L	UJ	T06	No
HIS241593	HW23	05/12/21	ML-015	U-238	0.156	0.27	0.573	pCi/L	UJ	T06	No
HIS241593	HW23	05/12/21	SW846 6020	Antimony	2		2	µg/L	U		No
HIS241593	HW23	05/12/21	SW846 6020	Arsenic	190		4	µg/L	=		No
HIS241593	HW23	05/12/21	SW846 6020	Barium	360		0.9	µg/L	=		No
HIS241593	HW23	05/12/21	SW846 6020	Cadmium	0.28		0.2	µg/L	=		No
HIS241593	HW23	05/12/21	SW846 6020	Chromium	4		4	µg/L	U		No
HIS241593	HW23	05/12/21	SW846 6020	Molybdenum	5.8		2	µg/L	=		No
HIS241593	HW23	05/12/21	SW846 6020	Nickel	3.6		2	µg/L	=		No
HIS241593	HW23	05/12/21	SW846 6020	Selenium	2		2	µg/L	U		No

Table F-3. CY 2021 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
HIS241593	HW23	05/12/21	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
HIS241593	HW23	05/12/21	SW846 6020	Vanadium	4		4	µg/L	U		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:

D01 - Initial calibration verification (ICV) or continuing calibration verification (CCV) were not performed for every analyte.

D04 - ICV/CCV - Inorganics: CCV recovery was above the upper control limit.

E01 - ICP and Furnace Requirements: Interference check sample recovery was outside the control limit.

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 2021 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**
SVP238259	B53W06S	02/09/21	ML-006	Ra-226	0.211	0.472	1.14	pCi/L	UJ	T06	No
SVP238259	B53W06S	02/09/21	ML-005	Th-228	0.729	0.47	0.524	pCi/L	J	T04, T20	No
SVP238259	B53W06S	02/09/21	ML-005	Th-230	1.33	0.628	0.525	pCi/L	J	F01	No
SVP238259	B53W06S	02/09/21	ML-005	Th-232	0.132	0.23	0.488	pCi/L	UJ	T06	No
SVP238259	B53W06S	02/09/21	ML-015	U-234	0.55	0.282	0.272	pCi/L	J	T04, T20	No
SVP238259	B53W06S	02/09/21	ML-015	U-235	0.0399	0.113	0.294	pCi/L	UJ	T06	No
SVP238259	B53W06S	02/09/21	ML-015	U-238	0.387	0.234	0.237	pCi/L	J	T04, T20	No
SVP238259	B53W06S	02/09/21	SW846 6020	Antimony	2		2	µg/L	U		No
SVP238259	B53W06S	02/09/21	SW846 6020	Arsenic	4		4	µg/L	U		No
SVP238259	B53W06S	02/09/21	SW846 6020	Barium	120		0.9	µg/L	=		No
SVP238259	B53W06S	02/09/21	SW846 6020	Cadmium	20		0.2	µg/L	=		No
SVP238259	B53W06S	02/09/21	SW846 6020	Chromium	8.8		4	µg/L	=		No
SVP238259	B53W06S	02/09/21	SW846 6020	Molybdenum	11		2	µg/L	=		No
SVP238259	B53W06S	02/09/21	SW846 6020	Nickel	35		2	µg/L	=		No
SVP238259	B53W06S	02/09/21	SW846 6020	Selenium	2		2	µg/L	U		No
SVP238259	B53W06S	02/09/21	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
SVP238259	B53W06S	02/09/21	SW846 6020	Vanadium	10		4	µg/L	=		No
SVP243243	B53W07D	08/03/21	ML-006	Ra-226	0.284	0.466	0.86	pCi/L	UJ	T06	No
SVP243243	B53W07D	08/03/21	ML-005	Th-228	0.372	0.321	0.344	pCi/L	J	T04, T20	No
SVP243243	B53W07D	08/03/21	ML-005	Th-230	0.891	0.495	0.344	pCi/L	J	F01, T04, T20	No
SVP243243	B53W07D	08/03/21	ML-005	Th-232	0.0647	0.183	0.476	pCi/L	UJ	T06	No
SVP243243	B53W07D	08/03/21	ML-015	U-234	0.2	0.267	0.49	pCi/L	UJ	T06	No
SVP243243	B53W07D	08/03/21	ML-015	U-235	-0.041	0.174	0.524	pCi/L	UJ	T06	No
SVP243243	B53W07D	08/03/21	ML-015	U-238	0.0828	0.196	0.478	pCi/L	UJ	T06	No
SVP243243	B53W07D	08/03/21	SW846 6020	Antimony	2		2	µg/L	U		No
SVP243243	B53W07D	08/03/21	SW846 6020	Arsenic	79		4	µg/L	=		No
SVP243243	B53W07D	08/03/21	SW846 6020	Barium	320		0.9	µg/L	=		No
SVP243243	B53W07D	08/03/21	SW846 6020	Cadmium	0.25		0.2	µg/L	J	E01	No
SVP243243	B53W07D	08/03/21	SW846 6020	Chromium	5.4		4	µg/L	=		No

Table F-4. CY 2021 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
SVP243243	B53W07D	08/03/21	SW846 6020	Molybdenum	2		2	µg/L	U		No
SVP243243	B53W07D	08/03/21	SW846 6020	Nickel	7.4		2	µg/L	=		No
SVP243243	B53W07D	08/03/21	SW846 6020	Selenium	2		2	µg/L	U		No
SVP243243	B53W07D	08/03/21	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
SVP243243	B53W07D	08/03/21	SW846 6020	Vanadium	4		4	µg/L	U		No
SVP243244	B53W07S	08/03/21	ML-006	Ra-226	0.0754	0.465	1.37	pCi/L	UJ	T06	No
SVP243244	B53W07S	08/03/21	ML-005	Th-228	0.861	0.571	0.606	pCi/L	J	T04, T20	No
SVP243244	B53W07S	08/03/21	ML-005	Th-230	1.51	0.754	0.619	pCi/L	J	F01	No
SVP243244	B53W07S	08/03/21	ML-005	Th-232	0.0839	0.238	0.618	pCi/L	UJ	T06	No
SVP243244	B53W07S	08/03/21	ML-015	U-234	4.24	1.22	0.404	pCi/L	=		No
SVP243244	B53W07S	08/03/21	ML-015	U-235	0.188	0.326	0.691	pCi/L	UJ	T06	No
SVP243244	B53W07S	08/03/21	ML-015	U-238	2.95	1.01	0.558	pCi/L	=		No
SVP243244	B53W07S	08/03/21	SW846 6020	Antimony	2		2	µg/L	U		No
SVP243244	B53W07S	08/03/21	SW846 6020	Arsenic	4		4	µg/L	U		No
SVP243244	B53W07S	08/03/21	SW846 6020	Barium	210		0.9	µg/L	=		No
SVP243244	B53W07S	08/03/21	SW846 6020	Cadmium	0.2		0.2	µg/L	U	E01	No
SVP243244	B53W07S	08/03/21	SW846 6020	Chromium	4		4	µg/L	U		No
SVP243244	B53W07S	08/03/21	SW846 6020	Molybdenum	2		2	µg/L	U		No
SVP243244	B53W07S	08/03/21	SW846 6020	Nickel	3.1		2	µg/L	=		No
SVP243244	B53W07S	08/03/21	SW846 6020	Selenium	3.4		2	µg/L	=		No
SVP243244	B53W07S	08/03/21	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
SVP243244	B53W07S	08/03/21	SW846 6020	Vanadium	4		4	µg/L	U		No
SVP243245	B53W09S	08/25/21	ML-006	Ra-226	0.571	0.639	1.05	pCi/L	UJ	T06	No
SVP243245	B53W09S	08/25/21	ML-005	Th-228	0.399	0.345	0.369	pCi/L	J	T04, T20	No
SVP243245	B53W09S	08/25/21	ML-005	Th-230	0.278	0.312	0.511	pCi/L	UJ	T06	No
SVP243245	B53W09S	08/25/21	ML-005	Th-232	0	0.196	0.511	pCi/L	UJ	T06	No
SVP243245	B53W09S	08/25/21	ML-015	U-234	0.746	0.501	0.549	pCi/L	J	T04, T20	No
SVP243245	B53W09S	08/25/21	ML-015	U-235	0	0.26	0.677	pCi/L	UJ	T06	No

Table F-4. CY 2021 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
SVP243245	B53W09S	08/25/21	ML-015	U-238	1.26	0.644	0.547	pCi/L	J	T04, T20	No
SVP243245	B53W09S	08/25/21	SW846 6020	Antimony	2		2	µg/L	U		No
SVP243245	B53W09S	08/25/21	SW846 6020	Arsenic	4		4	µg/L	U		No
SVP243245	B53W09S	08/25/21	SW846 6020	Barium	240		0.9	µg/L	=		No
SVP243245	B53W09S	08/25/21	SW846 6020	Cadmium	0.2		0.2	µg/L	U		No
SVP243245	B53W09S	08/25/21	SW846 6020	Chromium	4		4	µg/L	U		No
SVP243245	B53W09S	08/25/21	SW846 6020	Molybdenum	2.4		2	µg/L	=		No
SVP243245	B53W09S	08/25/21	SW846 6020	Nickel	20		2	µg/L	=		No
SVP243245	B53W09S	08/25/21	SW846 6020	Selenium	2		2	µg/L	U		No
SVP243245	B53W09S	08/25/21	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
SVP243245	B53W09S	08/25/21	SW846 6020	Vanadium	4		4	µg/L	U		No
SVP241595	B53W17S	05/11/21	SW846 6020	Antimony	2		2	µg/L	U		No
SVP241595	B53W17S	05/11/21	SW846 6020	Arsenic	4		4	µg/L	U		No
SVP241595	B53W17S	05/11/21	SW846 6020	Barium	200		0.9	µg/L	=		No
SVP241595	B53W17S	05/11/21	SW846 6020	Cadmium	0.21		0.2	µg/L	=		No
SVP241595	B53W17S	05/11/21	SW846 6020	Chromium	6		4	µg/L	=		No
SVP241595	B53W17S	05/11/21	SW846 6020	Molybdenum	2		2	µg/L	U		No
SVP241595	B53W17S	05/11/21	SW846 6020	Nickel	2.3		2	µg/L	=		No
SVP241595	B53W17S	05/11/21	SW846 6020	Selenium	71		2	µg/L	=		No
SVP241595	B53W17S	05/11/21	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
SVP241595	B53W17S	05/11/21	SW846 6020	Vanadium	4		4	µg/L	U		No
SVP241596	MW31-98	05/11/21	ML-006	Ra-226	0.0778	0.321	0.965	pCi/L	UJ	T06	No
SVP241596	MW31-98	05/11/21	ML-005	Th-228	0.103	0.297	0.754	pCi/L	UJ	T06	No
SVP241596	MW31-98	05/11/21	ML-005	Th-230	0.984	0.548	0.498	pCi/L	J	F01, T04, T20	No
SVP241596	MW31-98	05/11/21	ML-005	Th-232	0.0689	0.195	0.507	pCi/L	UJ	T06	No
SVP241596	MW31-98	05/11/21	ML-015	U-234	3.41	1.21	0.678	pCi/L	=		No
SVP241596	MW31-98	05/11/21	ML-015	U-235	0.348	0.465	0.853	pCi/L	UJ	T06	No
SVP241596	MW31-98	05/11/21	ML-015	U-238	4	1.31	0.497	pCi/L	=		No

Table F-4. CY 2021 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
SVP241596	MW31-98	05/11/21	SW846 6020	Antimony	2		2	µg/L	U		No
SVP241596	MW31-98	05/11/21	SW846 6020	Arsenic	4		4	µg/L	U		No
SVP241596	MW31-98	05/11/21	SW846 6020	Barium	350		0.9	µg/L	=		No
SVP241596	MW31-98	05/11/21	SW846 6020	Cadmium	0.26		0.2	µg/L	=		No
SVP241596	MW31-98	05/11/21	SW846 6020	Chromium	4		4	µg/L	U		No
SVP241596	MW31-98	05/11/21	SW846 6020	Molybdenum	3.3		2	µg/L	=		No
SVP241596	MW31-98	05/11/21	SW846 6020	Nickel	2		2	µg/L	U		No
SVP241596	MW31-98	05/11/21	SW846 6020	Selenium	5.60E+00		2	µg/L	=		No
SVP241596	MW31-98	05/11/21	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
SVP241596	MW31-98	05/11/21	SW846 6020	Vanadium	4		4	µg/L	U		No
SVP249090	MW32-98	11/08/21	ML-006	Ra-226	0.177	0.255	0.476	pCi/L	UJ	T06	No
SVP249090	MW32-98	11/08/21	ML-005	Th-228	0.388	0.413	0.793	pCi/L	UJ	T06	No
SVP249090	MW32-98	11/08/21	ML-005	Th-230	0.87	0.494	0.492	pCi/L	J	F01, T04, T20	No
SVP249090	MW32-98	11/08/21	ML-005	Th-232	0.031	0.132	0.396	pCi/L	UJ	T06	No
SVP249090	MW32-98	11/08/21	ML-015	U-234	1.54	0.683	0.498	pCi/L	=		No
SVP249090	MW32-98	11/08/21	ML-015	U-235	0.107	0.252	0.615	pCi/L	UJ	T06	No
SVP249090	MW32-98	11/08/21	ML-015	U-238	0.997	0.586	0.752	pCi/L	J	T04, T20	No
SVP249090	MW32-98	11/08/21	SW846 6020	Antimony	2		2	µg/L	U		No
SVP249090	MW32-98	11/08/21	SW846 6020	Arsenic	4		4	µg/L	U		No
SVP249090	MW32-98	11/08/21	SW846 6020	Barium	190		0.9	µg/L	=		No
SVP249090	MW32-98	11/08/21	SW846 6020	Cadmium	1.9		0.2	µg/L	J	E01	No
SVP249090	MW32-98	11/08/21	SW846 6020	Chromium	4		4	µg/L	U		No
SVP249090	MW32-98	11/08/21	SW846 6020	Molybdenum	2		2	µg/L	U		No
SVP249090	MW32-98	11/08/21	SW846 6020	Nickel	2		2	µg/L	U		No
SVP249090	MW32-98	11/08/21	SW846 6020	Selenium	2		2	µg/L	U		No
SVP249090	MW32-98	11/08/21	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
SVP249090	MW32-98	11/08/21	SW846 6020	Vanadium	4		4	µg/L	U		No
SVP241597	PW35	05/11/21	SW846 6020	Antimony	2		2	µg/L	U		No

Table F-4. CY 2021 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
SVP241597	PW35	05/11/21	SW846 6020	Arsenic	31		4	µg/L	=		No
SVP241597	PW35	05/11/21	SW846 6020	Barium	1900		0.9	µg/L	=		No
SVP241597	PW35	05/11/21	SW846 6020	Cadmium	1.2		0.2	µg/L	=		No
SVP241597	PW35	05/11/21	SW846 6020	Chromium	11		4	µg/L	=		No
SVP241597	PW35	05/11/21	SW846 6020	Molybdenum	2.3		2	µg/L	=		No
SVP241597	PW35	05/11/21	SW846 6020	Nickel	11		2	µg/L	=		No
SVP241597	PW35	05/11/21	SW846 6020	Selenium	2		2	µg/L	U		No
SVP241597	PW35	05/11/21	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
SVP241597	PW35	05/11/21	SW846 6020	Vanadium	13		4	µg/L	=		No
SVP243246	PW42	08/25/21	ML-006	Ra-226	0.235	0.385	0.712	pCi/L	UJ	T06	No
SVP243246	PW42	08/25/21	ML-005	Th-228	0.357	0.352	0.526	pCi/L	UJ	T04, T05	No
SVP243246	PW42	08/25/21	ML-005	Th-230	0.859	0.524	0.527	pCi/L	J	T04, T20	No
SVP243246	PW42	08/25/21	ML-005	Th-232	0.0714	0.202	0.526	pCi/L	UJ	T06	No
SVP243246	PW42	08/25/21	ML-015	U-234	0.184	0.26	0.469	pCi/L	UJ	T06	No
SVP243246	PW42	08/25/21	ML-015	U-235	0.0907	0.257	0.667	pCi/L	UJ	T06	No
SVP243246	PW42	08/25/21	ML-015	U-238	0.0732	0.207	0.539	pCi/L	UJ	T06	No
SVP243246	PW42	08/25/21	SW846 6020	Antimony	2		2	µg/L	U		No
SVP243246	PW42	08/25/21	SW846 6020	Arsenic	47		4	µg/L	=		No
SVP243246	PW42	08/25/21	SW846 6020	Barium	170		0.9	µg/L	=		No
SVP243246	PW42	08/25/21	SW846 6020	Cadmium	0.2		0.2	µg/L	U		No
SVP243246	PW42	08/25/21	SW846 6020	Chromium	4		4	µg/L	U		No
SVP243246	PW42	08/25/21	SW846 6020	Molybdenum	2		2	µg/L	U		No
SVP243246	PW42	08/25/21	SW846 6020	Nickel	2		2	µg/L	U		No
SVP243246	PW42	08/25/21	SW846 6020	Selenium	2		2	µg/L	U		No
SVP243246	PW42	08/25/21	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
SVP243246	PW42	08/25/21	SW846 6020	Vanadium	4		4	µg/L	U		No
SVP241599	PW43	05/11/21	ML-006	Ra-226	0.0928	0.304	0.851	pCi/L	UJ	T06	No
SVP241599	PW43	05/11/21	ML-005	Th-228	0.436	0.375	0.55	pCi/L	UJ	T04, T05	No

Table F-4. CY 2021 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**
SVP241599	PW43	05/11/21	ML-005	Th-230	0.614	0.416	0.413	pCi/L	J	F01, T04, T20	No
SVP241599	PW43	05/11/21	ML-005	Th-232	0.0484	0.133	0.342	pCi/L	UJ	T06	No
SVP241599	PW43	05/11/21	ML-015	U-234	2.24	0.892	0.588	pCi/L	=		No
SVP241599	PW43	05/11/21	ML-015	U-235	0.0985	0.279	0.725	pCi/L	UJ	T06	No
SVP241599	PW43	05/11/21	ML-015	U-238	1.43	0.71	0.585	pCi/L	=		No
SVP241599	PW43	05/11/21	SW846 6020	Antimony	2		2	µg/L	U		No
SVP241599	PW43	05/11/21	SW846 6020	Arsenic	4		4	µg/L	=		No
SVP241599	PW43	05/11/21	SW846 6020	Barium	190		0.9	µg/L	=		No
SVP241599	PW43	05/11/21	SW846 6020	Cadmium	1.1		0.2	µg/L	=		No
SVP241599	PW43	05/11/21	SW846 6020	Chromium	4		4	µg/L	U		No
SVP241599	PW43	05/11/21	SW846 6020	Molybdenum	2.7		2	µg/L	=		No
SVP241599	PW43	05/11/21	SW846 6020	Nickel	2.2		2	µg/L	=		No
SVP241599	PW43	05/11/21	SW846 6020	Selenium	2		2	µg/L	U		No
SVP241599	PW43	05/11/21	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
SVP241599	PW43	05/11/21	SW846 6020	Vanadium	4.8		4	µg/L	=		No
SLA238258	PW46	02/09/21	ML-006	Ra-226	0.284	0.379	0.697	pCi/L	UJ	T06	No
SLA238258-1	PW46	02/09/21	ML-006	Ra-226	0.116	0.233	0.523	pCi/L	UJ	T06	No
SLA238258-2	PW46	02/09/21	SW846 9315 MODL	Ra-226	0	0.0874	0.144	pCi/L	UJ	T06	No
SLA238258	PW46	02/09/21	ML-005	Th-228	0.213	0.426	1	pCi/L	UJ	T06	No
SLA238258-1	PW46	02/09/21	ML-005	Th-228	0.976	0.589	0.652	pCi/L	J	T04, T20	No
SLA238258-2	PW46	02/09/21	EML A-01-R MOD	Th-228	0.0813	0.221	0.39	pCi/L	UJ	T06	No
SLA238258	PW46	02/09/21	ML-005	Th-230	1.53	0.69	0.478	pCi/L	J	F01	No
SLA238258-1	PW46	02/09/21	ML-005	Th-230	2.72	0.97	0.489	pCi/L	J	F01	No
SLA238258-2	PW46	02/09/21	EML A-01-R MOD	Th-230	0.251	0.319	0.428	pCi/L	UJ	T06	No
SLA238258	PW46	02/09/21	ML-005	Th-232	-0.0354	0.159	0.477	pCi/L	UJ	T06	No
SLA238258-1	PW46	02/09/21	ML-005	Th-232	0.287	0.31	0.406	pCi/L	UJ	T06	No
SLA238258-2	PW46	02/09/21	EML A-01-R MOD	Th-232	0.0333	0.083	0.165	pCi/L	UJ	T06	No
SLA238258	PW46	02/09/21	ML-015	U-234	194	17.2	0.415	pCi/L	=		No

Table F-4. CY 2021 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
SLA238258-1	PW46	02/09/21	ML-015	U-234	229	20.5	0.394	pCi/L	=		No
SLA238258-2	PW46	02/09/21	EML A-01-R MOD	U-234	963	96	5.19	pCi/L	=	T01, T04	No
SLA238258	PW46	02/09/21	ML-015	U-235	8.78	1.49	0.461	pCi/L	=		No
SLA238258-1	PW46	02/09/21	ML-015	U-235	10.2	1.68	0.338	pCi/L	=		No
SLA238258-2	PW46	02/09/21	EML A-01-R MOD	U-235	60.2	15.3	2.58	pCi/L	=	T01, T04	No
SLA238258	PW46	02/09/21	ML-015	U-238	200	17.7	0.259	pCi/L	=		No
SLA238258-1	PW46	02/09/21	ML-015	U-238	235	21	0.298	pCi/L	=		No
SLA238258-2	PW46	02/09/21	EML A-01-R MOD	U-238	925	92.7	2.07	pCi/L	=	T01, T04	No
SLA238258	PW46	02/09/21	SW846 6020	Antimony	2		2	µg/L	U		No
SLA238258-1	PW46	02/09/21	SW846 6020	Antimony	2		2	µg/L	U		No
SLA238258-2	PW46	02/09/21	SW846 6020	Antimony	2.5		2.5	µg/L	U		No
SLA238258	PW46	02/09/21	SW846 6020	Arsenic	4		4	µg/L	U		No
SLA238258-1	PW46	02/09/21	SW846 6020	Arsenic	4		4	µg/L	U		No
SLA238258-2	PW46	02/09/21	SW846 6020	Arsenic	0.953		0.5	µg/L	=		No
SLA238258	PW46	02/09/21	SW846 6020	Barium	59		0.9	µg/L	=		No
SLA238258-1	PW46	02/09/21	SW846 6020	Barium	59		0.9	µg/L	=		No
SLA238258-2	PW46	02/09/21	SW846 6020	Barium	61.9		1.5	µg/L	=		No
SLA238258	PW46	02/09/21	SW846 6020	Cadmium	2.9		0.2	µg/L	=		No
SLA238258-1	PW46	02/09/21	SW846 6020	Cadmium	0.2		0.2	µg/L	U	E01, E08	No
SLA238258-2	PW46	02/09/21	SW846 6020	Cadmium	0.3		0.3	µg/L	U		No
SLA238258	PW46	02/09/21	SW846 6020	Chromium	4		4	µg/L	U		No
SLA238258-1	PW46	02/09/21	SW846 6020	Chromium	4		4	µg/L	U		No
SLA238258-2	PW46	02/09/21	SW846 6020	Chromium	2		2	µg/L	U		No
SLA238258	PW46	02/09/21	SW846 6020	Molybdenum	2		2	µg/L	U		No
SLA238258-1	PW46	02/09/21	SW846 6020	Molybdenum	2		2	µg/L	U		No
SLA238258-2	PW46	02/09/21	SW846 6010B	Molybdenum	5		5	µg/L	U		No
SLA238258	PW46	02/09/21	SW846 6020	Nickel	2		2	µg/L	U		No
SLA238258-1	PW46	02/09/21	SW846 6020	Nickel	2		2	µg/L	U		No
SLA238258-2	PW46	02/09/21	SW846 6020	Nickel	2		2	µg/L	U		No
SLA238258	PW46	02/09/21	SW846 6020	Selenium	2.7		2	µg/L	=		No
SLA238258-1	PW46	02/09/21	SW846 6020	Selenium	3.5		2	µg/L	=		No
SLA238258-2	PW46	02/09/21	SW846 6020	Selenium	9.71		0.5	µg/L	=		No

Table F-4. CY 2021 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**
SLA238258	PW46	02/09/21	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
SLA238258-1	PW46	02/09/21	SW846 6020	Thallium	0.9		0.9	µg/L	U		No
SLA238258-2	PW46	02/09/21	SW846 6020	Thallium	0.1		0.1	µg/L	U		No
SLA238258	PW46	02/09/21	SW846 6020	Vanadium	4		4	µg/L	U		No
SLA238258-1	PW46	02/09/21	SW846 6020	Vanadium	4		4	µg/L	U		No
SLA238258-2	PW46	02/09/21	SW846 6020	Vanadium	2		2	µg/L	U		No
SLA238258-2	PW46	02/09/21	SW846 9320 MODL	Ra-228	0.579	0.417	0.645	pCi/L	UJ	P08, T04, T05	No
SLA243242	PW46	08/02/21	ML-006	Ra-226	0.391	0.759	1.66	pCi/L	UJ	T06	No
SLA243242	PW46	08/02/21	ML-005	Th-228	0.493	0.438	0.605	pCi/L	UJ	T04, T05	No
SLA243242	PW46	08/02/21	ML-005	Th-230	1.07	0.628	0.605	pCi/L	J	F01, T04, T20	No
SLA243242	PW46	08/02/21	ML-005	Th-232	-0.0205	0.169	0.436	pCi/L	UJ	T06	No
SLA243242	PW46	08/02/21	ML-015	U-234	106	12.8	0.436	pCi/L	=		No
SLA243242	PW46	08/02/21	ML-015	U-235	5.77	1.66	0.745	pCi/L	=		No
SLA243242	PW46	08/02/21	ML-015	U-238	111	13.3	0.601	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.

P08 - Laboratory Control Samples: Professional judgment was used to qualify the data.

T01 - Radionuclide Quantitation: DLs were not met.

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.

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 EMICY21 (USACE 2020). 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 2021.

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 2021

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CALENDAR YEAR 2021 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:** 3/16/21 **Time:** 0957

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:

None.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 1006

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:

None.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 1005

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:

None.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 0955

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:

None.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 1010

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:
None.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 0950

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:

None.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 1100

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:

None.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 1105

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:

None.

CALENDAR YEAR 2021 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:** 3/16/21 **Time:** 0900

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:

None.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 0901

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:

None.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 1200

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:

Well lid needs paint and ID remarked/labeled.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 1154

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:

Well protective casing needs ID remarked/labeled.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 1155

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:
Well protective casing needs ID remarked/labeled.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 1158

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:

Well inaccessible due to active excavation and soil conditions due to weather.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 1150

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:

None.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 1152

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:

Well protective casing needs paint and ID remarked/labeled.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 1158

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:

Well protective casing needs paint and ID remarked/labeled.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 0925

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:

None.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 0926

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:

None.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 1157

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:

Well inaccessible due to active excavation and soil conditions due to weather.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 1156

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:

Well protective casing needs paint and the ID remarked/labeled.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 0920

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:

Remark/label the well ID on the protective casing.

Well pad is stable but cracked with gaps between the pad and protective casing. However, the well does not appear to be compromised.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 0915

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:

None.

Well Maintenance Checklist

Name of Observer(s): Lon Hoover & Nathan Gross **Date:** 3/16/21 **Time:** 0940

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:

Paint and remark/label the well protective casing.

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 75 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 2022b).
- 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 2022b).
- 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 2022b).

Airborne Radioactive Particulates

The EDE of less than 0.1 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 75 m east of the VP-40A fence line (Leidos 2022b). Details related to calculation of EDEs for the exposed receptors are contained in Appendix B of this EMDAR.

External Gamma Pathway

The Futura/VP-40A TLDs measured an average above background annual exposure of 5.2 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).

$$H_1 = 5.2 \text{ mrem/year}$$

Based on a 100-percent occupancy rate, the exposure rate (H_2) to the receptor was calculated.

$$H_2 = H_1 \times \frac{h_1}{h_2} * \frac{\tan^{-1}(L/h_2)}{\tan^{-1}(L/h_1)}$$

$$H_2 = 1.4E\text{-}01 \text{ mrem/year}$$

where:

- H_2 = exposure rate to the receptor (continuous exposure)
- H_1 = exposure rate to TLDs
- h_2 = distance from source to receptor = 75 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.

$$H_{MEI} = H_2 \times \frac{2{,}000 \text{ hours per work year}}{8{,}760 \text{ hours per total year}} = 3.1\text{-}02 \text{ mrem/year}$$

$$H_{MEI} = <0.1 \text{ mrem/year}$$

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 2022b).

To calculate the dispersion factor, the radon concentrations were determined for a receptor located at 1 m and 75 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.

$$C_2 = (9.45E\text{-}03)/(2.25E\text{-}02) = 0.42$$

The average of ATD monitoring data (S_1) at the site perimeter (Futura fence line) was calculated as follows.

$$S_1 = 0.11 \text{ pCi/L}$$

The actual radon exposure dose to the hypothetical maximally exposed individual was calculated.

$$S_{MEI} = S_1 \times F \times DCF \times T \times C_1 \times C_2$$

$$S_{MEI} = 0.11 \text{ pCi/L} * 0.007 \text{ WL/pCi.L} * 1{,}250 \text{ mrem/WLM} * 2{,}000 \text{ hours/year} * 1 \text{ month/170 hours} * 0.42$$

$$S_{MEI} = 4.6 \text{ mrem/year}$$

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 75 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 75 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 75 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 4.6 mrem per year from Rn-222, for a TEDE of 4.7 mrem per year (Leidos 2022b).

$$TEDE = CEDE \text{ (airborne particulates)} + H_{MEI} \text{ (external gamma)} + S_{MEI} \text{ (airborne radon)}$$

$$TEDE = <0.1 \text{ mrem/year} + <0.1 \text{ mrem/year} + 4.6 \text{ mrem/year} = 4.7 \text{ mrem/year}$$

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 0.6 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 2022c). 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 13.3 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).

$$H_1 = 13.3 \text{ mrem/year}$$

Based on a 100-percent occupancy rate, the exposure rate (H_2) to the receptor was calculated.

$$H_2 = H_1 \times \frac{h_1}{h_2} * \frac{\tan^{-1}(L/h_2)}{\tan^{-1}(L/h_1)}$$

$$H_2 = 1.4\text{E-}01 \text{ mrem/year}$$

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.

$$H_{MEI} = H_2 \times \frac{2{,}000 \text{ hours per work year}}{8{,}760 \text{ hours per total year}} = 3.1\text{E-}02 \text{ mrem/year}$$

$$H_{MEI} = <0.1 \text{ mrem/year}$$

Airborne Radon Pathway

The SLAPS ATDs measured an average above background annual exposure of 0.03 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 2022b).

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.

$$S_1 = 0.03 \text{ pCi/L}$$

The actual radon exposure dose to the hypothetical maximally exposed individual was calculated.

$$S_{MEI} = S_1 \times F \times DCF \times T \times C_1 \times C_2$$

$$S_{MEI} = 0.3\ \text{pCi/L}*0.007\ \text{WL/pCi.L}*1250\ \text{mrem/WLM}*2000\ \text{hours/year}*1\ \text{month/170 hours}*\ 0.045$$

$$S_{MEI} = 1.5\text{E-01 mrem/year}$$

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

$$\text{TEDE} = \text{CEDE (airborne particulates)} + H_{MEI}\ \text{(external gamma)} + S_{MEI}\ \text{(airborne radon)}$$

$$\text{TEDE} = 0.4\ \text{mrem/year} + <0.1\ \text{mrem/year} + 0.2\ \text{mrem/year} = 0.6\ \text{mrem/year}$$

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 2021 at a location approximately 230 m north-northwest of the center of the of the I-270/Pershall Road and VP-56 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

The EDE of 0.3 mrem per year to the receptor was 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 230 m north-northwest and 200 m east-southeast of the center of the I-270/Pershall Road, VP-56, and IA-09 Ballfields excavation areas respectively (Leidos 2022c). Details related to calculation of EDEs for the exposed receptors are contained in Appendix B of this EMDAR.

Total Effective Dose Equivalent

$$TEDE = CEDE\text{ (airborne particulates)} + H_{MEI}\text{ (external gamma)} + S_{MEI}\text{ (airborne radon)}$$

$$TEDE_{I\text{-}270/Pershall/VP\text{-}56} = 0.3\text{ mrem/year} + \text{negligible} + \text{negligible} = 0.3\text{ mrem/year}$$

$$TEDE_{IA\text{-}09\ Ballfields} = 0.2\text{ mrem/year} + \text{negligible} + \text{negligible} = 0.2\text{ mrem/year}$$

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 2022d)

The UCL_{95} values of the average contamination values measured in CWC surface water in CY 2021 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.

$$TEDE_W = \Sigma\ (TEDE_{Tot\text{-}U}, TEDE_{Th\text{-}228}, TEDE_{Th\text{-}230}, TEDE_{Th\text{-}232}, TEDE_{Ra\text{-}226}, TEDE_{Ra\text{-}228})$$

$$TEDE_i = \text{(Average) pCi/L} \times 2.0\text{ L/day} \times 26\text{ days/year} \times \text{DCF mrem/pCi}$$

Table I-1. Average Values for Radionuclides for CY 2021

Radionuclides	Average Concentration	Unit
Ra-226	0.34	pCi/L
Th-228	0.56	pCi/L
Th-230	0.86	pCi/L
Th-232	0.24	pCi/L
Total U	1.80	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 2021

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:

$$TEDE_{Ra\text{-}226} = 0.34\text{ pCi/L} \times 2.0\text{ L/day} \times 26\text{ day/year} \times 2.97\text{E-03 mrem/pCi} = 5.30\text{E-02 mrem/year}$$

$$TEDE_{Th\text{-}228} = 0.56\text{ pCi/L} \times 2.0\text{ L/day} \times 26\text{ day/year} \times 5.07\text{E-04 mrem/pCi} = 1.49\text{E-03 mrem/year}$$

$$TEDE_{Th\text{-}230} = 0.86 \text{ pCi/L} \times 2.0 \text{ L/day} \times 26 \text{ day/year} \times 9.10\text{E-}04 \text{mrem/pCi} = 4.08\text{E-}02 \text{ mrem/year}$$

$$TEDE_{Th\text{-}232} = 0.24 \text{ pCi/L} \times 2.0 \text{ L/day} \times 26 \text{ day/year} \times 1.07\text{E-}3 \text{ mrem/pCi} = 1.\ 32\text{E-}03 \text{ mrem/year}$$

$$TEDE_{Tot\text{-}U} = 1.80 \text{ pCi/L} \times 2.0 \text{ L/day} \times 26 \text{ day/year} \times 2.63\text{E-}04 \text{ mrem/pCi} = 2.46\text{E-}02 \text{ mrem/year}$$

$$TEDE_{W} = 1.47\text{E-}01 \text{ mrem/year}$$

Contaminated Sediment Ingestion (Leidos 2022d)

The UCL_{95} values of the average contamination values measured in CWC sediment in CY 2021 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.

$$TEDE_S = \Sigma\ (TEDE_{Tot\text{-}U}, TEDE_{Th\text{-}228}, TEDE_{Th\text{-}230}, TEDE_{Th\text{-}232}, TEDE_{Ra\text{-}226}, TEDE_{Ra\text{-}228})$$

$$TEDE_i = \text{(Average) pCi/g} \times 0.05 \text{ g/day} \times 26 \text{ days/year} \times \text{DCF mrem/pCi}$$

Table I-3. Average Values for Radionuclide for CY 2021

Radionuclides	Average Concentration	Unit
Ra-226	1.13	pCi/g
Ra-228	0.80	pCi/g
Th-228	1.20	pCi/g
Th-230	4.10	pCi/g
Th-232	1.07	pCi/g
Total U	2.36	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:

$$TEDE_{Ra\text{-}226} = 1.13 \text{ pCi/g} \times 0.05 \text{ g/day} \times 26 \text{ day/year} \times 2.97\text{E-}03 \text{ mrem/pCi} = 4.36\text{E-}03 \text{ mrem/year}$$

$$TEDE_{Ra\text{-}228} = 0.80 \text{ pCi/g} \times 0.05 \text{ g/day} \times 26 \text{ day/year} \times 1.45\text{E-}02 \text{ mrem/pCi} = 1.51\text{E-}02 \text{ mrem/year}$$

$$TEDE_{Th\text{-}228} = 1.20 \text{ pCi/g} \times 0.05 \text{ g/day} \times 26 \text{ day/year} \times 5.07\text{E-04 mrem/pCi} = 7.90\text{E-04 mrem/year}$$

$$TEDE_{Th\text{-}230} = 4.10 \text{ pCi/g} \times 0.05 \text{ g/day} \times 26 \text{ day/year} \times 9.10\text{E-04 mrem/pCi} = 4.85\text{E-03 mrem/year}$$

$$TEDE_{Th\text{-}232} = 1.07 \text{ pCi/g} \times 0.05 \text{ g/day} \times 26 \text{ day/year} \times 1.07\text{E-3 mrem/pCi2} = 1.49\text{E-03 mrem/year}$$

$$TEDE_{Tot\text{-}U} = 2.36 \text{ pCi/g} \times 0.05 \text{ g/day} \times 26 \text{ day/year} \times 2.63\text{E-4 mrem/pCi} = 8.08\text{E-04 mrem/year}$$

$$TEDE_S = 2.74\text{E-02 mrem/year}$$

Total Effective Dose Equivalent

$$TEDE = TEDE_W + TEDE_S$$

$$TEDE = 1.47\text{E-01 mrem/year} + 2.74\text{E-02 mrem/year} = 0.2 \text{ mrem/year}$$