Naval Facilities Engineering Systems Command Southwest
BRAC PMO West
San Diego, CA

AIR MONITORING SUMMARY REPORT 08 FOR PARCEL B REMOVAL SITE EVALUATION

HUNTERS POINT NAVAL SHIPYARD

SAN FRANCISCO, CALIFORNIA

July 7th, 2022 through May 11th, 2023

Approved for public release; distribution is unlimited

DCN: GESL-0005-5364-0074

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Prepared for:

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Contract Number: N62473-17-D-0005; Task Order No. N6247317F5364

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Acronyms and Abbreviations

AMSR ..... *Air Monitoring Summary Report*
ASRC ..... *Artic Slope Regional Corporation*
Cal/OSHA ..... *California Occupational Safety and Health Administration*
Cfm ..... *cubic feet per minute*
CFR ..... *Code of Federal Regulations*
CTO ..... *Contract Task Order*
DMAMP ..... *Dust Management and Air Monitoring Plan*
DMCP ..... *Dust Monitoring and Control Plan*
DTSC ..... *State of California Department of Toxic Substances Control*
EPA ..... *United States Environmental Protection Agency*
fibers/cm^3 ..... *fibers per cubic centimeter*
Gilbane ..... *Gilbane Federal*
HERO ..... *Human and Ecological Risk Office*
HPNS ..... *Hunters Point Naval Shipyard*
L/min ..... *liters per minute*
MDC ..... *minimum detectable concentration*
mg/m^3 ..... *milligrams per cubic meter*
Navy ..... *U.S. Department of the Navy*
NIOSH ..... *National Institute for Occupational Safety and Health*
PEL ..... *permissible exposure limit*
PM10 ..... *particulate matter less than 10 microns in diameter*
RAWP ..... *Remedial Action Work Plan*
RDL ..... *required detection limit*
ROC ..... *Radionuclide of concern*
TSP ..... *total suspended particulates*
TWA ..... *time-weighted average*
µg/m^3 ..... *micrograms per cubic meter*

1.0 Introduction

This Air Monitoring Summary Report (AMSR) was prepared by GES as requested by the United States Department of the Navy (Navy) under Radiological Environmental Multiple Award Contract N62473-17-D-0005, Contract Task Order (CTO) N6247317F5364. GES is performing air monitoring at Hunters Point Naval Shipyard (HPNS) in accordance with the Final Dust Management and Air Monitoring Plan (DMAMP), included as Appendix E to *Final Parcel B Removal Site Evaluation Work Plan, Hunters Point Naval Shipyard, San Francisco, California* (WP; Gilbane, 2022). The DMAMP describes the procedures that minimize dust during work activities and requires air monitoring to ensure these procedures are effective. The methods and procedures detailed in the DMAMP help to prevent exposure of residents and construction crews to potential airborne chemicals of concern, and dust from the work area.

This summary report describes the following:

- Where and how air monitoring samples were collected.
- What test methods were used to analyze air monitoring samples.
- How air monitoring data were evaluated.

This AMSR summarizes the air monitoring activities conducted by GES at HPNS Parcel B from July 7th, 2022 through May 11th, 2023, and compares the results with the established action levels presented in the DMAMP (Appendix E of the WP [Gilbane, 2022]).

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2.0 Monitoring Site Locations

Air monitoring stations were deployed at the minimum of one upwind and one downwind location whenever active soil handling operations were in progress. In addition, a southernmost air monitoring station (near Building 113A) was operated as a supplemental air monitoring location during earthmoving activities. Additional radiological air monitors may be placed within the daily work areas to monitor for worker health and safety. Based on past meteorological data, the prevalent wind direction at HPNS was from the west or west-southwest. The locations of Parcel B air monitoring stations are presented on **Figure 2-1**.

Air monitoring was performed to estimate and assess the impact of field activities. The locations of air monitoring stations were determined based on the prevailing wind direction and were modified as needed for accessibility and worker safety considerations. Wind direction was monitored daily using a windsock and confirmed with the prevalent wind direction recorded for the APTIM – KCASANFR1504 or Bayview Manor - KCASANFR1775 published at Weather Underground (www.wunderground.com).

Upwind/downwind station designations were assigned based on the prevalent wind direction. Atmospheric parameters were checked daily at www.wunderground.com (see **Attachment 1**). Monitoring stations remained stationary while sampling was conducted. Each monitoring station included four different monitoring systems:

1. Asbestos
2. Particulate matter less than 10 microns in diameter (PM10) and Metals (Lead and Manganese)
3. Total suspended particulates (TSP)
4. Radionuclides

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3.0 Analytical Methods

3.1 Asbestos

Air samples were sampled and analyzed in accordance with National Institute for Occupational Safety and Health (NIOSH) Method 7400, from the NIOSH Manual of Analytical Methods (NIOSH, 1994). Method 7400 requires that samples be collected on three-piece cellulose ester filters fitted with conductive cowlings at a sampling rate of between 0.5 liters per minute (L/min) and 16 L/min. Each sample was collected over the course of a period not to exceed 25 hours and submitted to A&B Laboratories of Houston, TX for analysis. Asbestos results were reviewed for anomalies and compliance with the action levels listed below.

3.2 PM10

Filter-based PM10 data are collected to ensure the protection of public health and safety during construction operations. Filter-based PM10 data are generated by sampling with calibrated air monitoring equipment that are operated continuously over the course of a period not to exceed 25 hours in accordance with the U.S. Environmental Protection Agency (EPA) reference sampling method for PM10 as described in Title 40 Code of Federal Regulations (CFR), Part 50, Subpart J (EPA, 1999a). During the sampling, measurements are taken to precisely calculate the volume of air that has passed through the filter media sample. The period sampled is dependent on the duration of the work activity. The sample is then shipped to Eurofins, West Sacramento, CA or Eurofins Environment Analytics, Ashland, VA for analysis. The concentration is gravimetrically determined. The sample results are reviewed for field and laboratory anomalies to provide confidence in the data and compared to air quality criteria to ensure compliance with the action levels listed below. In this way the precise amount of PM10 present in each cubic meter of air is determined.

3.3 TSP, Lead and Manganese

TSP samples were collected with a high-volume (39 to 60 cubic feet per minute [cfm]) air sampler in accordance with EPA's reference sampling method for TSP, described in 40 CFR 50, Subpart B. Each sample was collected on a filter over the course of a period not to exceed 25 hours (depending on the duration of the work activity). The sample is then shipped to Eurofins, West Sacramento, CA or Eurofins Environment Analytics, Ashland, VA for analysis. The filter was then weighed to determine the amount of TSP collected. The resulting concentration was compared to the HPNS Basewide level listed below to minimize permissible dust releases from the site. Once the TSP concentration was gravimetrically determined, the filter was analyzed for manganese and lead in accordance with EPA Method 6010B (equivalent to IO-3.4 in the Compendium of Methods for the Determination of Inorganic Compounds in Ambient Air [EPA, 1999b]).

3.4 Radionuclides of Concern

Radiological air samples were collected on filter media with a LV-1 low-volume air sampler. The air filter concentration is counted onsite following a decay period and are compared with public air concentration limits published in 10 CFR Part 20. Radiological air sampling methods and procedures are detailed in Gilbane Radiological Procedure PR-RP-150 *Radiological Survey and Sampling* (Gilbane, 2019).

Perimeter samples for ROCs were analyzed at ARS Aleut Analytical, of Port Allen, LA by the radiological methods listed below.

- Gamma Spectroscopy by EPA Method 901.1
- Alpha Spectroscopy/Eichrom Resin Separation by HASL 300 Pu-02RC
- Gas Flow Proportional Counting/Eichrom Resin Separation by SRW01

The calculated airborne concentration in microcuries per filter was then compared to the effluent concentration limit specified in Table 2 of Appendix B to 10 CFR 20. The effluent concentration of a given radionuclide is the minimum concentration in air which, if inhaled continuously over the course of a year, results in an exposure equal to the annual regulatory limit specified in 10 CFR 20.1302. The threshold for radiological effluent concentration in air samples is 10 percent of the effluent concentration, which ensures work practices are evaluated and modified as necessary to ensure the limit is not reached.

The equipment specifications and sampling procedures have complied with the specifications provided in the regulations for the sampler, filter media, accuracy, calibration, and quality assurance.

4.0 Air Monitoring Data Interpretation and Action Levels

To facilitate the comparison to project action levels, the delta between the upwind and downwind PM10 and TSP analytical results was calculated for detected values. Calculated negative values indicating that the upwind concentration was greater than the downwind concentration and non-detected values where no delta was calculated, are interpreted as acceptable.

The resulting deltas for PM10 and TSP and analytical data from air monitoring metals samples were compared with the threshold criteria listed in **Table 4-1** reproduced from Table 1; and radionuclide activities were compared to the airborne concentration action levels listed reproduced from Table 2 of the approved DMAMP (Appendix E of the WP [Gilbane, 2022]. The PM10 delta was additionally compared to the criterion taken from the *Final Basewide Dust Control Plan, Revision 1, Hunters Point Shipyard, San Francisco, California* (Tetra Tech EC, 2010) of 50 micrograms per cubic meter (ug/m^3).

Table 4-1: Air Monitoring Threshold Criteria

Test Parameter	Threshold Criteria	Threshold Criteria Reference
Asbestos	0.1 fibers/cm^3	Cal/OSHA PEL (on-site workers)
PM10[a]	50 µg/m^3	DTSC HERO developed action level (residents and public receptors)[a]
	5,000 µg/m^3	Cal/OSHA PEL (on-site workers)[b]
TSP	0.5 mg/m^3	Basewide HPNS Level selected to minimize overall permissible dust release from sites
Lead	0.050 mg/m^3	Cal/OSHA PEL (on-site workers)
Manganese	0.200 mg/m^3	Cal/OSHA PEL (on-site workers) 10 CFR, Part 20, Appendix B, Table 2 Column 1 adjusted from 50 mrem per year to maximum annual exposure of 10 mrem per year at the receptor (public receptor)[c]
Cesium-137	4.00E-11µCi/mL	
Plutonium-239	4.00E-15 µCi/mL	
Radium-226	1.80E-13 µCi/mL	
Strontium-90	1.20E-12 µCi/mL	
Cobalt-60	1.00E-11 µCi/mL	

Notes:

[a] = The DTSC HERO action level is based on the CSAAQS. The CSAAQS is designed to protect the general public from airborne particulates generated in the urban, suburban, and rural environments. The CSAAQS is not meant to be applied to general project-specific construction actions and related air quality. Rather, the standard is used to attain city- or regional-wide ambient air quality goals for the benefit of the general public. The current CSAAQS for PM10 is 50 µg/m3 average per 24-hour day. The City and County of San Francisco is currently a nonattainment area for the CSAAQS for PM10.

[b] = The Cal/OSHA PEL for particulates not otherwise regulated (respiratory) is used for PM10 comparison.

[c] = Results may be evaluated using 40 CFR Appendix E to Part 61 to demonstrate compliance with the National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61).

µCi/mL microcurie per milliliter

µg/m^3 = micrograms per cubic meter

Cal/OSHA = California Division of Occupational Safety and Health Administration

DTSC HERO = California Department of Toxic Substances Control, Human and Ecological Risk Office

fibers/cm^3 = fibers per cubic centimeter
HPNS = Hunters Point Naval Shipyard
mg/m^3 = milligrams per cubic meter
PEL = permissible exposure limit
PM10 = particulate matter less than 10 microns in diameter
TSP = total suspended particulates

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5.0 Air Monitoring Results

Weather information (including ambient pressure and temperature data) is presented in the table included as **Attachment 1**. Meteorological data for Stations 1, 2, and Building 113A were sourced from the Weather Underground (wunderground.com) station APTIM - KCASANFR1504 and Bayview Manor - KCASANFR1775. **Table 5-1** displays each air monitoring report and the associated dates covered in the report.

Air monitoring results are presented in the following attachments:

- Asbestos – **Attachment 2**
- PM10 – **Attachment 3**
- Lead and Manganese – **Attachment 4**
- TSP – **Attachment 5**
- Radiological – **Attachment 6**

Laboratory reports are included as **Attachment 7** and were subjected to cursory review by the Project Chemist. Radiological data were qualified for low-level contamination below the required detection limit (RDL) in the field filter blanks, negative results, or for minimum detectable concentrations (MDCs) above the RDL and for low carrier recovery. PM10, TSP and metals had some data estimated due to low-level particulates collected on the field blank media. Data, as qualified, are considered usable for their intended purposes.

Due to the nature of radiological laboratory analysis, radiological data will be presented as the contractor receives it. Ultimately the radiological results will be slightly delayed in comparison to the Asbestos, PM10, TSP, Lead, and Manganese results.

Table 5-1: Air Monitoring Report Summary

Air Monitoring Report Number	Data Date Range
01	07/07/22 – 09/15/22
02	09/16/22 – 10/13/22
03	10/14/22 – 11/03/22
04	11/04/22 – 12/08/22
05	12/09/22 – 12/22/22
06	12/23/22 – 02/16/23
07	02/17/23 – 04/20/23
08	04/21/23 – 05/11/23

5.1 Report 01

Air monitoring analytical results did not exceed project-specific screening criteria during

this reporting period's site operations.

5.2 Report 02

Air monitoring analytical results did not exceed project-specific screening criteria during this reporting period's site operations.

5.3 Report 03

Air monitoring analytical results did not exceed project-specific screening criteria during this reporting period's site operations.

5.4 Report 04

Air monitoring analytical results did not exceed project-specific screening criteria during this reporting period's site operations. The delta was taken by switching the upwind and downwind results due to the change in wind direction for sample end dates 11/10/22, 11/15/22, 11/16/22, 11/22/22, and 11/23/22.

5.5 Report 05

Air monitoring analytical results did not exceed project-specific screening criteria during this reporting period's site operations. The delta was taken by switching the upwind and downwind results due to the change in wind direction for sample end dates 12/15/22, 12/15/22 (second set of samples collected after field activities ceased), 12/21/22, and 12/22/22. The site was shut down for the remainder of the year and therefore no sampling was conducted.

5.6 Report 06

Air monitoring analytical results did not exceed project-specific screening criteria during this reporting period's site operations. The delta was taken by switching the upwind and downwind results due to the change in wind direction for sample end dates 1/24/23, 1/26/23, 1/26/23 (second set of samples collected after field activities ceased), 1/31/23, 2/2/23, 2/8/23, 2/9/23, and 2/9/23 (second set of samples collected after field activities ceased).

5.7 Report 07

Air monitoring analytical results did not exceed project-specific screening criteria during this reporting period's site operations. No earth-moving tasks were performed from 2/24/23 – 3/31/23 and therefore no air monitoring was conducted. The delta was taken by switching the upwind and downwind results due to the change in wind direction for

sample end dates 4/13/23 (second set of samples collected after field activities ceased).

5.8 Report 08

Air monitoring analytical results did not exceed project-specific screening criteria during this reporting period's site operations with the exception of Ra-226 at sample location 113A for the week ending 5/11/23. After discussion with the laboratory, it was found the detected result was a false positive due to the centroid energy being 0.5 Kev off the centroid of 186.21. The sample could not be reanalyzed as the filter was consumed for other radiological analyses. The laboratory revised the report to indicate a non-detect value with an elevated MDC due to the anomaly. As a result of this investigation, this radium-226 result is not reported in the tables as an exceedance but rather flagged as "NA", not applicable as the actual amount is indeterminable. The non-detected value has been qualified as estimated at the reporting limit. The field radiological results indicated no contamination above the screening criteria.

No earth-moving tasks were performed from 4/21/23 – 5/10/23 and therefore no air monitoring was conducted. On 5/11/23 the crew completed grading pads and the site is scheduled to be shut down.

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6.0 References

California Department of Toxic Substances Control, 2021, *Human and Ecological Risk Office (HERO) Memorandum, Dust Action Levels for Parcel B, Hunters Point Naval Shipyard, San Francisco, California*, March 24.

National Institute for Occupational Safety and Health, 1994, *NIOSH Manual of Analytical Methods, Method 7400*, August.

United States Environmental Protection Agency (EPA), 1999a. Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Ambient Air Specific Methods.

EPA, 1999b. Compendium of Methods for the Determination of Inorganic Compounds in Ambient Air.

Gilbane Federal (Gilbane), 2019. *PR-RP-150* “Radiological Survey and Sampling”. November.

Gilbane, 2022. *Final Parcel B Removal Site Evaluation Work Plan, Former Hunters Point Naval Shipyard, San Francisco, California*. January.

Tetra Tech EC, 2010, *Final Basewide Dust Control Plan, Revision 1, Hunters Point Shipyard, San Francisco, California*, November 29.

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FIGURES

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San Francisco Bay

Wind Compass

N NW NE W E SW SE S

Inset Map

Bayview Manor Weather Station

Parcel B

APTIM HPNS Weather Station

Hilltop Park

Quesada Ave

Palou Ave

Innes Ave

Keith St

Jennings St

Ingalls St

Carroll Ave

Gilman Ave

0 3,000 Feet

Berth 64

DRY DOCK 7

DRY DOCK 6

DRY DOCK 5

Berth 61

146

130

MSB01 (Upwind) Air Monitoring Station

Real-time Dust Monitoring

Windsock

103

Donahue St.

113

114

113A

Lockwood St.

MSB113A (Downwind) Air Monitoring Station

Real-time Dust Monitoring

Galvez Ave.

Fischer Ave.

Robinson St.

Horne Ave.

157

142

140

Real-time Dust Monitoring (Co-located)

MSB02 (Downwind) Air Monitoring Station

DRY DOCK 3

DRY DOCK 2

Air Sampling Station
Real-time Dust Monitoring
Windsock
Phase 1
Phase 2
Parcel B Boundary
Buildings
Impacted Existing
Impacted Demolished
Surface Soil Investigation

Note:
Prevailing wind direction is from west to northwest.

NAVFAC Naval Facilities Engineering Command

Removal Site Evaluation Work Plan
Radiological Investigation, Survey, and Reporting, Parcel B
Hunters Point Naval Shipyard
San Francisco, California

200 0 200
Feet

Figure 2-1
Air Sampling and Dust Monitoring Locations

G:\ArcGIS\Navy\HPS\PROJECTS\Parcel_B_rework\AirDust\ParcelBairDustLoc.mxd 11/4/2022

ATTACHMENT 1

AMBIENT PRESSURE, TEMPERATURE, AND PREVALENT WIND DIRECTION MONITORING RESULTS

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Attachment 1: Ambient Pressure, Temperature, and Prevalent Wind Direction Monitoring Results

Start Date	Ambient Pressure (in Hg)	Ambient Temperature (°F)	Prevalent Wind Direction
7/7/2022[1]	30.01	58.95	WSW
7/11/2022[1]	29.89	58.88	WSW
7/12/2022[1]	29.90	61.20	W
7/13/2022[1]	29.95	59.13	WSW
7/14/2022[1]	29.96	57.43	WSW
7/18/2022[2]	30.04	59.79	W
7/19/2022[2]	30.10	56.27	W
7/20/2022[2]	30.12	55.63	W
7/21/2022[2]	30.07	55.85	W
7/25/2022[2]	29.99	59.20	W
7/26/2022[2]	30.04	60.27	W
7/27/2022[2]	30.05	58.27	W
7/28/2022[2]	29.99	58.28	W
8/1/2022[2]	30.06	63.50	WNW
8/2/2022[2]	30.07	62.18	W
8/3/2022[2]	29.97	61.20	W
8/4/2022[2]	29.98	63.57	W
8/8/2022[2]	30.06	64.64	W
8/9/2022[2]	30.08	65.58	W
8/10/2022[2]	30.13	66.09	W
8/11/2022[2]	30.11	63.63	W
8/15/2022[2]	29.90	63.70	W
8/16/2022[2]	29.87	64.82	WNW
8/17/2022[2]	29.97	60.52	WNW
8/18/2022[2]	30.00	59.94	W
8/22/2022[2]	30.04	62.66	W
8/23/2022[2]	29.89	60.89	WSW
8/24/2022[2]	29.94	60.73	W
8/25/2022[2]	30.04	65.88	WSW
8/29/2022[2]	30.00	62.42	W
8/30/2022[2]	30.07	62.44	WSW
8/31/2022[2]	30.01	61.79	WSW
9/1/2022[2]	29.97	65.10	W
9/6/2022[2]	29.89	75.08	W
9/7/2022[2]	29.98	71.58	NW
9/8/2022[2]	29.87	74.28	WNW
9/12/2022[2]	30.00	61.63	WSW
9/13/2022[2]	29.98	61.93	W
9/14/2022[2]	30.04	63.16	W
9/15/2022[2]	30.11	62.63	W

Attachment 1: Ambient Pressure, Temperature, and Prevalent Wind Direction Monitoring Results

Start Date	Ambient Pressure (in Hg)	Ambient Temperature (°F)	Prevalent Wind Direction
9/19/2022[2]	29.92	64.57	S
9/20/2022[2]	29.99	64.78	NNW
9/21/2022[2]	30.07	65.29	W
9/22/2022[2]	30.15	66.46	WNW
9/26/2022[2]	30.05	58.51	W
9/27/2022[1]	29.99	59.41	WSW
9/28/2022[1]	30.04	59.95	WSW
9/29/2022[1]	30.03	67.48	WSW
10/3/2022[2]	30.10	61.70	W
10/4/2022[2]	30.07	58.62	W
10/5/2022[2]	30.07	58.73	W
10/6/2022[2]	30.12	60.51	WNW
10/10/2022[2]	30.04	56.04	WSW
10/11/2022[1]	30.01	56.86	WSW
10/12/2022[1]	30.08	57.39	WSW
10/13/2022[1]	30.05	57.88	WSW
10/17/2022[1]	30.03	61.97	SE
10/18/2022[1]	30.04	67.52	NW
10/19/2022[1]	30.00	65.67	WSW
10/20/2022[1]	29.97	59.54	WSW
10/24/2022[2]	30.26	59.41	WSW
10/25/2022[2]	30.17	55.60	W
10/26/2022[2]	30.12	57.13	WSW
10/27/2022[2]	30.14	60.51	SSW
10/31/2022[2]	29.95	56.90	SW
11/01/2022[2]	30.03	53.35	WSW
11/02/2022[2]	30.17	52.51	W
11/03/2022[2]	30.29	52.61	NNW
11/07/2022[2]	29.87	53.37	SW
11/09/2022[2]	30.28	53.11	W
11/10/2022[2]	30.35	53.65	ENE
11/14/2022[2]	30.23	53.12	SW
11/15/2022[2]	30.35	54.93	S
11/16/2022[2]	30.40	55.05	W
11/17/2022[2]	30.33	55.56	ENE
11/21/2022[2]	30.25	53.86	N
11/22/2022[2]	30.25	53.74	NNE
11/23/2022[2]	30.03	53.35	WNW
11/28/2022[2]	30.07	51.87	WNW
11/29/2022[2]	30.10	49.04	NNW

Attachment 1: Ambient Pressure, Temperature, and Prevalent Wind Direction Monitoring Results

Start Date	Ambient Pressure (in Hg)	Ambient Temperature (°F)	Prevalent Wind Direction
11/30/2022[2]	29.99	52.23	S
12/06/2022[2]	30.09	49.88	ESE
12/07/2022[1]	30.25	49.26	S
12/08/2022[1]	30.21	50.71	SSE
12/12/2022[1]	30.01	46.32	NNW
12/13/2022[1]	30.16	46.68	SE
12/14/2022[1]	30.22	47.59	NNE
12/15/2022[1]	30.16	51.62	E
12/19/2022[1]	30.30	44.38	NNW
12/20/2022[1]	30.31	48.34	E
12/21/2022[1]	30.21	50.85	N
1/23/2023[1]	30.20	53.46	ENE
1/24/2023[1]	30.34	53.35	ESE
1/25/2023[1]	30.34	58.21	ENE
1/26/2023[1]	30.41	62.18	ENE
1/30/2023[1]	30.12	46.43	NE
1/31/2023[1]	29.89	53.02	NNW
2/1/2023[1]	30.21	48.86	E
2/2/2023[1]	30.23	50.36	ESE
2/6/2023[1]	30.35	50.91	WSW
2/7/2023[1]	30.34	51.72	E
2/8/2023[1]	30.31	53.06	E
2/9/2023[1]	30.27	56.28	ENE
2/13/2023[1]	29.95	50.63	WNW
2/14/2023[1]	30.09	47.75	NNW
2/15/2023[1]	30.25	47.95	NNW
2/16/2023[1]	30.24	48.41	SE
2/20/2023[1]	30.04	54.49	WSW
2/21/2023[1]	29.79	47.50	WNW
2/22/2023[1]	29.82	42.97	W
2/23/2023[1]	29.86	44.67	SE
4/04/2023[1]	30.21	48.55	W
4/05/2023[1]	30.19	49.73	WSW
4/06/2023[1]	30.13	53.84	ESE
4/10/2023[2]	30.15	55.99	WSW
4/11/2023[2]	30.14	53.34	WSW
4/12/2023[2]	30.00	52.10	W
4/13/2023[2]	29.98	55.66	NNE
4/17/2023[1]	30.03	50.98	WNW
4/18/2023[1]	30.12	50.64	WNW

Attachment 1: Ambient Pressure, Temperature, and Prevalent Wind Direction Monitoring Results

Start Date	Ambient Pressure (in Hg)	Ambient Temperature (°F)	Prevalent Wind Direction
4/19/2023[1]	30.25	52.02	WNW
5/11/2023[2]	30.18	56.77	SW

Notes:

[1]Data collected using wunderground.com from Bayview Manor - KCASANFR1775

[2]Data collected using wunderground.com from APTIM HPNS - KCASANFR1504

°F = degree Farenheit

in Hg = inches of mercury

E = East

N = North

S = South

W = West

ATTACHMENT 2
ASBESTOS MONITORING RESULTS

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Attachment 2: Asbestos Monitoring Results

Sample, Date and Station Information			Sampler Run Information			Asbestos Fibers		
Sample ID	Sample End Date[1]	Monitoring Station	Ave Flow Rate (l/min)	Duration of Run (min)	Total Air Volume Monitored (L)	Asbestos (fibers)	Conc Asbestos (fibers/cm^3)	Exceedance (Yes/No)
MSB01-070722	07/08/22	1	3.0	1,431	4293	13.0	0.001	No
MSB02-070722	07/08/22	2	3.0	1,437	4311	7.5	0.001	No
MSB113A-070722	07/08/22	113A	3.0	1,429	4287	12.5	0.001	No
MSB01-071122	07/11/22	1	2.4	443	1063	5.5	0.003	No
MSB02-071122	07/11/22	2	3.1	448	1388	6.0	0.002	No
MSB113A-071122	07/11/22	113A	2.3	436	1002	2.0	< 0.003	No
MSB01-071222	07/12/22	1	3.3	448	1478	5.5	0.002	No
MSB02-071222	07/12/22	2	2.8	440	1232	5.0	< 0.002	No
MSB113A-071222	07/12/22	113A	1.9	424	805.6	4.0	< 0.003	No
MSB01-071322	07/13/22	1	2.0	524	1048	9.5	0.004	No
MSB02-071322	07/13/22	2	3.0	417	1251	8.5	0.003	No
MSB113A-071322	07/13/22	113A	3.0	420	1260	2.5	< 0.002	No
MSB01-071422	07/15/22	1	2.3	1,466	3371	1.5	< 0.001	No
MSB02-071422	07/15/22	2	3.0	1,443	4329	3.0	< 0.001	No
MSB113A-071422	07/15/22	113A	2.1	1,472	3091	2.0	< 0.001	No
MSB01-071822	07/19/22	1	2.5	1,378	3445	1.0	< 0.001	No
MSB02-071822	07/19/22	2	2.6	1,419	3689	1.0	< 0.001	No
MSB113A-071822	07/19/22	113A	3.6	1,422	5119	1.0	< 0.001	No
MSB01-071922	07/20/22	1	3.2	1,429	4572	0.5	< 0.001	No
MSB02-071922	07/20/22	2	2.5	1,422	3555	2.0	< 0.001	No
MSB113A-071922	07/20/22	113A	2.3	1,424	3275	2.0	< 0.001	No
MSB01-072022	07/21/22	1	2.7	1,473	3387	0.5	< 0.001	No
MSB02-072022	07/21/22	2	2.3	1,462	3947	3.0	< 0.001	No
MSB113A-072022	07/21/22	113A	2.3	1,468	3376	0.0	< 0.001	No
MSB01-072122	07/22/22	1	2.7	1,433	3869	0.5	< 0.001	No
MSB02-072122	07/22/22	2	2.9	1,456	4222	2.0	< 0.001	No
MSB113A-072122	07/22/22	113A	2.3	1,441	3314	1.0	< 0.001	No
MSB01-072522	07/26/22	1	2.4	1,454	3490	3.5	< 0.002	No
MSB02-072522	07/26/22	2	2.9	1,443	4185	2.0	< 0.002	No
MSB113A-072522	07/26/22	113A	2.2	1,454	3199	4.0	< 0.002	No
MSB01-072622	07/27/22	1	3.7	1,431	5295	4.0	< 0.002	No
MSB02-072622	07/27/22	2	3.0	1,432	4296	0.5	< 0.002	No
MSB113A-072622	07/27/22	113A	3.4	1,422	4835	1.5	< 0.002	No
MSB01-072722	07/28/22	1	3.4	1,464	4978	0.5	< 0.002	No
MSB02-072722	07/28/22	2	3.0	1,475	4425	1.5	< 0.002	No
MSB113A-072722	07/28/22	113A	3.4	1,469	4995	7.0	0.002	No
MSB01-072822	07/29/22	1	3.3	1,455	4802	8.0	0.003	No
MSB02-072822	07/29/22	2	2.9	1,466	4251	4.5	< 0.002	No
MSB113A-072822	07/29/22	113A	3.4	1,462	4971	13.0	0.004	No
MSB01-080122	08/02/22	1	3.5	1,450	5075	3.5	< 0.001	No
MSB02-080122	08/02/22	2	3.1	1,439	4460	0.0	< 0.001	No
MSB113A-080122	08/02/22	113A	3.5	1,449	5071	5.0	< 0.001	No
MSB01-080222	08/03/22	1	3.5	1,421	4973	3.5	< 0.001	No
MSB02-080222	08/03/22	2	3.4	1,426	4848	2.0	< 0.001	No
MSB113A-080222	08/03/22	113A	3.6	1,424	5126	2.5	< 0.001	No
MSB01-080322	08/04/22	1	3.4	1,430	4862	3.0	< 0.001	No
MSB02-080322	08/04/22	2	3.6	1,429	5144	8.0	0.001	No
MSB113A-080322	08/04/22	113A	3.4	1,429	4858	1.5	< 0.001	No
MSB01-080422	08/05/22	1	3.4	1,480	5032	3.5	< 0.001	No
MSB02-080422	08/05/22	2	3.4	1,466	4984	11.0	0.001	No
MSB113A-080422	08/05/22	113A	3.5	1,468	5138	28.0	0.003	No
MSB01-080822	08/09/22	1	3.7	1,443	5339	9.0	0.001	No
MSB02-080822	08/09/22	2	3.0	1,438	4314	11.0	0.001	No
MSB113A-080822	08/09/22	113A	3.6	1,442	5191	1.0	<0.001	No
MSB01-080922	08/10/22	1	3.6	1,448	5213	4.5	<0.001	No
MSB02-080922	08/10/22	2	3.8	1,444	5487	8.5	0.001	No
MSB113A-080922	08/10/22	113A	3.3	1,441	4755	4.5	<0.001	No
MSB01-081022	08/11/22	1	3.2	1,446	4627	5.5	0.001	No
MSB02-081022	08/11/22	2	3.4	1,449	4927	3.5	<0.001	No
MSB113A-081022	08/11/22	113A	3.2	1,448	4634	3.0	<0.001	No
MSB01-081122	08/12/22	1	3.0	1,418	4254	2.5	<0.001	No
MSB02-081122	08/12/22	2	3.4	1,414	4808	2.0	<0.001	No
MSB113A-081122	08/12/22	113A	3.0	1,415	4245	1.5	<0.001	No
MSB01-081522	08/16/22	1	3.6	1,444	5198	3.0	<0.001	No
MSB02-081522	08/16/22	2	3.3	1,431	4722	2.0	<0.001	No
MSB113A-081522	08/16/22	113A	3.1	1,444	4476	2.0	<0.001	No
MSB01-081622	08/17/22	1	3.2	1,434	4589	4.5	<0.001	No
MSB02-081622	08/17/22	2	3.3	1,440	4752	4.0	<0.001	No
MSB113A-081622	08/17/22	113A	3.2	1,433	4586	4.5	<0.001	No
MSB01-081722	08/18/22	1	3.7	1,429	5287	0.0	<0.001	No
MSB02-081722	08/18/22	2	3.1	1,428	4427	3.5	<0.001	No
MSB113A-081722	08/18/22	113A	3.2	1,431	4579	3.0	<0.001	No
MSB01-081822	08/19/22	1	3.4	1,457	4954	1.5	<0.001	No
MSB02-081822	08/19/22	2	3.1	1,471	4560	1.0	<0.001	No

Attachment 2: Asbestos Monitoring Results

Sample, Date and Station Information			Sampler Run Information			Asbestos Fibers		
Sample ID	Sample End Date[1]	Monitoring Station	Ave Flow Rate (l/min)	Duration of Run (min)	Total Air Volume Monitored (L)	Asbestos (fibers)	Conc Asbestos (fibers/cm^3)	Exceedance (Yes/No)
MSB113A-081822	08/19/22	113A	3.2	1,462	4678	1.5	<0.001	No
MSB01-082222	08/23/22	1	3.5	1,460	5110	4.0	<0.001	No
MSB02-082222	08/23/22	2	3.2	1,444	4621	10.0	0.001	No
MSB113A-082222	08/23/22	113A	3.0	1,452	4356	4.0	<0.001	No
MSB01-082322	08/22/22	1	3.3	1,413	4663	1.5	<0.001	No
MSB02-082322	08/22/22	2	3.1	1,421	4405	1.5	<0.001	No
MSB113A-082322	08/22/22	113A	2.9	1,417	4109	0.5	<0.001	No
MSB01-082422	08/25/22	1	3.2	1,418	4538	2.5	<0.001	No
MSB02-082422	08/25/22	2	3.3	1,442	4759	3.5	<0.001	No
MSB113A-082422	08/25/22	113A	3.3	1,418	4679	1.0	<0.001	No
MSB01-082522	08/25/22[2]	1	3.0	459	1377	1.0	<0.002	No
MSB02-082522	08/25/22[2]	2	3.1	473	1466	6.0	0.002	No
MSB113A-082522	08/25/22[2]	113A	3.3	462	1525	5.5	0.002	No
MSB01-082922	08/30/22	1	3.1	1,441	4467	7.0	0.001	No
MSB02-082922	08/30/22	2	3.3	1,453	4795	7.5	0.001	No
MSB113A-082922	08/30/22	113A	3.4	1,450	4930	7.0	0.001	No
MSB01-083022	08/31/22	1	3.2	1,438	4602	5.0	<0.001	No
MSB02-083022	08/31/22	2	3.3	1,444	4765	5.0	<0.001	No
MSB113A-083022	08/31/22	113A	3.1	1,438	4458	5.5	0.001	No
MSB01-083122	09/01/22	1	3.5	1,434	5019	6.5	0.001	No
MSB02-083122	09/01/22	2	3.3	1,438	4745	7.0	0.001	No
MSB113A-083122	09/01/22	113A	3.0	1,437	4311	5.5	0.001	No
MSB01-090122	09/01/22[2]	1	3.5	389	1362	6.5	0.002	No
MSB02-090122	09/01/22[2]	2	3.1	397	1231	4.0	<0.002	No
MSB113A-090122	09/01/22[2]	113A	3.1	393	1218	4.5	<0.002	No
MSB01-090622	09/07/22	1	3.5	1,423	4980	6.5	0.001	No
MSB02-090622	09/07/22	2	3.2	1,423	4553	5.0	<0.001	No
MSB113A-090622	09/07/22	113A	3.4	1,424	4841	4.0	<0.001	No
MSB01-090722	09/08/22	1	3.5	1,459	5106	1.0	<0.001	No
MSB02-090722	09/08/22	2	3.6	1,457	5245	4.5	<0.001	No
MSB113A-090722	09/08/22	113A	3.4	1,458	4957	2.5	<0.001	No
MSB01-090822	09/08/22[2]	1	3.3	421	1389	3.5	<0.002	No
MSB02-090822	09/08/22[2]	2	3.5	455	1592	2.5	<0.002	No
MSB113A-090822	09/08/22[2]	113A	3.5	441	1543	2.0	<0.002	No
MSB01-091222	09/13/22	1	3.5	1,429	5001	2.0	<0.001	No
MSB02-091222	09/13/22	2	3.1	1,425	4417	3.0	<0.001	No
MSB113A-091222	09/13/22	113A	3.6	1,426	5133	2.5	<0.001	No
MSB01-091322	09/14/22	1	3.1	1,456	4513	1.5	<0.001	No
MSB02-091322	09/14/22	2	3.5	1,453	5085	5.0	<0.001	No
MSB113A-091322	09/14/22	113A	3.3	1,457	4808	2.5	<0.001	No
MSB01-091422	09/15/22	1	3.3	1,456	4804	4.5	<0.001	No
MSB02-091422	09/15/22	2	3.2	1,456	4659	2.5	<0.001	No
MSB113A-091422	09/15/22	113A	3.4	1,453	4940	7.5	0.001	No
MSB01-091522	09/15/22[2]	1	3.2	407	1302	3.0	<0.002	No
MSB02-091522	09/15/22[2]	2	3.5	451	1578	2.5	<0.002	No
MSB113A-091522	09/15/22[2]	113A	3.2	424	1356	2.0	<0.002	No
MSB01-091922	09/20/22	1	3.4	1,417	4817	1.5	< 0.001	No
MSB02-091922	09/20/22	2	3.4	1,435	4879	4.0	< 0.005	No
MSB113A-091922	09/20/22	113A	3.5	1,424	4984	2.0	< 0.000	No
MSB01-092022	09/21/22	1	3.6	1,466	5277	3.5	< 0.001	No
MSB02-092022	09/21/22	2	3.0	1,463	4389	2.5	< 0.001	No
MSB113A-092022	09/21/22	113A	3.0	1,469	4407	4.0	< 0.001	No
MSB01-092122	09/22/22	1	3.4	1,490	5066	2.5	< 0.001	No
MSB02-092122	09/22/22	2	3.0	1,433	4299	3.0	<0.001	No
MSB113A-092122	09/22/22	113A	3.0	1,428	4284	1.5	< 0.001	No
MSB01-092222	9/22/22[2]	1	3.3	335	1105	1.5	< 0.002	No
MSB02-092222	9/22/22[2]	2	3.4	427	1451	2.0	< 0.002	No
MSB113A-092222	9/22/22[2]	113A	3.3	407	1343	2.0	< 0.002	No
MSB01-092622	09/27/22	1	3.4	1,440	4896	4.5	< 0.001	No
MSB02-092622	09/27/22	2	3.5	1,438	5033	8.5	0.001	No
MSB113A-092622	09/27/22	113A	3.5	1,435	5022	4.0	< 0.001	No
MSB01-092722	09/28/22	1	3.3	1,434	4732	8.0	0.001	No
MSB02-092722	09/28/22	2	3.6	1,436	5169	2.0	< 0.001	No
MSB113A-092722	09/28/22	113A	3.3	1,439	4748	2.5	< 0.001	No
MSB01-092822	09/29/22	1	3.0	1,426	4278	4.5	< 0.001	No
MSB02-092822	09/29/22	2	3.4	1,422	4834	4.5	< 0.001	No
MSB113A-092822	09/29/22	113A	3.0	1,425	4275	3.5	< 0.001	No
MSB01-092922	9/29/22[2]	1	3.5	451	1578	5.0	< 0.002	No
MSB02-092922	9/29/22[2]	2	3.3	478	1577	2.0	< 0.002	No
MSB113A-092922	9/29/22[2]	113A	3.1	458	1419	1.5	< 0.002	No
MSB01-100322	10/04/22	1	3.1	1,471	4560	4.5	< 0.001	No
MSB02-100322	10/04/22	2	3.3	1,462	4824	2.0	< 0.001	No

Attachment 2: Asbestos Monitoring Results

Sample, Date and Station Information			Sampler Run Information			Asbestos Fibers		
Sample ID	Sample End Date[1]	Monitoring Station	Ave Flow Rate (l/min)	Duration of Run (min)	Total Air Volume Monitored (L)	Asbestos (fibers)	Conc Asbestos (fibers/cm^3)	Exceedance (Yes/No)
MSB113A-100322	10/04/22	113A	3.4	1,469	4994	1.5	< 0.001	No
MSB01-100422	10/05/22	1	3.4	1,435	4879	17.0	0.002	No
MSB02-100422	10/05/22	2	3.6	1,442	5191	1.0	< 0.001	No
MSB113A-100422	10/05/22	113A	3.4	1,436	4882	0.5	< 0.001	No
MSB01-100522	10/06/22	1	3.3	1,439	4748	17.5	0.002	No
MSB02-100522	10/06/22	2	3.4	1,434	4875	1.5	< 0.001	No
MSB113A-100522	10/06/22	113A	3.2	1,430	4576	7.0	0.001	No
MSB01-100622	10/6/22[2]	1	3.3	425	1402	3.5	< 0.002	No
MSB02-100622	10/6/22[2]	2	3.4	460	1564	2.0	< 0.002	No
MSB113A-100622	10/6/22[2]	113A	3.1	440	1364	0.0	< 0.002	No
MSB01-101022	10/11/22	1	3.8	1,480	5624	5.5	0.000	No
MSB02-101022	10/11/22	2	3.6	1,441	5187	1.0	< 0.001	No
MSB113A-101022	10/11/22	113A	3.1	1,468	4550	1.0	< 0.001	No
MSB01-101122	10/12/22	1	3.6	1,413	5086	1.5	< 0.001	No
MSB02-101122	10/12/22	2	3.1	1,447	4485	4.0	< 0.001	No
MSB113A-101122	10/12/22	113A	3.1	1,418	4395	3.5	< 0.001	No
MSB01-101222	10/13/22	1	3.5	1,416	4956	2.0	< 0.001	No
MSB02-101222	10/13/22	2	3.2	1,420	4544	2.5	< 0.001	No
MSB113A-101222	10/13/22	113A	3.3	1,417	4676	3.5	< 0.001	No
MSB01-101322	10/13/22[2]	1	3.4	419	1424	3.0	< 0.002	No
MSB02-101322	10/13/22[2]	2	3.1	439	1360	1.0	< 0.002	No
MSB113A-101322	10/13/22[2]	113A	3.2	431	1379	1.0	< 0.002	No
MSB01-101722	10/18/22	1	3.4	1,414	4807	2.0	< 0.001	No
MSB02-101722	10/18/22	2	3.1	1,424	4414	1.0	< 0.001	No
MSB113A-101722	10/18/22	113A	3.3	1,414	4666	2.5	< 0.001	No
MSB01-101822	10/19/22	1	3.3	1,455	4801	9.0	0.001	No
MSB02-101822	10/19/22	2	3.1	1,453	4504	3.0	< 0.001	No
MSB113A-101822	10/19/22	113A	3.5	1,456	5096	4.0	< 0.001	No
MSB01-101922	10/20/22	1	3.4	1,422	4834	4.0	< 0.001	No
MSB02-101922	10/20/22	2	3.1	1,421	4405	3.5	< 0.001	No
MSB113A-101922	10/20/22	113A	3.4	1,421	4831	5.5	0.001	No
MSB01-102022	10/20/22[2]	1	3.5	329	1151	2.5	< 0.002	No
MSB02-102022	10/20/22[2]	2	3.3	384	1267	3.0	< 0.002	No
MSB113A-102022	10/20/22[2]	113A	3.3	354	1168	4.0	< 0.002	No
MSB01-102422	10/25/22	1	3.4	1,449	4926	19.0	0.001	No
MSB02-102422	10/25/22	2	3.3	1,446	4771	8.5	0.000	No
MSB113A-102422	10/25/22	113A	3.5	1,447	5064	13.0	0.001	No
MSB01-102522	10/26/22	1	3.3	1,446	4771	15.5	0.001	No
MSB02-102522	10/26/22	2	3.2	1,449	4636	8.0	0.000	No
MSB113A-102522	10/26/22	113A	3.2	1,449	4636	17.0	0.001	No
MSB01-102622	10/27/22	1	3.2	1,429	4572	15.0	0.001	No
MSB02-102622	10/27/22	2	3.3	1,429	4715	8.5	0.000	No
MSB113A-102622	10/27/22	113A	3.3	1,430	4719	6.5	0.000	No
MSB01-102722	10/27/22[2]	1	3.3	437	1442	13.5	0.003	No
MSB02-102722	10/27/22[2]	2	3.2	472	1510	5.5	0.000	No
MSB113A-102722	10/27/22[2]	113A	3.4	454	1543	11.5	0.002	No
MSB01-103122	11/01/22	1	3.3	1,430	4719	3.5	< 0.001	No
MSB02-103122	11/01/22	2	3.2	1,424	4556.8	2.0	< 0.001	No
MSB113A-103122	11/01/22	113A	3.4	1,428	4855	2.0	< 0.001	No
MSB01-110122	11/02/22	1	3.3	1,434	4732	3.0	< 0.001	No
MSB02-110122	11/02/22	2	3.1	1,443	4473	3.0	< 0.001	No
MSB113A-110122	11/02/22	113A	3.4	1,438	4889	2.0	< 0.001	No
MSB01-110222	11/03/22	1	3.2	1,427	4566	2.0	< 0.001	No
MSB02-110222	11/03/22	2	3.1	1,424	4414	5.0	< 0.001	No
MSB113A-110222	11/03/22	113A	3.3	1,423	4695	14.0	0.001	No
MSB01-110322	11/03/22[2]	1	3.1	437	1354	1.5	< 0.002	No
MSB02-110322	11/03/22[2]	2	3.2	459	1468	3.0	< 0.002	No
MSB113A-110322	11/03/22[2]	113A	3.2	446	1427	3.5	< 0.002	No
MSB01-110722	11/08/22	1	3.1	1,410	4371	3.5	< 0.001	No
MSB02-110722	11/08/22	2	3.3	1,420	4686	6.0	0.001	No
MSB113A-110722	11/08/22	113A	3.6	1,415	5094	3.0	< 0.001	No
MSB01-110122	11/10/22	1	3.8	1,431	5437	3.5	< 0.000	No
MSB02-110122	11/10/22	2	3.5	1,438	5033	2.0	< 0.001	No
MSB113A-110122	11/10/22	113A	3.4	1,434	4875	3.0	< 0.001	No
MSB01-110222	11/10/22[2]	1	3.3	386	1273	1.0	< 0.002	No
MSB02-110222	11/10/22[2]	2	3.4	400	1360	1.0	< 0.002	No
MSB113A-110222	11/10/22[2]	113A	3.2	412	1318	1.5	< 0.002	No
MSB01-111422	11/15/22	1	3.4	1,429	4858.6	4.0	< 0.001	No
MSB02-111422	11/15/22	2	3.5	1,423	4980.5	3.5	< 0.001	No
MSB113A-111422	11/15/22	113A	3.4	1,428	4855.2	3.5	< 0.001	No
MSB01-111522	11/16/22	1	3.3	1,437	4742.1	6.5	0.001	No
MSB02-111522	11/16/22	2	3.5	1,436	5026	3.0	< 0.001	No

Attachment 2: Asbestos Monitoring Results

Sample, Date and Station Information			Sampler Run Information			Asbestos Fibers		
Sample ID	Sample End Date[1]	Monitoring Station	Ave Flow Rate (l/min)	Duration of Run (min)	Total Air Volume Monitored (L)	Asbestos (fibers)	Conc Asbestos (fibers/cm^3)	Exceedance (Yes/No)
MSB113A-111522	11/16/22	113A	3.3	1,437	4742.1	4.0	< 0.001	No
MSB01-111622	11/17/22	1	3.3	1,428	4712.4	7.0	0.001	No
MSB02-111622	11/17/22	2	3.4	1,441	4899.4	7.5	0.001	No
MSB113A-111622	11/17/22	113A	3.7	1,448	5357.6	9.0	0.001	No
MSB01-111722	11/17/22[2]	1	3.7	449	1661.3	3.5	< 0.002	No
MSB02-111722	11/17/22[2]	2	3.5	464	1624	4.5	< 0.002	No
MSB113A-111722	11/17/22[2]	113A	3.5	437	1529.5	2.5	< 0.002	No
MSB01-112122	11/22/22	1	3.7	1,468	5341.6	5.5	0.0004	No
MSB02-112122	11/22/22	2	3.4	1,469	4994.6	5.5	0.001	No
MSB113A-112122	11/22/22	113A	3.8	1,469	5582.2	9.0	0.001	No
MSB01-112222	11/23/22	1	3.5	1,473	5155.5	8.5	0.001	No
MSB02-112222	11/23/22	2	3.4	1,502	5106.8	6.0	0.001	No
MSB113A-112222	11/23/22	113A	3.7	1,485	5494.5	7.5	0.001	No
MSB01-112822	11/29/22	1	3.8	1,355	5149	6.0	0.001	No
MSB02-112822	11/29/22	2	3.6	1,389	5000	5.0	< 0.001	No
MSB113A-112822	11/29/22	113A	3.8	1,325	5035	2.5	< 0.001	No
MSB01-112922	11/30/22	1	3.4	1,443	4906	3.5	< 0.001	No
MSB02-112922	11/30/22	2	3.5	1,439	5036	3.0	< 0.001	No
MSB113A-112922	11/30/22	113A	3.5	1,439	5036	2.5	< 0.001	No
MSB01-113022	12/01/22	1	3.5	1,448	5068	12.0	0.001	No
MSB02-113022	12/01/22	2	3.6	1,450	5220	6.0	0.001	No
MSB113A-113022	12/01/22	113A	3.5	1,447	5064	1.5	< 0.001	No
MSB01-120622	12/07/22	1	3.4	1,437	4885	11.0	0.001	No
MSB02-120622	12/07/22	2	3.4	1,422	4834	2.0	< 0.001	No
MSB113A-120622	12/07/22	113A	3.5	1,480	5180	7.5	0.001	No
MSB01-120722	12/08/22	1	3.2	1,421	4547	4.0	< 0.001	No
MSB02-120722	12/08/22	2	3.7	1,466	5424	2.5	< 0.000	No
MSB113A-120722	12/08/22	113A	3.5	1,380	4830	9.0	0.001	No
MSB01-120822	12/8/2022[2]	1	3.2	379	1212	4.0	< 0.002	No
MSB02-120822	12/8/2022[2]	2	3.6	346	1245	4.5	< 0.002	No
MSB113A-120822	12/8/2022[2]	113A	3.4	382	1298	3.0	< 0.002	No
MSB01-121222	12/13/22	1	3.3	1,424	4699	6.0	0.001	No
MSB02-121222	12/13/22	2	3.5	1,427	4994	3.0	< 0.001	No
MSB113A-121222	12/13/22	113A	3.5	1,428	4998	6.5	0.001	No
MSB01-121322	12/14/22	1	3.2	1,435	4592	5.0	< 0.001	No
MSB02-121322	12/14/22	2	3.5	1,438	5033	3.0	< 0.001	No
MSB113A-121322	12/14/22	113A	3.3	1,437	4742	2.5	< 0.001	No
MSB01-121422	12/15/22	1	3.4	1,445	4913	4.5	< 0.001	No
MSB02-121422	12/15/22	2	3.6	1,443	5194	2.0	< 0.001	No
MSB113A-121422	12/15/22	113A	3.5	1,448	5068	6.5	0.001	No
MSB01-121522	12/15/22[2]	1	3.0	466	1398	1.0	< 0.002	No
MSB02-121522	12/15/22[2]	2	3.6	429	1544	3.0	< 0.002	No
MSB113A-121522	12/15/22[2]	113A	3.4	456	1550	3.0	< 0.002	No
MSB01-121922	12/20/22	1	3.2	1,415	4528	6.0	0.001	No
MSB02-121922	12/20/22	2	3.7	1,418	5246	1.0	< 0.001	No
MSB113A-121922	12/20/22	113A	3.5	1,415	4952	4.5	< 0.001	No
MSB01-122022	12/21/22	1	3.7	1,447	5353	1.5	< 0.001	No
MSB02-122022	12/21/22	2	3.6	1,453	5230	6.5	0.001	No
MSB113A-122022	12/21/22	113A	3.4	1,452	4936	4.5	< 0.001	No
MSB01-122122	12/22/22	1	3.5	1,412	4942	7.0	0.001	No
MSB02-122122	12/22/22	2	3.6	1,426	5133	5.0	< 0.001	No
MSB113A-122122	12/22/22	113A	3.2	1,428	4569	3.5	< 0.001	No
MSB01-012323	01/24/23	1	3.6	1,480	5328	13.0	0.001	No
MSB02-012323	01/24/23	2	3.7	1,477	5464	10.0	0.001	No
MSB113A-012323	01/24/23	113A	3.6	1,496	5385	15.0	0.001	No
MSB01-012423	01/25/23	1	3.4	1,434	4875	9.0	0.001	No
MSB02-012423	01/25/23	2	3.7	1,424	5268	12.0	0.001	No
MSB113A-012423	01/25/23	113A	3.5	1,405	4917	15.5	0.002	No
MSB01-012523	01/26/23[3]	1	3.3	505	1666	11.5	0.003	No
MSB02-012523	01/26/23[3]	2	3.3	506	1669	10.5	0.003	No
MSB113A-012523	01/26/23[3]	113A	3.3	486	1603	12.0	0.004	No
MSB01-012623	01/26/23[2]	1	3.4	417	1417	11.0	0.004	No
MSB02-012623	01/26/23[2]	2	3.7	433	1602	8.5	0.003	No
MSB113A-012623	01/26/23[2]	113A	3.4	408	1387	6.5	0.002	No
MSB01-013023	01/31/23	1	3.7	1,436	5313.2	18.5	0.002	No
MSB02-013023	01/31/23	2	3.8	1,449	5506	14.5	0.001	No
MSB113A-013023	01/31/23	113A	3.7	1,443	5339	13.5	0.001	No
MSB01-013123	02/01/23	1	3.5	1,436	5026	14.0	0.001	No
MSB02-013123	02/01/23	2	3.5	1,420	4970	13.0	0.001	No
MSB113A-013123	02/01/23	113A	3.4	1,435	4879	17.5	0.002	No
MSB01-020123	02/02/23	1	3.3	1,437	4742	12.5	0.001	No
MSB02-020123	02/02/23	2	3.5	1,433	5015	15.0	0.001	No
MSB113A-020123	02/02/23	113A	3.7	1,433	5302	15.5	0.001	No

Attachment 2: Asbestos Monitoring Results

Sample, Date and Station Information			Sampler Run Information			Asbestos Fibers		
Sample ID	Sample End Date[1]	Monitoring Station	Ave Flow Rate (l/min)	Duration of Run (min)	Total Air Volume Monitored (L)	Asbestos (fibers)	Conc Asbestos (fibers/cm^3)	Exceedance (Yes/No)
MSB01-020223	02/02/23[2]	1	3.4	451	1533	13.5	0.004	No
MSB02-020223	02/02/23[2]	2	3.4	469	1594	13.0	0.004	No
MSB113A-020223	02/02/23[2]	113A	3.4	449	1526	12.5	0.004	No
MSB01-020623	02/07/23	1	3.6	1,425	5130	16.5	0.002	No
MSB02-020623	02/07/23	2	3.4	1,422	4834	12.5	0.001	No
MSB113A-020623	02/07/23	113A	3.6	1,428	5140	10.0	0.001	No
MSB01-020723	02/08/23	1	3.4	1,447	4919	11.5	0.001	No
MSB02-020723	02/08/23	2	3.7	1,448	5357	15.5	0.001	No
MSB113A-020723	02/08/23	113A	3.7	1,451	5368	12.0	0.001	No
MSB01-020823	02/09/23	1	3.4	1,436	4882	18.0	0.002	No
MSB02-020823	02/09/23	2	3.6	1,438	5176	15.0	0.001	No
MSB113A-020823	02/09/23	113A	3.3	1,427	4709	15.0	0.002	No
MSB01-020923	02/09/23[2]	1	3.4	434	1475	8.0	0.003	No
MSB02-020923	02/09/23[2]	2	3.7	452	1672	14.5	0.004	No
MSB113A-020923	02/09/23[2]	113A	3.2	429	1372	15.0	0.005	No
MSB01-021323	02/14/23	1	3.4	1,433	4872	10.5	0.001	No
MSB02-021323	02/14/23	2	3.8	1,431	5437	6.5	0.001	No
MSB113A-021323	02/14/23	113A	3.6	1,435	5166	12.5	0.001	No
MSB01-021423	02/15/23	1	3.2	1,432	4582	9.5	0.001	No
MSB02-021423	02/15/23	2	3.2	1,434	4588	8.0	0.001	No
MSB113A-021423	02/15/23	113A	3.3	1,433	4728	13.5	0.001	No
MSB01-021523	02/16/23	1	3.2	1,444	4620	12.5	0.001	No
MSB02-021523	02/16/23	2	3.3	1,444	4765	7.0	0.001	No
MSB113A-021523	02/16/23	113A	3.3	1,443	4761	10.0	0.002	No
MSB01-021623	02/16/23[2]	1	3.2	409	1308	6.0	0.002	No
MSB02-021623	02/16/23[2]	2	3.5	447	1564	7.0	0.002	No
MSB113A-021623	02/16/23[2]	113A	3.2	406	1299	10.0	0.004	No
MSB01-022023	02/21/23	1	3.3	1,448	4778	8.0	0.001	No
MSB02-022023	02/21/23	2	3.7	1,431	5294	18.0	0.002	No
MSB113A-022023	02/21/23	113A	3.3	1,427	4709	10.5	0.001	No
MSB01-022123	02/22/23	1	3.2	1,433	4585	19.0	0.002	No
MSB02-022123	02/22/23	2	3.2	1,446	4627	20.5	0.002	No
MSB113A-022123	02/22/23	113A	3.2	1,459	4668	17.0	0.002	No
MSB01-022223	02/23/23	1	3.1	1,435	4448	10.0	0.001	No
MSB02-022223	02/23/23	2	3.2	1,434	4588	10.0	0.001	No
MSB113A-022223	02/23/23	113A	3.2	1,433	4585	11.0	0.001	No
MSB01-022323	02/23/23[2]	1	3.0	393	1179	8.5	0.004	No
MSB02-022323	02/23/23[2]	2	3.2	392	1254	8.5	0.003	No
MSB113A-022323	02/23/23[2]	113A	3.2	395	1264	9.5	0.004	No
MSB01-040423	04/05/23	1	3.3	1,384	4567	18.0	0.002	No
MSB02-040423	04/05/23	2	3.5	1,381	4833	7.5	0.001	No
MSB113A-040423	04/05/23	113A	3.6	1,392	5011	14.0	0.001	No
MSB01-040523	04/06/23	1	3.2	1,435	4592	12.0	0.001	No
MSB02-040523	04/06/23	2	3.2	1,441	4611	11.0	0.001	No
MSB113A-040523	04/06/23	113A	3.5	1,430	5005	10.0	0.001	No
MSB01-040623	04/06/23[2]	1	3.5	407	1424	9.5	0.003	No
MSB02-040623	04/06/23[2]	2	3.4	312	1060	8.5	0.004	No
MSB113A-040623	04/06/23[2]	113A	3.6	398	1432	9.5	0.003	No
MSB01-041023	04/11/23	1	3.4	1,427	4851	10.5	0.001	No
MSB02-041023	04/11/23	2	3.3	1,431	4722	14.0	0.001	No
MSB113A-041023	04/11/23	113A	3.6	1,436	5169	18.5	0.002	No
MSB01-041123	04/12/23	1	3.3	1,433	4728	17.0	0.002	No
MSB02-041123	04/12/23	2	3.2	1,424	4556	20.0	0.005	No
MSB113A-041123	04/12/23	113A	3.3	1,425	4702	18.0	0.002	No
MSB01-041223	04/13/23	1	3.2	1,446	4627	25.0	0.003	No
MSB02-041223	04/13/23	2	3.1	1,454	4507	15.0	0.002	No
MSB113A-041223	04/13/23	113A	3.2	1,441	4611	16.0	0.002	No
MSB01-041323	04/13/23[2]	1	3.2	451	1443	15.0	0.005	No
MSB02-041323	04/13/23[2]	2	3.2	473	1513	11.0	0.004	No
MSB113A-041323	04/13/23[2]	113A	3.2	443	1417	14.0	0.005	No
MSB01-041723	04/18/23	1	3.4	1,427	4851	19.0	0.007	No
MSB02-041723	04/18/23	2	3.7	1,418	5747	12.5	0.004	No
MSB113A-041723	04/18/23	113A	3.3	1,431	4722	13.0	0.004	No
MSB01-041823	04/19/23	1	3.3	1,433	4729	11.5	0.004	No
MSB02-041823	04/19/23	2	3.2	1,439	4605	9.0	0.003	No
MSB113A-041823	04/19/23	113A	3.2	1,415	4528	12.5	0.004	No
MSB01-041923	04/20/23	1	3.2	1,453	4650	14.5	0.005	No
MSB02-041923	04/20/23	2	3.2	1,436	4595	12.5	0.004	No
MSB113A-041923	04/20/23	113A	3.5	1,423	4981	13.0	0.004	No
MSB01-051123	05/11/23	1	3.2	414	1324	11.5	0.004	No
MSB02-051123	05/11/23	2	3.4	433	1472	23.5	0.008	No

Attachment 2: Asbestos Monitoring Results

Sample, Date and Station Information			Sampler Run Information			Asbestos Fibers		
Sample ID	Sample End Date[1]	Monitoring Station	Ave Flow Rate (l/min)	Duration of Run (min)	Total Air Volume Monitored (L)	Asbestos (fibers)	Conc Asbestos (fibers/cm^3)	Exceedance (Yes/No)
MSB113A-051123	05/11/23	113A	3.3	393	1296	26.0	0.010	No

Notes:

[1]Sample "end" date indicates the date upon which sample collection ended.

[2]Air sample was taken down during the afternoon after field activities ceased.

[3] Generator Malfunction

Sample locations are shown on Figure 2-1

l/min = liters per minute

L = liter

min = minutes

fibers/cm^3 = fibers per cubic centimeter

< = below detection limit

ATTACHMENT 3

PARTICULATE MATTER, SMALLER THAN TEN MICRONS (PM10) MONITORING RESULTS

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Attachment 3: Particulate Matter, Smaller than Ten Microns (PM10) Monitoring Results

Sample, Date and Station Information			Sampler Run Information	PM10								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concentration in Air (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (ug/m^3)	PM10 MSB113A Concentration (Downwind - Upwind) (mg/m^3)	PM10 MSB113A Perimeter Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level[3] (ug/m^3)	Exceedance (Yes/No)[1]
GES_PM061322-38	MSB01	7/8/2022	1575.14	0.019	-0.0170	-17.000	-0.0060	-6.000	5,000	No	50	No
GES_PM061322-39	MSB02	7/8/2022	1626.27	0.0020								
GES_PM061322-40	MSB113A	7/8/2022	1587.75	0.013								
GES_PM061322-41	MSB01	7/12/2022	1586.87	0.0081	0.0013	1.300	-0.0006	-0.600	5,000	No	50	No
GES_PM061322-42	MSB02	7/12/2022	1593.10	0.0094								
GES_PM061322-43	MSB113A	7/12/2022	1578.52	0.0075								
GES_PM061322-44	MSB01	7/13/2022	1668.76	0.0052	-0.0030	-3.000	-0.0015	-1.500	5,000	No	50	No
GES_PM061322-45	MSB02	7/13/2022	1607.71	0.0022								
GES_PM061322-46	MSB113A	7/13/2022	1600.23	0.0037								
GES_PM061322-47	MSB01	7/14/2022	1571.88	0.015	-0.0020	-2.000	0.0000	0.000	5,000	No	50	No
GES_PM061322-48	MSB02	7/14/2022	1547.49	0.013								
GES_PM061322-49	MSB113A	7/14/2022	1586.39	0.015								
GES_PM061322-50	MSB01	7/15/2022	1671.83	0.021	-0.0020	-2.000	0.0040	4.000	5,000	No	50	No
GES_PM061322-51	MSB02	7/15/2022	1636.90	0.019								
GES_PM061322-52	MSB113A	7/15/2022	1626.56	0.025								
GES_PM061322-53	MSB01	7/19/2022	1604.22	0.025	0.0000	0.000	-0.0010	-1.000	5,000	No	50	No
GES_PM061322-54	MSB02	7/19/2022	1584.87	0.025								
GES_PM070522-73	MSB113A	7/19/2022	1584.48	0.024 J								
GES_PM070522-74	MSB01	7/20/2022	1649.08	0.0082	-0.0007	-0.700	0.0038	3.800	5,000	No	50	No
GES_PM070522-75	MSB02	7/20/2022	1593.23	0.0075								
GES_PM070522-76	MSB113A	7/20/2022	1543.80	0.012 J								
GES_PM070522-78	MSB01	7/21/2022	1681.99	0.0056	0.0040	4.000	0.0020	2.000	5,000	No	50	No
GES_PM070522-79	MSB02	7/21/2022	1631.55	0.0096								
GES_PM070522-80	MSB113A	7/21/2022	1577.49	0.0076 J								
GES_PM070522-81	MSB01	7/22/2022	1645.32	0.012	0.0020	2.000	0.0000	0.000	5,000	No	50	No
GES_PM070522-82	MSB02	7/22/2022	1624.79	0.014								
GES_PM070522-83	MSB113A	7/22/2022	1609.69	0.012 J								
GES_PM070522-84	MSB01	7/26/2022	1656.40	0.0062	0.0009	0.900	-0.0001	-0.100	5,000	No	50	No
GES_PM070522-85	MSB02	7/26/2022	1640.17	0.0071								
GES_PM070522-86	MSB113A	7/26/2022	1621.60	0.0061								
GES_PM070522-87	MSB01	7/27/2022	1630.68	0.0074	0.0000	0.000	-0.0015	-1.500	5,000	No	50	No
GES_PM070522-88	MSB02	7/27/2022	1601.47	0.0074								
GES_PM070522-89	MSB113A	7/27/2022	1585.40	0.0059								
GES_PM071122-91	MSB01	7/28/2022	1652.35	0.0057	-0.0010	-1.000	-0.0036	-3.600	5,000	No	50	No
GES_PM071122-92	MSB02	7/28/2022	1645.25	0.0047								
GES_PM071122-93	MSB113A	7/28/2022	1618.52	0.0021 J+								

Attachment 3: Particulate Matter, Smaller than Ten Microns (PM10) Monitoring Results

Sample, Date and Station Information			Sampler Run Information	PM10								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concentration in Air (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (ug/m^3)	PM10 MSB113A Concentration (Downwind - Upwind) (mg/m^3)	PM10 MSB113A Perimeter Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level[3] (ug/m^3)	Exceedance (Yes/No)[1]
GES_PM071122-94	MSB01	7/29/2022	1656.03	0.0053	0.0007	0.700	-0.0035	-3.500	5,000	No	50	No
GES_PM071122-95	MSB02	7/29/2022	1630.44	0.0060								
GES_PM071122-96	MSB113A	7/29/2022	1602.17	0.0018 J+								
GES_PM071122-97	MSB01	08/02/22	1664.38	0.0084	0.001	0.900	0.0016	1.600	5,000	No	50	No
GES_PM071122-98	MSB02	08/02/22	1621.19	0.0093								
GES_PM071122-99	MSB113A	08/02/22	1620.16	0.01								
GES_PM071122-101	MSB01	08/03/22	1633.03	0.0087	0.003	3.300	0.0011	1.100	5,000	No	50	No
GES_PM071122-102	MSB02	08/03/22	1606.01	0.012								
GES_PM071122-103	MSB113A	08/03/22	1586.91	0.0098								
GESPM072622-145	MSB01	08/04/22	1641.25	0.011	0.002	2.000	0.0020	2.000	5,000	No	50	No
GESPM072622-146	MSB02	08/04/22	1607.65	0.013								
GESPM072622-147	MSB113A	08/04/22	1592.35	0.013 J								
GESPM072622-148	MSB01	08/05/22	1703.92	0.013	0.002	2.000	0.0010	1.000	5,000	No	50	No
GESPM072622-149	MSB02	08/05/22	1653.18	0.015								
GESPM072622-150	MSB113A	08/05/22	1484.68	0.014								
GES_PM071122-105	MSB01	08/09/22	1663.70	0.01	0.002	2.000	0.0000	0.000	5,000	No	50	No
GES_PM071122-106	MSB02	08/09/22	1622.89	0.012								
GES_PM071122-107	MSB113A	08/09/22	1623.49	0.01								
GESPM072622-153	MSB01	08/10/22	1699.59	0.008	0.002	1.600	0.0008	0.800	5,000	No	50	No
GESPM072622-154	MSB02	08/10/22	1630.75	0.0096								
GESPM072622-155	MSB113A	08/10/22	1637.96	0.0088								
GES_PM072622-108	MSB01	08/11/22	1657.11	0.0097	0.000	-0.300	-0.0007	-0.700	5,000	No	50	No
GESPM072622-151	MSB02	08/11/22	1635.06	0.0094								
GESPM072622-152	MSB113A	08/11/22	1642.95	0.009								
GESPM072622-156	MSB01	08/12/22	1623.36	0.01	-0.001	-1.300	0.0040	4.000	5,000	No	50	No
GESPM072622-157	MSB02	08/12/22	1598.56	0.0087								
GESPM072622-158	MSB113A	08/12/22	1601.40	0.014								
GESPM072622-159	MSB01	08/16/22	1666.46	0.026	0.000	0.000	-0.0010	-1.000	5,000	No	50	No
GESPM072622-160	MSB02	08/16/22	1629.77	0.026								
GESPM072622-161	MSB113A	08/16/22	1641.67	0.025								
GESPM080822-163	MSB01	08/17/22	1669.85	0.0093	0.002	1.700	0.0047	4.700	5,000	No	50	No
GESPM080822-164	MSB02	08/17/22	1548.50	0.011								
GESPM080822-165	MSB113A	08/17/22	1532.16	0.014								
GESPM080822-166	MSB01	08/18/22	1638.74	0.0047	0.001	0.600	0.0006	0.600	5,000	No	50	No
GESPM080822-167	MSB02	08/18/22	1637.56	0.0053								
GESPM080822-168	MSB113A	08/18/22	1611.00	0.0053								

Attachment 3: Particulate Matter, Smaller than Ten Microns (PM10) Monitoring Results

Sample, Date and Station Information			Sampler Run Information	PM10								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concentration in Air (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (ug/m^3)	PM10 MSB113A Concentration (Downwind - Upwind) (mg/m^3)	PM10 MSB113A Perimeter Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level[3] (ug/m^3)	Exceedance (Yes/No)[1]
GESPM080822-169	MSB01	08/19/22	1668.62	0.0025	0.006	6.100	0.0013	1.300	5,000	No	50	No
GESPM080822-170	MSB02	08/19/22	1660.59	0.0086								
GESPM080822-171	MSB113A	08/19/22	1660.29	0.0038								
GESPM080822-172	MSB01	08/23/22	1674.26	0.0066	0.002	1.600	0.0006	0.600	5,000	No	50	No
GESPM080822-173	MSB02	08/23/22	1639.37	0.0082								
GESPM080822-174	MSB113A	08/23/22	1601.43	0.0072								
GESPM080822-176	MSB01	08/24/22	1639.29	0.0068	-0.001	-0.800	0.0010	1.000	5,000	No	50	No
GESPM080822-177	MSB02	08/24/22	1609.09	0.006								
GESPM080822-178	MSB113A	08/24/22	1571.14	0.0078								
GESPM080822-179	MSB01	08/25/22	1655.34	0.0048	-0.001	-0.900	0.0007	0.700	5,000	No	50	No
GESPM080822-180	MSB02	08/25/22	1633.41	0.0039								
GESPM080822-181	MSB113A	08/25/22	1584.08	0.0055								
GESPM080822-182	MSB01	08/25/22[3]	513.61	0.006	-0.005	-5.000	0.0020	2.000	5,000	No	50	No
GESPM080822-183	MSB02	08/25/22[3]	527.62	< 0.00095								
GESPM080822-184	MSB113A	08/25/22[3]	510.18	0.008								
GESPM080822-185	MSB01	08/30/22	1636.24	0.019	-0.001	-1.000	0.0020	2.000	5,000	No	50	No
GESPM080822-186	MSB02	08/30/22	1617.12	0.018								
GESPM080822-187	MSB113A	08/30/22	1582.23	0.021								
GESPM080822-189	MSB01	08/31/22	1648.08	0.018	-0.005	-5.000	-0.0020	-2.000	5,000	No	50	No
GESPM080822-190	MSB02	08/31/22	1637.85	0.013								
GESPM080822-191	MSB113A	08/31/22	1596.26	0.016								
GESPM080822-192	MSB01	09/01/22	1655.98	0.012	-0.001	-1.000	0.0030	3.000	5,000	No	50	No
GESPM080822-193	MSB02	09/01/22	1629.07	0.011								
GESPM080822-194	MSB113A	09/01/22	1588.04	0.015								
GESPM080822-195	MSB01	09/01/22[3]	439.21	0.008	0.002	2.000	0.0010	1.000	5,000	No	50	No
GESPM080822-196	MSB02	09/01/22[3]	450.62	0.01								
GESPM080822-197	MSB113A	09/01/22[3]	431.76	0.009								
GESPM080822-198	MSB01	09/07/22	1649.77	0.037	-0.009	-9.000	-0.0020	-2.000	5,000	No	50	No
GESPM082222-199	MSB02	09/07/22	1630.41	0.028								
GESPM082222-200	MSB113A	09/07/22	1611.43	0.035								
GESPM082222-202	MSB01	09/08/22	1685.89	0.028	-0.003	-3.000	-0.0070	-7.000	5,000	No	50	No
GESPM082222-203	MSB02	09/08/22	1668.92	0.025								
GESPM082222-204	MSB113A	09/08/22	1661.41	0.021								
GESPM082222-205	MSB01	09/08/22[3]	435.50	0.042	-0.016	-16.000	-0.0030	-3.000	5,000	No	50	No
GESPM082222-206	MSB02	09/08/22[3]	512.06	0.026								
GESPM082222-207	MSB113A	09/08/22[3]	491.77	0.039								

Attachment 3: Particulate Matter, Smaller than Ten Microns (PM10) Monitoring Results

Sample, Date and Station Information			Sampler Run Information	PM10								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concentration in Air (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (ug/m^3)	PM10 MSB113A Concentration (Downwind - Upwind) (mg/m^3)	PM10 MSB113A Perimeter Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level[3] (ug/m^3)	Exceedance (Yes/No)[1]
GESPM082222-208	MSB01	09/13/22	1589.23	0.024	-0.001	-1.000	0.0030	3.000	5,000	No	50	No
GESPM082222-209	MSB02	09/13/22	1614.36	0.023								
GESPM082222-210	MSB113A	09/13/22	1608.82	0.027								
GESPM082222-212	MSB01	09/14/22	1674.65	0.0094	-0.001	-0.900	0.0002	0.200	5,000	No	50	No
GESPM082222-213	MSB02	09/14/22	1649.19	0.0085								
GESPM082222-214	MSB113A	09/14/22	1643.13	0.0096								
GESPM082222-215	MSB01	09/15/22	1670.91	0.010	-0.002	-2.100	0.0040	4.000	5,000	No	50	No
GESPM082222-216	MSB02	09/15/22	1648.13	0.0079								
GESPM090622-235	MSB113A	09/15/22	1648.11	0.014								
GESPM090622-236	MSB01	09/15/22[3]	469.15	0.0045	-0.001	-0.900	-0.0034	-3.400	5,000	No	50	No
GESPM090622-237	MSB02	09/15/22[3]	495.02	0.0036								
GESPM090622-238	MSB113A	09/15/22[3]	472.73	< 0.0011								
GESPM090622-239	MSB01	09/20/22	1635.64	0.0170	-0.0030	-3.000	0.0010	1.000	5,000	No	50	No
GESPM090622-240	MSB02	09/20/22	1637.45	0.0140								
GESPM090622-241	MSB113A	09/20/22	1593.05	0.0180								
GESPM090622-243	MSB01	09/21/22	1692.11	0.0150 J	-0.0030	-3.000	-0.001	-1.000	5,000	No	50	No
GESPM090622-244	MSB02	09/21/22	1669.66	0.0120								
GESPM090622-245	MSB113A	09/21/22	1630.46	0.0140								
GESPM090622-246	MSB01	09/22/22	1680.46	0.0140	-0.0020	-2.000	-0.0045	-4.500	5,000	No	50	No
GESPM090622-247	MSB02	09/22/22	1637.21	0.0120								
GESPM090622-248	MSB113A	09/22/22	1588.35	0.0095								
GESPM090622-249	MSB01	09/22/22[3]	373.53	< 0.0013 J	-0.0003	-0.300	0.00000	0.000	5,000	No	50	No
GESPM090622-250	MSB02	09/22/22[3]	479.58	< 0.001 J								
GESPM090622-251	MSB113A	09/22/22[3]	451.8	0.0013								
GESPM091922-289	MSB01	09/27/22	1640.65	0.0110	-0.0010	-1.000	0.0010	1.000	5,000	No	50	No
GESPM091922-290	MSB02	09/27/22	1624.03	0.0100								
GESPM091922-291	MSB113A	09/27/22	1603.22	0.0120								
GESPM091922-292	MSB01	09/28/22	1621.57	0.0120	-0.0010	-1.000	0.0020	2.000	5,000	No	50	No
GESPM091922-293	MSB02	09/28/22	1636.33	0.0110								
GESPM091922-294	MSB113A	09/28/22	1592.5	0.0140								
GESPM091922-295	MSB01	09/29/22	1623.64	0.0110	0.0000	0.000	0.0020	2.000	5,000	No	50	No
GESPM091922-296	MSB02	09/29/22	1618.33	0.0110								
GESPM091922-297	MSB113A	09/29/22	1589.08	0.0130								
GESPM091922-298	MSB01	09/29/22[3]	514.58	0.0310	-0.0150	-15.000	-0.0070	-7.000	5,000	No	50	No
GESPM091922-299	MSB02	09/29/22[3]	547.95	0.0160								
GESPM091922-300	MSB113A	09/29/22[3]	516.71	0.0240								

Attachment 3: Particulate Matter, Smaller than Ten Microns (PM10) Monitoring Results

Sample, Date and Station Information			Sampler Run Information	PM10								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concentration in Air (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (ug/m^3)	PM10 MSB113A Concentration (Downwind - Upwind) (mg/m^3)	PM10 MSB113A Perimeter Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level[3] (ug/m^3)	Exceedance (Yes/No)[1]
GESPM091922-301	MSB01	10/04/22	1672.44	0.019	-0.0010	-1.000	0.0020	2.000	5,000	No	50	No
GESPM091922-302	MSB02	10/04/22	1656.00	0.018								
GESPM091922-303	MSB113A	10/04/22	1631.28	0.021								
GESPM091922-305	MSB01	10/05/22	1635.08	0.020	-0.0020	-2.000	-0.0040	-4.000	5,000	No	50	No
GESPM091922-306	MSB02	10/05/22	1627.94	0.018								
GESPM092122-307	MSB113A	10/05/22	1597.77	0.016								
GESPM092122-308	MSB01	10/06/22	1636.07	0.0076	-0.0014	-1.400	-0.0005	-0.500	5,000	No	50	No
GESPM092122-309	MSB02	10/06/22	1618.34	0.0062								
GESPM092122-310	MSB113A	10/06/22	1593.63	0.0071								
GESPM092122-311	MSB01	10/06/22[2]	486.80	0.0043	-0.0004	-0.400	-0.0014	-1.400	5,000	No	50	No
GESPM092122-312	MSB02	10/06/22[2]	513.71	0.0039 J								
GESPM092122-313	MSB113A	10/06/22[2]	485.14	0.0029								
GESPM092122-314	MSB01	10/11/22	1673.47	0.0084	-0.0003	-0.300	-0.0003	-0.300	5,000	No	50	No
GESPM092122-315	MSB02	10/11/22	1632.85	0.0081								
GESPM092122-316	MSB113A	10/11/22	1625.79	0.0081								
GESPM092122-318	MSB01	10/12/22	1616.62	0.015	-0.0010	-1.000	0.0040	4.000	5,000	No	50	No
GESPM092122-319	MSB02	10/12/22	1628.68	0.014								
GESPM092122-320	MSB113A	10/12/22	1582.42	0.019								
GESPM092122-321	MSB01	10/13/22	1604.98	0.0097	-0.0020	-2.000	0.0003	0.300	5,000	No	50	No
GESPM092122-322	MSB02	10/13/22	1605.94	0.0077								
GESPM092122-323	MSB113A	10/13/22	1574.95	0.010								
GESPM092122-324	MSB01	10/13/22[2]	476.31	< 0.001 J	0.0004	0.400	0.0014	1.400	5,000	No	50	No
GESPM092122-325	MSB02	10/13/22[2]	498.56	0.0014								
GESPM092122-326	MSB113A	10/13/22[2]	491.16	0.0024								
GESPM092122-327	MSB01	10/18/22	1614.25	0.021	-0.0040	-4.000	0.0000	0.000	5,000	No	50	No
GESPM092122-328	MSB02	10/18/22	1612.96	0.017								
GESPM092122-329	MSB113A	10/18/22	1579.58	0.021								
GESPM092122-331	MSB01	10/19/22	1661.56	0.033	-0.0070	-7.000	0.0000	0.000	5,000	No	50	No
GESPM092122-332	MSB02	10/19/22	1644.44	0.026								
GESPM092122-333	MSB113A	10/19/22	1626.73	0.033								
GESPM092122-334	MSB01	10/20/22	1627.83	0.018	-0.0010	-1.000	0.0030	3.000	5,000	No	50	No
GESPM092122-335	MSB02	10/20/22	1611.53	0.017								
GESPM092122-336	MSB113A	10/20/22	1585.09	0.021								
GESPM092122-337	MSB01	10/20/22[2]	365.09	0.014	-0.0040	-4.000	-0.0056	-5.600	5,000	No	50	No
GESPM092122-338	MSB02	10/20/22[2]	370.39	0.01								
GESPM092122-339	MSB113A	10/20/22[2]	391.25	0.0084								

Attachment 3: Particulate Matter, Smaller than Ten Microns (PM10) Monitoring Results

Sample, Date and Station Information			Sampler Run Information	PM10								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concentration in Air (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (ug/m^3)	PM10 MSB113A Concentration (Downwind - Upwind) (mg/m^3)	PM10 MSB113A Perimeter Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level[3] (ug/m^3)	Exceedance (Yes/No)[1]
GESPM092122-340	MSB01	10/25/22	1646.41	0.013	-0.0020	-2.000	-0.0034	-3.400	5,000	No	50	No
GESPM092122-341	MSB02	10/25/22	1633.73	0.011								
GESPM092122-342	MSB113A	10/25/22	1548.34	0.0096								
GESPM100322-344	MSB01	10/26/22	1645.67	0.018	0.0084	8.400	0.0020	2.000	5,000	No	50	No
GESPM100322-345	MSB02	10/26/22	1592.33	0.032								
GESPM100322-346	MSB113A	10/26/22	1610.55	0.02								
GESPM100322-347	MSB01	10/27/22	1665.33	0.012	0.0050	5.000	0.0070	7.000	5,000	No	50	No
GESPM100322-348	MSB02	10/27/22	1609.51	0.017								
GESPM100322-349	MSB113A	10/27/22	1592.94	0.019								
GESPM100322-350	MSB01	10/27/22[2]	496.95	0.0032	0.0039	3.900	0.0010	1.000	5,000	No	50	No
GESPM100322-351	MSB02	10/27/22[2]	534.53	0.0071								
GESPM100322-352	MSB113A	10/27/22[2]	504.08	0.0042								
GESPM100322-356	MSB01	11/01/22	1624.14	0.019	-0.0010	-1.000	0.0010	1.000	5,000	No	50	No
GESPM100322-355	MSB02	11/01/22	1605.49	0.018								
GESPM100322-354	MSB113A	11/01/22	1597.24	0.020								
GESPM100322-357	MSB01	11/02/22	1628.41	0.0092	-0.0017	-1.700	-0.0005	-0.500	5,000	No	50	No
GESPM100322-359	MSB02	11/02/22	1613.51	0.0075								
GESPM100322-358	MSB113A	11/02/22	1594.35	0.0087								
GESPM100322-360	MSB01	11/03/22	1609.52	0.007	-0.0025	-2.500	-0.0051	-5.100	5,000	No	50	No
GESPM100322-379	MSB02	11/03/22	1589.40	0.0045								
GESPM100322-380	MSB113A	11/03/22	1567.30	0.0019								
GESPM100322-381	MSB01	11/03/22[2]	500.38	0.0096 J	-0.0060	-6.000	0.0064	6.400	5,000	No	50	No
GESPM100322-382	MSB02	11/03/22[2]	520.08	0.0036								
GESPM100322-383	MSB113A	11/03/22[2]	495.88	0.016 J								
GESPM100322-384	MSB01	11/08/22	1598.34	0.0083	0.0012	1.200	0.0007	0.700	5,000	No	50	No
GESPM100322-385	MSB02	11/08/22	1579.76	0.0095								
GESPM100322-386	MSB113A	11/08/22	1562.49	0.0090								
GESPM100322-388	MSB01	11/10/22	1620.16	0.0092	-0.0030	-3.000	0.0018	1.800	5,000	No	50	No
GESPM100322-389	MSB02	11/10/22	1201.38	0.0062								
GESPM100322-390	MSB113A	11/10/22	1589.02	0.011								
GESPM100322-391	MSB01	11/10/22[2]	435.87	0.020 J	0.0010	1.000	0.0080	8.000	5,000	No	50	No
GESPM100322-392	MSB02	11/10/22[2]	425.15	0.019 J								
GESPM100322-393	MSB113A	11/10/22[2]	457.37	0.012								
GESPM100322-395	MSB01	11/15/22	1617.39	0.017	0.0040	4.000	0.0020	2.000	5,000	No	50	No
GESPM100322-396	MSB02	11/15/22	1612.86	0.013								
GESPM101722-397	MSB113A	11/15/22	1585.58	0.015								

Attachment 3: Particulate Matter, Smaller than Ten Microns (PM10) Monitoring Results

Sample, Date and Station Information			Sampler Run Information	PM10								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concentration in Air (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (ug/m^3)	PM10 MSB113A Concentration (Downwind - Upwind) (mg/m^3)	PM10 MSB113A Perimeter Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level[3] (ug/m^3)	Exceedance (Yes/No)[1]
GESPM101722-398	MSB01	11/16/22	1636.05	0.022	0.0070	7.000	0.0040	4.000	5,000	No	50	No
GESPM101722-399	MSB02	11/16/22	1629.12	0.015								
GESPM101722-400	MSB113A	11/16/22	1595.95	0.018								
GESPM101722-401	MSB01	11/17/22	1634.27	0.016	-0.0010	-1.000	0.0010	1.000	5,000	No	50	No
GESPM101722-402	MSB02	11/17/22	1630.45	0.015								
GESPM101722-403	MSB113A	11/17/22	1606.86	0.017								
GESPM101722-404	MSB01	11/17/22[2]	507.01	0.029	-0.0120	-12.000	-0.0070	-7.000	5,000	No	50	No
GESPM101722-405	MSB02	11/17/22[2]	527.41	0.017								
GESPM101722-406	MSB113A	11/17/22[2]	484.19	0.022								
GESPM101722-408	MSB01	11/22/22	1667.55	0.022	0.0080	8.000	0.0030	3.000	5,000	No	50	No
GESPM101722-409	MSB02	11/22/22	1671.54	0.014								
GESPM101722-410	MSB113A	11/22/22	1629.20	0.019								
GESPM101722-411	MSB01	11/23/22	1677.36	0.019	0.0040	4.000	0.0030	3.000	5,000	No	50	No
GESPM101722-412	MSB02	11/23/22	1697.96	0.015								
GESPM101722-413	MSB113A	11/23/22	1646.43	0.016								
GESPM103122-657	MSB01	11/29/22	1529.47	0.0097	0.0001	0.100	0.0003	0.300	5,000	No	50	No
GESPM103122-658	MSB02	11/29/22	1572.93	0.0098								
GESPM103122-659	MSB113A	11/29/22	1481.59	0.010								
GESPM103122-660	MSB01	11/30/22	1630.88	0.015	-0.0040	-4.000	-0.0030	-3.000	5,000	No	50	No
GESPM103122-661	MSB02	11/30/22	1579.37	0.011								
GESPM103122-662	MSB113A	11/30/22	1586.43	0.012								
GESPM103122-663	MSB01	12/01/22	1645.42	0.0092	-0.0046	-4.600	-0.0040	-4.000	5,000	No	50	No
GESPM103122-664	MSB02	12/01/22	1592.92	0.0046								
GESPM103122-665	MSB113A	12/01/22	1604.75	0.0052								
GESPM103122-667	MSB01	12/07/22	1621.94	0.011	0.0010	1.000	0.0010	1.000	5,000	No	50	No
GESPM103122-668	MSB02	12/07/22	1621.53	0.012								
GESPM103122-669	MSB113A	12/7/22[3]	835.78	0.012								
GESPM103122-670	MSB01	12/08/22	1547.62	0.013	-0.0010	-1.000	0.0010	1.000	5,000	No	50	No
GESPM103122-671	MSB02	12/08/22	1652.97	0.012								
GESPM103122-672	MSB113A	12/08/22	1530.56	0.014 J								
GESPM103122-673	MSB01	12/08/22[2]	422.08	0.018	-0.0157	-15.700	-0.0060	-6.000	5,000	No	50	No
GESPM103122-674	MSB02	12/08/22[2]	387.33	0.0023								
GESPM103122-675	MSB113A	12/08/22[2]	417.69	0.012								
GESPM103122-677	MSB01	12/13/22	1607.54	0.014	0.0030	3.000	0.0000	0.000	5,000	No	50	No
GESPM103122-678	MSB02	12/13/22	1610.22	0.017								
GESPM103122-679	MSB113A	12/13/22	1578.20	0.014								

Attachment 3: Particulate Matter, Smaller than Ten Microns (PM10) Monitoring Results

Sample, Date and Station Information			Sampler Run Information	PM10								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concentration in Air (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (ug/m^3)	PM10 MSB113A Concentration (Downwind - Upwind) (mg/m^3)	PM10 MSB113A Perimeter Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level[3] (ug/m^3)	Exceedance (Yes/No)[1]
GESPM103122-680	MSB01	12/14/22	1497.62	0.017	-0.0030	-3.000	-0.0020	-2.000	5,000	No	50	No
GESPM103122-681	MSB02	12/14/22	1615.86	0.014								
GESPM103122-682	MSB113A	12/14/22	1573.45	0.015								
GESPM103122-683	MSB01	12/15/22	1644.54	0.018	0.0010	1.000	0.0030	3.000	5,000	No	50	No
GESPM103122-684	MSB02	12/15/22	1634.09	0.017								
GESPM103122-685	MSB113A	12/15/22	1593.15	0.02								
GESPM103122-686	MSB01	12/15/22[2]	524.94	0.015	0.0030	3.000	0.0000	0.000	5,000	No	50	No
GESPM103122-687	MSB02	12/15/22[2]	481.72	0.012								
GESPM103122-688	MSB113A	12/15/22[2]	498.09	0.015								
PM112922-03	MSB01	12/20/22	1708.82	0.01743893	0.0029	2.936	0.005185	5.185	5,000	No	50	No
PM112922-05	MSB02	12/20/22	1688.36	0.0203748								
PM112922-07	MSB113A	12/20/22	1657.51	0.0226243								
PM112922-09	MSB01	12/21/22	1698.14	0.02178855	-0.000504	-0.504	-0.003422	-3.422	5,000	No	50	No
PM112922-11	MSB02	12/21/22	1677.68	0.02229269								
PM112922-13	MSB113A	12/21/22	1634.25	0.02521034								
PM112922-15	MSB01	12/22/22	1498.33	0.0262292	0.001179	1.179	-0.004164	-4.164	5,000	No	50	No
PM112922-17	MSB02	12/22/22	1520.95	0.02505013								
PM112922-19	MSB113A	12/22/22	1477.30	0.03039329								
PM120122-01	MSB01	01/24/23	1667.99	0.01013196	-0.0017	-1.714	0.0016	1.579	5,000	No	50	No
PM120122-03	MSB02	01/24/23	1164.95	0.011846								
PM120122-05	MSB113A	01/24/23	1636.88	0.00855286								
PM120122-07	MSB01	01/25/23	1659.34	0.0183808	-0.0032	-3.248	-0.0006	-0.595	5,000	No	50	No
PM120122-09	MSB02	01/25/23	1652.05	0.01513271								
PM120122-11	MSB113A	01/25/23	1596.74	0.01778624								
PM120122-13	MSB01	01/26/23[3]	585.62	0.01656364	0.0028	2.797	0.0018	1.792	5,000	No	50	No
PM120122-15	MSB02	01/26/23[3]	581.13	0.01376628								
PM120122-17	MSB113A	01/26/23[3]	568.66	0.01477157								
PM120122-19	MSB01	01/26/23[2]	449.66	0.00378063	-0.0037	-3.678	0.0005	0.505	5,000	No	50	No
PM120122-21	MSB02	01/26/23[2]	482.66	0.00745867								
PM120122-23	MSB113A	01/26/23[2]	457.92	0.00327568								
PM120122-27	MSB01	01/31/23	1652.72	0.00841038	0.0008	0.826	-0.00001	-0.009	5,000	No	50	No
PM120122-29	MSB02	01/31/23	1635.04	0.00758391								
PM120222-02	MSB113A	01/31/23	1615.29	0.00841954								
PM120222-04	MSB01	02/01/23	1660.87	0.01204188	-0.0015	-1.518	-0.0009	-0.931	5,000	No	50	No
PM120222-06	MSB02	02/01/23	1634.30	0.01052438								
PM120222-08	MSB113A	02/01/23	1620.10	0.01111043								

Attachment 3: Particulate Matter, Smaller than Ten Microns (PM10) Monitoring Results

Sample, Date and Station Information			Sampler Run Information	PM10								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concentration in Air (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (ug/m^3)	PM10 MSB113A Concentration (Downwind - Upwind) (mg/m^3)	PM10 MSB113A Perimeter Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level[3] (ug/m^3)	Exceedance (Yes/No)[1]
PM120222-10	MSB01	02/02/23	1650.52	0.02181131	0.0022	2.233	0.0027	2.690	5,000	No	50	No
PM120222-12	MSB02	02/02/23	1634.45	0.01957845								
PM120222-14	MSB113A	02/02/23	1615.98	0.01912152								
PM120222-15	MSB01	02/02/23[2]	495.68	0.02098128	-0.0041	-4.116	-0.0045	-4.486	5,000	No	50	No
PM120222-17	MSB02	02/02/23[2]	504.00	0.01686508								
PM120522-02	MSB113A	02/02/23[2]	485.00	0.01649485								
PM120522-06	MSB01	02/07/23	1630.08	0.01141048	-0.0008	-0.808	-0.0007	-0.656	5,000	No	50	No
PM120522-08	MSB02	02/07/23	1603.45	0.01060214								
PM120522-10	MSB113A	02/07/23	1608.63	0.01075449								
PM120522-12	MSB01	02/08/23	1654.87	0.03782774	0.0266	26.631	0.0262	26.173	5,000	No	50	No
PM120522-14	MSB02	02/08/23	1643.29	0.01119705								
PM120522-16	MSB113A	02/08/23	1621.69	0.01165451								
PM120522-18	MSB01	02/09/23	1650.12	0.01636245	0.0020	1.964	0.0073	7.324	5,000	No	50	No
PM120522-20	MSB02	02/09/23	1632.15	0.01439819								
PM120522-22	MSB113A	02/09/23[3]	520.02	0.00903811								
PM120522-24	MSB01	02/09/23[2]	497.14	0.01609205	0.0022	2.151	0.0089	8.873	5,000	No	50	No
PM120522-26	MSB02	02/09/23[2]	523.62	0.01394141								
PM120522-28	MSB113A	02/09/23[2]	470.96	0.0072193								
PM120622-02	MSB01	02/14/23	1640.33	0.01615529	-0.00002	-0.018	-0.0019	-1.949	5,000	No	50	No
PM120622-04	MSB02	02/14/23	1623.54	0.01613758								
PM120622-06	MSB113A	02/14/23	1541.57	0.0142063								
PM120622-08	MSB01	02/15/23	1639.48	0.00579452	0.0007	0.686	-0.0006	-0.561	5,000	No	50	No
PM120622-10	MSB02	02/15/23	1620.15	0.00648088								
PM120722-02	MSB113A	02/15/23	1605.18	0.00523306								
PM120722-04	MSB01	02/16/23	1653.57	0.00786178	-0.0009	-0.941	-0.0004	-0.361	5,000	No	50	No
PM120722-06	MSB02	02/16/23	1632.84	0.00692046								
PM120722-08	MSB113A	02/16/23	1613.19	0.00750067								
PM120722-10	MSB01	02/16/23[2]	464.74	0.01011318	-0.0036	-3.588	-0.0006	-0.624	5,000	No	50	No
PM120722-12	MSB02	02/16/23[2]	505.75	0.00652496								
PM011923-18	MSB113A	02/16/23[2]	453.17	0.00948871								
PM011823-24	MSB01	02/21/23	1663.96	0.0174283	-0.00097	-0.968	-0.0029	-2.907	5,000	No	50	No
PM011823-26	MSB02	02/21/23	1615.97	0.0164607								
PM011823-28	MSB113A	02/21/23	1611.48	0.01452081								
PM011823-30	MSB01	02/22/23	1637.20	0.01862937	0.0099	9.888	0.0121	12.075	5,000	No	50	No
PM011823-32	MSB02	02/22/23	1644.63	0.02851705								
PM011823-34	MSB113A	02/22/23	442.94[3]	0.03070393								

Attachment 3: Particulate Matter, Smaller than Ten Microns (PM10) Monitoring Results

Sample, Date and Station Information			Sampler Run Information	PM10								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concentration in Air (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (ug/m^3)	PM10 MSB113A Concentration (Downwind - Upwind) (mg/m^3)	PM10 MSB113A Perimeter Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level[3] (ug/m^3)	Exceedance (Yes/No)[1]
PM011823-36	MSB01	02/23/23	1636.04	0.00635681	-0.0001	-0.112	-0.0012	-1.189	5,000	No	50	No
PM011823-38	MSB02	02/23/23	1617.26	0.00624513								
PM011823-40	MSB113A	02/23/23	1567.42	0.00516773								
PM012923-51	MSB01	02/23/23[2]	447.92	0.0078139	-0.0049	-4.856	-0.0013	-1.267	5,000	No	50	No
PM012923-53	MSB02	02/23/23[2]	439.54	0.00295764								
PM012923-55	MSB113A	02/23/23[2]	442.98	0.00654657								
PM020923-07	MSB01	04/05/23	1588.62	0.01221186	-0.0054	-5.378	-0.0039	-3.880	5,000	No	50	No
PM020923-09	MSB02	04/05/23	1565.71	0.00683396								
PM020923-11	MSB113A	04/05/23	1560.31	0.00833168								
PM020923-13	MSB01	04/06/23	1654.16	0.00767761	-0.0002	-0.197	0.0027	2.732	5,000	No	50	No
PM020923-15	MSB02	04/06/23	1390.23	0.00748078								
PM020923-17	MSB113A	04/06/23	1604.23	0.01040998								
PM020923-19	MSB01	04/06/23[2]	465.06	0.00967617	-0.0069	-6.893	-0.0013	-1.291	5,000	No	50	No
PM020923-21	MSB02	04/06/23[2]	359.30	< 0.00278319								
PM020923-23	MSB113A	04/06/23[2]	441.26	0.00838508								
PM021523-09	MSB01	04/11/23	1607.61	0.00404327	0.00274	2.743	0.0010	1.029	5,000	No	50	No
PM021523-11	MSB02	04/11/23	1620.93	0.00678623								
PM021523-13	MSB113A	04/11/23	1557.57	0.005072								
PM021523-15	MSB01	04/12/23	1637.73	0.01215097	-0.0009	-0.860	0.0043	4.287	5,000	No	50	No
PM021523-17	MSB02	04/12/23	1638.48	0.01129095								
PM021523-19	MSB113A	04/12/23	1600.00	0.0164375								
PM021523-21	MSB01	04/13/23	1642.08	0.01400663	-0.0008	-0.792	0.0043	4.321	5,000	No	50	No
PM021523-23	MSB02	04/13/23	1657.27	0.0132145								
PM021523-25	MSB113A	04/13/23	1571.38	0.01832784								
PM021523-27	MSB01	04/13/23[2]	516.62	0.01664666	0.0082	8.224	0.0043	4.250	5,000	No	50	No
PM021523-29	MSB02	04/13/23[2]	546.17	0.00842229								
PM021523-31	MSB113A	04/13/23[2]	492.07	0.01239661								
PM022023-09	MSB01	04/18/23	1632.75	0.01133058	-0.0033	-3.286	-0.0005	-0.490	5,000	No	50	No
PM022023-11	MSB02	04/18/23	1628.35	0.00804495								
PM022023-13	MSB113A	04/18/23	1586.61	0.01084072								
PM022023-15	MSB01	04/19/23	1638.01	0.00915745	-0.0011	-1.115	0.0017	1.689	5,000	No	50	No
PM022023-17	MSB02	04/19/23	1641.19	0.00804294								
PM022023-19	MSB113A	04/19/23	1576.55	0.01084647								
PM022023-21	MSB01	04/20/23	1653.15	0.01179566	-0.0026	-2.622	0.0017	1.674	5,000	No	50	No
PM030323-02	MSB02	04/20/23	1646.08	0.00917331								
PM030323-04	MSB113A	04/20/23	1581.32	0.01346976								

Attachment 3: Particulate Matter, Smaller than Ten Microns (PM10) Monitoring Results

Sample, Date and Station Information			Sampler Run Information	PM10								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concentration in Air (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (mg/m^3)	PM10 Perimeter Concentration (Downwind - Upwind) (ug/m^3)	PM10 MSB113A Concentration (Downwind - Upwind) (mg/m^3)	PM10 MSB113A Perimeter Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level[3] (ug/m^3)	Exceedance (Yes/No)[1]
PM021523-38	MSB01	05/11/23	470.85	0.02612297	-0.0134	-13.419	-0.0065	-6.522	5,000	No	50	No
PM021523-40	MSB02	05/11/23	488.05	0.01270362								
PM021523-42	MSB113A	05/11/23	428.55	0.01960098								

Notes:

[1]PM10 data is additionally compared to the recommended dust action level of 50 ug/m3 for total PM10 in accordance with the DTSC Human and Ecological Risk Office (HERO) Parcel E Memorandum dated April 29, 2019 (DTSC, 2019) for informational purposes only.

[2]Air sample was taken down during the afternoon after field activities ceased.

[3]Generator malfunction.

Sample locations are shown on Figure 2-1

min = minutes

Cal/OSHA = California Division of Occupational Safety and Health

HERO = Human and Ecological Risk Office

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

J+ = estimated concentration biased high

m^3 = cubic meters

mg/m^3 = milligrams per cubic meter

PEL = permissible exposure limit

PM10 = particulate matter smaller than 10 microns in diameter

ug/m^3 = micrograms per cubic meter

ATTACHMENT 4
LEAD AND MANGANESE MONITORING RESULTS

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Attachment 4: Lead and Manganese Monitoring Results

Sample, Date and Station Information			Sampler Run Information	Lead		Manganese	
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concentration in Air (mg/m^3)	Exceedance (Yes/No)	Concentration in Air (mg/m^3)	Exceedance (Yes/No)
GES_PM061322-38	MSB01	7/8/2022	1575.14	0.0000029	No	0.0000075	No
GES_PM061322-39	MSB02	7/8/2022	1626.27	0.0000012	No	0.0000026	No
GES_PM061322-40	MSB113A	7/8/2022	1587.75	0.00000082	No	0.0000024	No
GES_PM061322-41	MSB01	7/12/2022	1586.87	0.0000012	No	0.0000030	No
GES_PM061322-42	MSB02	7/12/2022	1593.10	0.00000088	No	0.0000026	No
GES_PM061322-43	MSB113A	7/12/2022	1578.52	0.00000078	No	0.0000019	No
GES_PM061322-44	MSB01	7/13/2022	1668.76	0.00000063 J	No	0.0000024	No
GES_PM061322-45	MSB02	7/13/2022	1607.71	0.0000012	No	0.0000014	No
GES_PM061322-46	MSB113A	7/13/2022	1600.23	0.00000069 J	No	0.0000021	No
GES_PM061322-47	MSB01	7/14/2022	1571.88	0.00000076	No	0.0000029	No
GES_PM061322-48	MSB02	7/14/2022	1547.49	0.00000063 J	No	0.0000014	No
GES_PM061322-49	MSB113A	7/14/2022	1586.39	0.00000073 J	No	0.0000019	No
GES_PM061322-50	MSB01	7/15/2022	1671.83	0.00000090	No	0.0000020	No
GES_PM061322-51	MSB02	7/15/2022	1636.90	0.00000070 J	No	0.0000021	No
GES_PM061322-52	MSB113A	7/15/2022	1626.56	0.00000098	No	0.0000028	No
GES_PM061322-53	MSB01	7/19/2022	1604.22	0.0000013	No	0.0000029	No
GES_PM061322-54	MSB02	7/19/2022	1584.87	0.00000075 J	No	0.00000220	No
GES_PM070522-73	MSB113A	7/19/2022	1584.48	0.0000011	No	0.0000027	No
GES_PM070522-74	MSB01	7/20/2022	1649.08	0.00000076	No	0.0000020	No
GES_PM070522-75	MSB02	7/20/2022	1593.23	0.00000044 J	No	0.0000014	No
GES_PM070522-76	MSB113A	7/20/2022	1543.80	0.0000013	No	0.0000028	No
GES_PM070522-78	MSB01	7/21/2022	1681.99	0.0000010	No	0.0000028	No
GES_PM070522-79	MSB02	7/21/2022	1631.55	0.00000072 J	No	0.00000190	No
GES_PM070522-80	MSB113A	7/21/2022	1577.49	0.00000081	No	0.00000220	No
GES_PM070522-81	MSB01	7/22/2022	1645.32	0.0000010	No	0.0000031	No
GES_PM070522-82	MSB02	7/22/2022	1624.79	0.00000066 J	No	0.0000025	No
GES_PM070522-83	MSB113A	7/22/2022	1609.69	0.00000072 J	No	0.0000020	No
GES_PM070522-84	MSB01	7/26/2022	1656.40	0.00000090	No	0.0000025 J+	No
GES_PM070522-85	MSB02	7/26/2022	1640.17	0.00000055 J	No	0.0000015 J+	No
GES_PM070522-86	MSB113A	7/26/2022	1621.60	0.00000052 J	No	0.0000016 J+	No
GES_PM070522-87	MSB01	7/27/2022	1630.68	0.00000091	No	0.0000019 J+	No
GES_PM070522-88	MSB02	7/27/2022	1601.47	0.00000048 J	No	0.0000015 J+	No
GES_PM070522-89	MSB113A	7/27/2022	1585.40	0.00000075 J	No	0.0000018 J+	No
GES_PM071122-91	MSB01	7/28/2022	1652.35	0.0000011	No	0.0000028 J+	No
GES_PM071122-92	MSB02	7/28/2022	1645.25	0.00000064 J	No	0.0000014 J+	No
GES_PM071122-93	MSB113A	7/28/2022	1618.52	0.00000077	No	0.0000014 J+	No
GES_PM071122-94	MSB01	7/29/2022	1656.03	0.00000040 J	No	0.0000017 J+	No
GES_PM071122-95	MSB02	7/29/2022	1630.44	0.00000039 J	No	0.0000024 J+	No
GES_PM071122-96	MSB113A	7/29/2022	1602.17	0.00000058 J	No	0.0000012 J+	No
GES_PM071122-97	MSB01	08/02/22	1664.38	0.0000007 J	No	0.0000026	No
GES_PM071122-98	MSB02	08/02/22	1621.19	0.00000079	No	0.0000019	No
GES_PM071122-99	MSB113A	08/02/22	1620.16	0.00000093	No	0.0000028	No
GES_PM071122-101	MSB01	08/03/22	1633.03	0.00000089	No	0.0000025	No
GES_PM071122-102	MSB02	08/03/22	1606.01	0.0000007 J	No	0.0000031	No
GES_PM071122-103	MSB113A	08/03/22	1586.91	0.00000076	No	0.0000026	No
GESPM072622-145	MSB01	08/04/22	1641.25	0.00000046 J	No	0.0000016	No
GESPM072622-146	MSB02	08/04/22	1607.65	0.00000059 J	No	0.0000025	No

Attachment 4: Lead and Manganese Monitoring Results

Sample, Date and Station Information			Sampler Run Information	Lead		Manganese	
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concentration in Air (mg/m^3)	Exceedance (Yes/No)	Concentration in Air (mg/m^3)	Exceedance (Yes/No)
GESPM072622-147	MSB113A	08/04/22	1592.35	0.00000044 J	No	0.0000017	No
GESPM072622-148	MSB01	08/05/22	1703.92	0.0000006 J	No	0.0000021	No
GESPM072622-149	MSB02	08/05/22	1653.18	0.0000012	No	0.0000031	No
GESPM072622-150	MSB113A	08/05/22	1484.68	0.00000069 J	No	0.0000021	No
GES_PM071122-105	MSB01	08/09/22	1663.70	< 0.00000072	No	0.000002	No
GES_PM071122-106	MSB02	08/09/22	1622.89	< 0.00000074	No	0.0000035	No
GES_PM071122-107	MSB113A	08/09/22	1623.49	< 0.00000074	No	0.0000018	No
GESPM072622-153	MSB01	08/10/22	1699.59	< 0.00000071	No	0.0000019	No
GESPM072622-154	MSB02	08/10/22	1630.75	< 0.00000074	No	0.0000026	No
GESPM072622-155	MSB113A	08/10/22	1637.96	< 0.00000073	No	0.000002	No
GES_PM072622-108	MSB01	08/11/22	1657.11	< 0.00000072	No	0.0000021	No
GESPM072622-151	MSB02	08/11/22	1635.06	< 0.00000073	No	0.0000016	No
GESPM072622-152	MSB113A	08/11/22	1642.95	< 0.00000073	No	0.0000018	No
GESPM072622-156	MSB01	08/12/22	1623.36	< 0.00000074	No	0.000002	No
GESPM072622-157	MSB02	08/12/22	1598.56	< 0.00000075	No	0.0000023	No
GESPM072622-158	MSB113A	08/12/22	1601.40	< 0.00000075	No	0.0000045	No
GESPM072622-159	MSB01	08/16/22	1666.46	< 0.00000072	No	0.0000034	No
GESPM072622-160	MSB02	08/16/22	1629.77	< 0.00000074	No	0.0000033	No
GESPM072622-161	MSB113A	08/16/22	1641.67	< 0.00000073	No	0.0000036	No
GESPM080822-163	MSB01	08/17/22	1669.85	< 0.00000072	No	0.0000025	No
GESPM080822-164	MSB02	08/17/22	1548.50	< 0.00000077	No	0.0000036	No
GESPM080822-165	MSB113A	08/17/22	1532.16	< 0.00000078	No	0.0000048	No
GESPM080822-166	MSB01	08/18/22	1638.74	< 0.00000073	No	0.0000022	No
GESPM080822-167	MSB02	08/18/22	1637.56	< 0.00000073	No	0.0000022	No
GESPM080822-168	MSB113A	08/18/22	1611.00	< 0.00000074	No	0.0000027	No
GESPM080822-169	MSB01	08/19/22	1668.62	< 0.00000072	No	0.0000019	No
GESPM080822-170	MSB02	08/19/22	1660.59	< 0.00000072	No	0.0000071	No
GESPM080822-171	MSB113A	08/19/22	1660.29	< 0.00000072	No	0.0000023	No
GESPM080822-172	MSB01	08/23/22	1674.26	0.00000075	No	0.0000028	No
GESPM080822-173	MSB02	08/23/22	1639.37	0.00000068 J	No	0.0000041	No
GESPM080822-174	MSB113A	08/23/22	1601.43	0.00000056 J	No	0.0000018	No
GESPM080822-176	MSB01	08/24/22	1639.29	0.0000006 J	No	0.0000015	No
GESPM080822-177	MSB02	08/24/22	1609.09	0.00000057 J	No	0.0000017	No
GESPM080822-178	MSB113A	08/24/22	1571.14	0.00000067 J	No	0.000002	No
GESPM080822-179	MSB01	08/25/22	1655.34	0.00000044 J	No	0.0000017	No
GESPM080822-180	MSB02	08/25/22	1633.41	0.00000061 J	No	0.0000025	No
GESPM080822-181	MSB113A	08/25/22	1584.08	0.00000051 J	No	0.0000019	No
GESPM080822-182	MSB01	08/25/22[2]	513.61	0.0000014 J	No	0.0000044	No
GESPM080822-183	MSB02	08/25/22[2]	527.62	0.000001 J	No	0.0000034	No
GESPM080822-184	MSB113A	08/25/22[2]	510.18	0.0000011 J	No	0.0000036	No
GESPM080822-185	MSB01	08/30/22	1636.24	0.0000016	No	0.0000035	No
GESPM080822-186	MSB02	08/30/22	1617.12	0.00000071 J	No	0.0000048	No
GESPM080822-187	MSB113A	08/30/22	1582.23	0.00000073 J	No	0.0000028	No
GESPM080822-189	MSB01	08/31/22	1648.08	0.0000016	No	0.0000033	No
GESPM080822-190	MSB02	08/31/22	1637.85	0.00000055 J	No	0.0000035	No
GESPM080822-191	MSB113A	08/31/22	1596.26	0.00000059 J	No	0.0000021	No

Attachment 4: Lead and Manganese Monitoring Results

Sample, Date and Station Information			Sampler Run Information	Lead		Manganese	
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concentration in Air (mg/m^3)	Exceedance (Yes/No)	Concentration in Air (mg/m^3)	Exceedance (Yes/No)
GESPM080822-192	MSB01	09/01/22	1655.98	0.00000046 J	No	0.0000017	No
GESPM080822-193	MSB02	09/01/22	1629.07	0.00000048 J	No	0.0000021	No
GESPM080822-194	MSB113A	09/01/22	1588.04	0.00000069 J	No	0.0000024	No
GESPM080822-195	MSB01	09/01/22[2]	439.21	0.0000017 J	No	0.0000043	No
GESPM080822-196	MSB02	09/01/22[2]	450.62	0.0000012 J	No	0.0000068	No
GESPM080822-197	MSB113A	09/01/22[2]	431.76	0.0000019 J	No	0.0000054	No
GESPM080822-198	MSB01	09/07/22	1649.77	0.0000023	No	0.0000084	No
GESPM082222-199	MSB02	09/07/22	1630.41	0.0000012	No	0.0000076	No
GESPM082222-200	MSB113A	09/07/22	1611.43	0.0000019	No	0.0000068	No
GESPM082222-202	MSB01	09/08/22	1685.89	0.0000014	No	0.0000039	No
GESPM082222-203	MSB02	09/08/22	1668.92	0.0000013	No	0.0000043	No
GESPM082222-204	MSB113A	09/08/22	1661.41	0.0000012	No	0.0000033	No
GESPM082222-205	MSB01	09/08/22[2]	435.50	0.0000031	No	0.000021	No
GESPM082222-206	MSB02	09/08/22[2]	512.06	0.0000035	No	0.0000074	No
GESPM082222-207	MSB113A	09/08/22[2]	491.77	0.0000046	No	0.000012	No
GESPM082222-208	MSB01	09/13/22	1589.23	0.00000091	No	0.0000026	No
GESPM082222-209	MSB02	09/13/22	1614.36	0.00000081	No	0.0000068	No
GESPM082222-210	MSB113A	09/13/22	1608.82	0.000001	No	0.0000038	No
GESPM082222-212	MSB01	09/14/22	1674.65	0.00000059 J	No	0.0000016	No
GESPM082222-213	MSB02	09/14/22	1649.19	0.00000043 J	No	0.0000024	No
GESPM082222-214	MSB113A	09/14/22	1643.13	0.00000075	No	0.0000022	No
GESPM082222-215	MSB01	09/15/22	1670.91	0.00000042 J	No	0.0000022	No
GESPM082222-216	MSB02	09/15/22	1648.13	0.00000054 J	No	0.0000022	No
GESPM090622-235	MSB113A	09/15/22	1648.11	0.00000056 J	No	0.0000026	No
GESPM090622-236	MSB01	09/15/22[2]	469.15	0.00000072 J	No	0.0000046	No
GESPM090622-237	MSB02	09/15/22[2]	495.02	0.0000011 J	No	0.0000056	No
GESPM090622-238	MSB113A	09/15/22[2]	472.73	0.0000016 J	No	0.0000062	No
GESPM090622-239	MSB01	09/20/22	1635.64	0.0000011 J	No	0.0000023	No
GESPM090622-240	MSB02	09/20/22	1637.45	< 0.00000073 J	No	0.0000012 J	No
GESPM090622-241	MSB113A	09/20/22	1593.05	0.0000012 J	No	0.0000022	No
GESPM090622-243	MSB01	09/21/22	1692.11	0.00000075 J	No	0.0000029	No
GESPM090622-244	MSB02	09/21/22	1669.66	< 0.00000072 J	No	0.0000015	No
GESPM090622-245	MSB113A	09/21/22	1630.46	< 0.00000074 J	No	0.0000024	No
GESPM090622-246	MSB01	09/22/22	1680.46	< 0.00000071 J	No	0.0000026	No
GESPM090622-247	MSB02	09/22/22	1637.21	< 0.00000073 J	No	0.0000016	No
GESPM090622-248	MSB113A	09/22/22	1588.35	< 0.00000076 J	No	0.0000023	No
GESPM090622-249	MSB01	09/22/22[2]	373.53	< 0.0000032 J	No	0.0000034	No
GESPM090622-250	MSB02	09/22/22[2]	479.58	0.0000028	No	0.0000036	No
GESPM090622-251	MSB113A	09/22/22[2]	451.80	< 0.0000027 J	No	0.0000037	No
GESPM091922-289	MSB01	09/27/22	1640.65	0.00000061 J	No	0.0000027	No
GESPM091922-290	MSB02	09/27/22	1624.03	0.00000044 J	No	0.000002	No
GESPM091922-291	MSB113A	09/27/22	1603.22	0.00000067 J	No	0.0000024	No
GESPM091922-292	MSB01	09/28/22	1621.57	0.00000074	No	0.0000024	No
GESPM091922-293	MSB02	09/28/22	1636.33	0.00000053 J	No	0.0000019	No
GESPM091922-294	MSB113A	09/28/22	1592.50	0.000001	No	0.000003	No
GESPM091922-295	MSB01	09/29/22	1623.64	0.0000004 J	No	0.0000014 J	No
GESPM091922-296	MSB02	09/29/22	1618.33	0.00000055 J	No	0.0000015	No
GESPM091922-297	MSB113A	09/29/22	1589.08	0.00000059 J	No	0.0000018	No
GESPM091922-298	MSB01	09/29/22[2]	514.58	0.0000013 J	No	0.000015	No

Attachment 4: Lead and Manganese Monitoring Results

Sample, Date and Station Information			Sampler Run Information	Lead		Manganese	
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concentration in Air (mg/m^3)	Exceedance (Yes/No)	Concentration in Air (mg/m^3)	Exceedance (Yes/No)
GESPM091922-299	MSB02	09/29/22[2]	547.95	0.0000012 J	No	0.0000034	No
GESPM091922-300	MSB113A	09/29/22[2]	516.71	0.0000013 J	No	0.0000046	No
GESPM091922-301	MSB01	10/04/22	1672.44	0.00000073	No	0.0000028 J+	No
GESPM091922-302	MSB02	10/04/22	1656.00	0.00000064 J	No	0.0000026 J+	No
GESPM091922-303	MSB113A	10/04/22	1631.28	0.00000087	No	0.0000033 J+	No
GESPM091922-305	MSB01	10/05/22	1635.08	0.00000072 J	No	0.0000042 J+	No
GESPM091922-306	MSB02	10/05/22	1627.94	0.00000054 J	No	0.0000024 J+	No
GESPM092122-307	MSB113A	10/05/22	1597.77	0.00000095	No	0.0000037 J+	No
GESPM092122-308	MSB01	10/06/22	1636.07	0.00000075	No	0.0000028 J+	No
GESPM092122-309	MSB02	10/06/22	1618.34	0.00000056 J	No	0.0000022 J+	No
GESPM092122-310	MSB113A	10/06/22	1593.63	0.00000098	No	0.0000031 J+	No
GESPM092122-311	MSB01	10/06/22[2]	486.80	0.0000013 J	No	0.0000039 J+	No
GESPM092122-312	MSB02	10/06/22[2]	513.71	0.0000013 J	No	0.0000038 J+	No
GESPM092122-313	MSB113A	10/06/22[2]	485.14	0.0000014 J	No	0.0000042 J+	No
GESPM092122-314	MSB01	10/11/22	1673.47	< 0.00000072	No	0.0000025	No
GESPM092122-315	MSB02	10/11/22	1632.85	< 0.00000073	No	0.0000019	No
GESPM092122-316	MSB113A	10/11/22	1625.79	< 0.00000074	No	0.0000022	No
GESPM092122-318	MSB01	10/12/22	1616.62	< 0.00000074	No	0.0000031	No
GESPM092122-319	MSB02	10/12/22	1628.68	< 0.00000074	No	0.0000024	No
GESPM092122-320	MSB113A	10/12/22	1582.42	< 0.00000076	No	0.000004	No
GESPM092122-321	MSB01	10/13/22	1604.98	< 0.00000075	No	0.0000023	No
GESPM092122-322	MSB02	10/13/22	1605.94	< 0.00000075	No	0.0000018 J+	No
GESPM092122-323	MSB113A	10/13/22	1574.95	< 0.00000076	No	0.0000038	No
GESPM092122-324	MSB01	10/13/22[2]	476.31	0.0000022	No	0.0000048	No
GESPM092122-325	MSB02	10/13/22[2]	498.56	0.0000014	No	0.0000038	No
GESPM092122-326	MSB113A	10/13/22[2]	491.16	0.0000028	No	0.0000057	No
GESPM092122-328	MSB02	10/18/22	1612.96	0.0000013	No	0.000007	No
GESPM092122-329	MSB113A	10/18/22	1579.58	0.0000011	No	0.0000046	No
GESPM092122-331	MSB01	10/19/22	1661.56	0.0000014	No	0.0000063	No
GESPM092122-332	MSB02	10/19/22	1644.44	0.0000026	No	0.000018	No
GESPM092122-333	MSB113A	10/19/22	1626.73	0.0000019	No	0.000011	No
GESPM092122-334	MSB01	10/20/22	1627.83	0.0000029	No	0.000017	No
GESPM092122-335	MSB02	10/20/22	1611.53	0.0000011	No	0.0000062	No
GESPM092122-336	MSB113A	10/20/22	1585.09	0.0000014	No	0.0000079	No
GESPM092122-337	MSB01	01/02/00	365.09	0.0000021 J	No	0.0000084	No
GESPM092122-338	MSB02	01/02/00	370.39	0.0000016 J	No	0.0000061	No
GESPM092122-339	MSB113A	10/20/22[2]	391.25	0.0000024 J	No	0.0000071	No
GESPM092122-340	MSB01	10/25/22	1646.41	0.00000072 J	No	0.0000053	No
GESPM092122-341	MSB02	10/25/22	1633.73	0.00000055 J	No	0.0000027	No
GESPM092122-342	MSB113A	10/25/22	1548.34	0.00000067 J	No	0.0000031	No
GESPM100322-344	MSB01	10/26/22	1645.67	0.00000071 J	No	0.0000026	No
GESPM100322-345	MSB02	10/26/22	1592.33	0.0000019	No	0.000017	No
GESPM100322-346	MSB113A	10/26/22	1610.55	0.00000085	No	0.0000032	No
GESPM100322-347	MSB01	10/27/22	1665.33	0.00000051 J	No	0.0000027	No
GESPM100322-348	MSB02	10/27/22	1609.51	0.00000093	No	0.0000036	No
GESPM100322-349	MSB113A	10/27/22	1592.94	0.0000012	No	0.0000048	No
GESPM100322-350	MSB01	10/27/22[2]	496.95	0.0000017 J	No	0.0000069	No
GESPM100322-351	MSB02	10/27/22[2]	534.53	0.0000024 J	No	0.0000073	No
GESPM100322-352	MSB113A	10/27/22[2]	504.08	0.0000017 J	No	0.0000065	No

Attachment 4: Lead and Manganese Monitoring Results

Sample, Date and Station Information			Sampler Run Information	Lead		Manganese	
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concentration in Air (mg/m^3)	Exceedance (Yes/No)	Concentration in Air (mg/m^3)	Exceedance (Yes/No)
GESPM100322-356	MSB01	11/01/22	1624.14	0.00000084	No	0.0000029	No
GESPM100322-355	MSB02	11/01/22	1605.49	0.00000075	No	0.0000027	No
GESPM100322-354	MSB113A	11/01/22	1597.24	0.00000097	No	0.0000034	No
GESPM100322-357	MSB01	11/02/22	1628.41	0.00000037 J	No	0.0000018	No
GESPM100322-359	MSB02	11/02/22	1613.51	0.00000028 J	No	0.000001 J	No
GESPM100322-358	MSB113A	11/02/22	1594.35	0.00000037 J	No	0.0000015 J	No
GESPM100322-360	MSB01	11/03/22	1609.52	0.00000071 J	No	0.000003	No
GESPM100322-379	MSB02	11/03/22	1589.4	0.00000034 J	No	0.0000013 J	No
GESPM100322-380	MSB113A	11/03/22	1567.30	0.00000042 J	No	0.0000017	No
GESPM100322-381	MSB01	11/03/22[2]	500.38	0.0000014 J	No	0.0000047	No
GESPM100322-382	MSB02	11/03/22[2]	520.08	0.0000022 J	No	0.0000033	No
GESPM100322-383	MSB113A	11/03/22[2]	495.88	0.0000014 J	No	0.0000039	No
GESPM100322-384	MSB01	11/08/22	1598.34	< 0.00000075	No	0.0000019 J+	No
GESPM100322-385	MSB02	11/08/22	1579.76	< 0.00000076	No	0.0000012 J	No
GESPM100322-386	MSB113A	11/08/22	1562.49	< 0.00000077	No	0.0000015 J+	No
GESPM100322-388	MSB01	11/10/22	1620.16	0.0000013 J+	No	0.0000026 J+	No
GESPM100322-389	MSB02	11/10/22	1201.38	< 0.000001	No	0.0000019 J+	No
GESPM100322-390	MSB113A	11/10/22	1589.02	0.000001 J+	No	0.0000025 J+	No
GESPM100322-391	MSB01	11/10/22[2]	435.87	< 0.0000028	No	0.0000042 J+	No
GESPM100322-392	MSB02	11/10/22[2]	425.15	< 0.0000028	No	0.0000038 J+	No
GESPM100322-393	MSB113A	11/10/22[2]	457.37	< 0.0000026	No	0.0000041 J+	No
GESPM100322-395	MSB01	11/15/22	1617.39	0.00000170	No	0.0000042	No
GESPM100322-396	MSB02	11/15/22	1612.86	0.00000120	No	0.0000027	No
GESPM101722-397	MSB113A	11/15/22	1585.58	0.00000150	No	0.0000038	No
GESPM101722-398	MSB01	11/16/22	1636.05	0.0000017	No	0.0000069	No
GESPM101722-399	MSB02	11/16/22	1629.12	0.00000150	No	0.0000055	No
GESPM101722-400	MSB113A	11/16/22	1595.95	0.0000020	No	0.0000076	No
GESPM101722-401	MSB01	11/17/22	1634.27	0.00000170	No	0.0000056	No
GESPM101722-402	MSB02	11/17/22	1630.45	0.0000018	No	0.0000049	No
GESPM101722-403	MSB113A	11/17/22	1606.86	0.0000020	No	0.0000057	No
GESPM101722-404	MSB01	11/17/22[2]	507.01	0.0000035	No	0.000009	No
GESPM101722-405	MSB02	11/17/22[2]	527.41	0.0000042	No	0.000007	No
GESPM101722-406	MSB113A	11/17/22[2]	484.19	0.0000046	No	0.00001	No
GESPM101722-408	MSB01	11/22/22	1667.55	0.0000029	No	0.0000091	No
GESPM101722-409	MSB02	11/22/22	1671.54	0.0000021	No	0.0000064	No
GESPM101722-410	MSB113A	11/22/22	1629.20	0.0000027	No	0.0000093	No
GESPM101722-411	MSB01	11/23/22	1677.36	0.0000026	No	0.0000074	No
GESPM101722-412	MSB02	11/23/22	1697.96	0.0000021	No	0.000006	No
GESPM101722-413	MSB113A	11/23/22	1646.43	0.0000022	No	0.0000065	No
GESPM103122-657	MSB01	11/29/22	1529.47	0.0000012	No	0.0000032	No
GESPM103122-658	MSB02	11/29/22	1572.93	0.00000094	No	0.0000018	No
GESPM103122-659	MSB113A	11/29/22	1481.59	0.00000097	No	0.0000026	No
GESPM103122-660	MSB01	11/30/22	1630.88	0.0000016	No	0.0000047	No
GESPM103122-661	MSB02	11/30/22	1579.37	0.0000010	No	0.0000026	No
GESPM103122-662	MSB113A	11/30/22	1586.43	0.0000012	No	0.0000037	No
GESPM103122-663	MSB01	12/01/22	1645.42	0.0000010	No	0.0000031	No
GESPM103122-664	MSB02	12/01/22	1592.92	0.00000068 J	No	0.0000017 J	No
GESPM103122-665	MSB113A	12/01/22	1604.75	0.00000083	No	0.0000027	No
GESPM103122-667	MSB01	12/07/22	1621.94	0.00000085 J+	No	0.000003 J+	No

Attachment 4: Lead and Manganese Monitoring Results

Sample, Date and Station Information			Sampler Run Information	Lead		Manganese	
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concentration in Air (mg/m^3)	Exceedance (Yes/No)	Concentration in Air (mg/m^3)	Exceedance (Yes/No)
GESPM103122-668	MSB02	12/07/22	1621.53	< 0.00000074	No	0.0000019 J+	No
GESPM103122-669	MSB113A	12/7/2022[3]	835.78	< 0.0000014	No	0.0000025 J+	No
GESPM103122-670	MSB01	12/08/22	1547.62	< 0.00000078	No	0.0000021 J+	No
GESPM103122-671	MSB02	12/08/22	1652.97	< 0.00000073	No	0.0000018 J+	No
GESPM103122-672	MSB113A	12/08/22	1530.56	< 0.00000078	No	0.0000025 J+	No
GESPM103122-673	MSB01	12/08/22[2]	422.08	< 0.0000028	No	0.000004 J+	No
GESPM103122-674	MSB02	12/08/22[2]	387.33	< 0.0000031	No	< 0.0000031	No
GESPM103122-675	MSB113A	12/08/22[2]	417.69	< 0.0000029	No	0.0000047 J+	No
GESPM103122-677	MSB01	12/13/22	1607.54	0.00000099	No	0.0000024	No
GESPM103122-678	MSB02	12/13/22	1610.22	0.00000091	No	0.0000024	No
GESPM103122-679	MSB113A	12/13/22	1578.20	0.00000078	No	0.0000025	No
GESPM103122-680	MSB01	12/14/22	1497.62	0.0000011	No	0.0000028	No
GESPM103122-681	MSB02	12/14/22	1615.86	0.00000071 J	No	0.0000021	No
GESPM103122-682	MSB113A	12/14/22	1573.45	0.00000099	No	0.0000028	No
GESPM103122-683	MSB01	12/15/22	1644.54	0.0000018	No	0.0000048	No
GESPM103122-684	MSB02	12/15/22	1634.09	0.0000013	No	0.0000027	No
GESPM103122-685	MSB113A	12/15/22	1593.15	0.0000019	No	0.0000051	No
GESPM103122-686	MSB01	12/15/22[2]	524.94	0.000002 J	No	0.000005	No
GESPM103122-687	MSB02	12/15/22[2]	481.72	0.0000011 J	No	0.0000028	No
GESPM103122-688	MSB113A	12/15/22[2]	498.09	0.0000014 J	No	0.0000043	No
PM112922-03	MSB01	12/20/22	1708.82	< 0.00000819	No	< 0.00005735	No
PM112922-05	MSB02	12/20/22	1688.36	< 0.00000829	No	< 0.00005804	No
PM112922-07	MSB113A	12/20/22	1657.51	< 0.00000845	No	< 0.00005912	No
PM112922-09	MSB01	12/21/22	1698.14	< 0.00000824	No	< 0.00005771	No
PM112922-11	MSB02	12/21/22	1677.68	< 0.00000834	No	< 0.00005841	No
PM112922-13	MSB113A	12/21/22	1634.25	< 0.00000857	No	< 0.00005997	No
PM112922-15	MSB01	12/22/22	1498.33	< 0.00000934	No	< 0.00006541	No
PM112922-17	MSB02	12/22/22	1520.95	< 0.0000092	No	< 0.00006443	No
PM112922-19	MSB113A	12/22/22	1477.30	< 0.00000948	No	< 0.00006634	No
TSP120122-02	MSB01	01/24/23	1773.72	< 0.00000789	No	< 0.00005525	No
TSP120122-04	MSB02	01/24/23	1258.17	< 0.00001113	No	< 0.00007789	No
TSP120122-06	MSB113A	01/24/23	1603.99	< 0.00000873	No	< 0.0000611	No
TSP120122-08	MSB01	01/25/23	1659.34	< 0.00000844	No	< 0.00005906	No
TSP120122-10	MSB02	01/25/23	1754.51	< 0.00000798	No	< 0.00005586	No
TSP120122-12	MSB113A	01/25/23	1567.40	< 0.00000893	No	< 0.00006252	No
TSP120122-14	MSB01	01/26/23[3]	622.36	< 0.0000225	No	< 0.00015747	No
TSP120122-16	MSB02	01/26/23[3]	625.69	< 0.00002238	No	< 0.00015663	No
TSP120122-18	MSB113A	01/26/23[3]	556.91	< 0.00002514	No	< 0.00017597	No
TSP120122-20	MSB01	01/26/23[2]	479.19	< 0.00002922	No	< 0.00020451	No
TSP120122-22	MSB02	01/26/23[2]	522.27	< 0.00002681	No	< 0.00018764	No
TSP120122-24	MSB113A	01/26/23[2]	445.08	< 0.00003146	No	< 0.00022019	No
TSP120122-28	MSB01	01/31/23	1771.37	< 0.0000079 UJ	No	< 0.00005532	No
TSP120122-30	MSB02	01/31/23	1764.24	< 0.00000794 UJ	No	< 0.00005555	No
TSP120222-01	MSB113A	01/31/23	1595.92	< 0.00000877 UJ	No	< 0.00006141	No
TSP120222-03	MSB01	02/01/23	1758.62	< 0.00000796 UJ	No	< 0.00005573	No
TSP120222-05	MSB02	02/01/23	1759.17	< 0.00000796 UJ	No	< 0.00005571	No
TSP120222-07	MSB113A	02/01/23	1588.82	< 0.00000881 UJ	No	< 0.00006168	No
TSP120222-09	MSB01	02/02/23	1754.28	< 0.00000798 UJ	No	< 0.00005586	No
TSP120222-11	MSB02	02/02/23	1760.50	< 0.00000795 UJ	No	< 0.00005567	No
TSP120222-13	MSB113A	02/02/23	1579.37	< 0.00000886 UJ	No	< 0.00006205	No

Attachment 4: Lead and Manganese Monitoring Results

Sample, Date and Station Information			Sampler Run Information	Lead		Manganese	
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concentration in Air (mg/m^3)	Exceedance (Yes/No)	Concentration in Air (mg/m^3)	Exceedance (Yes/No)
TSP120222-16	MSB01	02/02/23[2]	525.25	< 0.00002665 UJ	No	< 0.00018658	No
TSP120522-01	MSB02	02/02/23[2]	544.93	< 0.00002569 UJ	No	< 0.00017984	No
TSP120522-03	MSB113A	02/02/23[2]	473.26	< 0.00002958 UJ	No	< 0.00020707	No
TSP120522-07	MSB01	02/07/23	1735.26	< 0.00000807	No	< 0.00005648	No
TSP120522-09	MSB02	02/07/23	1734.76	< 0.00000807	No	< 0.00005649	No
TSP120522-11	MSB113A	02/07/23	1574.14	< 0.00000889	No	< 0.00006226	No
TSP120522-13	MSB01	02/08/23	1758.16	< 0.00000796	No	< 0.00005574	No
TSP120522-15	MSB02	02/08/23	1775.14	< 0.00000789	No	< 0.00005521	No
TSP120522-17	MSB113A	02/08/23	1591.06	< 0.0000088	No	< 0.00006159	No
TSP120522-19	MSB01	02/09/23	1752.81	< 0.00000799	No	< 0.00005591	No
TSP120522-21	MSB02	02/09/23	1757.20	< 0.00000797	No	< 0.00005577	No
TSP120522-23	MSB113A	02/09/23[3]	979.54	< 0.00001429	No	< 0.00010005	No
TSP120522-25	MSB01	02/09/23[2]	525.02	< 0.00002667	No	< 0.00018666	No
TSP120522-27	MSB02	02/09/23[2]	564.49	< 0.0000248	No	< 0.00017361	No
TSP120522-29	MSB113A	02/09/23[2]	464.02	< 0.00003017	No	< 0.0002112	No
TSP120622-03	MSB01	02/14/23	1743.23	< 0.00000803	No	< 0.00005622	No
TSP120622-05	MSB02	02/14/23	1750.89	< 0.000008	No	< 0.00005597	No
TSP120622-07	MSB113A	02/14/23	1528.22	< 0.00000916	No	< 0.00006413	No
TSP120622-09	MSB01	02/15/23	1750.86	< 0.000008	No	< 0.00005597	No
TSP120722-01	MSB02	02/15/23	1749.13	< 0.000008	No	< 0.00005603	No
TSP120722-03	MSB113A	02/15/23	1584.60	< 0.00000884	No	< 0.00006185	No
TSP120722-05	MSB01	02/16/23	1767.35	< 0.00000792	No	< 0.00005545	No
TSP120722-07	MSB02	02/16/23	1755.68	< 0.00000797	No	< 0.00005582	No
TSP120722-09	MSB113A	02/16/23	1580.53	< 0.00000886	No	< 0.000062	No
TSP120722-11	MSB01	02/16/23[2]	498.18	< 0.0000281	No	< 0.00019672	No
TSP120722-17	MSB02	02/16/23[2]	542.78	< 0.00002579	No	< 0.00018055	No
TSP120722-19	MSB113A	02/16/23[2]	448.73	< 0.0000312	No	< 0.00021839	No
TSP011823-25	MSB01	02/21/23	1776.75	< 0.00000788	No	< 0.00005516	No
TSP011823-27	MSB02	02/21/23	1738.65	< 0.00000805	No	< 0.00005637	No
TSP011823-29	MSB113A	02/21/23	1574.75	< 0.00000889	No	< 0.00006223	No
TSP011823-31	MSB01	02/22/23	1740.00	< 0.00000805	No	< 0.00005632	No
TSP011823-33	MSB02	02/22/23	1767.90	< 0.00000792	No	< 0.00005543	No
TSP011823-35	MSB113A	02/22/23	861.74[3]	< 0.00001625	No	< 0.00011372	No
TSP011823-37	MSB01	02/23/23	1738.59	< 0.00000805	No	< 0.00005637	No
TSP011823-39	MSB02	02/23/23	1742.66	< 0.00000803	No	< 0.00005624	No
TSP011823-41	MSB113A	02/23/23	1558.68	< 0.00000898	No	< 0.00006287	No
TSP012923-52	MSB01	02/23/23[2]	473.67	< 0.00002956	No	< 0.0002069	No
TSP012923-54	MSB02	02/23/23[2]	471.45	< 0.0000297	No	< 0.00020787	No
TSP012923-56	MSB113A	02/23/23[2]	441.83	< 0.00003169	No	< 0.0002218	No
TSP020923-08	MSB01	04/05/23	1692.20	< 0.00000827	No	< 0.00005791	No
TSP020923-10	MSB02	04/05/23	1684.64	< 0.00000831	No	< 0.00005817	No
TSP020923-12	MSB113A	04/05/23	1542.19	< 0.00000908	No	< 0.00006355	No
TSP020923-14	MSB01	04/06/23	1759.77	< 0.00000796	No	< 0.00005569	No
TSP020923-16	MSB02	04/06/23	1493.84	< 0.00000937	No	< 0.0000656	No
TSP020923-18	MSB113A	04/06/23	1606.61	< 0.00000871	No	< 0.000061	No
TSP020923-20	MSB01	04/06/23[2]	498.29	< 0.0000281	No	< 0.00019667	No
TSP020923-22	MSB02	04/06/23[2]	386.93	< 0.00003618	No	< 0.00025328	No
TSP020923-24	MSB113A	04/06/23[2]	443.37	< 0.00003158	No	< 0.00022103	No
TSP021523-10	MSB01	04/11/23	1711.60	< 0.00000818	No	< 0.00005726	No

Attachment 4: Lead and Manganese Monitoring Results

Sample, Date and Station Information			Sampler Run Information	Lead		Manganese	
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concentration in Air (mg/m^3)	Exceedance (Yes/No)	Concentration in Air (mg/m^3)	Exceedance (Yes/No)
TSP021523-12	MSB02	04/11/23	1737.28	< 0.00000806	No	< 0.00005641	No
TSP021523-14	MSB113A	04/11/23	1545.26	< 0.00000906	No	< 0.00006342	No
TSP021523-16	MSB01	04/12/23	1760.51	< 0.00000795	No	< 0.00005567	No
TSP021523-18	MSB02	04/12/23	1760.89	< 0.00000795	No	< 0.00005565	No
TSP021523-20	MSB113A	04/12/23	1593.72	< 0.00000878	No	< 0.00006149	No
TSP021523-22	MSB01	04/13/23	1741.47	< 0.00000804	No	< 0.00005627	No
TSP021523-24	MSB02	04/13/23	1778.96	< 0.00000787	No	< 0.00005509	No
TSP021523-26	MSB113A	04/13/23	1562.10	< 0.00000896	No	< 0.00006274	No
TSP021523-28	MSB01	04/13/23[2]	551.25	< 0.0000254	No	< 0.00017778	No
TSP120622-30	MSB02	04/13/23[2]	585.34	< 0.00002392	No	< 0.00016742	No
TSP120622-36	MSB113A	04/13/23[2]	497.26	< 0.00002815	No	< 0.00019708	No
TSP022023-10	MSB01	04/18/23	1742.76	< 0.00000803	No	< 0.00005623	No
TSP022023-12	MSB02	04/18/23	1752.94	< 0.00000799	No	< 0.00005591	No
TSP022023-14	MSB113A	04/18/23	1595.27	< 0.00000878	No	< 0.00006143	No
TSP022023-16	MSB01	04/19/23	1745.91	< 0.00000802	No	< 0.00005613	No
TSP022023-18	MSB02	04/19/23	1762.74	< 0.00000794	No	< 0.0000556	No
TSP022023-20	MSB113A	04/19/23	1582.04	< 0.00000885	No	< 0.00006195	No
TSP030323-01	MSB01	04/20/23	1766.49	< 0.00000793	No	< 0.00005548	No
TSP030323-03	MSB02	04/20/23	1771.76	< 0.0000079	No	< 0.00005531	No
TSP030323-05	MSB113A	04/20/23	1587.18	< 0.00000882	No	< 0.00006174	No
TSP021523-39	MSB01	05/11/23	503.62	< 0.0000278	No	< 0.00019459	No
TSP021523-41	MSB02	05/11/23	522.97	< 0.00002677	No	< 0.00018739	No
TSP021523-43	MSB113A	05/11/23	432.46	< 0.00003237	No	< 0.00022661	No

Notes:

[1]Air sample was not collected on days with rain.

[2]Air sample was taken down during the afternoon after field activities ceased.

[3]Generator malfunction.

Sample locations are shown on Figure 2-1

m^3 = cubic meters

mg/m^3 = milligrams per cubic meter

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

J+ = estimated concentration biased high

< = below detection limit

< = below detection limit

ATTACHMENT 5

TOTAL SUSPENDED PARTICULATES MONITORING RESULTS

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Attachment 5: Total Suspended Particulates Monitoring Results

Sample, Date and Station Information			Sampler Run Information	TSP								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concen-tration in Air (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (ug/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (mg/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level (ug/m^3)	Exceedance (Yes/No)
GES_TSP061322-38	MSB01	7/8/2022	1752.44	0.0180891	0.002305	2.305	0.0056	5.594	5,000	No	500	No
GES_TSP061322-39	MSB02	7/8/2022	1740.72	0.0203939								
GES_TSP061322-40	MSB113A	7/8/2022	1567.65	0.0236828								
GES_TSP061322-41	MSB01	7/12/2022	1764.96	0.0162610	0.0064	6.373	0.0026	2.590	5,000	No	500	No
GES_TSP061322-42	MSB02	7/12/2022	1745.16	0.0226340								
GES_TSP061322-43	MSB113A	7/12/2022	1554.26	0.0188514								
GES_TSP061322-44	MSB01	7/13/2022	1767.79	0.0098461	-0.000592	-0.592	0.0046	4.600	5,000	No	500	No
GES_TSP061322-45	MSB02	7/13/2022	1739.85	0.0092537								
GES_TSP061322-46	MSB113A	7/13/2022	1578.31	0.0144458								
GES_TSP061322-47	MSB01	7/14/2022	1755.31	0.0225031	-0.0008	-0.843	0.0056	5.631	5,000	No	500	No
GES_TSP061322-48	MSB02	7/14/2022	1675.92	0.0216597								
GES_TSP061322-49	MSB113A	7/14/2022	1567.5	0.0281340								
GES_TSP061322-50	MSB01	7/15/2022	1816.52	0.0218550	0.0084	8.438	0.0199	19.915	5,000	No	500	No
GES_TSP061322-51	MSB02	7/15/2022	1792.47	0.0302934								
GES_TSP061322-52	MSB113A	7/15/2022	1601.64	0.0417697								
GES_TSP061322-53	MSB01	7/19/2022	1735.87	0.0288616	0.0048	4.821	-0.0179	-17.859	5,000	No	500	No
GES_TSP061322-54	MSB02	7/19/2022	1730.85	0.0336829								
GES_TSP070522-73	MSB113A	7/19/2022	1645.04	0.0110028 J								
GES_TSP070522-74	MSB01	7/20/2022	1761.31	0.0118662	0.0009	0.927	-0.0028	-2.797	5,000	No	500	No
GES_TSP070522-75	MSB02	7/20/2022	1750.99	0.0127928								
GES_TSP070522-76	MSB113A	7/20/2022	1742.11	0.0090695 J								
GES_TSP070522-78	MSB01	7/21/2022	1808.34	0.0068018	0.0048	4.765	-0.0011	-1.131	5,000	No	500	No
GES_TSP070522-79	MSB02	7/21/2022	1806.85	0.0115671								
GES_TSP070522-80	MSB113A	7/21/2022	1639.99	0.0056708 J								
GES_TSP070522-81	MSB01	7/22/2022	1747.17	0.0186015	0.0125	12.465	-0.0133	-13.257	5,000	No	500	No
GES_TSP070522-82	MSB02	7/22/2022	1757.52	0.0310665								
GES_TSP070522-83	MSB113A	7/22/2022	1627.68	0.005345 J								
GES_TSP070522-84	MSB01	7/26/2022	1771.32	0.0108958	-0.0013	-1.322	-0.0035	-3.488	5,000	No	500	No
GES_TSP070522-85	MSB02	7/26/2022	1754.87	0.0095734								
GES_TSP070522-86	MSB113A	7/26/2022	1647.00	0.0074074								
GES_TSP070522-87	MSB01	7/27/2022	1743.98	0.0115254	0.0015	1.493	-0.0034	-3.375	5,000	No	500	No

Attachment 5: Total Suspended Particulates Monitoring Results

Sample, Date and Station Information			Sampler Run Information	TSP								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concen-tration in Air (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (ug/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (mg/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level (ug/m^3)	Exceedance (Yes/No)
GES_TSP070522-88	MSB02	7/27/2022	1736.02	0.0130183								
GES_TSP070522-89	MSB113A	7/27/2022	1607.22	0.0081507								
GES_TSP071122-91	MSB01	7/28/2022	1795.60	0.0074070	0.0021	2.120	-0.0035	-3.532	5,000	No	500	No
GES_TSP071122-92	MSB02	7/28/2022	1815.93	0.0095268								
GES_TSP071122-93	MSB113A	7/28/2022	1651.72	0.0038747 J+								
GES_TSP071122-94	MSB01	7/29/2022	1767.63	0.0067322	0.0037	3.659	-0.0039	-3.945	5,000	No	500	No
GES_TSP071122-95	MSB02	7/29/2022	1790.03	0.0103909								
GES_TSP071122-96	MSB113A	7/29/2022	1650.33	0.0027873 J+								
GES_TSP071122-97	MSB01	08/02/22	1786.84	0.0169573	0.001	0.703	-0.0073	-7.250	5,000	No	500	No
GES_TSP071122-98	MSB02	08/02/22	1755.31	0.0176607								
GES_TSP071122-99	MSB113A	08/02/22	1637.99	0.009707								
GES_TSP071122-101	MSB01	08/03/22	1777.20	0.0108598	0.018	17.965	0.00013	0.131	5,000	No	500	No
GES_TSP071122-102	MSB02	08/03/22	1734.64	0.0288244								
GES_TSP071122-103	MSB113A	08/03/22	1610.42	0.0109909								
GES_TSP071122-104	MSB01	08/04/22	1767.28	0.0158436	0.010	9.656	-0.0054	-5.387	5,000	No	500	No
GES_TSP071122-105	MSB02	08/04/22	1745.16	0.0254991								
GES_TSP071122-106	MSB113A	08/04/22	1616.17	0.0104568 J								
GES_TSP071122-107	MSB01	08/05/22	1802.32	0.0221381	0.009	8.920	-0.0085	-8.539	5,000	No	500	No
GES_TSP071122-108	MSB02	08/05/22	1790.20	0.031058								
GESTSP072622-145	MSB113A	08/05/22	1500.13	0.0135988								
GESTSP072622-147	MSB01	08/09/22	1788.65	0.0134179	0.009	8.551	-0.0010	-1.011	5,000	No	500	No
GESTSP072622-148	MSB02	08/09/22	1761.55	0.0219693								
GESTSP072622-149	MSB113A	08/09/22	1636.18	0.0124069								
GESTSP072622-150	MSB01	08/10/22	1784.74	0.0141757	0.003	3.039	0.0025	2.526	5,000	No	500	No
GESTSP072622-151	MSB02	08/10/22	1777.57	0.0172145								
GESTSP072622-152	MSB113A	08/10/22	1628.55	0.016702								
GESTSP072622-153	MSB01	08/11/22	1781.62	0.0146496	-0.001	-1.096	-0.0029	-2.933	5,000	No	500	No
GESTSP072622-154	MSB02	08/11/22	1785.54	0.0135533								
GESTSP072622-155	MSB113A	08/11/22	1664.35	0.0117163								

Attachment 5: Total Suspended Particulates Monitoring Results

Sample, Date and Station Information			Sampler Run Information	TSP								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concen-tration in Air (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (ug/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (mg/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level (ug/m^3)	Exceedance (Yes/No)
GESTSP072622-156	MSB01	08/12/22	1746.69	0.0168891	0.006	6.443	0.0212	21.213	5,000	No	500	No
GESTSP072622-157	MSB02	08/12/22	1735.79	0.0233323								
GESTSP072622-158	MSB113A	08/12/22	1585.22	0.038102								
GESTSP072622-159	MSB01	08/16/22	1812.54	0.0263167	0.010	9.794	0.0185	18.510	5,000	No	500	No
GESTSP072622-160	MSB02	08/16/22	1747.40	0.0361108								
GESTSP072622-161	MSB113A	08/16/22	1621.82	0.0448262								
GESTSP080822-163	MSB01	08/17/22	1755.57	0.0213036	0.002	1.720	0.0022	2.176	5,000	No	500	No
GESTSP080822-164	MSB02	08/17/22	1763.42	0.0230234								
GESTSP080822-165	MSB113A	08/17/22	1605.64	0.0234797								
GESTSP080822-166	MSB01	08/18/22	1747.10	0.0170568	0.003	3.056	-0.0071	-7.127	5,000	No	500	No
GESTSP080822-167	MSB02	08/18/22	1740.22	0.0201124								
GESTSP080822-168	MSB113A	08/18/22	1631.46	0.0099298								
GESTSP080822-169	MSB01	08/19/22	1766.07	0.010362	0.019	19.342	-0.0025	-2.478	5,000	No	500	No
GESTSP080822-170	MSB02	08/19/22	1794.36	0.0297042								
GESTSP080822-171	MSB113A	08/19/22	1648.85	0.0078843								
GESTSP080822-172	MSB01	08/23/22	1781.10	0.0152153	0.016	16.216	-0.0043	-4.263	5,000	No	500	No
GESTSP080822-173	MSB02	08/23/22	1759.39	0.0314313								
GESTSP080822-174	MSB113A	08/23/22	1625.25	0.0109522								
GESTSP080822-176	MSB01	08/24/22	1735.43	0.013138	0.001	0.959	0.0021	2.075	5,000	No	500	No
GESTSP080822-177	MSB02	08/24/22	1745.01	0.0140973								
GESTSP080822-178	MSB113A	08/24/22	1564.48	0.0152127								
GESTSP080822-179	MSB01	08/25/22	1759.01	0.0128481	-0.001	-0.848	-0.0028	-2.833	5,000	No	500	No
GESTSP080822-180	MSB02	08/25/22	1783.36	0.0119998								
GESTSP080822-181	MSB113A	08/25/22	1607.64	0.0100147								
GESTSP080822-182	MSB01	08/25/22[2]	552.01	0.0217387	-0.009	-8.750	-0.0061	-6.078	5,000	No	500	No
GESTSP080822-183	MSB02	08/25/22[2]	577.41	0.012989								
GESTSP080822-184	MSB113A	08/25/22[2]	510.83	0.0156608								
GESTSP080822-185	MSB01	08/30/22	1755.42	0.0225017	0.008	8.500	0.0082	8.241	5,000	No	500	No
GESTSP080822-186	MSB02	08/30/22	1761.22	0.0310012								

Attachment 5: Total Suspended Particulates Monitoring Results

Sample, Date and Station Information			Sampler Run Information	TSP								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concen-tration in Air (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (ug/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (mg/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level (ug/m^3)	Exceedance (Yes/No)
GESTSP080822-187	MSB113A	08/30/22	1567.83	0.0307431								
GESTSP080822-189	MSB01	08/31/22	1716.69	0.0155532	0.015	15.187	0.0082	8.153	5,000	No	500	No
GESTSP080822-190	MSB02	08/31/22	1763.17	0.0307401								
GESTSP080822-191	MSB113A	08/31/22	1590.28	0.0237065								
GESTSP080822-192	MSB01	09/01/22	1799.18	0.0161185	0.004	4.276	0.0052	5.210	5,000	No	500	No
GESTSP080822-193	MSB02	09/01/22	1765.21	0.0203942								
GESTSP080822-194	MSB113A	09/01/22	1580.07	0.0213282								
GESTSP080822-195	MSB01	09/01/22[2]	467.94	0.0170962	0.007	7.326	0.0007	0.689	5,000	No	500	No
GESTSP080822-196	MSB02	09/01/22[2]	483.17	0.024422								
GESTSP080822-197	MSB113A	09/01/22[2]	432.94	0.0177854								
GESTSP080822-198	MSB01	09/07/22	1781.31	0.0407565	0.005	5.394	0.0046	4.573	5,000	No	500	No
GESTSP082222-199	MSB02	09/07/22	1776.78	0.0461509								
GESTSP082222-200	MSB113A	09/07/22	1590.59	0.0453291								
GESTSP082222-202	MSB01	09/08/22	1824.13	0.0323442	0.004	3.854	0.0066	6.556	5,000	No	500	No
GESTSP082222-203	MSB02	09/08/22	1806.72	0.0361982								
GESTSP082222-204	MSB113A	09/08/22	1616.98	0.0388997								
GESTSP082222-205	MSB01	09/08/22[2]	510.35	0.0656412	-0.028	-28.256	-0.0138	-13.755	5,000	No	500	No
GESTSP082222-206	MSB02	09/08/22[2]	553.69	0.0373855								
GESTSP082222-207	MSB113A	09/08/22[2]	481.82	0.0518866								
GESTSP082222-208	MSB01	09/13/22	1736.06	0.0326602	0.032	31.865	0.0058	5.849	5,000	No	500	No
GESTSP082222-209	MSB02	09/13/22	1729.56	0.0645251								
GESTSP082222-210	MSB113A	09/13/22	1560.66	0.0385093								
GESTSP082222-212	MSB01	09/14/22	1770.83	0.0164894	0.004	4.374	0.0004	0.377	5,000	No	500	No
GESTSP082222-213	MSB02	09/14/22	1783.03	0.0208634								
GESTSP082222-214	MSB113A	09/14/22	1606.74	0.0168665								
GESTSP082222-215	MSB01	09/15/22	1769.49	0.0161628	0.003	3.408	0.0006	0.584	5,000	No	500	No
GESTSP082222-216	MSB02	09/15/22	1773.07	0.0195706								

Attachment 5: Total Suspended Particulates Monitoring Results

Sample, Date and Station Information			Sampler Run Information	TSP								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concen-tration in Air (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (ug/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (mg/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level (ug/m^3)	Exceedance (Yes/No)
GESTSP090622-235	MSB113A	09/15/22	1606.32	0.0167464								
GESTSP090622-236	MSB01	09/15/22[2]	493.50	0.0190476	0.004	3.986	0.0035	3.460	5,000	No	500	No
GESTSP090622-237	MSB02	09/15/22[2]	534.01	0.0230333								
GESTSP090622-238	MSB113A	09/15/22[2]	457.62	0.0225078								
GESTSP090622-239	MSB01	09/20/22	1730.63	0.0222462	-0.005280	-5.280	0.000812	0.812	5,000	No	500	No
GESTSP090622-240	MSB02	09/20/22	1750.57	0.0169659								
GESTSP090622-241	MSB113A	09/20/22	1552.58	0.0230584								
GESTSP090622-243	MSB01	09/21/22	1843.57	0.0117706 J	0.00242	2.420	0.006481	6.481	5,000	No	500	No
GESTSP090622-244	MSB02	09/21/22	1796.97	0.0141906								
GESTSP090622-245	MSB113A	09/21/22	1605.33	0.0182517								
GESTSP090622-246	MSB01	09/22/22	1799.65	0.0174478	-0.003225	-3.225	0.001690	1.690	5,000	No	500	No
GESTSP090622-247	MSB02	09/22/22	1771.84	0.0142225								
GESTSP090622-248	MSB113A	09/22/22	1562.37	0.0191376								
GESTSP090622-249	MSB01	09/22/22[2]	397.88	0.0178446	0.001092	1.092	-0.004405	-4.405	5,000	No	500	No
GESTSP090622-250	MSB02	09/22/22[2]	517.52	0.0189365								
GESTSP090622-251	MSB113A	09/22/22[2]	446.44	0.0134397								
GESTSP091922-289	MSB01	09/27/22	1779.12	0.0147264	0.0000841	0.08410	0.0021317	2.1317	5,000	No	500	No
GESTSP091922-290	MSB02	09/27/22	1769.02	0.0148105								
GESTSP091922-291	MSB113A	09/27/22	1613.47	0.0168581								
GESTSP091922-292	MSB01	09/28/22	1737.44	0.0179577	0.002240	2.240	0.003971	3.971	5,000	No	500	No
GESTSP091922-293	MSB02	09/28/22	1757.61	0.0201981								
GESTSP091922-294	MSB113A	09/28/22	1586.00	0.0219283								
GESTSP091922-295	MSB01	09/29/22	1743.77	0.0192112	-0.0000366	-0.03660	0.002841	2.8410	5,000	No	500	No
GESTSP091922-296	MSB02	09/29/22	1757.53	0.0191746								
GESTSP091922-297	MSB113A	09/29/22	1582.61	0.0220522								
GESTSP091922-298	MSB01	09/29/22[2]	552.30	0.0563100	-0.033822	-33.822	-0.029669	-29.669	5,000	No	500	No
GESTSP091922-299	MSB02	09/29/22[2]	591.43	0.0224879								

Attachment 5: Total Suspended Particulates Monitoring Results

Sample, Date and Station Information			Sampler Run Information	TSP								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concen-tration in Air (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (ug/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (mg/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level (ug/m^3)	Exceedance (Yes/No)
GESTSP091922-300	MSB113A	09/29/22[2]	510.49	0.0266411								
GESTSP091922-301	MSB01	10/04/22	1787.57	0.0245585	0.000261	0.261	0.004486	4.486	5,000	No	500	No
GESTSP091922-302	MSB02	10/04/22	1780.89	0.0248191								
GESTSP091922-303	MSB113A	10/04/22	1618.19	0.0290448								
GESTSP091922-305	MSB01	10/05/22	1757.08	0.0310743	-0.0075855	-7.58550	-0.0070168	-7.0168	5,000	No	500	No
GESTSP091922-306	MSB02	10/05/22	1766.8	0.0234888								
GESTSP092122-307	MSB113A	10/05/22	1587.86	0.0240575								
GESTSP092122-308	MSB01	10/06/22	1751.65	0.0225502	-0.007436	-7.436	-0.007153	-7.153	5,000	No	500	No
GESTSP092122-309	MSB02	10/06/22	1759.92	0.0151143								
GESTSP092122-310	MSB113A	10/06/22	1584.68	0.0153974								
GESTSP092122-311	MSB01	10/06/22[2]	513.65	0.0165482	-0.0138466	-13.84660	-0.012808	-12.8076	5,000	No	500	No
GESTSP092122-312	MSB02	10/06/22[2]	555.23	0.0027016 J								
GESTSP092122-313	MSB113A	10/06/22[2]	481.21	0.0037406								
GESTSP092122-314	MSB01	10/11/22	1802.49	0.0161443	-0.003705	-3.705	-0.001389	-1.389	5,000	No	500	No
GESTSP092122-315	MSB02	10/11/22	1752.47	0.0124396								
GESTSP092122-316	MSB113A	10/11/22	1612.94	0.0147557								
GESTSP092122-318	MSB01	10/12/22	1731.11	0.02819	-0.0068465	-6.84650	-0.0019413	-1.9413	5,000	No	500	No
GESTSP092122-319	MSB02	10/12/22	1780.4	0.0213435								
GESTSP092122-320	MSB113A	10/12/22	1584.84	0.0262487								
GESTSP092122-321	MSB01	10/13/22	1750.7	0.0112526	0.002684	2.684	0.008636	8.636	5,000	No	500	No
GESTSP092122-322	MSB02	10/13/22	1736.43	0.0139366								
GESTSP092122-323	MSB113A	10/13/22	1568.74	0.0198886								
GESTSP092122-324	MSB01	10/13/22[2]	509.23	0.0060876	0.0003870	0.38700	0.0006861	0.6861	5,000	No	500	No
GESTSP092122-325	MSB02	10/13/22[2]	540.57	0.0064746								
GESTSP092122-326	MSB113A	10/13/22[2]	487.18	0.0067737								
GESTSP092122-327	MSB01	10/18/22	1733.23	0.0315	-0.007700	-7.700	-0.002900	-2.900	5,000	No	500	No
GESTSP092122-328	MSB02	10/18/22	1678.02	0.0238								

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Sample, Date and Station Information			Sampler Run Information	TSP								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concen-tration in Air (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (ug/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (mg/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level (ug/m^3)	Exceedance (Yes/No)
GESTSP092122-329	MSB113A	10/18/22	1574.69	0.0286								
GESTSP092122-331	MSB01	10/19/22	1787.52	0.0505	-0.00780	-7.800	-0.001700	-1.700	5,000	No	500	No
GESTSP092122-332	MSB02	10/19/22	1784.04	0.0427								
GESTSP092122-333	MSB113A	10/19/22	1615.64	0.0488								
GESTSP092122-334	MSB01	10/20/22	1735.15	0.0274	-0.002200	-2.200	-0.001800	-1.800	5,000	No	500	No
GESTSP092122-335	MSB02	10/20/22	1740.50	0.0252								
GESTSP092122-336	MSB113A	10/20/22	1582.32	0.0256								
GESTSP092122-337	MSB01	10/20/22[2]	389.41	0.018	0.000900	0.900	0.005500	5.500	5,000	No	500	No
GESTSP092122-338	MSB02	10/20/22[2]	401.69	0.0189								
GESTSP092122-339	MSB113A	10/20/22[2]	387.63	0.0235								
GESTSP092122-340	MSB01	10/25/22	1765.19	0.0269	-0.0071000	-7.10000	-0.0096000	-9.6000	5,000	No	500	No
GESTSP092122-341	MSB02	10/25/22	1760.71	0.0198								
GESTSP092122-342	MSB113A	10/25/22	1607.80	0.0173								
GESTSP100322-344	MSB01	10/26/22	1753.17	0.031	-0.001800	-1.800	-0.000100	-0.100	5,000	No	500	No
GESTSP100322-345	MSB02	10/26/22	1771.46	0.0292								
GESTSP100322-346	MSB113A	10/26/22	1597.10	0.0309								
GESTSP100322-347	MSB01	10/27/22	1743.85	0.0369	-0.0047000	-4.70000	-0.005700	-5.7000	5,000	No	500	No
GESTSP100322-348	MSB02	10/27/22	1738.29	0.0322								
GESTSP100322-349	MSB113A	10/27/22	1582.60	0.0312								
GESTSP100322-350	MSB01	10/27/22[2]	529.97	0.0304	-0.013500	-13.500	-0.020930	-20.930	5,000	No	500	No
GESTSP100322-351	MSB02	10/27/22[2]	574.70	0.0169								
GESTSP100322-352	MSB113A	10/27/22[2]	506.80	0.00947								
GESTSP100322-356	MSB01	11/01/22	1736.22	0.0285	-0.000100	-0.100	-0.001100	-1.100	5,000	No	500	No
GESTSP100322-355	MSB02	11/01/22	1726.65	0.0284								
GESTSP100322-354	MSB113A	11/01/22	1648.44	0.0274								
GESTSP100322-357	MSB01	11/02/22	1763.47	0.0174	-0.0013000	-1.30000	0.0023000	2.3000	5,000	No	500	No

Attachment 5: Total Suspended Particulates Monitoring Results

Sample, Date and Station Information			Sampler Run Information	TSP								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concen-tration in Air (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (ug/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (mg/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level (ug/m^3)	Exceedance (Yes/No)
GESTSP100322-359	MSB02	11/02/22	1739.84	0.0161								
GESTSP100322-358	MSB113A	11/02/22	1506.65	0.0197								
GESTSP100322-360	MSB01	11/03/22	1721.92	0.0136	-0.002400	-2.400	-0.003850	-3.850	5,000	No	500	No
GESTSP100322-379	MSB02	11/03/22	1727.34	0.0112								
GESTSP100322-380	MSB113A	11/03/22	1549.35	0.00975								
GESTSP100322-381	MSB01	11/03/22[2]	537.38	0.00707 J	-0.0014100	-1.41000	0.000040	0.0400	5,000	No	500	No
GESTSP100322-382	MSB02	11/03/22[2]	565.00	0.005660								
GESTSP100322-383	MSB113A	11/03/22[2]	492.35	0.00711 J								
GESTSP100322-384	MSB01	11/08/22	1716.45	0.0187	0.0043000	4.30	0.0020	2.00	5,000	No	500	No
GESTSP100322-385	MSB02	11/08/22	1716.47	0.023								
GESTSP100322-386	MSB113A	11/08/22	1549.17	0.0207								
GESTSP100322-388	MSB01	11/10/22	1732.65	0.0199	-0.001600	-1.60	0.00320	3.20	5,000	No	500	No
GESTSP100322-389	MSB02	11/10/22	1297.52	0.0183								
GESTSP100322-390	MSB113A	11/10/22	1573.19	0.0231								
GESTSP100322-391	MSB01	11/10/22[2]	462.20	0.0132 J	0.003322	3.322	-0.003900	-3.900	5,000	No	500	No
GESTSP100322-392	MSB02	11/10/22[2]	455.63	0.00988 J								
GESTSP100322-393	MSB113A	11/10/22[2]	449.01	0.0171								
GESTSP100322-395	MSB01	11/15/22	1764.80	0.0198	-0.0027000	-2.70000	-0.0034000	-3.4000	5,000	No	500	No
GESTSP100322-396	MSB02	11/15/22	1733.28	0.0225								
GESTSP101722-397	MSB113A	11/15/22	1563.88	0.0232								
GESTSP101722-398	MSB01	11/16/22	1744.39	0.032	0.006900	6.900	0.004700	4.700	5,000	No	500	No
GESTSP101722-399	MSB02	11/16/22	1744.77	0.0251								
GESTSP101722-400	MSB113A	11/16/22	1574.95	0.0273								
GESTSP101722-401	MSB01	11/17/22	1744.18	0.0256	-0.0010000	-1.00000	-0.002700	-2.7000	5,000	No	500	No
GESTSP101722-402	MSB02	11/17/22	1743.46	0.0246								
GESTSP101722-403	MSB113A	11/17/22	1586.98	0.0229								

Attachment 5: Total Suspended Particulates Monitoring Results

Sample, Date and Station Information			Sampler Run Information	TSP								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concen-tration in Air (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (ug/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (mg/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level (ug/m^3)	Exceedance (Yes/No)
GESTSP101722-404	MSB01	11/17/22[2]	542.45	0.0308	0.0011000	1.10000	0.003200	3.2000	5,000	No	500	No
GESTSP101722-405	MSB02	11/17/22[2]	561.74	0.0319								
GESTSP101722-406	MSB113A	11/17/22[2]	478.77	0.034								
GESTSP101722-408	MSB01	11/22/22	1801.18	0.0211	-0.003100	-3.100	-0.002000	-2.000	5,000	No	500	No
GESTSP101722-409	MSB02	11/22/22	1795.67	0.0242								
GESTSP101722-410	MSB113A	11/22/22	1616.44	0.0231								
GESTSP101722-411	MSB01	11/23/22	1821.48	0.0233	-0.000800	-0.800	-0.003200	-3.200	5,000	No	500	No
GESTSP101722-412	MSB02	11/23/22	1819.42	0.0241								
GESTSP101722-413	MSB113A	11/23/22	1627.35	0.0265								
GESTSP103122-657	MSB01	11/29/22	1644.00	0.0174	0.0036000	3.60000	0.0003000	0.3000	5,000	No	500	No
GESTSP103122-658	MSB02	11/29/22	1690.71	0.021								
GESTSP103122-659	MSB113A	11/29/22	1476.85	0.0177								
GESTSP103122-660	MSB01	11/30/22	1752.66	0.0139	0.005700	5.700	0.003700	3.700	5,000	No	500	No
GESTSP103122-661	MSB02	11/30/22	1749.07	0.0196								
GESTSP103122-662	MSB113A	11/30/22	1571.17	0.0176								
GESTSP103122-663	MSB01	12/01/22	1752.50	0.0210	-0.0067000	-6.70000	-0.000800	-0.8000	5,000	No	500	No
GESTSP103122-664	MSB02	12/01/22	1770.52	0.01430								
GESTSP103122-665	MSB113A	12/01/22	1596.90	0.0202								
GESTSP103122-667	MSB01	12/07/22	1758.18	0.0205	-0.003400	-3.400	0.006800	6.800	5,000	No	500	No
GESTSP103122-668	MSB02	12/07/22	1747.94	0.0171								
GESTSP103122-669	MSB113A	12/7/2022[3]	838.18	0.0273								
GESTSP103122-670	MSB01	12/08/22	1751.31	0.0187	0.0015000	1.50000	-0.003900	-3.9000	5,000	No	500	No
GESTSP103122-671	MSB02	12/08/22	1777.26	0.0202								
GESTSP103122-672	MSB113A	12/08/22	1534.09	0.0148								
GESTSP103122-673	MSB01	12/08/22[2]	458.17	0.0301	-0.0186000	-18.60000	-0.008200	-8.2000	5,000	No	500	No
GESTSP103122-674	MSB02	12/08/22[2]	416.13	0.0115								

Attachment 5: Total Suspended Particulates Monitoring Results

Sample, Date and Station Information			Sampler Run Information	TSP								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concen-tration in Air (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (ug/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (mg/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level (ug/m^3)	Exceedance (Yes/No)
GESTSP103122-675	MSB113A	12/08/22[2]	415.24	0.0219								
GESTSP103122-677	MSB01	12/13/22	1729.17	0.0235	-0.0008000	-0.80000	0.0011	1.1000	5,000	No	500	No
GESTSP103122-678	MSB02	12/13/22	1743.44	0.0227								
GESTSP103122-679	MSB113A	12/13/22	1563.78	0.0246								
GESTSP103122-680	MSB01	12/14/22	1738.32	0.0226	-0.001200	-1.200	-0.001400	-1.400	5,000	No	500	No
GESTSP103122-681	MSB02	12/14/22	1740.21	0.0214								
GESTSP103122-682	MSB113A	12/14/22	1563.35	0.0212								
GESTSP103122-683	MSB01	12/15/22	1756.35	0.0291	0.0029000	2.90000	0.000300	0.3000	5,000	No	500	No
GESTSP103122-684	MSB02	12/15/22	1764.57	0.0262								
GESTSP103122-685	MSB113A	12/15/22	1582.27	0.0288								
GESTSP103122-686	MSB01	12/15/22[2]	557.43	0.0285	0.0058000	5.80000	-0.0076	-7.6000	5,000	No	500	No
GESTSP103122-687	MSB02	12/15/22[2]	520.83	0.0227								
GESTSP103122-688	MSB113A	12/15/22[2]	493.12	0.0361								
TSP112922-04	MSB01	12/20/22	1826.44	0.03	-0.0043000	-4.30000	0.0013000	1.3000	5,000	No	500	No
TSP112922-06	MSB02	12/20/22	1816.34	0.0257								
TSP112922-08	MSB113A	12/20/22	1635.10	0.0313								
TSP112922-10	MSB01	12/21/22	1804.63	0.0326	0.000700	0.700	0.002900	2.900	5,000	No	500	No
TSP112922-12	MSB02	12/21/22	1802.29	0.0319								
TSP112922-14	MSB113A	12/21/22	1628.17	0.0297								
TSP112922-16	MSB01	12/22/22	1601.00	0.035	-0.0011000	-1.10000	0.000400	0.4000	5,000	No	500	No
TSP112922-18	MSB02	12/22/22	1641.66	0.0361								
TSP112922-21	MSB113A	12/22/22	1469.27	0.0346								
TSP120122-02	MSB01	01/24/23	1773.72	0.01	-0.0106000	-10.60000	-0.0101	-10.1000	5,000	No	500	No
TSP120122-04	MSB02	01/24/23	1258.17	0.0206								
TSP120122-06	MSB113A	01/24/23	1603.99	0.0201								
TSP120122-08	MSB01	01/25/23	1659.34	0.0337	-0.003200	-3.200	0.001600	1.600	5,000	No	500	No

Attachment 5: Total Suspended Particulates Monitoring Results

Sample, Date and Station Information			Sampler Run Information	TSP								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concen-tration in Air (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (ug/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (mg/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level (ug/m^3)	Exceedance (Yes/No)
TSP120122-10	MSB02	01/25/23	1754.51	0.0305								
TSP120122-12	MSB113A	01/25/23	1567.40	0.0353								
TSP120122-14	MSB01	01/26/23[3]	622.36	0.0312	0.0051000	5.10000	-0.004500	-4.5000	5,000	No	500	No
TSP120122-16	MSB02	01/26/23[3]	625.69	0.0261								
TSP120122-18	MSB113A	01/26/23[3]	556.91	0.0357								
TSP120122-20	MSB01	01/26/23[2]	479.19	0.0157	-0.0027000	-2.70000	0.0015	1.5000	5,000	No	500	No
TSP120122-22	MSB02	01/26/23[2]	522.27	0.0184								
TSP120122-24	MSB113A	01/26/23[2]	445.08	0.0142								
TSP120122-28	MSB01	01/31/23	1771.37	0.017	0.0033000	3.30000	0.0010	1.0000	5,000	No	500	No
TSP120122-30	MSB02	01/31/23	1764.24	0.0137								
TSP120222-01	MSB113A	01/31/23	1595.92	0.016								
TSP120222-03	MSB01	02/01/23	1758.62	0.0284	-0.005600	-5.600	-0.002700	-2.700	5,000	No	500	No
TSP120222-05	MSB02	02/01/23	1759.17	0.0228								
TSP120222-07	MSB113A	02/01/23	1588.82	0.0257								
TSP120222-09	MSB01	02/02/23	1754.28	0.0405	0.0051000	5.10000	-0.000700	-0.7000	5,000	No	500	No
TSP120222-11	MSB02	02/02/23	1760.50	0.0354								
TSP120222-13	MSB113A	02/02/23	1579.37	0.0412								
TSP120222-16	MSB01	02/02/23[2]	525.25	0.0367	-0.0018000	-1.80000	-0.0059	-5.9000	5,000	No	500	No
TSP120522-01	MSB02	02/02/23[2]	544.93	0.0349								
TSP120522-03	MSB113A	02/02/23[2]	473.26	0.0308								
TSP120522-07	MSB01	02/07/23	1735.26	0.0239	-0.0046000	-4.60000	0.0011	1.1000	5,000	No	500	No
TSP120522-09	MSB02	02/07/23	1734.76	0.0193								
TSP120522-11	MSB113A	02/07/23	1574.14	0.025								
TSP120522-13	MSB01	02/08/23	1758.16	0.0263	0.004800	4.800	-0.000300	-0.300	5,000	No	500	No
TSP120522-15	MSB02	02/08/23	1775.14	0.0215								
TSP120522-17	MSB113A	02/08/23	1591.06	0.0266								

Attachment 5: Total Suspended Particulates Monitoring Results

Sample, Date and Station Information			Sampler Run Information	TSP								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concen-tration in Air (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (ug/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (mg/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level (ug/m^3)	Exceedance (Yes/No)
TSP120522-19	MSB01	02/09/23	1752.81	0.0285	0.0019000	1.90000	-0.002600	-2.6000	5,000	No	500	No
TSP120522-21	MSB02	02/09/23	1757.20	0.0266								
TSP120522-23	MSB113A	02/09/23[3]	979.54	0.0311								
TSP120522-25	MSB01	02/09/23[2]	525.02	0.0314	0.0015000	1.50000	0.0116	11.6000	5,000	No	500	No
TSP120522-27	MSB02	02/09/23[2]	564.49	0.0299								
TSP120522-29	MSB113A	02/09/23[2]	464.02	0.0198								
TSP120622-03	MSB01	02/14/23	1743.23	0.0458	0.0119000	11.90000	-0.0109	-10.9000	5,000	No	500	No
TSP120622-05	MSB02	02/14/23	1750.89	0.0577								
TSP120622-07	MSB113A	02/14/23	1528.22	0.0349								
TSP120622-09	MSB01	02/15/23	1750.86	0.0136	0.006100	6.100	-0.001700	-1.700	5,000	No	500	No
TSP120722-01	MSB02	02/15/23	1749.13	0.0197								
TSP120722-03	MSB113A	02/15/23	1584.60	0.0119								
TSP120722-05	MSB01	02/16/23	1767.35	0.0169	-0.0007000	-0.70000	0.001300	1.3000	5,000	No	500	No
TSP120722-07	MSB02	02/16/23	1755.68	0.0162								
TSP120722-09	MSB113A	02/16/23	1580.53	0.0182								
TSP120722-11	MSB01	02/16/23[2]	498.18	0.0231	-0.0021000	-2.10000	-0.0068	-6.8000	5,000	No	500	No
TSP120722-17	MSB02	02/16/23[2]	542.78	0.021								
TSP120722-19	MSB113A	02/16/23[2]	448.73	0.0163								
TSP011823-25	MSB01	02/21/23	1776.75	0.0291	0.0003000	0.30000	0.0023	2.3000	5,000	No	500	No
TSP011823-27	MSB02	02/21/23	1738.65	0.0294								
TSP011823-29	MSB113A	02/21/23	1574.75	0.0314								
TSP011823-31	MSB01	02/22/23	1740.00	0.0545	0.016200	16.200	0.016100	16.100	5,000	No	500	No
TSP011823-33	MSB02	02/22/23	1767.90	0.0707								
TSP011823-35	MSB113A	02/22/23	861.74[3]	0.0706								
TSP011823-37	MSB01	02/23/23	1738.59	0.0154	0.0004000	0.40000	0.000300	0.3000	5,000	No	500	No
TSP011823-39	MSB02	02/23/23	1742.66	0.0158								

Attachment 5: Total Suspended Particulates Monitoring Results

Sample, Date and Station Information			Sampler Run Information	TSP								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concen-tration in Air (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (ug/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (mg/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level (ug/m^3)	Exceedance (Yes/No)
TSP011823-41	MSB113A	02/23/23	1558.68	0.0157								
TSP012923-52	MSB01	02/23/23[2]	473.67	0.0222	-0.0093000	-9.30000	0.0016	1.6000	5,000	No	500	No
TSP012923-54	MSB02	02/23/23[2]	471.45	0.0129								
TSP012923-56	MSB113A	02/23/23[2]	441.83	0.0238								
TSP020923-08	MSB01	04/05/23	1692.20	0.0135	0.0002000	0.20000	0.0037	3.7000	5,000	No	500	No
TSP020923-10	MSB02	04/05/23	1684.64	0.0137								
TSP020923-12	MSB113A	04/05/23	1542.19	0.0172								
TSP020923-14	MSB01	04/06/23	1759.77	0.0162	0.000400	0.400	-0.002900	-2.900	5,000	No	500	No
TSP020923-16	MSB02	04/06/23	1493.84	0.0166								
TSP020923-18	MSB113A	04/06/23	1606.61	0.0133								
TSP020923-20	MSB01	04/06/23[2]	498.29	0.0175	-0.0054000	-5.40000	-0.001700	-1.7000	5,000	No	500	No
TSP020923-22	MSB02	04/06/23[2]	386.93	0.0121								
TSP020923-24	MSB113A	04/06/23[2]	443.37	0.0158								
TSP021523-10	MSB01	04/11/23	1711.60	0.0158	0.0074000	7.40000	-0.0018	-1.8000	5,000	No	500	No
TSP021523-12	MSB02	04/11/23	1737.28	0.0232								
TSP021523-14	MSB113A	04/11/23	1545.26	0.014								
TSP021523-16	MSB01	04/12/23	1760.51	0.0216	0.0054000	5.40000	0.0063	6.3000	5,000	No	500	No
TSP021523-18	MSB02	04/12/23	1760.89	0.027								
TSP021523-20	MSB113A	04/12/23	1593.72	0.0279								
TSP021523-22	MSB01	04/13/23	1741.47	0.0229	0.002600	2.600	0.003300	3.300	5,000	No	500	No
TSP021523-24	MSB02	04/13/23	1778.96	0.0255								
TSP021523-26	MSB113A	04/13/23	1562.10	0.0262								
TSP021523-28	MSB01	04/13/23[2]	551.25	0.0216	-0.0035000	-3.50000	0.004700	4.7000	5,000	No	500	No
TSP120622-30	MSB02	04/13/23[2]	585.34	0.0251								
TSP120622-36	MSB113A	04/13/23[2]	497.26	0.0169								
TSP022023-10	MSB01	04/18/23	1742.76	0.0164	-0.0007000	-0.70000	-0.0040	-4.0000	5,000	No	500	No

Attachment 5: Total Suspended Particulates Monitoring Results

Sample, Date and Station Information			Sampler Run Information	TSP								
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concen-tration in Air (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (mg/m^3)	TSP Perimeter Concentration (Downwind - Upwind) (ug/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (mg/m^3)	TSP MSB113A Concentration (Downwind - Upwind) (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level (ug/m^3)	Exceedance (Yes/No)
TSP022023-12	MSB02	04/18/23	1752.94	0.0157								
TSP022023-14	MSB113A	04/18/23	1595.27	0.0124								
TSP022023-16	MSB01	04/19/23	1745.91	0.0158	0.000200	0.200	-0.004300	-4.300	5,000	No	500	No
TSP022023-18	MSB02	04/19/23	1762.74	0.016								
TSP022023-20	MSB113A	04/19/23	1582.04	0.0115								
TSP030323-01	MSB01	04/20/23	1766.49	0.0203	-0.0059000	-5.90000	-0.006000	-6.0000	5,000	No	500	No
TSP030323-03	MSB02	04/20/23	1771.76	0.0144								
TSP030323-05	MSB113A	04/20/23	1587.18	0.0143								
TSP021523-39	MSB01	05/11/23	503.62	0.049	-0.0245000	-24.50000	-0.012200	-12.2000	5,000	No	500	No
TSP021523-41	MSB02	05/11/23	522.97	0.0245								
TSP021523-43	MSB113A	05/11/23	432.46	0.0368								

Notes:

[1]Air sample was not collected on days with rain or when contaminated soil was not disturbed.

[2]Air sample was taken down during the afternoon after field activities ceased.

[3]Generator malfunction.

Sample locations are shown on Figure 2-1

HPNS = Hunters Point Naval Shipyard

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

J+ = estimated concentration biased high

m^3 = cubic meters

mg/m^3 = milligrams per cubic meter

ATTACHMENT 6
RADIONUCLIDES OF CONCERN AIR SAMPLING RESULTS

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Attachment 6: Radionuclides of Concern Air Sampling Results

Date	Sample Location	Duration of Run (min)	Cesium-137		Plutonium-239/240		Radium-226		Strontium-90		Cobalt-60		Exceedance (Yes/No)
Action Level			4.00E-11		4.00E-15		1.80E-13		1.20E-12		1.00E-11		
Units			µCi/mL		µCi/mL		µCi/mL		µCi/mL		µCi/mL		
7/7/22 -7/8/22	1	1335	9.14E-15	U	1.16E-14	U	3.21E-15	UJ	7.43E-15	J	3.37E-14	U	No
	2	1443	2.17E-14	U	1.58E-14	U	2.93E-15	UJ	1.05E-14	J	2.58E-14	U	No
	113A	1362	8.82E-15	U	1.19E-14	U	3.28E-15	UJ	1.05E-14	UJ	2.41E-14	U	No
7/11/22-7/15/22	1	5803	1.97E-15	U	2.4E-15	U	7.51E-16	UJ	3.9E-15	J	5.81E-15	U	No
	2	5789	2.41E-15	U	3.14E-15	U	7.71E-16	UJ	2.37E-15	J	5.53E-15	U	No
	113A	5791	2.66E-15	U	3.05E-15	U	9.18E-16	UJ	3.35E-15	J	5.44E-15	U	No
7/18/22-7/22/22	1	5966	4.82E-15	U	4.71E-15	U	6.57E-16	UJ	3.03E-15	J	5.59E-15	U	No
	2	5944	2.04E-15	U	2.31E-15	U	7.33E-16	UJ	1.26E-15	U	6.28E-15	U	No
	113A	5954	2.57E-15	U	2.87E-15	U	8.37E-16	UJ	1.15E-15	U	6.02E-15	U	No
7/25/22-7/29/22	1	5988	2.75E-15	U	2.94E-15	U	1.04E-15	UJ	2.47E-15	U	5.95E-15	U	No
	1*	5987	1.94E-15	U	2.8E-15	U	5.65E-16	UJ	2.98E-15	U	7.63E-15	U	No
	2	5945	2.36E-15	U	2.31E-15	U	7.47E-16	UJ	3.46E-15		5.71E-15	UJ	No
	113A	5965	2.49E-15	U	2.47E-15	U	7.49E-16	UJ	3.4E-15	U	5.82E-15	U	No
8/1/22-8/5/22	1	5962	4.8E-15	U	5.16E-15	U	4.6E-16	UJ	1.3E-15		1.32E-14	U	No
	2	5925	2.54E-15	U	2.05E-15	U	6.54E-16	UJ	1.74E-15		5.71E-15	U	No
	113A	5942	2.57E-15	U	3.06E-15	U	7.79E-16	UJ	1.84E-15		6.17E-15	U	No
8/8/22-8/12/22	1	5988	2.05E-15	U	2.58E-15	UJ	5.93E-16	UJ	1.07E-15	UJ	7.65E-15	U	No
	2	5945	2.17E-15	U	2.47E-15	UJ	8.48E-16	UJ	1.03E-15	UJ	5.97E-15	U	No
	113A	5976	2.72E-15	U	3.18E-15	UJ	4.01E-16	UJ	1.15E-15	UJ	5.47E-15	U	No
8/15/22-8/19/22	1	6002	2.16E-15	U	2.87E-15	U	5.92E-16	UJ	1.01E-15	UJ	5.61E-15	U	No
	2	5967	2.6E-15	U	2.34E-15	U	6.19E-16	UJ	9.58E-16	UJ	5.76E-15	U	No
	113A	5971	2.45E-15	U	2.82E-15	U	4.9E-16	UJ	9.74E-16	UJ	5.84E-15	U	No
8/22/22-8/25/22	1	4992	4.68E-15	U	6.06E-15	U	6.54E-16	U	2.49E-15	U	9.06E-15	U	No
	2	4999	3.25E-15	U	3.11E-15	U	5.12E-16	U	9.3E-15	J	1.07E-14	J	No
	2*	4999	2.43E-15	U	2.77E-15	U	7.22E-16	U	2.65E-15	U	1.25E-14	UJ	No
	113A	5002	2.87E-15	U	3.55E-15	U	8.04E-16	U	2.47E-15	U	6.36E-15	U	No
8/29/22-9/1/22	1	4932	2.35E-15	U	3.24E-15	U	4.39E-16	U	2.82E-15	U	5.94E-15	U	No
	2	4944	3.24E-15	U	3.73E-15	U	6.33E-16	U	2.74E-15	U	1.22E-14	U	No
	113A	4949	5.53E-15	U	5.68E-15	U	5.02E-16	U	2.16E-14	J	6.42E-15	U	No
9/5/22-9/8/22	1	3535	3.86E-15	U	4.1E-15	U	3.81E-16	U	2.51E-15	J	2.32E-14	U	No
	2	3562	4.23E-15	U	5.01E-15	U	5.16E-16	U	1.67E-15	U	1.86E-14	U	No
	113A	3558	3.4E-15	U	4.74E-15	U	5.87E-16	U	3.86E-15	J	1.94E-14	U	No
9/12/22-9/15/22	1	4967	2.89E-15	U	3.35E-15	U	1.87E-16	U	1.77E-15		1.25E-14	U	No
	2	4995	5.7E-15	U	6.32E-15	U	1.55E-16	U	2.22E-15		1.21E-14	U	No
	113A	4972	5.67E-15	U	4.84E-15	U	3.03E-16	U	1.71E-15		1.3E-14	U	No
8/22/22-8/25/22	1	4992	4.68E-15	U	6.54E-16	U	2.49E-15	U	9.06E-15	U	6.06E-15	U	No
	2	4999	3.25E-15	U	5.12E-16	U	9.3E-15	J	1.07E-14	J	3.11E-15	U	No
	2*	4999	2.43E-15	U	7.22E-16	U	2.65E-15	U	1.25E-14	UJ	2.77E-15	U	No
	113A	5002	2.87E-15	U	8.04E-16	U	2.47E-15	U	6.36E-15	U	3.55E-15	U	No

Attachment 6: Radionuclides of Concern Air Sampling Results

Date	Sample Location	Duration of Run (min)	Cesium-137		Plutonium-239/240		Radium-226		Strontium-90		Cobalt-60		Exceedance (Yes/No)
Action Level			4.00E-11		4.00E-15		1.80E-13		1.20E-12		1.00E-11		
Units			µCi/mL		µCi/mL		µCi/mL		µCi/mL		µCi/mL		
8/29/22-9/1/22	1	4932	2.35E-15	U	4.39E-16	U	2.82E-15	U	5.94E-15	U	3.24E-15	U	No
	2	4944	3.24E-15	U	6.33E-16	U	2.74E-15	U	1.22E-14	U	3.73E-15	U	No
	113A	4949	5.53E-15	U	5.02E-16	U	2.16E-14	J	6.42E-15	U	5.68E-15	U	No
9/6/22-9/8/22	1	3535	3.86E-15	U	3.81E-16	UJ	2.51E-15	J	2.32E-14	U	4.1E-15	U	No
	2	3562	4.23E-15	U	5.16E-16	UJ	1.67E-15	U	1.86E-14	U	5.01E-15	U	No
	113A	3558	3.4E-15	U	5.87E-16	UJ	3.86E-15	J	1.94E-14	U	4.74E-15	U	No
9/12/22-9/15/22	1	4967	2.89E-15	U	1.87E-16	U	1.77E-15		1.25E-14	U	3.35E-15	U	No
	2	4995	5.7E-15	U	1.55E-16	U	2.22E-15		1.21E-14	U	6.32E-15	U	No
	113A	4972	5.67E-15	U	3.03E-16	UJ	1.71E-15		1.3E-14	U	4.84E-15	U	No
9/19/22-9/22/22	1	4943	2.43E-15	U	3.96E-16	U	3.81E-15		1.64E-14	U	3.68E-15	U	No
	2	4965	5.5E-15	U	3.23E-16	U	2.79E-15		1.37E-14	U	5.89E-15	U	No
	113A	4956	2.75E-15	U	3.46E-16	U	4.13E-15	J	1.28E-14	U	3.16E-15	U	No
	113A*	4955	2.74E-15	U	3.45E-16	U	6.6E-15	J	1.3E-14	U	3.08E-15	U	No
9/26/22-9/29/22	1	4980	2.28E-15	U	3.09E-16	UJ	3.67E-15		1.77E-14	U	2.95E-15	U	No
	2	4998	2.18E-15	U	3.63E-16	UJ	4.07E-15		1.41E-14	U	3.06E-15	U	No
	113A	4985	4.93E-15	U	3.91E-16	UJ	5.53E-15		1.39E-14	U	6.46E-15	U	No
10/03/22-10/06/22	1	4976	4.77E-15	U	3.74E-16	UJ	2.33E-15	U	1.85E-14	U	6.46E-15	U	No
	2	5004	3.18E-15	U	4.92E-16	UJ	5.33E-15	J	1.42E-14	U	3.26E-15	U	No
	113A	4990	2.74E-15	U	2.75E-16	UJ	2.21E-15	U	1.5E-14	U	3.13E-15	U	No
10/10/22-10/13/22	1	4731	3.23E-15	U	2.12E-16	UJ	3.15E-15	U	1.85E-14	UJ	3.78E-15	U	No
	2	4741	2.64E-15	U	3.67E-16	UJ	2.9E-15	U	1.49E-14	U	3.76E-15	U	No
	113A	4736	3.5E-15	U	3.84E-16	UJ	5.44E-15	J	1.49E-14	U	3.56E-15	U	No
10/17/22-10/20/22	1	4870	5.18E-15	U	4.4E-16	UJ	2.59E-15	U	1.53E-14	U	4.64E-15	U	No
	1*	4870	2.87E-15	U	2.82E-16	UJ	2.63E-15	U	1.61E-14		3.8E-15	U	No
	2	4861	3.16E-15	U	4.04E-16	UJ	2.64E-15	U	1.41E-14	U	3.37E-15	U	No
	113A	4891	3.15E-15	U	4.64E-16	UJ	2.9E-15	U	1.3E-14	U	3.31E-15	U	No
10/24/22-10/27/22	1	4985	2.39E-15	U	4.33E-16	UJ	2E-15	U	1.2E-14	U	2.7E-15	U	No
	2	5016	2.51E-15	U	2.57E-16	UJ	2.23E-15	U	1.23E-14	U	2.46E-15	U	No
	113A	5006	2.9E-15	U	2.64E-16	UJ	2.32E-15	U	1.33E-14	U	3.05E-15	U	No
10/31/22-11/03/22	1	4991	2.84E-15	U	2.64E-16	UJ	1.8E-15	U	1.79E-14	U	3.87E-15	U	No
	2	5006	3.15E-15	U	5.09E-16	UJ	2.83E-15	U	1.28E-14	U	3.09E-15	U	No
	113A	4991	2.18E-15	U	3.55E-16	UJ	2.9E-15	U	1.43E-14	U	2.38E-15	U	No
11/07/22-11/10/22	1	4928	3.3E-15	U	4.68E-16	UJ	2.57E-15	U	1.8E-14	U	5.07E-15	U	No
	2	4927	2.5E-15	U	3.96E-16	UJ	2.61E-15	U	1.4E-14	U	2.65E-15	U	No
	113A	4952	2.54E-15	U	3.75E-16	UJ	2.86E-15	U	1.35E-14	U	2.77E-15	U	No
11/14/22-11/17/22	1	4965	2.23E-15	U	3.73E-16	UJ	3.72E-15		1.37E-14	U	3.26E-15	U	No
	2	4980	2.4E-15	U	4.3E-16	UJ	2.83E-15	U	1.28E-14	U	2.62E-15	U	No
	2*	4980	2.69E-15	U	2.8E-16	UJ	2.82E-15	U	1.27E-14	U	2.75E-15	U	No
	113A	4979	2.5E-15	U	2.27E-16	UJ	3.14E-15	U	1.42E-14	U	3.22E-15	U	No

Attachment 6: Radionuclides of Concern Air Sampling Results

Date	Sample Location	Duration of Run (min)	Cesium-137		Plutonium-239/240		Radium-226		Strontium-90		Cobalt-60		Exceedance (Yes/No)
Action Level			4.00E-11		4.00E-15		1.80E-13		1.20E-12		1.00E-11		
Units			µCi/mL		µCi/mL		µCi/mL		µCi/mL		µCi/mL		
11/21/22-11/23/22	1	3185	4.18E-15	U	4.42E-16	UJ	4.37E-15	U	2E-14	U	4.71E-15	U	No
	2	3215	3.53E-15	U	5.43E-16	UJ	4.23E-15	U	2.46E-14	U	4.58E-15	U	No
	113A	3175	4.83E-15	U	5.81E-16	UJ	5.58E-15		2.17E-14	U	5.43E-15	U	No
11/28/22-12/01/22	1	4239	3.72E-15	U	2.26E-16	UJ	2.71E-15	U	2.16E-14	U	3.86E-15	U	No
	2	4290	3.88E-15	U	4.04E-16	UJ	3.56E-15	U	1.52E-14	U	3.67E-15	U	No
	113A	4225	3E-15	U	4.16E-16	UJ	3.87E-15	U	1.61E-14	U	3.31E-15	U	No
12/06/22-12/08/22	1	3409	4.22E-15	U	7.34E-16	UJ	3.5E-15	U	2.7E-14		4.2E-15	U	No
	2	3420	3.13E-15	U	5.55E-16	UJ	4.02E-15	U	1.99E-14	UJ	4.52E-15	U	No
	113A	3429	4.44E-15	U	1.31E-15	UJ	3.69E-15	U	2.12E-14		5.41E-15	U	No
12/12/22-12/15/22	1	4969	5.2E-15	U	4.25E-16	UJ	4.32E-15	J	1.34E-14	U	4.65E-15	U	No
	2	4983	2.52E-15	U	3.16E-16	UJ	2.83E-15	J	1.27E-14	U	2.9E-15	U	No
	113A	4992	2.37E-15	U	2.86E-16	UJ	5.4E-15	J	1.19E-14	U	2.43E-15	U	No
12/19/22-12/22/22	1	4471	3.41E-15	U	4.11E-16	U	6.69E-15	J	1.36E-14	U	4.51E-15	U	No
	2	4490	2.68E-15	U	4.35E-16	U	3.5E-15	J	1.42E-14	U	3.05E-15	U	No
	113A	4490	2.8E-15	U	4.48E-16	U	2.66E-15	U	1.36E-14	U	3.49E-15	U	No
	113A*	4490	2.85E-15	U	5.76E-16	U	3.38E-15	J	1.55E-14	U	3.21E-15	U	No
1/23/23-1/26/23	1	4880	2.92E-15	U	2.9E-16	U	5.26E-14	U	1.38E-14	U	3.81E-15	U	No
	2	4912	2.7E-15	U	2.96E-16	U	3.32E-14	U	1.34E-14	U	2.74E-15	U	No
	113A	4891	2.95E-15	U	3.5E-16	U	5.4E-14	U	1.26E-14	U	3.59E-15	U	No
1/30/23-2/02/23	1	4803	2.4E-15	U	2.93E-16	UJ	3.07E-14	UJ	1.33E-14	U	2.11E-15		No
	2	4769	2.65E-15	U	1.81E-16	UJ	3.24E-14	UJ	1.26E-14	U	3.2E-15	U	No
	113A	4826	4.99E-15	U	3.17E-16	UJ	1.09E-13	UJ	1.37E-14	U	6.2E-15	U	No
2/06/23-2/09/23	1	4769	2.34E-15	U	2.68E-16	UJ	3.29E-14	UJ	1.53E-14	U	3.49E-15	U	No
	2	4772	3.26E-15	U	1.18E-15	J	5.35E-14	UJ	1.39E-14	U	3.74E-15		No
	113A	4793	3.37E-15	U	3.37E-16	UJ	3.33E-14	UJ	1.62E-14	U	3.11E-15	U	No
2/13/23-2/16/23	1	4686	5.98E-15	U	2.39E-16	UJ	1.1E-13	UJ	1.41E-14	U	5.59E-15	U	No
	2	4703	3.22E-15	U	3.58E-16	UJ	5.08E-14	UJ	1.53E-14	U	4.45E-15	U	No
	113A	4689	3.15E-15	U	4.05E-16	UJ	5.53E-14	UJ	1.63E-14	U	3.2E-15	U	No
2/20/23-2/23/23	1	4738	5.62E-15	U	1.79E-16	U	1.13E-13		1.39E-14	U	7.24E-15	U	No
	2	4726	2.73E-15	U	3.1E-16	U	3.26E-14	U	1.36E-14	U	2.76E-15	U	No
	113A	4762	3.31E-15	U	4E-16	U	4.49E-14	U	1.51E-14	U	3.4E-15	U	No
5/11/23-5/11/23	1	434	-1.4E-14	U	2.43E-15	UJ	-1.1E-13	J	1.42E-13	U	-2.1E-14	U	No
	2	423	1.2E-14	J	-9.7E-16	J	-3.6E-13	J	1.47E-13	U	3.95E-14	U	No
	113A	432	-1.8E-14	U	3.93E-15	J	6.41E-13	UJ	7.91E-14	J	1.19E-14	J	NA

Notes:

* = duplicate sample

J = Activity is an approximate value.

min = minutes

U = Activity is less than the MDC.

µCi/mL=microcuries per milliliter

NA = Not Applicable: The laboratory confirmed the MDA exceedance was due to a false positive. See the AMR text fo

ATTACHMENT 7
LABORATORY REPORTS

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Laboratory Analysis Report

Job ID : 23052136

10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

Client Project Name :
J310000900 / Hunters Point Shipyard, Parcel B Removal Site Evaluation

Report To :	Client Name:	GES - ASRC Industrial	Total Number of Pages:	6
	Attn:	[redacted]	P.O.#. :	J310000900-005
	Client Address:	1501 West Fountainhead Parkway, Ste. #550	Date Received :	05/18/2023 09:40
	City, State, Zip:	Tempe, Arizona, 85282	Sample Collected By :	

A&B Labs has analyzed the following samples...

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
FBB-051123	5/11/2023 8:00	Cassette	23052136.01
MSB01-051123	5/11/2023 14:16	Cassette	23052136.02
MSB02-051123	5/11/2023 14:22	Cassette	23052136.03
MSB113A-051123	5/11/2023 14:08	Cassette	23052136.04

[redacted]

Released By: [redacted]

Title: Vice President Operations

Analyst: [redacted]

ANALYSIS OF AIRBORNE FIBER SAMPLING
SAMPLING PERFORMED BY CLIENT
ANALYSIS CONDUCTED BY A & B ENVIRONMENTAL SERVICES, INC.
AIHA Lab Accreditation # 101470 TDH PLM/PCM Lab License # 300080

Date 5/25/2023

Job ID : 23052136
Analytical Method: NIOSH 7400-I3-June2019

Client: GES - ASRC Industrial Project: J310000900 / Hunters Point Shipyard, Parcel B Removal Site Evaluation Attn: [redacted]

A&B Sample ID	Client Sample ID	Collected Date	Area/Person	Flow Rate L/m	Time On	Time Off	Total Time (min)	Volume (Liters)	Total Fields	Total Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
23052136.01	FBB-051123	05/11/2023						0	100	8	10.191	0.000		05/25/23	[redacted]
23052136.02	MSB01-051123	05/11/2023	Area	3.2			414	1324.	100	11.5	14.650	0.004		05/25/23	
23052136.03	MSB02-051123	05/11/2023	Area	3.4			433	1472.	100	23.5	29.936	0.008		05/25/23	
23052136.04	MSB113A-051123	05/11/2023	Area	3.3			393	1296.	100	26	33.121	0.010		05/25/23	

Detection limit of this method is estimated at 7 f/mm2 (5.5 fibers per 100 fields)

Sr Value

(Fiber Range*; Sr Value): (5-20; Sr = 0.06), (20-50; Sr = 0.05), (50-100; Sr = 0.04), (>100; Sr = 0.04)

*Fiber Range = # of Fibers / 100 Counts

OUTR = Overload,Unable To Read

Intralaboratory Sr 5-20:0.06 20-50:0.04 50-100:0.02

Sample Condition Checklist

A&B JobID : **23052136**	Date Received : **05/18/2023**	Time Received : **9:40AM**
Client Name : **GES - ASRC Industrial**		
Temperature : **23.9°C**	Sample pH : **NA**	
Thermometer ID : **IR5**	pH Paper ID : **NA**	
Perservative :		

	Check Points	Yes	No	N/A
1.	**Cooler Seal present and signed.**	X		
2.	**Sample(s) in a cooler.**		X	
3.	**If yes, ice in cooler.**			X
4.	**Sample(s) received with chain-of-custody.**	X		
5.	**C-O-C signed and dated.**	X		
6.	**Sample(s) received with signed sample custody seal.**		X	
7.	**Sample containers arrived intact. (If No comment)**	X		
8.	**Matrix:** Water ☐ Soil ☐ Liquid ☐ Sludge ☐ Solid ☐ Cassette ☑ Tube ☐ Bulk ☐ Badge ☐ Food ☐ Other ☐			
9.	**Samples were received in appropriate container(s)**	X		
10.	**Sample(s) were received with Proper preservative**			X
11.	**All samples were tagged or labeled.**	X		
12.	**Sample ID labels match C-O-C ID's.**	X		
13.	**Bottle count on C-O-C matches bottles found.**	X		
14.	**Sample volume is sufficient for analyses requested.**	X		
15.	**Samples were received with in the hold time.**	X		
16.	**VOA vials completely filled.**			X
17.	**Sample accepted.**	X		
18.	**Has client been contacted about sub-out**			X

Comments : Include actions taken to resolve discrepancies/problem:

No cooler was received, however samples are received in a box with a custody seal. ~[redacted] 5/1823

Received by : [redacted]

Check in by/date : [redacted] / 05/18/2023

ab-s005-0321

Job ID:23052136

05/18/2023 GES - ASRC Industrial ACH

CHAIN-OF-CUSTODY RECORD

Gilbane Federal
[redacted]
1501 W Fountainhead Parkway, Suite 550, Tempe, Arizona 85282
[redacted]

COC ID # [redacted]051723ASBB

GES

Project Name: Hunters Point Shipyard, Parcel B Removal Site Evaluation	Laboratory: A&B Labs	Event: Parcel B Asbestos
Project Number: J310000900	POC: [redacted]	
WBS Code: J310000900	Ship to: 10100 East Fwy Ste. 100 Houston TX 77029	

Comments: Please conslidate all COC pages that share the same COC ID into one SDG.

Equipment:

Code	Matrix
A	Air
AQ	Air Quality Control Matrix

Code	Container/Preservative
1	Filter/No Preservatives

Page 1 of 1

Event: Parcel B Asbestos

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: Asbestos	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
						1						
1	FBB-051123	AQ	05/11/2023	0800	[redacted]	x	FBB	FB1	0.00	0.00	1	
2	MSB01-051123	A	05/11/2023	1416		x	MSB01	N1	0.00	0.00	1	
3	MSB02-051123	A	05/11/2023	1422		x	MSB02	N1	0.00	0.00	1	
4	MSB113A-051123	A	05/11/2023	1408		x	MSB113A	N1	0.00	0.00	1	
5												
6												

01B 02B 03B 04B

[redacted] 5/17/23

Turnaround Time: 7 days

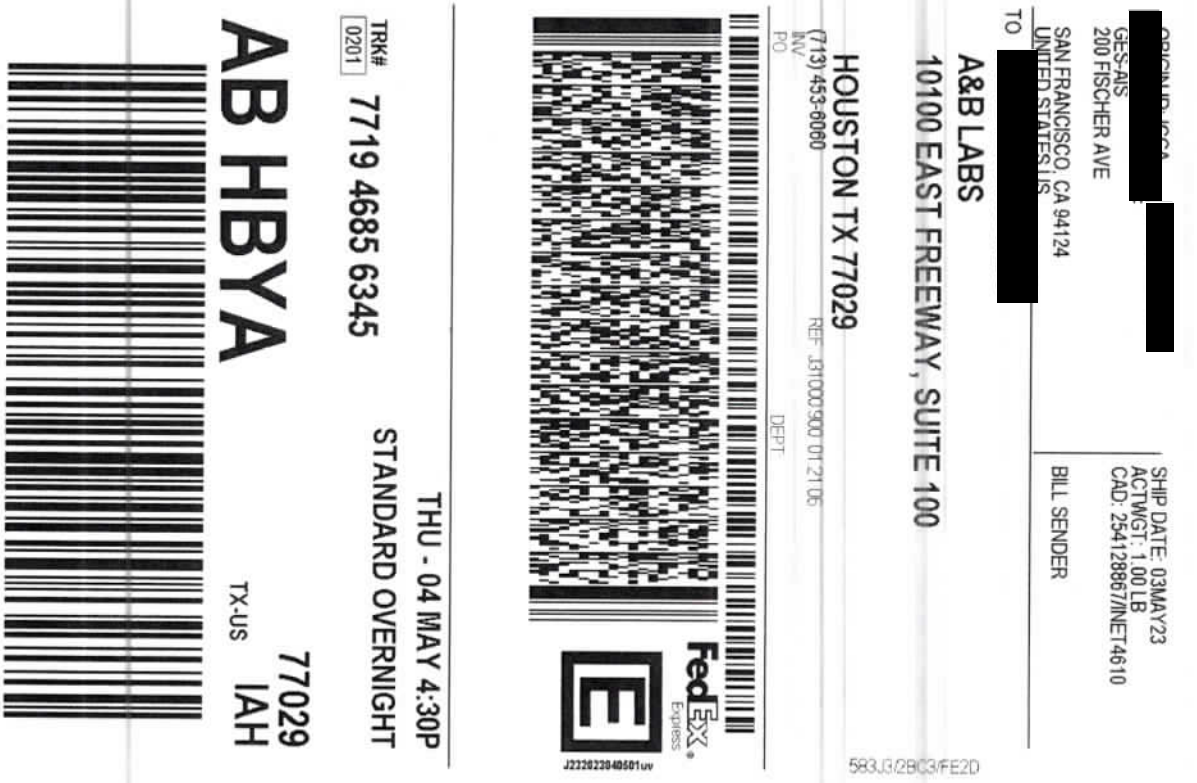
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Shipping Date / Carrier / Airbill Number
[redacted]	5/17/23	[redacted]	FedEx	5/17/23 1400		Shipping Date: 05/17/23 / FEDEX 7719 8424 1174
FedEx	5/18/23	9:40	[redacted] 5/18/23	5-18-23	9:40	[redacted] (Signature, Date, Time) & condition 5/18/23

23.9-C IAS [redacted]

COC ID # [redacted]051723ASBB

Flow Rate, Total Time

Sample ID	End Date	End Time	Flow Rate (L/min), Total Time (mins)
FBB-051123	5/11/23	8:00:00 AM	NA
MSB01-051123	5/11/23	2:16:00 PM	3.2; 414
MSB02-051123	5/11/23	2:22:00 PM	3.4; 433
MSB113A-051123	5/11/23	2:08:00 PM	3.3; 393



After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

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ARS Aleut Analytical, LLC

Laboratory Analytical Report

ARS1-23-00796

GES-AIS, LLC
[redacted]
1501 West Fountainhead Parkway
Suite 550
Tempe, AZ 85282
[redacted]

COC Number: [redacted]**041223RADB**
Job Number: **J310000900**
Job Location: **Hunters Point Shipyard, Parcel B Removal Site Evaluation**
Project Name: **Parcel B Air Monitoring RAD**

Questions regarding this analytical report should be addressed to ARS project manager, [redacted] who can be reached by email at projectmanagers@aaa.aleutfederal.com.

I certify that the test results presented in this report (in either hardcopy or electronic file (EDD)) meet the requirements of the laboratory's certifications and other applicable contract terms and conditions. A full list of the Port Allen, LA laboratory's certifications is provided with this report. Any exceptions to the certification or contract will be noted within the case narratives presented in the report. Any subcontracted sample results will be identified within the case narratives presented in the report. In the event this report is an amendment to a previously released report, the case narrative will clearly identify the original report as well as the reason(s) for reissuance. A statement of uncertainty for each analysis is available upon request. I authorize release and issuance of this report on the date signed below.

[redacted] Laboratory Management, ARS Aleut Analytical

Signature **Date** **Title**

This report provides analytical results of the requested analysis and does not include any opinions or interpretations. ARS Aleut Analytical, LLC assumes no liability for the use or interpretation of analytical results. Results relate only to items tested. A partial reproduction of this test report is prohibited. Reproduction of this report in full requires the written approval of the laboratory.

LELAP Cert # 01949

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Table Of Contents

Certifications and Accreditations List

State or Accrediting Body (AB)	Certificate Number
AIHA LAP, LLC	209312
Alaska	LA01131
California	3085
ANAB DoD	ADE-1489
ANAB DOE	ADE-1489.01
Louisiana DEQ - NELAC	01949
Louisiana DHH	LA022
Nevada	LA011312023-1
New Jersey	LA009
New York	66780 (NPW) / 66781 (SHW)
Texas	T104704447-22-18
Utah	LA011312022-13
Washington	C1010

For additional information related to the specific matrices, methods,and analytes recognized by each accrediting body, contact us at QA@aaa.aleutfederal.com for additional information.

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ARS Aleut Analytical, LLC
Analytical Reports

for

GES-AIS, LLC

Case Narrative

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PROJECT SAMPLE IDENTIFICATION CROSS-REFERENCE
TO ARS SAMPLE LABORATORY IDs

Client Sample ID	ARS Aleut Analytical Sample ID
FBB-040423	ARS1-23-00796-001
MSB01-040423	ARS1-23-00796-002
MSB02-040423	ARS1-23-00796-003
MSB113A-040423	ARS1-23-00796-004

Sample	Date Collected	Date Received	Analysis	Basis	Prep Date/Time	Analysis Date/Time
001	04/04/23 08:00	04/13/23	ASP-PU239-AF	As Received	04/28/23 08:06	05/05/23 02:58
001	04/04/23 08:00	04/13/23	GAM-A-AF	As Received	NA	04/18/23 14:18
001	04/04/23 08:00	04/13/23	GPC-SR90-AF	As Received	04/26/23 12:27	04/28/23 10:58
002	04/06/23 14:16	04/13/23	ASP-PU239-AF	As Received	04/28/23 08:06	05/05/23 02:58
002	04/06/23 14:16	04/13/23	GAM-A-AF	As Received	NA	04/14/23 13:52
002	04/06/23 14:16	04/13/23	GPC-SR90-AF	As Received	04/26/23 12:27	04/28/23 10:58
003	04/06/23 14:00	04/13/23	ASP-PU239-AF	As Received	04/28/23 08:06	05/05/23 02:58
003	04/06/23 14:00	04/13/23	GAM-A-AF	As Received	NA	04/19/23 14:03
003	04/06/23 14:00	04/13/23	GPC-SR90-AF	As Received	04/26/23 12:27	04/28/23 10:58
004	04/06/23 14:12	04/13/23	ASP-PU239-AF	As Received	04/28/23 08:06	05/05/23 02:58
004	04/06/23 14:12	04/13/23	GAM-A-AF	As Received	NA	04/20/23 14:05
004	04/06/23 14:12	04/13/23	GPC-SR90-AF	As Received	04/26/23 12:27	04/28/23 10:58

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SAMPLE RECEIPT/PREP

The samples arrived in good condition. The samples were screened for radioactive contamination as per procedure **PALA-SR-001-SOP Sample Receiving**. Sample date(s) and time(s) are listed as provided by the client. In regard to the Air Filters, no flow rate information was provided by the client. Turnaround time was set at 28 calendar days.

ANALYTICAL METHODS

Pu-239/240 analysis was performed using **PALA-RAD-026, "Americium, Plutonium and Uranium in Water, Soil and Vegetation Matrices by Sequential Separation Using Eichrom Stabilized Chemistry Resin (with Vacuum Box System Option) (Eichrom ACW-02 & Eichrom ACW-03)"**.

Ac-228, Am-241, Bi-212, Bi-214, Co-60, Cs-137, Eu-152, Eu-154, K-40, Pa-234, Pb-210, Pb-212, Pb-214, Ra-226, Ra-228, Th-234, Tl-208, U-235, and U-238 analyses were performed using **PALA-RAD-007, "Modified Gamma Emitting Radionuclides in Soil, Air, and Biota Matrices (EPA 901.1 Mod, SM 7120B, & HASL-300 Ga-01-R)"**.

Sr-90 analysis was performed using **PALA-RAD-032, "Strontium 89, 90 and Total Strontium in Water, Soil and Vegetation Matrices by Eichrom Resin Separation (Eichrom SRW01, EPA 905.0, HASL 300 Sr-01-RC)"**.

ANALYTICAL RESULTS

ARS1-23-00796: The Method Blank for GAM-A-AF had a detect for U-235. All fractions were non-detects, therefore the activity in the Method Blank did not contribute to the concentration in client samples.

Batch ARS1-B23-00750: The Method Blank is greater than the MDA for Pu-239/240; all positive detects for Pu-239/240 in this analytical batch are qualified with a 'B'.

Fraction 001 in batch ARS1-B23-00653 has elevated MDA for Ra-226 with ACT of -1.129E-6 uCi/filter, MDA of 9.195E-6 uCi/filter and CRDL of 4.4E-06 uCi/filter.
Fraction 002 in batch ARS1-B23-00750 has elevated MDA for Pu-239/240 with ACT of 4.632E-9 uCi/filter, MDA of 6.534E-8 uCi/filter and CRDL of 4.8E-08 uCi/filter.
Fraction 002 in batch ARS1-B23-00653 has elevated MDA for Ra-226 with ACT of -1.513E-6 uCi/filter, MDA of 9.530E-6 uCi/filter and CRDL of 4.4E-06 uCi/filter.
Fraction 003 in batch ARS1-B23-00750 has elevated MDA for Pu-239/240 with ACT of -2.565E-8 uCi/filter, MDA of 1.032E-7 uCi/filter and CRDL of 4.8E-08 uCi/filter.
Fraction 003 in batch ARS1-B23-00653 has elevated MDA for Ra-226 with ACT of 2.507E-6 uCi/filter, MDA of 9.213E-6 uCi/filter and CRDL of 4.4E-06 uCi/filter.
Fraction 004 in batch ARS1-B23-00750 has elevated MDA for Pu-239/240 with ACT of -2.349E-8 uCi/filter, MDA of 8.523E-8 uCi/filter and CRDL of 4.8E-08 uCi/filter.
Fraction 004 in batch ARS1-B23-00653 has elevated MDA for Ra-226 with ACT of -1.113E-6 uCi/filter, MDA of 1.475E-5 uCi/filter and CRDL of 4.4E-06 uCi/filter.

ARS1-B23-00750: ROI's adjusted to better fit the peaks of interest.

Notes (Case Narrative)

Definitions:

CRDL	Contract Required Detection Limit
CSU	Combined Standard Uncertainty
DLC	Decision Level Concentration (ANSI N42.23)
DO	Duplicate Original
DUP	Sample Duplicate
LCS/LCSD	Laboratory Control Sample/Laboratory Control Sample Duplicate
LOD	Limit of Detection
LOQ	Limit of Quantitation
MBL	Method Blank
MCL	Maximum Contaminant Level
MDA	Minimum Detectable Activity
MDL	Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
N/A	Not Applicable
NC	Not Calculated
NP	Not Provided
NR	Not Referenced
PQL	Practical Quantitation Limit

Data Qualifiers:

B	The result of both the method blank and the target sample are above the MDL.
D	Sample analysis accomplished through dilution.
J	The reported result is an estimated value above the LOD but below the LOQ, or above the MDL but below the PQL.
Q	One or more quality control criteria failed.
U	Result is below the MDA, MDL, PQL, LOD, or LOQ
*	LCS/LCSD or Sample DUP fails all Duplicate criteria.
S	Spike
SC	Subcontracted out to another qualified laboratory.
H	Holding time exceeded
E	Exceeds MCL
**	Reporting Limit is higher than MCL; Target cannot be detected
ǂ	Method/Matrix/Analyte not accredited for this certification

Radiochemistry Comments:

1.0) All MDA/MDC values are calculated on a sample specific basis.

2.0) Data in this report are within the limits of uncertainty specified in the reference method unless otherwise specified.

3.0) Total activity is actually total gamma activity and is determined utilizing the prominent gamma emitters from the naturally occurring radioactive decay chains and other prominent radioactive nuclides. Total activity may be lower than the actual total activity due to the extent of secular equilibrium achieved in the various decay chains at the time of analysis. The total activity is not representative of nuclides that emit solely alpha or beta particles.

4.0) Ra-226 after ingrowth is determined via secular equilibrium with its daughter, Bismuth 214 (Gamma Spectroscopy only).

5.0) Ra-228 is determined via secular equilibrium with its daughter, Actinium 228 (Gamma Spectroscopy only).

6.0) U-238 is determined via secular equilibrium with its daughter, Thorium 234 (Gamma Spectroscopy only).

7.0) All gamma spectroscopy was performed utilizing high purity germanium detectors (**HPGe**).

8.0) ARS makes every attempt to match sample density to calibrated density; however, in some cases, it is not practical or possible to do so and data results may be affected (Gamma Spectroscopy only).

9.0) Gamma spectroscopy results are calculated values based on the **ORTEC®** GammaVision ENV32 Analysis Engine.

10.0) DoD/DOE and ISO 17025 certifications through ANAB apply only to the following methods in **Non-Potable Water**:
Gross Alpha and Gross Beta (EPA 900.0, EPA 9310); Radium 226 (EPA 903.0, EPA 903.1, EPA 9315); Radium 228 (EPA 904.0, EPA 9320); ICP/MS (EPA 6020B); ICP-OES (EPA 6010D); Mercury CVAA (EPA 7470A); Strontium-89 (EPA 905.0, Eichrom SRW01, HASL 300 Sr-01); Strontium-90 (EPA 905.0, Eichrom SRW01, HASL 300 Sr-02-RC); Tritium (EPA 906.0); Enriched Tritium (ARS-040), Carbon-14 (ARS-019), Tritium/Carbon (ARS-151); Gamma Emitters (EPA 901.1, SM 7120B, HASL 300 Ga-01-R); Americium-241 (Eichrom ACW03, Eichrom ACW16, HASL 300 Se-03, HASL 300 Am-03); Neptunium 237 (Eichrom ACW16); Plutonium 238, Plutonium 239/240, Plutonium-241 (Eichrom ACW03, Eichrom ACW16, HASL 300 Se-03, HASL 300 Pu-10); Thorium-228, Thorium 230, Thorium-232 (Eichrom ACW10); Uranium-234, Uranium-235,

11.0) Uranium-238 (Eichrom ACW03, Eichrom ACW16, HASL 300 Se-03); Technetium-99 (Eichrom TCW02)
DoD/DOE and ISO 17025 certifications through ANAB apply only to the following methods in **Solid and Chemical Materials**:
Gross Alpha and Gross Beta (EPA 900.0 Mod, EPA 9310); ICP/MS (EPA 6020B); ICP-OES (EPA 6010D); Mercury CVAA (EPA 7471B); Strontium-89 (EPA 905.0 Mod, Eichrom SRW01, HASL 300 Sr-01); Strontium-90 (EPA 905.0 Mod, Eichrom SRW01, HASL 300 Sr-02); Tritium (EPA 906.0 Mod); Gamma Emitters (EPA 901.1, HASL 300 Ga-01-R); Americium-241 (Eichrom ACW03, HASL 300 Se-03, HASL 300 Am-01-RC); Neptunium 237 (Eichrom ACW16); Plutonium 238, Plutonium 239/240, Plutonium-241 (Eichrom ACW03, Eichrom ACW16, HASL 300 Se-03, HASL 300 Pu-

12.0) 02-RC, HASL 300 Pu-03-RC); Thorium-228, Thorium 230, Thorium-232 (Eichrom ACW10); Uranium-234, Uranium-235, Uranium-238 (Eichrom ACW03, Eichrom ACW16, HASL 300 Se-03, HASL 300 U-02, HASL 300 U-04); Technetium-99 (Eichrom TCS01)
DoD/DOE and ISO 17025 certifications through ANAB apply only to the following methods in **Air and Emissions**:
Gross Alpha and Gross Beta (EPA 900.0 Mod, EPA 9310); Strontium-89 (Eichrom SRW01, HASL 300 Sr-01-RC); Strontium-90 (Eichrom SRW01, HASL 300 Sr-02-RC); Gamma Emitters (EPA 901.1, HASL 300 Ga-01-R); Americium-241 (Eichrom ACW03, HASL 300 Se-03); Neptunium 237 (Eichrom ACW16); Plutonium 238, Plutonium 239/240, Plutonium-241 (Eichrom ACW03, Eichrom ACW16, HASL 300 Se-03); Thorium-228, Thorium 230, Thorium-232 (Eichrom ACW10); Uranium-234, Uranium-235, Uranium-238 (Eichrom ACW03, Eichrom ACW16, HASL 300 Se-03); Technetium-99 (Eichrom TCW02, Eichrom TCS01)

General Comments:

1.0 Modified analysis procedures are procedures that are modified to meet certain specifications. An example may be the use of a water method to analyze a solid matrix due to the lack of an officially recognized procedure for the analysis of the solid matrix. Modified analyses are indicated by the subsequent addition of "M" or "Mod" to the procedure number (i.e. 901.1M, 901.1 Mod).

2.0 All NIOSH method results are reported without blank corrections applied.

3.0 Basis: "As Received" = analyzed as received from client; "Dry" = dried prior to being analyzed; "Dry Weight Corrected" = analyzed as received; result corrected for percent moisture.

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ARS Aleut Analytical, LLC
Analytical Reports

for

GES-AIS, LLC

Analytical Results

2609 North River Road • Port Allen, Louisiana 70767
(225) 228-1394

ARS Sample Delivery Group: ARS1-23-00796
Client Sample ID: FBB-040423
Sample Collection Date: 04/04/23 8:00
Sample Matrix: Air Filter
Percent Solids: N/A

Request or PO Number: J310000900
ARS Sample ID: ARS1-23-00796-001
Date Received: 04/13/23
Report Date: 05/11/23

Radiochemistry

Analysis Method: Eichrom ACW03 **ABatch Sample ID:** ARS1-B23-00750-07

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Pu-239/240	5.934E-8	3.943E-8	4.594E-8	1.627E-8	4.8E-08	B	uCi/filter	05/05/23 2:58	[redacted]	59.2%

Analysis Method: EPA 901.1M **ABatch Sample ID:** ARS1-B23-00653-07

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Bi-214	1.640E-6	1.052E-6	1.322E-6	6.610E-7	NP		uCi/filter	04/18/23 14:18	[redacted]	N/A
Co-60	-3.399E-7	6.860E-7	1.144E-6	5.720E-7	0.00024	U	uCi/filter	04/18/23 14:18	[redacted]	N/A
Cs-137	-1.630E-7	7.440E-7	8.064E-7	4.032E-7	0.00048	U	uCi/filter	04/18/23 14:18	[redacted]	N/A
K-40	2.201E-5	8.530E-6	8.045E-6	4.023E-6	NP		uCi/filter	04/18/23 14:18	[redacted]	N/A
Pb-210	2.107E-5	4.773E-6	5.769E-6	2.885E-6	NP		uCi/filter	04/18/23 14:18	[redacted]	N/A
Pb-212	7.219E-7	4.968E-7	7.035E-7	3.518E-7	NP		uCi/filter	04/18/23 14:18	[redacted]	N/A
Ra-226	-1.129E-6	7.257E-6	9.195E-6	4.598E-6	4.4E-06	U	uCi/filter	04/18/23 14:18	[redacted]	N/A

Analysis Method: Eichrom SRW01 **ABatch Sample ID:** ARS1-B23-00741-08

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
SR-90	-2.595E-7	1.980E-6	3.652E-6	1.683E-6	2.4E-05	U	uCi/filter	04/28/23 10:58	[redacted]	96.9%

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ARS Sample Delivery Group: ARS1-23-00796
Client Sample ID: MSB01-040423
Sample Collection Date: 04/06/23 14:16
Sample Matrix: Air Filter
Percent Solids: N/A

Request or PO Number: J310000900
ARS Sample ID: ARS1-23-00796-002
Date Received: 04/13/23
Report Date: 05/11/23

Radiochemistry

Analysis Method: Eichrom ACW03 **ABatch Sample ID:** ARS1-B23-00750-08

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Pu-239/240	4.632E-9	3.274E-8	6.534E-8	2.639E-8	4.8E-08	U	uCi/filter	05/05/23 2:58	[redacted]	66.5%

Analysis Method: EPA 901.1M **ABatch Sample ID:** ARS1-B23-00653-08

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Co-60	-6.383E-7	1.002E-6	1.013E-6	5.065E-7	0.00024	U	uCi/filter	04/14/23 13:52	[redacted]	N/A
Cs-137	-3.743E-7	7.215E-7	7.771E-7	3.886E-7	0.00048	U	uCi/filter	04/14/23 13:52		N/A
Ra-226	-1.513E-6	7.532E-6	9.530E-6	4.765E-6	4.4E-06	U	uCi/filter	04/14/23 13:52		N/A

Analysis Method: Eichrom SRW01 **ABatch Sample ID:** ARS1-B23-00741-09

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
SR-90	1.474E-6	2.233E-6	3.784E-6	1.750E-6	2.4E-05	U	uCi/filter	04/28/23 10:58	[redacted]	92.7%

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ARS Sample Delivery Group: ARS1-23-00796
Client Sample ID: MSB02-040423
Sample Collection Date: 04/06/23 14:00
Sample Matrix: Air Filter
Percent Solids: N/A

Request or PO Number: J310000900
ARS Sample ID: ARS1-23-00796-003
Date Received: 04/13/23
Report Date: 05/11/23

Radiochemistry

Analysis Method: Eichrom ACW03 **ABatch Sample ID:** ARS1-B23-00750-09

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Pu-239/240	-2.565E-8	4.832E-8	1.032E-7	4.465E-8	4.8E-08	U	uCi/filter	05/05/23 2:58	[redacted]	62.6%

Analysis Method: EPA 901.1M **ABatch Sample ID:** ARS1-B23-00653-09

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Bi-214	1.911E-6	8.946E-7	1.163E-6	5.815E-7	NP		uCi/filter	04/19/23 14:03	[redacted]	N/A
Co-60	5.698E-8	8.512E-7	8.786E-7	4.393E-7	0.00024	U	uCi/filter	04/19/23 14:03		N/A
Cs-137	-1.729E-7	7.018E-7	7.612E-7	3.806E-7	0.00048	U	uCi/filter	04/19/23 14:03		N/A
K-40	1.928E-5	7.200E-6	7.123E-6	3.562E-6	NP		uCi/filter	04/19/23 14:03		N/A
Ra-226	2.507E-6	7.298E-6	9.213E-6	4.607E-6	4.4E-06	U	uCi/filter	04/19/23 14:03		N/A

Analysis Method: Eichrom SRW01 **ABatch Sample ID:** ARS1-B23-00741-10

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
SR-90	-5.243E-7	2.163E-6	3.993E-6	1.854E-6	2.4E-05	U	uCi/filter	04/28/23 10:58	[redacted]	95.2%

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ARS Sample Delivery Group: ARS1-23-00796
Client Sample ID: MSB113A-040423
Sample Collection Date: 04/06/23 14:12
Sample Matrix: Air Filter
Percent Solids: N/A

Request or PO Number: J310000900
ARS Sample ID: ARS1-23-00796-004
Date Received: 04/13/23
Report Date: 05/11/23

Radiochemistry

Analysis Method: Eichrom ACW03 **ABatch Sample ID:** ARS1-B23-00750-10

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Pu-239/240	-2.349E-8	3.807E-8	8.523E-8	3.625E-8	4.8E-08	U	uCi/filter	05/05/23 2:58	[redacted]	65.1%

Analysis Method: EPA 901.1M **ABatch Sample ID:** ARS1-B23-00653-10

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Co-60	-2.807E-7	1.077E-6	1.102E-6	5.510E-7	0.00024	U	uCi/filter	04/20/23 14:05	[redacted]	N/A
Cs-137	-4.510E-8	7.884E-7	8.909E-7	4.455E-7	0.00048	U	uCi/filter	04/20/23 14:05		N/A
Ra-226	-1.113E-6	1.386E-5	1.475E-5	7.375E-6	4.4E-06	U	uCi/filter	04/20/23 14:05		N/A

Analysis Method: Eichrom SRW01 **ABatch Sample ID:** ARS1-B23-00741-11

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
SR-90	-1.877E-6	2.104E-6	4.127E-6	1.909E-6	2.4E-05	U	uCi/filter	04/28/23 10:58	[redacted]	96.0%

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Batch QC

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QC Results per Analytical Batch

Analytical Batch	**ARS1-B23-00653**
SDG	**ARS1-23-00796**
Analysis	**Gamma Spec (Short) in (Air Filters, Smears [AF])**
Method	**EPA 901.1M**
Analysis Code	**GAM-A-AF**
Report Units	**uCi/filter**

Acceptable QC Performance Ranges

QC Sample Type	Performance Items and Ranges		
Laboratory Control Sample	**Recovery (%):**	**> 75**	**< 125**
Matrix Spike	**Recovery (%):**	**> 60**	**< 140**
Duplicate	**Duplicate Error Ratio (DER):**		**< 3**
	Relative Percent Difference (RPD %):		**≤ 25**

Laboratory Control Sample

			Analysis Date	04/14/23 08:23	Analysis Technician	[redacted]	
Analysis Batch Sample ID	**QC Type**	**Analyte**	**Results**	**CSU (2s)**	**Expected Value**	**LCS Rec (%)**	**MDA**
ARS1-B23-00653-01	**LCS**	AM-241	31.275	2.380	33.065	94.6	0.120
ARS1-B23-00653-01	**LCS**	CO-60	21.283	1.254	20.928	101.7	0.365
ARS1-B23-00653-01	**LCS**	CS-137	13.517	0.882	12.996	104.0	0.073

Duplicate RER/DER/RPD

		Analysis Date	04/14/23 08:35	Analysis Technician	[redacted]	
Analyte	**Results LCS**	**CSU LCS (2s)**	**Results LCSD**	**CSU LCSD (2s)**	**DER**	**RPD**
AM-241	31.275	2.380	32.045	2.437	0.443	2.4
CO-60	21.283	1.254	20.616	1.220	0.747	3.2
CS-137	13.517	0.882	13.417	0.876	0.158	0.7

Method Blank

		Analysis Date	04/18/23 13:59	Analysis Technician	[redacted]	
Analysis Batch Sample ID	**QC Type**	**Analyte**	**Results**	**CSU (2s)**	**MDA**	**Qual**
ARS1-B23-00653-03	**MBL**	AC-228	-1.492E-6	3.684E-6	3.727E-6	U
ARS1-B23-00653-03	**MBL**	AM-241	-9.642E-8	7.857E-7	1.306E-6	U
ARS1-B23-00653-03	**MBL**	BI-212	-3.594E-6	6.741E-6	7.808E-6	U
ARS1-B23-00653-03	**MBL**	BI-214	-4.388E-7	2.149E-6	2.365E-6	U
ARS1-B23-00653-03	**MBL**	CO-60	-6.265E-7	7.728E-7	1.272E-6	U
ARS1-B23-00653-03	**MBL**	CS-137	-1.205E-7	7.849E-7	9.196E-7	U
ARS1-B23-00653-03	**MBL**	EU-152	-3.649E-7	8.207E-7	1.082E-6	U
ARS1-B23-00653-03	**MBL**	K-40	-2.079E-5	1.612E-5	1.748E-5	U
ARS1-B23-00653-03	**MBL**	PA-234	-1.401E-9	1.386E-6	1.314E-6	U
ARS1-B23-00653-03	**MBL**	PB-210	-3.288E-6	9.049E-6	1.003E-5	U
ARS1-B23-00653-03	**MBL**	PB-212	-9.587E-7	1.288E-6	1.865E-6	U
ARS1-B23-00653-03	**MBL**	PB-214	9.658E-7	1.934E-6	1.914E-6	U
ARS1-B23-00653-03	**MBL**	RA-226	-1.244E-5	1.536E-5	1.593E-5	U
ARS1-B23-00653-03	**MBL**	RA-228	-1.492E-6	3.684E-6	3.727E-6	U
ARS1-B23-00653-03	**MBL**	TH-234	-5.839E-7	8.817E-6	1.011E-5	U
ARS1-B23-00653-03	**MBL**	TL-208	1.201E-8	1.016E-6	1.035E-6	U
ARS1-B23-00653-03	**MBL**	U-235	3.062E-6	1.839E-6	2.752E-6	
ARS1-B23-00653-03	**MBL**	U-238	-5.839E-7	8.817E-6	1.011E-5	U

QC Results per Analytical Batch

Analytical Batch	**ARS1-B23-00741**
SDG	**ARS1-23-00796**
Analysis	**Strontium-90 in (Air Filters, Smears [AF])**
Method	**Eichrom SRW01**
Analysis Code	**GPC-SR90-AF**
Report Units	**uCi/filter**

Acceptable QC Performance Ranges

QC Sample Type	Performance Items and Ranges		
Laboratory Control Sample	**Recovery (%):**	**> 75**	**< 125**
Matrix Spike	**Recovery (%):**	**> 60**	**< 140**
Duplicate	**Duplicate Error Ratio (DER):**		**< 3**
	Relative Percent Difference (RPD %):		**≤ 25**

Laboratory Control Sample

			Analysis Date	04/28/23 10:58	**Analysis Technician**	[redacted]	
Analysis Batch Sample ID	**QC Type**	**Analyte**	**Results**	**CSU (2s)**	**Expected Value**	**LCS Rec (%)**	**MDA**
ARS1-B23-00741-01	**LCS**	SR-90	2.076E-5	3.193E-6	1.980E-5	104.8	5.857E-7

Duplicate RER/DER/RPD

			Analysis Date	04/28/23 10:58	**Analysis Technician**	[redacted]	
Analyte	**Results LCS**	**CSU LCS (2s)**	**Results LCSD**	**CSU LCSD (2s)**	**DER**	**RPD**	
SR-90	2.076E-5	3.193E-6	2.003E-5	3.081E-6	0.324	3.6	

Method Blank

			Analysis Date	04/28/23 10:58	**Analysis Technician**	[redacted]	
Analysis Batch Sample ID	**QC Type**	**Analyte**	**Results**	**CSU (2s)**	**MDA**	**Qual**	
ARS1-B23-00741-03	**MBL**	SR-90	2.912E-7	1.198E-6	2.125E-6	U	

QC Results per Analytical Batch

Analytical Batch	**ARS1-B23-00750**
SDG	**ARS1-23-00796**
Analysis	**Plutonium (239, 240Pu) in (Air Filters, Smears, Leak Test [AF, SM, LT])**
Method	**Eichrom ACW03**
Analysis Code	**ASP-PU239-AF**
Report Units	**uCi/filter**

Acceptable QC Performance Ranges

QC Sample Type	Performance Items and Ranges		
Laboratory Control Sample	**Recovery (%):**	**> 75**	**< 125**
Matrix Spike	**Recovery (%):**	**> 60**	**< 140**
Duplicate	**Duplicate Error Ratio (DER):**		**< 3**
	Relative Percent Difference (RPD %):		**≤ 25**

Laboratory Control Sample

Analysis Date	05/05/23 02:58	Analysis Technician	[redacted]

Analysis Batch Sample ID	QC Type	Analyte	Results	CSU (2s)	Expected Value	LCS Rec (%)	MDA
ARS1-B23-00750-01	**LCS**	PU-239/240	7.751E-6	9.707E-7	7.740E-6	100.1	4.056E-8

Duplicate RER/DER/RPD

Analysis Date	05/05/23 02:58	Analysis Technician	[redacted]

Analyte	Results LCS	CSU LCS (2s)	Results LCSD	CSU LCSD (2s)	DER	RPD
PU-239/240	7.751E-6	9.707E-7	7.855E-6	9.884E-7	0.147	1.3

Method Blank

Analysis Date	05/05/23 02:58	Analysis Technician	[redacted]

Analysis Batch Sample ID	QC Type	Analyte	Results	CSU (2s)	MDA	Qual
ARS1-B23-00750-03	**MBL**	PU-238	-2.957E-8	6.668E-8	1.360E-7	U
ARS1-B23-00750-03	**MBL**	PU-239/240	4.494E-7	1.341E-7	1.328E-7	

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QC Summary

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QC Sample Results

Analytical Batch: ARS1-B23-00653
Lab Sample ID: ARS1-B23-00653-01
Method: EPA 901.1M

Sample Type: LCS
Matrix: Air Filter
Analysis Date: 04/14/23 8:23

Analyte	Spike Added	Analysis Result	Qual	Analysis Units	% Rec	% Rec Limits
Am-241	33.065	31.275		uCi/filter	94.6	75 - 125
Co-60	20.928	21.283		uCi/filter	101.7	75 - 125
Cs-137	12.996	13.517		uCi/filter	104.0	75 - 125

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QC Sample Results

Analytical Batch: ARS1-B23-00653
Lab Sample ID: ARS1-B23-00653-02
Method: EPA 901.1M

Sample Type: LCSD
Matrix: Air Filter
Analysis Date: 04/14/23 8:35

Analyte	Spike Added	Analysis Result	Qual	Analysis Units	% Rec	% Rec Limits	RPD	RPD Limit	DER	DER Limit
Am-241	33.065	32.045		uCi/filter	96.9	75 - 125	2.4	25	0.443	3
Co-60	20.928	20.616		uCi/filter	98.5	75 - 125	3.2	25	0.747	3
Cs-137	12.996	13.417		uCi/filter	103.2	75 - 125	0.7	25	0.158	3

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QC Sample Results

Analytical Batch: ARS1-B23-00653
Lab Sample ID: ARS1-B23-00653-03
Method: EPA 901.1M

Sample Type: MBL
Matrix: Air Filter
Analysis Date: 04/18/23 13:59

Analyte	Analysis Result	CSU +/- 2 s	MDA	DLC	Qual	Analysis Units
Ac-228	-1.492E-6	3.684E-6	3.727E-6	1.864E-6	U	uCi/filter
Am-241	-9.642E-8	7.857E-7	1.306E-6	6.530E-7	U	uCi/filter
Bi-212	-3.594E-6	6.741E-6	7.808E-6	3.904E-6	U	uCi/filter
Bi-214	-4.388E-7	2.149E-6	2.365E-6	1.183E-6	U	uCi/filter
Co-60	-6.265E-7	7.728E-7	1.272E-6	6.360E-7	U	uCi/filter
Cs-137	-1.205E-7	7.849E-7	9.196E-7	4.598E-7	U	uCi/filter
Eu-152	-3.649E-7	8.207E-7	1.082E-6	5.410E-7	U	uCi/filter
K-40	-2.079E-5	1.612E-5	1.748E-5	8.740E-6	U	uCi/filter
Pa-234	-1.401E-9	1.386E-6	1.314E-6	6.570E-7	U	uCi/filter
Pb-210	-3.288E-6	9.049E-6	1.003E-5	5.015E-6	U	uCi/filter
Pb-212	-9.587E-7	1.288E-6	1.865E-6	9.325E-7	U	uCi/filter
Pb-214	9.658E-7	1.934E-6	1.914E-6	9.570E-7	U	uCi/filter
Ra-226	-1.244E-5	1.536E-5	1.593E-5	7.965E-6	U	uCi/filter
Ra-228	-1.492E-6	3.684E-6	3.727E-6	1.864E-6	U	uCi/filter
Th-234	-5.839E-7	8.817E-6	1.011E-5	5.055E-6	U	uCi/filter
Tl-208	1.201E-8	1.016E-6	1.035E-6	5.175E-7	U	uCi/filter
U-235	3.062E-6	1.839E-6	2.752E-6	1.376E-6		uCi/filter
U-238	-5.839E-7	8.817E-6	1.011E-5	5.055E-6	U	uCi/filter

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QC Association Summary

ARS Sample Delivery Group: ARS1-23-00796 **Analytical Batch:** ARS1-B23-00653

Analysis: Gamma Spec (Short) in (Air Filters, Smears [AF])

Batch Sample ID	Lab Sample ID	Client Sample ID	Matrix	Method	Prep Method
ARS1-B23-00653-01		Lab Control Sample	Air Filter	EPA 901.1M	N/A
ARS1-B23-00653-02		Lab Control Sample Duplicate	Air Filter	EPA 901.1M	N/A
ARS1-B23-00653-03		Method Blank	Air Filter	EPA 901.1M	N/A
ARS1-B23-00653-07	ARS1-23-00796-001	FBB-040423	Air Filter	EPA 901.1M	N/A
ARS1-B23-00653-08	ARS1-23-00796-002	MSB01-040423	Air Filter	EPA 901.1M	N/A
ARS1-B23-00653-09	ARS1-23-00796-003	MSB02-040423	Air Filter	EPA 901.1M	N/A
ARS1-B23-00653-10	ARS1-23-00796-004	MSB113A-040423	Air Filter	EPA 901.1M	N/A

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QC Sample Results

Analytical Batch: ARS1-B23-00741
Lab Sample ID: ARS1-B23-00741-01
Method: Eichrom SRW01

Sample Type: LCS
Matrix: Air Filter
Analysis Date: 04/28/23 10:58

Analyte	Spike Added	Analysis Result	Qual	Analysis Units	% Rec	% Rec Limits
SR-90	1.980E-5	2.076E-5		uCi/filter	104.8	75 - 125

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QC Sample Results

Analytical Batch: ARS1-B23-00741
Lab Sample ID: ARS1-B23-00741-02
Method: Eichrom SRW01

Sample Type: LCSD
Matrix: Air Filter
Analysis Date: 04/28/23 10:58

Analyte	Spike Added	Analysis Result	Qual	Analysis Units	% Rec	% Rec Limits	RPD	RPD Limit	DER	DER Limit
SR-90	1.980E-5	2.003E-5		uCi/filter	101.1	75 - 125	3.6	25	0.324	3

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QC Sample Results

Analytical Batch: ARS1-B23-00741
Lab Sample ID: ARS1-B23-00741-03
Method: Eichrom SRW01

Sample Type: MBL
Matrix: Air Filter
Analysis Date: 04/28/23 10:58

Analyte	Analysis Result	CSU +/- 2 s	MDA	DLC	Qual	Analysis Units
SR-90	2.912E-7	1.198E-6	2.125E-6	9.805E-7	U	uCi/filter

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QC Association Summary

ARS Sample Delivery Group: ARS1-23-00796

Analytical Batch: ARS1-B23-00741

Analysis: Strontium-90 in (Air Filters, Smears [AF])

Batch Sample ID	Lab Sample ID	Client Sample ID	Matrix	Method	Prep Method
ARS1-B23-00741-01		Lab Control Sample	Air Filter	Eichrom SRW01	N/A
ARS1-B23-00741-02		Lab Control Sample Duplicate	Air Filter	Eichrom SRW01	N/A
ARS1-B23-00741-03		Method Blank	Air Filter	Eichrom SRW01	N/A
ARS1-B23-00741-08	ARS1-23-00796-001	FBB-040423	Air Filter	Eichrom SRW01	N/A
ARS1-B23-00741-09	ARS1-23-00796-002	MSB01-040423	Air Filter	Eichrom SRW01	N/A
ARS1-B23-00741-10	ARS1-23-00796-003	MSB02-040423	Air Filter	Eichrom SRW01	N/A
ARS1-B23-00741-11	ARS1-23-00796-004	MSB113A-040423	Air Filter	Eichrom SRW01	N/A

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QC Sample Results

Analytical Batch: ARS1-B23-00750
Lab Sample ID: ARS1-B23-00750-01
Method: Eichrom ACW03

Sample Type: LCS
Matrix: Air Filter
Analysis Date: 05/05/23 2:58

Analyte	Spike Added	Analysis Result	Qual	Analysis Units	% Rec	% Rec Limits
Pu-239/240	7.740E-6	7.751E-6		uCi/filter	100.1	75 - 125

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QC Sample Results

Analytical Batch: ARS1-B23-00750
Lab Sample ID: ARS1-B23-00750-02
Method: Eichrom ACW03

Sample Type: LCSD
Matrix: Air Filter
Analysis Date: 05/05/23 2:58

Analyte	Spike Added	Analysis Result	Qual	Analysis Units	% Rec	% Rec Limits	RPD	RPD Limit	DER	DER Limit
Pu-239/240	7.796E-6	7.855E-6		uCi/filter	100.8	75 - 125	1.3	25	0.147	3

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QC Sample Results

Analytical Batch: ARS1-B23-00750
Lab Sample ID: ARS1-B23-00750-03
Method: Eichrom ACW03

Sample Type: MBL
Matrix: Air Filter
Analysis Date: 05/05/23 2:58

Analyte	Analysis Result	CSU +/- 2 s	MDA	DLC	Qual	Analysis Units
Pu-238	-2.957E-8	6.668E-8	1.360E-7	5.997E-8	U	uCi/filter
Pu-239/240	4.494E-7	1.341E-7	1.328E-7	5.836E-8		uCi/filter

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QC Association Summary

ARS Sample Delivery Group: ARS1-23-00796

Analytical Batch: ARS1-B23-00750

Analysis: Plutonium (239, 240Pu) in (Air Filters, Smears, Leak Test [AF, SM, LT])

Batch Sample ID	Lab Sample ID	Client Sample ID	Matrix	Method	Prep Method
ARS1-B23-00750-01		Lab Control Sample	Air Filter	Eichrom ACW03	N/A
ARS1-B23-00750-02		Lab Control Sample Duplicate	Air Filter	Eichrom ACW03	N/A
ARS1-B23-00750-03		Method Blank	Air Filter	Eichrom ACW03	N/A
ARS1-B23-00750-07	ARS1-23-00796-001	FBB-040423	Air Filter	Eichrom ACW03	N/A
ARS1-B23-00750-08	ARS1-23-00796-002	MSB01-040423	Air Filter	Eichrom ACW03	N/A
ARS1-B23-00750-09	ARS1-23-00796-003	MSB02-040423	Air Filter	Eichrom ACW03	N/A
ARS1-B23-00750-10	ARS1-23-00796-004	MSB113A-040423	Air Filter	Eichrom ACW03	N/A

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ARS Aleut Analytical, LLC
Analytical Reports

for

GES-AIS, LLC

Sample Management Records

CHAIN-OF-CUSTODY RECORD

Gilbane Federal
[redacted]
2300 Clayton Road, Suite 1050, Concord, CA 94520
[redacted]

COC # [redacted] ~~041223RADB~~
[redacted] 041223RADB

GES

Project Name: Hunters Point Shipyard, Parcel B Removal Site Evaluation	Laboratory: ARS Aleut Analytical (AAA), Port Allen, LA	Event: **Parcel B Air Monitoring RAD**
Project Number: J310000900	POC: [redacted]	
WBS Code: J310000900	Ship to: 2609 North River Road, Port Allen, LA 70767-3469	

Comments:

Wrong COC ID was on the COC. Should be KT041223RADB [redacted] 4/13/23

Equipment:

Code	Matrix
A	Air
AQ	Air Quality Control Matrix

Code	Container/Preservative
1	1x Gallon Ziploc Bag, None
15	1x 250-mL Plastic, 4 Degrees C

Event: Parcel B Air Monitoring RAD

	Sample ID	Matrix	Date	Time	Samp Init	Analytical Test Method: E901.1 - Gamma Spec Air (15)	RC0240 - Pu Isotopes (15)	SR02RC - Sr-90 (1)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
1	FBB-040423	AQ	04/04/2023	0800	[redacted]	X	X	X	FIELDQC	FB1	0.00	0.00	1	
2	MSB01-040423	A	04/06/2023	1416		X	X	X	MSB01	N1	0.00	0.00	1	
3	MSB02-040423	A	04/06/2023	1400		X	X	X	MSB02	N1	0.00	0.00	1	
4	MSB113A-040423	A	04/06/2023	1412		X	X	X	MSB113A	N1	0.00	0.00	1	
5														
6														

Turnaround Time: 28 days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[redacted]	4/12/23	1400	[redacted]	4/12/23	1400
				4-13-23	900

Shipping Date / Carrier / Airbill Number
Shipping Date: 4/12/2023 / FEDEX / 7717 5813 7143

Received by Laboratory: *(Signature, Date, Time)* **& condition**

GES.Navy_COC_Field
April 04, 2023

GES
AN ABRC INDUSTRIAL COMPANY

Procedures: GES-003 / EPA 900.0M

File ID Number: [redacted]041223RADB

Start Date 4/4/23
Stop Date 4/6/23
040423

4/12/2023 041223

Field Entry

	Station	Sample ID	Date In:	Time In:	Date Out:	Time Out:	Initial Flow Rate (LPM)	Final Flow Rate (LPM)	Flow volume Cu.M	Julian Date for Date Out	Total Run Time (Days)	Total Run Time (Hours)	Total Run Time (Minutes)	Average Flow Rate (LPM)	Initial Flow Rate (CFM)	Final Flow Rate (CFM)	Average Flow Rate (CFM)	Average Flow Rate (Cu.M/h)	Flow Rate (Cu.M/min)	Total Flow (L)
1	MSB01	MSB01-040423	04/04/23	8:15	04/06/23	14:16	60	60	194.5	96	2.25	54.02	3241.0	60	2.11888	2.11888	2.11888	3.6	0.06	194,460
2	MSB02	MSB02-040423	04/04/23	8:07	04/06/23	14:00	60	60	194.0	96	2.25	53.88	3233.0	60	2.11888	2.11888	2.11888	3.6	0.06	193,980
3	MSB113A	MSB113A-040423	04/04/23	8:21	04/06/23	14:12	60	60	193.9	96	2.24	53.85	3231.0	60	2.11888	2.11888	2.11888	3.6	0.06	193,860

FORMULAS:

Number of Days = (Date Out +Time Out) minus (Date In+Time In)
Number of Minutes = # of Days X 24hr X 60min
Flow Rate (m3/h) = Flow Rate (CFM) x 60min x (12in x 2.54cm/in / 100cm/m)^3 :
Mid-Sample Date/Time = [(Date+Time Out) + (Date+Time In)] / 2
Flow Rate (Cu.M/min) = CFM X 0.0283168466 Cu.M/CF
Flow Rate (LPM) = Cu.M X 1000
Total Flow (L) = LPM X Total Minutes

SDG Report - Samples and Containers

SDG Specific Data							
SDG	ARS1-23-00796			TAT Days	28 Calendar Days	Project Type	Environmental
Sample Count	4	Rpt Level	4	Date Received	04/13/2023	COC Number	[redacted]041223RADB
Client	GES-AIS, LLC			Discrepancy Resol	N/A	PO Number	
Client Code	1138			Client Deadline	05/11/2023	Job Number	J310000900
Profile Number	PN-01411					Job Location	Hunters Point Shipyard, Parcel B Removal Site Evaluation
Comment							

Samples and Containers Checked In Thus Far

FR	Name	Matrix	Start Date	End Date	Disp	Hold	Arch	Storage	Comments
001	FBB-040423	Air Filter	04/04/2023 07:59	04/04/2023 08:00	H	30	10	PrePrep	
	IC_ID	**Cnt**	**Container Type**	**AF Volume (L)**	**AF Units**		**Rate**	**Mins**	**Comments**
	434822	1	HDP Container	1	LPM			1	
			Mid-Sample Date:	04/04/2023 07:59	AF Volume (CuM):		0.001		
002	MSB01-040423	Air Filter	04/06/2023 14:15	04/06/2023 14:16	H	30	10	PrePrep	
	IC_ID	**Cnt**	**Container Type**	**AF Volume (L)**	**AF Units**		**Rate**	**Mins**	**Comments**
	434823	1	HDP Container	1	LPM			1	
			Mid-Sample Date:	04/06/2023 14:15	AF Volume (CuM):		0.001		
003	MSB02-040423	Air Filter	04/06/2023 13:59	04/06/2023 14:00	H	30	10	PrePrep	
	IC_ID	**Cnt**	**Container Type**	**AF Volume (L)**	**AF Units**		**Rate**	**Mins**	**Comments**
	434824	1	HDP Container	1	LPM			1	
			Mid-Sample Date:	04/06/2023 13:59	AF Volume (CuM):		0.001		
004	MSB113A-040423	Air Filter	04/06/2023 14:11	04/06/2023 14:12	H	30	10	PrePrep	
	IC_ID	**Cnt**	**Container Type**	**AF Volume (L)**	**AF Units**		**Rate**	**Mins**	**Comments**
	434825	1	HDP Container	1	LPM			1	
			Mid-Sample Date:	04/06/2023 14:11	AF Volume (CuM):		0.001		

SDG Report - Analysis Assignments

SDG	**ARS1-23-00796**	**Sample Count**	**4**
Client	**GES-AIS, LLC**	**Analysis Count**	**3-12**

Sample Count Totals Per Analysis

Analysis Code	Analysis Description	In/Out	Samples Count
ASP-PU239-AF	Plutonium (239, 240Pu) in (Air Filters, Smears, Leak Test [AF, SM, LT])	I	4
GAM-A-AF	Gamma Spec (Short) in (Air Filters, Smears [AF])	I	4
GPC-SR90-AF	Strontium-90 in (Air Filters, Smears [AF])	I	4

Analyses Assigned Per Fraction

Fraction	Analysis Code	X = Assigned
001	ASP-PU239-AF	X
001	GAM-A-AF	X
001	GPC-SR90-AF	X
002	ASP-PU239-AF	X
002	GAM-A-AF	X
002	GPC-SR90-AF	X
003	ASP-PU239-AF	X
003	GAM-A-AF	X
003	GPC-SR90-AF	X
004	ASP-PU239-AF	X
004	GAM-A-AF	X
004	GPC-SR90-AF	X

Client Name: GES-AIS, LLC Profile Name: Parcel B Rad Sampling Report Level: 4

Analysis Code	Prep Type	Units	Aliquot	Prep Code	Procedure	Count Time					
ASP-PU239-AF	WRAD	uCi	filter	N/A	PALA-RAD-026						
	Analyte			**RDL**	**LCS LL/UL**	**MS LL/UL**	**RadY LL/UL**	**GravY LL/UL**	**RER**	**RPD**	**Surr LL/UL**
	Pu-239/240 (15117-48-3)			4.8E-08 uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
GAM-A-AF	WGAM	uCi	filter	N/A	PALA-RAD-007						
	Analyte			**RDL**	**LCS LL/UL**	**MS LL/UL**	**RadY LL/UL**	**GravY LL/UL**	**RER**	**RPD**	**Surr LL/UL**
	Ac-228 (14331-83-0)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Am-241 (14596-10-2)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Bi-212 (14913-49-6)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Bi-214 (14733-03-0)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Co-60 (10198-40-0)			0.00024 uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Cs-137 (10045-97-3)			0.00048 uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Eu-152 (14683-23-9)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Eu-154 (15585-10-1)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	K-40 (13966-00-2)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Pb-210 (14255-04-0)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Pb-212 (15092-94-1)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Pb-214 (15067-28-4)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Ra-226 (13982-63-3)			4.4E-06 uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Ra-228 (15262-20-1)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Th-234 (15065-10-8)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Tl-208 (14913-50-9)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	U-235 (15117-96-1)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	U-238 (7440-61-1)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Pa-234 (15100-28-4)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A

GPC-SR90-AF	WRAD	uCi	filter	N/A	PALA-RAD-032						
	Analyte			**RDL**	**LCS LL/UL**	**MS LL/UL**	**RadY LL/UL**	**GravY LL/UL**	**RER**	**RPD**	**Surr LL/UL**
	Sr-90 (10098-97-2)			2.4E-05 uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A

Analysis Code	Fraction	Units	Aliquot	Conductivity	Analyte Count
ASP-PU239-AF	001	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Pu-239/240	
ASP-PU239-AF	002	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Pu-239/240	
ASP-PU239-AF	003	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Pu-239/240	
ASP-PU239-AF	004	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Pu-239/240	
GAM-A-AF	001	uCi	filter	N/A	19
		Group		**Analyte**	
		Parcel B Rad Sampling		Ac-228	
		Parcel B Rad Sampling		Am-241	
		Parcel B Rad Sampling		Bi-212	
		Parcel B Rad Sampling		Bi-214	
		Parcel B Rad Sampling		Co-60	
		Parcel B Rad Sampling		Cs-137	
		Parcel B Rad Sampling		Eu-152	
		Parcel B Rad Sampling		Eu-154	
		Parcel B Rad Sampling		K-40	
		Parcel B Rad Sampling		Pa-234	
		Parcel B Rad Sampling		Pb-210	
		Parcel B Rad Sampling		Pb-212	
		Parcel B Rad Sampling		Pb-214	

GAM-A-AF	001	Parcel B Rad Sampling		Ra-226	
		Parcel B Rad Sampling		Ra-228	
		Parcel B Rad Sampling		Th-234	
		Parcel B Rad Sampling		Tl-208	
		Parcel B Rad Sampling		U-235	
		Parcel B Rad Sampling		U-238	
GAM-A-AF	002	uCi	filter	N/A	19
		Group		**Analyte**	
		Parcel B Rad Sampling		Ac-228	
		Parcel B Rad Sampling		Am-241	
		Parcel B Rad Sampling		Bi-212	
		Parcel B Rad Sampling		Bi-214	
		Parcel B Rad Sampling		Co-60	
		Parcel B Rad Sampling		Cs-137	
		Parcel B Rad Sampling		Eu-152	
		Parcel B Rad Sampling		Eu-154	
		Parcel B Rad Sampling		K-40	
		Parcel B Rad Sampling		Pa-234	
		Parcel B Rad Sampling		Pb-210	
		Parcel B Rad Sampling		Pb-212	
		Parcel B Rad Sampling		Pb-214	
		Parcel B Rad Sampling		Ra-226	
		Parcel B Rad Sampling		Ra-228	
		Parcel B Rad Sampling		Th-234	
		Parcel B Rad Sampling		Tl-208	
		Parcel B Rad Sampling		U-235	
		Parcel B Rad Sampling		U-238	
GAM-A-AF	003	uCi	filter	N/A	19
		Group		**Analyte**	
		Parcel B Rad Sampling		Ac-228	
		Parcel B Rad Sampling		Am-241	
		Parcel B Rad Sampling		Bi-212	
		Parcel B Rad Sampling		Bi-214	
		Parcel B Rad Sampling		Co-60	

GAM-A-AF	003	Parcel B Rad Sampling		Cs-137	
		Parcel B Rad Sampling		Eu-152	
		Parcel B Rad Sampling		Eu-154	
		Parcel B Rad Sampling		K-40	
		Parcel B Rad Sampling		Pa-234	
		Parcel B Rad Sampling		Pb-210	
		Parcel B Rad Sampling		Pb-212	
		Parcel B Rad Sampling		Pb-214	
		Parcel B Rad Sampling		Ra-226	
		Parcel B Rad Sampling		Ra-228	
		Parcel B Rad Sampling		Th-234	
		Parcel B Rad Sampling		Tl-208	
		Parcel B Rad Sampling		U-235	
		Parcel B Rad Sampling		U-238	
GAM-A-AF	004	uCi	filter	N/A	19
		Group		**Analyte**	
		Parcel B Rad Sampling		Ac-228	
		Parcel B Rad Sampling		Am-241	
		Parcel B Rad Sampling		Bi-212	
		Parcel B Rad Sampling		Bi-214	
		Parcel B Rad Sampling		Co-60	
		Parcel B Rad Sampling		Cs-137	
		Parcel B Rad Sampling		Eu-152	
		Parcel B Rad Sampling		Eu-154	
		Parcel B Rad Sampling		K-40	
		Parcel B Rad Sampling		Pa-234	
		Parcel B Rad Sampling		Pb-210	
		Parcel B Rad Sampling		Pb-212	
		Parcel B Rad Sampling		Pb-214	
		Parcel B Rad Sampling		Ra-226	
		Parcel B Rad Sampling		Ra-228	
		Parcel B Rad Sampling		Th-234	
		Parcel B Rad Sampling		Tl-208	
		Parcel B Rad Sampling		U-235	

GAM-A-AF	004	Parcel B Rad Sampling		U-238	
GPC-SR90-AF	001	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Sr-90	
GPC-SR90-AF	002	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Sr-90	
GPC-SR90-AF	003	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Sr-90	
GPC-SR90-AF	004	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Sr-90	

PALA Sample Receipt Inspection Form

Client Name: GES-NEIS

SDG: ARS1-23-00796

Sample Custodian: [redacted]

Survey Start Date: 9/13/23 Survey Start Time: 945

Thermometer ID: E105401226 Calibration Due Date: 1/12/24 pH Paper Lot# NA

Exposure Rate Meter + Probe Unit ID: 273629 Calibration Due Date: 9/13/23 Background: 4 µR/hr

Count Rate Meter + Probe Unit ID: 268993 Calibration Due Date: 9/29/23 Background: 20 cpm

Delivery Type (circle one): Direct Lock Box Commercial Carrier: FEDEX Total # of ESCs: 1

*True temperature is recorded which includes any applicable correction factors.

External Shipping Container Tracking:	Exposure Rate (µR/hr) (limit <500 µR/hr)	Max External Swipe Counts (cpm)	Max Internal Swipe Counts (cpm)	ESC True Temps* (°C)	TRAX Matrix ID (circle all that apply): (See Section 4.3 of SOP)
A: 771758137143	5	30	30	NA	AQ WD WG WO
B:					WS WW SI UR
C:					SO OL BI VG
D:					WP SM (AF)
E:					
F:					

Visual Inspection: External Shipping Container (Circle response)

Good Condition with no Leaks or Tears	(Yes)	No	
Marked Radioactive	Yes	(No)	
UN2910	Yes	(No)	
Security Seals	(Yes)	No	
If yes, intact?	(Yes)	No	N/A

Internal Shipping Container

COC's Present	(Yes)	No	
Well packaged container with no signs of leakage	(Yes)	No	

COC/Sample Inspection (Circle response)

Sample Containers in good condition	(Yes)	No	
No spills or leaks	(Yes)	No	
Marked Radioactive	Yes	(No)	
Durable labels w/indelible ink	(Yes)	No	
COC reliquished/received correctly	(Yes)	No	
Adequate volume/filled correctly	(Yes)	No	
Hold Time sufficient for analysis	(Yes)	No	
For VOC/Radon, Head space?	Yes	No	(N/A)
If yes, <6mm?	Yes	No	(N/A)
# of containers received matches # on COC	(Yes)	No	
Samples received on ice?	Yes	(No)	
Type (circle one):	Bagged Ice	Loose Ice	Blue Ice (N/A)

Comments:

PALA Sample Survey Form

Client Name: GES-AIS

SDG: ARS1-23-00796

Pipette ID: NA Tip Lot#: NA

Disposible pipette lot#: NA

Sample ID from Client on COC or Sample	ESC Letter	Sample Container Type	Approx. Fill Level (%)	pH As Rec'd (pH <2 is Acceptable)	pH Adjusted (pH <2 is Acceptable)	Acid Lot # or Ind container temp (°C)	Vol. of Acid Used (mL)	cpm (Acceptance Limits <100 cpm/cm²)
FBB-040423	A	ziploc	25	NA	NA	NA	NA	30
MSB01	↓	↓	↓	↓	↓	↓	↓	↓
MSB02	↓	↓	↓	↓	↓	↓	↓	↓
MSB113A	↓	↓	↓	↓	↓	↓	↓	↓

Sample Custodian: [redacted] Survey End Date: 4/13/23 Survey/pH End Time: 950

pH re-check required? YES or NO

NOTE: Any metals sample acidified at sample receiving must be re-checked after a 24 hour hold.

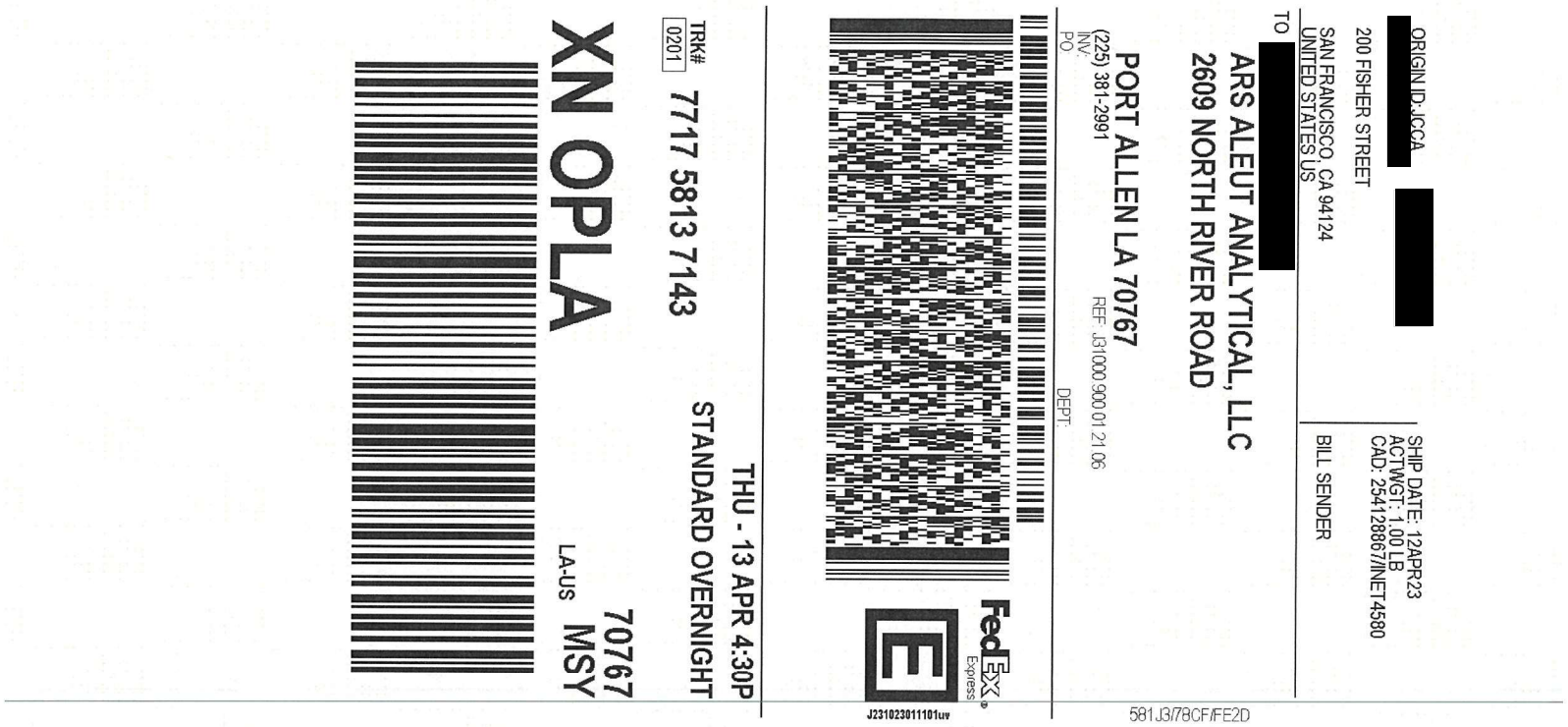
If YES: pH re-check date/time: ____________ / ________ Analyst: ________________ pH strip lot #: ______________

Were all re-checked samples' pH < 2? YES or NO*

**If no, complete and send to Project Management:*
1. Section A of PALA-SR-001-FM-05 (24 Hour Hold pH Readjustment)
2. SR section of PALA-SR-001-FM-03 (Discrepant Sample Receipt Report).

PALA-SR-001-FM-02 r 00.2 Sample Survey Form
Effective Date: 8:52 AM

Page ___ of ___



After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

2609 North River Road
Port Allen, Louisiana 70767
(225) 228-1394

ARS Aleut Analytical, LLC

Laboratory Analytical Report

ARS1-23-00867

GES-AIS, LLC
[redacted]
1501 West Fountainhead Parkway
Suite 550
Tempe, AZ 85282
[redacted]

COC Number: [redacted]**041923RADB**
PO Number: **Parcel B Air Monitoring RAD**
Job Number: **J310000900**
Job Location: **Hunters Point Shipyard, Parcel B Removal Site Evaluation**
Project Name: **Parcel B Air Monitoring RAD**

Questions regarding this analytical report should be addressed to ARS project manager, [redacted], who can be reached by email at projectmanagers@aaa.aleutfederal.com.

I certify that the test results presented in this report (in either hardcopy or electronic file (EDD)) meet the requirements of the laboratory's certifications and other applicable contract terms and conditions. A full list of the Port Allen, LA laboratory's certifications is provided with this report. Any exceptions to the certification or contract will be noted within the case narratives presented in the report. Any subcontracted sample results will be identified within the case narratives presented in the report. In the event this report is an amendment to a previously released report, the case narrative will clearly identify the original report as well as the reason(s) for reissuance. A statement of uncertainty for each analysis is available upon request. I authorize release and issuance of this report on the date signed below.

[redacted] Laboratory Management, ARS Aleut Analytical

Signature **Date** **Title**

This report provides analytical results of the requested analysis and does not include any opinions or interpretations. ARS Aleut Analytical, LLC assumes no liability for the use or interpretation of analytical results. Results relate only to items tested. A partial reproduction of this test report is prohibited. Reproduction of this report in full requires the written approval of the laboratory.

LELAP Cert # 01949

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Certifications and Accreditations List

State or Accrediting Body (AB)	Certificate Number
AIHA LAP, LLC	209312
Alaska	LA01131
California	3085
ANAB DoD	ADE-1489
ANAB DOE	ADE-1489.01
Louisiana DEQ - NELAC	01949
Louisiana DHH	LA022
Nevada	LA011312023-1
New Jersey	LA009
New York	66780 (NPW) / 66781 (SHW)
Texas	T104704447-22-18
Utah	LA011312022-13
Washington	C1010

For additional information related to the specific matrices, methods,and analytes recognized by each accrediting body, contact us at QA@aaa.aleutfederal.com for additional information.

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for

GES-AIS, LLC

Case Narrative

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PROJECT SAMPLE IDENTIFICATION CROSS-REFERENCE
TO ARS SAMPLE LABORATORY IDs

Client Sample ID	ARS Aleut Analytical Sample ID
FBB-041023	ARS1-23-00867-001
MSB01-041023	ARS1-23-00867-002
MSB02-041023	ARS1-23-00867-003
MSB113A-041023	ARS1-23-00867-004

Sample	Date Collected	Date Received	Analysis	Basis	Prep Date/Time	Analysis Date/Time
001	04/10/23 08:00	04/20/23	ASP-PU239-AF	As Received	05/09/23 12:02	05/13/23 01:51
001	04/10/23 08:00	04/20/23	GAM-A-AF	As Received	NA	04/28/23 14:35
001	04/10/23 08:00	04/20/23	GPC-SR90-AF	As Received	05/09/23 12:02	05/17/23 11:02
002	04/13/23 14:57	04/20/23	ASP-PU239-AF	As Received	05/09/23 12:02	05/13/23 01:51
002	04/13/23 14:57	04/20/23	GAM-A-AF	As Received	NA	05/03/23 14:26
002	04/13/23 14:57	04/20/23	GPC-SR90-AF	As Received	05/09/23 12:02	05/17/23 11:02
003	04/13/23 15:09	04/20/23	ASP-PU239-AF	As Received	05/09/23 12:02	05/13/23 01:51
003	04/13/23 15:09	04/20/23	GAM-A-AF	As Received	NA	04/28/23 14:39
003	04/13/23 15:09	04/20/23	GPC-SR90-AF	As Received	05/09/23 12:02	05/17/23 11:02
004	04/13/23 14:54	04/20/23	ASP-PU239-AF	As Received	05/09/23 12:02	05/13/23 01:51
004	04/13/23 14:54	04/20/23	GAM-A-AF	As Received	NA	05/05/23 15:54
004	04/13/23 14:54	04/20/23	GPC-SR90-AF	As Received	05/09/23 12:02	05/17/23 11:02

SAMPLE RECEIPT/PREP

The samples arrived in good condition. The samples were screened for radioactive contamination as per procedure **PALA-SR-001-SOP Sample Receiving**. Sample date(s) and time(s) are listed as provided by the client. In regard to the Air Filters, no flow rate information was provided by the client. Turnaround time was set at 28 calendar days.

ANALYTICAL METHODS

Pu-239/240 analysis was performed using **PALA-RAD-026, "Americium, Plutonium and Uranium in Water, Soil and Vegetation Matrices by Sequential Separation Using Eichrom Stabilized Chemistry Resin (with Vacuum Box System Option) (Eichrom ACW-02 & Eichrom ACW-03)"**.

Ac-228, Am-241, Bi-212, Bi-214, Co-60, Cs-137, Eu-152, Eu-154, K-40, Pa-234, Pb-210, Pb-212, Pb-214, Ra-226, Ra-228, Th-234, Tl-208, U-235, and U-238 analyses were performed using **PALA-RAD-007, "Modified Gamma Emitting Radionuclides in Soil, Air, and Biota Matrices (EPA 901.1 Mod, SM 7120B, & HASL-300 Ga-01-R)"**.

Sr-90 analysis was performed using **PALA-RAD-032, "Strontium 89, 90 and Total Strontium in Water, Soil and Vegetation Matrices by Eichrom Resin Separation (Eichrom SRW01, EPA 905.0, HASL 300 Sr-01-RC)"**.

ANALYTICAL RESULTS

Fraction 001 in batch ARS1-B23-00744 has elevated MDA for Ra-226 with ACT of -8.230E-5 uCi/filter, MDA of 3.054E-5 uCi/filter and CRDL of 4.4E-06 uCi/filter.
Fraction 002 in batch ARS1-B23-00817 has elevated MDA for Pu-239/240 with ACT of -2.867E-8 uCi/filter, MDA of 1.025E-7 uCi/filter and CRDL of 4.8E-08 uCi/filter.
Fraction 002 in batch ARS1-B23-00744 has elevated MDA for Ra-226 with ACT of -3.926E-6 uCi/filter, MDA of 1.536E-5 uCi/filter and CRDL of 4.4E-06 uCi/filter.
Fraction 003 in batch ARS1-B23-00817 has elevated MDA for Pu-239/240 with ACT of -3.201E-8 uCi/filter, MDA of 7.583E-8 uCi/filter and CRDL of 4.8E-08 uCi/filter.
Fraction 003 in batch ARS1-B23-00744 has elevated MDA for Ra-226 with ACT of 2.100E-6 uCi/filter, MDA of 9.130E-6 uCi/filter and CRDL of 4.4E-06 uCi/filter.
Fraction 004 in batch ARS1-B23-00817 has elevated MDA for Pu-239/240 with ACT of -3.119E-8 uCi/filter, MDA of 7.763E-8 uCi/filter and CRDL of 4.8E-08 uCi/filter.
Fraction 004 in batch ARS1-B23-00744 has elevated MDA for Ra-226 with ACT of -8.420E-5 uCi/filter, MDA of 3.115E-5 uCi/filter and CRDL of 4.4E-06 uCi/filter.

ARS1-B23-00817: ROI's adjusted to better fit the peaks of interest.

Notes (Case Narrative)

Definitions:

CRDL	Contract Required Detection Limit
CSU	Combined Standard Uncertainty
DLC	Decision Level Concentration (ANSI N42.23)
DO	Duplicate Original
DUP	Sample Duplicate
LCS/LCSD	Laboratory Control Sample/Laboratory Control Sample Duplicate
LOD	Limit of Detection
LOQ	Limit of Quantitation
MBL	Method Blank
MCL	Maximum Contaminant Level
MDA	Minimum Detectable Activity
MDL	Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
N/A	Not Applicable
NC	Not Calculated
NP	Not Provided
NR	Not Referenced
PQL	Practical Quantitation Limit

Data Qualifiers:

B	The result of both the method blank and the target sample are above the MDL.
D	Sample analysis accomplished through dilution.
J	The reported result is an estimated value above the LOD but below the LOQ, or above the MDL but below the PQL.
Q	One or more quality control criteria failed.
U	Result is below the MDA, MDL, PQL, LOD, or LOQ
*	LCS/LCSD or Sample DUP fails all Duplicate criteria.
S	Spike
SC	Subcontracted out to another qualified laboratory.
H	Holding time exceeded
E	Exceeds MCL
**	Reporting Limit is higher than MCL; Target cannot be detected
ǂ	Method/Matrix/Analyte not accredited for this certification

Radiochemistry Comments:

1.0) All MDA/MDC values are calculated on a sample specific basis.

2.0) Data in this report are within the limits of uncertainty specified in the reference method unless otherwise specified.

3.0) Total activity is actually total gamma activity and is determined utilizing the prominent gamma emitters from the naturally occurring radioactive decay chains and other prominent radioactive nuclides. Total activity may be lower than the actual total activity due to the extent of secular equilibrium achieved in the various decay chains at the time of analysis. The total activity is not representative of nuclides that emit solely alpha or beta particles.

4.0) Ra-226 after ingrowth is determined via secular equilibrium with its daughter, Bismuth 214 (Gamma Spectroscopy only).

5.0) Ra-228 is determined via secular equilibrium with its daughter, Actinium 228 (Gamma Spectroscopy only).

6.0) U-238 is determined via secular equilibrium with its daughter, Thorium 234 (Gamma Spectroscopy only).

7.0) All gamma spectroscopy was performed utilizing high purity germanium detectors (**HPGe**).

8.0) ARS makes every attempt to match sample density to calibrated density; however, in some cases, it is not practical or possible to do so and data results may be affected (Gamma Spectroscopy only).

9.0) Gamma spectroscopy results are calculated values based on the **ORTEC®** GammaVision ENV32 Analysis Engine.

10.0) DoD/DOE and ISO 17025 certifications through ANAB apply only to the following methods in **Non-Potable Water**:
Gross Alpha and Gross Beta (EPA 900.0, EPA 9310); Radium 226 (EPA 903.0, EPA 903.1, EPA 9315); Radium 228 (EPA 904.0, EPA 9320); ICP/MS (EPA 6020B); ICP-OES (EPA 6010D); Mercury CVAA (EPA 7470A); Strontium-89 (EPA 905.0, Eichrom SRW01, HASL 300 Sr-01); Strontium-90 (EPA 905.0, Eichrom SRW01, HASL 300 Sr-02-RC); Tritium (EPA 906.0); Enriched Tritium (ARS-040), Carbon-14 (ARS-019), Tritium/Carbon (ARS-151); Gamma Emitters (EPA 901.1, SM 7120B, HASL 300 Ga-01-R); Americium-241 (Eichrom ACW03, Eichrom ACW16, HASL 300 Se-03, HASL 300 Am-03); Neptunium 237 (Eichrom ACW16); Plutonium 238, Plutonium 239/240, Plutonium-241 (Eichrom ACW03, Eichrom ACW16, HASL 300 Se-03, HASL 300 Pu-10); Thorium-228, Thorium 230, Thorium-232 (Eichrom ACW10); Uranium-234, Uranium-235,

11.0) Uranium-238 (Eichrom ACW03, Eichrom ACW16, HASL 300 Se-03); Technetium-99 (Eichrom TCW02)
DoD/DOE and ISO 17025 certifications through ANAB apply only to the following methods in **Solid and Chemical Materials**:
Gross Alpha and Gross Beta (EPA 900.0 Mod, EPA 9310); ICP/MS (EPA 6020B); ICP-OES (EPA 6010D); Mercury CVAA (EPA 7471B); Strontium-89 (EPA 905.0 Mod, Eichrom SRW01, HASL 300 Sr-01); Strontium-90 (EPA 905.0 Mod, Eichrom SRW01, HASL 300 Sr-02); Tritium (EPA 906.0 Mod); Gamma Emitters (EPA 901.1, HASL 300 Ga-01-R); Americium-241 (Eichrom ACW03, HASL 300 Se-03, HASL 300 Am-01-RC); Neptunium 237 (Eichrom ACW16); Plutonium 238, Plutonium 239/240, Plutonium-241 (Eichrom ACW03, Eichrom ACW16, HASL 300 Se-03, HASL 300 Pu-

12.0) 02-RC, HASL 300 Pu-03-RC); Thorium-228, Thorium 230, Thorium-232 (Eichrom ACW10); Uranium-234, Uranium-235, Uranium-238 (Eichrom ACW03, Eichrom ACW16, HASL 300 Se-03, HASL 300 U-02, HASL 300 U-04); Technetium-99 (Eichrom TCS01)
DoD/DOE and ISO 17025 certifications through ANAB apply only to the following methods in **Air and Emissions**:
Gross Alpha and Gross Beta (EPA 900.0 Mod, EPA 9310); Strontium-89 (Eichrom SRW01, HASL 300 Sr-01-RC); Strontium-90 (Eichrom SRW01, HASL 300 Sr-02-RC); Gamma Emitters (EPA 901.1, HASL 300 Ga-01-R); Americium-241 (Eichrom ACW03, HASL 300 Se-03); Neptunium 237 (Eichrom ACW16); Plutonium 238, Plutonium 239/240, Plutonium-241 (Eichrom ACW03, Eichrom ACW16, HASL 300 Se-03); Thorium-228, Thorium 230, Thorium-232 (Eichrom ACW10); Uranium-234, Uranium-235, Uranium-238 (Eichrom ACW03, Eichrom ACW16, HASL 300 Se-03); Technetium-99 (Eichrom TCW02, Eichrom TCS01)

General Comments:

1.0 Modified analysis procedures are procedures that are modified to meet certain specifications. An example may be the use of a water method to analyze a solid matrix due to the lack of an officially recognized procedure for the analysis of the solid matrix. Modified analyses are indicated by the subsequent addition of "M" or "Mod" to the procedure number (i.e. 901.1M, 901.1 Mod).

2.0 All NIOSH method results are reported without blank corrections applied.

3.0 Basis: "As Received" = analyzed as received from client; "Dry" = dried prior to being analyzed; "Dry Weight Corrected" = analyzed as received; result corrected for percent moisture.

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ARS Aleut Analytical, LLC
Analytical Reports

for

GES-AIS, LLC

Analytical Results

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ARS Sample Delivery Group: ARS1-23-00867
Client Sample ID: FBB-041023
Sample Collection Date: 04/10/23 8:00
Sample Matrix: Air Filter
Percent Solids: N/A

Request or PO Number: Parcel B Air Monitoring RAD
ARS Sample ID: ARS1-23-00867-001
Date Received: 04/20/23
Report Date: 05/17/23

Radiochemistry

Analysis Method: Eichrom ACW03 **ABatch Sample ID:** ARS1-B23-00817-07

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Pu-239/240	2.343E-7	8.697E-8	9.619E-8	4.162E-8	4.8E-08		uCi/filter	05/13/23 1:51	[redacted]	61.9%

Analysis Method: EPA 901.1M **ABatch Sample ID:** ARS1-B23-00744-07

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Co-60	-1.119E-6	1.840E-6	1.864E-6	9.320E-7	0.00024	U	uCi/filter	04/28/23 14:35	[redacted]	N/A
Cs-137	-1.060E-7	1.401E-6	1.581E-6	7.905E-7	0.00048	U	uCi/filter	04/28/23 14:35		N/A
Ra-226	-8.230E-5	3.359E-5	3.054E-5	1.527E-5	4.4E-06	U	uCi/filter	04/28/23 14:35		N/A

Analysis Method: Eichrom SRW01 **ABatch Sample ID:** ARS1-B23-00818-07

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
SR-90	4.172E-6	2.476E-6	3.667E-6	1.689E-6	2.4E-05		uCi/filter	05/17/23 11:02	[redacted]	101%

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ARS Sample Delivery Group: ARS1-23-00867
Client Sample ID: MSB01-041023
Sample Collection Date: 04/13/23 14:57
Sample Matrix: Air Filter
Percent Solids: N/A

Request or PO Number: Parcel B Air Monitoring RAD
ARS Sample ID: ARS1-23-00867-002
Date Received: 04/20/23
Report Date: 05/17/23

Radiochemistry

Analysis Method: Eichrom ACW03 **ABatch Sample ID:** ARS1-B23-00817-08

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Pu-239/240	-2.867E-8	5.026E-8	1.025E-7	4.570E-8	4.8E-08	U	uCi/filter	05/13/23 1:51	[redacted]	73.9%

Analysis Method: EPA 901.1M **ABatch Sample ID:** ARS1-B23-00744-08

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Ac-228	4.532E-6	1.669E-6	2.248E-6	1.124E-6	NP		uCi/filter	05/03/23 14:26	[redacted]	N/A
Bi-212	5.394E-6	3.307E-6	4.576E-6	2.288E-6	NP		uCi/filter	05/03/23 14:26		N/A
Co-60	4.640E-7	9.355E-7	9.547E-7	4.774E-7	0.00024	U	uCi/filter	05/03/23 14:26		N/A
Cs-137	-4.713E-7	8.493E-7	9.468E-7	4.734E-7	0.00048	U	uCi/filter	05/03/23 14:26		N/A
Ra-226	-3.926E-6	1.589E-5	1.536E-5	7.680E-6	4.4E-06	U	uCi/filter	05/03/23 14:26		N/A
Ra-228	4.532E-6	1.669E-6	2.248E-6	1.124E-6	NP		uCi/filter	05/03/23 14:26		N/A

Analysis Method: Eichrom SRW01 **ABatch Sample ID:** ARS1-B23-00818-08

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
SR-90	4.498E-6	2.660E-6	3.944E-6	1.819E-6	2.4E-05		uCi/filter	05/17/23 11:02	[redacted]	94.8%

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ARS Sample Delivery Group: ARS1-23-00867
Client Sample ID: MSB02-041023
Sample Collection Date: 04/13/23 15:09
Sample Matrix: Air Filter
Percent Solids: N/A

Request or PO Number: Parcel B Air Monitoring RAD
ARS Sample ID: ARS1-23-00867-003
Date Received: 04/20/23
Report Date: 05/17/23

Radiochemistry

Analysis Method: Eichrom ACW03 **ABatch Sample ID:** ARS1-B23-00817-09

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Pu-239/240	-3.201E-8	3.366E-8	7.583E-8	3.310E-8	4.8E-08	U	uCi/filter	05/13/23 1:51	[redacted]	85.2%

Analysis Method: EPA 901.1M **ABatch Sample ID:** ARS1-B23-00744-09

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Bi-214	2.433E-6	1.217E-6	1.447E-6	7.235E-7	NP		uCi/filter	04/28/23 14:39	[redacted]	N/A
Co-60	1.021E-7	8.583E-7	8.843E-7	4.422E-7	0.00024	U	uCi/filter	04/28/23 14:39		N/A
Cs-137	5.666E-7	6.181E-7	6.603E-7	3.302E-7	0.00048	U	uCi/filter	04/28/23 14:39		N/A
Pb-214	1.810E-6	6.841E-7	1.011E-6	5.055E-7	NP		uCi/filter	04/28/23 14:39		N/A
Ra-226	2.100E-6	7.224E-6	9.130E-6	4.565E-6	4.4E-06	U	uCi/filter	04/28/23 14:39		N/A
Tl-208	5.664E-7	2.839E-7	4.328E-7	2.164E-7	NP		uCi/filter	04/28/23 14:39		N/A

Analysis Method: Eichrom SRW01 **ABatch Sample ID:** ARS1-B23-00818-09

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
SR-90	2.486E-6	2.234E-6	3.586E-6	1.655E-6	2.4E-05	U	uCi/filter	05/17/23 11:02	[redacted]	97.3%

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ARS Sample Delivery Group: ARS1-23-00867
Client Sample ID: MSB113A-041023
Sample Collection Date: 04/13/23 14:54
Sample Matrix: Air Filter
Percent Solids: N/A

Request or PO Number: Parcel B Air Monitoring RAD
ARS Sample ID: ARS1-23-00867-004
Date Received: 04/20/23
Report Date: 05/17/23

Radiochemistry

Analysis Method: Eichrom ACW03 **ABatch Sample ID:** ARS1-B23-00817-10

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Pu-239/240	-3.119E-8	3.171E-8	7.763E-8	3.278E-8	4.8E-08	U	uCi/filter	05/13/23 1:51	[redacted]	66.3%

Analysis Method: EPA 901.1M **ABatch Sample ID:** ARS1-B23-00744-10

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Co-60	8.442E-7	1.396E-6	1.423E-6	7.115E-7	0.00024	U	uCi/filter	05/05/23 15:54	[redacted]	N/A
Cs-137	-8.127E-7	1.526E-6	1.701E-6	8.505E-7	0.00048	U	uCi/filter	05/05/23 15:54		N/A
Ra-226	-8.420E-5	3.324E-5	3.115E-5	1.558E-5	4.4E-06	U	uCi/filter	05/05/23 15:54		N/A

Analysis Method: Eichrom SRW01 **ABatch Sample ID:** ARS1-B23-00818-10

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
SR-90	3.192E-6	2.627E-6	4.161E-6	1.920E-6	2.4E-05	U	uCi/filter	05/17/23 11:02	[redacted]	89.7%

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ARS Aleut Analytical, LLC
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QC Summary

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QC Sample Results

Analytical Batch: ARS1-B23-00744
Lab Sample ID: ARS1-B23-00744-01
Method: EPA 901.1M

Sample Type: LCS
Matrix: Air Filter
Analysis Date: 04/26/23 13:25

Analyte	Spike Added	Analysis Result	Qual	Analysis Units	% Rec	% Rec Limits
Am-241	33.065	31.713		uCi/filter	95.9	75 - 125
Co-60	20.928	20.564		uCi/filter	98.3	75 - 125
Cs-137	12.996	13.326		uCi/filter	102.5	75 - 125

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QC Sample Results

Analytical Batch: ARS1-B23-00744
Lab Sample ID: ARS1-B23-00744-02
Method: EPA 901.1M

Sample Type: LCSD
Matrix: Air Filter
Analysis Date: 04/26/23 13:43

Analyte	Spike Added	Analysis Result	Qual	Analysis Units	% Rec	% Rec Limits	RPD	RPD Limit	DER	DER Limit
Am-241	33.065	32.333		uCi/filter	97.8	75 - 125	1.9	25	0.346	3
Co-60	20.928	22.277		uCi/filter	106.4	75 - 125	8.0	25	1.926	3
Cs-137	12.996	13.553		uCi/filter	104.3	75 - 125	1.7	25	0.439	3

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QC Sample Results

Analytical Batch: ARS1-B23-00744
Lab Sample ID: ARS1-B23-00744-03
Method: EPA 901.1M

Sample Type: MBL
Matrix: Air Filter
Analysis Date: 04/27/23 14:02

Analyte	Analysis Result	CSU +/- 2 s	MDA	DLC	Qual	Analysis Units
Ac-228	-0.007	0.007	0.007	0.003	U	uCi/filter
Am-241	1.175E-4	0.001	0.002	0.001	U	uCi/filter
Bi-212	-0.004	0.011	0.013	0.006	U	uCi/filter
Bi-214	-0.003	0.004	0.004	0.002	U	uCi/filter
Co-60	5.582E-4	0.002	0.002	7.700E-4	U	uCi/filter
Cs-137	5.458E-4	0.001	0.002	7.700E-4	U	uCi/filter
Eu-152	-1.777E-4	0.001	0.002	8.750E-4	U	uCi/filter
Eu-154	5.216E-4	0.001	0.001	6.850E-4	U	uCi/filter
K-40	-0.036	0.027	0.026	0.013	U	uCi/filter
Pa-234	7.341E-4	0.002	0.002	0.001	U	uCi/filter
Pb-210	-0.003	0.015	0.017	0.009	U	uCi/filter
Pb-212	5.896E-4	0.002	0.002	0.001	U	uCi/filter
Pb-214	0.001	0.003	0.003	0.002	U	uCi/filter
Ra-226	-0.070	0.025	0.031	0.016	U	uCi/filter
Ra-228	-0.007	0.007	0.007	0.003	U	uCi/filter
Th-234	0.002	0.016	0.017	0.008	U	uCi/filter
Tl-208	-0.001	0.002	0.002	8.650E-4	U	uCi/filter
U-235	-0.006	0.005	0.007	0.003	U	uCi/filter
U-238	0.002	0.016	0.017	0.008	U	uCi/filter

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QC Association Summary

ARS Sample Delivery Group: ARS1-23-00867 **Analytical Batch:** ARS1-B23-00744

Analysis: Gamma Spec (Short) in (Air Filters, Smears [AF])

Batch Sample ID	Lab Sample ID	Client Sample ID	Matrix	Method	Prep Method
ARS1-B23-00744-01		Lab Control Sample	Air Filter	EPA 901.1M	N/A
ARS1-B23-00744-02		Lab Control Sample Duplicate	Air Filter	EPA 901.1M	N/A
ARS1-B23-00744-03		Method Blank	Air Filter	EPA 901.1M	N/A
ARS1-B23-00744-07	ARS1-23-00867-001	FBB-041023	Air Filter	EPA 901.1M	N/A
ARS1-B23-00744-08	ARS1-23-00867-002	MSB01-041023	Air Filter	EPA 901.1M	N/A
ARS1-B23-00744-09	ARS1-23-00867-003	MSB02-041023	Air Filter	EPA 901.1M	N/A
ARS1-B23-00744-10	ARS1-23-00867-004	MSB113A-041023	Air Filter	EPA 901.1M	N/A

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QC Sample Results

Analytical Batch: ARS1-B23-00817
Lab Sample ID: ARS1-B23-00817-01
Method: Eichrom ACW03

Sample Type: LCS
Matrix: Air Filter
Analysis Date: 05/13/23 1:51

Analyte	Spike Added	Analysis Result	Qual	Analysis Units	% Rec	% Rec Limits
Pu-239/240	7.747E-6	7.664E-6		uCi/filter	98.9	75 - 125

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QC Sample Results

Analytical Batch: ARS1-B23-00817
Lab Sample ID: ARS1-B23-00817-02
Method: Eichrom ACW03

Sample Type: LCSD
Matrix: Air Filter
Analysis Date: 05/13/23 1:51

Analyte	Spike Added	Analysis Result	Qual	Analysis Units	% Rec	% Rec Limits	RPD	RPD Limit	DER	DER Limit
Pu-239/240	7.775E-6	7.500E-6		uCi/filter	96.5	75 - 125	2.2	25	0.239	3

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QC Sample Results

Analytical Batch: ARS1-B23-00817
Lab Sample ID: ARS1-B23-00817-03
Method: Eichrom ACW03

Sample Type: MBL
Matrix: Air Filter
Analysis Date: 05/13/23 1:51

Analyte	Analysis Result	CSU +/- 2 s	MDA	DLC	Qual	Analysis Units
Pu-238	4.834E-9	3.416E-8	6.819E-8	2.754E-8	U	uCi/filter
Pu-239/240	-5.800E-8	4.694E-8	1.085E-7	4.771E-8	U	uCi/filter

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QC Association Summary

ARS Sample Delivery Group: ARS1-23-00867

Analytical Batch: ARS1-B23-00817

Analysis: Plutonium (239, 240Pu) in (Air Filters, Smears, Leak Test [AF, SM, LT])

Batch Sample ID	Lab Sample ID	Client Sample ID	Matrix	Method	Prep Method
ARS1-B23-00817-01		Lab Control Sample	Air Filter	Eichrom ACW03	N/A
ARS1-B23-00817-02		Lab Control Sample Duplicate	Air Filter	Eichrom ACW03	N/A
ARS1-B23-00817-03		Method Blank	Air Filter	Eichrom ACW03	N/A
ARS1-B23-00817-07	ARS1-23-00867-001	FBB-041023	Air Filter	Eichrom ACW03	N/A
ARS1-B23-00817-08	ARS1-23-00867-002	MSB01-041023	Air Filter	Eichrom ACW03	N/A
ARS1-B23-00817-09	ARS1-23-00867-003	MSB02-041023	Air Filter	Eichrom ACW03	N/A
ARS1-B23-00817-10	ARS1-23-00867-004	MSB113A-041023	Air Filter	Eichrom ACW03	N/A

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QC Sample Results

Analytical Batch: ARS1-B23-00818
Lab Sample ID: ARS1-B23-00818-01
Method: Eichrom SRW01

Sample Type: LCS
Matrix: Air Filter
Analysis Date: 05/17/23 11:02

Analyte	Spike Added	Analysis Result	Qual	Analysis Units	% Rec	% Rec Limits
SR-90	2.013E-5	2.143E-5		uCi/filter	106.4	75 - 125

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QC Sample Results

Analytical Batch: ARS1-B23-00818
Lab Sample ID: ARS1-B23-00818-02
Method: Eichrom SRW01

Sample Type: LCSD
Matrix: Air Filter
Analysis Date: 05/17/23 11:02

Analyte	Spike Added	Analysis Result	Qual	Analysis Units	% Rec	% Rec Limits	RPD	RPD Limit	DER	DER Limit
SR-90	2.009E-5	2.331E-5		uCi/filter	116.0	75 - 125	8.4	25	0.761	3

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QC Sample Results

Analytical Batch: ARS1-B23-00818
Lab Sample ID: ARS1-B23-00818-03
Method: Eichrom SRW01

Sample Type: MBL
Matrix: Air Filter
Analysis Date: 05/17/23 11:02

Analyte	Analysis Result	CSU +/- 2 s	MDA	DLC	Qual	Analysis Units
SR-90	2.257E-6	2.239E-6	3.633E-6	1.665E-6	U	uCi/filter

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QC Association Summary

ARS Sample Delivery Group: ARS1-23-00867

Analytical Batch: ARS1-B23-00818

Analysis: Strontium-90 in (Air Filters, Smears [AF])

Batch Sample ID	Lab Sample ID	Client Sample ID	Matrix	Method	Prep Method
ARS1-B23-00818-01		Lab Control Sample	Air Filter	Eichrom SRW01	N/A
ARS1-B23-00818-02		Lab Control Sample Duplicate	Air Filter	Eichrom SRW01	N/A
ARS1-B23-00818-03		Method Blank	Air Filter	Eichrom SRW01	N/A
ARS1-B23-00818-07	ARS1-23-00867-001	FBB-041023	Air Filter	Eichrom SRW01	N/A
ARS1-B23-00818-08	ARS1-23-00867-002	MSB01-041023	Air Filter	Eichrom SRW01	N/A
ARS1-B23-00818-09	ARS1-23-00867-003	MSB02-041023	Air Filter	Eichrom SRW01	N/A
ARS1-B23-00818-10	ARS1-23-00867-004	MSB113A-041023	Air Filter	Eichrom SRW01	N/A

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ARS Aleut Analytical, LLC
Analytical Reports

for

GES-AIS, LLC

Batch QC

ALEUT

QC Results per Analytical Batch

Analytical Batch	**ARS1-B23-00744**
SDG	**ARS1-23-00867**
Analysis	**Gamma Spec (Short) in (Air Filters, Smears [AF])**
Method	**EPA 901.1M**
Analysis Code	**GAM-A-AF**
Report Units	**uCi/filter**

Acceptable QC Performance Ranges

QC Sample Type	Performance Items and Ranges		
Laboratory Control Sample	**Recovery (%):**	**> 75**	**< 125**
Matrix Spike	**Recovery (%):**	**> 60**	**< 140**
Duplicate	**Duplicate Error Ratio (DER):**		**< 3**
	Relative Percent Difference (RPD %):		**≤ 25**

Laboratory Control Sample

Analysis Date: 04/26/23 13:25 | Analysis Technician: [redacted]

Analysis Batch Sample ID	QC Type	Analyte	Results	CSU (2s)	Expected Value	LCS Rec (%)	MDA
ARS1-B23-00744-01	**LCS**	AM-241	31.713	2.463	33.065	95.9	0.118
ARS1-B23-00744-01	**LCS**	CO-60	20.564	1.289	20.928	98.3	0.394
ARS1-B23-00744-01	**LCS**	CS-137	13.326	0.710	12.996	102.5	0.070

Duplicate RER/DER/RPD

Analysis Date: 04/26/23 13:43 | Analysis Technician: [redacted]

Analyte	Results LCS	CSU LCS (2s)	Results LCSD	CSU LCSD (2s)	DER	RPD
AM-241	31.713	2.463	32.333	2.510	0.346	1.9
CO-60	20.564	1.289	22.277	1.173	1.926	8.0
CS-137	13.326	0.710	13.553	0.722	0.439	1.7

Method Blank

Analysis Date: 04/27/23 14:02 | Analysis Technician: [redacted]

Analysis Batch Sample ID	QC Type	Analyte	Results	CSU (2s)	MDA	Qual
ARS1-B23-00744-03	**MBL**	AC-228	-0.007	0.007	0.007	U
ARS1-B23-00744-03	**MBL**	AM-241	1.175E-4	0.001	0.002	U
ARS1-B23-00744-03	**MBL**	BI-212	-0.004	0.011	0.013	U
ARS1-B23-00744-03	**MBL**	BI-214	-0.003	0.004	0.004	U
ARS1-B23-00744-03	**MBL**	CO-60	5.582E-4	0.002	0.002	U
ARS1-B23-00744-03	**MBL**	CS-137	5.458E-4	0.001	0.002	U
ARS1-B23-00744-03	**MBL**	EU-152	-1.777E-4	0.001	0.002	U
ARS1-B23-00744-03	**MBL**	EU-154	5.216E-4	0.001	0.001	U
ARS1-B23-00744-03	**MBL**	K-40	-0.036	0.027	0.026	U
ARS1-B23-00744-03	**MBL**	PA-234	7.341E-4	0.002	0.002	U
ARS1-B23-00744-03	**MBL**	PB-210	-0.003	0.015	0.017	U
ARS1-B23-00744-03	**MBL**	PB-212	5.896E-4	0.002	0.002	U
ARS1-B23-00744-03	**MBL**	PB-214	0.001	0.003	0.003	U
ARS1-B23-00744-03	**MBL**	RA-226	-0.070	0.025	0.031	U
ARS1-B23-00744-03	**MBL**	RA-228	-0.007	0.007	0.007	U
ARS1-B23-00744-03	**MBL**	TH-234	0.002	0.016	0.017	U
ARS1-B23-00744-03	**MBL**	TL-208	-0.001	0.002	0.002	U
ARS1-B23-00744-03	**MBL**	U-235	-0.006	0.005	0.007	U
ARS1-B23-00744-03	**MBL**	U-238	0.002	0.016	0.017	U

QC Results per Analytical Batch

Analytical Batch	**ARS1-B23-00817**
SDG	**ARS1-23-00867**
Analysis	**Plutonium (239, 240Pu) in (Air Filters, Smears, Leak Test [AF, SM, LT])**
Method	**Eichrom ACW03**
Analysis Code	**ASP-PU239-AF**
Report Units	**uCi/filter**

Acceptable QC Performance Ranges

QC Sample Type	Performance Items and Ranges		
Laboratory Control Sample	**Recovery (%):**	**> 75**	**< 125**
Matrix Spike	**Recovery (%):**	**> 60**	**< 140**
Duplicate	**Duplicate Error Ratio (DER):**		**< 3**
	Relative Percent Difference (RPD %):		**≤ 25**

Laboratory Control Sample

			Analysis Date	05/13/23 01:51	**Analysis Technician**	[redacted]	
Analysis Batch Sample ID	**QC Type**	**Analyte**	**Results**	**CSU (2s)**	**Expected Value**	**LCS Rec (%)**	**MDA**
ARS1-B23-00817-01	**LCS**	PU-239/240	7.664E-6	9.612E-7	7.747E-6	98.9	8.755E-8

Duplicate RER/DER/RPD

			Analysis Date	05/13/23 01:51	**Analysis Technician**	[redacted]	
Analyte	**Results LCS**	**CSU LCS (2s)**	**Results LCSD**	**CSU LCSD (2s)**	**DER**	**RPD**	
PU-239/240	7.664E-6	9.612E-7	7.500E-6	9.390E-7	0.239	2.2	

Method Blank

			Analysis Date	05/13/23 01:51	**Analysis Technician**	[redacted]	
Analysis Batch Sample ID	**QC Type**	**Analyte**	**Results**	**CSU (2s)**	**MDA**	**Qual**	
ARS1-B23-00817-03	**MBL**	PU-238	4.834E-9	3.416E-8	6.819E-8	U	
ARS1-B23-00817-03	**MBL**	PU-239/240	-5.800E-8	4.694E-8	1.085E-7	U	

QC Results per Analytical Batch

Analytical Batch	**ARS1-B23-00818**
SDG	**ARS1-23-00867**
Analysis	**Strontium-90 in (Air Filters, Smears [AF])**
Method	**Eichrom SRW01**
Analysis Code	**GPC-SR90-AF**
Report Units	**uCi/filter**

Acceptable QC Performance Ranges

QC Sample Type	Performance Items and Ranges		
Laboratory Control Sample	**Recovery (%):**	**> 75**	**< 125**
Matrix Spike	**Recovery (%):**	**> 60**	**< 140**
Duplicate	**Duplicate Error Ratio (DER):**		**< 3**
	Relative Percent Difference (RPD %):		**≤ 25**

Laboratory Control Sample

Analysis Date	05/17/23 11:02	Analysis Technician	[redacted]

Analysis Batch Sample ID	QC Type	Analyte	Results	CSU (2s)	Expected Value	LCS Rec (%)	MDA
ARS1-B23-00818-01	**LCS**	SR-90	2.143E-5	3.276E-6	2.013E-5	106.4	3.723E-7

Duplicate RER/DER/RPD

Analysis Date	05/17/23 11:02	Analysis Technician	[redacted]

Analyte	Results LCS	CSU LCS (2s)	Results LCSD	CSU LCSD (2s)	DER	RPD
SR-90	2.143E-5	3.276E-6	2.331E-5	3.550E-6	0.761	8.4

Method Blank

Analysis Date	05/17/23 11:02	Analysis Technician	[redacted]

Analysis Batch Sample ID	QC Type	Analyte	Results	CSU (2s)	MDA	Qual
ARS1-B23-00818-03	**MBL**	SR-90	2.257E-6	2.239E-6	3.633E-6	U

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ARS Aleut Analytical, LLC
Analytical Reports

for

GES-AIS, LLC

Sample Management Records

CHAIN-OF-CUSTODY RECORD

Gilbane Federal
[redacted]
2300 Clayton Road, Suite 1050, Concord, CA 94520

COC # [redacted]041923RADB

Project Name: Hunters Point Shipyard, Parcel B Removal Site Evaluation	Laboratory: ARS Aleut Analytical (AAA), Port Allen, LA	Event: **Parcel B Air Monitoring RAD**
Project Number: J310000900	POC: [redacted]	
WBS Code: J310000900	Ship to: 2609 North River Road, Port Allen, LA 70767-3469	

Comments:

SW9315 - Ra-226 not needed

[redacted]

Equipment:

Code	Matrix
A	Air
AQ	Air Quality Control Matrix

Code	Container/Preservative
1	1x Gallon Ziploc Bag, None
1	1x Filter, None
15	1x 250-mL Plastic, 4 Degrees C

Event: Parcel B Air Monitoring RAD

	Sample ID	Matrix	Date	Time	Samp Init	Analytical Test Method: E901.1 - Gamma Spec Air	RC0240 - Pu Isotopes	SR02RC - Sr90	SW9315 - Ra226	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
						15	15	1	1						
1	FBB-041023	AQ	04/10/2023	0800	[redacted]	X	X	X	X	FIELDQC	FB1	0.00	0.00	1	
2	MSB01-041023	A	04/13/2023	1457		X	X	X	X	MSB01	N1	0.00	0.00	1	
3	MSB02-041023	A	04/13/2023	1509		X	X	X	X	MSB02	N1	0.00	0.00	1	
4	MSB113A-041023	A	04/13/2023	1454		X	X	X	X	MSB113A	N1	0.00	0.00	1	
5															

Turnaround Time: NA

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[redacted]	4/19/23	1400	Fedex	4/19/23	1400
			[redacted]	4/20/23	930

Shipping Date / Carrier / Airbill Number
Shipping Date: 4/19/2023 / FEDEX / 7718 0431 6268

Received by Laboratory: *(Signature, Date, Time)* **& condition**

SDG Report - Samples and Containers

SDG Specific Data							
SDG	ARS1-23-00867			TAT Days	28 Calendar Days	Project Type	Environmental
Sample Count	4	Rpt Level	4	Date Received	04/20/2023	COC Number	[redacted]041923RADB
Client	GES-AIS, LLC			Discrepancy Resol	N/A	PO Number	Parcel B Air Monitoring RAD
Client Code	1138			Client Deadline	05/18/2023	Job Number	J310000900
Profile Number	PN-01411					Job Location	Hunters Point Shipyard, Parcel B Removal Site Evaluation
Comment							

Samples and Containers Checked In Thus Far

FR	Name	Matrix	Start Date	End Date	Disp	Hold	Arch	Storage	Comments
001	FBB-041023	Air Filter	04/10/2023 07:59	04/10/2023 08:00	H	30	10	PrePrep	
	IC_ID	**Cnt**	**Container Type**	**AF Volume (L)**	**AF Units**		**Rate**	**Mins**	**Comments**
	435334	1	HDP Container	1	LPM			1	
			Mid-Sample Date:	04/10/2023 07:59	AF Volume (CuM):		0.001		
002	MSB01-041023	Air Filter	04/13/2023 14:56	04/13/2023 14:57	H	30	10	PrePrep	
	IC_ID	**Cnt**	**Container Type**	**AF Volume (L)**	**AF Units**		**Rate**	**Mins**	**Comments**
	435335	1	HDP Container	1	LPM			1	
			Mid-Sample Date:	04/13/2023 14:56	AF Volume (CuM):		0.001		
003	MSB02-041023	Air Filter	04/13/2023 15:08	04/13/2023 15:09	H	30	10	PrePrep	
	IC_ID	**Cnt**	**Container Type**	**AF Volume (L)**	**AF Units**		**Rate**	**Mins**	**Comments**
	435336	1	HDP Container	1	LPM			1	
			Mid-Sample Date:	04/13/2023 15:08	AF Volume (CuM):		0.001		
004	MSB113A-041023	Air Filter	04/13/2023 14:53	04/13/2023 14:54	H	30	10	PrePrep	
	IC_ID	**Cnt**	**Container Type**	**AF Volume (L)**	**AF Units**		**Rate**	**Mins**	**Comments**
	435337	1	HDP Container	1	LPM			1	
			Mid-Sample Date:	04/13/2023 14:53	AF Volume (CuM):		0.001		

SDG Report - Analysis Assignments

SDG	**ARS1-23-00867**	**Sample Count**	**4**
Client	**GES-AIS, LLC**	**Analysis Count**	**3-12**

Sample Count Totals Per Analysis

Analysis Code	Analysis Description	In/Out	Samples Count
ASP-PU239-AF	Plutonium (239, 240Pu) in (Air Filters, Smears, Leak Test [AF, SM, LT])	I	4
GAM-A-AF	Gamma Spec (Short) in (Air Filters, Smears [AF])	I	4
GPC-SR90-AF	Strontium-90 in (Air Filters, Smears [AF])	I	4

Analyses Assigned Per Fraction

Fraction	Analysis Code	X = Assigned
001	ASP-PU239-AF	X
001	GAM-A-AF	X
001	GPC-SR90-AF	X
002	ASP-PU239-AF	X
002	GAM-A-AF	X
002	GPC-SR90-AF	X
003	ASP-PU239-AF	X
003	GAM-A-AF	X
003	GPC-SR90-AF	X
004	ASP-PU239-AF	X
004	GAM-A-AF	X
004	GPC-SR90-AF	X

Client Name: GES-AIS, LLC Profile Name: Parcel B Rad Sampling Report Level: 4

Analysis Code	Prep Type	Units	Aliquot	Prep Code	Procedure	Count Time					
ASP-PU239-AF	WRAD	uCi	filter	N/A	PALA-RAD-026						
	Analyte			**RDL**	**LCS LL/UL**	**MS LL/UL**	**RadY LL/UL**	**GravY LL/UL**	**RER**	**RPD**	**Surr LL/UL**
	Pu-239/240 (15117-48-3)			4.8E-08 uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
GAM-A-AF	WGAM	uCi	filter	N/A	PALA-RAD-007						
	Analyte			**RDL**	**LCS LL/UL**	**MS LL/UL**	**RadY LL/UL**	**GravY LL/UL**	**RER**	**RPD**	**Surr LL/UL**
	Ac-228 (14331-83-0)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Am-241 (14596-10-2)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Bi-212 (14913-49-6)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Bi-214 (14733-03-0)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Co-60 (10198-40-0)			0.00024 uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Cs-137 (10045-97-3)			0.00048 uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Eu-152 (14683-23-9)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Eu-154 (15585-10-1)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	K-40 (13966-00-2)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Pb-210 (14255-04-0)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Pb-212 (15092-94-1)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Pb-214 (15067-28-4)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Ra-226 (13982-63-3)			4.4E-06 uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Ra-228 (15262-20-1)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Th-234 (15065-10-8)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Tl-208 (14913-50-9)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	U-235 (15117-96-1)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	U-238 (7440-61-1)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Pa-234 (15100-28-4)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A

GPC-SR90-AF	WRAD	uCi	filter	N/A	PALA-RAD-032						
	Analyte			**RDL**	**LCS LL/UL**	**MS LL/UL**	**RadY LL/UL**	**GravY LL/UL**	**RER**	**RPD**	**Surr LL/UL**
	Sr-90 (10098-97-2)			2.4E-05 uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A

Analysis Code	Fraction	Units	Aliquot	Conductivity	Analyte Count
ASP-PU239-AF	001	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Pu-239/240	
ASP-PU239-AF	002	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Pu-239/240	
ASP-PU239-AF	003	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Pu-239/240	
ASP-PU239-AF	004	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Pu-239/240	
GAM-A-AF	001	uCi	filter	N/A	19
		Group		**Analyte**	
		Parcel B Rad Sampling		Ac-228	
		Parcel B Rad Sampling		Am-241	
		Parcel B Rad Sampling		Bi-212	
		Parcel B Rad Sampling		Bi-214	
		Parcel B Rad Sampling		Co-60	
		Parcel B Rad Sampling		Cs-137	
		Parcel B Rad Sampling		Eu-152	
		Parcel B Rad Sampling		Eu-154	
		Parcel B Rad Sampling		K-40	
		Parcel B Rad Sampling		Pa-234	
		Parcel B Rad Sampling		Pb-210	
		Parcel B Rad Sampling		Pb-212	
		Parcel B Rad Sampling		Pb-214	

GAM-A-AF	001	Parcel B Rad Sampling		Ra-226	
		Parcel B Rad Sampling		Ra-228	
		Parcel B Rad Sampling		Th-234	
		Parcel B Rad Sampling		Tl-208	
		Parcel B Rad Sampling		U-235	
		Parcel B Rad Sampling		U-238	
GAM-A-AF	002	uCi	filter	N/A	19
		Group		**Analyte**	
		Parcel B Rad Sampling		Ac-228	
		Parcel B Rad Sampling		Am-241	
		Parcel B Rad Sampling		Bi-212	
		Parcel B Rad Sampling		Bi-214	
		Parcel B Rad Sampling		Co-60	
		Parcel B Rad Sampling		Cs-137	
		Parcel B Rad Sampling		Eu-152	
		Parcel B Rad Sampling		Eu-154	
		Parcel B Rad Sampling		K-40	
		Parcel B Rad Sampling		Pa-234	
		Parcel B Rad Sampling		Pb-210	
		Parcel B Rad Sampling		Pb-212	
		Parcel B Rad Sampling		Pb-214	
		Parcel B Rad Sampling		Ra-226	
		Parcel B Rad Sampling		Ra-228	
		Parcel B Rad Sampling		Th-234	
		Parcel B Rad Sampling		Tl-208	
		Parcel B Rad Sampling		U-235	
		Parcel B Rad Sampling		U-238	
GAM-A-AF	003	uCi	filter	N/A	19
		Group		**Analyte**	
		Parcel B Rad Sampling		Ac-228	
		Parcel B Rad Sampling		Am-241	
		Parcel B Rad Sampling		Bi-212	
		Parcel B Rad Sampling		Bi-214	
		Parcel B Rad Sampling		Co-60	

GAM-A-AF	003	Parcel B Rad Sampling	Cs-137
		Parcel B Rad Sampling	Eu-152
		Parcel B Rad Sampling	Eu-154
		Parcel B Rad Sampling	K-40
		Parcel B Rad Sampling	Pa-234
		Parcel B Rad Sampling	Pb-210
		Parcel B Rad Sampling	Pb-212
		Parcel B Rad Sampling	Pb-214
		Parcel B Rad Sampling	Ra-226
		Parcel B Rad Sampling	Ra-228
		Parcel B Rad Sampling	Th-234
		Parcel B Rad Sampling	Tl-208
		Parcel B Rad Sampling	U-235
		Parcel B Rad Sampling	U-238

GAM-A-AF	004	uCi	filter	N/A	19

Group	Analyte
Parcel B Rad Sampling	Ac-228
Parcel B Rad Sampling	Am-241
Parcel B Rad Sampling	Bi-212
Parcel B Rad Sampling	Bi-214
Parcel B Rad Sampling	Co-60
Parcel B Rad Sampling	Cs-137
Parcel B Rad Sampling	Eu-152
Parcel B Rad Sampling	Eu-154
Parcel B Rad Sampling	K-40
Parcel B Rad Sampling	Pa-234
Parcel B Rad Sampling	Pb-210
Parcel B Rad Sampling	Pb-212
Parcel B Rad Sampling	Pb-214
Parcel B Rad Sampling	Ra-226
Parcel B Rad Sampling	Ra-228
Parcel B Rad Sampling	Th-234
Parcel B Rad Sampling	Tl-208
Parcel B Rad Sampling	U-235

GAM-A-AF	004	Parcel B Rad Sampling		U-238	
GPC-SR90-AF	001	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Sr-90	
GPC-SR90-AF	002	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Sr-90	
GPC-SR90-AF	003	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Sr-90	
GPC-SR90-AF	004	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Sr-90	

PALA Sample Receipt Inspection Form

Client Name: GES-AIS

SDG: ARS1-23-00867

Sample Custodi [redacted] Survey Start Date: 4/20/23 Survey Start Time: 940

Thermometer ID: E105401226l Calibration Due Date: 1/12/24 pH Paper Lot# NA

Exposure Rate Meter + Probe Unit ID: 273629 Calibration Due Date: 9/13/23 Background: 4 µR/hr

Count Rate Meter + Probe Unit ID: 268993 Calibration Due Date: 9/29/23 Background: 20 cpm

Delivery Type (circle one): Direct Lock Box (Commercial Carrier) FEDEX Total # of ESCs: 1

*True temperature is recorded which includes any applicable correction factors.

	External Shipping Container Tracking:	Exposure Rate (µR/hr) (limit <500 µR/hr)	Max External Swipe Counts (cpm)	Max Internal Swipe Counts (cpm)	ESC True Temps* (°C)	TRAX Matrix ID (circle all that apply): (See Section 4.3 of SOP)
A:	771804316268	5	30	30	NA	AQ WD WG WO
B:						WS WW SI UR
C:						SO OL BI VG
D:						WP SM (AF)
E:						
F:						

Visual Inspection: External Shipping Container	(Circle response)		
Good Condition with no Leaks or Tears	(Yes)	No	
Marked Radioactive	Yes	(No)	
UN2910	Yes	(No)	
Security Seals	(Yes)	No	
If yes, intact?	(Yes)	No	N/A
Internal Shipping Container			
COC's Present	(Yes)	No	
Well packaged container with no signs of leakage	(Yes)	No	

COC/Sample Inspection	(Circle response)		
Sample Containers in good condition	(Yes)	No	
No spills or leaks	(Yes)	No	
Marked Radioactive	Yes	(No)	
Durable labels w/indelible ink	(Yes)	No	
COC reliquished/received correctly	(Yes)	No	
Adequate volume/filled correctly	(Yes)	No	
Hold Time sufficient for analysis	(Yes)	No	
For VOC/Radon, Head space?	Yes	No	(N/A)
If yes, <6mm?	Yes	No	(N/A)
# of containers received matches # on COC	(Yes)	No	
Samples received on ice?	Yes	(No)	
Type (circle one):	Bagged Ice	Loose Ice	Blue Ice (N/A)

Comments:

PALA Sample Survey Form

Client Name: GES-AIS

SDG: ARS1-23-00867

Pipette ID: NA Tip Lot#: NA

Disposible pipette lot#: NA

Sample ID from Client on COC or Sample	ESC Letter	Sample Container Type	Approx. Fill Level (%)	pH <2 is Acceptable: pH As Rec'd	pH Adjusted	Acid Lot # or Ind container temp (°C)	Vol. of Acid Used (mL)	Acceptance Limits <100 cpm/cm: cpm
FBB-041023	A	Ziploc	25	NA	NA	NA	NA	30
MSB01-	↓	↓	↓	↓	↓	↓	↓	↓
MSB02-	↓	↓	↓	↓	↓	↓	↓	↓
MSB13A-	↓	↓	↓	↓	↓	↓	↓	↓

Sample Custodian [redacted] Survey End Date: 4/20/23 Survey/pH End Time: 945

pH re-check required? YES or NO *NOTE. Any metals sample acidified at sample receiving must be re-checked after a 24 hour hold.*

If YES: pH re-check date/time: _____/_____ Analyst: _____ pH strip lot #: _____

Were all re-checked samples' pH < 2? YES or NO*

**If no, complete and send to Project Management:*
1. Section A of PALA-SR-001-FM-05 (24 Hour Hold pH Readjustment)
2. SR section of PALA-SR-001-FM-03 (Discrepant Sample Receipt Report).

FedEx Ship Manager - Print Your Label(s)

ORIGIN ID:ICCA [redacted]
[redacted]
200 FISHER STREET
SAN FRANCISCO, CA 94124
UNITED STATES US

SHIP DATE: 19APR23
ACTWGT: 1.00 LB
CAD: 254120867/INET4580

BILL SENDER

TO [redacted]
ARS ALEUT ANALYTICAL, LLC
2609 NORTH RIVER ROAD

PORT ALLEN LA 70767
(225) 381-2991
REF: J31000.900.01.21.06
INV:
PO:
DEPT:

591J3/79CF/FE2D

FedEx Express

J31023111101ue

THU - 20 APR 4:30P
STANDARD OVERNIGHT

TRK# 0201 7718 0431 6268

XN OPLA

70767
LA-US MSY

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

4/10/23, 1:25 PM

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ARS Aleut Analytical, LLC

Laboratory Analytical Report

ARS1-23-00921

GES-AIS, LLC
[redacted]
1501 West Fountainhead Parkway
Suite 550
Tempe, AZ 85282
[redacted]

COC Number: [redacted]**042623RADB**
PO Number: **Parcel B Air Monitoring RAD**
Job Number: **J310000900**
Job Location: **Hunters Point Shipyard, Parcel B Removal Site Evaluation**

Questions regarding this analytical report should be addressed to ARS project manager, [redacted], who can be reached by email at projectmanagers@aaa.aleutfederal.com.

I certify that the test results presented in this report (in either hardcopy or electronic file (EDD)) meet the requirements of the laboratory's certifications and other applicable contract terms and conditions. A full list of the Port Allen, LA laboratory's certifications is provided with this report. Any exceptions to the certification or contract will be noted within the case narratives presented in the report. Any subcontracted sample results will be identified within the case narratives presented in the report. In the event this report is an amendment to a previously released report, the case narrative will clearly identify the original report as well as the reason(s) for reissuance. A statement of uncertainty for each analysis is available upon request. I authorize release and issuance of this report on the date signed below.

[redacted] Laboratory Management, ARS Aleut Analytical

Signature **Date** **Title**

This report provides analytical results of the requested analysis and does not include any opinions or interpretations. ARS Aleut Analytical, LLC assumes no liability for the use or interpretation of analytical results. Results relate only to items tested. A partial reproduction of this test report is prohibited. Reproduction of this report in full requires the written approval of the laboratory.

LELAP Cert # 01949

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Table Of Contents

Certifications and Accreditations List

State or Accrediting Body (AB)	Certificate Number
AIHA LAP, LLC	209312
Alaska	LA01131
California	3085
ANAB DoD	ADE-1489
ANAB DOE	ADE-1489.01
Louisiana DEQ - NELAC	01949
Louisiana DHH	LA022
Nevada	LA011312023-1
New Jersey	LA009
New York	66780 (NPW) / 66781 (SHW)
Texas	T104704447-22-18
Utah	LA011312022-13
Washington	C1010

For additional information related to the specific matrices, methods,and analytes recognized by each accrediting body, contact us at QA@aaa.aleutfederal.com for additional information.

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ARS Aleut Analytical, LLC
Analytical Reports

for

GES-AIS, LLC

Case Narrative

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PROJECT SAMPLE IDENTIFICATION CROSS-REFERENCE
TO ARS SAMPLE LABORATORY IDs

Client Sample ID	ARS Aleut Analytical Sample ID
FBB-041723	ARS1-23-00921-001
MSB01-041723	ARS1-23-00921-002
MSB02-041723	ARS1-23-00921-003
MSB113A-041723	ARS1-23-00921-004

Sample	Date Collected	Date Received	Analysis	Basis	Prep Date/Time	Analysis Date/Time
001	04/17/23 08:00	04/27/23	ASP-PU239-AF	As Received	05/26/23 09:22	06/01/23 02:43
001	04/17/23 08:00	04/27/23	GAM-A-AF	As Received	NA	05/10/23 14:38
001	04/17/23 08:00	04/27/23	GPC-SR90-AF	As Received	05/26/23 09:22	05/30/23 12:44
002	04/20/23 07:21	04/27/23	ASP-PU239-AF	As Received	05/26/23 09:22	06/01/23 02:43
002	04/20/23 07:21	04/27/23	GAM-A-AF	As Received	NA	05/13/23 10:00
002	04/20/23 07:21	04/27/23	GPC-SR90-AF	As Received	05/26/23 09:22	05/30/23 12:44
003	04/20/23 06:49	04/27/23	ASP-PU239-AF	As Received	05/26/23 09:22	06/01/23 02:42
003	04/20/23 06:49	04/27/23	GAM-A-AF	As Received	NA	05/10/23 14:41
003	04/20/23 06:49	04/27/23	GPC-SR90-AF	As Received	05/26/23 09:22	05/30/23 12:44
004	04/20/23 07:05	04/27/23	ASP-PU239-AF	As Received	05/26/23 09:22	06/01/23 02:42
004	04/20/23 07:05	04/27/23	GAM-A-AF	As Received	NA	05/11/23 14:26
004	04/20/23 07:05	04/27/23	GPC-SR90-AF	As Received	05/26/23 09:22	05/30/23 12:44

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SAMPLE RECEIPT/PREP

The samples arrived in good condition. The samples were screened for radioactive contamination as per procedure **PALA-SR-001-SOP Sample Receiving**. Sample date(s) and time(s) are listed as provided by the client. In regard to the Air Filters, no flow rate information was provided by the client. Turnaround time was set at 28 calendar days.

ANALYTICAL METHODS

Pu-239/240 analysis was performed using **PALA-RAD-026, "Americium, Plutonium and Uranium in Water, Soil and Vegetation Matrices by Sequential Separation Using Eichrom Stabilized Chemistry Resin (with Vacuum Box System Option) (Eichrom ACW-02 & Eichrom ACW-03)"**.

Ac-228, Am-241, Bi-212, Bi-214, Co-60, Cs-137, Eu-152, Eu-154, K-40, Pa-234, Pb-210, Pb-212, Pb-214, Ra-226, Ra-228, Th-234, Tl-208, U-235, and U-238 analyses were performed using **PALA-RAD-007, "Modified Gamma Emitting Radionuclides in Soil, Air, and Biota Matrices (EPA 901.1 Mod, SM 7120B, & HASL-300 Ga-01-R)"**.

Sr-90 analysis was performed using **PALA-RAD-032, "Strontium 89, 90 and Total Strontium in Water, Soil and Vegetation Matrices by Eichrom Resin Separation (Eichrom SRW01, EPA 905.0, HASL 300 Sr-01-RC)"**.

ANALYTICAL RESULTS

Fraction 001 in batch ARS1-B23-00874 has elevated MDA for Pu-239/240 with ACT of -3.610E-8 uCi/filter, MDA of 1.004E-7 uCi/filter and CRDL of 4.8E-08 uCi/filter.
Fraction 001 in batch ARS1-B23-00824 has elevated MDA for Ra-226 with ACT of -6.298E-6 uCi/filter, MDA of 1.532E-5 uCi/filter and CRDL of 4.4E-06 uCi/filter.
Fraction 002 in batch ARS1-B23-00874 has elevated MDA for Pu-239/240 with ACT of 2.106E-8 uCi/filter, MDA of 9.221E-8 uCi/filter and CRDL of 4.8E-08 uCi/filter.
Fraction 002 in batch ARS1-B23-00824 has elevated MDA for Ra-226 with ACT of -8.523E-5 uCi/filter, MDA of 3.191E-5 uCi/filter and CRDL of 4.4E-06 uCi/filter.
Fraction 003 in batch ARS1-B23-00874 has elevated MDA for Pu-239/240 with ACT of -7.086E-8 uCi/filter, MDA of 1.291E-7 uCi/filter and CRDL of 4.8E-08 uCi/filter.
Fraction 003 in batch ARS1-B23-00824 has elevated MDA for Ra-226 with ACT of 3.797E-6 uCi/filter, MDA of 9.048E-6 uCi/filter and CRDL of 4.4E-06 uCi/filter.
Fraction 004 in batch ARS1-B23-00874 has elevated MDA for Pu-239/240 with ACT of -2.018E-8 uCi/filter, MDA of 8.122E-8 uCi/filter and CRDL of 4.8E-08 uCi/filter.
Fraction 004 in batch ARS1-B23-00824 has elevated MDA for Ra-226 with ACT of 8.337E-7 uCi/filter, MDA of 1.525E-5 uCi/filter and CRDL of 4.4E-06 uCi/filter.

ARS1-B23-00874: ROI's adjusted to better fit the peaks of interest.

Notes (Case Narrative)

Definitions:

CRDL	Contract Required Detection Limit
CSU	Combined Standard Uncertainty
DLC	Decision Level Concentration (ANSI N42.23)
DO	Duplicate Original
DUP	Sample Duplicate
LCS/LCSD	Laboratory Control Sample/Laboratory Control Sample Duplicate
LOD	Limit of Detection
LOQ	Limit of Quantitation
MBL	Method Blank
MCL	Maximum Contaminant Level
MDA	Minimum Detectable Activity
MDL	Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
N/A	Not Applicable
NC	Not Calculated
NP	Not Provided
NR	Not Referenced
PQL	Practical Quantitation Limit

Data Qualifiers:

B	The result of both the method blank and the target sample are above the MDL.
D	Sample analysis accomplished through dilution.
J	The reported result is an estimated value above the LOD but below the LOQ, or above the MDL but below the PQL.
Q	One or more quality control criteria failed.
U	Result is below the MDA, MDL, PQL, LOD, or LOQ
*	LCS/LCSD or Sample DUP fails all Duplicate criteria.
S	Spike
SC	Subcontracted out to another qualified laboratory.
H	Holding time exceeded
E	Exceeds MCL
**	Reporting Limit is higher than MCL; Target cannot be detected
ǂ	Method/Matrix/Analyte not accredited for this certification

Radiochemistry Comments:

1.0) All MDA/MDC values are calculated on a sample specific basis.

2.0) Data in this report are within the limits of uncertainty specified in the reference method unless otherwise specified.

3.0) Total activity is actually total gamma activity and is determined utilizing the prominent gamma emitters from the naturally occurring radioactive decay chains and other prominent radioactive nuclides. Total activity may be lower than the actual total activity due to the extent of secular equilibrium achieved in the various decay chains at the time of analysis. The total activity is not representative of nuclides that emit solely alpha or beta particles.

4.0) Ra-226 after ingrowth is determined via secular equilibrium with its daughter, Bismuth 214 (Gamma Spectroscopy only).

5.0) Ra-228 is determined via secular equilibrium with its daughter, Actinium 228 (Gamma Spectroscopy only).

6.0) U-238 is determined via secular equilibrium with its daughter, Thorium 234 (Gamma Spectroscopy only).

7.0) All gamma spectroscopy was performed utilizing high purity germanium detectors (**HPGe**).

8.0) ARS makes every attempt to match sample density to calibrated density; however, in some cases, it is not practical or possible to do so and data results may be affected (Gamma Spectroscopy only).

9.0) Gamma spectroscopy results are calculated values based on the **ORTEC®** GammaVision ENV32 Analysis Engine.

10.0) DoD/DOE and ISO 17025 certifications through ANAB apply only to the following methods in **Non-Potable Water**:
Gross Alpha and Gross Beta (EPA 900.0, EPA 9310); Radium 226 (EPA 903.0, EPA 903.1, EPA 9315); Radium 228 (EPA 904.0, EPA 9320); ICP/MS (EPA 6020B); ICP-OES (EPA 6010D); Mercury CVAA (EPA 7470A); Strontium-89 (EPA 905.0, Eichrom SRW01, HASL 300 Sr-01); Strontium-90 (EPA 905.0, Eichrom SRW01, HASL 300 Sr-02-RC); Tritium (EPA 906.0); Enriched Tritium (ARS-040), Carbon-14 (ARS-019), Tritium/Carbon (ARS-151); Gamma Emitters (EPA 901.1, SM 7120B, HASL 300 Ga-01-R); Americium-241 (Eichrom ACW03, Eichrom ACW16, HASL 300 Se-03, HASL 300 Am-03); Neptunium 237 (Eichrom ACW16); Plutonium 238, Plutonium 239/240, Plutonium-241 (Eichrom ACW03, Eichrom ACW16, HASL 300 Se-03, HASL 300 Pu-10); Thorium-228, Thorium 230, Thorium-232 (Eichrom ACW10); Uranium-234, Uranium-235,

11.0) Uranium-238 (Eichrom ACW03, Eichrom ACW16, HASL 300 Se-03); Technetium-99 (Eichrom TCW02)
DoD/DOE and ISO 17025 certifications through ANAB apply only to the following methods in **Solid and Chemical Materials**:
Gross Alpha and Gross Beta (EPA 900.0 Mod, EPA 9310); ICP/MS (EPA 6020B); ICP-OES (EPA 6010D); Mercury CVAA (EPA 7471B); Strontium-89 (EPA 905.0 Mod, Eichrom SRW01, HASL 300 Sr-01); Strontium-90 (EPA 905.0 Mod, Eichrom SRW01, HASL 300 Sr-02); Tritium (EPA 906.0 Mod); Gamma Emitters (EPA 901.1, HASL 300 Ga-01-R); Americium-241 (Eichrom ACW03, HASL 300 Se-03, HASL 300 Am-01-RC); Neptunium 237 (Eichrom ACW16); Plutonium 238, Plutonium 239/240, Plutonium-241 (Eichrom ACW03, Eichrom ACW16, HASL 300 Se-03, HASL 300 Pu-

12.0) 02-RC, HASL 300 Pu-03-RC); Thorium-228, Thorium 230, Thorium-232 (Eichrom ACW10); Uranium-234, Uranium-235, Uranium-238 (Eichrom ACW03, Eichrom ACW16, HASL 300 Se-03, HASL 300 U-02, HASL 300 U-04); Technetium-99 (Eichrom TCS01)
DoD/DOE and ISO 17025 certifications through ANAB apply only to the following methods in **Air and Emissions**:
Gross Alpha and Gross Beta (EPA 900.0 Mod, EPA 9310); Strontium-89 (Eichrom SRW01, HASL 300 Sr-01-RC); Strontium-90 (Eichrom SRW01, HASL 300 Sr-02-RC); Gamma Emitters (EPA 901.1, HASL 300 Ga-01-R); Americium-241 (Eichrom ACW03, HASL 300 Se-03); Neptunium 237 (Eichrom ACW16); Plutonium 238, Plutonium 239/240, Plutonium-241 (Eichrom ACW03, Eichrom ACW16, HASL 300 Se-03); Thorium-228, Thorium 230, Thorium-232 (Eichrom ACW10); Uranium-234, Uranium-235, Uranium-238 (Eichrom ACW03, Eichrom ACW16, HASL 300 Se-03); Technetium-99 (Eichrom TCW02, Eichrom TCS01)

General Comments:

1.0 Modified analysis procedures are procedures that are modified to meet certain specifications. An example may be the use of a water method to analyze a solid matrix due to the lack of an officially recognized procedure for the analysis of the solid matrix. Modified analyses are indicated by the subsequent addition of "M" or "Mod" to the procedure number (i.e. 901.1M, 901.1 Mod).

2.0 All NIOSH method results are reported without blank corrections applied.

3.0 Basis: "As Received" = analyzed as received from client; "Dry" = dried prior to being analyzed; "Dry Weight Corrected" = analyzed as received; result corrected for percent moisture.

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ARS Aleut Analytical, LLC
Analytical Reports

for

GES-AIS, LLC

Analytical Results

2609 North River Road • Port Allen, Louisiana 70767
(225) 228-1394

ARS Sample Delivery Group: ARS1-23-00921
Client Sample ID: FBB-041723
Sample Collection Date: 04/17/23 8:00
Sample Matrix: Air Filter
Percent Solids: N/A

Request or PO Number: Parcel B Air Monitoring RAD
ARS Sample ID: ARS1-23-00921-001
Date Received: 04/27/23
Report Date: 06/02/23

Radiochemistry

Analysis Method: Eichrom ACW03 **ABatch Sample ID:** ARS1-B23-00874-04

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Pu-239/240	-3.610E-8	4.802E-8	1.004E-7	4.475E-8	4.8E-08	U	uCi/filter	06/01/23 2:43	[redacted]	74.0%

Analysis Method: EPA 901.1M **ABatch Sample ID:** ARS1-B23-00824-04

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Ac-228	5.054E-6	1.625E-6	1.995E-6	9.975E-7	NP		uCi/filter	05/10/23 14:38	[redacted]	N/A
Co-60	-2.642E-7	9.562E-7	1.046E-6	5.230E-7	0.00024	U	uCi/filter	05/10/23 14:38		N/A
Cs-137	4.184E-7	7.478E-7	8.672E-7	4.336E-7	0.00048	U	uCi/filter	05/10/23 14:38		N/A
Ra-226	-6.298E-6	1.477E-5	1.532E-5	7.660E-6	4.4E-06	U	uCi/filter	05/10/23 14:38		N/A
Ra-228	5.054E-6	1.625E-6	1.995E-6	9.975E-7	NP		uCi/filter	05/10/23 14:38		N/A

Analysis Method: Eichrom SRW01 **ABatch Sample ID:** ARS1-B23-00875-04

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
SR-90	1.026E-6	2.353E-6	4.086E-6	1.890E-6	2.4E-05	U	uCi/filter	05/30/23 12:44	[redacted]	97.3%

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ARS Sample Delivery Group: ARS1-23-00921
Client Sample ID: MSB01-041723
Sample Collection Date: 04/20/23 7:21
Sample Matrix: Air Filter
Percent Solids: N/A

Request or PO Number: Parcel B Air Monitoring RAD
ARS Sample ID: ARS1-23-00921-002
Date Received: 04/27/23
Report Date: 06/02/23

Radiochemistry

Analysis Method: Eichrom ACW03 **ABatch Sample ID:** ARS1-B23-00874-05

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Pu-239/240	2.106E-8	5.162E-8	9.221E-8	4.040E-8	4.8E-08	U	uCi/filter	06/01/23 2:43	[redacted]	70.3%

Analysis Method: EPA 901.1M **ABatch Sample ID:** ARS1-B23-00824-05

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Co-60	6.526E-7	1.416E-6	1.451E-6	7.255E-7	0.00024	U	uCi/filter	05/13/23 10:00	[redacted]	N/A
Cs-137	-8.316E-7	1.548E-6	1.725E-6	8.625E-7	0.00048	U	uCi/filter	05/13/23 10:00	[redacted]	N/A
Ra-226	-8.523E-5	3.336E-5	3.191E-5	1.596E-5	4.4E-06	U	uCi/filter	05/13/23 10:00	[redacted]	N/A

Analysis Method: Eichrom SRW01 **ABatch Sample ID:** ARS1-B23-00875-05

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
SR-90	2.716E-6	2.484E-6	4.005E-6	1.858E-6	2.4E-05	U	uCi/filter	05/30/23 12:44	[redacted]	101%

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ARS Sample Delivery Group: ARS1-23-00921
Client Sample ID: MSB02-041723
Sample Collection Date: 04/20/23 6:49
Sample Matrix: Air Filter
Percent Solids: N/A

Request or PO Number: Parcel B Air Monitoring RAD
ARS Sample ID: ARS1-23-00921-003
Date Received: 04/27/23
Report Date: 06/02/23

Radiochemistry

Analysis Method: Eichrom ACW03 **ABatch Sample ID:** ARS1-B23-00874-06

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Pu-239/240	-7.086E-8	5.991E-8	1.291E-7	5.816E-8	4.8E-08	U	uCi/filter	06/01/23 2:42	[redacted]	64.1%

Analysis Method: EPA 901.1M **ABatch Sample ID:** ARS1-B23-00824-06

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Co-60	3.710E-7	7.133E-7	7.298E-7	3.649E-7	0.00024	U	uCi/filter	05/10/23 14:41	[redacted]	N/A
Cs-137	2.953E-7	6.108E-7	6.605E-7	3.303E-7	0.00048	U	uCi/filter	05/10/23 14:41		N/A
Pb-214	1.699E-6	8.353E-7	1.056E-6	5.280E-7	NP		uCi/filter	05/10/23 14:41		N/A
Ra-226	3.797E-6	7.193E-6	9.048E-6	4.524E-6	4.4E-06	U	uCi/filter	05/10/23 14:41		N/A

Analysis Method: Eichrom SRW01 **ABatch Sample ID:** ARS1-B23-00875-06

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
SR-90	1.448E-6	2.236E-6	3.795E-6	1.753E-6	2.4E-05	U	uCi/filter	05/30/23 12:44	[redacted]	102%

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ARS Sample Delivery Group: ARS1-23-00921
Client Sample ID: MSB113A-041723
Sample Collection Date: 04/20/23 7:05
Sample Matrix: Air Filter
Percent Solids: N/A

Request or PO Number: Parcel B Air Monitoring RAD
ARS Sample ID: ARS1-23-00921-004
Date Received: 04/27/23
Report Date: 06/02/23

Radiochemistry

Analysis Method: Eichrom ACW03 **ABatch Sample ID:** ARS1-B23-00874-07

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Pu-239/240	-2.018E-8	3.802E-8	8.122E-8	3.514E-8	4.8E-08	U	uCi/filter	06/01/23 2:42	[redacted]	75.1%

Analysis Method: EPA 901.1M **ABatch Sample ID:** ARS1-B23-00824-07

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
Ac-228	4.126E-6	1.629E-6	2.396E-6	1.198E-6	NP		uCi/filter	05/11/23 14:26	[redacted]	N/A
Co-60	-6.518E-7	1.127E-6	1.143E-6	5.715E-7	0.00024	U	uCi/filter	05/11/23 14:26		N/A
Cs-137	3.287E-7	7.449E-7	8.347E-7	4.174E-7	0.00048	U	uCi/filter	05/11/23 14:26		N/A
Ra-226	8.337E-7	1.586E-5	1.525E-5	7.625E-6	4.4E-06	U	uCi/filter	05/11/23 14:26		N/A
Ra-228	4.126E-6	1.629E-6	2.396E-6	1.198E-6	NP		uCi/filter	05/11/23 14:26		N/A

Analysis Method: Eichrom SRW01 **ABatch Sample ID:** ARS1-B23-00875-07

Analysis Description	Analysis Results	CSU +/- 2 s	MDA	DLC	CRDL	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery
SR-90	2.698E-7	2.025E-6	3.624E-6	1.678E-6	2.4E-05	U	uCi/filter	05/30/23 12:44	[redacted]	102%

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QC Summary

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QC Sample Results

Analytical Batch: ARS1-B23-00824
Lab Sample ID: ARS1-B23-00824-01
Method: EPA 901.1M

Sample Type: LCS
Matrix: Air Filter
Analysis Date: 05/11/23 13:50

Analyte	Spike Added	Analysis Result	Qual	Analysis Units	% Rec	% Rec Limits
Am-241	33.065	31.836		uCi/filter	96.3	75 - 125
Co-60	20.928	21.884		uCi/filter	104.6	75 - 125
Cs-137	12.996	13.460		uCi/filter	103.6	75 - 125

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QC Sample Results

Analytical Batch: ARS1-B23-00824
Lab Sample ID: ARS1-B23-00824-02
Method: EPA 901.1M

Sample Type: LCSD
Matrix: Air Filter
Analysis Date: 05/11/23 14:21

Analyte	Spike Added	Analysis Result	Qual	Analysis Units	% Rec	% Rec Limits	RPD	RPD Limit	DER	DER Limit
Am-241	33.065	31.899		uCi/filter	96.5	75 - 125	0.2	25	0.035	3
Co-60	20.928	21.724		uCi/filter	103.8	75 - 125	0.7	25	0.190	3
Cs-137	12.996	13.256		uCi/filter	102.0	75 - 125	1.5	25	0.397	3

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QC Sample Results

Analytical Batch: ARS1-B23-00824
Lab Sample ID: ARS1-B23-00824-03
Method: EPA 901.1M

Sample Type: MBL
Matrix: Air Filter
Analysis Date: 05/10/23 14:36

Analyte	Analysis Result	CSU +/- 2 s	MDA	DLC	Qual	Analysis Units
Ac-228	-0.004	0.006	0.006	0.003	U	uCi/filter
Am-241	-5.073E-4	0.001	0.002	0.001	U	uCi/filter
Bi-212	0.006	0.010	0.011	0.006	U	uCi/filter
Bi-214	5.423E-4	0.004	0.003	0.002	U	uCi/filter
Co-60	4.531E-4	0.002	0.002	7.950E-4	U	uCi/filter
Cs-137	-7.674E-4	0.002	0.002	8.400E-4	U	uCi/filter
Eu-152	4.158E-4	0.001	0.002	8.450E-4	U	uCi/filter
Eu-154	5.099E-4	0.001	0.001	6.700E-4	U	uCi/filter
K-40	-0.024	0.027	0.025	0.012	U	uCi/filter
Pa-234	-7.709E-4	0.002	0.002	0.001	U	uCi/filter
Pb-210	-0.002	0.015	0.017	0.008	U	uCi/filter
Pb-212	-0.001	0.002	0.002	0.001	U	uCi/filter
Pb-214	-0.001	0.003	0.003	0.002	U	uCi/filter
Ra-226	-0.071	0.025	0.031	0.015	U	uCi/filter
Ra-228	-0.004	0.006	0.006	0.003	U	uCi/filter
Th-234	0.007	0.016	0.017	0.008	U	uCi/filter
Tl-208	-0.001	0.002	0.002	8.550E-4	U	uCi/filter
U-235	-0.003	0.006	0.007	0.003	U	uCi/filter
U-238	0.007	0.016	0.017	0.008	U	uCi/filter

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QC Association Summary

ARS Sample Delivery Group: ARS1-23-00921 **Analytical Batch:** ARS1-B23-00824

Analysis: Gamma Spec (Short) in (Air Filters, Smears [AF])

Batch Sample ID	Lab Sample ID	Client Sample ID	Matrix	Method	Prep Method
ARS1-B23-00824-01		Lab Control Sample	Air Filter	EPA 901.1M	N/A
ARS1-B23-00824-02		Lab Control Sample Duplicate	Air Filter	EPA 901.1M	N/A
ARS1-B23-00824-03		Method Blank	Air Filter	EPA 901.1M	N/A
ARS1-B23-00824-04	ARS1-23-00921-001	FBB-041723	Air Filter	EPA 901.1M	N/A
ARS1-B23-00824-05	ARS1-23-00921-002	MSB01-041723	Air Filter	EPA 901.1M	N/A
ARS1-B23-00824-06	ARS1-23-00921-003	MSB02-041723	Air Filter	EPA 901.1M	N/A
ARS1-B23-00824-07	ARS1-23-00921-004	MSB113A-041723	Air Filter	EPA 901.1M	N/A

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QC Sample Results

Analytical Batch: ARS1-B23-00874
Lab Sample ID: ARS1-B23-00874-01
Method: Eichrom ACW03

Sample Type: LCS
Matrix: Air Filter
Analysis Date: 06/01/23 2:42

Analyte	Spike Added	Analysis Result	Qual	Analysis Units	% Rec	% Rec Limits
Pu-239/240	7.838E-6	7.688E-6		uCi/filter	98.1	75 - 125

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QC Sample Results

Analytical Batch: ARS1-B23-00874
Lab Sample ID: ARS1-B23-00874-02
Method: Eichrom ACW03

Sample Type: LCSD
Matrix: Air Filter
Analysis Date: 06/01/23 2:42

Analyte	Spike Added	Analysis Result	Qual	Analysis Units	% Rec	% Rec Limits	RPD	RPD Limit	DER	DER Limit
Pu-239/240	7.768E-6	7.054E-6		uCi/filter	90.8	75 - 125	8.6	25	0.949	3

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QC Sample Results

Analytical Batch: ARS1-B23-00874
Lab Sample ID: ARS1-B23-00874-03
Method: Eichrom ACW03

Sample Type: MBL
Matrix: Air Filter
Analysis Date: 06/01/23 2:43

Analyte	Analysis Result	CSU +/- 2 s	MDA	DLC	Qual	Analysis Units
Pu-238	-3.062E-8	6.474E-8	1.341E-7	5.874E-8	U	uCi/filter
Pu-239/240	-3.674E-8	6.588E-8	1.375E-7	6.043E-8	U	uCi/filter

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QC Association Summary

ARS Sample Delivery Group: ARS1-23-00921

Analytical Batch: ARS1-B23-00874

Analysis: Plutonium (239, 240Pu) in (Air Filters, Smears, Leak Test [AF, SM, LT])

Batch Sample ID	Lab Sample ID	Client Sample ID	Matrix	Method	Prep Method
ARS1-B23-00874-01		Lab Control Sample	Air Filter	Eichrom ACW03	N/A
ARS1-B23-00874-02		Lab Control Sample Duplicate	Air Filter	Eichrom ACW03	N/A
ARS1-B23-00874-03		Method Blank	Air Filter	Eichrom ACW03	N/A
ARS1-B23-00874-04	ARS1-23-00921-001	FBB-041723	Air Filter	Eichrom ACW03	N/A
ARS1-B23-00874-05	ARS1-23-00921-002	MSB01-041723	Air Filter	Eichrom ACW03	N/A
ARS1-B23-00874-06	ARS1-23-00921-003	MSB02-041723	Air Filter	Eichrom ACW03	N/A
ARS1-B23-00874-07	ARS1-23-00921-004	MSB113A-041723	Air Filter	Eichrom ACW03	N/A

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QC Sample Results

Analytical Batch: ARS1-B23-00875
Lab Sample ID: ARS1-B23-00875-01
Method: Eichrom SRW01

Sample Type: LCS
Matrix: Air Filter
Analysis Date: 05/30/23 12:44

Analyte	Spike Added	Analysis Result	Qual	Analysis Units	% Rec	% Rec Limits
SR-90	2.033E-5	1.940E-5		uCi/filter	95.4	75 - 125

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QC Sample Results

Analytical Batch: ARS1-B23-00875
Lab Sample ID: ARS1-B23-00875-02
Method: Eichrom SRW01

Sample Type: LCSD
Matrix: Air Filter
Analysis Date: 05/30/23 12:44

Analyte	Spike Added	Analysis Result	Qual	Analysis Units	% Rec	% Rec Limits	RPD	RPD Limit	DER	DER Limit
SR-90	2.027E-5	1.975E-5		uCi/filter	97.4	75 - 125	1.8	25	0.159	3

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QC Sample Results

Analytical Batch: ARS1-B23-00875
Lab Sample ID: ARS1-B23-00875-03
Method: Eichrom SRW01

Sample Type: MBL
Matrix: Air Filter
Analysis Date: 05/30/23 12:44

Analyte	Analysis Result	CSU +/- 2 s	MDA	DLC	Qual	Analysis Units
SR-90	1.950E-6	2.635E-6	4.424E-6	2.047E-6	U	uCi/filter

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QC Association Summary

ARS Sample Delivery Group: ARS1-23-00921

Analytical Batch: ARS1-B23-00875

Analysis: Strontium-90 in (Air Filters, Smears [AF])

Batch Sample ID	Lab Sample ID	Client Sample ID	Matrix	Method	Prep Method
ARS1-B23-00875-01		Lab Control Sample	Air Filter	Eichrom SRW01	N/A
ARS1-B23-00875-02		Lab Control Sample Duplicate	Air Filter	Eichrom SRW01	N/A
ARS1-B23-00875-03		Method Blank	Air Filter	Eichrom SRW01	N/A
ARS1-B23-00875-04	ARS1-23-00921-001	FBB-041723	Air Filter	Eichrom SRW01	N/A
ARS1-B23-00875-05	ARS1-23-00921-002	MSB01-041723	Air Filter	Eichrom SRW01	N/A
ARS1-B23-00875-06	ARS1-23-00921-003	MSB02-041723	Air Filter	Eichrom SRW01	N/A
ARS1-B23-00875-07	ARS1-23-00921-004	MSB113A-041723	Air Filter	Eichrom SRW01	N/A

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for

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Batch QC

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QC Results per Analytical Batch

Analytical Batch	**ARS1-B23-00824**
SDG	**ARS1-23-00921**
Analysis	**Gamma Spec (Short) in (Air Filters, Smears [AF])**
Method	**EPA 901.1M**
Analysis Code	**GAM-A-AF**
Report Units	**uCi/filter**

Acceptable QC Performance Ranges

QC Sample Type	Performance Items and Ranges		
Laboratory Control Sample	**Recovery (%):**	**> 75**	**< 125**
Matrix Spike	**Recovery (%):**	**> 60**	**< 140**
Duplicate	**Duplicate Error Ratio (DER):**		**< 3**
	Relative Percent Difference (RPD %):		**≤ 25**

Laboratory Control Sample

			Analysis Date	05/11/23 13:50	Analysis Technician	[redacted]	
Analysis Batch Sample ID	**QC Type**	**Analyte**	**Results**	**CSU (2s)**	**Expected Value**	**LCS Rec (%)**	**MDA**
ARS1-B23-00824-01	**LCS**	AM-241	31.836	2.473	33.065	96.3	0.118
ARS1-B23-00824-01	**LCS**	CO-60	21.884	1.167	20.928	104.6	0.392
ARS1-B23-00824-01	**LCS**	CS-137	13.460	0.717	12.996	103.6	0.070

Duplicate RER/DER/RPD

		Analysis Date	05/11/23 14:21	Analysis Technician	[redacted]	
Analyte	**Results LCS**	**CSU LCS (2s)**	**Results LCSD**	**CSU LCSD (2s)**	**DER**	**RPD**
AM-241	31.836	2.473	31.899	2.478	0.035	0.2
CO-60	21.884	1.167	21.724	1.164	0.190	0.7
CS-137	13.460	0.717	13.256	0.706	0.397	1.5

Method Blank

		Analysis Date	05/10/23 14:36	Analysis Technician	[redacted]	
Analysis Batch Sample ID	**QC Type**	**Analyte**	**Results**	**CSU (2s)**	**MDA**	**Qual**
ARS1-B23-00824-03	**MBL**	AC-228	-0.004	0.006	0.006	U
ARS1-B23-00824-03	**MBL**	AM-241	-5.073E-4	0.001	0.002	U
ARS1-B23-00824-03	**MBL**	BI-212	0.006	0.010	0.011	U
ARS1-B23-00824-03	**MBL**	BI-214	5.423E-4	0.004	0.003	U
ARS1-B23-00824-03	**MBL**	CO-60	4.531E-4	0.002	0.002	U
ARS1-B23-00824-03	**MBL**	CS-137	-7.674E-4	0.002	0.002	U
ARS1-B23-00824-03	**MBL**	EU-152	4.158E-4	0.001	0.002	U
ARS1-B23-00824-03	**MBL**	EU-154	5.099E-4	0.001	0.001	U
ARS1-B23-00824-03	**MBL**	K-40	-0.024	0.027	0.025	U
ARS1-B23-00824-03	**MBL**	PA-234	-7.709E-4	0.002	0.002	U
ARS1-B23-00824-03	**MBL**	PB-210	-0.002	0.015	0.017	U
ARS1-B23-00824-03	**MBL**	PB-212	-0.001	0.002	0.002	U
ARS1-B23-00824-03	**MBL**	PB-214	-0.001	0.003	0.003	U
ARS1-B23-00824-03	**MBL**	RA-226	-0.071	0.025	0.031	U
ARS1-B23-00824-03	**MBL**	RA-228	-0.004	0.006	0.006	U
ARS1-B23-00824-03	**MBL**	TH-234	0.007	0.016	0.017	U
ARS1-B23-00824-03	**MBL**	TL-208	-0.001	0.002	0.002	U
ARS1-B23-00824-03	**MBL**	U-235	-0.003	0.006	0.007	U
ARS1-B23-00824-03	**MBL**	U-238	0.007	0.016	0.017	U

QC Results per Analytical Batch

Analytical Batch	**ARS1-B23-00874**
SDG	**ARS1-23-00921**
Analysis	**Plutonium (239, 240Pu) in (Air Filters, Smears, Leak Test [AF, SM, LT])**
Method	**Eichrom ACW03**
Analysis Code	**ASP-PU239-AF**
Report Units	**uCi/filter**

Acceptable QC Performance Ranges

QC Sample Type	Performance Items and Ranges		
Laboratory Control Sample	**Recovery (%):**	**> 75**	**< 125**
Matrix Spike	**Recovery (%):**	**> 60**	**< 140**
Duplicate	**Duplicate Error Ratio (DER):**		**< 3**
	Relative Percent Difference (RPD %):		**≤ 25**

Laboratory Control Sample

			Analysis Date	06/01/23 02:42	**Analysis Technician**	[redacted]	
Analysis Batch Sample ID	**QC Type**	**Analyte**	**Results**	**CSU (2s)**	**Expected Value**	**LCS Rec (%)**	**MDA**
ARS1-B23-00874-01	**LCS**	PU-239/240	7.688E-6	9.608E-7	7.838E-6	98.1	6.972E-8

Duplicate RER/DER/RPD

			Analysis Date	06/01/23 02:42	**Analysis Technician**	[redacted]	
Analyte	**Results LCS**	**CSU LCS (2s)**	**Results LCSD**	**CSU LCSD (2s)**	**DER**	**RPD**	
PU-239/240	7.688E-6	9.608E-7	7.054E-6	8.892E-7	0.949	8.6	

Method Blank

			Analysis Date	06/01/23 02:43	**Analysis Technician**	[redacted]	
Analysis Batch Sample ID	**QC Type**	**Analyte**	**Results**	**CSU (2s)**	**MDA**	**Qual**	
ARS1-B23-00874-03	**MBL**	PU-238	-3.062E-8	6.474E-8	1.341E-7	U	
ARS1-B23-00874-03	**MBL**	PU-239/240	-3.674E-8	6.588E-8	1.375E-7	U	

QC Results per Analytical Batch

Analytical Batch	**ARS1-B23-00875**
SDG	**ARS1-23-00921**
Analysis	**Strontium-90 in (Air Filters, Smears [AF])**
Method	**Eichrom SRW01**
Analysis Code	**GPC-SR90-AF**
Report Units	**uCi/filter**

Acceptable QC Performance Ranges

QC Sample Type	Performance Items and Ranges		
Laboratory Control Sample	**Recovery (%):**	**> 75**	**< 125**
Matrix Spike	**Recovery (%):**	**> 60**	**< 140**
Duplicate	**Duplicate Error Ratio (DER):**		**< 3**
	Relative Percent Difference (RPD %):		**≤ 25**

Laboratory Control Sample

Analysis Date	05/30/23 12:44	Analysis Technician	[redacted]

Analysis Batch Sample ID	QC Type	Analyte	Results	CSU (2s)	Expected Value	LCS Rec (%)	MDA
ARS1-B23-00875-01	**LCS**	SR-90	1.940E-5	2.990E-6	2.033E-5	95.4	4.312E-7

Duplicate RER/DER/RPD

Analysis Date	05/30/23 12:44	Analysis Technician	[redacted]

Analyte	Results LCS	CSU LCS (2s)	Results LCSD	CSU LCSD (2s)	DER	RPD
SR-90	1.940E-5	2.990E-6	1.975E-5	3.041E-6	0.159	1.8

Method Blank

Analysis Date	05/30/23 12:44	Analysis Technician	[redacted]

Analysis Batch Sample ID	QC Type	Analyte	Results	CSU (2s)	MDA	Qual
ARS1-B23-00875-03	**MBL**	SR-90	1.950E-6	2.635E-6	4.424E-6	U

2609 North River Road • Port Allen, Louisiana 70767
(225) 228-1394

ARS Aleut Analytical, LLC
Analytical Reports

for

GES-AIS, LLC

Sample Management Records

CHAIN-OF-CUSTODY RECORD

Gilbane Federal
[redacted]
1501 W Fountainhead Parkway, Suite 550, Tempe, Arizona 85282
[redacted]

COC # [redacted]042623RADB

GES
AN ABS GROUP COMPANY

Project Name: Hunters Point Shipyard, Parcel B Removal Site Evaluation	Laboratory: ARS Aleut Analytical (AAA), Port Allen, LA	Event: **Parcel B Air Monitoring RAD**
Project Number: J310000900	POC: [redacted]	
WBS Code: J310000900	Ship to: 2609 North River Road, Port Allen, LA 70767-3469	

Comments:

Equipment:

Code	Matrix
A	Air
AQ	Air Quality Control Matrix

Code	Container/Preservative
1	1x Gallon Ziploc Bag, None
15	1x 250-ml Plastic, 4 Degrees C

						Analytical Test Method	E901.1 - Gamma Spec Air	RC0240 - Pu Isotopes	SR02RC - Sr90										
Event: Parcel B Air Monitoring RAD							15	15	1										
	Sample ID	Matrix	Date	Time	Samp Init.											Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
1	FBB-041723	AQ	04/17/2023	0800	[redacted]		X	X	X							FIELDQC	FB1	0.00	0.00	1	
2	MSB01-041723	A	04/20/2023	0721			X	X	X							MSB01	N1	0.00	0.00	1	
3	MSB02-041723	A	04/20/2023	0649			X	X	X							MSB02	N1	0.00	0.00	1	
4	MSB113A-041723	A	04/20/2023	0705			X	X	X							MSB113A	N1	0.00	0.00	1	
5																					

Turnaround Time: 28 days

[redacted] 4/24/23

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time	Shipping Date / Carrier / Airbill Number
[redacted]	4/26/23	1600	[redacted]	4/26/23	1600	Shipping Date: 4/26/2023 / FEDEX / 7718 7710 3717
			[redacted]	4-27-23	10:00	**Received by Laboratory:** *(Signature, Date, Time)* **& condition**
						[redacted] 4-27-23 10:00 GOOD

GES.Navy_COC_Field
April 17, 2023

GES
AN AERO INDUSTRIAL COMPANY

FLOW RATE: 60 LPM

Procedures: GES-003 / EPA 900.0M

File ID Number: [redacted]42623RADB

Start Date 4/17/23
Stop Date 4/20/23
041723 4/20/2023 042623

Field Entry

	Station	Sample ID	Date In:	Time In:	Date Out:	Time Out:	Initial Flow Rate (LPM)	Final Flow Rate (LPM)	Flow volume Cu.M	Julian Date for Date Out	Total Run Time (Days)	Total Run Time (Hours)	Total Run Time (Minutes)	Average Flow Rate (LPM)	Initial Flow Rate (CFM)	Final Flow Rate (CFM)	Average Flow Rate (CFM)	Average Flow Rate (Cu.M/h)	Flow Rate (Cu.M/min)	Total Flow (L)
1	FBB	FBB-041723	04/17/23	8:00	04/17/23	8:00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2	MSB01	MSB01-041723	04/17/23	6:57	04/20/23	7:21	60	60	260.6	110	3.02	72.40	4344.0	60	2.11888	2.11888	2.11888	3.6	0.06	260,640
3	MSB02	MSB02-041723	04/17/23	6:40	04/20/23	6:49	60	60	259.7	110	3.01	72.15	4329.0	60	2.11888	2.11888	2.11888	3.6	0.06	259,740
4	MSB113A	MSB113A-041723	04/17/23	6:45	04/20/23	7:05	60	60	260.4	110	3.01	72.33	4340.0	60	2.11888	2.11888	2.11888	3.6	0.06	260,400

FORMULAS:

Number of Days = (Date Out + Time Out) minus (Date In+Time In)
Number of Minutes = # of Days X 24hr X 60min
Flow Rate (m3/h) = Flow Rate (CFM) x 60min x (12in x 2.54cm/in / 100cm/m)^3 :
Mid Sample Date/Time = [(Date + Time Out) + (Date + Time In)] / 2
Flow Rate (Cu.M/min) = CFM X 0.0283168466 Cu.M/CF
Flow Rate (LPM) = Cu.M X 1000
Total Flow (L) = LPM X Total Minutes

SDG Report - Samples and Containers

SDG Specific Data							
SDG	ARS1-23-00921		TAT Days	28 Calendar Days	Project Type	Environmental
Sample Count	4	Rpt Level 4	Date Received	04/27/2023	COC Number	[redacted]042623RADB
Client	GES-AIS, LLC		Discrepancy Resol	N/A	PO Number	Parcel B Air Monitoring RAD
Client Code	1138		Client Deadline	05/25/2023	Job Number	J310000900
Profile Number	PN-01411				Job Location	Hunters Point Shipyard, Parcel B Removal Site Evaluation
Comment						

Samples and Containers Checked In Thus Far

FR	Name	Matrix	Start Date	End Date	Disp	Hold	Arch	Storage	Comments
001	FBB-041723	Air Filter	04/17/2023 07:59	04/17/2023 08:00	H	30	10	PrePrep	
	IC_ID	**Cnt**	**Container Type**	**AF Volume (L)**	**AF Units**		**Rate**	**Mins**	**Comments**
	435926	1	HDP Container	1	LPM			1	
			Mid-Sample Date:	04/17/2023 07:59	AF Volume (CuM):		0.001		
002	MSB01-041723	Air Filter	04/20/2023 07:20	04/20/2023 07:21	H	30	10	PrePrep	
	IC_ID	**Cnt**	**Container Type**	**AF Volume (L)**	**AF Units**		**Rate**	**Mins**	**Comments**
	435927	1	HDP Container	1	LPM			1	
			Mid-Sample Date:	04/20/2023 07:20	AF Volume (CuM):		0.001		
003	MSB02-041723	Air Filter	04/20/2023 06:48	04/20/2023 06:49	H	30	10	PrePrep	
	IC_ID	**Cnt**	**Container Type**	**AF Volume (L)**	**AF Units**		**Rate**	**Mins**	**Comments**
	435928	1	HDP Container	1	LPM			1	
			Mid-Sample Date:	04/20/2023 06:48	AF Volume (CuM):		0.001		
004	MSB113A-041723	Air Filter	04/20/2023 07:04	04/20/2023 07:05	H	30	10	PrePrep	
	IC_ID	**Cnt**	**Container Type**	**AF Volume (L)**	**AF Units**		**Rate**	**Mins**	**Comments**
	435929	1	HDP Container	1	LPM			1	
			Mid-Sample Date:	04/20/2023 07:04	AF Volume (CuM):		0.001		

SDG Report - Analysis Assignments

SDG	**ARS1-23-00921**	**Sample Count**	**4**
Client	**GES-AIS, LLC**	**Analysis Count**	**3-12**

Sample Count Totals Per Analysis

Analysis Code	Analysis Description	In/Out	Samples Count
ASP-PU239-AF	Plutonium (239, 240Pu) in (Air Filters, Smears, Leak Test [AF, SM, LT])	I	4
GAM-A-AF	Gamma Spec (Short) in (Air Filters, Smears [AF])	I	4
GPC-SR90-AF	Strontium-90 in (Air Filters, Smears [AF])	I	4

Analyses Assigned Per Fraction

Fraction	Analysis Code	X = Assigned
001	ASP-PU239-AF	X
001	GAM-A-AF	X
001	GPC-SR90-AF	X
002	ASP-PU239-AF	X
002	GAM-A-AF	X
002	GPC-SR90-AF	X
003	ASP-PU239-AF	X
003	GAM-A-AF	X
003	GPC-SR90-AF	X
004	ASP-PU239-AF	X
004	GAM-A-AF	X
004	GPC-SR90-AF	X

Client Name: GES-AIS, LLC Profile Name: Parcel B Rad Sampling Report Level: 4

Analysis Code	Prep Type	Units	Aliquot	Prep Code	Procedure	Count Time					
ASP-PU239-AF	WRAD	uCi	filter	N/A	PALA-RAD-026						
	Analyte			**RDL**	**LCS LL/UL**	**MS LL/UL**	**RadY LL/UL**	**GravY LL/UL**	**RER**	**RPD**	**Surr LL/UL**
	Pu-239/240 (15117-48-3)			4.8E-08 uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
GAM-A-AF	WGAM	uCi	filter	N/A	PALA-RAD-007						
	Analyte			**RDL**	**LCS LL/UL**	**MS LL/UL**	**RadY LL/UL**	**GravY LL/UL**	**RER**	**RPD**	**Surr LL/UL**
	Ac-228 (14331-83-0)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Am-241 (14596-10-2)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Bi-212 (14913-49-6)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Bi-214 (14733-03-0)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Co-60 (10198-40-0)			0.00024 uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Cs-137 (10045-97-3)			0.00048 uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Eu-152 (14683-23-9)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Eu-154 (15585-10-1)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	K-40 (13966-00-2)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Pb-210 (14255-04-0)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Pb-212 (15092-94-1)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Pb-214 (15067-28-4)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Ra-226 (13982-63-3)			4.4E-06 uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Ra-228 (15262-20-1)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Th-234 (15065-10-8)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Tl-208 (14913-50-9)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	U-235 (15117-96-1)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	U-238 (7440-61-1)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A
	Pa-234 (15100-28-4)			uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A

GPC-SR90-AF	WRAD	uCi	filter	N/A	PALA-RAD-032						
	Analyte			**RDL**	**LCS LL/UL**	**MS LL/UL**	**RadY LL/UL**	**GravY LL/UL**	**RER**	**RPD**	**Surr LL/UL**
	Sr-90 (10098-97-2)			2.4E-05 uCi/filter	75/125	60/140	30/110	30/110	1	25	N/A

Analysis Code	Fraction	Units	Aliquot	Conductivity	Analyte Count
ASP-PU239-AF	001	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Pu-239/240	
ASP-PU239-AF	002	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Pu-239/240	
ASP-PU239-AF	003	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Pu-239/240	
ASP-PU239-AF	004	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Pu-239/240	
GAM-A-AF	001	uCi	filter	N/A	19
		Group		**Analyte**	
		Parcel B Rad Sampling		Ac-228	
		Parcel B Rad Sampling		Am-241	
		Parcel B Rad Sampling		Bi-212	
		Parcel B Rad Sampling		Bi-214	
		Parcel B Rad Sampling		Co-60	
		Parcel B Rad Sampling		Cs-137	
		Parcel B Rad Sampling		Eu-152	
		Parcel B Rad Sampling		Eu-154	
		Parcel B Rad Sampling		K-40	
		Parcel B Rad Sampling		Pa-234	
		Parcel B Rad Sampling		Pb-210	
		Parcel B Rad Sampling		Pb-212	
		Parcel B Rad Sampling		Pb-214	

GAM-A-AF	001	Parcel B Rad Sampling		Ra-226	
		Parcel B Rad Sampling		Ra-228	
		Parcel B Rad Sampling		Th-234	
		Parcel B Rad Sampling		Tl-208	
		Parcel B Rad Sampling		U-235	
		Parcel B Rad Sampling		U-238	
GAM-A-AF	002	uCi	filter	N/A	19
		Group		**Analyte**	
		Parcel B Rad Sampling		Ac-228	
		Parcel B Rad Sampling		Am-241	
		Parcel B Rad Sampling		Bi-212	
		Parcel B Rad Sampling		Bi-214	
		Parcel B Rad Sampling		Co-60	
		Parcel B Rad Sampling		Cs-137	
		Parcel B Rad Sampling		Eu-152	
		Parcel B Rad Sampling		Eu-154	
		Parcel B Rad Sampling		K-40	
		Parcel B Rad Sampling		Pa-234	
		Parcel B Rad Sampling		Pb-210	
		Parcel B Rad Sampling		Pb-212	
		Parcel B Rad Sampling		Pb-214	
		Parcel B Rad Sampling		Ra-226	
		Parcel B Rad Sampling		Ra-228	
		Parcel B Rad Sampling		Th-234	
		Parcel B Rad Sampling		Tl-208	
		Parcel B Rad Sampling		U-235	
		Parcel B Rad Sampling		U-238	
GAM-A-AF	003	uCi	filter	N/A	19
		Group		**Analyte**	
		Parcel B Rad Sampling		Ac-228	
		Parcel B Rad Sampling		Am-241	
		Parcel B Rad Sampling		Bi-212	
		Parcel B Rad Sampling		Bi-214	
		Parcel B Rad Sampling		Co-60	

GAM-A-AF	003	Parcel B Rad Sampling	Cs-137
		Parcel B Rad Sampling	Eu-152
		Parcel B Rad Sampling	Eu-154
		Parcel B Rad Sampling	K-40
		Parcel B Rad Sampling	Pa-234
		Parcel B Rad Sampling	Pb-210
		Parcel B Rad Sampling	Pb-212
		Parcel B Rad Sampling	Pb-214
		Parcel B Rad Sampling	Ra-226
		Parcel B Rad Sampling	Ra-228
		Parcel B Rad Sampling	Th-234
		Parcel B Rad Sampling	Tl-208
		Parcel B Rad Sampling	U-235
		Parcel B Rad Sampling	U-238
GAM-A-AF	004	uCi / filter	N/A / 19
		Group	**Analyte**
		Parcel B Rad Sampling	Ac-228
		Parcel B Rad Sampling	Am-241
		Parcel B Rad Sampling	Bi-212
		Parcel B Rad Sampling	Bi-214
		Parcel B Rad Sampling	Co-60
		Parcel B Rad Sampling	Cs-137
		Parcel B Rad Sampling	Eu-152
		Parcel B Rad Sampling	Eu-154
		Parcel B Rad Sampling	K-40
		Parcel B Rad Sampling	Pa-234
		Parcel B Rad Sampling	Pb-210
		Parcel B Rad Sampling	Pb-212
		Parcel B Rad Sampling	Pb-214
		Parcel B Rad Sampling	Ra-226
		Parcel B Rad Sampling	Ra-228
		Parcel B Rad Sampling	Th-234
		Parcel B Rad Sampling	Tl-208
		Parcel B Rad Sampling	U-235

GAM-A-AF	004	Parcel B Rad Sampling		U-238	
GPC-SR90-AF	001	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Sr-90	
GPC-SR90-AF	002	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Sr-90	
GPC-SR90-AF	003	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Sr-90	
GPC-SR90-AF	004	uCi	filter	N/A	1
		Group		**Analyte**	
		Parcel B Rad Sampling		Sr-90	

PALA Sample Receipt Inspection Form

Client Name: GES

SDG: ARS1-23-00921

Sample Custodian: [redacted] Survey Start Date: 4-27-23 Survey Start Time: 14:27

Thermometer ID: E105401226l Calibration Due Date: 1/12/24 pH Paper Lot# NA

Exposure Rate Meter + Probe Unit ID: 273629 Calibration Due Date: 9/13/23 Background: 5 µR/hr

Count Rate Meter + Probe Unit ID: 268993 Calibration Due Date: 9/29/23 Background: 30 cpm

Delivery Type (circle one): Direct Lock Box (Commercial Carrier: Fed-ex) Total # of ESCs: 1

*True temperature is recorded which includes any applicable correction factors.

External Shipping Container Tracking:	Exposure Rate (µR/hr) (limit <500 µR/hr)	Max External Swipe Counts (cpm)	Max Internal Swipe Counts (cpm)	ESC True Temps* (°C)	TRAX Matrix ID (circle all that apply): (See Section 4.3 of SOP)
A: 771877103717	5	30	30	NA	AQ WD WG WO
B:					WS WW SI UR
C:					SO OL BI VG
D:					WP SM (AF)
E:					
F:					

Visual Inspection: External Shipping Container (Circle response)

Good Condition with no Leaks or Tears	(Yes)	No	
Marked Radioactive	Yes	(No)	
UN2910	Yes	(No)	
Security Seals	(Yes)	No	
If yes, intact?	(Yes)	No	N/A
Internal Shipping Container			
COC's Present	(Yes)	No	
Well packaged container with no signs of leakage	(Yes)	No	

COC/Sample Inspection (Circle response)

Sample Containers in good condition	(Yes)	No	
No spills or leaks	(Yes)	No	
Marked Radioactive	Yes	(No)	
Durable labels w/indelible ink	(Yes)	No	
COC reliquished/received correctly	(Yes)	No	
Adequate volume/filled correctly	(Yes)	No	
Hold Time sufficient for analysis	(Yes)	No	
For VOC/Radon, Head space?	Yes	No	(N/A)
If yes, <6mm?	Yes	No	(N/A)
# of containers received matches # on COC	(Yes)	No	
Samples received on ice?	Yes	(No)	
Type (circle one):	Bagged Ice	Loose Ice	Blue Ice (N/A)

Comments:

PALA Sample Survey Form

Client Name: GES

SDG: ARS1-23-00921

Pipette ID: NA Tip Lot#: NA

Disposible pipette lot#: NA

Sample ID from Client on COC or Sample	ESC Letter	Sample Container Type	Approx. Fill Level (%)	pH <2 is Acceptable: pH As Rec'd	pH <2 is Acceptable: pH Adjusted	Acid Lot # or Ind container temp (°C)	Vol. of Acid Used (mL)	Acceptance Limits: <100 cpm/cm² cpm
FBB-041723	A	Air Filter	100%	NA	NA	NA	NA	30
MSB01-041723								30
MSB02-041723								30
MSB113A-041723								30

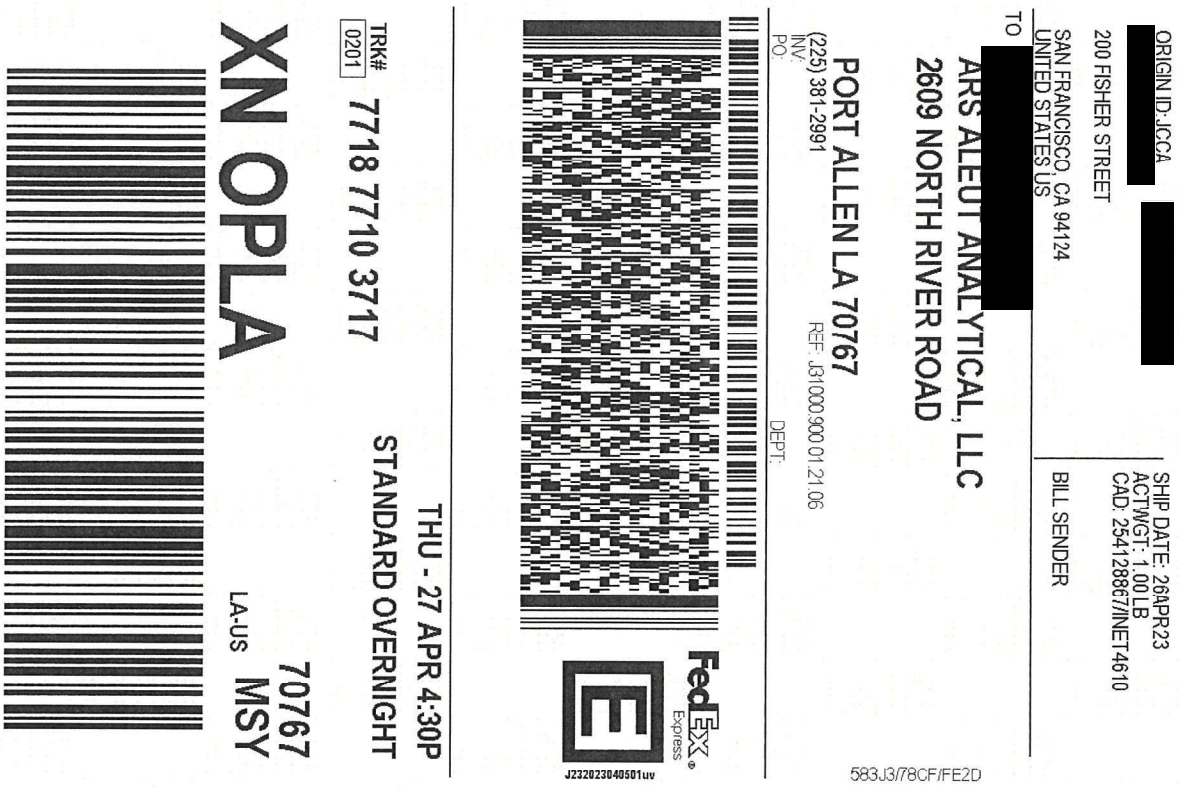
Sample Custodia [redacted] Survey End Date: 4-27-23 Survey/pH End Time: 14:40

pH re-check required? YES or NO *NOTE: Any metals sample acidified at sample receiving must be re-checked after a 24 hour hold.*

If YES: pH re-check date/time: _____/_____ Analyst: _____ pH strip lot #: _____

Were all re-checked samples' pH < 2? YES or NO*

**If no, complete and send to Project Management:*
1. Section A of PALA-SR-001-FM-05 (24 Hour Hold pH Readjustment)
2. SR section of PALA-SR-001-FM-03 (Discrepant Sample Receipt Report).



After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Eurofins Analytics, LLC
10329 Stony Run Lane
Ashland, Va 23005
Phone: (804) 365-3000 Fax: (804) 365-3002
AIHA LAP, LLC Accreditation ID 100531

June 6, 2023

[redacted]
AIS-GES, LLC
1501 W. FOUNTAINHEAD PKWY,
#550
TEMPE, AZ 85282

Laboratory Workorder ID: B138040

Client Project ID: J31000900 PARCEL B HUNTERS PT
Received: May 18, 2023
Reported: May 25, 2023

Attached are the results we obtained on the analysis of your samples submitted to Analytics. Any Chains-of-Custody associated by this sample group are enclosed. Air concentrations are calculated as a convenience to the client and the overall accuracy of this result depends on both the accuracy of the air volume and the amount found by analysis. Theoretical air volumes for passive monitors are calculated using the sampling time submitted and the manufacture's listed sampling rate for each compound. Results provided in this report relate only to the items tested.

For blanks and non-detects the results indicated with a '<' value represents the reporting limit for the analysis. Unless otherwise noted results are not corrected for blank values.

Unless the signature of the appropriate manager(s) appears on this report, this report should be considered PRELIMINARY and is subject to change.

We appreciate your confidence in allowing Analytics to be your testing laboratory. Any questions regarding this report can be addressed by calling our customer services department at (800) 888-8061.

[redacted]
[redacted] CIH
Technical Director

Enclosures

Eurofins Analytics, LLC
10329 Stony Run Lane
Ashland, Va 23005
Phone: (804) 365-3000 Fax: (804) 365-3002
AIHA LAP, LLC Accreditation ID 100531

Final Report

AIS-GES, LLC
1501 W. FOUNTAINHEAD PKWY, #550
TEMPE, AZ 85282

Customer: PARCELB1
Attention: [redacted]
PO Number J310000900

Date Received: 05/18/23
Client Project ID J31000900 PARCEL B HUNTERS PT

Lab ID: B138040001 Sample ID: PM030323-06 FIELDQC Media: 8X10 PREWEIGHED GLASS Sample Date: 5/11/2023 8:00:00 AM

Analyte	Method	Analysis Date	Volume		Reporting Limit	Front	Rear	Total	Concentration
PM10 Particulates	40CFR50 App.J	05/19/23	0	L	1000 ug			< 1000 ug	--

Lab ID: B138040002 Sample ID: TSP030323-07 FIELDQC Media: 8X10 PREWEIGHED GLASS Sample Date: 5/11/2023 8:00:00 AM

Analyte	Method	Analysis Date	Volume		Reporting Limit	Front	Rear	Total	Concentration
Total Suspended Particulates	40CFR50 App.B	05/19/23	0	L	1000 ug			< 1000 ug	--
Lead	40 CFR Part 50 Appendix G	05/23/23	0	L	14 ug			< 14 ug	--
Manganese	40 CFR Part 50 Appendix G	05/23/23	0	L	98 ug			< 98 ug	--

Lab ID: B138040003 Sample ID: PM021523-38 MSB01 Media: 8X10 PREWEIGHED GLASS Sample Date: 5/11/2023 2:17:00 PM

Analyte	Method	Analysis Date	Volume		Reporting Limit	Front	Rear	Total	Concentration
PM10 Particulates	40CFR50 App.J	05/19/23	470850	L	1000 ug			12300 ug	26 ug/M3

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Lab ID: B138040004 Sample ID: TSP021523-39 MSB01 Media: 8X10 PREWEIGHED GLASS Sample Date: 5/11/2023 2:17:00 PM

Analyte	Method	Analysis Date	Volume		Reporting Limit	Front	Rear	Total	Concentration
Total Suspended Particulates	40CFR50 App.B	05/19/23	503620	L	1000 ug			24700 ug	49 ug/M3
Lead	40 CFR Part 50 Appendix G	05/23/23	503620	L	14 ug			< 14 ug	< 0.028 ug/M3
Manganese	40 CFR Part 50 Appendix G	05/23/23	503620	L	98 ug			< 98 ug	< 0.195 ug/M3

Lab ID: B138040005 Sample ID: PM021523-40 MSB02 Media: 8X10 PREWEIGHED GLASS Sample Date: 5/11/2023 2:19:00 PM

Analyte	Method	Analysis Date	Volume		Reporting Limit	Front	Rear	Total	Concentration
PM10 Particulates	40CFR50 App.J	05/19/23	488050	L	1000 ug			6200 ug	13 ug/M3

Lab ID: B138040006 Sample ID: TSP021523-41 MSB02 Media: 8X10 PREWEIGHED GLASS Sample Date: 5/11/2023 2:19:00 PM

Analyte	Method	Analysis Date	Volume		Reporting Limit	Front	Rear	Total	Concentration
Total Suspended Particulates	40CFR50 App.B	05/19/23	522970	L	1000 ug			12800 ug	24 ug/M3
Lead	40 CFR Part 50 Appendix G	05/23/23	522970	L	14 ug			< 14 ug	< 0.027 ug/M3
Manganese	40 CFR Part 50 Appendix G	05/23/23	522970	L	98 ug			< 98 ug	< 0.187 ug/M3

Lab ID: B138040007 Sample ID: PM021523-42 MSB113A Media: 8X10 PREWEIGHED GLASS Sample Date: 5/11/2023 2:05:00 PM

Analyte	Method	Analysis Date	Volume		Reporting Limit	Front	Rear	Total	Concentration
PM10 Particulates	40CFR50 App.J	05/19/23	428550	L	1000 ug			8400 ug	20 ug/M3

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Lab ID: B138040008 Sample ID: TSP021523-43 MSB113A Media: 8X10 PREWEIGHED GLASS Sample Date: 5/11/2023 2:05:00 PM

Analyte	Method	Analysis Date	Volume	Reporting Limit	Front	Rear	Total	Concentration
Total Suspended Particulates	40CFR50 App.B	05/19/23	432460 L	1000 ug			15900 ug	37 ug/M3
Lead	40 CFR Part 50 Appendix G	05/23/23	432460 L	14 ug			< 14 ug	< 0.032 ug/M3
Manganese	40 CFR Part 50 Appendix G	05/23/23	432460 L	98 ug			< 98 ug	< 0.227 ug/M3

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General Laboratory Comments

Abbreviations:
ug = micrograms; mg=milligrams; g = grams, ppm=parts per million (volume), ppb = parts per billion (volume), mg/M3=milligrams per cubic meter of air, ug/M3=micrograms per cubic meter of air; Min=minutes, Qual=Qualifiers

CHAIN-OF-CUSTODY RECORD

Gilbane Federal
[redacted]
1501 W Fountainhead Parkway, Suite 550, Tempe, Arizona 85282
[redacted]

COC # [redacted]051723AIRB

B138040

Project Name: Hunters Point Shipyard, Parcel B Removal Site Evaluation	Laboratory: EUROFINS BUILT ENVIRONMENT TESTING ANALYTICS, ASHLAND, VA	Event: **Parcel B Air Monitoring**
Project Number: J310000900	POC: [redacted]	
WBS Code: J310000900	Ship to: 10329 Stony Run Lane, Ashland, VA 23005	

Comments:

Equipment:

Code	Matrix
A	Air
AQ	Air Quality Control Matrix

Code	Container/Preservative
1	1x 250-mL Plastic, 4 Degrees C
1	1x Envelope, None

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: CAAIR - Air PM10	N0500 - Air TSP	SW6010B - Air Pb Mn	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
	Event: Parcel B Air Monitoring					1	1	1						
1	PM030323-06	AQ	05/11/2023	0800	[redacted]	X			FIELDQC	FB1	0.00	0.00	1	
2	TSP030323-07	AQ	05/11/2023	0800			X	X	FIELDQC	FB1	0.00	0.00	1	
3	PM021523-38	A	05/11/2023	1417		X			MSB01	N1	0.00	0.00	1	
4	TSP021523-39	A	05/11/2023	1417			X	X	MSB01	N1	0.00	0.00	1	
5	PM021523-40	A	05/11/2023	1419		X			MSB02	N1	0.00	0.00	1	
6	TSP021523-41	A	05/11/2023	1419			X	X	MSB02	N1	0.00	0.00	1	
7	PM021523-42	A	05/11/2023	1405		X			MSB113A	N1	0.00	0.00	1	
8	TSP021523-43	A	05/11/2023	1405			X	X	MSB113A	N1	0.00	0.00	1	

Turnaround Time: NA

Relinquished by: *(Signature)*	**Date**	**Time**	**Received by: *(Signature)***	**Date**	**Time**
[redacted]	5/17/23	1600	FedEx	5/17/23	1600
			[redacted]	5/18/23	12:25
			[redacted]		

Shipping Date / Carrier / Airbill Number

Shipping Date: 5/17/2023 / FEDEX / 7719 4726 2579

Received by Laboratory: *(Signature, Date, Time)* **& condition**

[redacted] 5/18/23 12:25 Custody Seals Intact

GES.Navy_COC_Field
May 10, 2023

COC # [redacted]051723AIRB

Project Name: Hunters Point Shipyard, Parcel B Removal Site Evaluation	Event: Parcel B Air Monitoring
Project Number: J310000900	
WBS Code: J310000900	

	Sample ID	Matrix	Date	Time	Comments
1	PM030323-06	AQ	05/11/2023	0800	
2	TSP030323-07	AQ	05/11/2023	0800	
3	PM021523-38	A	05/11/2023	1417	VOLUME (M3): 470.85
4	TSP021523-39	A	05/11/2023	1417	VOLUME (M3): 503.62
5	PM021523-40	A	05/11/2023	1419	VOLUME (M3): 488.05
6	TSP021523-41	A	05/11/2023	1419	VOLUME (M3): 522.97
7	PM021523-42	A	05/11/2023	1405	VOLUME (M3): 428.55
8	TSP021523-43	A	05/11/2023	1405	VOLUME (M3): 432.46

Relinquished by: ***(Signature)***
Date
Time
Received by: *(Signature)*
GES.Navy_COC_Field (27)

Date
Time
Shipping Date: / /
Received by Laboratory: ***(Signature, Date, Time)*** & co

Sample ID	Cubic Meter	Volume (L)
PM021523-38	470.85	470850
TSP021523-39	503.62	503620
PM021523-40	488.05	488050
TSP021523-41	522.97	522970
PM021523-42	428.55	428550
TSP021523-43	432.46	432460
		0
		0
		0
		0
		0
		0
		0
		0
		0
		0
		0
		0

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Built Environment Testing Analytics

Level 2 QA/QC Summary Report

Work Order #: B138040

Report Date: 6/6/2023

Batch ID: **ICP230519B** Analysis Date: 5/23/2023

Media:: **8X10PW GFF** Preparation Date 5/19/2023

Blank Spike Results

			Percent Recovery				
QC ID	QC Type	Parameter	LCS	LCSD	Acceptance	RPD	Limit
LCS ICP23	BLKSPK	Lead	99	99	75-125	0.0	25
LCS ICP23	BLKSPK	Manganese	96	96	75-125	0.0	25

Method Blank Results

QC ID	QC Type	Parameter	Result	RL	Units
LMB ICP2	LMB	Lead	< 14	14	ug
LMB ICP2	LMB	Manganese	< 98	98	ug