

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

## AIR MONITORING SUMMARY REPORT FOR PARCEL E REMEDIAL ACTION PHASE 2



SAN FRANCISCO, CALIFORNIA

April 1st, 2022 through April 30th, 2022

Approved for public release; distribution is unlimited

DCN: GLBN-0005-4332-0091



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**HUNTERS POINT NAVAL SHIPYARD** 

SAN FRANCISCO, CALIFORNIA

April 1st, 2022 through April 30th, 2022

DCN: GLBN-0005-4332-0091

#### Prepared for:

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#### **Acronyms and Abbreviations**

AMSR \_\_\_\_\_\_ Air Monitoring Summary Report Cal/OSHA \_\_\_\_\_ California Occupational Safety and Health Administration Cfm cubic feet per minute CFR \_\_\_\_\_ Code of Federal Regulations CTO \_\_\_\_\_ Contract Task Order DMCP \_\_\_\_\_ Dust Monitoring and Control Plan DTSC \_\_\_\_\_ State of California Department of Toxic Substances Control EPA \_\_\_\_\_ United States Environmental Protection Agency fiber/cm<sup>3</sup> fibers per cubic centimeter Gilbane Gilbane Federal HPNS \_\_\_\_\_ Hunters Point Naval Shipyard L/min \_\_\_\_\_\_ liters per minute mg/m³ \_\_\_\_\_ 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 TSP total suspended particulates TWA \_\_\_\_\_\_time-weighted average μg/m<sup>3</sup> \_\_\_\_\_ micrograms per cubic meter

#### 1.0 Introduction

This Air Monitoring Summary Report (AMSR) was prepared by Gilbane Federal (Gilbane) 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) N6247317F4332. Gilbane is performing air monitoring at Hunters Point Naval Shipyard (HPNS) in accordance with the Final Dust Monitoring and Control Plan (DMCP), included as Appendix E to *Final Remedial Action Work Plan, Parcel E Remedial Action Phase 2, Hunters Point Naval Shipyard, San Francisco, California* (RAWP; Gilbane, 2019a). The Dust Monitoring and Control Plan (DMCP) describes the procedures that minimize dust during work activities and requires air monitoring to ensure these procedures are effective. The DMCP helps 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 Gilbane at HPNS Parcel E from April 1st through April 30th, 2022 and compares the results with the established action levels presented in the DMCP (Appendix E of the RAWP [Gilbane, 2019a]).

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1.0 Introduction

#### 2.0 Monitoring Site Locations

Air monitoring stations were deployed at one upwind and downwind location from the work area whenever active soil handling operations were in progress. Based on past meteorological data, the prevalent wind direction at HPNS was from the west or west-southwest. The locations of Parcel E 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 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 (Copper, Lead, and Manganese)
- 3. Total suspended particulates (TSP)
- 4. Radiological air samplers

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2.0 Monitoring Site Locations

#### 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 a period of less than 24 hours. Asbestos results were reviewed for anomalies and compliance with the action levels listed below.

#### 3.2 PM10, Copper, Lead, and Manganese

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 a period of time (usually 8 or 24 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. 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 a certified analytical laboratory where 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.

Once the PM10 concentration was gravimetrically determined, the filter was analyzed for copper, manganese and lead in accordance with EPA Method 6020 (equivalent to IO-3.5 in the Compendium of Methods for the Determination of Inorganic Compounds in Ambient Air [EPA, 1999])

#### 3.3 TSP

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 an approximately 8 to 24-hour period (depending on the duration of the work activity). 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.

#### 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, 2019b).

The radiological air sample concentration is counted on a Low Background Protean WPC-9950 and analyzed for gross alpha and beta activity. The calculated airborne concentration in microcuries is 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 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 and radiological samples were compared with the threshold criteria listed in **Table 4-1** reproduced from Table 1 of the approved DMCP (Appendix E of the RAWP [Gilbane, 2019a]. The PM10 delta was additionally compared to the criterion taken from the *Technical Memorandum: Draft Dust Action Levels for Parcel E, Hunters Point Shipyard, San Francisco, California* (Department of Toxic Substances Control [DTSC] 2017) of 50 micrograms per cubic meter (ug/m³).

Table 4-1: Air Monitoring Threshold Criteria

Test Parameter	Threshold Criteria	Threshold Criteria Reference				
Asbestos	0.1 fiber/cm <sup>3</sup>	Cal/OSHA PEL				
PM10 <sup>a</sup>	5,000 ug/m <sup>3</sup>	Cal/OSHA PEL				
		Basewide HPNS Level selected to				
TSP	0.5 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup> minimize overall permissible dust release				
		from sites				
Copper	1.0 mg/m <sup>3</sup>	Cal/OSHA PEL				
Lead	0.050 mg/m <sup>3</sup>	Cal/OSHA PEL				
Manganese	0.200 mg/m <sup>3</sup>	Cal/OSHA PEL				
Radiological	10% of Effluent	Occupational and public air concentration				
	Concentration	limits for ROCs are published in 10 Code of				
	Values	Federal Regulations Part 20, Appendix B.				

#### Notes:

<sup>a</sup> = The Cal/OSHA PEL for particulates not otherwise regulated (respiratory) is used for PM10 comparison. ug/m³ = micrograms per cubic meter

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

fiber/cm<sup>3</sup> = fibers per cubic centimeter

HPNS = Hunters Point Naval Shipyard

mg/m<sup>3</sup> = milligrams per cubic meter

PEL = permissible exposure limit

PM10 = particulate matter less than 10 microns in diameter

ROC = radionuclide of concern

TSP = total suspended particulates

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	4.0 Air Monitoring Data Interpretation and Action Levels
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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 and 2 were sourced from the Weather Underground (wunderground.com) station Bayview Manor - KCASANER1775.

Air Monitoring Data was collected from Station 1 in Parcel E and Station 2 in Parcel D-1 from April 1st through April 30th, 2022, during which Gilbane was grading and managing radiological screening yard pads, performing site maintenance, and transporting rock and debris. Samples were not collected during periods of site inactivity, rain events, and/or while site work was limited to non-earth moving tasks.

Construction and remediation activities conducted from April 1st through April 30th, 2022 did not result in the exceedance of the established threshold criteria, as described in detail below.

Asbestos results from April 1st through April 30<sup>th</sup>, 2022 did not exceed the threshold criteria presented in **Table 4-1**. The results are presented as **Attachment 2**.

PM10, lead, manganese, and copper results from April 1st through April 30th, 2022 did not exceed the threshold criteria presented in **Table 4-1**. The results are presented as **Attachment 3** and **Attachment 4**.

TSP results from April 1st through April 30th, 2022 did not exceed the threshold criteria presented in **Table 4-1**. The results are presented as **Attachment 5**.

Radiological air sampling results from April 1st through April 30th, 2022 did not exceed the threshold criteria presented in **Table 4-1**. The results are presented as **Attachment 6**.

Analytical laboratory reports are included as **Attachment 7** and were subjected to cursory review by the Project Chemist. It was noted during review that a second weight was not recorded by the laboratory to confirm the constant weight of the filters. No other data quality issues were noted. The data, as qualified, should be considered usable for their intended purposes.

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5.0 Air Monitoring Results

#### 6.0 References

- Department of Toxic Substances Control (DTSC), 2017. Draft Technical Memorandum: Dust Action Levels for Parcel E, Hunters Point. May.
- National Institute for Occupational Safety and Health, (NIOSH), 1994. Manual of Analytical Methods.
- United States Environmental Protection Agency (EPA), 1999. Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Ambient Air Specific Methods.
- Gilbane Federal, 2019a. Final Remedial Action Work Plan, Parcel E Remedial Action, Phase 2, Hunters Point Naval Shipyard, San Francisco, California. October
- Gilbane Federal, 2019b. Radiological Procedure PR-RP-150 Radiological Survey and Sampling, Version 01, October 1.

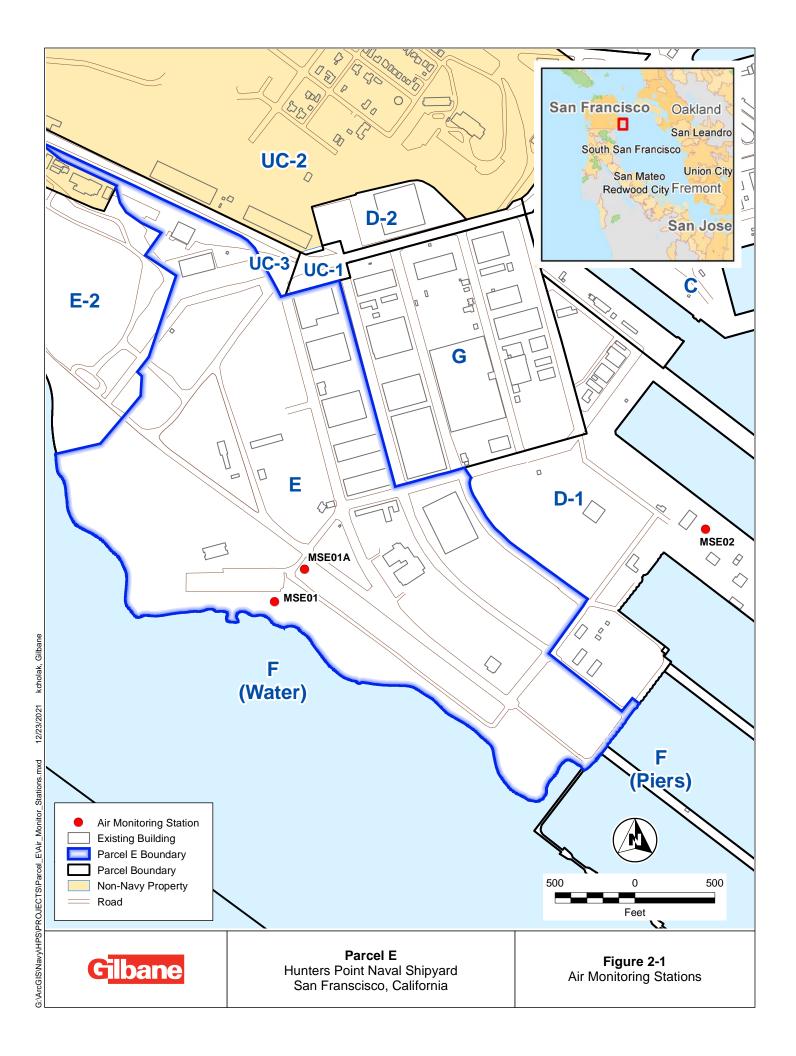
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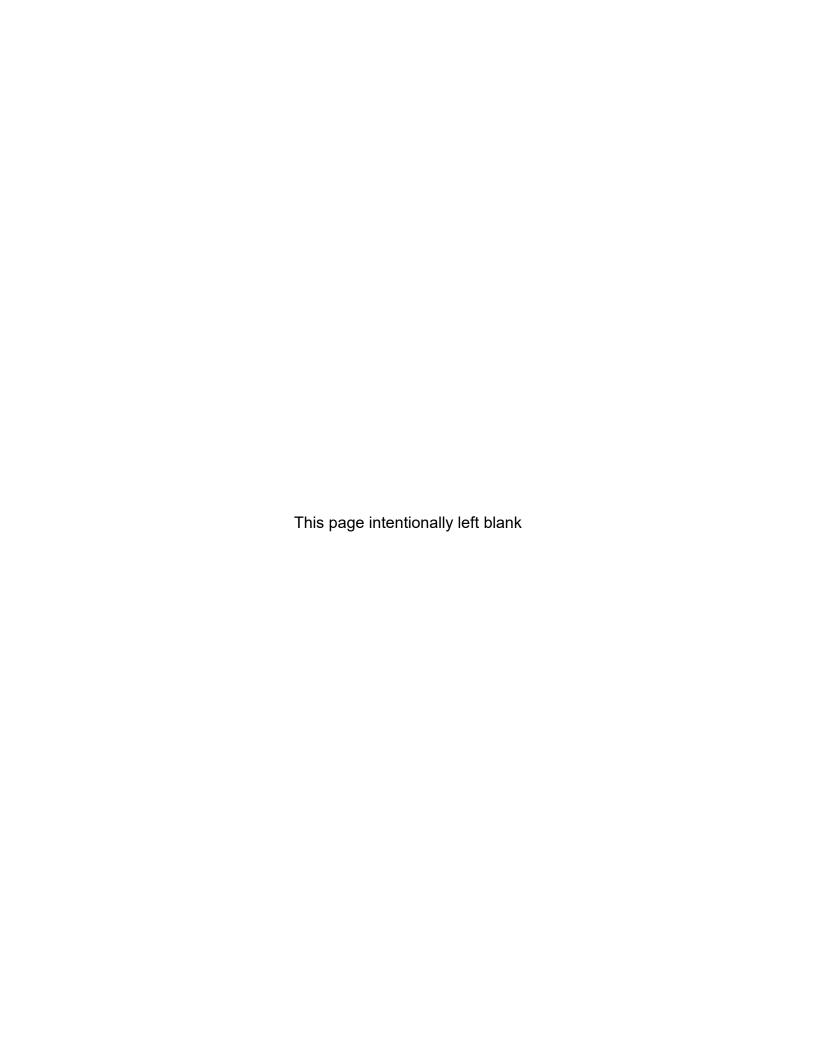
6.0 References

Figures

### **FIGURES**

Figures





## ATTACHMENT 1 AMBIENT PRESSURE, TEMPERATURE, AND PREVALENT WIND DIRECTION MONITORING RESULTS

Attachment 1

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

Start Date	Ambient Pressure (in Hg)	Ambient Temperature (°F)	Prevalent Wind Direction
4/4/2022	30.14	54.70	W
4/5/2022	30.14	56.03	WSW
4/6/2022	30.08	66.40	NE
4/7/2022	30.10	71.55	Е
4/11/2022	30.02	49.04	W
4/12/2022	30.23	49.13	WNW
4/13/2022	30.18	52.06	WSW
4/14/2022	30.06	54.50	S
4/18/2022	30.03	56.69	S
4/19/2022	30.01	54.53	SW
4/20/2022	29.92	57.89	SSE
4/21/2022	29.93	56.55	SWW
4/25/2022	30.03	55.30	WSW
4/26/2022	29.98	53.24	W
4/27/2022	30.01	52.28	WSW
4/28/2022	30.08	53.24	W

#### Notes:

 ${\bf Data\ collected\ using\ wunderground.com\ from\ Bayview\ Manor\ -\ KCASANFR1775}$ 

°F = degree Fareheit

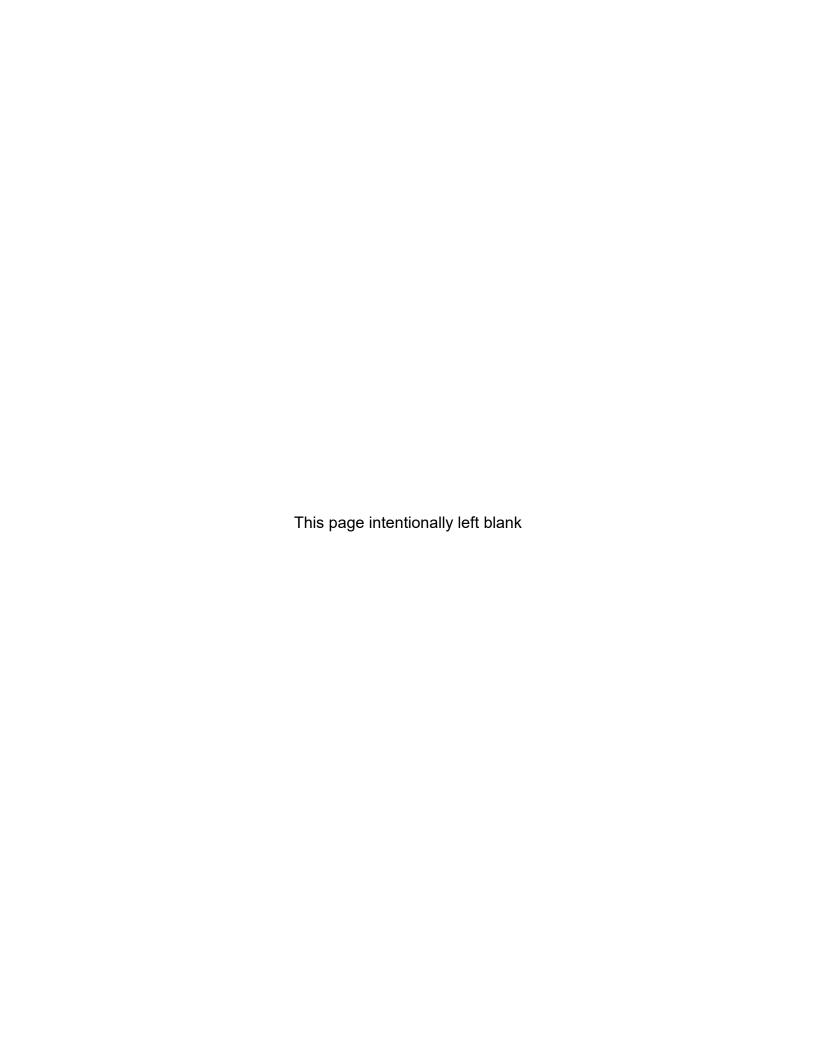
in Hg = inches of mercury

E = East

N = North

S = South

W = West



## ATTACHMENT 2 ASBESTOS MONITORING RESULTS

**Attachment 2: Asbestos Monitoring Results** 

Sample, Date a	and Station I	nformation	Sampler Run	Information		Asbestos Fibers			
Sample ID	Sample Start Date <sup>1</sup>	Monitoring Station	Duration of Run (min)	Total Air Volume Monitored (L)	Asbestos (fibers)	Conc Asbestos (fibers/cm³)	Exceedance (Yes/No)		
MSE01-040422	04/04/22	1	515	1030	4.0	<0.003	No		
MSE02-040422	04/04/22	2	534	1068	8.5	0.004	No		
MSE01-040522	04/05/22	1	532	1064	3.0	<0.003	No		
MSE02-040522	04/05/22	2	540	1080	3.0	<0.002	No		
MSE01-040622	04/06/22	1	540	1080	9.5	0.004	No		
MSE02-040622	04/06/22	2	547	1094	13.0	0.006	No		
MSE01-040722	04/07/22	1	433	866	7.0	0.004	No		
MSE02-040722	04/07/22	2	429	858	4.0	<0.003	No		
MSE01-041122	04/11/22	1	530	1060	2.5	<0.003	No		
MSE02-041122	04/11/22	2	537	1074	7.5	0.003	No		
MSE01-041222	04/12/22	1	525	1050	5.0	<0.003	No		
MSE02-041222	04/12/22	2	529	1058	8.5	0.004	No		
MSE01-041322	04/13/22	1	531	1062	2.0	<0.003	No		
MSE02-041322	04/13/22	2	529	1058	2.5	<0.003	No		
MSE01-041422	04/14/22	1	427	854	4.0	< 0.003	No		
MSE02-041422	04/14/22	2	436	872	0.0	< 0.003	No		
MSE01-041822	04/18/22	1	498	996	1.0	<0.003	No		
MSE02-041822	04/18/22	2	521	1042	2.0	<0.003	No		
MSE01-041922	04/19/22	1	554	1108	1.5	<0.002	No		
MSE02-041922	04/19/22	2	555	1110	4.0	<0.002	No		
MSE01-042022	04/20/22	1	546	1092	6.0	0.003	No		
MSE02-042022	04/20/22	2	546	1092	0.0	<0.002	No		
MSE01-042122	04/21/22	1	478	956	1.0	<0.003	No		
MSE02-042122	04/21/22	2	486	972	0.5	<0.003	No		
MSE01-042522	04/25/22	1	518	1036	4.5	<0.003	No		
MSE02-042522	04/25/22	2	537	1074	8.0	0.004	No		
MSE01-042622	04/26/22	1	537	1074	8.5	0.004	No		
MSE02-042622	04/26/22	2	551	1102	10.5	0.005	No		
MSE01-042722	04/27/22	1	529	1058	3.5	<0.003	No		
MSE02-042722	04/27/22	2	523	1046	9.0	0.004	No		
MSE01-042822	04/28/22	1	446	892	7.0	0.004	No		
MSE02-042822	04/28/22	2	446	892	12.5	0.007	No		

#### Notes:

<sup>1</sup>Sample "start" date indicates the date upon which sample collection began.

Samples analyzed by A&B Labs

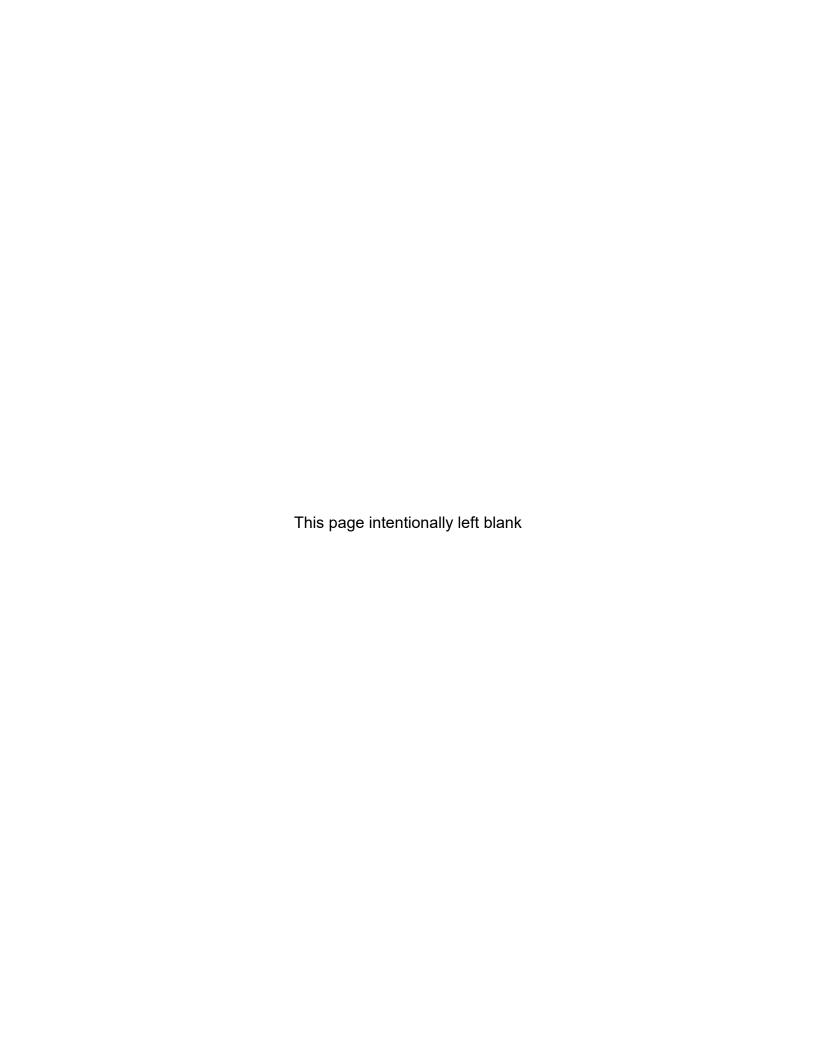
Sample locations are shown on Figure 2-1

L = liter

min = minutes

fibers/cm<sup>3</sup> = fibers per cubic centimeter

< = below detection limit



# ATTACHMENT 3 PARTICULATE MATTER, SMALLER THAN TEN MICRONS (PM10) MONITORING RESULTS

Attachment 3

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

Sample, Date and Station Information										
Sample ID	Monitoring Station	Sample End Date <sup>1</sup>	Total Air Volume Monitored (m³)	Concentration in Air (mg/m³)	Delta between Downwind and Upwind (mg/m³)	Delta between Downwind and Upwind (ug/m³)	Cal/OSHA PEL (ug/m³)	Exceedance (Yes/No)	HERO Action Level <sup>4</sup> (ug/m <sup>3</sup> )	Exceedance (Yes/No)
GILBANEPM030122-1822	1	04/05/2022	1727.17	0.022						
GILBANEPM030122-1823	2	04/05/2022	1728.57	0.026	0.0040	4.0	5,000	No	50	No
GILBANEPM030122-1824	1	04/06/2022	1720.30	0.041						
GILBANEPM030122-1825	2	04/06/2022	1712.46	0.037	-0.0040	-4.0	5,000	No	50	No
GILBANEPM030122-1820	1	4/7/2022	1754.97	0.035						
GILBANEPM030122-1821	2	4/7/2022	1747.24	0.031	0.0040	4.0	5,000	No	50	No
GILBANEPM030122-1826	1	04/07/2022 <sup>2</sup>	524.25	0.044						
GILBANEPM030122-1827	2	04/07/2022 <sup>2</sup>	522.65	0.037	0.0070	7.0	5,000	No	50	No
GILBANEPM030122-1828	1	04/12/2022	1722.45	0.041						
GILBANEPM030122-1829	2	04/12/2022	1714.91	0.027	-0.0140	-14.0	5,000	No	50	No
GILBANEPM030122-1830	1	04/13/2022 <sup>3</sup>	1739.71	0.015						
GILBANEPM030122-1831	2	4/13/2022	1731.45	0.019	0.0040	4.0	5,000	No	50	No
GILBANEPM030122-1832	1	04/14/2022	1684.17	0.014						
GILBANEPM030122-1833	2	04/14/2022	1734.83	0.014	0.0000	0.0	5,000	No	50	No
GILBANEPM030122-1834	1	04/14/2022 <sup>2</sup>	519.74	0.011						
GILBANEPM030122-1835	2	04/14/2022 <sup>2</sup>	520.96	0.0084	-0.0026	-2.6	5,000	No	50	No
GILBANEPM030122-1836	1	04/19/2022	1713.15	0.014						
GILBANEPM030122-1837	2	04/19/2022	1706.18	0.0089	-0.0051	-5.1	5,000	No	50	No
GILBANEPM030122-1838	1	04/20/2022	1763.61	0.016						
GILBANEPM030122-1839	2	04/20/2022	1752.64	0.0091	-0.0069	-6.9	5,000	No	50	No
GILBANEPM030122-1840	1	04/21/2022	1770.64	0.025						
GILBANEPM030122-1841	2	04/21/2022	1739.51	0.011	-0.0140	-14.0	5,000	No	50	No
GILBANEPM030122-1842	1	04/21/2022 <sup>2</sup>	583.10	0.014						
GILBANEPM030122-1843	2	04/21/2022 <sup>2</sup>	588.23	0.009	-0.0050	-5.0	5,000	No	50	No
GILBANEPM031522-1876	1	4/26/2022	1723.78	0.035 J						
GILBANEPM031522-1877	2	4/26/2022	1719.87	0.027 J	-0.0080	-8.0	5,000	No	50	No
GILBANEPM031522-1878	1	04/27/2022	1739.63	0.031 J						
GILBANEPM031522-1879	2	04/27/2022 <sup>3</sup>	1511.52	0.06 J	0.0290	29.0	5,000	No	50	No
GILBANEPM031522-1880	1	04/28/2022	1727.02	0.026 J						
GILBANEPM031522-1881	2	04/28/2022 <sup>3</sup>	1622.18	0.054 J	0.0280	28.0	5,000	No	50	No
GILBANEPM031522-1882	1	04/28/20222	527.48	0.031 J						
GILBANEPM031522-1883	2	04/28/20222	513.17	0.05 J	0.0190	19.0	5,000	No	50	No

#### Notes:

<sup>1</sup>Air sample was not collected on days with rain or when contaminated soil was not disturbed.

<sup>4</sup>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.

Samples analyzed by Eurofins TestAmerica

Sample locations are shown on Figure 2-1

Cal/OSHA = California Division of Occupational Safety and Health

HERO = Human and Ecological Risk Office

J = estimated concentration. See data review report for details.

m<sup>3</sup> = cubic meters

mg/m³ = milligrams per cubic meter

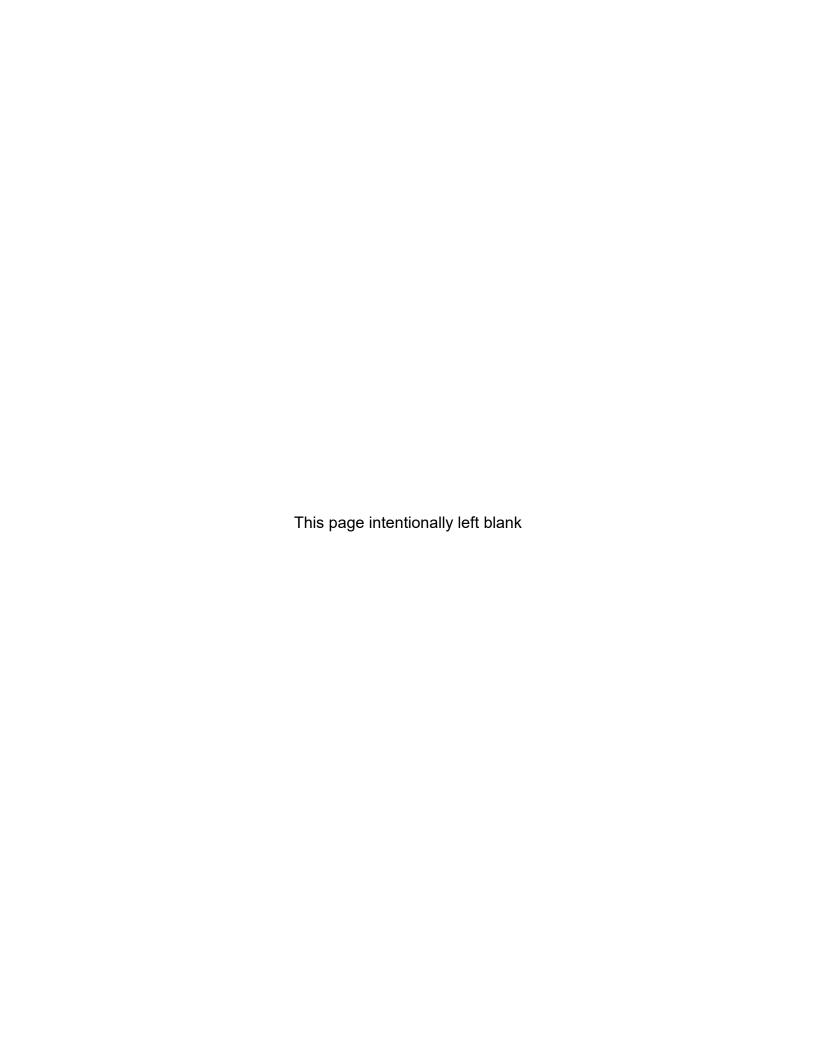
PEL = permissible exposure limit

PM10 = particulate matter smaller than 10 microns in diameter

ug/m³ = micrograms per cubic meter

 $<sup>^2\</sup>mbox{Air}$  sample was taken down during the afternoon after field activities ceased.

<sup>&</sup>lt;sup>3</sup>Generator malfunction



Attachment 4

## ATTACHMENT 4 COPPER, LEAD, AND MANGANESE MONITORING RESULTS

Attachment 4

Attachment 4: Copper, Lead, and Manganese Monitoring Results

Sample, Date and Station Information		Sampler Run Information	Copper		Lead		Manganese		
Sample ID	Monitoring Station	Sample End Date <sup>1</sup>	Total Air Volume Monitored (m³)	Concentration in Air (mg/m³)	Exceedance (Yes/No)	Concentration in Air (mg/m³)	Exceedance (Yes/No)	Concentration in Air (mg/m³)	Exceedance (Yes/No)
GILBANEPM030122-1822	1	04/05/2022	1727.17	0.000029	No	0.0000024	No	0.0000054	No
GILBANEPM030122-1823	2	04/05/2022	1728.57	0.00021	No	0.0000042	No	0.000009	No
GILBANEPM030122-1824	1	04/06/2022	1720.30	0.000088	No	0.0000031	No	0.000008	No
GILBANEPM030122-1825	2	04/06/2022	1712.46	0.00016	No	0.000003	No	0.0000067	No
GILBANEPM030122-1820	1	4/7/2022	1754.97	0.00025	No	0.0000053	No	0.000015	No
GILBANEPM030122-1821	2	4/7/2022	1747.24	0.00016	No	0.0000031	No	0.00001	No
GILBANEPM030122-1826	1	04/07/2022 <sup>2</sup>	524.25	0.00019	No	0.0000064	No	0.000026	No
GILBANEPM030122-1827	2	04/07/2022 <sup>2</sup>	522.65	0.00018	No	0.0000052	No	0.000019	No
GILBANEPM030122-1828	1	04/12/2022	1722.45	0.00011	No	0.0000098	No	0.000014	No
GILBANEPM030122-1829	2	04/12/2022	1714.91	0.00018	No	0.0000078	No	0.0000097	No
GILBANEPM030122-1830	1	04/13/2022 <sup>3</sup>	1739.71	0.000035	No	0.0000024	No	0.0000061	No
GILBANEPM030122-1831	2	4/13/2022	1731.45	0.00013	No	0.0000037	No	0.0000065	No
GILBANEPM030122-1832	1	04/14/2022	1684.17	0.000027	No	0.0000011	No	0.0000033	No
GILBANEPM030122-1833	2	04/14/2022	1734.83	0.00023	No	0.0000013	No	0.0000032	No
GILBANEPM030122-1834	1	04/14/20222	519.74	0.000042	No	0.0000017 J	No	0.0000038	No
GILBANEPM030122-1835	2	04/14/20222	520.96	0.00013	No	0.0000015 J	No	0.0000021 J	No
GILBANEPM030122-1836	1	04/19/2022	1713.15	0.00004	No	0.0000021	No	0.0000062	No
GILBANEPM030122-1837	2	04/19/2022	1706.18	0.000044	No	0.0000009	No	0.0000022	No
GILBANEPM030122-1838	1	04/20/2022	1763.61	0.000025	No	0.0000023	No	0.0000053	No
GILBANEPM030122-1839	2	04/20/2022	1752.64	0.000018	No	0.0000014	No	0.0000023	No
GILBANEPM030122-1840	1	04/21/2022	1770.64	0.000026	No	0.0000019	No	0.0000096	No
GILBANEPM030122-1841	2	04/21/2022	1739.51	0.0000093	No	0.00000052 J	No	0.0000018	No
GILBANEPM030122-1842	1	04/21/20222	583.10	0.000065	No	0.0000013 J	No	0.0000027	No
GILBANEPM030122-1843	2	04/21/20222	588.23	0.000023	No	0.00000087 J	No	0.0000018 J	No
GILBANEPM031522-1876	1	4/26/2022	1723.78	0.000052 J	No	0.0000041 J	No	0.0000098 J	No
GILBANEPM031522-1877	2	4/26/2022	1719.87	0.000016 J	No	0.0000053 J	No	0.0000084 J	No
GILBANEPM031522-1878	1	04/27/2022	1739.63	0.000013 J	No	0.0000018 J	No	0.0000052 J	No
GILBANEPM031522-1879	2	04/27/2022 <sup>3</sup>	1511.52	0.000064 J	No	0.000021 J	No	0.00002 J	No
GILBANEPM031522-1880	1	04/28/2022	1727.02	0.00002 J	No	0.0000025 J	No	0.0000055 J	No
GILBANEPM031522-1881	2	04/28/2022 <sup>3</sup>	1622.18	0.000059 J	No	0.000014 J	No	0.000018 J	No
GILBANEPM031522-1882	1	04/28/20222	527.48	0.00008 J	No	0.0000055 J	No	0.000013 J	No
GILBANEPM031522-1883	2	04/28/20222	513.17	0.00011 J	No	0.000024 J	No	0.00003 J	No

Notes:

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

Samples analyzed by Eurofins TestAmerica

Sample locations are shown on Figure 2-1

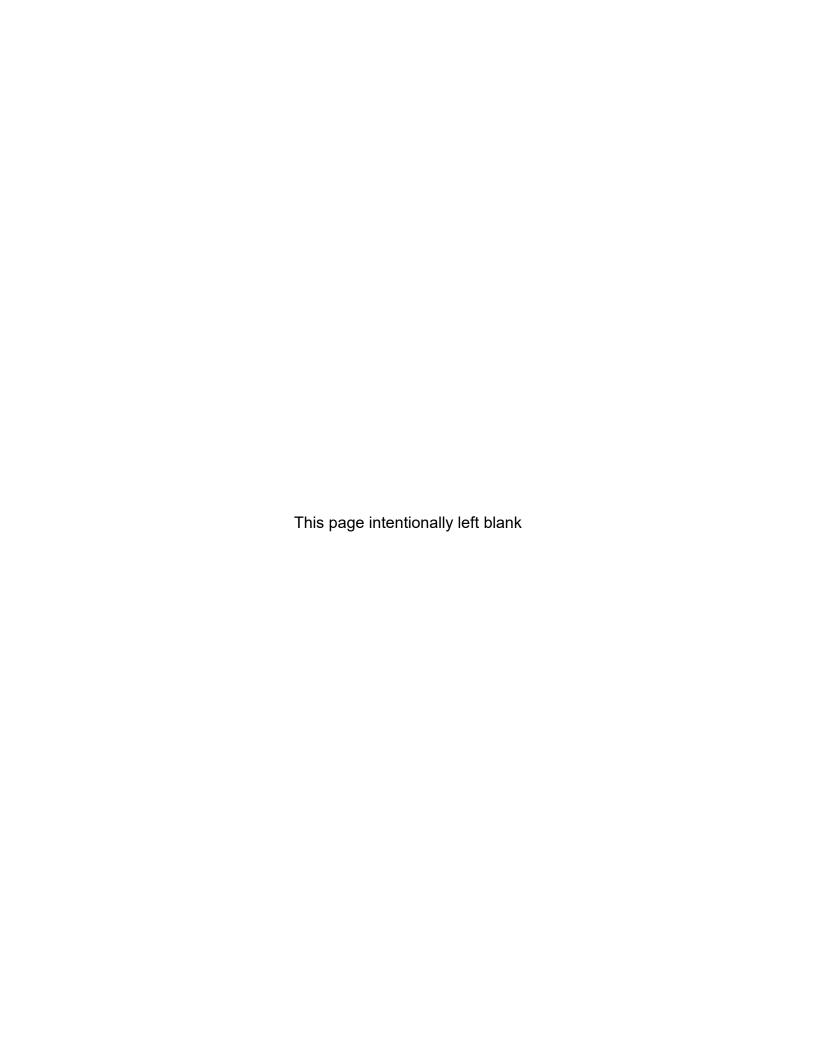
m<sup>3</sup> = cubic meters

mg/m³ = milligrams per cubic meter

J = estimated concentration. See data review report for details.

<sup>&</sup>lt;sup>2</sup>Air sample was taken down during the afternoon after field activities ceased.

<sup>&</sup>lt;sup>3</sup>Generator malfunction



# ATTACHMENT 5 TOTAL SUSPENDED PARTICULATES MONITORING RESULTS

Attachment 5

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**Attachment 5: Total Suspended Particulates Monitoring Results** 

Station   Date   Monitored (m³)   Monitored (mg/m³)   Monitorede	Sample, Date and St	tation Inform	ation	Sampler Run Information				
GILBANETSP030122-1823 2 04/05/2022 1723.08 0.0373749 0.007 0.5 No GILBANETSP030122-1824 1 04/06/2022 1615.28 0.0542321 0.006 0.5 No GILBANETSP030122-1825 2 04/06/2022 1713.42 0.0479742 -0.006 0.5 No GILBANETSP030122-1820 1 4/7/2022 1697.83 0.045941 0.006 0.5 No GILBANETSP030122-1821 2 4/7/2022 1747.28 0.0398906 0.006 0.5 No GILBANETSP030122-1826 1 04/07/2022² 499.84 0.0524168 0.0543782 -0.002 0.5 No GILBANETSP030122-1827 2 04/07/2022² 518.59 0.0543782 -0.002 0.5 No GILBANETSP030122-1828 1 04/12/2022 1653.84 0.0419025 0.0543782 -0.002 0.5 No GILBANETSP030122-1829 2 04/12/2022 1723.77 0.032777 -0.009 0.5 No GILBANETSP030122-1830 1 04/13/2022 1661.59 0.0296102 0.05413782 -0.004 0.5 No GILBANETSP030122-1831 2 04/13/2022³ 1730.65 0.0053737 -0.024 0.5 No GILBANETSP030122-1832 1 04/14/2022² 1661.18 0.0208286 0.001 0.5 No GILBANETSP030122-1833 2 04/14/2022 1704.82 0.0218205 0.001 0.5 No GILBANETSP030122-1834 1 04/14/2022² 497.57 0.0120586 0.001 0.5 No GILBANETSP030122-1835 2 04/14/2022² 520.17 0.0138416 0.002 0.5 No GILBANETSP030122-1835 1 04/12/2022 1665.91 0.0209058 0.5 No GILBANETSP030122-1837 2 04/19/2022 1663.91 0.0209058 0.5 No GILBANETSP030122-1837 2 04/19/2022 1689.67 0.0187019 0.0509058 0.5 No GILBANETSP030122-1839 2 04/20/2022 1720.22 0.0128472 -0.008 0.5 No GILBANETSP030122-1834 1 04/20/2022 1689.67 0.0187019 0.0005 0.5 No GILBANETSP030122-1834 1 04/20/2022 1743.85 0.0198412 -0.028 0.5 No GILBANETSP030122-1841 2 04/21/2022 768.45 0.048279 0.004962 0.0508873 1 04/20/2022 1743.85 0.0198412 -0.028 0.5 No GILBANETSP030122-1843 2 04/21/2022 590.98 0.0121832 0.007 0.5 No GILBANETSP0301522-1877 2 4/26/2022 1748.85 0.049568 J 0	Sample ID			Volume Monitored	in Air	between Downwind and Upwind	HPNS Level	Exceedance (Yes/No)
GILBANETSP030122-1824 1 04/06/2022 1615.28 0.0542321	GILBANETSP030122-1822	1	04/05/2022	1642.13	0.0303874			
GILBANETSP030122-1825 2 04/06/2022 1713.42 0.0479742 -0.006 0.5 No GILBANETSP030122-1820 1 4/7/2022 1697.83 0.045941 0.006 0.5 No GILBANETSP030122-1821 2 4/7/2022 1747.28 0.0398906 0.006 0.5 No GILBANETSP030122-1826 1 04/07/2022² 499.84 0.0524168 GILBANETSP030122-1827 2 04/07/2022² 518.59 0.0543782 -0.002 0.5 No GILBANETSP030122-1828 1 04/12/2022 1653.84 0.0419025 GILBANETSP030122-1829 2 04/12/2022 1723.77 0.032777 -0.009 0.5 No GILBANETSP030122-1830 1 04/13/2022 1661.59 0.0296102 GILBANETSP030122-1831 2 04/13/2022 1661.59 0.0296102 GILBANETSP030122-1832 1 04/14/2022 1661.18 0.0208286 GILBANETSP030122-1833 2 04/14/2022 1704.82 0.0218205 0.001 0.5 No GILBANETSP030122-1834 1 04/14/2022 1704.82 0.0218205 0.001 0.5 No GILBANETSP030122-1835 2 04/14/2022² 497.57 0.0120586 GILBANETSP030122-1836 1 04/19/2022 1635.91 0.0209058 GILBANETSP030122-1838 1 04/20/2022 1720.22 0.0128472 -0.008 0.5 No GILBANETSP030122-1839 2 04/12/2022 1720.22 0.0128472 -0.008 0.5 No GILBANETSP030122-1839 2 04/20/2022 1776.12 0.0140193 -0.005 0.5 No GILBANETSP030122-1840 1 04/21/2022 768.45 0.048279 GILBANETSP030122-1841 2 04/21/2022 768.45 0.048279 GILBANETSP030122-1842 1 04/21/2022 590.98 0.0121832 0.007 0.5 No GILBANETSP030122-1843 2 04/21/2022 590.98 0.0121832 0.007 0.5 No GILBANETSP030122-1843 2 04/21/2022 590.98 0.0121832 0.007 0.5 No GILBANETSP030122-1843 2 04/21/2022 590.98 0.0121832 0.007 0.5 No GILBANETSP030152-1847 2 04/21/2022 590.98 0.0121832 0.007 0.5 No GILBANETSP031522-1876 1 4/26/2022 1668.01 0.0368703 J 0.013 0.5 No	GILBANETSP030122-1823	2	04/05/2022	1723.08	0.0373749	0.007	0.5	No
GILBANETSP030122-1820 1 4/7/2022 1697.83 0.045941 0.006 0.5 No GILBANETSP030122-1826 1 04/07/2022² 499.84 0.0524168 0.0096 0.5 No GILBANETSP030122-1827 2 04/07/2022² 518.59 0.0543782 -0.002 0.5 No GILBANETSP030122-1828 1 04/12/2022 1653.84 0.0419025 0.006 0.5 No GILBANETSP030122-1829 2 04/12/2022 1723.77 0.032777 -0.009 0.5 No GILBANETSP030122-1830 1 04/13/2022 1661.59 0.0296102 0.0053737 -0.024 0.5 No GILBANETSP030122-1831 2 04/14/2022 1661.18 0.0208286 0.001 0.5 No GILBANETSP030122-1833 2 04/14/2022 1704.82 0.0218205 0.001 0.5 No GILBANETSP030122-1834 1 04/14/2022² 497.57 0.0120586 0.001 0.5 No GILBANETSP030122-1835 2 04/14/2022² 520.17 0.0138416 0.002 0.5 No GILBANETSP030122-1836 1 04/19/2022 1635.91 0.0209058 0.001 0.5 No GILBANETSP030122-1838 1 04/20/2022 1720.22 0.0128472 -0.008 0.5 No GILBANETSP030122-1838 1 04/20/2022 1720.22 0.0128472 -0.008 0.5 No GILBANETSP030122-1839 2 04/20/2022 1776.12 0.0140193 -0.005 0.5 No GILBANETSP030122-1840 1 04/21/2022 768.45 0.048279 0.0187019 0.05 O.5 No GILBANETSP030122-1841 2 04/21/2022 564.29 0.004962 0.004962 0.005 O.5 No GILBANETSP030122-1843 2 04/21/2022 590.98 0.0121832 0.007 0.5 No GILBANETSP030122-1843 2 04/21/2022 590.98 0.0121832 0.007 0.5 No GILBANETSP030122-1843 2 04/21/2022² 590.98 0.0121832 0.007 0.5 No GILBANETSP031522-1876 1 4/26/2022 178.85 0.049568 J 0.013 0.5 No	GILBANETSP030122-1824	1	04/06/2022	1615.28	0.0542321			
GILBANETSP030122-1821 2 4/7/2022 1747.28 0.0398906 0.006 0.5 No GILBANETSP030122-1826 1 04/07/2022² 499.84 0.0524168 GILBANETSP030122-1827 2 04/07/2022² 518.59 0.0543782 -0.002 0.5 No GILBANETSP030122-1828 1 04/12/2022 1653.84 0.0419025 GILBANETSP030122-1829 2 04/12/2022 1723.77 0.032777 -0.009 0.5 No GILBANETSP030122-1830 1 04/13/2022 1661.59 0.0296102 GILBANETSP030122-1831 2 04/13/2022³ 1730.65 0.0053737 -0.024 0.5 No GILBANETSP030122-1832 1 04/14/2022 1661.18 0.0208286 GILBANETSP030122-1833 2 04/14/2022 1704.82 0.0218205 0.001 0.5 No GILBANETSP030122-1834 1 04/14/2022² 497.57 0.0120586 GILBANETSP030122-1835 2 04/14/2022² 520.17 0.0138416 0.002 0.5 No GILBANETSP030122-1836 1 04/19/2022 1635.91 0.0209058 GILBANETSP030122-1837 2 04/19/2022 1720.22 0.0128472 -0.008 0.5 No GILBANETSP030122-1838 1 04/20/2022 1689.67 0.0187019 GILBANETSP030122-1849 2 04/20/2022 1776.12 0.0140193 -0.005 0.5 No GILBANETSP030122-1840 1 04/21/2022 768.45 0.048279 GILBANETSP030122-1841 2 04/21/2022 768.45 0.048279 GILBANETSP030122-1844 1 04/21/2022 564.29 0.004962 GILBANETSP030122-1843 2 04/21/2022 590.98 0.0121832 0.007 0.5 No GILBANETSP030122-1847 2 4/26/2022 1668.01 0.0368703 J GILBANETSP031522-1876 1 4/26/2022 1718.85 0.049568 J 0.013 0.5 No	GILBANETSP030122-1825	2	04/06/2022	1713.42	0.0479742	-0.006	0.5	No
GILBANETSP030122-1826	GILBANETSP030122-1820	1	4/7/2022	1697.83	0.045941			
GILBANETSP030122-1827 2 04/07/2022² 518.59 0.0543782 -0.002 0.5 No GILBANETSP030122-1828 1 04/12/2022 1653.84 0.0419025 0.0543782 0.0543782 0.0543782 0.0543782 0.0543782 0.0543782 0.0543782 0.0543782 0.0543782 0.0543782 0.0543782 0.055 No GILBANETSP030122-1830 1 04/13/2022 1661.59 0.0296102 0.0296102 0.056 No GILBANETSP030122-1831 2 04/13/2022³ 1730.65 0.0053737 0.024 0.5 No GILBANETSP030122-1832 1 04/14/2022 1661.18 0.0208286 0.001 0.5 No GILBANETSP030122-1833 2 04/14/2022 1704.82 0.0218205 0.001 0.5 No GILBANETSP030122-1834 1 04/14/2022² 497.57 0.0120586 0.002 0.5 No GILBANETSP030122-1835 2 04/14/2022² 520.17 0.0138416 0.002 0.5 No GILBANETSP030122-1836 1 04/19/2022 1635.91 0.0209058 0.5 GILBANETSP030122-1837 2 04/19/2022 1720.22 0.0128472 0.008 0.5 No GILBANETSP030122-1838 1 04/20/2022 1689.67 0.0187019 0.0187019 0.0187019 0.0187019 0.0187019 0.0187019 0.0188415 0.0421/2022 768.45 0.048279 0.0188412 0.005 0.5 No GILBANETSP030122-1841 2 04/21/2022 768.45 0.048279 0.0188412 0.005 0.5 No GILBANETSP030122-1841 2 04/21/2022 564.29 0.004962 0.004962 0.004962 0.004962 0.004962 0.004962 0.004962 0.004962 0.004962 0.004962 0.004962 0.004962 0.004962 0.004962 0.004962 0.004962 0.004962 0.004962 0.004965 0.0049683 0.0049683 0.0049683 0.0049683 0.0049683 0.0049684	GILBANETSP030122-1821	2	4/7/2022	1747.28	0.0398906	0.006	0.5	No
GILBANETSP030122-1828 1 04/12/2022 1653.84 0.0419025	GILBANETSP030122-1826	1	04/07/20222	499.84	0.0524168			
GILBANETSP030122-1829 2 04/12/2022 1723.77 0.032777 -0.009 0.5 No GILBANETSP030122-1831 2 04/13/2022 1661.59 0.0296102 GILBANETSP030122-1831 2 04/13/2022 1661.18 0.0208286 GILBANETSP030122-1832 1 04/14/2022 1661.18 0.0208286 GILBANETSP030122-1833 2 04/14/2022 1704.82 0.0218205 0.001 0.5 No GILBANETSP030122-1834 1 04/14/2022 497.57 0.0120586 GILBANETSP030122-1835 2 04/14/2022 520.17 0.0138416 0.002 0.5 No GILBANETSP030122-1836 1 04/19/2022 1635.91 0.0209058 GILBANETSP030122-1837 2 04/19/2022 1720.22 0.0128472 -0.008 0.5 No GILBANETSP030122-1838 1 04/20/2022 1689.67 0.0187019 GILBANETSP030122-1839 2 04/20/2022 1776.12 0.0140193 -0.005 0.5 No GILBANETSP030122-1840 1 04/21/2022 768.45 0.048279 GILBANETSP030122-1841 2 04/21/2022 1743.85 0.0198412 -0.028 0.5 No GILBANETSP030122-1842 1 04/21/2022 564.29 0.004962 GILBANETSP030122-1843 2 04/21/2022 590.98 0.0121832 0.007 0.5 No GILBANETSP030122-1843 2 04/21/2022 590.98 0.0121832 0.007 0.5 No GILBANETSP030122-1843 2 04/21/2022 1748.85 0.049568 J 0.013 0.5 No GILBANETSP030122-1847 2 4/26/2022 1718.85 0.049568 J 0.013 0.5 No	GILBANETSP030122-1827	2	04/07/20222	518.59	0.0543782	-0.002	0.5	No
GILBANETSP030122-1831 2 04/13/2022 1661.59 0.0296102	GILBANETSP030122-1828	1	04/12/2022	1653.84	0.0419025			
GILBANETSP030122-1831 2 04/13/2022³ 1730.65 0.0053737 -0.024 0.5 No GILBANETSP030122-1832 1 04/14/2022 1661.18 0.0208286 GILBANETSP030122-1833 2 04/14/2022 1704.82 0.0218205 0.001 0.5 No GILBANETSP030122-1834 1 04/14/2022² 497.57 0.0120586 GILBANETSP030122-1835 2 04/14/2022² 520.17 0.0138416 0.002 0.5 No GILBANETSP030122-1836 1 04/19/2022 1635.91 0.0209058 GILBANETSP030122-1837 2 04/19/2022 1720.22 0.0128472 -0.008 0.5 No GILBANETSP030122-1838 1 04/20/2022 1689.67 0.0187019 GILBANETSP030122-1839 2 04/20/2022 1776.12 0.0140193 -0.005 0.5 No GILBANETSP030122-1840 1 04/21/2022 768.45 0.048279 GILBANETSP030122-1841 2 04/21/2022 1743.85 0.0198412 -0.028 0.5 No GILBANETSP030122-1842 1 04/21/2022 564.29 0.004962 GILBANETSP030122-1843 2 04/21/2022² 590.98 0.0121832 0.007 0.5 No GILBANETSP0301522-1843 2 04/21/2022² 590.98 0.0121832 0.007 0.5 No GILBANETSP031522-1876 1 4/26/2022 1718.85 0.049568 J 0.013 0.5 No	GILBANETSP030122-1829	2	04/12/2022	1723.77	0.032777	-0.009	0.5	No
GILBANETSP030122-1832	GILBANETSP030122-1830	1	04/13/2022	1661.59	0.0296102			
GILBANETSP030122-1833 2 04/14/2022 1704.82 0.0218205 0.001 0.5 No GILBANETSP030122-1834 1 04/14/2022² 520.17 0.0120586 0.002 0.5 No GILBANETSP030122-1836 1 04/19/2022 1635.91 0.0209058 GILBANETSP030122-1837 2 04/19/2022 1720.22 0.0128472 -0.008 0.5 No GILBANETSP030122-1838 1 04/20/2022 1689.67 0.0187019 GILBANETSP030122-1839 2 04/20/2022 1776.12 0.0140193 -0.005 0.5 No GILBANETSP030122-1840 1 04/21/2022 768.45 0.048279 GILBANETSP030122-1841 2 04/21/2022 1743.85 0.0198412 -0.028 0.5 No GILBANETSP030122-1842 1 04/21/2022 564.29 0.004962 GILBANETSP030122-1843 2 04/21/2022² 590.98 0.0121832 0.007 0.5 No GILBANETSP030122-1843 2 04/21/2022² 590.98 0.0121832 0.007 0.5 No GILBANETSP0301522-1876 1 4/26/2022 1718.85 0.049568 J 0.013 0.5 No	GILBANETSP030122-1831	2	04/13/2022 <sup>3</sup>	1730.65	0.0053737	-0.024	0.5	No
GILBANETSP030122-1834 1 04/14/2022² 497.57 0.0120586	GILBANETSP030122-1832	1	04/14/2022	1661.18	0.0208286			
GILBANETSP030122-1835 2 04/14/2022² 520.17 0.0138416 0.002 0.5 No GILBANETSP030122-1837 2 04/19/2022 1635.91 0.0209058 GILBANETSP030122-1838 1 04/20/2022 1689.67 0.0187019 GILBANETSP030122-1839 2 04/20/2022 1776.12 0.0140193 -0.005 0.5 No GILBANETSP030122-1840 1 04/21/2022 768.45 0.048279 GILBANETSP030122-1841 2 04/21/2022 1743.85 0.0198412 -0.028 0.5 No GILBANETSP030122-1842 1 04/21/2022 564.29 0.004962 GILBANETSP030122-1843 2 04/21/2022 590.98 0.0121832 0.007 0.5 No GILBANETSP030122-1843 2 04/21/2022² 590.98 0.0121832 0.007 0.5 No GILBANETSP0301522-1876 1 4/26/2022 1718.85 0.049568 J 0.013 0.5 No	GILBANETSP030122-1833	2	04/14/2022	1704.82	0.0218205	0.001	0.5	No
GILBANETSP030122-1836 1 04/19/2022 1635.91 0.0209058	GILBANETSP030122-1834	1	04/14/2022 <sup>2</sup>	497.57	0.0120586			
GILBANETSP030122-1837 2 04/19/2022 1720.22 0.0128472 -0.008 0.5 No GILBANETSP030122-1838 1 04/20/2022 1689.67 0.0187019 GILBANETSP030122-1839 2 04/20/2022 1776.12 0.0140193 -0.005 0.5 No GILBANETSP030122-1840 1 04/21/2022 768.45 0.048279 GILBANETSP030122-1841 2 04/21/2022 1743.85 0.0198412 -0.028 0.5 No GILBANETSP030122-1842 1 04/21/2022 564.29 0.004962 GILBANETSP030122-1843 2 04/21/2022 564.29 0.004962 GILBANETSP030122-1843 2 04/21/2022 590.98 0.0121832 0.007 0.5 No GILBANETSP031522-1876 1 4/26/2022 1668.01 0.0368703 J GILBANETSP031522-1877 2 4/26/2022 1718.85 0.049568 J 0.013 0.5 No	GILBANETSP030122-1835	2	04/14/20222	520.17	0.0138416	0.002	0.5	No
GILBANETSP030122-1838 1 04/20/2022 1689.67 0.0187019 0.0187019 0.0187019 0.0187019 0.0187019 0.0187019 0.0140193 0.005 0.5 No GILBANETSP030122-1840 1 04/21/2022 768.45 0.048279 0.0188412 0.028 0.5 No GILBANETSP030122-1841 2 04/21/2022 1743.85 0.0198412 0.028 0.5 No GILBANETSP030122-1842 1 04/21/2022 564.29 0.004962 0.004962 0.0188NETSP030122-1843 2 04/21/2022 590.98 0.0121832 0.007 0.5 No GILBANETSP031522-1876 1 4/26/2022 1668.01 0.0368703 J GILBANETSP031522-1877 2 4/26/2022 1718.85 0.049568 J 0.013 0.5 No	GILBANETSP030122-1836	1	04/19/2022	1635.91	0.0209058			
GILBANETSP030122-1849 2 04/20/2022 1776.12 0.0140193 -0.005 0.5 No GILBANETSP030122-1841 2 04/21/2022 768.45 0.048279 -0.028 0.5 No GILBANETSP030122-1841 2 04/21/2022 1743.85 0.0198412 -0.028 0.5 No GILBANETSP030122-1842 1 04/21/2022² 564.29 0.004962 GILBANETSP030122-1843 2 04/21/2022² 590.98 0.0121832 0.007 0.5 No GILBANETSP031522-1876 1 4/26/2022 1668.01 0.0368703 J GILBANETSP031522-1877 2 4/26/2022 1718.85 0.049568 J 0.013 0.5 No	GILBANETSP030122-1837	2	04/19/2022	1720.22	0.0128472	-0.008	0.5	No
GILBANETSP030122-1840 1 04/21/2022 768.45 0.048279 GILBANETSP030122-1841 2 04/21/2022 1743.85 0.0198412 -0.028 0.5 No GILBANETSP030122-1842 1 04/21/2022 564.29 0.004962 GILBANETSP030122-1843 2 04/21/2022² 590.98 0.0121832 0.007 0.5 No GILBANETSP031522-1876 1 4/26/2022 1668.01 0.0368703 J GILBANETSP031522-1877 2 4/26/2022 1718.85 0.049568 J 0.013 0.5 No	GILBANETSP030122-1838	1	04/20/2022	1689.67	0.0187019			
GILBANETSP030122-1841 2 04/21/2022 1743.85 0.0198412 -0.028 0.5 No GILBANETSP030122-1842 1 04/21/2022 564.29 0.004962 GILBANETSP030122-1843 2 04/21/2022² 590.98 0.0121832 0.007 0.5 No GILBANETSP031522-1876 1 4/26/2022 1668.01 0.0368703 J GILBANETSP031522-1877 2 4/26/2022 1718.85 0.049568 J 0.013 0.5 No	GILBANETSP030122-1839	2	04/20/2022	1776.12	0.0140193	-0.005	0.5	No
GILBANETSP030122-1842 1 04/21/2022 <sup>2</sup> 564.29 0.004962 0.0121832 0.007 0.5 No GILBANETSP031522-1876 1 4/26/2022 1718.85 0.049568 J 0.013 0.5 No	GILBANETSP030122-1840	1	04/21/2022	768.45	0.048279			
GILBANETSP030122-1843 2 04/21/2022 <sup>2</sup> 590.98 0.0121832 0.007 0.5 No GILBANETSP031522-1876 1 4/26/2022 1668.01 0.0368703 J 0.013 0.5 No	GILBANETSP030122-1841	2	04/21/2022	1743.85	0.0198412	-0.028	0.5	No
GILBANETSP031522-1876 1 4/26/2022 1668.01 0.0368703 J GILBANETSP031522-1877 2 4/26/2022 1718.85 0.049568 J 0.013 0.5 No	GILBANETSP030122-1842	1	04/21/20222	564.29	0.004962			
GILBANETSP031522-1877 2 4/26/2022 1718.85 0.049568 J 0.013 0.5 No	GILBANETSP030122-1843	2	04/21/20222	590.98	0.0121832	0.007	0.5	No
	GILBANETSP031522-1876	1	4/26/2022	1668.01	0.0368703 J			
GILBANETSP031522-1878 1 04/27/2022 1664.31 0.0430809 J	GILBANETSP031522-1877	2	4/26/2022	1718.85	0.049568 J	0.013	0.5	No
	GILBANETSP031522-1878	1	04/27/2022	1664.31	0.0430809 J			
GILBANETSP031522-1879 2 04/27/2022 <sup>3</sup> 1509.90 0.0584807 J 0.015 0.5 No	GILBANETSP031522-1879	2	04/27/20223	1509.90	0.0584807 J	0.015	0.5	No
GILBANETSP031522-1880 1 04/28/2022 1656.35 0.0391222 J	GILBANETSP031522-1880	1	04/28/2022	1656.35	0.0391222 J			
GILBANETSP031522-1881 2 04/28/2022 <sup>3</sup> 1625.32 0.059496 J 0.020 0.5 No	GILBANETSP031522-1881	2	04/28/20223	1625.32	0.059496 J	0.020	0.5	No
GILBANETSP031522-1882 1 04/28/2022 <sup>2</sup> 503.20 0.0272258 J	GILBANETSP031522-1882	1	04/28/20222	503.20	0.0272258 J			
GILBANETSP031522-1883 2 04/28/2022 <sup>2</sup> 513.21 0.0576762 J 0.030 0.5 No	GILBANETSP031522-1883	2	04/28/20222	513.21	0.0576762 J	0.030	0.5	No

Samples analyzed by Eurofins TestAmerica

Sample locations are shown on Figure 2-1

HPNS = Hunters Point Naval Shipyard

m<sup>3</sup> = cubic meters

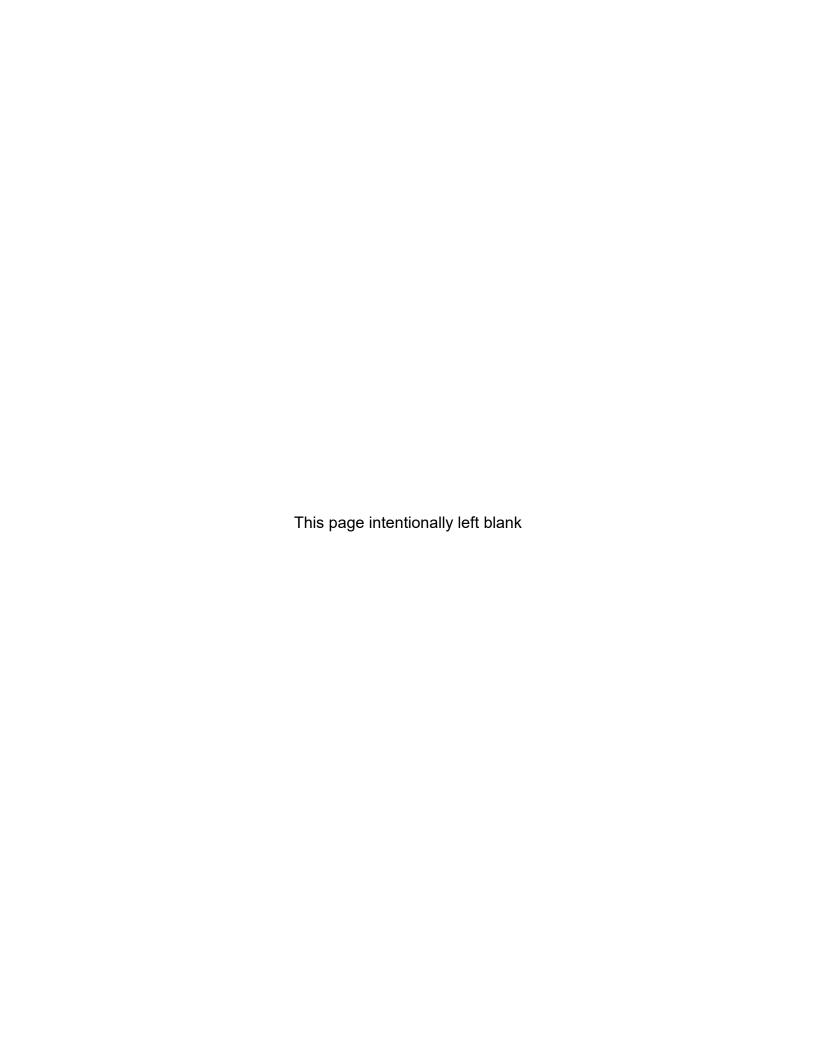
mg/m³ = milligrams per cubic meter

Notes:

<sup>1</sup>Air sample was not collected on days with rain or when contaminated soil was not disturbed.

<sup>&</sup>lt;sup>2</sup>Air sample was taken down during the afternoon after field activities ceased.

<sup>&</sup>lt;sup>3</sup>Generator malfunction



# ATTACHMENT 6 AIR SAMPLING RESULTS – PUBLIC EXPOSURE MONITORING

Attachment 6

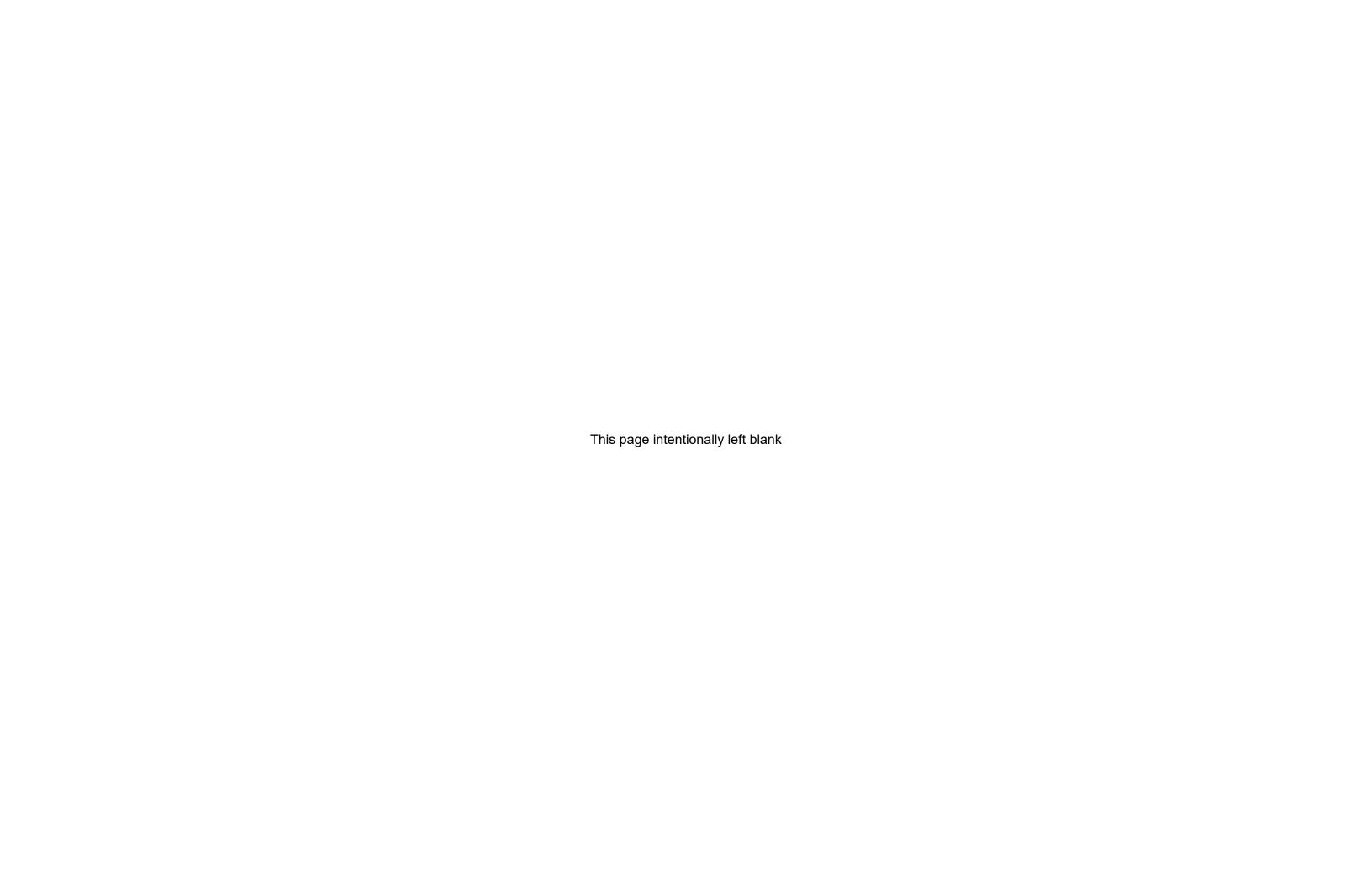
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## AIR SAMPLE RESULTS - PUBLIC EXPOSURE MONITORING

Project Information							Effluent Air Concentration					Sampling Period			Color Codes								
Contract /	Task Order N	lumber:	Project Titl	le / Location	on:		Gilbane Project N	Number:					Alpha	Beta	Air s	amples coll	ected		Value < 0	).1 x Efflue	ent Conc (i.e	e., < 10%)	
N62473	3-17-D-0005	/ F4332		Parcel E	RA HPNS, SF	F, CA	J3	10000400			Rad	ionuclide	Ra-226	Sr-90	between	04 Apr 202	2		Value > 0	).1 x Efflue	ent Conc (i.e	e., > 10%)	
			Infor	rmation ef	ffective as of:	02 May 2022	-			Ef	fluent Conc	(μCi/ml)	9.E-13	6.E-12	and	28 Apr 202	2		Value >	> Effluent (	Conc (i.e., >	100%)	
				5	Sample Collec	ction							Count	nformatio	n				Sample	Results		Init	tials
Sample	Sample	San	nple	Equip	Ave Flow	Start	End	Elapsed	Volume	Inst	Count	Time	Counting	Gross	Activity	Net	dpm	Activity	(µCi/ml)	Effluent	Conc (%)	Count	Data
Number	Type	Loca	ation	No	Rate (lpm)	Day Time	Date Time	Time (min)	(ml)	No	Date	(min)	Units	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta	Tech	Reviewer
AS-0505	Perimeter	MS	E01	PE09	60	4/4/22 6:55	4/4/22 16:00	545	3.3E+07	D	04/11/22	1	cpm	0.15	4.75	0.4	10.0	5.8E-15	1.4E-13	0.6%	2.3%	BCS	СВ
AS-0506	Perimeter	MS	E02	PE10	60	4/4/22 6:45	4/4/22 15:55	550	3.3E+07	D	04/11/22	1	cpm	0.15	4.85	0.4	10.3	5.7E-15	1.4E-13	0.6%	2.3%	BCS	СВ
AS-0507	Perimeter	MS	E01	PE09	60	4/5/22 4:25	4/5/22 16:05	700	4.2E+07	D	04/11/22	1	cpm	0.20	3.90	0.6	7.6	6.0E-15	8.2E-14	0.7%	1.4%	BCS	СВ
AS-0508	Perimeter	MS	E02	PE10	60	4/5/22 4:35	4/5/22 16:10	695	4.2E+07	D	04/11/22	1	cpm	0.20	4.20	0.6	8.5	6.0E-15	9.1E-14	0.7%	1.5%	BCS	СВ
AS-0509	Perimeter	MS	E01	PE09	60	4/6/22 3:55	4/6/22 16:03	728	4.4E+07	D	04/11/22	1	cpm	0.25	4.85	0.7	10.3	7.2E-15	1.1E-13	0.8%	1.8%	BCS	СВ
AS-0510	Perimeter	MS	E02	PE10	60	4/6/22 3:45	4/6/22 16:10	745	4.5E+07	D	04/11/22	1	cpm	0.25	4.55	0.7	9.4	7.0E-15	9.5E-14	0.8%	1.6%	BCS	СВ
AS-0511	Perimeter	MS	E01	PE11	60	4/7/22 4:10	4/7/22 14:23	613	3.7E+07	D	04/11/22	1	cpm	0.40	4.55	1.1	9.4	1.4E-14	1.2E-13	1.5%	1.9%	BCS	СВ
AS-0512	Perimeter	MS	E02	PE12	60	4/7/22 4:00	4/7/22 14:30	630	3.8E+07	D	04/11/22	1	cpm	0.25	5.25	0.7	11.4	8.3E-15	1.4E-13	0.9%	2.3%	BCS	СВ
AS-0513	Perimeter	MS	E01	PE11	60	4/11/22 6:50	4/11/22 16:09	559	3.4E+07	D	04/18/22	1	cpm	0.30	3.75	0.8	7.2	1.1E-14	9.6E-14	1.2%	1.6%	BCS	СВ
AS-0514	Perimeter	MS	E02	PE12	60	4/11/22 6:37	4/11/22 16:00	563	3.4E+07	D	04/18/22	1	cpm	0.15	4.70	0.4	9.9	5.6E-15	1.3E-13	0.6%	2.2%	BCS	СВ
AS-0515	Perimeter	MS	E01	PE11	60	4/12/22 4:30	4/12/22 16:00	690	4.1E+07	D	04/18/22	1	cpm	0.10	3.90	0.3	7.6	3.0E-15	8.3E-14	0.3%	1.4%	BCS	СВ
AS-0516	Perimeter	MS	E02	PE12	60	4/12/22 4:20	4/12/22 15:50	690	4.1E+07	D	04/18/22	1	cpm	0.05	4.95	0.1	10.6	1.5E-15	1.1E-13	0.2%	1.9%	BCS	СВ
AS-0517	Perimeter	MS	E01	PE11	60	4/13/22 4:25	4/13/22 15:50	685	4.1E+07	D	04/18/22	1	cpm	0.15	5.00	0.4	10.7	4.6E-15	1.2E-13	0.5%	2.0%	BCS	СВ
AS-0518	Perimeter	MS	E02	PE12	60	4/13/22 4:20	4/13/22 16:00	700	4.2E+07	D	04/18/22	1	cpm	0.00	5.05	0.0	10.8	0.0E+00	1.2E-13	0.0%	1.9%	BCS	СВ
AS-0519	Perimeter	MS	E01	PE11	60	4/14/22 4:00	4/14/22 14:50	650	3.9E+07	D	04/18/22	1	cpm	0.30	4.00	0.8	7.9	9.7E-15	9.1E-14	1.1%	1.5%	BCS	СВ
AS-0520	Perimeter	MS	E02	PE12	60	4/14/22 4:10	4/14/22 14:47	637	3.8E+07	D	04/18/22	1	cpm	0.30	5.70	0.8	12.7	9.8E-15	1.5E-13	1.1%	2.5%	BCS	СВ
AS-0521	Perimeter	MS	E01	PE11	60	4/18/22 6:35	4/18/22 16:00	565	3.4E+07	D	04/27/22	1	cpm	0.25	5.00	0.7	10.7	9.3E-15	1.4E-13	1.0%	2.4%	BCS	СВ
AS-0522	Perimeter	MS	E02	PE12	60	4/18/22 6:40	4/18/22 15:50	550	3.3E+07	D	04/27/22	1	cpm	0.20	4.80	0.6	10.1	7.6E-15	1.4E-13	0.8%	2.3%	BCS	СВ
AS-0523	Perimeter	MS	E01	PE11	60	4/19/22 4:15	4/19/22 15:55	700	4.2E+07	D	04/27/22	1	cpm	0.20	4.55	0.6	9.4	6.0E-15	1.0E-13	0.7%	1.7%	BCS	СВ
AS-0524	Perimeter	MS	E02	PE12	60	4/19/22 4:22	4/19/22 15:45	683	4.1E+07	D	04/27/22	1	cpm	0.35	4.60	1.0	9.6	1.1E-14	1.1E-13	1.2%	1.8%	BCS	СВ
AS-0525	Perimeter	MS	E01	PE11	60	4/20/22 4:17	4/20/22 15:36	679	4.1E+07	D	04/27/22	1	cpm	0.10	3.90	0.3	7.6	3.1E-15	8.4E-14	0.3%	1.4%	BCS	СВ
AS-0526	Perimeter	MS	E02	PE12	60	4/20/22 4:10	4/20/22 15:42	692	4.2E+07	D	04/27/22	1	cpm	0.05	4.00	0.1	7.9	1.5E-15	8.6E-14	0.2%	1.4%	BCS	СВ
AS-0527	Perimeter	MS	E01	PE11	60	4/21/22 4:05	4/21/22 15:00	655	3.9E+07	D	04/27/22	1	cpm	0.05	4.50	0.1	9.3	1.6E-15	1.1E-13	0.2%	1.8%	BCS	СВ
AS-0528	Perimeter	MS	E02	PE12	60	4/21/22 4:10	4/21/22 15:03	653	3.9E+07	D	04/27/22	1	cpm	0.10	4.00	0.3	7.9	3.2E-15	9.1E-14	0.4%	1.5%	BCS	СВ
AS-0529	Perimeter	MS	E01	PE11	60	4/25/22 6:45	4/25/22 15:55	550	3.3E+07	D	05/02/22	1	cpm	0.35	5.50	1.0	12.1	1.3E-14	1.7E-13	1.5%	2.8%	BCS	СВ
AS-0530	Perimeter	MS	E02	PE12	60	4/25/22 6:30	4/25/22 16:02	572	3.4E+07	D	05/02/22	1	cpm	0.60	3.65	1.7	6.9	2.2E-14	9.1E-14	2.4%	1.5%	BCS	СВ
AS-0531	Perimeter	MS	E01	PE11	60	4/26/22 6:22	4/26/22 15:50	568	3.4E+07	D	05/02/22	1	cpm	0.25	5.45	0.7	12.0	9.2E-15	1.6E-13	1.0%	2.6%	BCS	СВ
AS-0532	Perimeter	MS	E02	PE12	60	4/26/22 6:14	4/26/22 15:58	584	3.5E+07	D	05/02/22	1	cpm	0.05	5.35	0.1	11.7	1.8E-15	1.5E-13	0.2%	2.5%	BCS	СВ
AS-0533	Perimeter	MS	E01	PE11	60	4/27/22 4:15	4/27/22 15:38	683	4.1E+07	D	05/02/22	1	cpm	0.05	3.90	0.1	7.6	1.5E-15	8.4E-14	0.2%	1.4%	BCS	СВ
AS-0534	Perimeter	MS	E02	PE12	60	4/27/22 4:10	4/27/22 15:35	685	4.1E+07	D	05/02/22	1	cpm	0.20	4.30	0.6	8.7	6.1E-15	9.6E-14	0.7%	1.6%	BCS	СВ
AS-0535	Perimeter	MS	E01	PE11	60	4/28/22 4:10	4/28/22 13:57	587	3.5E+07	D	05/02/22	1	cpm	0.30	3.50	0.8	6.5	1.1E-14	8.3E-14	1.2%	1.4%	BCS	СВ
AS-0536	Perimeter	MS	E02	PE12	60	4/28/22 4:15	4/28/22 14:08	593	3.6E+07	D	05/02/22	1	cpm	0.40	4.00	1.1	7.9	1.4E-14	1.0E-13	1.6%	1.7%	BCS	СВ

IN-RP-152 (Jul 2021)



## ATTACHMENT 7 LABORATORY REPORTS

Attachment 7

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Job ID: 22040533



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

## Client Project Name : HPNS Parcel E Phase II J310000400

Report To: Client Name: GES - ASRC Industrial Total Number of Pages: 5

Attn:

Client Address: 1501 West Fountainhead Parkway, Ste. #550 Date Received: 04/06/2022 16:18

P.O.#.:

J310000400-0015

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
MSE01-033122	3/31/2022 14:40	Cassette	22040533.01
MSE02-033122	3/31/2022 14:44	Cassette	22040533.02
MSE01-040422	4/4/2022 15:47	Cassette	22040533.03
MSE02-040422	4/4/2022 15:52	Cassette	22040533.04

Released By:

Analyst:

Title: Vice President Operations

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Results apply to the sample as received. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client. Any TWA calculations are based on client supplied data not lab observation.

ab-q210-0321

Report Number: RPT220413077



## ANALYSIS OF AIRBORNE FIBER SAMPLING SAMPLING PERFORMED BY CLIENT SIG CONDUCTED BY A S. P. ENVIRONMENTAL CERV

## ANALYSIS CONDUCTED BY A & B ENVIRONMENTAL SERVICES, INC. AIHA Lab Accreditation # 101470 TDH PLM/PCM Lab License # 300080

Date 4/13/2022

Job ID: 22040533

Analytical Method: NIOSH 7400-I2-Aug1994

Client: GES	- ASRC Industrial		Project: HPI	NS Parcel E I	Phase II :	31000040	00				ļ	Attn:			
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 Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
22040533.0	MSE01-033122	03/31/2022	Area	2			460	920	100	2.0	2.548	< 0.003		04/13/22	
22040533.0	MSE02-033122	03/31/2022	Area	2			473	946	100	6.0	7.643	0.003		04/13/22	
22040533.0	MSE01-040422	04/04/2022	Area	2			515	1030	100	4	5.096	< 0.003		04/13/22	
22040533.0	MSE02-040422	04/04/2022	Area	2			534	1068	100	8.5	10.828	0.004		04/13/22	

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



## **Sample Condition Checklist**

A&I	B JobID : <b>22040533</b>	Date Received: 04/06/2022 Time Received: 4:1	L8PM		
Clie	ent Name : GES - ASRC Industrial				
Ter	nperature : 24.1°C	Sample pH: NA			
The	rmometer ID : <b>IR3</b>	pH Paper ID : <b>NA</b>			
Pe	rservative :				
		Check Points	Yes	No	N/A
1.	Cooler Seal present and signed.		Х		
2.	Sample(s) in a cooler.			Х	
3.	If yes, ice in cooler.				Χ
4.	Sample(s) received with chain-of-custo	ody.	Х		
5.	C-O-C signed and dated.		Х		
6.	Sample(s) received with signed sample	e custody seal.		Х	
7.	Sample containers arrived intact. (If N		Х		
8.	Water Soil Liquid Slu	adge Solid Cassette Tube Bulk Badge Food Other			
9.	Samples were received in appropriate	container(s)	Х		
10.	Sample(s) were received with Proper p	reservative			Χ
11.	All samples were tagged or labeled.		Х		
12.	Sample ID labels match C-O-C ID's.		Х		
13.	Bottle count on C-O-C matches bottles	found.	Х		
14.	Sample volume is sufficient for analyse	es requested.	Х		
15.	Samples were received with in the hold	I time.	Х		
16.	VOA vials completely filled.				Χ
17.	Sample accepted.		Х		
18.	Has client been contacted about sub-o	ut			Х
-					
	nments : Include actions taken to resol cooler was received, however samples are re	ve discrepancies/problem: eceived in a box with a custody seal. Received black cassesttes. ~EV 4/7/2022			
	and the samples die	1 17/2022			
Re	ceived by :	Check in by/date : / 04/07/2022			

...

ab-s005-0321

Gilba	ne												Chain-	-Of-Cu	usto	ody	
Project Name and N Project Manager: Site Location: Hu	lumber: 1	HPNS Parcel E			00		Labora Addres	-	0100 East l ouston TX		100 C	Contact N	lame:	Pag	<u>4/05/2</u> ge: <u>1</u>	2022 _of _1	
Sample ID		Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Non	rvative: e iner Type:					Spec	v Rate = ial Instruct I Time (m	ions/Com	
MSE01-033122	OLA	3/31/2022	1440	NA	NA	1	AA	Х						460			
MSE02-033122	OZA	3/31/2022	1444	NA	NA	1	AA	X						473			
MSE01-040422	034	4/04/2022	1547	NA	NA	1	AA	Х						515			
MSE02-040422	O4A TP	4/04/2022	1552	NA	NA	1	AA	Х						534			
04/06/202 Sampled By:		22040		H 	Sampl	ler:							Courier/Airbill No.: F		76 9918		
Signature:					Relinqu	ished f	By/Affili	ation:			Date:	Time:	Received By/ Affiliation	on:		Date:	Time:
Special Instruction	s:						Fŧ	こしも	6:1ba	4-4	4/5/22 -22	1600 1616	Fedex	1.	4-4	4/5/22 0-ZZ	1600
Send Results to:	Standard																

SHIP DATE: 05APR22 ACTWGT: 1.00 LB CAD: 254128867/INET4460

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STODY

Job ID: 22040818



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

#### Client Project Name: HPNS Parcel E Phase II J310000400

GES - ASRC Industrial Report To: Total Number of Pages: 5 Client Name:

Attn:

P.O.#.: J310000400-0015 Client Address: 1501 West Fountainhead Parkway, Ste. #550 Date Received: 04/08/2022 15:50

Sample Collected By: City, State, Zip: Tempe, Arizona, 85282

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-040522	4/5/2022 16:00	Cassette	22040818.01
MSE02-040522	4/5/2022 15:57	Cassette	22040818.02
MSE01-040622	4/6/2022 15:56	Cassette	22040818.03
MSE02-040622	4/6/2022 15:52	Cassette	22040818.04

Released By:

Project Manager

Title:

Analyst:

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## 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 4/18/2022

Job ID: 22040818

Analytical Method: NIOSH 7400-I2-Aug1994

Client: GES - /	ASRC Industrial		Project: HPI	NS Parcel E F	Phase II I	31000040	00				ı	Attn:			
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
22040818.01	MSE01-040522	04/05/2022	Area	2			532	1064	100	3	3.822	< 0.003		04/18/22	
22040818.02	MSE02-040522	04/05/2022	Area	2			540	1080	100	3	3.822	< 0.002		04/18/22	
22040818.03	MSE01-040622	04/06/2022	Area	2			540	1080	100	9.5	12.102	0.004		04/18/22	
22040818.04	MSE02-040622	04/06/2022	Area	2			547	1094	100	13.0	16.561	0.006		04/18/22	

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



Phone:

## **Sample Condition Checklist**

	3 JobID: <b>22040818</b>	Date Received: 04/08/2022	me Received : 3:5	ОРМ		
	ent Name : GES - ASRC Industrial					
Ter	nperature : 20.4°C	Sample pH: NA				
The	ermometer ID: <b>IR3</b>	pH Paper ID: <b>NA</b>				
Pe	rservative :			1		1
		Check Points		Yes	No	N/A
1.	Cooler Seal present and signed.			Χ		
2.	Sample(s) in a cooler.				Χ	
3.	If yes, ice in cooler.				Χ	
4.	Sample(s) received with chain-of-custo	ody.		Χ		
5.	C-O-C signed and dated.			Χ		
6.	Sample(s) received with signed sample	e custody seal.			Χ	
7.	Sample containers arrived intact. (If N			Χ		
8.	Water Soil Liquid Slu Matrix:   [ ]	Idge Solid Cassette Tube Bulk Badge	Food Other			
9.	Samples were received in appropriate	container(s)		Χ		
10.	Sample(s) were received with Proper p	reservative				Χ
11.	All samples were tagged or labeled.			Χ		
12.	Sample ID labels match C-O-C ID's.			Χ		
13.	Bottle count on C-O-C matches bottles	found.		Χ		
14.	Sample volume is sufficient for analyse	es requested.		Χ		
15.	Samples were received with in the hold	I time.		Χ		
16.	VOA vials completely filled.					Х
17.	Sample accepted.			Χ		
18.	Has client been contacted about sub-o	ut				Х
Cor	nments : Include actions taken to resol	ve discrenancies/problem:				
		eceived in a box with a custody seal. Received as black or	assettes. ~EV 4/8/202	2		
				_		
_			1.04/00/2022			
кe	ceived by:	Check in by/date:	/ 04/08/2022			

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ab-s005-0321

Gilbane										Chain-C	f-Cust	ody	/
Project Name and Number Project Manage Site Location: Hunters Po				00		Labora Addres	atory rearrie.		Contact	Name:		7/2022 of _1	
Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	<del></del>	Preservative: None Container Type: Filter				Flow Rate Special Instru Total Time (	ctions/Cor	
MSE01-040522	4/05/2022	1600	NA	NA	1	AA	X				532		
MSE02-040522	4/05/2022	1557	NA	NA	1	AA	X				540		
MSE01-040622 MSE02-040622	4/06/2022	1556 1552	NA NA	NA	1	AA	X				540		
MSE02-040622	TD	1552	INA	NA	1	AA	X				547		
	2204081	8 IIII ACH		Sample						Courier/Airbill No.: FedEx/	7765 0825 3258		
Signature:			F	Relinqui	shed E	By/Affilia	ation:	Date:	Time:	Received By/ Affiliation:		Date:	Time:
Special Instructions			_	Ė	ede	×	Gil ban	e 4/71 4/8/2	22 1600 Z 15150	Fedex		4/7/27	160
Send Results to:													
Turnaround Time: Standa	rd												

ORIGIN ID: ICCA

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SHIP DATE: 07APR22 ACTWGT: 1.00 LB CAD: 254128867/INET4460

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Job ID: 22041270



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

#### Client Project Name: HPNS Parcel E Phase II J310000400

GES - ASRC Industrial Report To: Total Number of Pages: 5 Client Name:

Attn:

P.O.#.: J310000400-0015 Client Address: 1501 West Fountainhead Parkway, Ste. #550 Date Received: 04/13/2022 14:58

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
MSE01-040722	4/7/2022 14:17	Cassette	22041270.01
MSE02-040722	4/7/2022 14:06	Cassette	22041270.02
MSE01-041122	4/11/2022 15:51	Cassette	22041270.03
MSE02-041122	4/11/2022 15:45	Cassette	22041270.04

Released By:

Analyst:

Title: Vice President Operations

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Report Number: RPT220421033



#### ANALYSIS OF AIRBORNE FIBER SAMPLING SAMPLING PERFORMED BY CLIENT ANALYSIS CONDUCTED BY A & B ENVIRONMENTAL SERVICI

## ANALYSIS CONDUCTED BY A & B ENVIRONMENTAL SERVICES, INC. AIHA Lab Accreditation # 101470 TDH PLM/PCM Lab License # 300080

Date 4/21/2022

Job ID: 22041270

Analytical Method: NIOSH 7400-I2-Aug1994

Client: GES -	ASRC Industrial		Project: HPN	NS Parcel E F	Phase II I	31000040	00				ı	Attn:			
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
22041270.01	MSE01-040722	04/07/2022	Area	2			433	866	100	7	8.917	0.004		04/19/22	
22041270.02	MSE02-040722	04/07/2022	Area	2			429	858	100	4.0	5.096	< 0.003		04/19/22	
22041270.03	MSE01-041122	04/11/2022	Area	2			530	1060	100	2.5	3.185	< 0.003		04/19/22	
22041270.04	MSE02-041122	04/11/2022	Area	2			537	1074	100	7.5	9.554	0.003		04/19/22	

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



## **Sample Condition Checklist**

	3 JobID: <b>22041270</b>	Date Received: <b>04/13/2022</b>	Time Received : 2:5	58PM					
Clie	Client Name : GES - ASRC Industrial								
Ter	nperature: 19.9°C	Sample pH: NA							
The	rmometer ID : <b>IR3</b>	pH Paper ID: <b>NA</b>							
Pe	rservative :				1	ı			
			Yes	No	N/A				
1.	Cooler Seal present and signed.			Х					
2.	Sample(s) in a cooler.				Χ				
3.	If yes, ice in cooler.					Χ			
4.	Sample(s) received with chain-of-custo	ody.		Х					
5.	C-O-C signed and dated.			Х					
6.	Sample(s) received with signed sample	e custody seal.			Х				
7.	Sample containers arrived intact. (If N	o comment)		Х					
8.	Water Soil Liquid Slu Matrix:	udge Solid Cassette Tube Bulk Badg	je Food Other						
9.	). Samples were received in appropriate container(s)								
10.	0. Sample(s) were received with Proper preservative								
11.	All samples were tagged or labeled.			Х					
12.	Sample ID labels match C-O-C ID's.			Х					
13.	Bottle count on C-O-C matches bottles	found.		Х					
14.	Sample volume is sufficient for analyse	es requested.		Х					
15.	Samples were received with in the hold	l time.		Х					
16.	VOA vials completely filled.					Х			
17.	Sample accepted.			Х					
18.	Has client been contacted about sub-o	ut				X			
1									
	nments : Include actions taken to resol			22					
NO C	ooier was received, nowever samples are r	eceived in a box with a custody seal. Received in black	Cassettes. ~EV 4/14/20	22					
Re	ceived by :	Check in by/date:	04/14/2022						

Phone : www.ablabs.com

ab-s005-0321

	Gilbane											Chain-O	f-Cust	ody	
	Project Name and Number:  Project Manage  Site Location: Hunters Poin	HPNS Parcel E			00		abora		0100 East Fw ouston TX 7	1 000	Contact N	Name	<u>4/1</u> Page: <u>1</u>	2/2022 of _1_	_
	Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Non	rvative: e iner Type:				Flow Rate	ructions/Com	
OIA	MSE01-040722	4/07/2022	1417	NA	NA	1	AA	Х					433	Old	
	MSE02-040722	4/07/2022	1406	NA	NA	1	AA	Х					429	AS.	
	MSE01-041122	4/11/2022	1551	NA	NA	1	AA	X					530	03 A	
	MSE02-041122	4/11/2022	1545	NA	NA	1	AA	Х					537	04 H	
			TP	j			1						l L		
	Job ID:2	220412													
	Sampled By				Sample	er:						Courier/Airbill No.: FedEx/	7765 5824 3435	5	
	Signature:				Relinqui	isheu L	ултин	ation.	57	Date:	Time:	Received By/ Affiliation:		Date:	Time:
	Special Instructions:								1 Gilbana	· 4/12/2	2 1600	Fedex		4/12/22	
					Fe	Je	7				14!58			4/13/22	14:58
	Send Results to:  Turnaround Time: Standard	d													

7 epp: 19.9

SHIP DATE: 12APR22 ACTWGT: 1.00 LB CAD: 254128867/INET4460

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Job ID: 22041486



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

## Client Project Name : HPNS Parcel E Phase II J310000400

Report To: Client Name: GES - ASRC Industrial Total Number of Pages: 5

Attn:

Client Address: 1501 West Fountainhead Parkway, Ste. #550 Date Received: 04/18/2022 13:56

City, State, Zip: Tempe, Arizona, 85282 Samp

Sample Collected By :

J310000400-0015

P.O.#.:

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01 - 041222	4/12/2022 15:46	Cassette	22041486.01
MSE02 - 041222	4/12/2022 15:39	Cassette	22041486.02
MSE01 - 041322	4/13/2022 15:57	Cassette	22041486.03
MSE02 - 041322	4/13/2022 15:35	Cassette	22041486.04

Released By:

Analyst:

Title: Vice President Operations

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ab-q210-0321

Report Number: RPT220425090



## 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 4/25/2022

Job ID: 22041486

Analytical Method: NIOSH 7400-I2-Aug1994

Client: GES - /	ASRC Industrial		Project: HPI	NS Parcel E I	Phase II J	31000040	00					Attn:			
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 Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
22041486.01	MSE01 - 041222	04/12/2022	Area	2			525	1050	100	5.0	6.369	< 0.003		04/21/22	
22041486.02	MSE02 - 041222	04/12/2022	Area	2			529	1058	100	8.5	10.828	0.004		04/21/22	
22041486.03	MSE01 - 041322	04/13/2022	Area	2			531	1062	100	2.0	2.548	< 0.003		04/21/22	
22041486.04	MSE02 - 041322	04/13/2022	Area	2			529	1058	100	2.5	3.185	< 0.003		04/21/22	

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



Received by:

## **Sample Condition Checklist**

A&l	3 JobID : <b>22041486</b>	Date Received : <b>04/18/2022</b>	Time Received : 1:	66РМ					
Clie	Client Name : GES - ASRC Industrial								
Ter	Temperature : 25.0°C Sample pH : NA								
The	ermometer ID : <b>IR3</b>	pH Paper ID: <b>NA</b>							
Pe	rservative :								
		Yes	No	N/A					
1.	Cooler Seal present and signed.			Х					
2.	Sample(s) in a cooler.								
3.	If yes, ice in cooler.								
4.	Sample(s) received with chain-of-custo	ody.		Х					
5.	C-O-C signed and dated.			Х					
6.	Sample(s) received with signed sample	custody seal.			Χ				
7.	Sample containers arrived intact. (If N	o comment)		Х					
8.	Water Soil Liquid Sludge Solid Cassette Tube Bulk Badge Food Other Matrix:								
9.	Samples were received in appropriate of	container(s)		Х					
10.	Sample(s) were received with Proper p	reservative				Χ			
11.	All samples were tagged or labeled.			Х					
12.	Sample ID labels match C-O-C ID's.			Х					
13.	Bottle count on C-O-C matches bottles	found.		Х					
14.	Sample volume is sufficient for analyse	s requested.		Х					
15.	Samples were received with in the hold	time.		Х					
16.	16. VOA vials completely filled.								
17.	Sample accepted.			Х					
18.	Has client been contacted about sub-or	ıt				Χ			
_									
	nments: Include actions taken to resolution was received, however samples are re	ve discrepancies/problem: eceived in a box with a custody seal. ~EV 4/18/2022							
	·	,							
ļ									

ab-s005-0321

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Check in by/date : / 04/18/2022

	Gilbane												Chain-	Of	-Cust	ody	1
	Project Name and Number: Project Manager Site Location: Hunters Poi	HPNS Parcel E			00		abora		0100 E	A&B La ast Fwy S TX 7702	Ste. 100	Contact I	Namı		<u>4/1</u> Page: <u>1</u>	4/2022 of _1	
A	Sample ID  MSE01-041222  MSE02-041222  MSE01-041322  MSE02-041322	4/12/2022 4/12/2022 4/13/2022 4/13/2022 4/13/2022 7 4/14/2: 2204148	li.	Z Z Z Z Sample Depth (top)	S Sample Depth (bottom)	T T T No. of Containers	A A B Sample Matrix	Non	Analys rvative: e iner Typ						Flow Rate Special Instr Total Time 525 529 531 529	uctions/Con	
	Sampled By:  Signature: Special Instructions:  Send Results to:  Turnaround Time: Standard	ASRC Industrial	ACH			shed B			Page 4		Date: 4/14/22 4/18/22	Time: 1600	Courier/Airbill No.: For Received By/ Affiliation Fedex	on:		Date: \[\f\/\22\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	13:5

200 FISHER STREET

SAN FRANCISCO, CA 94124 UNITED STATES US

SHIP DATE: 14APR22 ACTWGT: 1.00 LB CAD: 254128867/INET4460

**BILL SENDER** 

A & B LABS 10100 EAST FREEWAY, SUITE 100

HOUSTON TX 77029

REF J31000.400 00.18.04



FRI - 15 APR 4:30P STANDARD OVERNIGHT

7765 7297 0740

77029 IAH



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Job ID: 22041820



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

#### Client Project Name: HPNS Parcel E Phase II J310000400

GES - ASRC Industrial Report To: Total Number of Pages: 5 Client Name:

Attn:

P.O.#.: J310000400-0015 Client Address: 1501 West Fountainhead Parkway, Ste. #550 Date Received: 04/20/2022 15:01

Tempe, Arizona, 85282 Sample Collected By: City, State, Zip:

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-041422	4/14/2022 14:12	Cassette	22041820.01
MSE02-041422	4/14/2022 14:06	Cassette	22041820.02
MSE01-041822	4/18/2022 15:24	Cassette	22041820.03
MSE02-041822	4/18/2022 15:32	Cassette	22041820.04

Released By:

Vice President Operations

Title:

Analyst:

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4/27/2022

Page 1 of 5 Report Number: RPT220427007



## 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 4/27/2022

Job ID: 22041820

Analytical Method: NIOSH 7400-I2-Aug1994

Client: GES -	ASRC Industrial		Project: HPI	NS Parcel E I	Phase II .	31000040	00				ļ	Attn:			
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
22041820.01	MSE01-041422	04/14/2022	Area	2			427	854	100	4	5.096	< 0.003		04/25/22	
22041820.02	MSE02-041422	04/14/2022	Area	2			436	872	100	0	0.000	< 0.003		04/25/22	
22041820.03	MSE01-041822	04/18/2022	Area	2			498	996	100	1	1.274	< 0.003		04/25/22	
22041820.04	MSE02-041822	04/18/2022	Area	2			521	1042	100	2	2.548	< 0.003		04/25/22	

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



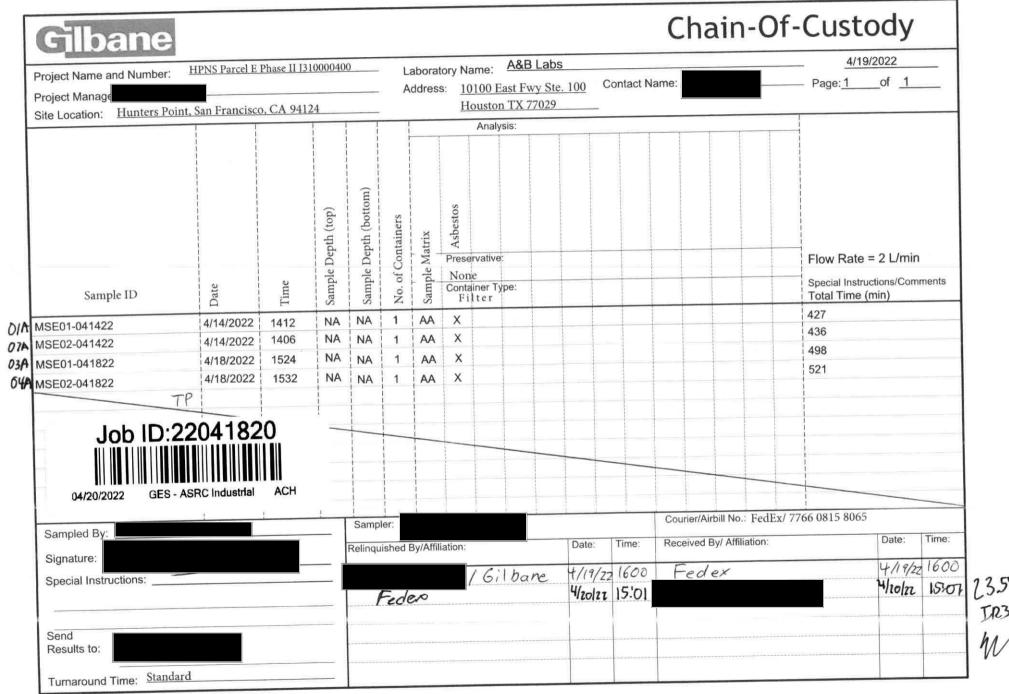
Phone:

## **Sample Condition Checklist**

A&I	3 JobID : <b>22041820</b>	Date Received: 04/20/2022 Time Recei	ved : <b>3:0</b>	1PM					
Client Name : GES - ASRC Industrial									
	Temperature: 23.5°C Sample pH: NA								
	ermometer ID : IR3	pH Paper ID: NA							
	rservative :	piri aper 15 . RA							
10	Scivative .	Check Points							
			Yes	No	N/A				
1.	Cooler Seal present and signed.		Х						
2.	Sample(s) in a cooler.			Χ					
3.	If yes, ice in cooler.					Χ			
4.	Sample(s) received with chain-of-custo	ody.		Х					
5.	C-O-C signed and dated.			Х					
6.	Sample(s) received with signed sample	custody seal.			Х				
7.	Sample containers arrived intact. (If N	o comment)		Х					
8.	B. Matrix: Water Soil Liquid Sludge Solid Cassette Tube Bulk Badge Food Other								
9.	Samples were received in appropriate container(s)								
10.	0. Sample(s) were received with Proper preservative								
11.	All samples were tagged or labeled.			Х					
12.	Sample ID labels match C-O-C ID's.			Х					
13.	Bottle count on C-O-C matches bottles	found.		Χ					
14.	Sample volume is sufficient for analyse	s requested.		Χ					
15.	Samples were received with in the hold	l time.		Х					
16.	VOA vials completely filled.					Χ			
17.	Sample accepted.			Х					
18.	18. Has client been contacted about sub-out								
_									
	nments: Include actions taken to resolution and resolution actions taken to resolution actions are received.	ve discrepancies/problem: eceived in a box with a custody seal. Received black cassettes. ~E'	/ 4/20/2022						
	in the received, noticed sumples the fi	and the control of th	, 20, 2022						
Re	ceived by :	Check in by/date: / 04/2	20/2022						

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ab-s005-0321



ORIGIN ID: ICCA

200 FISHER STREET

SAN FRANCISCO, CA 94124 UNITED STATES US

SHIP DATE: 19APR22 ACTWGT: 1.00 LB CAD: 254128867/INET4460

**BILL SENDER** 

A & B LABS 10100 EAST FREEWAY, SUITE 100

HOUSTON TX 77029

REF J31000 400 00 18 04

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Date: gnature:

Job ID: 22042099



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## Client Project Name :

#### HPNS Parcel E Phase II J310000400

Report To: Client Name: GES - ASRC Industrial Total Number of Pages: 5

 Attn:
 P.O.#.:
 J310000400-0015

 Client Address:
 1501 West Fountainhead Parkway, Ste. #550
 Date Received:
 04/25/2022 09:29

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
MSE01-041922	4/19/2022 15:49	Cassette	22042099.01
MSE02-041922	4/19/2022 15:40	Cassette	22042099.02
MSE01-042022	4/20/2022 16:00	Cassette	22042099.03
MSE02-042022	4/20/2022 15:50	Cassette	22042099.04

Released By:

Vice President Operations

Title:

Analyst:

Report Number: RPT220502133

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ab-q210-0321



# 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 5/2/2022

Job ID: 22042099

Analytical Method: NIOSH 7400-I2-Aug1994

Client: GES - /	Client: GES - ASRC Industrial Project: HPNS Parcel E Phase II J310000400 Attn:														
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
22042099.01	MSE01-041922	04/19/2022	Area	2			554	1108	100	1.5	1.911	< 0.002		05/02/22	
22042099.02	MSE02-041922	04/19/2022	Area	2			555	1110	100	4.0	5.096	< 0.002		05/02/22	
22042099.03	MSE01-042022	04/20/2022	Area	2			546	1092	100	6.0	7.643	0.003		05/02/22	
22042099.04	MSE02-042022	04/20/2022	Area	2			546	1092	100	0	0.000	< 0.002		05/02/22	

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



Received by:

# **Sample Condition Checklist**

A&I	3 JobID : <b>22042099</b>	Date Received: <b>04/25/2022</b> Time Received: <b>9:2</b>	29AM					
Clie	ent Name : GES - ASRC Industrial							
Ter	nperature : 21.3°C	Sample pH: NA						
The	ermometer ID : <b>IR3</b>	pH Paper ID : NA						
Pe	rservative :		T		1			
		Check Points	Yes	No	N/A			
1.	Cooler Seal present and signed.		Х					
2.	Sample(s) in a cooler.			Χ				
3.	If yes, ice in cooler.				Х			
4.	Sample(s) received with chain-of-custo	ody.	Х					
5.	5. C-O-C signed and dated.							
6.	Sample(s) received with signed sample	e custody seal.		Χ				
7.	7. Sample containers arrived intact. (If No comment)  Water Soil Liquid Sludge Solid Cassette Tube Bulk Badge Food Other							
8.								
9.	9. Samples were received in appropriate container(s)							
10.	.0. Sample(s) were received with Proper preservative							
11.	All samples were tagged or labeled.		Х					
12.	Sample ID labels match C-O-C ID's.		Х					
13.	Bottle count on C-O-C matches bottles	found.	Х					
14.	Sample volume is sufficient for analyse	es requested.	Х					
15.	Samples were received with in the hold	I time.	Х					
16.	VOA vials completely filled.				Х			
17.	Sample accepted.		Х					
18.	Has client been contacted about sub-o	ut			Χ			
_								
	nments: Include actions taken to resol  k Cassettes. No cooler was received: howey	ver, samples are received in a box with custody seal. ~JE 04/25/22						
2.40	Jassacca, ita casia, mas received, nower	or and the received in a box man education of the officer						

ab-s005-0321

Phone: www.ablabs.com

Check in by/date : / 04/25/2022

Analysis:   Job ID:22042099	Project Name and Number: Project Manage Site Location: Hunters Po	HPNS Parcel E			00		Labora Addres	ss: <u>1</u>			y Ste. 100	Contact	Name	Page:_	4/21/2022 1 of 1	
Sample ID   Samp	Site Location. Italies											, ID	.22042000			
MSE01-041922				epth (top)	epth (bottom)	ontainers	fatrix	-								
Sampled By:   Sampler:   Sampler:   Sampler:   Sampler:   Sampled By:   Sampled By:   Sampler:	Sample ID	Date	Time	Sample	Sample D	No. of Co	Sample	Non	ne ainer Ty					Special I	nstructions/Cor	
Sampled By:   Sampler:   Sampler:   Sampler:   Signature:   Special Instructions:   Nat.	MSE01-041922	4/19/2022	1549	NA	NA	1	1	X						554		011
Sampled By:   Sampler:   Signature:   Special Instructions:   Nat   Na	MSE02-041922	4/19/2022	1540	NA	NA	1	AA	Х						555	9	OLA
Sampled By:   Sampler:   Courier/Airbill No: FedEx/ 7766 3534 7550     Signature:   Special Instructions:   Nat	MSE01-042022	4/20/2022	1600	NA	NA	1	AA	X						546	(	03 A
Sampled By:  Signature:  Special Instructions:  Sampler:  Courier/Airbill No.: FedEx/ 7766 3534 7550  Date: Time: Received By/ Affiliation:  Date: Time: Special Local Hard States Affiliation:  College Hard States Affiliation:  Date: Time: Received By/ Affiliation:  Date: Time: Received By/ Affiliation:  Special Instructions: Note: Market Marke	MSE02-042022	4/20/2022	1550	NA	NA	1	AA	×						546		D47
Sampled By:    Signature:   Date: Time: Received By/ Affiliation:   Date: Time: Special Instructions:   Nate:   Time:   Nate:   Time:   Nate:   Time:   Nate:   Time:   Nate:   Nate:																TO
Sampled By:    Signature:   Date: Time: Received By/ Affiliation:   Date: Time: Special Instructions:   Nate:   Time:   Nate:   Time:   Nate:   Time:   Nate:   Time:   Nate:   Nate:				i,	1		i						G. A. A. A. A. H. M. A. T. J. T.	/ 27/4 25/4 2	550	
Special Instructions: Note /Calbace 4/21/22 /60 Ed (x) 1/21/24 /60	Sampled By:												S. NO. WOOLE CO. CO. S. S. S. P. S.	7 7 7 00 3534 7		1
	Signature:				Relinqui	shea t	зугапш	ation C	)		Date:	Time:	Received By/ Affiliation:		Date:	Tim
	Special Instructions:/	Vac				l	O F			ne	4/21/22	160	Edex		4/21/26 9/25/7	16

ORIGIN ID: JCCA

200 FISHER STREET

SAN FRANCISCO, CA 94124 UNITED STATES US

SHIP DATE: 21APR22 ACTWGT: 1.00 LB CAD: 254128867/INET4460

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TO

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HOUSTON TX 77029

REF J31000 400 00 18 04

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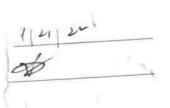
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7766 3534 7550

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# **Laboratory Analysis Report**

Job ID: 22042569



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

# Client Project Name : HPNS Parcel E Phase II J310000400

Client Name: GES - ASRC Industrial Attn:

Client Address: 1501 West Fountainhead Parkway, Ste. #550

City, State, Zip: Tempe, Arizona, 85282

Total Number of Pages: 5

P.O.#.: J310000400-0015 Date Received: 04/27/2022 14:44

Sample Collected By:

.....

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

Report To:

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-042122	4/21/2022 15:05	Cassette	22042569.01
MSE02-042122	4/21/2022 15:01	Cassette	22042569.02
MSE01-042522	4/25/2022 15:49	Cassette	22042569.03
MSE02-042522	4/25/2022 15:52	Cassette	22042569.04

Released By:	
Title:	Vice President Operations

Analyst:

Report Number: RPT220504037

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ab-q210-0321



# ANALYSIS OF AIRBORNE FIBER SAMPLING SAMPLING PERFORMED BY CLIENT ALYSIS CONDUCTED BY A S. B. ENVIDONMENTAL SERVI

# ANALYSIS CONDUCTED BY A & B ENVIRONMENTAL SERVICES, INC. AIHA Lab Accreditation # 101470 TDH PLM/PCM Lab License # 300080

Date 5/4/2022

Job ID: 22042569

Analytical Method: NIOSH 7400-I2-Aug1994

Client: GES - /	Client: GES - ASRC Industrial Project: HPNS Parcel E Phase II J310000400 Attn:														
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
22042569.01	MSE01-042122	04/21/2022	Area	2			478	956	100	1	1.274	< 0.003		05/02/22	
22042569.02	MSE02-042122	04/21/2022	Area	2			486	972	100	0.5	0.637	< 0.003		05/02/22	
22042569.03	MSE01-042522	04/25/2022	Area	2			518	1036	100	4.5	5.732	< 0.003		05/02/22	
22042569.04	MSE02-042522	04/25/2022	Area	2			537	1074	100	8.0	10.191	0.004		05/02/22	

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



Received by:

# **Sample Condition Checklist**

A&I	3 JobID : <b>22042569</b>	Date Received: 04/27/2022 Time Received: 2:	44PM							
Clie	ent Name : GES - ASRC Industrial									
Ter	nperature: 18.3°C	Sample pH: NA								
	ermometer ID : <b>IR3</b>	pH Paper ID : NA								
Pe	rservative :									
		Check Points	Yes	No	N/A					
1.	Cooler Seal present and signed.		Х							
2.	Sample(s) in a cooler.			Х						
3.	If yes, ice in cooler.				Х					
4.	Sample(s) received with chain-of-custo	Х								
5.	C-O-C signed and dated.		Х							
6.	Sample(s) received with signed sample	e custody seal.		Х						
7.	Х									
8.										
9.	Х									
10.	10. Sample(s) were received with Proper preservative									
11.	All samples were tagged or labeled.		Х							
12.	Sample ID labels match C-O-C ID's.		Х							
13.	Bottle count on C-O-C matches bottles	found.	Х							
14.	Sample volume is sufficient for analyse	es requested.	Х							
15.	Samples were received with in the hole	I time.	Х							
16.	VOA vials completely filled.				Х					
17.	Sample accepted.		Х							
18.	Has client been contacted about sub-o	ut			Х					
_		us disavanasias (mushlam.								
	Comments: Include actions taken to resolve discrepancies/problem:  Black Cassettes. No Cooler was received; however, samples are received in a box with custody seal. ~JE 04/27/22									

ab-s005-0321

Phone: www.ablabs.com

Check in by/date : / 04/27/2022

Gilbane											Chain-Of-	Cust	oay	
Project Name and Number	HPNS Parcel E	Phase II I.	31000040	00	. 1	abora	itory N	lame: A&B L	abs			4/26	/2022	
Project Manager					. /	Addres	ss: 1	0100 East Fwy	Ste. 100	Contact N	Name:	Page:1	_of _1_	
	oint, San Francisc	o, CA 941	124				I	Iouston TX 770	129		***			
							1	Analysis:						
			Sample Depth (top)	Sample Depth (bottom)	Containers	Matrix	Asbestos							
	- 1		le le	le D	Ű	leN	Nor	rvative:		-		Flow Rate	= 2 L/mir	1
Sample ID	Date	Time	Samp	Samp	No. of	Sample	Conta	ainer Type: Iter				Special Instru Total Time (		ments
MSE01-042122	4/21/2022	1505	NA	NA	1	AA	X					478 0	IA	
MSE02-042122	4/21/2022	1501	NA	NA	1	AA	X					486 02	A	
MSE01-042522	4/25/2022	1549	NA	NA	1	AA	X					518 05	5A	
MSE02-042522	4/25/2022	1552	NA	NA	1	AA	х					537 04	HA	
Job ID:2204														<b>X</b>
Sampled By: _		i	1	Sampl	er:	1					Courier/Airbill No.: FedEx/ 776	6 8034 8798		
	2			Relinqui	shed E	By/Affili	ation:		Date:	Time:	Received By/ Affiliation:		Date:	Time:
Signature:	4		7 7 7				0		- 1 1	1927				10.00
Special Instructions:/	1000		_		/	ED	Ex	ui lban	4/24/20	- 1600	Ked 4		04/29/22	1602
Send Results to:														
Turnaround Time: Stand	ard										19	3°C 1R3		

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# **Laboratory Analysis Report**

Job ID: 22042960



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

#### Client Project Name: HPNS Parcel E Phase II J310000400

GES - ASRC Industrial Report To: Total Number of Pages: 5 Client Name:

Attn:

P.O.#.: J310000400-0015 Client Address: 1501 West Fountainhead Parkway, Ste. #550 Date Received: 04/29/2022 15:37

Tempe, Arizona, 85282 City, State, Zip: Sample Collected By:

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-042622	4/26/2022 15:58	Cassette	22042960.01
MSE02-042622	4/26/2022 16:00	Cassette	22042960.02
MSE01-042722	4/27/2022 15:42	Cassette	22042960.03
MSE02-042722	4/27/2022 15:51	Cassette	22042960.04



Analyst:

Title: Vice President Operations

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5/6/2022



# 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 5/6/2022

Job ID: 22042960

Analytical Method: NIOSH 7400-I2-Aug1994

Client: GES	- ASRC Industrial		Project: HPI	NS Parcel E I	Phase II .	31000040	00				Attn:				
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 Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
22042960.0	MSE01-042622	04/26/2022	Area	2			537	1074	100	8.5	10.828	0.004		05/06/22	
22042960.0	MSE02-042622	04/26/2022	Area	2			551	1102	100	10.5	13.376	0.005		05/06/22	
22042960.0	MSE01-042722	04/27/2022	Area	2			529	1058	100	3.5	4.459	< 0.003		05/06/22	
22042960.0	MSE02-042722	04/27/2022	Area	2			523	1046	100	9.0	11.465	0.004		05/06/22	

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



Received by:

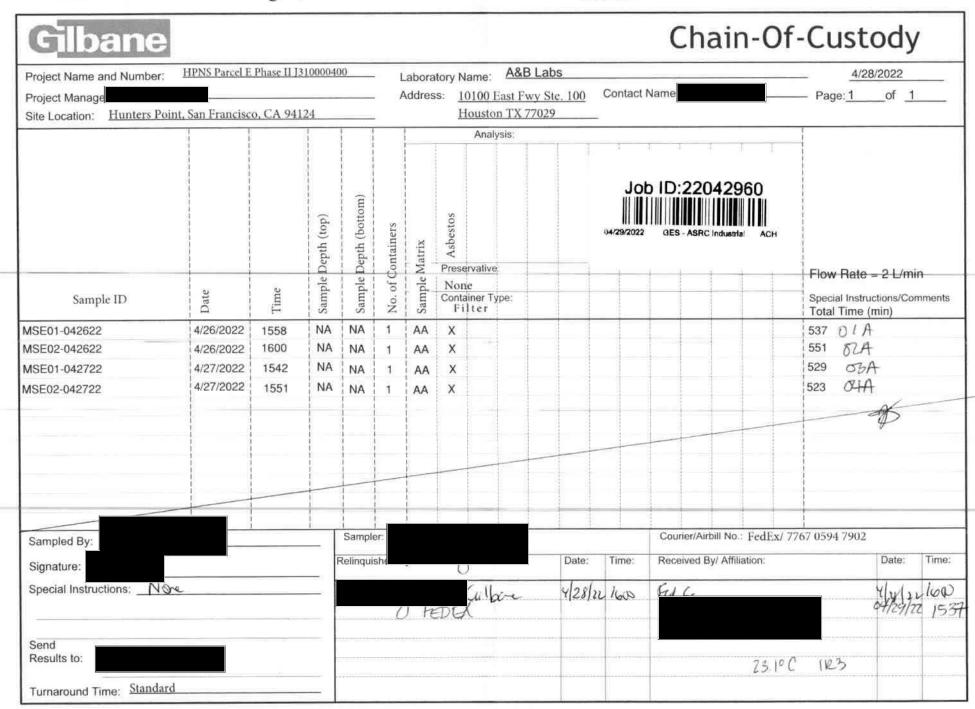
# **Sample Condition Checklist**

Α&	A&B JobID: 22042960 Date Received: 04/29/2022 Time Received: 3:37PM									
	ent Name : GES - ASRC Industrial	1111								
	nperature : 23.1°C	Sample pH: NA								
	ermometer ID : <b>IR3</b>	pH Paper ID: NA								
Pe	rservative :		T	ı						
		Check Points		Yes	No	N/A				
1.	Cooler Seal present and signed.			Х						
2.	Sample(s) in a cooler.				Χ					
3.	If yes, ice in cooler.					Χ				
4.		Χ								
5.	5. C-O-C signed and dated.									
6.	6. Sample(s) received with signed sample custody seal.									
7.	7. Sample containers arrived intact. (If No comment)									
8. Water Soil Liquid Sludge Solid Cassette Tube Bulk Badge Food Other										
9.		Χ								
10. Sample(s) were received with Proper preservative										
11.	11. All samples were tagged or labeled.									
12.	Sample ID labels match C-O-C ID's.			Χ						
13.	Bottle count on C-O-C matches bottles	found.		Χ						
14.	Sample volume is sufficient for analyse	es requested.		Χ						
15.	Samples were received with in the hole	l time.		Χ						
16.	VOA vials completely filled.					Х				
17.	Sample accepted.			Х						
18.	Has client been contacted about sub-o	ut				Х				
	mments: Include actions taken to resol		1/20/22							
DIAC	n Casselles. Ino cooler was received; flower	ver, sample are received in a box with custody seal. ~JE 04	[]							

ab-s005-0321

Phone: www.ablabs.com

Check in by/date : / 04/29/2022



SHIP DATE: 28APR22 ACTWGT: 1.00 LB CAD: 254128867/INET4490 ORIGIN ID: JCCA 200 FISHER STREET SAN FRANCISCO, CA 94124 UNITED STATES US BILL SENDER A & B LABS 10100 EAST FREEWAY, SUITE 100 HOUSTON TX 77029 REF J31000 400 00 18:04 PO DEPT Fed Exx. FRI - 29 APR 4:30P

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## **Laboratory Analysis Report**

Job ID: 22050377



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

#### Client Project Name: HPNS Parcel E Phase II J310000400

GES - ASRC Industrial Report To: Total Number of Pages: 5 Client Name:

Attn:

P.O.#.: J310000400-0015 Client Address: 1501 West Fountainhead Parkway, Ste. #550 Date Received: 05/04/2022 14:51

Tempe, Arizona, 85282 Sample Collected By: City, State, Zip:

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-042822	4/28/2022 14:11	Cassette	22050377.01
MSE02-042822	4/28/2022 14:03	Cassette	22050377.02
MSE01-050222	5/2/2022 15:49	Cassette	22050377.03
MSE02-050222	5/2/2022 15:37	Cassette	22050377.04

Released By:

Analyst:

Title: Vice President Operations

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5/11/2022

Page 1 of 5 Report Number: RPT220511014



# ANALYSIS OF AIRBORNE FIBER SAMPLING SAMPLING PERFORMED BY CLIENT ALYSIS CONDUCTED BY A & B ENVIRONMENTAL SERVICE

# ANALYSIS CONDUCTED BY A & B ENVIRONMENTAL SERVICES, INC. AIHA Lab Accreditation # 101470 TDH PLM/PCM Lab License # 300080

Date 5/11/2022

Job ID: 22050377

Analytical Method: NIOSH 7400-I2-Aug1994

Client: GES - /	ASRC Industrial		Project: HPI	Project: HPNS Parcel E Phase II J310000400							ļ	Attn:			
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
22050377.01	MSE01-042822	04/28/2022	Area	2			446	892	100	7	8.917	0.004		05/06/22	
22050377.02	MSE02-042822	04/28/2022	Area	2			446	892	100	12.5	15.924	0.007		05/06/22	
22050377.03	MSE01-050222	05/02/2022	Area	2			525	1050	100	2	2.548	< 0.003		05/06/22	
22050377.04	MSE02-050222	05/02/2022	Area	2			529	1058	100	65.0	82.803	0.030		05/06/22	

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



# **Sample Condition Checklist**

Λ Ω. Ι	3 JobID : <b>22050377</b>	Date Received: 05/04/2022 Time Received: 2	:51PM							
		Date Neceived : US/ U4/ 2022	.5171							
	ent Name : GES - ASRC Industrial									
	nperature : 19.8°C	Sample pH: NA								
	ermometer ID : <b>IR3</b>	pH Paper ID: NA								
Perservative :										
		Check Points	Yes	No	N/A					
1.	Cooler Seal present and signed.		Х							
2.	Sample(s) in a cooler.			Х						
3.	If yes, ice in cooler.				Х					
4.	Sample(s) received with chain-of-custo	ody.	Х							
5.	C-O-C signed and dated.		Х							
6.	Sample(s) received with signed sample	e custody seal.		Х						
7.	Sample containers arrived intact. (If N	o comment)	Х							
8.	Water Soil Liquid Slu Matrix:	udge Solid Cassette Tube Bulk Badge Food Other								
9.	Samples were received in appropriate	container(s)	Х							
10.	Sample(s) were received with Proper p	preservative			Х					
11.	All samples were tagged or labeled.		Х							
12.	Sample ID labels match C-O-C ID's.		Х							
13.	Bottle count on C-O-C matches bottles	found.	Х							
14.	Sample volume is sufficient for analyse	es requested.	Х							
15.	Samples were received with in the hold	l time.	Х							
16.	VOA vials completely filled.				Х					
17.	Sample accepted.		Х							
18.	Has client been contacted about sub-o	ut			Х					
	nments: Include actions taken to resol		,							
INO (	ooiei was received, nowever sampies are r	eceived in a box with a custody seal. Received black cassettes. $\sim$ EV 5/4/202	<u> </u>							
Re	ceived by :	Check in by/date : // 05/04/2022								

ab-s005-0321

Phone : www.ablabs.com

Gilba	ne												Cł	nair	1-O	f-Cust	ody	,
Project Name a	Mumbor:	HPNS Parcel I	E Phase II J	31000040	00	- 1	abora	atory N	ame:	A&B	Labs					5/0	3/2022	
Project Manage						_ /	Addres	ss: 10	0100 E	East Fw	y Ste. 100	Contact	Name			Page: 1	of _1	
Site Location: <u>H</u>	Hunters Point,	San Francisc	co, CA 941	124		-		<u>H</u>	ousto	n TX 77	029	-						
					i i				Analy	/sis:						_		
Sample	ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Non	rvative e iner Ty I t e r							Flow Rate	uctions/Con	
MSE01-042822	OLA	4/28/2022	1411	NA NA	NA	1	AA	X	itei							Total Time	(min)	
MSE02-042822	0214	4/28/2022	1403	NA	NA	1	AA	X								446		
MSE01-050222	034	5/02/2022	1549	NA	NA	1	AA	X								525		
MSE02-050222	OHA	5/02/2022	1537	NA	NA	1	AA	X								529		
Job           05/04/2022	ID:220		1 1	0/3/2	Z													
Sampled By:			<u> </u>	1	Sampl	er:							Courier/	Airbill No.:	FedEx/	7767 4706 1540		
				_	Relinqui	ished B	y/Affilia	ation:			Date	: Time:	Received	By/ Affilia	ation:		Date:	Time:
Signature:			(A)						1 ( )	11	-/-	- 1/					5/2/22	1
Special Instructio	ins.					1	FI	05	1 Gi	1 bane	5/3 5-4-2	122 1600 2 <b>14:5</b> 1		edex			5/3/22 -4-72	1600 14:51
Send Results to:	60 >																	
Turnaround Time	: Standard																	

200 FISHER STREET

SAN FRANCISCO, CA 94124 UNITED STATES US

SHIP DATE: 03MAY22 ACTWGT: 1.00 LB CAD: 254128867/INET4490

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# **Environment Testing America**

# **ANALYTICAL REPORT**

Eurofins Sacramento 880 Riverside Parkway West Sacramento, CA 95605 Tel: (916)373-5600

Laboratory Job ID: 320-86524-1

Client Project/Site: Hunters Point, Parcel E, Phase 2

For:

GES-AIS, LLC 1501 W Fountainhead Parkway Ste 550

Tempe, Arizona 85282

Authorized for release by: 4/15/2022 5:20:31 PM

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Results relate only to the items tested and the sample(s) as received by the laboratory.

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Laboratory Job ID: 320-86524-1

Project/Site: Hunters Point, Parcel E, Phase 2

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11

13

## **Definitions/Glossary**

Client: GES-AIS, LLC Job ID: 320-86524-1

Project/Site: Hunters Point, Parcel E, Phase 2

#### **Qualifiers**

B 4		4.	1 -
IV	ıe	τа	IS

Qualifier Qualifier Description

B Compound was found in the blank and sample.

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

#### **Glossary**

Abbreviation These commonly used abbreviations may or n	ay not be present in this report.
---	-----------------------------------

Example 2 Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

**Eurofins Sacramento** 

Page 3 of 14 4/15/2022

#### **Case Narrative**

Client: GES-AIS, LLC Job ID: 320-86524-1

Project/Site: Hunters Point, Parcel E, Phase 2

Job ID: 320-86524-1

**Laboratory: Eurofins Sacramento** 

Narrative

Job Narrative 320-86524-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 4/6/2022 9:55 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 18.5° C.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# **Detection Summary**

Client: GES-AIS, LLC Job ID: 320-86524-1

Project/Site: Hunters Point, Parcel E, Phase 2

<b>Client Sample</b>	ID: GILBANEPM030122-1822
----------------------	--------------------------

## Lab Sample ID: 320-86524-1

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0024	0.00069	0.00010	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.029	0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0054 B	0.00069	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	22	0.29	0.29	ug/m3	1		PM10	Total/NA

## Client Sample ID: GILBANETSP030122-1822

## Lab Sample ID: 320-86524-2

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	30.3874	0.3045	0.3045 ug/m3 (Air)	1	40CFR50 App B	Total/NA

## Client Sample ID: GILBANEPM030122-1823

## Lab Sample ID: 320-86524-3

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0042	0.00069	0.00010	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.21	0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0090 B	0.00069	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	26	0.29	0.29	ug/m3	1		PM10	Total/NA

## Client Sample ID: GILBANETSP030122-1823

## Lab Sample ID: 320-86524-4

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	37.3749	0.2902	0.2902 ug/m3 (Air)	1	40CFR50 App B	Total/NA

11

4/15/2022

## **Client Sample Results**

Client: GES-AIS, LLC Job ID: 320-86524-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM030122-1822

Date Collected: 04/05/22 07:10

Date Received: 04/06/22 09:55

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0024		0.00069	0.00010	ug/m3 (Air)		04/15/22 08:30	04/15/22 13:12	1
Copper	0.029		0.0014	0.00010	ug/m3 (Air)		04/15/22 08:30	04/15/22 13:12	1
Manganese	0.0054	В	0.00069	0.000097	ug/m3 (Air)		04/15/22 08:30	04/15/22 13:12	1

**General Chemistry** Analyte RL Result Qualifier **RL** Unit Prepared Analyzed Dil Fac Particulate Matter as PM 10 0.29 04/13/22 09:35 0.29 ug/m3

Client Sample ID: GILBANETSP030122-1822

Date Collected: 04/05/22 07:10

Date Received: 04/06/22 09:55 Sample Container: Folder/Filter

General Chemistry									
Analyte	Result (	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	30.3874		0.3045	0.3045	ug/m3 (Air)	_		04/13/22 09:35	1

Client Sample ID: GILBANEPM030122-1823

Date Collected: 04/05/22 06:58

Date Received: 04/06/22 09:55 Sample Container: Folder/Filter

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0042		0.00069	0.00010	ug/m3 (Air)	_	04/15/22 08:30	04/15/22 13:15	1
Copper	0.21		0.0014	0.00010	ug/m3 (Air)		04/15/22 08:30	04/15/22 13:15	1
Manganese	0.0090	В	0.00069	0.000097	ug/m3 (Air)		04/15/22 08:30	04/15/22 13:15	1

Analyte Result Qualifier RL **RL** Unit Prepared Analyzed Dil Fac 0.29 0.29 ug/m3 04/13/22 09:35 **Particulate Matter as PM 10** 26

Client Sample ID: GILBANETSP030122-1823

Date Collected: 04/05/22 06:58 Date Received: 04/06/22 09:55

Sample Container: Folder/Filter

General Chemistry										
	Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Total Suspended Particulates	37.3749		0.2902	0.2902	ug/m3 (Air)			04/13/22 09:35	1

**Eurofins Sacramento** 

Matrix: Air

Matrix: Air

Matrix: Air

Matrix: Air

Lab Sample ID: 320-86524-1

Lab Sample ID: 320-86524-2

Lab Sample ID: 320-86524-3

Lab Sample ID: 320-86524-4

4/15/2022

## **QC Sample Results**

Client: GES-AIS, LLC Job ID: 320-86524-1

Project/Site: Hunters Point, Parcel E, Phase 2

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-580364/1-B

**Analysis Batch: 580582** 

Manganese

Manganese

**Client Sample ID: Method Blank Matrix: Air** Prep Type: Total/NA

Prep Batch: 580366

	IVID	IAID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)	_	04/15/22 08:30	04/15/22 12:50	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		04/15/22 08:30	04/15/22 12:50	1
Manganese	0.000203	J	0.0012	0.00017	ug/m3 (Air)		04/15/22 08:30	04/15/22 12:50	1

MD MD

Lab Sample ID: LCS 320-580364/2-B **Client Sample ID: Lab Control Sample** Matrix: Air Prep Type: Total/NA **Analysis Batch: 580582** Prep Batch: 580366 Spike LCS LCS %Rec Limits Analyte Added Result Qualifier Unit D %Rec Lead 0.240 0.244 ug/m3 (Air) 102 86 - 111 0.240 0.232 ug/m3 (Air) 97 85 - 110 Copper

0.238

0.248

ug/m3 (Air)

ug/m3 (Air)

99

103

88 - 110

88 - 110

0.240

0.240

Lab Sample ID: LCSD 320-580364/3-B **Client Sample ID: Lab Control Sample Dup** Matrix: Air Prep Type: Total/NA **Prep Batch: 580366 Analysis Batch: 580582** Spike LCSD LCSD %Rec **RPD** Added Result Qualifier Unit Limits RPD Limit **Analyte** D %Rec Lead 0.240 0.247 ug/m3 (Air) 103 86 - 111 1 15 Copper 0.240 0.243 ug/m3 (Air) 101 85 - 110 5 15

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# **QC Association Summary**

Client: GES-AIS, LLC Job ID: 320-86524-1

Project/Site: Hunters Point, Parcel E, Phase 2

#### **Metals**

## Pre Prep Batch: 580364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86524-1	GILBANEPM030122-1822	Total/NA	Air	Filter to Air	
320-86524-3	GILBANEPM030122-1823	Total/NA	Air	Filter to Air	
MB 320-580364/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-580364/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-580364/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

#### Prep Batch: 580366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86524-1	GILBANEPM030122-1822	Total/NA	Air	3050B	580364
320-86524-3	GILBANEPM030122-1823	Total/NA	Air	3050B	580364
MB 320-580364/1-B	Method Blank	Total/NA	Air	3050B	580364
LCS 320-580364/2-B	Lab Control Sample	Total/NA	Air	3050B	580364
LCSD 320-580364/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	580364

## **Analysis Batch: 580582**

Lab Sample ID 320-86524-1	Client Sample ID GILBANEPM030122-1822	Prep Type Total/NA	Matrix Air	Method 6020	Prep Batch 580366
320-86524-3	GILBANEPM030122-1823	Total/NA	Air	6020	580366
MB 320-580364/1-B	Method Blank	Total/NA	Air	6020	580366
LCS 320-580364/2-B	Lab Control Sample	Total/NA	Air	6020	580366
LCSD 320-580364/3-B	Lab Control Sample Dup	Total/NA	Air	6020	580366

## **General Chemistry**

## Pre Prep Batch: 580572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86524-2	GILBANETSP030122-1822	Total/NA	Air	Filter to Air	
320-86524-4	GILBANETSP030122-1823	Total/NA	Air	Filter to Air	

## **Analysis Batch: 580587**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86524-1	GILBANEPM030122-1822	Total/NA	Air	PM10	
320-86524-3	GILBANEPM030122-1823	Total/NA	Air	PM10	

## **Analysis Batch: 580588**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86524-2	GILBANETSP030122-1822	Total/NA	Air	40CFR50 App B	580572
320-86524-4	GILBANETSP030122-1823	Total/NA	Air	40CFR50 App B	580572

**Eurofins Sacramento** 

4/15/2022

Job ID: 320-86524-1

Lab Sample ID: 320-86524-2

Lab Sample ID: 320-86524-3

Lab Sample ID: 320-86524-4

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM030122-1822

Lab Sample ID: 320-86524-1 Date Collected: 04/05/22 07:10 Matrix: Air

Date Received: 04/06/22 09:55

Client: GES-AIS, LLC

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					580364	04/15/22 08:12	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	580366	04/15/22 08:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			580582	04/15/22 13:12	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0374 g	580587	04/13/22 09:35	DPM	TAL SAC

Client Sample ID: GILBANETSP030122-1822

Date Collected: 04/05/22 07:10

Date Received: 04/06/22 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			580588	04/13/22 09:35	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					580572	04/15/22 15:04	DPM	TAL SAC

Client Sample ID: GILBANEPM030122-1823

Date Collected: 04/05/22 06:58

Date Received: 04/06/22 09:55

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					580364	04/15/22 08:12	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	580366	04/15/22 08:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			580582	04/15/22 13:15	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0448 g	580587	04/13/22 09:35	DPM	TAL SAC

**Client Sample ID: GILBANETSP030122-1823** 

Date Collected: 04/05/22 06:58

Date Received: 04/06/22 09:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			580588	04/13/22 09:35	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					580572	04/15/22 15:04	DPM	TAL SAC

#### **Laboratory References:**

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Matrix: Air

Matrix: Air

Matrix: Air

# **Accreditation/Certification Summary**

Client: GES-AIS, LLC Job ID: 320-86524-1

Project/Site: Hunters Point, Parcel E, Phase 2

## **Laboratory: Eurofins Sacramento**

The accreditations/certifications listed below are applicable to this report.

Authority	Pro	ogram	Identification Number	Expiration Date
ANAB	De	pt. of Defense ELAP	L2468	01-20-24
Oregon	NE	LAP	4040	01-29-23
The following analytes	are included in this repo	rt, but the laboratory is not o	certified by the governing authority.	This list may include analytes for wh
the agency does not o	offer certification.	•	, , ,	This list may include analytes for wh
,		rt, but the laboratory is not o	certified by the governing authority Analyte	This list may include analytes for wh
the agency does not o	offer certification.	•	, , ,	

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## **Method Summary**

Client: GES-AIS, LLC

Project/Site: Hunters Point, Parcel E, Phase 2

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL SAC
40CFR50 App B	Suspended Particulate Matter in Ambient Air	EPA	TAL SAC
PM10	Particulate Matter	40CFR50J	TAL SAC
3050B	Preparation, Metals	SW846	TAL SAC
Filter to Air	Filter to Air volume ratio	None	TAL SAC

#### **Protocol References:**

40CFR50J = 40 CFR Part 50 Appendix J EPA = US Environmental Protection Agency

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### **Laboratory References:**

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Job ID: 320-86524-1

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# **Sample Summary**

Client: GES-AIS, LLC Job ID: 320-86524-1

Project/Site: Hunters Point, Parcel E, Phase 2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-86524-1	GILBANEPM030122-1822	Air	04/05/22 07:10	04/06/22 09:55
320-86524-2	GILBANETSP030122-1822	Air	04/05/22 07:10	04/06/22 09:55
320-86524-3	GILBANEPM030122-1823	Air	04/05/22 06:58	04/06/22 09:55
320-86524-4	GILBANETSP030122-1823	Air	04/05/22 06:58	04/06/22 09:55

COC # KT040522AIR

Gilbane Federal

CHAIN-OF-CUSTODY

RECORD

2300 Clayton Road, Suite 1050, Concord, CA 94520 bwomack@ges-ais.com **Brett Womack** 

Page 1 of 1 VOLUME: 1727.17 (M3) VOLUME: 1642.13 (M3) VOLUME: 1728.57 (M3) Received by Laboratory: (Signature, Date, Time) & condition VOLUME: 1723.08(M3) Laboratory: EUROFINS ENVIRONMENT TESTING NORTHERN CALIFORNIA, LLC (EETN Event: Parcel E Phase 2 Air Shipping Date: 4/5/2022 / FedEx 7764 8679 3658 Shipping Date / Carrier / Airbill Number 320-86524 Chain of Custody Cooler Top - Bottom 0.00 0.00 0.00 0.00 Sample Depth (ft bgs) 0.00 0.00 0.00 0.00 Type ź ž Ξ Z 1x 250-mL Plastic, 4 Degrees C Container/Preservative 2550 009 1x Envelope, None Time Ship to: 880 Riverside Parkway, West Sacramento, CA 95605 Location ID AMSE2 AMSE1 AMSE2 Code Matrix 7 Air 4/5/22 4 Code Date 5 Received by: (Signature) SW6020 - Air Pb Mn Cu × × Fedex 92T 1iA - 0020N × × CAAIR - Air PM10 × Analytical Test Method Samp Ż ¥ ¥ Init. ¥ 0710 0658 9590 Time 0091 Time 0710 Project Name: Hunters Point Shipyard, Parcel E RA Phase 2 04/05/2022 04/05/2022 04/05/2022 4/5/22 04/05/2022 Event: Parcel E Phase 2 Air Monitoring April 2022 Date Date Matrix 2 ⋖ ⋖ X Ø GILBANETSP030122-1822 GILBANETSP030122-1823 GILBANEPM030122-1823 GILBANEPM030122-1822 Relinquished by: (Signature) Project Number: J310000400 WBS Code: J310000400-016 Turnaround Time: 5 days Gilbane.Navy\_COC\_Field April 05, 2022 Sample ID Equipment: Comments: 4 2 6 10 9 00

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## **Login Sample Receipt Checklist**

Client: GES-AIS, LLC Job Number: 320-86524-1

Login Number: 86524

List Number: 1 Creator:

**List Source: Eurofins Sacramento** 

Creator:		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	SEAL
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# **Environment Testing America**

# **ANALYTICAL REPORT**

Eurofins Sacramento 880 Riverside Parkway West Sacramento, CA 95605 Tel: (916)373-5600

Laboratory Job ID: 320-86611-1

Client Project/Site: Hunters Point, Parcel E, Phase 2

For:

GES-AIS, LLC 1501 W Fountainhead Parkway Ste 550 Tempe, Arizona 85282

Attn:

Authorized for release by: 4/15/2022 5:20:57 PM

-----LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Laboratory Job ID: 320-86611-1

Project/Site: Hunters Point, Parcel E, Phase 2

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## **Definitions/Glossary**

Client: GES-AIS, LLC Job ID: 320-86611-1

Project/Site: Hunters Point, Parcel E, Phase 2

## Glossary

DLC

These commonly used abbreviations may or may not be present in this report.
Listed under the "D" column to designate that the result is reported on a dry weight basis
Percent Recovery
Contains Free Liquid
Colony Forming Unit
Contains No Free Liquid
Duplicate Error Ratio (normalized absolute difference)
Dilution Factor
Detection Limit (DoD/DOE)
Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contar

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

Decision Level Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

**Eurofins Sacramento** 

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#### **Case Narrative**

Client: GES-AIS, LLC Job ID: 320-86611-1

Project/Site: Hunters Point, Parcel E, Phase 2

Job ID: 320-86611-1

**Laboratory: Eurofins Sacramento** 

**Narrative** 

Job Narrative 320-86611-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 4/8/2022 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 20.4° C.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Client: GES-AIS, LLC Job ID: 320-86611-1

Project/Site: Hunters Point, Parcel E, Phase 2

<b>Client Sample</b>	D: GILBA	NEPM030122-1824
----------------------	----------	-----------------

## Lab Sample ID: 320-86611-1

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D Met	hod	Prep Type
Lead	0.0031	0.00070	0.00010	ug/m3 (Air)	1	602	0	Total/NA
Copper	0.088	0.0014	0.00010	ug/m3 (Air)	1	602	0	Total/NA
Manganese	0.0080	0.00070	0.000098	ug/m3 (Air)	1	602	0	Total/NA
Particulate Matter as PM 10	41	0.29	0.29	ug/m3	1	PM	10	Total/NA

## Client Sample ID: GILBANETSP030122-1824

#### Lab Sample ID: 320-86611-2

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	54.2321	0.3095	0.3095 ug/m3 (Air)		40CFR50 App B	Total/NA

#### **Client Sample ID: GILBANEPM030122-1825**

#### Lab Sample ID: 320-86611-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0030		0.00070	0.00011	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.16		0.0014	0.00011	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0067		0.00070	0.000098	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	37		0.29	0.29	ug/m3	1		PM10	Total/NA

#### **Client Sample ID: GILBANETSP030122-1825**

#### Lab Sample ID: 320-86611-4

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	47.9742	0.2918	0.2918 ug/m3 (Air)	1 -	40CFR50 App B	Total/NA

#### Client Sample ID: GILBANEPM030122-1820

#### Lab Sample ID: 320-86611-5

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0053	0.00068	0.00010	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.25	0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.015	0.00068	0.000096	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	35	0.28	0.28	ug/m3	1		PM10	Total/NA

## Client Sample ID: GILBANETSP030122-1820

## Lab Sample ID: 320-86611-6

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	45.9410	0.2945	0.2945 ug/m3 (Air)	1	40CFR50 App B	Total/NA

#### Client Sample ID: GILBANEPM030122-1821

#### Lab Sample ID: 320-86611-7

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D Meth	od	Prep Type
Lead	0.0031	0.00069	0.00010	ug/m3 (Air)	1	6020		Total/NA
Copper	0.16	0.0014	0.00010	ug/m3 (Air)	1	6020		Total/NA
Manganese	0.010	0.00069	0.000096	ug/m3 (Air)	1	6020		Total/NA
Particulate Matter as PM 10	31	0.29	0.29	ug/m3	1	PM10	)	Total/NA

#### Client Sample ID: GILBANETSP030122-1821

## Lab Sample ID: 320-86611-8

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D Method	Prep Type
Total Suspended Particulates	39.8906	0.2862	0.2862 ug/m3 (Air)	1 40CFR50 A	Npp B Total/NA

This Detection Summary does not include radiochemical test results.

4/15/2022

Client: GES-AIS, LLC Job ID: 320-86611-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM030122-1824

Lab Sample ID: 320-86611-1

Date Collected: 04/06/22 06:57 Matrix: Air

Date Received: 04/08/22 09:30 Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)									
Analyte	Result Q	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0031		0.00070	0.00010	ug/m3 (Air)		04/14/22 08:35	04/14/22 15:13	1
Copper	0.088		0.0014	0.00010	ug/m3 (Air)		04/14/22 08:35	04/14/22 15:13	1
Manganese	0.0080		0.00070	0.000098	ug/m3 (Air)		04/14/22 08:35	04/14/22 15:13	1

**General Chemistry** Analyte RL Result Qualifier **RL Unit** Prepared Analyzed Dil Fac 0.29 04/11/22 07:15 Particulate Matter as PM 10 41 0.29 ug/m3

Lab Sample ID: 320-86611-2 Client Sample ID: GILBANETSP030122-1824 Date Collected: 04/06/22 06:57 Matrix: Air

Date Received: 04/08/22 09:30 Sample Container: Folder/Filter

**General Chemistry** Analyte Result Qualifier RL **RL Unit** Prepared Analyzed Dil Fac **Total Suspended Particulates** 0.3095 0.3095 ug/m3 (Air) 04/11/22 07:15 54.2321

Client Sample ID: GILBANEPM030122-1825 Lab Sample ID: 320-86611-3

Date Collected: 04/06/22 06:46

Date Received: 04/08/22 09:30 Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0030	0.00070	0.00011	ug/m3 (Air)	_	04/14/22 08:35	04/14/22 15:16	1
Copper	0.16	0.0014	0.00011	ug/m3 (Air)		04/14/22 08:35	04/14/22 15:16	1
Manganese	0.0067	0.00070	0.000098	ug/m3 (Air)		04/14/22 08:35	04/14/22 15:16	1

**General Chemistry** Analyte Result Qualifier RL **RL** Unit **Prepared** Analyzed Dil Fac 0.29 0.29 ug/m3 04/11/22 07:15 **Particulate Matter as PM 10** 37

Client Sample ID: GILBANETSP030122-1825 Lab Sample ID: 320-86611-4

Date Collected: 04/06/22 06:46 Date Received: 04/08/22 09:30 Sample Container: Folder/Filter

**General Chemistry** Analyte Result Qualifier RL **RL Unit** Prepared Analyzed Dil Fac 0.2918 04/11/22 07:15 **Total Suspended Particulates** 47.9742 0.2918 ug/m3 (Air)

Client Sample ID: GILBANEPM030122-1820 Lab Sample ID: 320-86611-5

Date Collected: 04/07/22 06:59 Matrix: Air Date Received: 04/08/22 09:30

Sample Container: Folder/Filter

Method: 6020 - Me	tals (ICP/MS)							
Analyte	Result Quali	ifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0053	0.00068	0.00010	ug/m3 (Air)		04/14/22 08:35	04/14/22 15:20	1
Copper	0.25	0.0014	0.00010	ug/m3 (Air)		04/14/22 08:35	04/14/22 15:20	1
Manganese	0.015	0.00068	0.000096	ug/m3 (Air)		04/14/22 08:35	04/14/22 15:20	1

**Eurofins Sacramento** 

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Matrix: Air

Matrix: Air

## Client Sample Results

Client: GES-AIS, LLC Job ID: 320-86611-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM030122-1820

Lab Sample ID: 320-86611-5 Date Collected: 04/07/22 06:59

Matrix: Air

Date Received: 04/08/22 09:30 Sample Container: Folder/Filter

**General Chemistry** Analyte Unit Result Qualifier RL RL D Prepared Analyzed Dil Fac 0.28 0.28 ug/m3 04/11/22 07:15 Particulate Matter as PM 10 35

Client Sample ID: GILBANETSP030122-1820 Lab Sample ID: 320-86611-6

Date Collected: 04/07/22 06:59

Matrix: Air

Date Received: 04/08/22 09:30 Sample Container: Folder/Filter

**General Chemistry** Analyte Result Qualifier RL **RL** Unit Prepared Analyzed Dil Fac 0.2945 0.2945 ug/m3 (Air) 04/11/22 07:15 **Total Suspended Particulates** 45.9410

Client Sample ID: GILBANEPM030122-1821 Lab Sample ID: 320-86611-7

Date Collected: 04/07/22 06:52

Matrix: Air

Date Received: 04/08/22 09:30 Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS) Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 0.0031 0.00069 0.00010 ug/m3 (Air) 04/14/22 08:35 04/14/22 15:23 Lead 0.0014 0.00010 ug/m3 (Air) 04/14/22 08:35 04/14/22 15:23 Copper 0.16 0.00069 0.000096 ug/m3 (Air) 04/14/22 08:35 04/14/22 15:23 **Manganese** 0.010

**General Chemistry** Analyte Result Qualifier RL **RL Unit** Prepared Analyzed Dil Fac Particulate Matter as PM 10 31 0.29 0.29 ug/m3 04/11/22 07:15

Client Sample ID: GILBANETSP030122-1821 Lab Sample ID: 320-86611-8

Date Collected: 04/07/22 06:52

Matrix: Air

Date Received: 04/08/22 09:30 Sample Container: Folder/Filter

**General Chemistry** Analyte Result Qualifier RL **RL** Unit Analyzed Dil Fac D Prepared 0.2862 **Total Suspended Particulates** 39.8906 0.2862 ug/m3 (Air) 04/11/22 07:15

4/15/2022

## **QC Sample Results**

Client: GES-AIS, LLC Job ID: 320-86611-1

Project/Site: Hunters Point, Parcel E, Phase 2

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-580026/1-B

**Matrix: Air Analysis Batch: 580286**  **Client Sample ID: Method Blank** 

Prep Type: Total/NA

Prep Batch: 580040

Analyte	Result (	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)	_	04/14/22 08:35	04/14/22 14:35	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		04/14/22 08:35	04/14/22 14:35	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		04/14/22 08:35	04/14/22 14:35	1

MR MR

Lab Sample ID: LCS 320-580026/2-B

Matrix: Air

**Analysis Batch: 580286** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA Prep Batch: 580040

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit D %Rec Limits Lead 0.240 0.244 ug/m3 (Air) 102 86 - 111 0.240 0.235 ug/m3 (Air) 98 85 - 110 Copper 0.240 0.239 ug/m3 (Air) 99 88 - 110 Manganese

Lab Sample ID: LCSD 320-580026/3-B

**Matrix: Air** 

**Analysis Batch: 580286** 

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA

**Prep Batch: 580040** 

Spike LCSD LCSD %Rec **RPD** Added Result Qualifier Unit Limits RPD Limit **Analyte** D %Rec Lead 0.240 0.238 ug/m3 (Air) 99 86 - 111 3 15 Copper 0.240 0.244 ug/m3 (Air) 102 85 - 110 4 15 Manganese 0.240 0.258 ug/m3 (Air) 107 88 - 110 8 15

4/15/2022

## **QC Association Summary**

Client: GES-AIS, LLC Job ID: 320-86611-1

Project/Site: Hunters Point, Parcel E, Phase 2

#### **Metals**

#### Pre Prep Batch: 580026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86611-1	GILBANEPM030122-1824	Total/NA	Air	Filter to Air	
320-86611-3	GILBANEPM030122-1825	Total/NA	Air	Filter to Air	
320-86611-5	GILBANEPM030122-1820	Total/NA	Air	Filter to Air	
320-86611-7	GILBANEPM030122-1821	Total/NA	Air	Filter to Air	
MB 320-580026/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-580026/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-580026/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

#### Prep Batch: 580040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86611-1	GILBANEPM030122-1824	Total/NA	Air	3050B	580026
320-86611-3	GILBANEPM030122-1825	Total/NA	Air	3050B	580026
320-86611-5	GILBANEPM030122-1820	Total/NA	Air	3050B	580026
320-86611-7	GILBANEPM030122-1821	Total/NA	Air	3050B	580026
MB 320-580026/1-B	Method Blank	Total/NA	Air	3050B	580026
LCS 320-580026/2-B	Lab Control Sample	Total/NA	Air	3050B	580026
LCSD 320-580026/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	580026

#### **Analysis Batch: 580286**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86611-1	GILBANEPM030122-1824	Total/NA	Air	6020	580040
320-86611-3	GILBANEPM030122-1825	Total/NA	Air	6020	580040
320-86611-5	GILBANEPM030122-1820	Total/NA	Air	6020	580040
320-86611-7	GILBANEPM030122-1821	Total/NA	Air	6020	580040
MB 320-580026/1-B	Method Blank	Total/NA	Air	6020	580040
LCS 320-580026/2-B	Lab Control Sample	Total/NA	Air	6020	580040
LCSD 320-580026/3-B	Lab Control Sample Dup	Total/NA	Air	6020	580040

## **General Chemistry**

#### Pre Prep Batch: 580572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86611-2	GILBANETSP030122-1824	Total/NA	Air	Filter to Air	
320-86611-4	GILBANETSP030122-1825	Total/NA	Air	Filter to Air	
320-86611-6	GILBANETSP030122-1820	Total/NA	Air	Filter to Air	
320-86611-8	GILBANETSP030122-1821	Total/NA	Air	Filter to Air	

#### **Analysis Batch: 580590**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86611-1	GILBANEPM030122-1824	Total/NA	Air	PM10	<del>_</del>
320-86611-3	GILBANEPM030122-1825	Total/NA	Air	PM10	
320-86611-5	GILBANEPM030122-1820	Total/NA	Air	PM10	
320-86611-7	GILBANEPM030122-1821	Total/NA	Air	PM10	

#### Analysis Batch: 580591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86611-2	GILBANETSP030122-1824	Total/NA	Air	40CFR50 App B	580572
320-86611-4	GILBANETSP030122-1825	Total/NA	Air	40CFR50 App B	580572
320-86611-6	GILBANETSP030122-1820	Total/NA	Air	40CFR50 App B	580572
320-86611-8	GILBANETSP030122-1821	Total/NA	Air	40CFR50 App B	580572

**Eurofins Sacramento** 

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Job ID: 320-86611-1

Matrix: Air

**Matrix: Air** 

Matrix: Air

Matrix: Air

Matrix: Air

Lab Sample ID: 320-86611-1

Lab Sample ID: 320-86611-2

Lab Sample ID: 320-86611-3

Lab Sample ID: 320-86611-4

Lab Sample ID: 320-86611-5

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM030122-1824

Date Collected: 04/06/22 06:57 Date Received: 04/08/22 09:30

Client: GES-AIS, LLC

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					580026	04/14/22 08:10	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	580040	04/14/22 08:35	NIM	TAL SAC
Total/NA	Analysis	6020		1	•		580286	04/14/22 15:13	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 a	0 0700 a	580590	04/11/22 07:15	DPM	TAL SAC

Client Sample ID: GILBANETSP030122-1824

Date Collected: 04/06/22 06:57

Date Received: 04/08/22 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			580591	04/11/22 07:15	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					580572	04/15/22 15:04	DPM	TAL SAC

Client Sample ID: GILBANEPM030122-1825

Date Collected: 04/06/22 06:46

Date Received: 04/08/22 09:30

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					580026	04/14/22 08:10	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	580040	04/14/22 08:35	NIM	TAL SAC
Total/NA	Analysis	6020		1			580286	04/14/22 15:16	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0638 g	580590	04/11/22 07:15	DPM	TAL SAC

Client Sample ID: GILBANETSP030122-1825

Date Collected: 04/06/22 06:46

Date Received: 04/08/22 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			580591	04/11/22 07:15	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					580572	04/15/22 15:04	DPM	TAL SAC

Client Sample ID: GILBANEPM030122-1820

Date Collected: 04/07/22 06:59

Date Received: 04/08/22 09:30

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					580026	04/14/22 08:10	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	580040	04/14/22 08:35	NIM	TAL SAC
Total/NA	Analysis	6020		1	•		580286	04/14/22 15:20	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0614 g	580590	04/11/22 07:15	DPM	TAL SAC

**Eurofins Sacramento** 

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4/15/2022

#### **Lab Chronicle**

Client: GES-AIS, LLC Job ID: 320-86611-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANETSP030122-1820

Lab Sample ID: 320-86611-6 Date Collected: 04/07/22 06:59 Matrix: Air

Date Received: 04/08/22 09:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			580591	04/11/22 07:15	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					580572	04/15/22 15:04	DPM	TAL SAC

Client Sample ID: GILBANEPM030122-1821

Date Collected: 04/07/22 06:52

Date Received: 04/08/22 09:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					580026	04/14/22 08:10	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	580040	04/14/22 08:35	NIM	TAL SAC
Total/NA	Analysis	6020		1			580286	04/14/22 15:23	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0533 g	580590	04/11/22 07:15	DPM	TAL SAC

Client Sample ID: GILBANETSP030122-1821

Date Collected: 04/07/22 06:52

Date Received: 04/08/22 09:30

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			580591	04/11/22 07:15	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					580572	04/15/22 15:04	DPM	TAL SAC

#### **Laboratory References:**

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Matrix: Air

Matrix: Air

Lab Sample ID: 320-86611-7

Lab Sample ID: 320-86611-8

## **Accreditation/Certification Summary**

Client: GES-AIS, LLC Job ID: 320-86611-1

Project/Site: Hunters Point, Parcel E, Phase 2

## **Laboratory: Eurofins Sacramento**

The accreditations/certifications listed below are applicable to this report.

Authority	Pro	ogram	Identification Number	<b>Expiration Date</b>
ANAB	De	pt. of Defense ELAP	L2468	01-20-24
Oregon	NE	ELAP	4040	01-29-23
The following analyte	s are included in this repo	rt, but the laboratory is not	certified by the governing authority.	This list may include
the agency does not o	offer certification.	,	, , , ,	This list may include
the agency does not of Analysis Method	•	Matrix	Analyte	
the agency does not o	offer certification.	,	, , , ,	

## **Method Summary**

Client: GES-AIS, LLC

Project/Site: Hunters Point, Parcel E, Phase 2

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL SAC
40CFR50 App B	Suspended Particulate Matter in Ambient Air	EPA	TAL SAC
PM10	Particulate Matter	40CFR50J	TAL SAC
3050B	Preparation, Metals	SW846	TAL SAC
Filter to Air	Filter to Air volume ratio	None	TAL SAC

#### **Protocol References:**

40CFR50J = 40 CFR Part 50 Appendix J EPA = US Environmental Protection Agency

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### **Laboratory References:**

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Job ID: 320-86611-1

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## **Sample Summary**

Client: GES-AIS, LLC Job ID: 320-86611-1

Project/Site: Hunters Point, Parcel E, Phase 2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-86611-1	GILBANEPM030122-1824	Air	04/06/22 06:57	04/08/22 09:30
320-86611-2	GILBANETSP030122-1824	Air	04/06/22 06:57	04/08/22 09:30
320-86611-3	GILBANEPM030122-1825	Air	04/06/22 06:46	04/08/22 09:30
320-86611-4	GILBANETSP030122-1825	Air	04/06/22 06:46	04/08/22 09:30
320-86611-5	GILBANEPM030122-1820	Air	04/07/22 06:59	04/08/22 09:30
320-86611-6	GILBANETSP030122-1820	Air	04/07/22 06:59	04/08/22 09:30
320-86611-7	GILBANEPM030122-1821	Air	04/07/22 06:52	04/08/22 09:30
320-86611-8	GILBANETSP030122-1821	Air	04/07/22 06:52	04/08/22 09:30

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COC # KT040722AIR

CHAIN-OF-CUSTODY

RECORD

2300 Clayton Road, Suite 1050, Concord, CA 94520 bwomack@ges-ais.com **Brett Womack** 

VOLUME: 1720.30 (M3) VOLUME: 1615.28 (M3) VOLUME: 1712.46 (M3) VOLUME: 1713.42 (M3) VOLUME: 1754.97 (M3) VOLUME: 1697.83 (M3) VOLUME: 1747.24 (M3) VOLUME: 1747.28 (M3) Event: Parcel E Phase 2 Air Monitoring April 2022 Cooler 320-86611 Chain of Custody Laboratory: EUROFINS ENVIRONMENT TESTING NORTHERN CALIFORNIA, LLC (EETN Top - Bottom 0.00 0.00 00.0 0.00 0.00 0.00 0.00 0.00 Sample Depth (ft bgs) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Type ž ž Ξ ź Z Z Z Z 1x 250-mL Plastic, 4 Degrees Container/Preservative 1x Envelope, None Ship to: 880 Riverside Parkway, West Sacramento, CA 95605 Location ID AMSE2 AMSE2 AMSE2 AMSE2 AMSE1 AMSE1 AMSE1 Code Matrix AMSE1 Air Code SW6020 - Air Pb Mn Cu × × **42T 1A - 0080M** × PO CAAIR - Air PM10 × × Analytical Test Method Samp 노 노 Init. ¥ 노 Ā ¥ Y Ā 0646 0659 6990 0646 0652 Time 0657 0657 0652 Project Name: Hunters Point Shipyard, Parcel E RA Phase 2 04/06/2022 04/07/2022 04/06/2022 04/07/2022 04/07/2022 04/07/2022 04/06/2022 04/06/2022 Event: Parcel E Phase 2 Air Monitoring April 2022 Date Matrix V V K 4 K X V K GILBANETSP030122-1824 GILBANETSP030122-1825 GILBANETSP030122-1820 GILBANETSP030122-1821 GILBANEPM030122-1825 GILBANEPM030122-1820 GILBANEPM030122-1824 GILBANEPM030122-1821 Project Number: J310000400 WBS Code: J310000400-016 **Turnaround Time: 5 days** Sample ID Equipment: Comments: 10

Page 1 of 1 Received by Laboratory: (Signature, Date, Time) & condition Shipping Date / Carrier / Airbill Number Shipping Date: 4/7/2022 / FedEx 7765 0829 4291 20.4 0930 Time 4/7/22 4-8-27 Date Received by: (Signature) Fedex Time 1600 4/7/22 Date Gifbane.Navy\_COC\_Field April 07, 2022

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## **Login Sample Receipt Checklist**

Client: GES-AIS, LLC Job Number: 320-86611-1

Login Number: 86611 List Number: 1

Creator:

oreator.		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	seal
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

**List Source: Eurofins Sacramento** 

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# **Environment Testing America**

## **ANALYTICAL REPORT**

Eurofins Sacramento 880 Riverside Parkway West Sacramento, CA 95605 Tel: (916)373-5600

Laboratory Job ID: 320-86744-1

Client Project/Site: Hunters Point, Parcel E, Phase 2

For:

GES-AIS, LLC 1501 W Fountainhead Parkway Ste 550 Tempe, Arizona 85282

Attn:

Authorized for release by: 4/20/2022 1:58:33 PM

····· Links ·····

Review your project results through

Total Access

**Have a Question?** 



Visit us at: www.eurofinsus.com/Env The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Laboratory Job ID: 320-86744-1

# **Table of Contents**

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## **Definitions/Glossary**

Client: GES-AIS, LLC Job ID: 320-86744-1

Project/Site: Hunters Point, Parcel E, Phase 2

#### **Qualifiers**

Qualifier Description

B Compound was found in the blank and sample.

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

#### **Glossary**

Abbreviation These commonly used abbreviations may or n	ay not be present in this report.
---	-----------------------------------

Example 2 Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

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#### **Case Narrative**

Client: GES-AIS, LLC Job ID: 320-86744-1

Project/Site: Hunters Point, Parcel E, Phase 2

Job ID: 320-86744-1

**Laboratory: Eurofins Sacramento** 

Narrative

Job Narrative 320-86744-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 4/13/2022 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 15.1° C.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Client: GES-AIS, LLC Job ID: 320-86744-1

Project/Site: Hunters Point, Parcel E, Phase 2

<b>Client Sample</b>	ID: GILBANEPM030122-1826
----------------------	--------------------------

## Lab Sample ID: 320-86744-1

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0064	0.0023	0.00034	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.19	0.0046	0.00034	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.026 B	0.0023	0.00032	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	44	0.95	0.95	ug/m3	1		PM10	Total/NA

## Client Sample ID: GILBANETSP030122-1826

## Lab Sample ID: 320-86744-2

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	52.4168	1.0003	1.0003 ug/m3 (Air)		40CFR50 App B	Total/NA

#### Client Sample ID: GILBANEPM030122-1827

## Lab Sample ID: 320-86744-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0052		0.0023	0.00034	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.18		0.0046	0.00034	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.019	В	0.0023	0.00032	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	37		0.96	0.96	ug/m3	1		PM10	Total/NA

## Client Sample ID: GILBANETSP030122-1827

#### Lab Sample ID: 320-86744-4

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	54.3782	0.9642	0.9642 ug/m3 (Air)		40CFR50 App B	Total/NA

## Client Sample ID: GILBANEPM030122-1828

#### Lab Sample ID: 320-86744-5

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0098	0.00070	0.00010	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.11	0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.014 B	0.00070	0.000098	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	41	0.29	0.29	ug/m3	1		PM10	Total/NA

## Client Sample ID: GILBANETSP030122-1828

## Lab Sample ID: 320-86744-6

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	41.9025	0.3023	0.3023 ug/m3 (Air)	1	40CFR50 App B	Total/NA

#### Client Sample ID: GILBANEPM030122-1829

#### Lab Sample ID: 320-86744-7

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D Meth	od	Prep Type
Lead	0.0078	0.00070	0.00010	ug/m3 (Air)	1	6020		Total/NA
Copper	0.18	0.0014	0.00010	ug/m3 (Air)	1	6020		Total/NA
Manganese	0.0097 B	0.00070	0.000098	ug/m3 (Air)	1	6020		Total/NA
Particulate Matter as PM 10	27	0.29	0.29	ug/m3	1	PM10	)	Total/NA

#### Client Sample ID: GILBANETSP030122-1829

## Lab Sample ID: 320-86744-8

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type	
Total Suspended Particulates	32 7770	0 2901	0.2901 ug/m3 (Air)	1	40CFR50 App B	Total/NA	

This Detection Summary does not include radiochemical test results.

4/20/2022

Job ID: 320-86744-1

Client: GES-AIS, LLC Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM030122-1826

Date Collected: 04/07/22 14:15

Date Received: 04/13/22 10:30 Sample Container: Folder/Filter

Lab	Sample	ID:	320-86744-1
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Matrix: Air

Method: 6020 - Metals (ICP/MS) Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 0.0023 Lead 0.00034 ug/m3 (Air) 04/20/22 03:30 04/20/22 07:08 0.0064 Copper 0.19 0.0046 0.00034 ug/m3 (Air) 04/20/22 03:30 04/20/22 07:08 **Manganese** 0.0023 0.00032 ug/m3 (Air) 04/20/22 03:30 04/20/22 07:08 0.026 B **General Chemistry** 

Analyte Particulate Matter as PM 10

Result Qualifier RL **RL Unit** D Prepared Analyzed Dil Fac 0.95 0.95 ug/m3 04/14/22 09:00

Client Sample ID: GILBANETSP030122-1826 Lab Sample ID: 320-86744-2 Date Collected: 04/07/22 14:15 Matrix: Air

Date Received: 04/13/22 10:30 Sample Container: Folder/Filter

**General Chemistry** Analyte Result Qualifier RL **RL Unit** D Prepared Analyzed Dil Fac **Total Suspended Particulates** 1.0003 1.0003 ug/m3 (Air) 04/14/22 09:00 52.4168

Client Sample ID: GILBANEPM030122-1827 Lab Sample ID: 320-86744-3

Date Collected: 04/07/22 14:05 Date Received: 04/13/22 10:30

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0052		0.0023		ug/m3 (Air)	- =		04/20/22 07:18	1
Copper	0.18		0.0046	0.00034	ug/m3 (Air)		04/20/22 03:30	04/20/22 07:18	1
Manganese	0.019	В	0.0023	0.00032	ug/m3 (Air)		04/20/22 03:30	04/20/22 07:18	1

**General Chemistry** Analyte Result Qualifier RL **RL** Unit **Prepared** Analyzed Dil Fac 0.96 04/14/22 09:00 0.96 ug/m3 Particulate Matter as PM 10 37

Lab Sample ID: 320-86744-4 Client Sample ID: GILBANETSP030122-1827

Date Collected: 04/07/22 14:05 Date Received: 04/13/22 10:30

Sample Container: Folder/Filter

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	54.3782		0.9642	0.9642	ug/m3 (Air)			04/14/22 09:00	1

Client Sample ID: GILBANEPM030122-1828 Lab Sample ID: 320-86744-5 Matrix: Air

Date Collected: 04/12/22 07:02 Date Received: 04/13/22 10:30 Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)								
Analyte	Result Qual	lifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0098	0.00070	0.00010	ug/m3 (Air)		04/20/22 03:30	04/20/22 07:21	1
Copper	0.11	0.0014	0.00010	ug/m3 (Air)		04/20/22 03:30	04/20/22 07:21	1
Manganese	0.014 B	0.00070	0.000098	ug/m3 (Air)		04/20/22 03:30	04/20/22 07:21	1

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Matrix: Air

Matrix: Air

## Client Sample Results

Client: GES-AIS, LLC Job ID: 320-86744-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM030122-1828

Lab Sample ID: 320-86744-5 Matrix: Air

Date Collected: 04/12/22 07:02

Date Received: 04/13/22 10:30 Sample Container: Folder/Filter

**General Chemistry** Analyte Result Qualifier Unit RL RL D Prepared Analyzed Dil Fac 0.29 ug/m3 0.29 04/14/22 09:00 Particulate Matter as PM 10 41

Client Sample ID: GILBANETSP030122-1828 Lab Sample ID: 320-86744-6

Date Collected: 04/12/22 07:02

Date Received: 04/13/22 10:30 Sample Container: Folder/Filter

**General Chemistry** Analyte Result Qualifier RL **RL** Unit Prepared Analyzed Dil Fac 41.9025 0.3023 0.3023 ug/m3 (Air) 04/14/22 09:00 **Total Suspended Particulates** 

Client Sample ID: GILBANEPM030122-1829 Lab Sample ID: 320-86744-7

Date Collected: 04/12/22 06:50

Date Received: 04/13/22 10:30 Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS) Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 0.0078 0.00070 0.00010 ug/m3 (Air) 04/20/22 03:30 04/20/22 07:24 Lead 0.0014 0.00010 ug/m3 (Air) 04/20/22 03:30 04/20/22 07:24 Copper 0.18 0.00070 0.000098 ug/m3 (Air) 04/20/22 03:30 04/20/22 07:24 **Manganese** 0.0097 B

**General Chemistry** Analyte Result Qualifier RL **RL Unit** Prepared Analyzed Dil Fac Particulate Matter as PM 10 0.29 0.29 ug/m3 04/14/22 09:00 27

Client Sample ID: GILBANETSP030122-1829 Lab Sample ID: 320-86744-8

Date Collected: 04/12/22 06:50

Date Received: 04/13/22 10:30 Sample Container: Folder/Filter

**General Chemistry** Analyte Result Qualifier RL **RL** Unit Analyzed Dil Fac D Prepared 0.2901 **Total Suspended Particulates** 32.7770 0.2901 ug/m3 (Air) 04/14/22 09:00

Matrix: Air

Matrix: Air

Matrix: Air

## **QC Sample Results**

Client: GES-AIS, LLC Job ID: 320-86744-1

Project/Site: Hunters Point, Parcel E, Phase 2

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-581463/1-B

**Matrix: Air** 

**Analysis Batch: 581517** 

**Client Sample ID: Method Blank** 

**Prep Type: Total/NA** 

**Prep Batch: 581468** 

	1110	141.0							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)	_	04/20/22 03:30	04/20/22 06:42	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		04/20/22 03:30	04/20/22 06:42	1
Manganese	0.000221	J	0.0012	0.00017	ug/m3 (Air)		04/20/22 03:30	04/20/22 06:42	1

MR MR

Lab Sample ID: LCS 320-581463/2-B

Matrix: Air

Analysis Batch: 581517

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

**Prep Batch: 581468** 

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Lead	0.240	0.251		ug/m3 (Air)	_	104	86 - 111	
Copper	0.240	0.229		ug/m3 (Air)		96	85 - 110	
Manganese	0.240	0.239		ug/m3 (Air)		99	88 - 110	
Manganose	0.240	0.200		ag/illo (/ til )		00	00 - 110	

Lab Sample ID: LCSD 320-581463/3-B

**Matrix: Air** 

**Analysis Batch: 581517** 

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA

**Prep Batch: 581468** 

Spike LCSD LCSD %Rec RPD Added Result Qualifier Unit Limits RPD Limit **Analyte** D %Rec Lead 0.240 0.249 ug/m3 (Air) 104 86 - 111 1 15 Copper 0.240 0.240 ug/m3 (Air) 100 85 - 110 5 15 Manganese 0.240 0.250 ug/m3 (Air) 104 88 - 110 15 5

4/20/2022

## **QC Association Summary**

Client: GES-AIS, LLC Job ID: 320-86744-1

Project/Site: Hunters Point, Parcel E, Phase 2

#### **Metals**

#### Pre Prep Batch: 581463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86744-1	GILBANEPM030122-1826	Total/NA	Air	Filter to Air	
320-86744-3	GILBANEPM030122-1827	Total/NA	Air	Filter to Air	
320-86744-5	GILBANEPM030122-1828	Total/NA	Air	Filter to Air	
320-86744-7	GILBANEPM030122-1829	Total/NA	Air	Filter to Air	
MB 320-581463/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-581463/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-581463/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

#### **Prep Batch: 581468**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86744-1	GILBANEPM030122-1826	Total/NA	Air	3050B	581463
320-86744-3	GILBANEPM030122-1827	Total/NA	Air	3050B	581463
320-86744-5	GILBANEPM030122-1828	Total/NA	Air	3050B	581463
320-86744-7	GILBANEPM030122-1829	Total/NA	Air	3050B	581463
MB 320-581463/1-B	Method Blank	Total/NA	Air	3050B	581463
LCS 320-581463/2-B	Lab Control Sample	Total/NA	Air	3050B	581463
LCSD 320-581463/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	581463

#### **Analysis Batch: 581517**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86744-1	GILBANEPM030122-1826	Total/NA	Air	6020	581468
320-86744-3	GILBANEPM030122-1827	Total/NA	Air	6020	581468
320-86744-5	GILBANEPM030122-1828	Total/NA	Air	6020	581468
320-86744-7	GILBANEPM030122-1829	Total/NA	Air	6020	581468
MB 320-581463/1-B	Method Blank	Total/NA	Air	6020	581468
LCS 320-581463/2-B	Lab Control Sample	Total/NA	Air	6020	581468
LCSD 320-581463/3-B	Lab Control Sample Dup	Total/NA	Air	6020	581468

## **General Chemistry**

#### Pre Prep Batch: 580572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86744-2	GILBANETSP030122-1826	Total/NA	Air	Filter to Air	
320-86744-4	GILBANETSP030122-1827	Total/NA	Air	Filter to Air	
320-86744-6	GILBANETSP030122-1828	Total/NA	Air	Filter to Air	
320-86744-8	GILBANETSP030122-1829	Total/NA	Air	Filter to Air	

#### **Analysis Batch: 581498**

Lab Sample ID 320-86744-1	Client Sample ID GILBANEPM030122-1826	Prep Type Total/NA	Matrix Air	Method PM10	Prep Batch
320-86744-3	GILBANEPM030122-1827	Total/NA	Air	PM10	
320-86744-5	GILBANEPM030122-1828	Total/NA	Air	PM10	
320-86744-7	GILBANEPM030122-1829	Total/NA	Air	PM10	

#### **Analysis Batch: 581500**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86744-2	GILBANETSP030122-1826	Total/NA	Air	40CFR50 App B	580572
320-86744-4	GILBANETSP030122-1827	Total/NA	Air	40CFR50 App B	580572
320-86744-6	GILBANETSP030122-1828	Total/NA	Air	40CFR50 App B	580572
320-86744-8	GILBANETSP030122-1829	Total/NA	Air	40CFR50 App B	580572

**Eurofins Sacramento** 

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Job ID: 320-86744-1

Matrix: Air

**Matrix: Air** 

TAL SAC

TAL SAC

Matrix: Air

Lab Sample ID: 320-86744-1

Lab Sample ID: 320-86744-2

Lab Sample ID: 320-86744-4

04/14/22 09:00 DPM

04/15/22 15:04 DPM

581500

580572

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM030122-1826

Date Collected: 04/07/22 14:15 Date Received: 04/13/22 10:30

Client: GES-AIS, LLC

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					581463	04/20/22 01:22	DPM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	581468	04/20/22 03:30	DPM	TAL SAC
Total/NA	Analysis	6020		1			581517	04/20/22 07:08	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0233 g	581498	04/14/22 09:00	DPM	TAL SAC

Client Sample ID: GILBANETSP030122-1826

Date Collected: 04/07/22 14:15

Total/NA

Total/NA

Date Received: 04/13/22 10:30 Dil Initial Final Batch **Batch** Batch Prepared **Prep Type** Type Method **Amount Amount** Number or Analyzed Run **Factor** Analyst Lab 40CFR50 App B

Client Sample ID: GILBANEPM030122-1827

Filter to Air

Analysis

Pre Prep

Lab Sample ID: 320-86744-3 Date Collected: 04/07/22 14:05 Date Received: 04/13/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					581463	04/20/22 01:22	DPM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	581468	04/20/22 03:30	DPM	TAL SAC
Total/NA	Analysis	6020		1			581517	04/20/22 07:18	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0194 g	581498	04/14/22 09:00	DPM	TAL SAC

Client Sample ID: GILBANETSP030122-1827

Date Collected: 04/07/22 14:05

Date Received: 04/13/22 10:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B	-	1			581500	04/14/22 09:00	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					580572	04/15/22 15:04	DPM	TAL SAC

Client Sample ID: GILBANEPM030122-1828

Date Collected: 04/12/22 07:02

Date Received: 04/13/22 10:30

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					581463	04/20/22 01:22	DPM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	581468	04/20/22 03:30	DPM	TAL SAC
Total/NA	Analysis	6020		1	•		581517	04/20/22 07:21	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0698 g	581498	04/14/22 09:00	DPM	TAL SAC

**Eurofins Sacramento** 

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Lab Sample ID: 320-86744-5 Matrix: Air

Matrix: Air

4/20/2022

#### **Lab Chronicle**

Client: GES-AIS, LLC Job ID: 320-86744-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANETSP030122-1828

Lab Sample ID: 320-86744-6 Date Collected: 04/12/22 07:02 Matrix: Air

Date Received: 04/13/22 10:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			581500	04/14/22 09:00	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					580572	04/15/22 15:04	DPM	TAL SAC

Client Sample ID: GILBANEPM030122-1829

Date Collected: 04/12/22 06:50

Date Received: 04/13/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					581463	04/20/22 01:22	DPM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	581468	04/20/22 03:30	DPM	TAL SAC
Total/NA	Analysis	6020		1	·		581517	04/20/22 07:24	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0457 g	581498	04/14/22 09:00	DPM	TAL SAC

Client Sample ID: GILBANETSP030122-1829

Date Collected: 04/12/22 06:50

Date Received: 04/13/22 10:30

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			581500	04/14/22 09:00	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					580572	04/15/22 15:04	DPM	TAL SAC

#### **Laboratory References:**

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Lab Sample ID: 320-86744-7

Lab Sample ID: 320-86744-8

Matrix: Air

Matrix: Air

## **Accreditation/Certification Summary**

Client: GES-AIS, LLC Job ID: 320-86744-1

Project/Site: Hunters Point, Parcel E, Phase 2

## **Laboratory: Eurofins Sacramento**

The accreditations/certifications listed below are applicable to this report.

Authority		ogram	Identification Number	Expiration Date	
ANAB	De	pt. of Defense ELAP	L2468	01-20-24	
Oregon	NE	ELAP	4040	01-29-23	
The following analyte:	s are included in this repo	ort, but the laboratory is not	certified by the governing authority.	This list may include analytes for wh	
The following analytes the agency does not o	•	ort, but the laboratory is not	certified by the governing authority.	This list may include analytes for wh	
• ,	•	ort, but the laboratory is not Matrix	certified by the governing authority.  Analyte	This list may include analytes for whether the state of t	
the agency does not o	offer certification.	,	, , ,		

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## **Method Summary**

Client: GES-AIS, LLC

Project/Site: Hunters Point, Parcel E, Phase 2

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL SAC
40CFR50 App B	Suspended Particulate Matter in Ambient Air	EPA	TAL SAC
PM10	Particulate Matter	40CFR50J	TAL SAC
3050B	Preparation, Metals	SW846	TAL SAC
Filter to Air	Filter to Air volume ratio	None	TAL SAC

#### **Protocol References:**

40CFR50J = 40 CFR Part 50 Appendix J EPA = US Environmental Protection Agency

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### **Laboratory References:**

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

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Job ID: 320-86744-1

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## **Sample Summary**

Client: GES-AIS, LLC Job ID: 320-86744-1

Project/Site: Hunters Point, Parcel E, Phase 2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-86744-1	GILBANEPM030122-1826	Air	04/07/22 14:15	04/13/22 10:30
320-86744-2	GILBANETSP030122-1826	Air	04/07/22 14:15	04/13/22 10:30
320-86744-3	GILBANEPM030122-1827	Air	04/07/22 14:05	04/13/22 10:30
320-86744-4	GILBANETSP030122-1827	Air	04/07/22 14:05	04/13/22 10:30
320-86744-5	GILBANEPM030122-1828	Air	04/12/22 07:02	04/13/22 10:30
320-86744-6	GILBANETSP030122-1828	Air	04/12/22 07:02	04/13/22 10:30
320-86744-7	GILBANEPM030122-1829	Air	04/12/22 06:50	04/13/22 10:30
320-86744-8	GILBANETSP030122-1829	Air	04/12/22 06:50	04/13/22 10:30

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COC # KT041222AIR

Event: Parcel E Phase 2 Air Monitoring April 2022

ator: EUROFINS ENVIRONMENT TESTING NORTHERN CALIFORNIA, LLC (EETN

Ship to: 880 Riverside Parkway, West Sacramento, CA 95605

Labor

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2

Project Number: J310000400

WBS Code: J310000400-016

Gilbane Federal

CHAIN-OF-CUSTODY

RECORD

Brett Womack

2300 Clayton Road, Suite 1050, Concord, CA 94520 bwomack@ges-ais.com

VOLUME: 1722.45 (M3) VOLUME: 1653.84 (M3) VOLUME: 1714.91 (M3) VOLUME: 1723.77 (M3) VOLUME: 524.25 (M3) VOLUME: 522.65 (M3) VOLUME: 518.59 (M3) VOLUME: 499.84 (M3) Comments Cooler Top - Bottom Sample Depth (ft bgs) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Type NZ NZ 8 ž ž Ξ Z Z 1x 250-mL Plastic, 4 Degrees C Code Container/Preservative 1x Envelope, None Location ID AMSE2 AMSE2 AMSE1 AMSE2 AMSE1 AMSE1 AMSE2 Code Matrix Air 4 2Me020 - Air Pb Mn Cu × × × × 92T 1iA - 0030N × × CAAIR - Air PM10 Analytical Test Method Samp ¥ ¥ ¥ ¥ 노 노 In: 노  $\overline{a}$ 1415 1415 1405 1405 0702 0702 0650 0650 Time 04/07/2022 04/07/2022 04/12/2022 04/12/2022 04/12/2022 04/12/2022 04/07/2022 04/07/2022 Event: Parcel E Phase 2 Air Monitoring April 2022 Date 320-86744 Chain of Custody Matrix K < K Ø ⋖ ⋖ 4 ⋖ GILBANETSP030122-1826 GILBANETSP030122-1828 GILBANETSP030122-1829 GILBANETSP030122-1827 GILBANEPM030122-1828 GILBANEPM030122-1829 GILBANEPM030122-1826 GILBANEPM030122-1827 Turnaround Time: 5 days Sample ID Comments: Equipment: 10 9 00 6

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Time Shipping Date / Carrier / Airbill Number
	22/21/h	2091	Fedex	4/12/22	1600	4/12/22 1600 Shipping Date: 4/12/2022/ FedEx 7765 5826 8531
	4/26	0501				
	)					Received by Laboratory: (Signature, Date, Time) & condition
Gilbane.Navy_COC_Field April 12, 2022				15.10		Page 1 of 1

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**List Source: Eurofins Sacramento** 

Client: GES-AIS, LLC Job Number: 320-86744-1

Login Number: 86744 List Number: 1

Creator:

Creator:		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	seal
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal Preservation not required
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

**Eurofins Sacramento** 

4/20/2022

## **ANALYTICAL REPORT**

Eurofins Sacramento 880 Riverside Parkway West Sacramento, CA 95605 Tel: (916)373-5600

Laboratory Job ID: 320-86834-1

Client Project/Site: Hunters Point, Parcel E, Phase 2

For:

GES-AIS, LLC 1501 W Fountainhead Parkway Ste 550 Tempe, Arizona 85282

Attn:

Authorized for release by: 4/26/2022 8:32:56 AM

·····LINKS ······

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**Have a Question?** 



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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Laboratory Job ID: 320-86834-1

Project/Site: Hunters Point, Parcel E, Phase 2

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Eurofins Sacramento 4/26/2022

## **Definitions/Glossary**

Client: GES-AIS, LLC Job ID: 320-86834-1

Project/Site: Hunters Point, Parcel E, Phase 2

## **Glossary**

LOD

LOQ

<u> </u>	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit

Limit of Detection (DoD/DOE)

Limit of Quantitation (DoD/DOE)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent
POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

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#### **Case Narrative**

Client: GES-AIS, LLC Job ID: 320-86834-1

Project/Site: Hunters Point, Parcel E, Phase 2

Job ID: 320-86834-1

**Laboratory: Eurofins Sacramento** 

Narrative

Job Narrative 320-86834-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 4/15/2022 9:50 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 18.8° C.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Client: GES-AIS, LLC Job ID: 320-86834-1

Project/Site: Hunters Point, Parcel E, Phase 2

<b>Client Sample</b>	ID:	GILBANEPM030122-1830
----------------------	-----	----------------------

## Lab Sample ID: 320-86834-1

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac [	Method	Prep Type
Lead	0.0024	0.00069	0.00010	ug/m3 (Air)	1	6020	Total/NA
Copper	0.035	0.0014	0.00010	ug/m3 (Air)	1	6020	Total/NA
Manganese	0.0061	0.00069	0.000097	ug/m3 (Air)	1	6020	Total/NA
Particulate Matter as PM 10	15	0.29	0.29	ug/m3	1	PM10	Total/NA

## Client Sample ID: GILBANETSP030122-1830

#### Lab Sample ID: 320-86834-2

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	29.6102	0.3009	0.3009 ug/m3 (Air)		40CFR50 App B	Total/NA

#### Client Sample ID: GILBANEPM030122-1831

## Lab Sample ID: 320-86834-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0037		0.00069	0.00010	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.13		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0065		0.00069	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	19		0.29	0.29	ug/m3	1		PM10	Total/NA

## Client Sample ID: GILBANETSP030122-1831

#### Lab Sample ID: 320-86834-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	5.3737		0.2889	0.2889	ug/m3 (Air)	1	_	40CFR50 App B	Total/NA

#### Client Sample ID: GILBANEPM030122-1832

#### Lab Sample ID: 320-86834-5

Analyte	Result Qu	ualifier RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0011	0.00071	0.00011	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.027	0.0014	0.00011	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0033	0.00071	0.00010	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	14	0.30	0.30	ug/m3	1		PM10	Total/NA

## Client Sample ID: GILBANETSP030122-1832

## Lab Sample ID: 320-86834-6

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	20.8286	0.3010	0.3010 ug/m3 (Air)	1	40CFR50 App B	Total/NA

#### Client Sample ID: GILBANEPM030122-1833

#### Lab Sample ID: 320-86834-7

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0013	0.00069	0.00010	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.23	0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0032	0.00069	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	14	0.29	0.29	ug/m3	1		PM10	Total/NA

#### Client Sample ID: GILBANETSP030122-1833

## Lab Sample ID: 320-86834-8

Γ							
Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type	
Total Suspended Particulates	21 8205	0.2933	0.2933 ug/m3 (Air)	1 -	40CFR50 App B	Total/NA	

This Detection Summary does not include radiochemical test results.

4/26/2022

Job ID: 320-86834-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM030122-1830

Lab Sample ID: 320-86834-1 Date Collected: 04/13/22 06:58

Matrix: Air

Date Received: 04/15/22 09:50 Sample Container: Folder/Filter

Client: GES-AIS, LLC

Method: 6020 - Metals (ICP/MS)									
Analyte	Result (	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0024		0.00069	0.00010	ug/m3 (Air)		04/22/22 09:15	04/25/22 12:15	1
Copper	0.035		0.0014	0.00010	ug/m3 (Air)		04/22/22 09:15	04/25/22 12:15	1
Manganese	0.0061		0.00069	0.000097	ug/m3 (Air)		04/22/22 09:15	04/25/22 12:15	1

**General Chemistry** Analyte RL Result Qualifier **RL** Unit Prepared Analyzed Dil Fac Particulate Matter as PM 10 0.29 15 0.29 ug/m3 04/20/22 05:25

Lab Sample ID: 320-86834-2 Client Sample ID: GILBANETSP030122-1830

Date Collected: 04/13/22 06:58

Matrix: Air

Date Received: 04/15/22 09:50 Sample Container: Folder/Filter

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	29.6102		0.3009	0.3009	ug/m3 (Air)			04/20/22 05:25	1

Lab Sample ID: 320-86834-3 Client Sample ID: GILBANEPM030122-1831

Date Collected: 04/13/22 06:48

Matrix: Air

Date Received: 04/15/22 09:50 Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS) Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0037	0.00069	0.00010	ug/m3 (Air)	_	04/22/22 09:15	04/25/22 12:18	1
Copper	0.13	0.0014	0.00010	ug/m3 (Air)		04/22/22 09:15	04/25/22 12:18	1
Manganese	0.0065	0.00069	0.000097	ug/m3 (Air)		04/22/22 09:15	04/25/22 12:18	1

Analyte Result Qualifier RL **RL** Unit Analyzed Dil Fac Prepared 0.29 0.29 ug/m3 04/20/22 05:25 **Particulate Matter as PM 10** 19

Client Sample ID: GILBANETSP030122-1831 Lab Sample ID: 320-86834-4

Date Collected: 04/13/22 06:48 Date Received: 04/15/22 09:50

Matrix: Air

Sample Container: Folder/Filter

	General Chemistry									
	Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
l	Total Suspended Particulates	5.3737		0.2889	0.2889	ug/m3 (Air)			04/20/22 05:25	1

Client Sample ID: GILBANEPM030122-1832 Lab Sample ID: 320-86834-5

Date Collected: 04/14/22 07:00 Matrix: Air

Date Received: 04/15/22 09:50 Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0011		0.00071	0.00011	ug/m3 (Air)	_	04/22/22 09:15	04/25/22 12:28	1
Copper	0.027		0.0014	0.00011	ug/m3 (Air)		04/22/22 09:15	04/25/22 12:28	1
Manganese	0.0033		0.00071	0.00010	ug/m3 (Air)		04/22/22 09:15	04/25/22 12:28	1

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## Client Sample Results

Client: GES-AIS, LLC Job ID: 320-86834-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM030122-1832

Lab Sample ID: 320-86834-5

Date Collected: 04/14/22 07:00 Matrix: Air

Date Received: 04/15/22 09:50 Sample Container: Folder/Filter

**General Chemistry** Analyte Result Qualifier Unit RL RL D Prepared Analyzed Dil Fac 0.30 ug/m3 0.30 04/20/22 05:25 Particulate Matter as PM 10 14

Client Sample ID: GILBANETSP030122-1832 Lab Sample ID: 320-86834-6

Date Collected: 04/14/22 07:00

Date Received: 04/15/22 09:50 Sample Container: Folder/Filter

**General Chemistry** Analyte Result Qualifier RL **RL** Unit Prepared Analyzed Dil Fac 0.3010 0.3010 ug/m3 (Air) 04/20/22 05:25 **Total Suspended Particulates** 20.8286

Client Sample ID: GILBANEPM030122-1833 Lab Sample ID: 320-86834-7

Date Collected: 04/14/22 06:53

Date Received: 04/15/22 09:50 Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS) Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 0.0013 0.00069 0.00010 ug/m3 (Air) 04/22/22 09:15 04/25/22 12:31 Lead 0.0014 0.00010 ug/m3 (Air) 04/22/22 09:15 04/25/22 12:31 Copper 0.23 0.00069 0.000097 ug/m3 (Air) 04/22/22 09:15 04/25/22 12:31 **Manganese** 0.0032

**General Chemistry** Analyte Result Qualifier RL **RL** Unit Prepared Analyzed Dil Fac Particulate Matter as PM 10 0.29 0.29 ug/m3 04/20/22 05:25 14

Client Sample ID: GILBANETSP030122-1833 Lab Sample ID: 320-86834-8

Date Collected: 04/14/22 06:53

Date Received: 04/15/22 09:50 Sample Container: Folder/Filter

**General Chemistry** Analyte Result Qualifier RL **RL** Unit Analyzed Dil Fac D Prepared 0.2933 **Total Suspended Particulates** 21.8205 0.2933 ug/m3 (Air) 04/20/22 05:25

Matrix: Air

Matrix: Air

Matrix: Air

# **QC Sample Results**

Client: GES-AIS, LLC Job ID: 320-86834-1

Project/Site: Hunters Point, Parcel E, Phase 2

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-582199/1-B

**Client Sample ID: Method Blank Matrix: Air Prep Type: Total/NA Prep Batch: 582204** Analysis Batch: 582797 MR MR

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)	_	04/22/22 09:15	04/25/22 11:36	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		04/22/22 09:15	04/25/22 11:36	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		04/22/22 09:15	04/25/22 11:36	1

Lab Sample ID: LCS 320-582199/2-B **Client Sample ID: Lab Control Sample Prep Type: Total/NA** Matrix: Air **Analysis Batch: 582797 Prep Batch: 582204** 

		Spike	LCS	LCS				%Rec	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
Lead		0.240	0.232		ug/m3 (Air)	_	97	86 - 111	
Copper		0.240	0.220		ug/m3 (Air)		91	85 - 110	
Manganese		0.240	0.228		ug/m3 (Air)		95	88 - 110	

Lab Sample ID: LCSD 320-582199/3-B **Client Sample ID: Lab Control Sample Dup Matrix: Air** Prep Type: Total/NA Prep Batch: 582204 Analysis Batch: 582797

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Lead	0.240	0.243		ug/m3 (Air)	_	101	86 - 111	5	15
Copper	0.240	0.232		ug/m3 (Air)		97	85 - 110	6	15
Manganese	0.240	0.241		ug/m3 (Air)		100	88 - 110	5	15

4/26/2022

# **QC Association Summary**

Client: GES-AIS, LLC Job ID: 320-86834-1

Project/Site: Hunters Point, Parcel E, Phase 2

## **Metals**

# Pre Prep Batch: 582199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86834-1	GILBANEPM030122-1830	Total/NA	Air	Filter to Air	
320-86834-3	GILBANEPM030122-1831	Total/NA	Air	Filter to Air	
320-86834-5	GILBANEPM030122-1832	Total/NA	Air	Filter to Air	
320-86834-7	GILBANEPM030122-1833	Total/NA	Air	Filter to Air	
MB 320-582199/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-582199/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-582199/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

## **Prep Batch: 582204**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86834-1	GILBANEPM030122-1830	Total/NA	Air	3050B	582199
320-86834-3	GILBANEPM030122-1831	Total/NA	Air	3050B	582199
320-86834-5	GILBANEPM030122-1832	Total/NA	Air	3050B	582199
320-86834-7	GILBANEPM030122-1833	Total/NA	Air	3050B	582199
MB 320-582199/1-B	Method Blank	Total/NA	Air	3050B	582199
LCS 320-582199/2-B	Lab Control Sample	Total/NA	Air	3050B	582199
LCSD 320-582199/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	582199

# **Analysis Batch: 582797**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86834-1	GILBANEPM030122-1830	Total/NA	Air	6020	582204
320-86834-3	GILBANEPM030122-1831	Total/NA	Air	6020	582204
320-86834-5	GILBANEPM030122-1832	Total/NA	Air	6020	582204
320-86834-7	GILBANEPM030122-1833	Total/NA	Air	6020	582204
MB 320-582199/1-B	Method Blank	Total/NA	Air	6020	582204
LCS 320-582199/2-B	Lab Control Sample	Total/NA	Air	6020	582204
LCSD 320-582199/3-B	Lab Control Sample Dup	Total/NA	Air	6020	582204

# **General Chemistry**

# Pre Prep Batch: 580924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86834-2	GILBANETSP030122-1830	Total/NA	Air	Filter to Air	
320-86834-4	GILBANETSP030122-1831	Total/NA	Air	Filter to Air	
320-86834-6	GILBANETSP030122-1832	Total/NA	Air	Filter to Air	
320-86834-8	GILBANETSP030122-1833	Total/NA	Air	Filter to Air	

# **Analysis Batch: 582877**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86834-1	GILBANEPM030122-1830	Total/NA	Air	PM10	
320-86834-3	GILBANEPM030122-1831	Total/NA	Air	PM10	
320-86834-5	GILBANEPM030122-1832	Total/NA	Air	PM10	
320-86834-7	GILBANEPM030122-1833	Total/NA	Air	PM10	

# **Analysis Batch: 582878**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86834-2	GILBANETSP030122-1830	Total/NA	Air	40CFR50 App B	580924
320-86834-4	GILBANETSP030122-1831	Total/NA	Air	40CFR50 App B	580924
320-86834-6	GILBANETSP030122-1832	Total/NA	Air	40CFR50 App B	580924
320-86834-8	GILBANETSP030122-1833	Total/NA	Air	40CFR50 App B	580924

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Project/Site: Hunters Point, Parcel E, Phase 2

Client: GES-AIS, LLC

Client Sample ID: GILBANEPM030122-1830

Date Collected: 04/13/22 06:58 Date Received: 04/15/22 09:50

Lab Sample ID: 320-86834-1

**Matrix: Air** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					582199	04/22/22 09:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	582204	04/22/22 09:15	NIM	TAL SAC
Total/NA	Analysis	6020		1	•		582797	04/25/22 12:15	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0264 g	582877	04/20/22 05:25	JMD	TAL SAC

Client Sample ID: GILBANETSP030122-1830

Date Collected: 04/13/22 06:58 Date Received: 04/15/22 09:50

Lab Sample ID: 320-86834-2

**Matrix: Air** 

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					580924	04/18/22 10:51	DPM	TAL SAC
_Total/NA	Analysis	40CFR50 App B		1			582878	04/20/22 05:25	JMD	TAL SAC

Client Sample ID: GILBANEPM030122-1831

Date Collected: 04/13/22 06:48

Lab Sample ID: 320-86834-3

Lab Sample ID: 320-86834-4

Lab Sample ID: 320-86834-5

Matrix: Air

Matrix: Air

Matrix: Air

Date Received: 04/15/22 09:50

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					582199	04/22/22 09:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	582204	04/22/22 09:15	NIM	TAL SAC
Total/NA	Analysis	6020		1			582797	04/25/22 12:18	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0322 g	582877	04/20/22 05:25	JMD	TAL SAC

Client Sample ID: GILBANETSP030122-1831

Date Collected: 04/13/22 06:48

Date Received: 04/15/22 09:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					580924	04/18/22 10:51	DPM	TAL SAC
Total/NA	Analysis	40CFR50 App B		1			582878	04/20/22 05:25	.IMD	TAL SAC

Client Sample ID: GILBANEPM030122-1832

Date Collected: 04/14/22 07:00

Date Received: 04/15/22 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					582199	04/22/22 09:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	582204	04/22/22 09:15	NIM	TAL SAC
Total/NA	Analysis	6020		1	•		582797	04/25/22 12:28	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0232 g	582877	04/20/22 05:25	JMD	TAL SAC

**Eurofins Sacramento** 

## **Lab Chronicle**

Client: GES-AIS, LLC Job ID: 320-86834-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANETSP030122-1832

Lab Sample ID: 320-86834-6 Date Collected: 04/14/22 07:00 Matrix: Air

Date Received: 04/15/22 09:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					580924	04/18/22 10:51	DPM	TAL SAC
Total/NA	Analysis	40CFR50 App B		1			582878	04/20/22 05:25	JMD	TAL SAC

Client Sample ID: GILBANEPM030122-1833

Lab Sample ID: 320-86834-7 Date Collected: 04/14/22 06:53 Matrix: Air

Date Received: 04/15/22 09:50

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					582199	04/22/22 09:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	582204	04/22/22 09:15	NIM	TAL SAC
Total/NA	Analysis	6020		1			582797	04/25/22 12:31	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0245 g	582877	04/20/22 05:25	JMD	TAL SAC

Client Sample ID: GILBANETSP030122-1833

Lab Sample ID: 320-86834-8 Date Collected: 04/14/22 06:53 Matrix: Air

Date Received: 04/15/22 09:50

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					580924	04/18/22 10:51	DPM	TAL SAC
Total/NA	Analysis	40CFR50 App B		1			582878	04/20/22 05:25	JMD	TAL SAC

**Laboratory References:** 

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# **Accreditation/Certification Summary**

Client: GES-AIS, LLC Job ID: 320-86834-1

Project/Site: Hunters Point, Parcel E, Phase 2

# **Laboratory: Eurofins Sacramento**

The accreditations/certifications listed below are applicable to this report.

Authority	Pro	ogram	Identification Number	Expiration Date 01-20-24	
ANAB	De	pt. of Defense ELAP	L2468		
Oregon	gon NELAP		4040	01-29-23	
,		rt, but the laboratory is not	certified by the governing authority.	This list may include analytes for whi	
the agency does not o	offer certification.	,	, , ,	This list may include analytes for whi	
0 ,		rt, but the laboratory is not o	certified by the governing authority.  Analyte	This list may include analytes for whi	
the agency does not o	offer certification.	,	, , ,		

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# **Method Summary**

Client: GES-AIS, LLC

Project/Site: Hunters Point, Parcel E, Phase 2

Laboratory Method **Method Description** Protocol Metals (ICP/MS) SW846 TAL SAC 6020 Suspended Particulate Matter in Ambient Air EPA TAL SAC 40CFR50 App B PM10 Particulate Matter 40CFR50J TAL SAC SW846 3050B Preparation, Metals TAL SAC Filter to Air Filter to Air volume ratio None TAL SAC

#### **Protocol References:**

40CFR50J = 40 CFR Part 50 Appendix J EPA = US Environmental Protection Agency

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### **Laboratory References:**

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

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Job ID: 320-86834-1

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# **Sample Summary**

Client: GES-AIS, LLC Job ID: 320-86834-1

Project/Site: Hunters Point, Parcel E, Phase 2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-86834-1	GILBANEPM030122-1830	Air	04/13/22 06:58	04/15/22 09:50
320-86834-2	GILBANETSP030122-1830	Air	04/13/22 06:58	04/15/22 09:50
320-86834-3	GILBANEPM030122-1831	Air	04/13/22 06:48	04/15/22 09:50
320-86834-4	GILBANETSP030122-1831	Air	04/13/22 06:48	04/15/22 09:50
320-86834-5	GILBANEPM030122-1832	Air	04/14/22 07:00	04/15/22 09:50
320-86834-6	GILBANETSP030122-1832	Air	04/14/22 07:00	04/15/22 09:50
320-86834-7	GILBANEPM030122-1833	Air	04/14/22 06:53	04/15/22 09:50
320-86834-8	GILBANETSP030122-1833	Air	04/14/22 06:53	04/15/22 09:50

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COC # KT041422AIR

Gilbane Federal

CHAIN-OF-CUSTODY

RECORD

2300 Clayton Road, Suite 1050, Concord, CA 94520 bwomack@ges-ais.com Brett Womack

Page 1 of 1 VOLUME: 1661.18 (M3) VOLUME: 1734.83 (M3) VOLUME: 1704.82 (M3) VOLUME: 1739.71 (M3) VOLUME: 1731.45 (M3) VOLUME: 1730.65 (M3) VOLUME: 1684.17 (M3) Received by Laboratory: (Signature, Date, Time) & condition VOLUME: 1661.59 (M3) Laboratory: EUROFINS ENVIRONMENT TESTING NORTHERN CALIFORNIA, LLC (EETN Event: Parcel E Phase 2 Air Shipping Date: 4/14/2022/ FedEx 7765 7301 6745 Shipping Date / Carrier / Airbill Number Cooler Top - Bottom 0.00 Depth (ft bgs) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Sample Type ž Ξ Ξ ź ź ž ž ž 1x 250-mL Plastic, 4 Degrees C Container/Preservative 000 8:50 Time 1x Envelope, None Ship to: 880 Riverside Parkway, West Sacramento, CA 95605 Location 1D AMSE2 AMSE2 AMSE1 AMSE2 AMSE1 AMSE2 AMSE1 AMSE1 Code Matrix Air 4/14/22  $\boldsymbol{\beta}$ **«** Code Date Received by: (Signature) 204-15.22 SW6020 - Air Pb Mn Cu × × × × **4ST 1iA - 0030N** × × × × talex CAAIR - Air PM10 × Analytical Test Method Samp ¥ ¥ 호 Ϋ́ Init ¥ Ϋ́ Ϋ́ 노 NO TIMES ON SOMPLES 0658 0658 0648 0648 0200 0200 0653 0653 Time Time 600 Project Name: Hunters Point Shipyard, Parcel E RA Phase 2 77/4/22 04/13/2022 04/13/2022 04/13/2022 04/14/2022 04/14/2022 04/14/2022 04/14/2022 04/13/2022 Event: Parcel E Phase 2 Air Monitoring April 2022 Date Date 320-86834 Chain of Custody Matrix × ⋖ ⋖ ⋖ ⋖ Ø V ⋖ GILBANETSP030122-1830 GILBANETSP030122-1832 GILBANETSP030122-1833 GILBANETSP030122-1831 GILBANEPM030122-1830 GILBANEPM030122-1832 GILBANEPM030122-1833 Project Number: J310000400 GILBANEPM030122-1831 Relinquished by: (Signature) WBS Code: J310000400-016 Turnaround Time: 5 days Gilbane.Navy\_COC\_Field April 14, 2022 Sample ID Comments: Equipment: 00 2 10 9 6

# **Login Sample Receipt Checklist**

Client: GES-AIS, LLC Job Number: 320-86834-1

Login Number: 86834 List Number: 1

Creator:

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	SEAL
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested	True	

True

True

True

N/A

2

**List Source: Eurofins Sacramento** 

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MS/MSDs

<6mm (1/4").

Multiphasic samples are not present.

Residual Chlorine Checked.

Samples do not require splitting or compositing.

Containers requiring zero headspace have no headspace or bubble is

# **Environment Testing America**

# **ANALYTICAL REPORT**

Eurofins Sacramento 880 Riverside Parkway West Sacramento, CA 95605 Tel: (916)373-5600

Laboratory Job ID: 320-86947-1

Client Project/Site: Hunters Point, Parcel E, Phase 2

For:

GES-AIS, LLC 1501 W Fountainhead Parkway Ste 550 Tempe, Arizona 85282

Attn:

Authorized for release by: 4/27/2022 6:07:53 PM

..... Links ......

Review your project results through

Total Access

**Have a Question?** 



Visit us at: www.eurofinsus.com/Env The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Client: GES-AIS, LLC

Project/Site: Hunters Point, Parcel E, Phase 2

Laboratory Job ID: 320-86947-1

# **Table of Contents**

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# **Definitions/Glossary**

Client: GES-AIS, LLC Job ID: 320-86947-1

Project/Site: Hunters Point, Parcel E, Phase 2

### **Qualifiers**

M	eta	Is

Qualifier Qualifier Description

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

## **Glossary**

Abbreviation	These commonly used abbreviations may or may not be present in this report.
--------------	---

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent
POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

## **Case Narrative**

Client: GES-AIS, LLC

Job ID: 320-86947-1 Project/Site: Hunters Point, Parcel E, Phase 2

Job ID: 320-86947-1

**Laboratory: Eurofins Sacramento** 

**Narrative** 

**Job Narrative** 320-86947-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 4/20/2022 9:55 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 19.7° C.

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client: GES-AIS, LLC Job ID: 320-86947-1

Project/Site: Hunters Point, Parcel E, Phase 2

Particulate Matter as PM 10

Client Sample	ID: GILBANEPM030122-1834	Į.
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Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0017	J	0.0023	0.00035	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.042		0.0046	0.00035	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0038		0.0023	0.00032	ug/m3 (Air)	1		6020	Total/NA

0.96 ug/m3

# Client Sample ID: GILBANETSP030122-1834

Γ	- Amalusta	Result Qualifier	DI	RL Unit	Dil Fac D Method	Dran Time
ı	Analyte	Result Qualifier	KL	RL Unit	Dil Fac D Method	Prep Type
	Total Suspended Particulates	12.0586	1.0049	1.0049 ug/m3 (Air)	1 40CFR50 App	B Total/NA

# Client Sample ID: GILBANEPM030122-1835

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0015	J	0.0023	0.00035	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.13		0.0046	0.00035	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0021	J	0.0023	0.00032	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	8.4		0.96	0.96	ug/m3	1		PM10	Total/NA

# Client Sample ID: GILBANETSP030122-1835

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	13.8416		0.9612	0.9612	ug/m3 (Air)	1	_	40CFR50 App B	Total/NA

# Client Sample ID: GILBANEPM030122-1836

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0021	0.00070	0.00011	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.040	0.0014	0.00011	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0062	0.00070	0.000098	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	14	0.29	0.29	ug/m3	1		PM10	Total/NA

# Client Sample ID: GILBANETSP030122-1836

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	20.9058	0.3056	0.3056 ug/m3 (Air)		40CFR50 App B	Total/NA

# Client Sample ID: GILBANEPM030122-1837

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.00090	0.00070	0.00011	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.044	0.0014	0.00011	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0022	0.00070	0.000098	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	8.9	0.29	0.29	ug/m3	1		PM10	Total/NA

# Client Sample ID: GILBANETSP030122-1837

<u> </u>				· · · · · · · · · · · · · · · · · · ·	
Analyte	Result Qualifier	RL	RL Unit	Dil Fac D Method	Prep Type
Total Suspended Particulates	12.8472	0.2907	0.2907 ug/m3 (Air)	1 40CFR50 App E	3 Total/NA

This Detection Summary does not include radiochemical test results.

4/27/2022

Lab Sample ID: 320-86947-1

Lab Sample ID: 320-86947-2

Lab Sample ID: 320-86947-3

Lab Sample ID: 320-86947-4

Lab Sample ID: 320-86947-5

Lab Sample ID: 320-86947-6

Lab Sample ID: 320-86947-7

Lab Sample ID: 320-86947-8

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Job ID: 320-86947-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM030122-1834

Date Collected: 04/14/22 14:15

Lab Sample ID: 320-86947-1

Matrix: Air

Date Received: 04/20/22 09:55 Sample Container: Folder/Filter

Client: GES-AIS, LLC

Meth	od: 6020 - Metals (ICP/MS)								
Analyt	e Resu	ılt Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.001	7 J	0.0023	0.00035	ug/m3 (Air)		04/26/22 10:13	04/26/22 15:09	1
Coppe	er 0.04	2	0.0046	0.00035	ug/m3 (Air)		04/26/22 10:13	04/26/22 15:09	1
Manga	nnese 0.003	8	0.0023	0.00032	ug/m3 (Air)		04/26/22 10:13	04/26/22 15:09	1
_									

- 1	manganoos	0.0000				3				-
	General Chemistry Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Particulate Matter as PM 10	11		0.96	0.96	ug/m3	_		04/22/22 09:00	1

Client Sample ID: GILBANETSP030122-1834 Lab Sample ID: 320-86947-2
Date Collected: 04/14/22 14:15

Matrix: Air

Date Received: 04/20/22 09:55 Sample Container: Folder/Filter

General ChemistryAnalyteResultQualifierRLRLUnitDPreparedAnalyzedDil FacTotal Suspended Particulates12.05861.00491.0049ug/m3 (Air)DPrepared04/22/22 09:001

Client Sample ID: GILBANEPM030122-1835

Date Collected: 04/14/22 14:09

Lab Sample ID: 320-86947-3

Matrix: Air

Date Collected: 04/14/22 14:09 Date Received: 04/20/22 09:55

Date Received: 04/20/22 09:55
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0015	J	0.0023	0.00035	ug/m3 (Air)		04/26/22 10:13	04/26/22 15:25	1
Copper	0.13		0.0046	0.00035	ug/m3 (Air)		04/26/22 10:13	04/26/22 15:25	1
Manganese	0.0021	J	0.0023	0.00032	ug/m3 (Air)		04/26/22 10:13	04/26/22 15:25	1
General Chemistry					. ,				

Client Sample ID: GILBANETSP030122-1835

Lab Sample ID: 320-86947-4

Date Collected: 04/14/22 14:09

Matrix: Air

Date Collected: 04/14/22 14:09 Date Received: 04/20/22 09:55 Sample Container: Folder/Filter

General Chemistry									
Analyte	Result C	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	13 8416		0.9612	0.9612	ug/m3 (Air)			04/22/22 09:00	1

Client Sample ID: GILBANEPM030122-1836 Lab Sample ID: 320-86947-5

Date Collected: 04/19/22 06:36 Date Received: 04/20/22 09:55 Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0021	0.00070	0.00011	ug/m3 (Air)		04/26/22 10:13	04/26/22 15:29	1
Copper	0.040	0.0014	0.00011	ug/m3 (Air)		04/26/22 10:13	04/26/22 15:29	1
Manganese	0.0062	0.00070	0.000098	ug/m3 (Air)		04/26/22 10:13	04/26/22 15:29	1

**Eurofins Sacramento** 

Matrix: Air

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# Client Sample Results

Client: GES-AIS, LLC Job ID: 320-86947-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM030122-1836

Lab Sample ID: 320-86947-5

Date Collected: 04/19/22 06:36 Matrix: Air

Date Received: 04/20/22 09:55 Sample Container: Folder/Filter

**General Chemistry** Analyte Result Qualifier Unit RL RL D Prepared Analyzed Dil Fac 0.29 ug/m3 0.29 04/22/22 09:00 Particulate Matter as PM 10 14

Client Sample ID: GILBANETSP030122-1836 Lab Sample ID: 320-86947-6

Date Collected: 04/19/22 06:36

Date Received: 04/20/22 09:55 Sample Container: Folder/Filter

**General Chemistry** Analyte Result Qualifier RL **RL** Unit Prepared Analyzed Dil Fac 0.3056 0.3056 ug/m3 (Air) 04/22/22 09:00 **Total Suspended Particulates** 20.9058

Client Sample ID: GILBANEPM030122-1837 Lab Sample ID: 320-86947-7

Date Collected: 04/19/22 06:26

Date Received: 04/20/22 09:55 Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS) Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 0.00070 0.00011 ug/m3 (Air) 04/26/22 10:13 04/26/22 15:32 Lead 0.00090 0.00011 ug/m3 (Air) 0.0014 04/26/22 10:13 04/26/22 15:32 Copper 0.044 0.00070 0.000098 ug/m3 (Air) 04/26/22 10:13 04/26/22 15:32 **Manganese** 0.0022

**General Chemistry** Analyte Result Qualifier RL Prepared **RL** Unit Analyzed Dil Fac Particulate Matter as PM 10 0.29 0.29 ug/m3 04/22/22 09:00 8.9

Client Sample ID: GILBANETSP030122-1837 Lab Sample ID: 320-86947-8

Date Collected: 04/19/22 06:26

Date Received: 04/20/22 09:55 Sample Container: Folder/Filter

**General Chemistry** Analyte Result Qualifier RL **RL** Unit Analyzed Dil Fac D Prepared 0.2907 **Total Suspended Particulates** 12.8472 0.2907 ug/m3 (Air) 04/22/22 09:00

Matrix: Air

Matrix: Air

Matrix: Air

# **QC Sample Results**

Client: GES-AIS, LLC Job ID: 320-86947-1

Project/Site: Hunters Point, Parcel E, Phase 2

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-583031/1-B

**Matrix: Air** 

**Analysis Batch: 583309** 

**Client Sample ID: Method Blank** 

**Prep Type: Total/NA** 

Prep Batch: 583040

	1410	1410							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		04/26/22 10:13	04/26/22 14:59	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		04/26/22 10:13	04/26/22 14:59	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		04/26/22 10:13	04/26/22 14:59	1

MD MD

Lab Sample ID: LCS 320-583031/2-B

Matrix: Air

Analysis Batch: 583309

**Client Sample ID: Lab Control Sample Prep Type: Total/NA** 

**Prep Batch: 583040** 

%Rec

	Opine	LOO	LUU			/01 <b>1CC</b>	
Analyte	Added	Result	Qualifier	Unit	D %Re	c Limits	
Lead	0.240	0.234		ug/m3 (Air)	9	86 - 111	
Copper	0.240	0.220		ug/m3 (Air)	9	1 85 - 110	
Manganese	0.240	0.227		ug/m3 (Air)	9	5 88 - 110	

LCS LCS

Snike

Lab Sample ID: LCSD 320-583031/3-B

**Matrix: Air** 

Analysis Batch: 583309

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA

**Prep Batch: 583040** 

Spike LCSD LCSD %Rec RPD Added Result Qualifier Unit Limits RPD Limit **Analyte** D %Rec Lead 0.240 0.248 ug/m3 (Air) 103 86 - 111 6 15 Copper 0.240 0.233 ug/m3 (Air) 97 85 - 110 6 15 Manganese 0.240 0.238 ug/m3 (Air) 99 88 - 110 5 15

4/27/2022

# **QC Association Summary**

Client: GES-AIS, LLC Job ID: 320-86947-1

Project/Site: Hunters Point, Parcel E, Phase 2

## **Metals**

# Pre Prep Batch: 583031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86947-1	GILBANEPM030122-1834	Total/NA	Air	Filter to Air	
320-86947-3	GILBANEPM030122-1835	Total/NA	Air	Filter to Air	
320-86947-5	GILBANEPM030122-1836	Total/NA	Air	Filter to Air	
320-86947-7	GILBANEPM030122-1837	Total/NA	Air	Filter to Air	
MB 320-583031/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-583031/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-583031/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

## **Prep Batch: 583040**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86947-1	GILBANEPM030122-1834	Total/NA	Air	3050B	583031
320-86947-3	GILBANEPM030122-1835	Total/NA	Air	3050B	583031
320-86947-5	GILBANEPM030122-1836	Total/NA	Air	3050B	583031
320-86947-7	GILBANEPM030122-1837	Total/NA	Air	3050B	583031
MB 320-583031/1-B	Method Blank	Total/NA	Air	3050B	583031
LCS 320-583031/2-B	Lab Control Sample	Total/NA	Air	3050B	583031
LCSD 320-583031/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	583031

# **Analysis Batch: 583309**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86947-1	GILBANEPM030122-1834	Total/NA	Air	6020	583040
320-86947-3	GILBANEPM030122-1835	Total/NA	Air	6020	583040
320-86947-5	GILBANEPM030122-1836	Total/NA	Air	6020	583040
320-86947-7	GILBANEPM030122-1837	Total/NA	Air	6020	583040
MB 320-583031/1-B	Method Blank	Total/NA	Air	6020	583040
LCS 320-583031/2-B	Lab Control Sample	Total/NA	Air	6020	583040
LCSD 320-583031/3-B	Lab Control Sample Dup	Total/NA	Air	6020	583040

# **General Chemistry**

# Pre Prep Batch: 583181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86947-2	GILBANETSP030122-1834	Total/NA	Air	Filter to Air	
320-86947-4	GILBANETSP030122-1835	Total/NA	Air	Filter to Air	
320-86947-6	GILBANETSP030122-1836	Total/NA	Air	Filter to Air	
320-86947-8	GILBANETSP030122-1837	Total/NA	Air	Filter to Air	

# **Analysis Batch: 583469**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86947-1	GILBANEPM030122-1834	Total/NA	Air	PM10	<u> </u>
320-86947-3	GILBANEPM030122-1835	Total/NA	Air	PM10	
320-86947-5	GILBANEPM030122-1836	Total/NA	Air	PM10	
320-86947-7	GILBANEPM030122-1837	Total/NA	Air	PM10	

# **Analysis Batch: 583478**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-86947-2	GILBANETSP030122-1834	Total/NA	Air	40CFR50 App B	583181
320-86947-4	GILBANETSP030122-1835	Total/NA	Air	40CFR50 App B	583181
320-86947-6	GILBANETSP030122-1836	Total/NA	Air	40CFR50 App B	583181
320-86947-8	GILBANETSP030122-1837	Total/NA	Air	40CFR50 App B	583181

**Eurofins Sacramento** 

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Job ID: 320-86947-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM030122-1834

Date Collected: 04/14/22 14:15 Date Received: 04/20/22 09:55

Client: GES-AIS, LLC

Lab Sample ID: 320-86947-1

Matrix: Air

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					583031	04/26/22 09:45	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	583040	04/26/22 10:13	NIM	TAL SAC
Total/NA	Analysis	6020		1			583309	04/26/22 15:09	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0056 g	583469	04/22/22 09:00	JMD	TAL SAC

Client Sample ID: GILBANETSP030122-1834

Date Collected: 04/14/22 14:15 Date Received: 04/20/22 09:55

Lab Sample ID: 320-86947-2 Matrix: Air

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			583478	04/22/22 09:00	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					583181	04/26/22 16:39	JMD	TAL SAC

Client Sample ID: GILBANEPM030122-1835

Date Collected: 04/14/22 14:09 Date Received: 04/20/22 09:55

Lab Sample ID: 320-86947-3 Matrix: Air

Batch Batch Dil Initial Final Batch Prepared Method **Prep Type** Type Run **Factor** Amount Amount Number or Analyzed Analyst Lab Total/NA Pre Prep Filter to Air 583031 04/26/22 09:45 NIM TAL SAC Total/NA 3050B 583040 Prep 100 mL 04/26/22 10:13 NIM TAL SAC 0.08333 Sample Total/NA Analysis 6020 TAL SAC 583309 04/26/22 15:25 JMD Total/NA Analysis PM10 0 g 0.0044 g 583469 04/22/22 09:00 JMD TAL SAC

Client Sample ID: GILBANETSP030122-1835

Date Collected: 04/14/22 14:09

Date Received: 04/20/22 09:55

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B	-	1			583478	04/22/22 09:00	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					583181	04/26/22 16:39	JMD	TAL SAC

Client Sample ID: GILBANEPM030122-1836

Date Collected: 04/19/22 06:36

Date Received: 04/20/22 09:55

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					583031	04/26/22 09:45	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	583040	04/26/22 10:13	NIM	TAL SAC
Total/NA	Analysis	6020		1	·		583309	04/26/22 15:29	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0239 g	583469	04/22/22 09:00	JMD	TAL SAC

**Eurofins Sacramento** 

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Lab Sample ID: 320-86947-4 Matrix: Air

Lab Sample ID: 320-86947-5 Matrix: Air

## **Lab Chronicle**

Client: GES-AIS, LLC Job ID: 320-86947-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANETSP030122-1836

Lab Sample ID: 320-86947-6 Date Collected: 04/19/22 06:36 Matrix: Air

Date Received: 04/20/22 09:55

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			583478	04/22/22 09:00	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					583181	04/26/22 16:39	JMD	TAL SAC

Client Sample ID: GILBANEPM030122-1837

Date Collected: 04/19/22 06:26

Date Received: 04/20/22 09:55

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					583031	04/26/22 09:45	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	583040	04/26/22 10:13	NIM	TAL SAC
Total/NA	Analysis	6020		1			583309	04/26/22 15:32	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0152 g	583469	04/22/22 09:00	JMD	TAL SAC

Client Sample ID: GILBANETSP030122-1837

Date Collected: 04/19/22 06:26

Date Received: 04/20/22 09:55

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			583478	04/22/22 09:00	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					583181	04/26/22 16:39	JMD	TAL SAC

#### **Laboratory References:**

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Matrix: Air

Matrix: Air

Lab Sample ID: 320-86947-7

Lab Sample ID: 320-86947-8

# **Accreditation/Certification Summary**

Client: GES-AIS, LLC Job ID: 320-86947-1

Project/Site: Hunters Point, Parcel E, Phase 2

# **Laboratory: Eurofins Sacramento**

The accreditations/certifications listed below are applicable to this report.

Authority	Pro	ogram	Identification Number	Expiration Date
ANAB	De	pt. of Defense ELAP	L2468	01-20-24
Oregon	NE	ELAP	4040	01-29-23
The following analytes	s are included in this repo	rt, but the laboratory is not (	certified by the governing authority.	This list may include analytes for which
the agency does not	offer certification.	,	, , ,	This list may include analytes for which
0 ,	•	rt, but the laboratory is not o	certified by the governing authority.  Analyte	This list may include analytes for which
the agency does not	offer certification.	,	, , ,	

# **Method Summary**

Client: GES-AIS, LLC

Project/Site: Hunters Point, Parcel E, Phase 2

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL SAC
40CFR50 App B	Suspended Particulate Matter in Ambient Air	EPA	TAL SAC
PM10	Particulate Matter	40CFR50J	TAL SAC
3050B	Preparation, Metals	SW846	TAL SAC
Filter to Air	Filter to Air volume ratio	None	TAL SAC

#### **Protocol References:**

40CFR50J = 40 CFR Part 50 Appendix J EPA = US Environmental Protection Agency

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### **Laboratory References:**

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

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Job ID: 320-86947-1

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# **Sample Summary**

Client: GES-AIS, LLC Job ID: 320-86947-1

Project/Site: Hunters Point, Parcel E, Phase 2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-86947-1	GILBANEPM030122-1834	Air	04/14/22 14:15	04/20/22 09:55
320-86947-2	GILBANETSP030122-1834	Air	04/14/22 14:15	04/20/22 09:55
320-86947-3	GILBANEPM030122-1835	Air	04/14/22 14:09	04/20/22 09:55
320-86947-4	GILBANETSP030122-1835	Air	04/14/22 14:09	04/20/22 09:55
320-86947-5	GILBANEPM030122-1836	Air	04/19/22 06:36	04/20/22 09:55
320-86947-6	GILBANETSP030122-1836	Air	04/19/22 06:36	04/20/22 09:55
320-86947-7	GILBANEPM030122-1837	Air	04/19/22 06:26	04/20/22 09:55
320-86947-8	GILBANETSP030122-1837	Air	04/19/22 06:26	04/20/22 09:55

Gilbane Federal **Brett Womack** 

CHAIN-OF-CUSTODY

RECORD

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2

2300 Clayton Road, Suite 1050, Concord, CA 94520 bwomack@ges-ais.com

COC # KT041922AIR

Page 1 of 1 VOLUME: 1713.15 (M3) VOLUME: 1635.91 (M3) VOLUME: 1706.18 (M3) VOLUME: 1720.22 (M3) Received by Laboratory: (Signature, Date, Time) & condition VOLUME: 520.96 (M3) VOLUME: 520.17 (M3) VOLUME: 519.74 (M3) VOLUME: 497.57 (M3) Laboratory: EUROFINS ENVIRONMENT TESTING NORTHERN CALIFORNIA, LLC (EETN Event: Parcel E Phase 2 Air Shipping Date: 4/19/2022/FedEx 7766 0818 8274 Shipping Date / Carrier / Airbill Number Cooler Top - Bottom 0.00 0.00 00.0 0.00 0.00 0.00 0.00 0.00 Depth (ft bgs) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 320-86947 Chain of Custody Sample Type N2 22 Z NZ NZ ž Ξ Z 1930 1x 250-ml. Plastic, 4 Degrees C Container/Preservative 0955 Time 89 1x Envelope, None Ship to: 880 Riverside Parkway, West Sacramento, CA 95605 Location ID AMSE2 AMSE2 AMSE2 AMSE1 AMSE1 AMSE2 **AMSE1 AMSE1** Code Matrix Ar 22/61/4 4.20.72 4 Code Date Received by: (Signature) SW6020 - Air Pb Mn Cu × **927 11A - 0030V** × Fedex CAAIR - Air PM10 Analytical Test Method Samp Init. ¥ ¥ 노 ¥ 노 노 Ϋ́ 꿏 1600 1415 1415 1409 1409 0636 9636 0626 9626 Time Time 4/19/22 04/14/2022 04/14/2022 04/19/2022 04/19/2022 04/19/2022 04/19/2022 04/14/2022 04/14/2022 Event: Parcel E Phase 2 Air Monitoring April 2022 Date Matrix 4 K Ø 4 ⋖ ⋖ Þ × GILBANETSP030122-1835 GILBANETSP030122-1834 GILBANETSP030122-1836 GILBANETSP030122-1837 GILBANEPM030122-1836 GILBANEPM030122-1834 GILBANEPM030122-1835 GILBANEPM030122-1837 Relinquished by: (Signature) Project Number: J310000400 WBS Code: J310000400-016 Turnaround Time: 5 days Gilbane.Navy\_COC\_Field April 19, 2022 Sample ID Comments: Equipment: S 00 6

# **Login Sample Receipt Checklist**

Client: GES-AIS, LLC Job Number: 320-86947-1

Creator

Login Number: 86947 **List Source: Eurofins Sacramento** List Number: 1

Creator		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	SEAL
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# **Environment Testing America**

# **ANALYTICAL REPORT**

Eurofins Sacramento 880 Riverside Parkway West Sacramento, CA 95605 Tel: (916)373-5600

Laboratory Job ID: 320-87141-1

Client Project/Site: Hunters Point, Parcel E, Phase 2

For:

GES-AIS, LLC 1501 W Fountainhead Parkway Ste 550 Tempe, Arizona 85282

Attn:

Authorized for release by: 5/2/2022 6:41:01 PM

----- LINKS -----

Review your project results through

**Have a Question?** 



Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Laboratory Job ID: 320-87141-1

Project/Site: Hunters Point, Parcel E, Phase 2

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# **Definitions/Glossary**

Client: GES-AIS, LLC Job ID: 320-87141-1

Project/Site: Hunters Point, Parcel E, Phase 2

### **Qualifiers**

B 4		
M	ΔТЗ	ıc
	Clu	

Qualifier Qualifier Description

B Compound was found in the blank and sample.

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

## **Glossary**

Abbreviation	These commonly	y used abbreviations may	y or may not be	present in this report.
--------------	----------------	--------------------------	-----------------	-------------------------

Example 2 Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

**Eurofins Sacramento** 

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## **Case Narrative**

Client: GES-AIS, LLC Job ID: 320-87141-1

Project/Site: Hunters Point, Parcel E, Phase 2

Job ID: 320-87141-1

**Laboratory: Eurofins Sacramento** 

Narrative

Job Narrative 320-87141-1

### Comments

No additional comments.

#### Receipt

The samples were received on 4/25/2022 12:00 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 21.1° C.

#### Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Client: GES-AIS, LLC Job ID: 320-87141-1

Project/Site: Hunters Point, Parcel E, Phase 2

# Lab Sample ID: 320-87141-1

Analyte	Result Qu	ualifier RL	MDL	Unit	Dil Fac	D Method	Prep Type
Lead	0.0023	0.00068	0.00010	ug/m3 (Air)	1	6020	Total/NA
Copper	0.025 B	0.0014	0.00010	ug/m3 (Air)	1	6020	Total/NA
Manganese	0.0053	0.00068	0.000095	ug/m3 (Air)	1	6020	Total/NA
Particulate Matter as PM 10	16	0.28	0.28	ug/m3	1	PM10	Total/NA

# Client Sample ID: GILBANETSP030122-1838

# Lab Sample ID: 320-87141-2

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	18.7019	0.2959	0.2959 ug/m3 (Air)	1	40CFR50 App B	Total/NA

# Client Sample ID: GILBANEPM030122-1839

# Lab Sample ID: 320-87141-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0014		0.00068	0.00010	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.018	В	0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0023		0.00068	0.000096	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	9.1		0.29	0.29	ug/m3	1		PM10	Total/NA

# Client Sample ID: GILBANETSP030122-1839

# Lab Sample ID: 320-87141-4

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	14.0193	0.2815	0.2815 ug/m3 (Air)	1	40CFR50 App B	Total/NA

# Client Sample ID: GILBANEPM030122-1840

# Lab Sample ID: 320-87141-5

Analyte	Result Qu	ualifier RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0019	0.00068	0.00010	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.026 B	0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0096	0.00068	0.000095	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	25	0.28	0.28	ug/m3	1		PM10	Total/NA

# Client Sample ID: GILBANETSP030122-1840

# Lab Sample ID: 320-87141-6

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	48.2790	0.6507	0.6507 ug/m3 (Air)	1	40CFR50 App B	Total/NA

# Client Sample ID: GILBANEPM030122-1841

# Lab Sample ID: 320-87141-7

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D M	ethod	Prep Type
Lead	0.00052 J	0.00069	0.00010	ug/m3 (Air)	1	_ 60	020	Total/NA
Copper	0.0093 B	0.0014	0.00010	ug/m3 (Air)	1	60	020	Total/NA
Manganese	0.0018	0.00069	0.000097	ug/m3 (Air)	1	60	020	Total/NA
Particulate Matter as PM 10	11	0.29	0.29	ug/m3	1	P	M10	Total/NA

# Client Sample ID: GILBANETSP030122-1841

# Lab Sample ID: 320-87141-8

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type	
Total Suspended Particulates	19 8412	0.2867	0.2867 ug/m3 (Air)		40CFR50 App B	Total/NA	•

This Detection Summary does not include radiochemical test results.

5/2/2022

Job ID: 320-87141-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM030122-1838

Lab Sample ID: 320-87141-1 Date Collected: 04/20/22 06:51

Matrix: Air

Date Received: 04/25/22 12:00 Sample Container: Folder/Filter

Client: GES-AIS, LLC

Method: 6020 - Metals (ICP/MS)							
Analyte	Result Qualifier	RL	MDL Unit	t D	Prepared	Analyzed	Dil Fac
Lead	0.0023	0.00068	0.00010 ug/n	n3 (Air)	04/29/22 08:25	04/29/22 15:32	1
Copper	0.025 B	0.0014	0.00010 ug/n	n3 (Air)	04/29/22 08:25	04/29/22 15:32	1
Manganese	0.0053	0.00068	0.000095 ug/n	n3 (Air)	04/29/22 08:25	04/29/22 15:32	1

**General Chemistry** Analyte RL Result Qualifier **RL** Unit Prepared Analyzed Dil Fac Particulate Matter as PM 10 0.28 16 0.28 ug/m3 04/26/22 09:00

Client Sample ID: GILBANETSP030122-1838 Lab Sample ID: 320-87141-2

Date Collected: 04/20/22 06:51 Date Received: 04/25/22 12:00 Matrix: Air

Sample Container: Folder/Filter

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	18.7019		0.2959	0.2959	ug/m3 (Air)	_		04/26/22 09:00	1

Lab Sample ID: 320-87141-3 Client Sample ID: GILBANEPM030122-1839 **Matrix: Air** 

Date Collected: 04/20/22 06:45

Date Received: 04/25/22 12:00 Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS) Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0014		0.00068	0.00010	ug/m3 (Air)	_	04/29/22 08:25	04/29/22 15:35	1
Copper	0.018	В	0.0014	0.00010	ug/m3 (Air)		04/29/22 08:25	04/29/22 15:35	1
Manganese	0.0023		0.00068	0.000096	ug/m3 (Air)		04/29/22 08:25	04/29/22 15:35	1

Analyte Result Qualifier RL **RL** Unit Prepared Analyzed Dil Fac 0.29 0.29 ug/m3 04/26/22 09:00 **Particulate Matter as PM 10** 9.1

Client Sample ID: GILBANETSP030122-1839 Lab Sample ID: 320-87141-4

Date Collected: 04/20/22 06:45 Matrix: Air

Date Received: 04/25/22 12:00 Sample Container: Folder/Filter

General Chemistry								
Analyte	Result Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	14.0193	0.2815	0.2815	ug/m3 (Air)	_		04/26/22 09:00	1

Client Sample ID: GILBANEPM030122-1840 Lab Sample ID: 320-87141-5 Matrix: Air

Date Collected: 04/21/22 07:04 Date Received: 04/25/22 12:00 Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0019		0.00068	0.00010	ug/m3 (Air)		04/29/22 08:25	04/29/22 15:39	1
Copper	0.026	В	0.0014	0.00010	ug/m3 (Air)		04/29/22 08:25	04/29/22 15:39	1
Manganese	0.0096		0.00068	0.000095	ug/m3 (Air)		04/29/22 08:25	04/29/22 15:39	1

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# Client Sample Results

Client: GES-AIS, LLC Job ID: 320-87141-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM030122-1840

Lab Sample ID: 320-87141-5 Matrix: Air

Date Collected: 04/21/22 07:04 Date Received: 04/25/22 12:00

Sample Container: Folder/Filter

**General Chemistry** Analyte Unit Result Qualifier RL RL D Prepared Analyzed Dil Fac 0.28 ug/m3 0.28 04/26/22 09:00 Particulate Matter as PM 10 25

Client Sample ID: GILBANETSP030122-1840 Lab Sample ID: 320-87141-6

Date Collected: 04/21/22 07:04

Date Received: 04/25/22 12:00 Sample Container: Folder/Filter

**General Chemistry** Analyte Result Qualifier RL **RL** Unit Prepared Analyzed Dil Fac 48.2790 0.6507 0.6507 ug/m3 (Air) 04/26/22 09:00 **Total Suspended Particulates** 

Client Sample ID: GILBANEPM030122-1841 Lab Sample ID: 320-87141-7

Date Collected: 04/21/22 06:49

Date Received: 04/25/22 12:00 Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS) Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 0.00052 J 0.00069 0.00010 ug/m3 (Air) 04/29/22 08:25 04/29/22 15:42 Lead 0.0014 0.00010 ug/m3 (Air) 04/29/22 08:25 04/29/22 15:42 Copper 0.0093 B 0.00069 0.000097 ug/m3 (Air) 04/29/22 08:25 04/29/22 15:42 **Manganese** 0.0018

**General Chemistry** Analyte Result Qualifier RL Prepared **RL** Unit Analyzed Dil Fac Particulate Matter as PM 10 0.29 0.29 ug/m3 04/26/22 09:00 11

Client Sample ID: GILBANETSP030122-1841 Lab Sample ID: 320-87141-8

Date Collected: 04/21/22 06:49

Date Received: 04/25/22 12:00 Sample Container: Folder/Filter

**General Chemistry** Analyte Result Qualifier RL **RL** Unit Analyzed Dil Fac D Prepared 0.2867 **Total Suspended Particulates** 19.8412 0.2867 ug/m3 (Air) 04/26/22 09:00

Matrix: Air

Matrix: Air

Matrix: Air

# **QC Sample Results**

Client: GES-AIS, LLC Job ID: 320-87141-1

Project/Site: Hunters Point, Parcel E, Phase 2

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-583911/1-B

**Matrix: Air** 

**Analysis Batch: 584524** 

**Client Sample ID: Method Blank** 

**Prep Type: Total/NA** 

**Prep Batch: 583918** 

		1410							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)	_	04/29/22 08:25	04/29/22 15:03	1
Copper	0.000532	J	0.0024	0.00018	ug/m3 (Air)		04/29/22 08:25	04/29/22 15:03	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		04/29/22 08:25	04/29/22 15:03	1

MR MR

Lab Sample ID: LCS 320-583911/2-B

Matrix: Air

Analysis Batch: 584524

**Client Sample ID: Lab Control Sample Prep Type: Total/NA** 

**Prep Batch: 583918** 

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Lead	0.240	0.234		ug/m3 (Air)	_	97	86 - 111	
Copper	0.240	0.229		ug/m3 (Air)		95	85 - 110	
Manganese	0.240	0.234		ug/m3 (Air)		98	88 - 110	

Lab Sample ID: LCSD 320-583911/3-B

**Matrix: Air** 

Analysis Batch: 584524

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA

**Prep Batch: 583918** 

LCSD LCSD Spike %Rec RPD Added Result Qualifier Unit D %Rec Limits RPD Limit **Analyte** Lead 0.240 0.240 ug/m3 (Air) 100 86 - 111 3 15 Copper 0.240 0.233 ug/m3 (Air) 97 85 - 110 2 15 Manganese 0.240 0.238 ug/m3 (Air) 99 88 - 110 2 15

5/2/2022

# **QC Association Summary**

Client: GES-AIS, LLC Job ID: 320-87141-1

Project/Site: Hunters Point, Parcel E, Phase 2

## **Metals**

# Pre Prep Batch: 583911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87141-1	GILBANEPM030122-1838	Total/NA	Air	Filter to Air	
320-87141-3	GILBANEPM030122-1839	Total/NA	Air	Filter to Air	
320-87141-5	GILBANEPM030122-1840	Total/NA	Air	Filter to Air	
320-87141-7	GILBANEPM030122-1841	Total/NA	Air	Filter to Air	
MB 320-583911/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-583911/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-583911/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

## **Prep Batch: 583918**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87141-1	GILBANEPM030122-1838	Total/NA	Air	3050B	583911
320-87141-3	GILBANEPM030122-1839	Total/NA	Air	3050B	583911
320-87141-5	GILBANEPM030122-1840	Total/NA	Air	3050B	583911
320-87141-7	GILBANEPM030122-1841	Total/NA	Air	3050B	583911
MB 320-583911/1-B	Method Blank	Total/NA	Air	3050B	583911
LCS 320-583911/2-B	Lab Control Sample	Total/NA	Air	3050B	583911
LCSD 320-583911/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	583911

# **Analysis Batch: 584524**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87141-1	GILBANEPM030122-1838	Total/NA	Air	6020	583918
320-87141-3	GILBANEPM030122-1839	Total/NA	Air	6020	583918
320-87141-5	GILBANEPM030122-1840	Total/NA	Air	6020	583918
320-87141-7	GILBANEPM030122-1841	Total/NA	Air	6020	583918
MB 320-583911/1-B	Method Blank	Total/NA	Air	6020	583918
LCS 320-583911/2-B	Lab Control Sample	Total/NA	Air	6020	583918
LCSD 320-583911/3-B	Lab Control Sample Dup	Total/NA	Air	6020	583918

# **General Chemistry**

# Pre Prep Batch: 583181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87141-2	GILBANETSP030122-1838	Total/NA	Air	Filter to Air	
320-87141-4	GILBANETSP030122-1839	Total/NA	Air	Filter to Air	
320-87141-6	GILBANETSP030122-1840	Total/NA	Air	Filter to Air	
320-87141-8	GILBANETSP030122-1841	Total/NA	Air	Filter to Air	

# **Analysis Batch: 584672**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87141-1	GILBANEPM030122-1838	Total/NA	Air	PM10	_ <u> </u>
320-87141-3	GILBANEPM030122-1839	Total/NA	Air	PM10	
320-87141-5	GILBANEPM030122-1840	Total/NA	Air	PM10	
320-87141-7	GILBANEPM030122-1841	Total/NA	Air	PM10	

# Analysis Batch: 584674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87141-2	GILBANETSP030122-1838	Total/NA	Air	40CFR50 App B	583181
320-87141-4	GILBANETSP030122-1839	Total/NA	Air	40CFR50 App B	583181
320-87141-6	GILBANETSP030122-1840	Total/NA	Air	40CFR50 App B	583181
320-87141-8	GILBANETSP030122-1841	Total/NA	Air	40CFR50 App B	583181

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Job ID: 320-87141-1

Client: GES-AIS, LLC

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM030122-1838

Date Collected: 04/20/22 06:51 Date Received: 04/25/22 12:00 Lab Sample ID: 320-87141-1

Matrix: Air

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					583911	04/29/22 08:10	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	583918	04/29/22 08:25	NIM	TAL SAC
Total/NA	Analysis	6020		1			584524	04/29/22 15:32	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0288 g	584672	04/26/22 09:00	JMD	TAL SAC

Client Sample ID: GILBANETSP030122-1838

Date Collected: 04/20/22 06:51 Date Received: 04/25/22 12:00 Lab Sample ID: 320-87141-2 Matrix: Air

		Batch	Batch		Dil	Initial	Final	Batch	Prepared		
	Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
	Total/NA	Analysis	40CFR50 App B		1			584674	04/26/22 09:00	JMD	TAL SAC
L	_Total/NA	Pre Prep	Filter to Air					583181	04/26/22 16:41	JMD	TAL SAC

Client Sample ID: GILBANEPM030122-1839

Date Collected: 04/20/22 06:45 Date Received: 04/25/22 12:00

Lab Sample ID: 320-87141-3 Matrix: Air

Batch Batch Dil Initial Final Batch Prepared Method **Prep Type** Type Run **Factor** Amount Amount Number or Analyzed Analyst Lab Total/NA Pre Prep Filter to Air 583911 04/29/22 08:10 NIM TAL SAC Total/NA 3050B Prep 100 mL 583918 04/29/22 08:25 NIM TAL SAC 0.08333 Sample Total/NA Analysis 6020 584524 TAL SAC 04/29/22 15:35 JMD Total/NA Analysis PM10 0 g 0.0159 g 584672 04/26/22 09:00 JMD TAL SAC

Client Sample ID: GILBANETSP030122-1839

Date Collected: 04/20/22 06:45

Date Received: 04/25/22 12:00

_	Batch	Batch	_	Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			584674	04/26/22 09:00	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					583181	04/26/22 16:41	JMD	TAL SAC

Client Sample ID: GILBANEPM030122-1840

Date Collected: 04/21/22 07:04

Date Received: 04/25/22 12:00

<del>_</del>	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air				-	583911	04/29/22 08:10	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	583918	04/29/22 08:25	NIM	TAL SAC
Total/NA	Analysis	6020		1	•		584524	04/29/22 15:39	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0447 g	584672	04/26/22 09:00	JMD	TAL SAC

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Lab Sample ID: 320-87141-4

Matrix: Air

## **Lab Chronicle**

Client: GES-AIS, LLC Job ID: 320-87141-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANETSP030122-1840

Lab Sample ID: 320-87141-6 Date Collected: 04/21/22 07:04 Matrix: Air

Date Received: 04/25/22 12:00

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			584674	04/26/22 09:00	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					583181	04/26/22 16:41	JMD	TAL SAC

Client Sample ID: GILBANEPM030122-1841

Date Collected: 04/21/22 06:49

Date Received: 04/25/22 12:00

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					583911	04/29/22 08:10	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	583918	04/29/22 08:25	NIM	TAL SAC
Total/NA	Analysis	6020		1			584524	04/29/22 15:42	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0183 g	584672	04/26/22 09:00	JMD	TAL SAC

Client Sample ID: GILBANETSP030122-1841

Date Collected: 04/21/22 06:49

Date Received: 04/25/22 12:00

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			584674	04/26/22 09:00	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					583181	04/26/22 16:41	JMD	TAL SAC

**Laboratory References:** 

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Matrix: Air

Matrix: Air

Lab Sample ID: 320-87141-7

Lab Sample ID: 320-87141-8

# **Accreditation/Certification Summary**

Client: GES-AIS, LLC Job ID: 320-87141-1

Project/Site: Hunters Point, Parcel E, Phase 2

## **Laboratory: Eurofins Sacramento**

The accreditations/certifications listed below are applicable to this report.

Authority	Pro	ogram	Identification Number	Expiration Date
ANAB	De	ept. of Defense ELAP	L2468	01-20-24
Oregon	NE	ELAP	4040	01-29-23
The following analytes	s are included in this repo	ort, but the laboratory is not	certified by the governing authority.	This list may include analytes for wh
The following analytes the agency does not o	•	ort, but the laboratory is not	certified by the governing authority.	This list may include analytes for wh
	•	ort, but the laboratory is not o	certified by the governing authority.  Analyte	This list may include analytes for wh
the agency does not o	offer certification.	,	, , ,	

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# **Method Summary**

Client: GES-AIS, LLC

Project/Site: Hunters Point, Parcel E, Phase 2

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL SAC
40CFR50 App B	Suspended Particulate Matter in Ambient Air	EPA	TAL SAC
PM10	Particulate Matter	40CFR50J	TAL SAC
3050B	Preparation, Metals	SW846	TAL SAC
Filter to Air	Filter to Air volume ratio	None	TAL SAC

### **Protocol References:**

40CFR50J = 40 CFR Part 50 Appendix J EPA = US Environmental Protection Agency

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### **Laboratory References:**

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Job ID: 320-87141-1

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# **Sample Summary**

Client: GES-AIS, LLC Job ID: 320-87141-1

Project/Site: Hunters Point, Parcel E, Phase 2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-87141-1	GILBANEPM030122-1838	Air	04/20/22 06:51	04/25/22 12:00
320-87141-2	GILBANETSP030122-1838	Air	04/20/22 06:51	04/25/22 12:00
320-87141-3	GILBANEPM030122-1839	Air	04/20/22 06:45	04/25/22 12:00
320-87141-4	GILBANETSP030122-1839	Air	04/20/22 06:45	04/25/22 12:00
320-87141-5	GILBANEPM030122-1840	Air	04/21/22 07:04	04/25/22 12:00
320-87141-6	GILBANETSP030122-1840	Air	04/21/22 07:04	04/25/22 12:00
320-87141-7	GILBANEPM030122-1841	Air	04/21/22 06:49	04/25/22 12:00
320-87141-8	GILBANETSP030122-1841	Air	04/21/22 06:49	04/25/22 12:00

Laboratory: EUROFINS ENVIRONMENT TESTING NORTHERN CALIFORNIA, LLC (EETN | Event: Parcel E Phase 2 Air | Monitoring April 2022

Ship to: 880 Riverside Parkway, West Sacramento, CA 95605

13 14

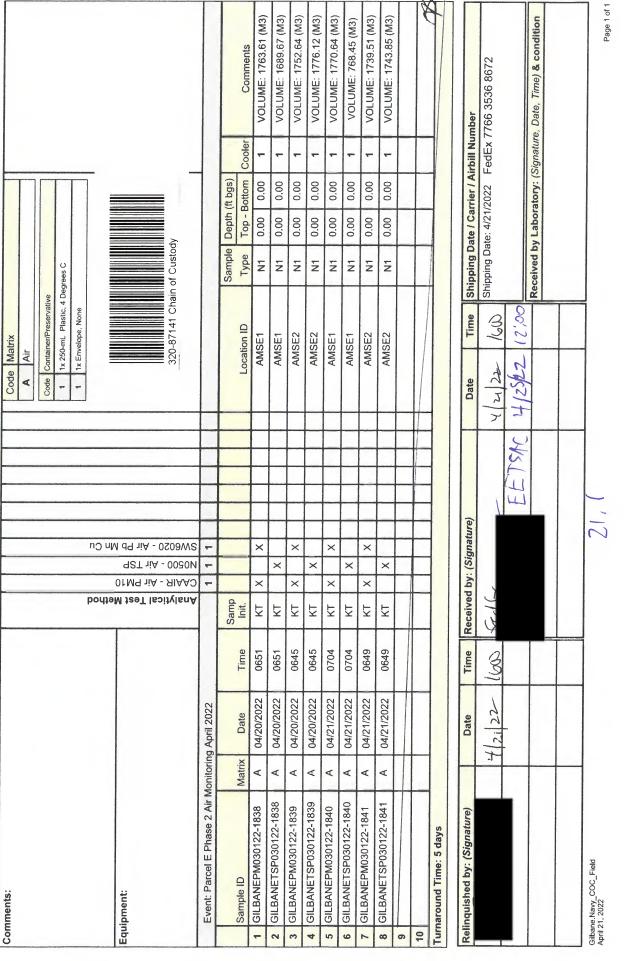
CHAIN-OF-CUSTODY

RECORD

Gilbane Federal Brett Womack 2300 Clayton Road, Suite 1050, Concord, CA 94520 bwomack@ges-ais.com

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2

Project Number: J310000400 WBS Code: J310000400-016



# **Login Sample Receipt Checklist**

Client: GES-AIS, LLC Job Number: 320-87141-1

Login Number: 87141

Creator

**List Source: Eurofins Sacramento** List Number: 1

Creator		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	Seal
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal Preservation not required
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# **ANALYTICAL REPORT**

Eurofins Sacramento 880 Riverside Parkway West Sacramento, CA 95605 Tel: (916)373-5600

Laboratory Job ID: 320-87209-1

Client Project/Site: Hunters Point, Parcel E, Phase 2

For:

GES-AIS, LLC 1501 W Fountainhead Parkway Ste 550 Tempe, Arizona 85282

Attn:

Authorized for release by: 5/4/2022 6:31:09 PM

·····LINKS ······

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Laboratory Job ID: 320-87209-1

Project/Site: Hunters Point, Parcel E, Phase 2

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### **Definitions/Glossary**

Client: GES-AIS, LLC Job ID: 320-87209-1

Project/Site: Hunters Point, Parcel E, Phase 2

### **Qualifiers**

M	eta	Is

Qualifier Qualifier Description

B Compound was found in the blank and sample.

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

### **Glossary**

Abbreviation	These commonly	used abbreviations ma	or may not be	present in this report.
--------------	----------------	-----------------------	---------------	-------------------------

Example 2 Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

**Eurofins Sacramento** 

### **Case Narrative**

Client: GES-AIS, LLC

Project/Site: Hunters Point, Parcel E, Phase 2

Job ID: 320-87209-1

Job ID: 320-87209-1

**Laboratory: Eurofins Sacramento** 

Narrative

Job Narrative 320-87209-1

### Comments

No additional comments.

### Receipt

The samples were received on 4/27/2022 9:35 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 18.4° C.

### Metals

Method PM10: A second weight was not taken during the initial tare weight process. The value of the first weight was entered in the 2nd tare weight column on the particulate spreadsheet for calculation purposes.

GILBANEPM031522-1876 (320-87209-5) and GILBANEPM031522-1877 (320-87209-7)

Method 40CFR50 App B: A second weight was not taken during the initial tare weight process. The value of the first weight was entered in the 2nd tare weight column on the particulate spreadsheet for calculation purposes.

GILBANETSP031522-1876 (320-87209-6) and GILBANETSP031522-1877 (320-87209-8)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client: GES-AIS, LLC Job ID: 320-87209-1

Project/Site: Hunters Point, Parcel E, Phase 2

# Lab Sample ID: 320-87209-1

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0013 J	0.0021	0.00031	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.065	0.0041	0.00031	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0027 B	0.0021	0.00029	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	14	0.86	0.86	ug/m3	1		PM10	Total/NA

### Client Sample ID: GILBANETSP030122-1842

### Lab Sample ID: 320-87209-2

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	4.9620	0.8861	0.8861 ug/m3 (Air)	1 -	40CFR50 App B	Total/NA

### Client Sample ID: GILBANEPM030122-1843

### Lab Sample ID: 320-87209-3

Analyte	Result Qual	lifier RL	MDL	Unit	Dil Fac	D Meth	od Prep Type
Lead	0.00087 J	0.0020	0.00031	ug/m3 (Air)	1	6020	Total/NA
Copper	0.023	0.0041	0.00031	ug/m3 (Air)	1	6020	Total/NA
Manganese	0.0018 JB	0.0020	0.00029	ug/m3 (Air)	1	6020	Total/NA
Particulate Matter as PM 10	9.0	0.85	0.85	ug/m3	1	PM10	Total/NA

### Client Sample ID: GILBANETSP030122-1843

### Lab Sample ID: 320-87209-4

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	12.1832	0.8461	0.8461 ug/m3 (Air)	1	40CFR50 App B	Total/NA

### Client Sample ID: GILBANEPM031522-1876

### Lab Sample ID: 320-87209-5

Analyte	Result Qualifier	RL	MDL U	nit	Dil Fac	D Method	Prep Type
Lead	0.0041	0.00070	0.00010 ug	g/m3 (Air)	1	6020	Total/NA
Copper	0.052	0.0014	0.00010 ug	g/m3 (Air)	1	6020	Total/NA
Manganese	0.0098 B	0.00070	0.000097 ug	g/m3 (Air)	1	6020	Total/NA
Particulate Matter as PM 10	35	0.29	0.29 ug	g/m3	1	PM10	Total/NA

### Client Sample ID: GILBANETSP031522-1876

### Lab Sample ID: 320-87209-6

	Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
ı	Total Suspended Particulates	36.8703	0.2998	0.2998 ug/m3 (Air)	1	40CFR50 App B	Total/NA

### Client Sample ID: GILBANEPM031522-1877

### Lab Sample ID: 320-87209-7

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0053	0.00070	0.00010	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.016	0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0084 B	0.00070	0.000098	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	27	0.29	0.29	ua/m3	1		PM10	Total/NA

### Client Sample ID: GILBANETSP031522-1877

### Lab Sample ID: 320-87209-8

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type	
Total Suspended Particulates	49 5680	0.2909	0.2909 ug/m3 (Air)		40CFR50 App B	Total/NA	

This Detection Summary does not include radiochemical test results.

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Job ID: 320-87209-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM030122-1842

Lab Sample ID: 320-87209-1 Date Collected: 04/21/22 15:03

Matrix: Air

04/29/22 10:15

Date Received: 04/27/22 09:35 Sample Container: Folder/Filter

Client: GES-AIS, LLC

Method: 6020 - Metals (ICP/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0013	J	0.0021	0.00031	ug/m3 (Air)		05/04/22 08:23	05/04/22 13:39	1
Copper	0.065		0.0041	0.00031	ug/m3 (Air)		05/04/22 08:23	05/04/22 13:39	1
Manganese	0.0027	В	0.0021	0.00029	ug/m3 (Air)		05/04/22 08:23	05/04/22 13:39	1

**General Chemistry** Analyte RL Result Qualifier **RL Unit** Prepared Analyzed Dil Fac 0.86 Particulate Matter as PM 10 14 0.86 ug/m3 04/29/22 10:15

Lab Sample ID: 320-87209-2 Client Sample ID: GILBANETSP030122-1842 Date Collected: 04/21/22 15:03 Matrix: Air

Date Received: 04/27/22 09:35

Sample Container: Folder/Filter **General Chemistry** Analyte Result Qualifier RL **RL Unit** Prepared Analyzed Dil Fac

0.8861 Client Sample ID: GILBANEPM030122-1843 Lab Sample ID: 320-87209-3

0.8861 ug/m3 (Air)

4.9620

Date Collected: 04/21/22 15:08 **Matrix: Air** 

Date Received: 04/27/22 09:35 Sample Container: Folder/Filter

**Total Suspended Particulates** 

Method: 6020 - Metals	(ICP/MS)							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00087 J	0.0020	0.00031	ug/m3 (Air)	_	05/04/22 08:23	05/04/22 13:55	1
Copper	0.023	0.0041	0.00031	ug/m3 (Air)		05/04/22 08:23	05/04/22 13:55	1
Manganese	0.0018 JB	0.0020	0.00029	ug/m3 (Air)		05/04/22 08:23	05/04/22 13:55	1

**General Chemistry** Analyte Result Qualifier RL **RL** Unit Prepared Analyzed Dil Fac 0.85 0.85 ug/m3 04/29/22 10:15 **Particulate Matter as PM 10** 9.0

Client Sample ID: GILBANETSP030122-1843 Lab Sample ID: 320-87209-4

Date Collected: 04/21/22 15:08 Date Received: 04/27/22 09:35

Sample Container: Folder/Filter

General Chemistry								
Analyte	Result Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	12.1832	0.8461	0.8461	ug/m3 (Air)			04/29/22 10:15	1

Client Sample ID: GILBANEPM031522-1876 Lab Sample ID: 320-87209-5

Date Collected: 04/26/22 06:58 Matrix: Air

Date Received: 04/27/22 09:35 Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/N	NS)							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0041	0.00070	0.00010	ug/m3 (Air)		05/04/22 08:23	05/04/22 13:59	1
Copper	0.052	0.0014	0.00010	ug/m3 (Air)		05/04/22 08:23	05/04/22 13:59	1
Manganese	0.0098 B	0.00070	0.000097	ug/m3 (Air)		05/04/22 08:23	05/04/22 13:59	1

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Matrix: Air

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### Client Sample Results

Client: GES-AIS, LLC Job ID: 320-87209-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM031522-1876

Lab Sample ID: 320-87209-5 Date Collected: 04/26/22 06:58

Matrix: Air

Date Received: 04/27/22 09:35 Sample Container: Folder/Filter

**General Chemistry** Analyte Unit Result Qualifier RL RL D Prepared Analyzed Dil Fac 0.29 ug/m3 0.29 04/29/22 10:15 Particulate Matter as PM 10 35

Client Sample ID: GILBANETSP031522-1876 Lab Sample ID: 320-87209-6

Date Collected: 04/26/22 06:58

Matrix: Air

Date Received: 04/27/22 09:35 Sample Container: Folder/Filter

**General Chemistry** Analyte Result Qualifier RL **RL** Unit Prepared Analyzed Dil Fac 0.2998 0.2998 ug/m3 (Air) 04/29/22 10:15 **Total Suspended Particulates** 36.8703

Client Sample ID: GILBANEPM031522-1877 Lab Sample ID: 320-87209-7

Date Collected: 04/26/22 06:46

Matrix: Air

Date Received: 04/27/22 09:35 Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS) Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 0.00070 0.00010 ug/m3 (Air) 05/04/22 08:23 05/04/22 14:02 Lead 0.0053 0.0014 0.00010 ug/m3 (Air) 05/04/22 08:23 05/04/22 14:02 Copper 0.016 0.00070 0.000098 ug/m3 (Air) 05/04/22 08:23 05/04/22 14:02 **Manganese** 0.0084 B

**General Chemistry** Analyte Result Qualifier RL **RL** Unit Prepared Analyzed Dil Fac Particulate Matter as PM 10 0.29 0.29 ug/m3 04/29/22 10:15 27

Client Sample ID: GILBANETSP031522-1877 Lab Sample ID: 320-87209-8

Date Collected: 04/26/22 06:46 Matrix: Air

Date Received: 04/27/22 09:35 Sample Container: Folder/Filter

**General Chemistry** Analyte Result Qualifier RL **RL** Unit Analyzed Dil Fac D Prepared 0.2909 **Total Suspended Particulates** 49.5680 0.2909 ug/m3 (Air) 04/29/22 10:15

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## **QC Sample Results**

Client: GES-AIS, LLC Job ID: 320-87209-1

Project/Site: Hunters Point, Parcel E, Phase 2

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-585065/1-B

Analysis Batch: 585253

Matrix: Air

Prep Type: Total/NA
Prep Batch: 585071

MB MB

Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac

Analyte	Result Qual	lifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND ND	0.0012	0.00018	ug/m3 (Air)	_	05/04/22 08:23	05/04/22 13:29	1
Copper	ND	0.0024	0.00018	ug/m3 (Air)		05/04/22 08:23	05/04/22 13:29	1
Manganese	0.000248 J	0.0012	0.00017	ug/m3 (Air)		05/04/22 08:23	05/04/22 13:29	1

Lab Sample ID: LCS 320-585065/2-B

Matrix: Air

Analysis Batch: 585253

Spike LCS LCS

Analyte Added Result Qualifier Unit D %Rec Limits

Lead 0.240 0.242 ug/m3 (Air) 86 - 111 101 0.240 0.232 ug/m3 (Air) 97 85 - 110 Copper 0.240 0.239 ug/m3 (Air) 99 88 - 110 Manganese

Lab Sample ID: LCSD 320-585065/3-B

Matrix: Air

Prep Type: Total/NA

Analysis Batch: 585253

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 585071

Spike LCSD LCSD %Rec **RPD** Added Result Qualifier Unit Limits RPD Limit **Analyte** D %Rec Lead 0.240 0.249 ug/m3 (Air) 104 86 - 111 3 15 Copper 0.240 0.235 ug/m3 (Air) 98 85 - 110 1 15 0.240 0.244 ug/m3 (Air) 102 88 - 110 2 Manganese 15

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**Client Sample ID: Method Blank** 

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# **QC Association Summary**

Client: GES-AIS, LLC Job ID: 320-87209-1

Project/Site: Hunters Point, Parcel E, Phase 2

### **Metals**

### Pre Prep Batch: 585065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87209-1	GILBANEPM030122-1842	Total/NA	Air	Filter to Air	
320-87209-3	GILBANEPM030122-1843	Total/NA	Air	Filter to Air	
320-87209-5	GILBANEPM031522-1876	Total/NA	Air	Filter to Air	
320-87209-7	GILBANEPM031522-1877	Total/NA	Air	Filter to Air	
MB 320-585065/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-585065/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-585065/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

### **Prep Batch: 585071**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87209-1	GILBANEPM030122-1842	Total/NA	Air	3050B	585065
320-87209-3	GILBANEPM030122-1843	Total/NA	Air	3050B	585065
320-87209-5	GILBANEPM031522-1876	Total/NA	Air	3050B	585065
320-87209-7	GILBANEPM031522-1877	Total/NA	Air	3050B	585065
MB 320-585065/1-B	Method Blank	Total/NA	Air	3050B	585065
LCS 320-585065/2-B	Lab Control Sample	Total/NA	Air	3050B	585065
LCSD 320-585065/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	585065

### **Analysis Batch: 585253**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87209-1	GILBANEPM030122-1842	Total/NA	Air	6020	585071
320-87209-3	GILBANEPM030122-1843	Total/NA	Air	6020	585071
320-87209-5	GILBANEPM031522-1876	Total/NA	Air	6020	585071
320-87209-7	GILBANEPM031522-1877	Total/NA	Air	6020	585071
MB 320-585065/1-B	Method Blank	Total/NA	Air	6020	585071
LCS 320-585065/2-B	Lab Control Sample	Total/NA	Air	6020	585071
LCSD 320-585065/3-B	Lab Control Sample Dup	Total/NA	Air	6020	585071

## **General Chemistry**

### Pre Prep Batch: 585155

Lab Sample ID 320-87209-2	Client Sample ID GILBANETSP030122-1842	Prep Type Total/NA	Matrix Air	Method Filter to Air	Prep Batch
320-87209-4	GILBANETSP030122-1843	Total/NA	Air	Filter to Air	
320-87209-6	GILBANETSP031522-1876	Total/NA	Air	Filter to Air	
320-87209-8	GILBANETSP031522-1877	Total/NA	Air	Filter to Air	

### **Analysis Batch: 585290**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87209-1	GILBANEPM030122-1842	Total/NA	Air	PM10	
320-87209-3	GILBANEPM030122-1843	Total/NA	Air	PM10	
320-87209-5	GILBANEPM031522-1876	Total/NA	Air	PM10	
320-87209-7	GILBANEPM031522-1877	Total/NA	Air	PM10	

### **Analysis Batch: 585308**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87209-2	GILBANETSP030122-1842	Total/NA	Air	40CFR50 App B	585155
320-87209-4	GILBANETSP030122-1843	Total/NA	Air	40CFR50 App B	585155
320-87209-6	GILBANETSP031522-1876	Total/NA	Air	40CFR50 App B	585155
320-87209-8	GILBANETSP031522-1877	Total/NA	Air	40CFR50 App B	585155

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Job ID: 320-87209-1

Client: GES-AIS, LLC

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM030122-1842

Date Collected: 04/21/22 15:03 Date Received: 04/27/22 09:35

Lab Sample ID: 320-87209-1

Matrix: Air

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					585065	05/04/22 07:56	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	585071	05/04/22 08:23	NIM	TAL SAC
Total/NA	Analysis	6020		1			585253	05/04/22 13:39	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0080 g	585290	04/29/22 10:15	JMD	TAL SAC

Client Sample ID: GILBANETSP030122-1842

Date Collected: 04/21/22 15:03 Date Received: 04/27/22 09:35

Lab Sample ID: 320-87209-2 Matrix: Air

Lab Sample ID: 320-87209-3

Lab Sample ID: 320-87209-4

Lab Sample ID: 320-87209-5

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			585308	04/29/22 10:15	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					585155	05/04/22 11:29	JMD	TAL SAC

Client Sample ID: GILBANEPM030122-1843

Date Collected: 04/21/22 15:08 Matrix: Air Date Received: 04/27/22 09:35

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					585065	05/04/22 07:56	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	585071	05/04/22 08:23	NIM	TAL SAC
Total/NA	Analysis	6020		1			585253	05/04/22 13:55	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0053 g	585290	04/29/22 10:15	JMD	TAL SAC

**Client Sample ID: GILBANETSP030122-1843** 

Date Collected: 04/21/22 15:08

Date Received: 04/27/22 09:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B	-	1			585308	04/29/22 10:15	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					585155	05/04/22 11:29	JMD	TAL SAC

Client Sample ID: GILBANEPM031522-1876

Date Collected: 04/26/22 06:58

Date Received: 04/27/22 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					585065	05/04/22 07:56	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	585071	05/04/22 08:23	NIM	TAL SAC
Total/NA	Analysis	6020		1	•		585253	05/04/22 13:59	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0608 g	585290	04/29/22 10:15	JMD	TAL SAC

**Eurofins Sacramento** 

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Matrix: Air

Matrix: Air

5/4/2022

### **Lab Chronicle**

Client: GES-AIS, LLC Job ID: 320-87209-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANETSP031522-1876

Lab Sample ID: 320-87209-6 Date Collected: 04/26/22 06:58 Matrix: Air

Date Received: 04/27/22 09:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			585308	04/29/22 10:15	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					585155	05/04/22 11:29	JMD	TAL SAC

Client Sample ID: GILBANEPM031522-1877

Lab Sample ID: 320-87209-7 Date Collected: 04/26/22 06:46 Matrix: Air

Date Received: 04/27/22 09:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					585065	05/04/22 07:56	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	585071	05/04/22 08:23	NIM	TAL SAC
Total/NA	Analysis	6020		1			585253	05/04/22 14:02	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0465 g	585290	04/29/22 10:15	JMD	TAL SAC

Client Sample ID: GILBANETSP031522-1877

Date Collected: 04/26/22 06:46 Matrix: Air

Date Received: 04/27/22 09:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			585308	04/29/22 10:15	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					585155	05/04/22 11:29	JMD	TAL SAC

**Laboratory References:** 

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Lab Sample ID: 320-87209-8

**Eurofins Sacramento** 

# **Accreditation/Certification Summary**

Client: GES-AIS, LLC Job ID: 320-87209-1

Project/Site: Hunters Point, Parcel E, Phase 2

## **Laboratory: Eurofins Sacramento**

The accreditations/certifications listed below are applicable to this report.

Authority	Pro	ogram	Identification Number	Expiration Date
ANAB	Der	pt. of Defense ELAP	L2468	01-20-24
Oregon	NE	LAP	4040	01-29-23
The following analytes	are included in this repor	rt, but the laboratory is not o	certified by the governing authority.	This list may include analytes for whi
the agency does not o	offer certification.	•	, , ,	This list may include analytes for whi
the agency does not o	•	rt, but the laboratory is not o	Analyte	
the agency does not o	offer certification.	•	, , ,	

# **Method Summary**

Client: GES-AIS, LLC

Project/Site: Hunters Point, Parcel E, Phase 2

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL SAC
40CFR50 App B	Suspended Particulate Matter in Ambient Air	EPA	TAL SAC
PM10	Particulate Matter	40CFR50J	TAL SAC
3050B	Preparation, Metals	SW846	TAL SAC
Filter to Air	Filter to Air volume ratio	None	TAL SAC

### **Protocol References:**

40CFR50J = 40 CFR Part 50 Appendix J EPA = US Environmental Protection Agency

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### **Laboratory References:**

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Job ID: 320-87209-1

# **Sample Summary**

Client: GES-AIS, LLC Job ID: 320-87209-1

Project/Site: Hunters Point, Parcel E, Phase 2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-87209-1	GILBANEPM030122-1842	Air	04/21/22 15:03	04/27/22 09:35
320-87209-2	GILBANETSP030122-1842	Air	04/21/22 15:03	04/27/22 09:35
320-87209-3	GILBANEPM030122-1843	Air	04/21/22 15:08	04/27/22 09:35
320-87209-4	GILBANETSP030122-1843	Air	04/21/22 15:08	04/27/22 09:35
320-87209-5	GILBANEPM031522-1876	Air	04/26/22 06:58	04/27/22 09:35
320-87209-6	GILBANETSP031522-1876	Air	04/26/22 06:58	04/27/22 09:35
320-87209-7	GILBANEPM031522-1877	Air	04/26/22 06:46	04/27/22 09:35
320-87209-8	GILBANETSP031522-1877	Air	04/26/22 06:46	04/27/22 09:35

COC # KT042622AIR

CHAIN-OF-CUSTODY RECORD

Gilbane Federal Brett Womack 2300 Clayton Road, Suite 1050, Concord, CA 94520 bwomack@ges-ais.com

Project Number: J31000460	STIDNATO.	Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	hase 2		ode	rathry	FURNEINS FAL	/IRONMENT T	aboratory FUROFINS ENVIRONMENT TESTING NOBTHERN CALLEDONIA 110 JECTAN	CALIEDDA	OII VII	/CCTA!	E. sont.	Description of the second	
					Poc						1	100	Monitori	Monitoring April 2022	
WBS Code: 1310000400-016					Chin	100.00	Disconde Contraction	186.24	10010						
WES CODE: 3310000400-010					dius	10: 88	U Kiverside Parkv	way, West Sacr	Ship to: 880 Kiverside Parkway, West Sacramento, CA 95605						
Comments:				lethod		Mn Cu			Code Matrix  A Air  Code Container/Preservative  1 1x 250-mL Plastic, 4 Degrees C  1 1x Envelope, None	Degrees C					
Equipment:				Analytical Test M	CAAIR - Air PM10	42T 1iA - 0050N 1d9 1iA - 0209WS					320-8720	O Chain	320-87209 Chain of Custody	, kp	
Event: Parcel E Phase 2 Air Monitoring April 2022	Vir Monitori	ng April 2022			+	1 1									
Sample ID	Matrix	Date	Time	Samp Init.					Location ID	Sample		Depth (ft bgs) Top - Bottom	Cooler	Comments	
1 GILBANEPM030122-1842	A .	04/21/2022	1503	Ā	×	×			AMSE1	NZ	0.00	00.00	-	VOLUME: 583.10 (M3)	(m)
2 GILBANETSP030122-1842	12 A	04/21/2022	1503	ΚŢ		×			AMSE1	N2	0.00	00.00	-	VOLUME: 564.29 (M3)	(m)
3 GILBANEPM030122-1843	A .	04/21/2022	1508	KT	×	×			AMSE2	N2	0.00	00.00	-	VOLUME: 588.23 (M3)	<u></u>
4 GILBANETSP030122-1843	13 A	04/21/2022	1508	Ā		×			AMSE2	N2	0.00	00.00	-	VOLUME: 590.98 (M3)	<u></u>
5 GILBANEPM031522-1876	A O	04/26/2022	0658	Ϋ́	×	×			AMSE1	۲	0.00	00'0	-	VOLUME: 1723.78 (M3)	3)
6 GILBANETSP031522-1876	9.	04/26/2022	0658	KT		×			AMSE1	ž	0.00	00.00	-	VOLUME: 1668.01 (M3)	3
7 GILBANEPM031522-1877	4	04/26/2022	0646	KT	×	×			AMSE2	Σ	0.00	00.00	-	VOLUME: 1719.87 (M3)	3)
8 GILBANETSP031522-1877	7 A	04/26/2022	0646	호		×		+	AMSE2	۶	0.00	0.00	-	VOLUME: 1718.85 (M3)	3)
10				1	1					+					R
Turnaround Time: 5 days															RS .
Relinquished by: (Signature)		Date	Time	Received		by: (Signature)	ture)		Date Time	Shipping Date / Carrier / Airhill Number	Date / C	arrier / A	irbill Nie	mber	
		Mm/x	lan	The				12/4	22 (60)	Shipping D	ate: 4/2	5/2022 /	edEx 77	Shipping Date: 4/26/2022 / FedEx 7766 8039 8196	
								4.2	17.22 0936	Received	by Labo	ratory: (	Signature	Received by Laboratory: (Signature, Date, Time) & condition	L
Gilbane.Navy_COC_Field April 26, 2022									18	700				eoe d	Page 1 of 1

# **Login Sample Receipt Checklist**

Client: GES-AIS, LLC Job Number: 320-87209-1

Login Number: 87209

List Number: 1 Creator:

**List Source: Eurofins Sacramento** 

Creator:		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	SEAL
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# **Environment Testing America**

# **ANALYTICAL REPORT**

Eurofins Sacramento 880 Riverside Parkway West Sacramento, CA 95605 Tel: (916)373-5600

Laboratory Job ID: 320-87310-1

Client Project/Site: Hunters Point, Parcel E, Phase 2

For:

GES-AIS, LLC 1501 W Fountainhead Parkway Ste 550 Tempe, Arizona 85282

Attn:

Authorized for release by: 5/6/2022 2:55:12 PM

·····LINKS ······

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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10

Laboratory Job ID: 320-87310-1

Project/Site: Hunters Point, Parcel E, Phase 2

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## **Definitions/Glossary**

Client: GES-AIS, LLC Job ID: 320-87310-1

Project/Site: Hunters Point, Parcel E, Phase 2

## **Glossary**

EDL

LOD

These commonly used abbreviations may or may not be present in this report.
Listed under the "D" column to designate that the result is reported on a dry weight basis
Percent Recovery
Contains Free Liquid
Colony Forming Unit
Contains No Free Liquid
Duplicate Error Ratio (normalized absolute difference)
Dilution Factor
Detection Limit (DoD/DOE)
Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
Decision Level Concentration (Radiochemistry)

LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)

Estimated Detection Limit (Dioxin)

Limit of Detection (DoD/DOE)

MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

**Eurofins Sacramento** 

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### **Case Narrative**

Client: GES-AIS, LLC

Project/Site: Hunters Point, Parcel E, Phase 2

Job ID: 320-87310-1

Job ID: 320-87310-1

**Laboratory: Eurofins Sacramento** 

Narrative

Job Narrative 320-87310-1

### Comments

No additional comments.

### Receipt

The samples were received on 4/29/2022 9:35 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 17.4° C.

### Metals

Method PM10: A second weight was not taken during the initial tare weight process for GILBANEPM031522-1878 (320-87310-1), GILBANEPM031522-1879 (320-87310-3), GILBANEPM031522-1880 (320-87310-5) and GILBANEPM031522-1881 (320-87310-7). The value of the first weight was entered in the 2nd tare weight column on the particulate spreadsheet for calculation purposes.

Method 40CFR50 App B: A second weight was not taken during the initial tare weight process for GILBANETSP031522-1878 (320-87310-2), GILBANETSP031522-1879 (320-87310-4), GILBANETSP031522-1880 (320-87310-6) and GILBANETSP031522-1881 (320-87310-8). The value of the first weight was entered in the 2nd tare weight column on the particulate spreadsheet for calculation purposes.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client: GES-AIS, LLC Job ID: 320-87310-1

Project/Site: Hunters Point, Parcel E, Phase 2

<b>Client Sample</b>	ID: GILBANEPM031522-1878
----------------------	--------------------------

## Lab Sample ID: 320-87310-1

Analyte	Result Qualifier	r RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0018	0.00069	0.00010	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.013	0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0052	0.00069	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	31	0.29	0.29	ug/m3	1		PM10	Total/NA

### Client Sample ID: GILBANETSP031522-1878

## Lab Sample ID: 320-87310-2

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	43.0809	0.3004	0.3004 ug/m3 (Air)	1	40CFR50 App B	Total/NA

### **Client Sample ID: GILBANEPM031522-1879**

### Lab Sample ID: 320-87310-3

Analyte	Result (	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.021		0.00079	0.00012	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.064		0.0016	0.00012	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.020		0.00079	0.00011	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	60		0.33	0.33	ug/m3	1		PM10	Total/NA

### Client Sample ID: GILBANETSP031522-1879

### Lab Sample ID: 320-87310-4

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	58.4807	0.3311	0.3311 ug/m3 (Air)	1 -	40CFR50 App B	Total/NA

## Client Sample ID: GILBANEPM031522-1880

### Lab Sample ID: 320-87310-5

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0025	0.00069	0.00010	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.020	0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0055	0.00069	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	26	0.29	0.29	ug/m3	1		PM10	Total/NA

## Client Sample ID: GILBANETSP031522-1880

# Lab Sample ID: 320-87310-6

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	39.1222	0.3019	0.3019 ug/m3 (Air)	1	40CFR50 App B	Total/NA

### Client Sample ID: GILBANEPM031522-1881

## Lab Sample ID: 320-87310-7

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.014	0.00074	0.00011	ug/m3 (Air)	1	_	6020	Total/NA
Copper	0.059	0.0015	0.00011	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.018	0.00074	0.00010	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	54	0.31	0.31	ug/m3	1		PM10	Total/NA

## Client Sample ID: GILBANETSP031522-1881

### Lab Sample ID: 320-87310-8

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	59.4960	0.3076	0.3076 ug/m3 (Air)	1 -	40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

5/6/2022

Client: GES-AIS, LLC Job ID: 320-87310-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM031522-1878

Lab Sample ID: 320-87310-1

Date Collected: 04/27/22 06:57 Matrix: Air

Date Received: 04/29/22 09:35 Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)								
Analyte	Result Q	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0018	0.00069	0.00010	ug/m3 (Air)		05/04/22 11:40	05/05/22 12:25	1
Copper	0.013	0.0014	0.00010	ug/m3 (Air)		05/04/22 11:40	05/05/22 12:25	1
Manganese	0.0052	0.00069	0.000097	ug/m3 (Air)		05/04/22 11:40	05/05/22 12:25	1

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	31		0.29	0.29	ug/m3			05/02/22 11:50	1

Client Sample ID: GILBANETSP031522-1878 Lab Sample ID: 320-87310-2 Matrix: Air

Date Collected: 04/27/22 06:57 Date Received: 04/29/22 09:35

Sample Container: Folder/Filter

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	43.0809		0.3004	0.3004	ug/m3 (Air)			05/02/22 11:50	1

Lab Sample ID: 320-87310-3 Client Sample ID: GILBANEPM031522-1879

Date Collected: 04/27/22 07:46

Date Received: 04/29/22 09:35 Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS) Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.021	0.00079	0.00012	ug/m3 (Air)	_	05/04/22 11:40	05/05/22 12:41	1
Copper	0.064	0.0016	0.00012	ug/m3 (Air)		05/04/22 11:40	05/05/22 12:41	1
Manganese	0.020	0.00079	0.00011	ug/m3 (Air)		05/04/22 11:40	05/05/22 12:41	1

Analyte Result Qualifier RL **RL** Unit Prepared Analyzed Dil Fac 0.33 0.33 ug/m3 05/02/22 11:50 Particulate Matter as PM 10 60

Client Sample ID: GILBANETSP031522-1879 Lab Sample ID: 320-87310-4

Date Collected: 04/27/22 07:46 Date Received: 04/29/22 09:35

Sample Container: Folder/Filter

	General Chemistry									
	Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
l	Total Suspended Particulates	58.4807		0.3311	0.3311	ug/m3 (Air)			05/02/22 11:50	1

Client Sample ID: GILBANEPM031522-1880 Lab Sample ID: 320-87310-5 Matrix: Air

Date Collected: 04/28/22 06:46 Date Received: 04/29/22 09:35 Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0025	0.00069	0.00010	ug/m3 (Air)		05/04/22 11:40	05/05/22 12:44	1
Copper	0.020	0.0014	0.00010	ug/m3 (Air)		05/04/22 11:40	05/05/22 12:44	1
Manganese	0.0055	0.00069	0.000097	ug/m3 (Air)		05/04/22 11:40	05/05/22 12:44	1

**Eurofins Sacramento** 

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Matrix: Air

Matrix: Air

### Client Sample Results

Client: GES-AIS, LLC Job ID: 320-87310-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM031522-1880

Lab Sample ID: 320-87310-5 Date Collected: 04/28/22 06:46

Matrix: Air

Date Received: 04/29/22 09:35 Sample Container: Folder/Filter

General Chemistry								
Analyte	Result Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	26	0.29	0.29	ug/m3			05/02/22 11:50	1

Client Sample ID: GILBANETSP031522-1880 Lab Sample ID: 320-87310-6

Date Collected: 04/28/22 06:46

Matrix: Air

Date Received: 04/29/22 09:35 Sample Container: Folder/Filter

**General Chemistry** Analyte Result Qualifier RL **RL** Unit Prepared Analyzed Dil Fac 0.3019 0.3019 ug/m3 (Air) 05/02/22 11:50 **Total Suspended Particulates** 39.1222

Client Sample ID: GILBANEPM031522-1881 Lab Sample ID: 320-87310-7

Date Collected: 04/28/22 06:37

Matrix: Air

Date Received: 04/29/22 09:35 Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS) Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac 0.00074 0.00011 ug/m3 (Air) 05/04/22 11:40 05/05/22 12:48 Lead 0.014 0.0015 0.00011 ug/m3 (Air) 05/04/22 11:40 05/05/22 12:48 Copper 0.059 **Manganese** 0.00074 0.00010 ug/m3 (Air) 05/04/22 11:40 05/05/22 12:48 0.018

**General Chemistry** Analyte Result Qualifier RL Prepared **RL** Unit Analyzed Dil Fac Particulate Matter as PM 10 0.31 0.31 ug/m3 05/02/22 11:50 54

Client Sample ID: GILBANETSP031522-1881 Lab Sample ID: 320-87310-8

Date Collected: 04/28/22 06:37

Matrix: Air

Date Received: 04/29/22 09:35 Sample Container: Folder/Filter

**General Chemistry** Analyte Result Qualifier RL **RL** Unit Analyzed Dil Fac D Prepared 0.3076 0.3076 ug/m3 (Air) **Total Suspended Particulates** 59.4960 05/02/22 11:50

5/6/2022

## **QC Sample Results**

Client: GES-AIS, LLC Job ID: 320-87310-1

Project/Site: Hunters Point, Parcel E, Phase 2

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-585173/1-B

**Matrix: Air** 

Analysis Batch: 585549

**Client Sample ID: Method Blank** 

**Prep Type: Total/NA** 

**Prep Batch: 585191** 

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		05/04/22 11:40	05/05/22 12:15	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		05/04/22 11:40	05/05/22 12:15	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		05/04/22 11:40	05/05/22 12:15	1

Lab Sample ID: LCS 320-585173/2-B

Matrix: Air

Analysis Batch: 585549

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 585191

7 many one Datom Cook is								
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Lead	0.240	0.237		ug/m3 (Air)	_	99	86 - 111	
Copper	0.240	0.228		ug/m3 (Air)		95	85 - 110	
Manganese	0.240	0.235		ug/m3 (Air)		98	88 - 110	

Lab Sample ID: LCSD 320-585173/3-B

**Matrix: Air** 

Analysis Batch: 585549

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA

**Prep Batch: 585191** 

%Rec RPD

Spike LCSD LCSD Added Result Qualifier Unit D %Rec Limits RPD Limit **Analyte** Lead 0.240 0.224 ug/m3 (Air) 93 86 - 111 6 15 Copper 0.240 0.220 ug/m3 (Air) 91 85 - 110 4 15 Manganese 0.240 0.227 ug/m3 (Air) 94 88 - 110 15 4

5/6/2022

# **QC Association Summary**

Client: GES-AIS, LLC Job ID: 320-87310-1

Project/Site: Hunters Point, Parcel E, Phase 2

### **Metals**

### Pre Prep Batch: 585173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87310-1	GILBANEPM031522-1878	Total/NA	Air	Filter to Air	
320-87310-3	GILBANEPM031522-1879	Total/NA	Air	Filter to Air	
320-87310-5	GILBANEPM031522-1880	Total/NA	Air	Filter to Air	
320-87310-7	GILBANEPM031522-1881	Total/NA	Air	Filter to Air	
MB 320-585173/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-585173/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-585173/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

### **Prep Batch: 585191**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87310-1	GILBANEPM031522-1878	Total/NA	Air	3050B	585173
320-87310-3	GILBANEPM031522-1879	Total/NA	Air	3050B	585173
320-87310-5	GILBANEPM031522-1880	Total/NA	Air	3050B	585173
320-87310-7	GILBANEPM031522-1881	Total/NA	Air	3050B	585173
MB 320-585173/1-B	Method Blank	Total/NA	Air	3050B	585173
LCS 320-585173/2-B	Lab Control Sample	Total/NA	Air	3050B	585173
LCSD 320-585173/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	585173

### **Analysis Batch: 585549**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87310-1	GILBANEPM031522-1878	Total/NA	Air	6020	585191
320-87310-3	GILBANEPM031522-1879	Total/NA	Air	6020	585191
320-87310-5	GILBANEPM031522-1880	Total/NA	Air	6020	585191
320-87310-7	GILBANEPM031522-1881	Total/NA	Air	6020	585191
MB 320-585173/1-B	Method Blank	Total/NA	Air	6020	585191
LCS 320-585173/2-B	Lab Control Sample	Total/NA	Air	6020	585191
LCSD 320-585173/3-B	Lab Control Sample Dup	Total/NA	Air	6020	585191

## **General Chemistry**

### Pre Prep Batch: 585155

Lab Sample ID 320-87310-2	Client Sample ID GILBANETSP031522-1878	Prep Type Total/NA	Matrix Air	Method Filter to Air	Prep Batch
320-87310-4	GILBANETSP031522-1879	Total/NA	Air	Filter to Air	
320-87310-6	GILBANETSP031522-1880	Total/NA	Air	Filter to Air	
320-87310-8	GILBANETSP031522-1881	Total/NA	Air	Filter to Air	

### **Analysis Batch: 585762**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87310-1	GILBANEPM031522-1878	Total/NA	Air	PM10	
320-87310-3	GILBANEPM031522-1879	Total/NA	Air	PM10	
320-87310-5	GILBANEPM031522-1880	Total/NA	Air	PM10	
320-87310-7	GILBANEPM031522-1881	Total/NA	Air	PM10	

### Analysis Batch: 585769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87310-2	GILBANETSP031522-1878	Total/NA	Air	40CFR50 App B	585155
320-87310-4	GILBANETSP031522-1879	Total/NA	Air	40CFR50 App B	585155
320-87310-6	GILBANETSP031522-1880	Total/NA	Air	40CFR50 App B	585155
320-87310-8	GILBANETSP031522-1881	Total/NA	Air	40CFR50 App B	585155

**Eurofins Sacramento** 

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Job ID: 320-87310-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM031522-1878

Date Collected: 04/27/22 06:57 Date Received: 04/29/22 09:35

Client: GES-AIS, LLC

Lab Sample ID: 320-87310-1

Matrix: Air

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					585173	05/04/22 11:20	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	585191	05/04/22 11:40	NIM	TAL SAC
Total/NA	Analysis	6020		1			585549	05/05/22 12:25	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0534 g	585762	05/02/22 11:50	JMD	TAL SAC

Client Sample ID: GILBANETSP031522-1878

Date Collected: 04/27/22 06:57 Date Received: 04/29/22 09:35

Lab Sample ID: 320-87310-2 **Matrix: Air** 

Lab

Dil Initial Final Batch Batch Batch Prepared **Prep Type** Type Method **Amount** Amount Number or Analyzed Run **Factor** Analyst Total/NA 40CFR50 App B 585769 05/02/22 11:50 JMD TAL SAC Analysis Total/NA Pre Prep Filter to Air 585155 05/04/22 11:29 JMD TAL SAC

Client Sample ID: GILBANEPM031522-1879

Date Collected: 04/27/22 07:46 Date Received: 04/29/22 09:35

**Prep Type** 

Total/NA

Total/NA

Total/NA

Total/NA

Batch

Type

Prep

Pre Prep

Analysis

Analysis

Lab Sample ID: 320-87310-3

Matrix: Air

Batch Dil Initial Final Batch Prepared Method Run **Factor Amount** Amount Number or Analyzed Analyst Lab Filter to Air 585173 05/04/22 11:20 NIM TAL SAC 3050B 585191 05/04/22 11:40 NIM TAL SAC 0.08333 100 mL Sample 6020 TAL SAC

0.0905 g

585549

585762

Client Sample ID: GILBANETSP031522-1879

PM10

Date Collected: 04/27/22 07:46 Date Received: 04/29/22 09:35

Lab Sample ID: 320-87310-4

Lab Sample ID: 320-87310-5

05/05/22 12:41 JMD

05/02/22 11:50 JMD

Matrix: Air

Matrix: Air

TAL SAC

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B	-	1			585769	05/02/22 11:50	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					585155	05/04/22 11:29	JMD	TAL SAC

0 g

Client Sample ID: GILBANEPM031522-1880

Date Collected: 04/28/22 06:46

Date Received: 04/29/22 09:35

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					585173	05/04/22 11:20	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	585191	05/04/22 11:40	NIM	TAL SAC
Total/NA	Analysis	6020		1	•		585549	05/05/22 12:44	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0450 g	585762	05/02/22 11:50	JMD	TAL SAC

**Eurofins Sacramento** 

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### **Lab Chronicle**

Client: GES-AIS, LLC Job ID: 320-87310-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANETSP031522-1880

Lab Sample ID: 320-87310-6 Date Collected: 04/28/22 06:46 Matrix: Air

Date Received: 04/29/22 09:35

-	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			585769	05/02/22 11:50	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					585155	05/04/22 11:29	JMD	TAL SAC

Client Sample ID: GILBANEPM031522-1881

Date Collected: 04/28/22 06:37

Date Received: 04/29/22 09:35

Prep Type	Batch	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
riep lype	Type	Wiethou	Kuii	Factor	Aillouilt	Aillouilt	Number	Ol Allalyzeu	Allalyst	Lau
Total/NA	Pre Prep	Filter to Air					585173	05/04/22 11:20	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333	100 mL	585191	05/04/22 11:40	NIM	TAL SAC
					Sample					
Total/NA	Analysis	6020		1			585549	05/05/22 12:48	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0880 g	585762	05/02/22 11:50	JMD	TAL SAC

Client Sample ID: GILBANETSP031522-1881

Date Collected: 04/28/22 06:37

Date Received: 04/29/22 09:35

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			585769	05/02/22 11:50	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					585155	05/04/22 11:29	JMD	TAL SAC

**Laboratory References:** 

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Matrix: Air

Matrix: Air

Lab Sample ID: 320-87310-7

Lab Sample ID: 320-87310-8

# **Accreditation/Certification Summary**

Client: GES-AIS, LLC Job ID: 320-87310-1

Project/Site: Hunters Point, Parcel E, Phase 2

## **Laboratory: Eurofins Sacramento**

The accreditations/certifications listed below are applicable to this report.

Authority	Pro	ogram	Identification Number	Expiration Date
ANAB	Der	pt. of Defense ELAP	L2468	01-20-24
Oregon	NE	LAP	4040	01-29-23
The following analytes	are included in this repor	rt, but the laboratory is not o	certified by the governing authority.	This list may include analytes for whi
the agency does not o	offer certification.	•	, , ,	This list may include analytes for whi
0 ,	•	rt, but the laboratory is not o	certified by the governing authority.  Analyte	This list may include analytes for whi
the agency does not o	offer certification.	•	, , ,	

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# **Method Summary**

Client: GES-AIS, LLC

Project/Site: Hunters Point, Parcel E, Phase 2

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL SAC
40CFR50 App B	Suspended Particulate Matter in Ambient Air	EPA	TAL SAC
PM10	Particulate Matter	40CFR50J	TAL SAC
3050B	Preparation, Metals	SW846	TAL SAC
Filter to Air	Filter to Air volume ratio	None	TAL SAC

### **Protocol References:**

40CFR50J = 40 CFR Part 50 Appendix J EPA = US Environmental Protection Agency

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### **Laboratory References:**

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Job ID: 320-87310-1

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# **Sample Summary**

Client: GES-AIS, LLC Job ID: 320-87310-1

Project/Site: Hunters Point, Parcel E, Phase 2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-87310-1	GILBANEPM031522-1878	Air	04/27/22 06:57	04/29/22 09:35
320-87310-2	GILBANETSP031522-1878	Air	04/27/22 06:57	04/29/22 09:35
320-87310-3	GILBANEPM031522-1879	Air	04/27/22 07:46	04/29/22 09:35
320-87310-4	GILBANETSP031522-1879	Air	04/27/22 07:46	04/29/22 09:35
320-87310-5	GILBANEPM031522-1880	Air	04/28/22 06:46	04/29/22 09:35
320-87310-6	GILBANETSP031522-1880	Air	04/28/22 06:46	04/29/22 09:35
320-87310-7	GILBANEPM031522-1881	Air	04/28/22 06:37	04/29/22 09:35
320-87310-8	GILBANETSP031522-1881	Air	04/28/22 06:37	04/29/22 09:35

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

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VOLUME: 1739.63 (M3) VOLUME: 1664.31 (M3) VOLUME: 1509.90 (M3) VOLUME: 1727.02 (M3) VOLUME: 1656.35 (M3) VOLUME: 1622.18 (M3) VOLUME: 1625.32 (M3) VOLUME: 1511.52 (M3) Event: Parcel E Phase 2 Air Monitoring April 2022 Comments Shipping Date: 4/28/2022 / FedEx 7767 0597 7206 Shipping Date / Carrier / Airbill Number 320-87310 Chain of Custody Cooler Laboratory: EUROFINS ENVIRONMENT TESTING NORTHERN CALIFORNIA, LLC (EETN Top - Bottom 0.00 0.00 0.00 0.00 0.00 0.00 Depth (ft bgs) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Sample Type Z Z ž ž ź ź Ξ Ξ 1x 250-mL Plastic, 4 Degrees C Container/Preservative 1x Envelope, None Time Ship to: 880 Riverside Parkway, West Sacramento, CA 95605 Location ID AMSE2 AMSE2 AMSE2 AMSE1 AMSE1 AMSE1 Code Matrix AMSE1 AMSE2 Air 4/2/22 Date Received by: (Signature) 2W6020 - Air Pb Mn Cu × × × × 92T 1iA - 0030N × × × × POC: 1 CAAIR - Air PM10 × × Analytical Test Method Samp Init. 노 노 노 ¥ 노 노 ¥ 노 Time 0746 0746 9490 0646 7590 0637 0637 7590 3 Project Name: Hunters Point Shipyard, Parcel E RA Phase 2 4/28/22 04/28/2022 04/27/2022 04/27/2022 04/27/2022 04/27/2022 04/28/2022 04/28/2022 04/28/2022 Event: Parcel E Phase 2 Air Monitoring April 2022 Date Date Matrix ⋖ ⋖ ⋖ Ø Þ Þ ⋖ ⋖ GILBANETSP031522-1879 GILBANETSP031522-1878 GILBANETSP031522-1880 GILBANETSP031522-1881 GILBANEPM031522-1879 GILBANEPM031522-1880 GILBANEPM031522-1878 GILBANEPM031522-1881 Relinquished by: (Signature) Project Number: J310000400 WBS Code: J310000400-016 Turnaround Time: 5 days Sample ID Comments: Equipment: 19 2 9

COC # KT042822AIR

Brett Womack 2300 Clayton Road, Suite 1050, Concord, CA 94520

Gilbane Federal

CHAIN-OF-CUSTODY

RECORD

bwomack@ges-ais.com

# **Login Sample Receipt Checklist**

Client: GES-AIS, LLC Job Number: 320-87310-1

Login Number: 87310

List Number: 1
Creator:

List Source: Eurofins Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	seal
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Eurofins Sacramento

# **Environment Testing America**

# **ANALYTICAL REPORT**

Eurofins Sacramento 880 Riverside Parkway West Sacramento, CA 95605 Tel: (916)373-5600

Laboratory Job ID: 320-87453-1

Client Project/Site: Hunters Point, Parcel E, Phase 2

For:

GES-AIS, LLC 1501 W Fountainhead Parkway Ste 550 Tempe, Arizona 85282

Attn:

Authorized for release by: 5/11/2022 5:09:34 PM

..... LINKS .....

Review your project results through

Total Access

**Have a Question?** 



Visit us at: www.eurofinsus.com/Env The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Laboratory Job ID: 320-87453-1

Project/Site: Hunters Point, Parcel E, Phase 2

# **Table of Contents**

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# **Definitions/Glossary**

Client: GES-AIS, LLC Job ID: 320-87453-1

Project/Site: Hunters Point, Parcel E, Phase 2

Negative / Absent

Positive / Present
Practical Quantitation Limit

Presumptive

**Quality Control** 

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

Relative Percent Difference, a measure of the relative difference between two points

# Glossary

NEG

POS

PQL PRES

QC

RER

RL RPD

TEF

TEQ

**TNTC** 

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)

### **Case Narrative**

Client: GES-AIS, LLC

Project/Site: Hunters Point, Parcel E, Phase 2

Job ID: 320-87453-1

Job ID: 320-87453-1

**Laboratory: Eurofins Sacramento** 

**Narrative** 

Job Narrative 320-87453-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 5/4/2022 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 19.1° C.

#### Metals

Method PM10: A second weight was not taken during the initial tare weight process. The value of the first weight was entered in the 2nd tare weight column on the particulate spreadsheet for calculation purposes. GILBANEPM031522-1882 (320-87453-1) and GILBANEPM031522-1883 (320-87453-3)

Method 40CFR50 App B: A second weight was not taken during the initial tare weight process. The value of the first weight was entered in the 2nd tare weight column on the particulate spreadsheet for calculation purposes. GILBANETSP031522-1882 (320-87453-2) and GILBANETSP031522-1883 (320-87453-4)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# **Detection Summary**

Client: GES-AIS, LLC Job ID: 320-87453-1

Project/Site: Hunters Point, Parcel E, Phase 2

<b>Client Sample</b>	ID: GILBANEPM031522-1882
----------------------	--------------------------

Lab	Sample	ID:	320-	87453-

Analyte	Result Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
Lead	0.0055	0.0023	0.00034	ug/m3 (Air)	1	6020	Total/NA
Copper	0.080	0.0046	0.00034	ug/m3 (Air)	1	6020	Total/NA
Manganese	0.013	0.0023	0.00032	ug/m3 (Air)	1	6020	Total/NA
Particulate Matter as PM 10	31	0.95	0.95	ug/m3	1	PM10	Total/NA

# Client Sample ID: GILBANETSP031522-1882

# Lab Sample ID: 320-87453-2

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	27.2258	0.9936	0.9936 ug/m3 (Air)	1 -	40CFR50 App B	Total/NA

### Client Sample ID: GILBANEPM031522-1883

# Lab Sample ID: 320-87453-3

Analyte	Result Qualifier	RL	MDL Uni	it Dil Fac	D	Method	Prep Type
Lead	0.024	0.0023	0.00035 ug/r	m3 (Air) 1	_	6020	Total/NA
Copper	0.11	0.0047	0.00035 ug/r	m3 (Air) 1		6020	Total/NA
Manganese	0.030	0.0023	0.00033 ug/r	m3 (Air) 1		6020	Total/NA
Particulate Matter as PM 10	50	0.97	0.97 ug/r	m3 1		PM10	Total/NA

# Client Sample ID: GILBANETSP031522-1883

### Lab Sample ID: 320-87453-4

Analyte	Result Qualifier	RL	RL Unit	Dil Fac D	Method	Prep Type
Total Suspended Particulates	57.6762	0.9743	0.9743 ug/m3 (Air)	1	40CFR50 App B	Total/NA

# **Client Sample Results**

Client: GES-AIS, LLC Job ID: 320-87453-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM031522-1882

Lab Sample ID: 320-87453-1 Date Collected: 04/28/22 13:54

Matrix: Air

Date Received: 05/04/22 09:45 Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0055	0.0023	0.00034	ug/m3 (Air)		05/09/22 12:00	05/09/22 15:10	1
Copper	0.080	0.0046	0.00034	ug/m3 (Air)		05/09/22 12:00	05/09/22 15:10	1
Manganese	0.013	0.0023	0.00032	ug/m3 (Air)		05/09/22 12:00	05/09/22 15:10	1

_ General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	31		0.95	0.95	ug/m3			05/05/22 08:00	1

Client Sample ID: GILBANETSP031522-1882 Lab Sample ID: 320-87453-2 Matrix: Air

Date Collected: 04/28/22 13:54 Date Received: 05/04/22 09:45

Sample Container: Folder/Filter

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	27.2258		0.9936	0.9936	ug/m3 (Air)			05/11/22 14:00	1

Lab Sample ID: 320-87453-3 Client Sample ID: GILBANEPM031522-1883 Matrix: Air

Date Collected: 04/28/22 14:05

Date Received: 05/04/22 09:45 Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS) Analyte	Result Qualifie	er RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.024	0.0023	0.00035	ug/m3 (Air)		05/09/22 12:00	05/09/22 15:20	1
Copper	0.11	0.0047	0.00035	ug/m3 (Air)		05/09/22 12:00	05/09/22 15:20	1
Manganese	0.030	0.0023	0.00033	ug/m3 (Air)		05/09/22 12:00	05/09/22 15:20	1
General Chemistry Analyte	Result Qualifie	er RL	RL	Unit	D	Prepared	Analyzed	Dil Fac

0.97 0.97 ug/m3 05/05/22 08:00 **Particulate Matter as PM 10 50** Client Sample ID: GILBANETSP031522-1883 Lab Sample ID: 320-87453-4

Date Collected: 04/28/22 14:05

Date Received: 05/04/22 09:45 Sample Container: Folder/Filter

General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	57.6762		0.9743	0.9743	ug/m3 (Air)			05/11/22 14:00	1

5/11/2022

Matrix: Air

# **QC Sample Results**

Client: GES-AIS, LLC Job ID: 320-87453-1

Project/Site: Hunters Point, Parcel E, Phase 2

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-586384/1-B

**Matrix: Air** 

**Analysis Batch: 586555** 

**Client Sample ID: Method Blank** 

**Prep Type: Total/NA** 

Prep Batch: 586403

	IVID	IAID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		05/09/22 12:00	05/09/22 14:41	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		05/09/22 12:00	05/09/22 14:41	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		05/09/22 12:00	05/09/22 14:41	1

MD MD

Lab Sample ID: LCS 320-586384/2-B

Matrix: Air

Analysis Batch: 586555

**Client Sample ID: Lab Control Sample** 

**Prep Type: Total/NA** 

**Prep Batch: 586403** 

•	Spike	e LCS	LCS				%Rec	
Analyte	Added	d Result	Qualifier	Unit	D	%Rec	Limits	
Lead	0.24	0.239		ug/m3 (Air)	_	99	86 - 111	
Copper	0.24	0.232		ug/m3 (Air)		97	85 - 110	
Manganese	0.24	0.238		ug/m3 (Air)		99	88 - 110	

Lab Sample ID: LCSD 320-586384/3-B

**Matrix: Air** 

Analysis Batch: 586555

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA

**Prep Batch: 586403** 

%Rec RPD Limits RPD Limit

Added Result Qualifier Unit D %Rec **Analyte** Lead 0.240 0.237 ug/m3 (Air) 99 86 - 111 1 15 Copper 0.240 0.227 ug/m3 (Air) 94 85 - 110 2 15 Manganese 0.240 0.235 ug/m3 (Air) 98 88 - 110 15

Spike

LCSD LCSD

5/11/2022

# **QC Association Summary**

Client: GES-AIS, LLC Job ID: 320-87453-1

Project/Site: Hunters Point, Parcel E, Phase 2

### **Metals**

### Pre Prep Batch: 586384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87453-1	GILBANEPM031522-1882	Total/NA	Air	Filter to Air	
320-87453-3	GILBANEPM031522-1883	Total/NA	Air	Filter to Air	
MB 320-586384/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-586384/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-586384/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

### **Prep Batch: 586403**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87453-1	GILBANEPM031522-1882	Total/NA	Air	3050B	586384
320-87453-3	GILBANEPM031522-1883	Total/NA	Air	3050B	586384
MB 320-586384/1-B	Method Blank	Total/NA	Air	3050B	586384
LCS 320-586384/2-B	Lab Control Sample	Total/NA	Air	3050B	586384
LCSD 320-586384/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	586384

### **Analysis Batch: 586555**

<b>Lab Sample ID</b> 320-87453-1	Client Sample ID GILBANEPM031522-1882	Prep Type Total/NA	Matrix Air	Method 6020	Prep Batch 586403
320-87453-3	GILBANEPM031522-1883	Total/NA	Air	6020	586403
MB 320-586384/1-B	Method Blank	Total/NA	Air	6020	586403
LCS 320-586384/2-B	Lab Control Sample	Total/NA	Air	6020	586403
LCSD 320-586384/3-B	Lab Control Sample Dup	Total/NA	Air	6020	586403

# **General Chemistry**

### Pre Prep Batch: 586983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87453-2	GILBANETSP031522-1882	Total/NA	Air	Filter to Air	
320-87453-4	GILBANETSP031522-1883	Total/NA	Air	Filter to Air	

### **Analysis Batch: 586989**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87453-1	GILBANEPM031522-1882	Total/NA	Air	PM10	
320-87453-3	GILBANEPM031522-1883	Total/NA	Air	PM10	

### **Analysis Batch: 586991**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87453-2	GILBANETSP031522-1882	Total/NA	Air	40CFR50 App B	586983
320-87453-4	GILBANETSP031522-1883	Total/NA	Air	40CFR50 App B	586983

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Client: GES-AIS, LLC Job ID: 320-87453-1

Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM031522-1882

Lab Sample ID: 320-87453-1 Date Collected: 04/28/22 13:54 Matrix: Air

Date Received: 05/04/22 09:45

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					586384	05/09/22 11:05	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	586403	05/09/22 12:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			586555	05/09/22 15:10	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0164 g	586989	05/05/22 08:00	JMD	TAL SAC

Client Sample ID: GILBANETSP031522-1882

Date Collected: 04/28/22 13:54

Date Received: 05/04/22 09:45

	Batch	Batch	D	Dil	Initial	Final	Batch	Prepared	A l 4	Lab
Prep Type Total/NA	Type Pre Prep	Method Filter to Air	Run	Factor	Amount	Amount	Number 586983	or Analyzed 05/11/22 14:00	Analyst JMD	TAL SAC
Total/NA	Analysis	40CFR50 App B		1			586991	05/11/22 14:00		TAL SAC

Client Sample ID: GILBANEPM031522-1883

Date Collected: 04/28/22 14:05

Date Received: 05/04/22 09:45

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					586384	05/09/22 11:05	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	586403	05/09/22 12:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			586555	05/09/22 15:20	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0258 g	586989	05/05/22 08:00	JMD	TAL SAC

**Client Sample ID: GILBANETSP031522-1883** 

Date Collected: 04/28/22 14:05

Date Received: 05/04/22 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					586983	05/11/22 14:00	JMD	TAL SAC
Total/NA	Analysis	40CFR50 App B		1			586991	05/11/22 14:00	JMD	TAL SAC

### **Laboratory References:**

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Lab Sample ID: 320-87453-2

Lab Sample ID: 320-87453-3

Lab Sample ID: 320-87453-4

Matrix: Air

Matrix: Air

Matrix: Air

**Eurofins Sacramento** 

# **Accreditation/Certification Summary**

Client: GES-AIS, LLC Job ID: 320-87453-1

Project/Site: Hunters Point, Parcel E, Phase 2

# **Laboratory: Eurofins Sacramento**

The accreditations/certifications listed below are applicable to this report.

Authority		ogram	Identification Number	Expiration Date	
ANAB	De	pt. of Defense ELAP	L2468	01-20-24	
Oregon	NE	LAP	4040	01-29-23	
The following analytes	s are included in this repor	rt, but the laboratory is not	certified by the governing authority.	This list may include analytes for wh	
The following analytes the agency does not o	•	rt, but the laboratory is not o	certified by the governing authority.	This list may include analytes for wh	
,	•	rt, but the laboratory is not o	certified by the governing authority.  Analyte	This list may include analytes for wh	
the agency does not o	offer certification.	•	, , ,		

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# **Method Summary**

Client: GES-AIS, LLC

Project/Site: Hunters Point, Parcel E, Phase 2

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL SAC
40CFR50 App B	Suspended Particulate Matter in Ambient Air	EPA	TAL SAC
PM10	Particulate Matter	40CFR50J	TAL SAC
3050B	Preparation, Metals	SW846	TAL SAC
Filter to Air	Filter to Air volume ratio	None	TAL SAC

### **Protocol References:**

40CFR50J = 40 CFR Part 50 Appendix J EPA = US Environmental Protection Agency

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### **Laboratory References:**

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

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Job ID: 320-87453-1

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# **Sample Summary**

Client: GES-AIS, LLC Job ID: 320-87453-1

Project/Site: Hunters Point, Parcel E, Phase 2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-87453-1	GILBANEPM031522-1882	Air	04/28/22 13:54	05/04/22 09:45
320-87453-2	GILBANETSP031522-1882	Air	04/28/22 13:54	05/04/22 09:45
320-87453-3	GILBANEPM031522-1883	Air	04/28/22 14:05	05/04/22 09:45
320-87453-4	GILBANETSP031522-1883	Air	04/28/22 14:05	05/04/22 09:45

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COC # KT04822AAIR

CHAIN-OF-CUSTODY

RECORD

Gilbane Federal Brett Womack 2300 Clayton Road, Suite 1050, Concord, CA 94520 bwomack@ges-ais.com

VOLUME: 527.48 (M3) VOLUME: 503.20 (M3) VOLUME: 513.17 (M3) VOLUME: 513.21 (M3) Event: Parcel E Phase 2 Air Monitoring April 2022 Cooler 320-87453 Chain of Custody Laboratory: EUROFINS ENVIRONMENT TESTING NORTHERN CALIFORNIA, LLC (EETN Top - Bottom 0.00 0.00 0.00 0.00 Depth (ft bgs) 0.00 0.00 0.00 0.00 Sample Type **N**2 N2 NZ NZ 1x 250-mL Plastic, 4 Degrees C Container/Preservative 1x Envelope, None Ship to: 880 Riverside Parkway, West Sacramento, CA 95605 Location ID AMSE2 **AMSE1 AMSE1** AMSE2 Code Matrix Air 4 Code SW6020 - Air Pb Mn Cu × × 48T 1iA - 0030N × × PO CAAIR - Air PM10 × × Analytical Test Method Samp Init. ¥ ¥ ¥ Υ 5/3/22 1405 1405 1354 1354 Time Project Name: Hunters Point Shipyard, Parcel E RA Phase 2 04/28/2022 04/28/2022 04/28/2022 04/28/2022 Event: Parcel E Phase 2 Air Monitoring April 2022 7 Matrix ۷ Ø Ø ⋖ GILBANETSP031522-1882 GILBANETSP031522-1883 GILBANEPM031522-1882 GILBANEPM031522-1883 Project Number: J310000400 WBS Code: J310000400-016 Sample ID Equipment: Comments: 4 2 9

Dolinguiched hu. (Cianoture)	Date	Time	Received by: (Signature)	Date	Time	Time Shipping Date / Carrier / Airbill Number
	5/3/22 1600	0091	Fedex	5/3/22	0091	5/3/22 1600 Shipping Date: 5/3/2022
				2000 11 2000 X	3000	redex //6/ T/11 7650
				11.11		Received by Laboratory: (Signature, Date, Time) & condition
		•				
Gilbane.Navy_COC_Field April 29, 2022						\$ poor 0

œ 6 Turnaround Time: 5 days

# **Login Sample Receipt Checklist**

Client: GES-AIS, LLC Job Number: 320-87453-1

Login Number: 87453

List Number: 1 Creator:

Creator:		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	SEAL
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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**List Source: Eurofins Sacramento** 

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