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

AIR MONITORING SUMMARY REPORT FOR PARCEL E REMEDIAL ACTION PHASE 2

HUNTERS POINT NAVAL SHIPYARD

SAN FRANCISCO, CALIFORNIA

May 1st, 2022 through May 26th, 2022

Approved for public release; distribution is unlimited

DCN: GLBN-0005-4332-0096

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Prepared for:

Department of the Navy
Naval Facilities Engineering Systems Command Southwest
BRAC PMO West
33000 Nixie Way, Bldg, 50
San Diego, CA 92147

Prepared by:

Gilbane Federal
1655 Grant Street, Suite 1200
Concord, CA 94520

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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^3 ..... *fibers per cubic centimeter*
Gilbane ..... *Gilbane Federal*
HPNS ..... *Hunters Point Naval Shipyard*
L/min ..... *liters per minute*
mg/m^3 ..... *milligrams per cubic meter*
Navy ..... *U.S. Department of the Navy*
NIOSH ..... *National Institute for Occupational Safety and Health*
PEL ..... *permissible exposure limit*
PM10 ..... *particulate matter less than 10 microns in diameter*
RAWP ..... *Remedial Action Work Plan*
TSP ..... *total suspended particulates*
TWA ..... *time-weighted average*
$\mu g/m^3$ ..... *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 May 1st, 2022 through May 26th, 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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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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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/m^3).

Table 4-1: Air Monitoring Threshold Criteria

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

Notes:

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

ug/m^3 = micrograms per cubic meter

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

fiber/cm^3 = fibers per cubic centimeter

HPNS = Hunters Point Naval Shipyard

mg/m^3 = milligrams per cubic meter

PEL = permissible exposure limit

PM10 = particulate matter less than 10 microns in diameter

ROC = radionuclide of concern

TSP = total suspended particulates

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5.0 Air Monitoring Results

Weather information (including ambient pressure and temperature data) is presented in the table included as **Attachment 1**. Meteorological data for Stations 1 and 2 were sourced from the Weather Underground (wunderground.com) station Bayview Manor - KCASANFR1775.

Air Monitoring Data was collected from Station 1 in Parcel E and Station 2 in Parcel D-1 from May 1st, 2022 through May 26th, 2022, during which Gilbane was grading and managing radiological screening yard pads and transporting excavated material. 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 May 1st, 2022 through May 26th, 2022 did not result in the exceedance of the established threshold criteria, as described in detail below.

Asbestos results from May 1st, 2022 through May 26th, 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 May 1st, 2022 through May 26th, 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 May 1st, 2022 through May 26th, 2022 did not exceed the threshold criteria presented in **Table 4-1**. The results are presented as **Attachment 5**.

Radiological air sampling results from May 1st, 2022 through May 26th, 2022 did not exceed the threshold criteria presented in **Table 4-1**. The results are presented as **Attachment 6**.

Analytical laboratory reports and laboratory corrective actions 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 final tare weight of the filters. Although the final weight recording may have been miniscule, the data were qualified as estimated, due to the lack of confirmation. No other data quality issues were noted. The data, as qualified, should be considered usable for their intended purposes.

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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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FIGURES

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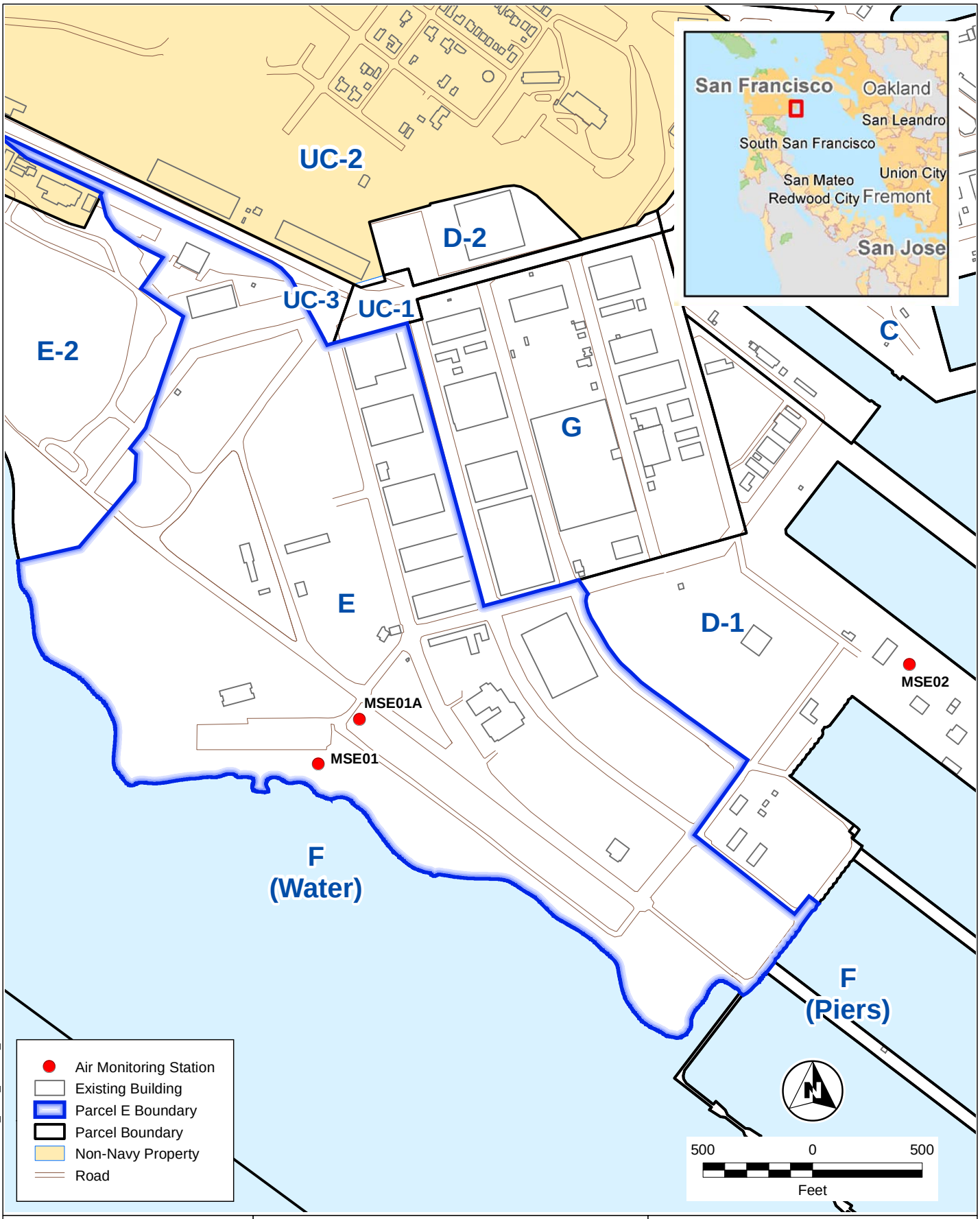

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Gilbane

Parcel E
Hunters Point Naval Shipyard
San Franscisco, California

Figure 2-1
Air Monitoring Stations

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ATTACHMENT 1

AMBIENT PRESSURE, TEMPERATURE, AND PREVALENT WIND DIRECTION MONITORING RESULTS

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

Start Date	Ambient Pressure (in Hg)	Ambient Temperature (°F)	Prevalent Wind Direction
5/2/2022	30.01	54.06	West
5/3/2022	29.97	56.64	West
5/4/2022	29.96	53.61	WSW
5/5/2022	30.05	55.22	WSW
5/9/2022	30.08	50.92	WSW
5/10/2022	30.19	50.74	West
5/11/2022	30.26	52.77	West
5/12/2022	30.33	54.94	West
5/16/2022	30.03	53.85	West
5/17/2022	30.04	54.79	WSW
5/18/2022	30.01	60.89	WSW
5/19/2022	29.97	60.02	WSW
5/23/2022	29.90	56.21	WSW
5/24/2022	29.80	66.74	WSW
5/25/2022	29.82	58.65	West
5/26/2022	29.89	59.63	WSW
5/31/2022	29.92	57.29	WSW

Notes:

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

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ATTACHMENT 2
ASBESTOS MONITORING RESULTS

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Attachment 2: Asbestos Monitoring Results

Sample, Date and Station Information			Sampler Run Information		Asbestos Fibers		
Sample ID	Sample Start Date[1]	Monitoring Station	Duration of Run (min)	Total Air Volume Monitored (L)	Asbestos (fibers)	Conc Asbestos (fibers/cm^3)	Exceedance (Yes/No)
MSE01-050222	05/02/22	1	525	1050	2.0	<0.003	No
MSE02-050222	05/02/22	2	529	1058	65.0	0.030	No
MSE01-050322	05/03/22	1	522	1044	5.0	<0.003	No
MSE02-050322	05/03/22	2	525	1050	4.0	<0.003	No
MSE01-050422	05/04/22	1	537	1074	3.0	<0.003	No
MSE02-050422	05/04/22	2	541	1082	19.5	0.009	No
MSE01-050522	05/05/22	1	448	896	1.5	<0.003	No
MSE02-050522	05/05/22	2	454	908	1.0	<0.003	No
MSE01-050922	05/09/22	1	524	1048	1.0	<0.003	No
MSE02-050922	05/09/22	2	533	1066	10.0	0.005	No
MSE01-051022	05/10/22	1	542	1084	4.5	<0.002	No
MSE02-051022	05/10/22	2	547	1094	15.0	0.007	No
MSE01-051122	05/11/22	1	566	1132	3.5	<0.002	No
MSE02-051122	05/11/22	2	566	1132	0.0	<0.002	No
MSE01-051222	05/12/22	1	453	906	1.0	<0.003	No
MSE02-051222	05/12/22	2	450	900	16.5	0.009	No
MSE01-051622	05/16/22	1	502	1004	3.0	<0.003	No
MSE02-051622	05/16/22	2	507	1014	24.0	0.012	No
MSE01-051722	05/17/22	1	514	1028	4.5	<0.003	No
MSE02-051722	05/17/22	2	514	1028	6.0	0.003	No
MSE01-051822	05/18/22	1	521	1042	1.0	<0.003	No
MSE02-051822	05/18/22	2	526	1052	1.5	<0.003	No
MSE01-051922	05/19/22	1	470	940	3.0	<0.003	No
MSE02-051922	05/19/22	2	465	930	23.0	0.012	No
MSE01-052322	05/23/22	1	500	1000	9.5	0.005	No
MSE02-052322	05/23/22	2	510	1020	0.0	<0.003	No
MSE01-052422	05/24/22	1	512	1024	6.0	0.003	No
MSE02-052422	05/24/22	2	521	1042	0.0	<0.003	No
MSE01-052522	05/25/22	1	509	1018	9.0	0.004	No
MSE02-052522	05/25/22	2	517	1034	6.0	0.003	No
MSE01-052622	05/26/22	1	402	804	0.0	<0.003	No
MSE02-052622	05/26/22	2	403	806	3.5	<0.003	No
MSE01-053122	05/31/22	1	493	986	4.5	<0.003	No
MSE02-053122	05/31/22	2	516	1032	2.0	<0.003	No

Notes:

[1]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^3 = fibers per cubic centimeter

< = below detection limit

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ATTACHMENT 3

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

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

Sample, Date and Station Information			Sampler Run Information	PM10						
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concen-tration in Air (mg/m^3)	Delta between Downwind and Upwind (mg/m^3)	Delta between Downwind and Upwind (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level[3] (ug/m^3)	Exceedance (Yes/No)
GILBANEPM031522-1884	1	5/3/2022	1721.40	0.032 J						
GILBANEPM031522-1885	2	5/3/2022	1726.95	0.037 J	0.0050	5.0	5,000	No	50	No
GILBANEPM031522-1886	1	5/4/2022	1712.46	0.032 J						
GILBANEPM031522-1887	2	5/4/2022	1703.60	0.03 J	-0.0020	-2.0	5,000	No	50	No
GILBANEPM031522-1888	1	5/5/2022	1744.74	0.033 J						
GILBANEPM031522-1889	2	5/5/2022	1738.60	0.029 J	-0.0040	-4.0	5,000	No	50	No
GILBANEPM031522-1890	1	5/5/2022[2]	531.97	0.019 J						
GILBANEPM031522-1891	2	5/5/2022[2]	527.57	0.034 J	0.0150	15.0	5,000	No	50	No
GILBANEPM041222-1892	1	5/10/2022	1703.34	0.013						
GILBANEPM041222-1893	2	5/10/2022	1693.05	0.023	0.0100	10.0	5,000	No	50	No
GILBANEPM041222-1894	1	5/11/2022	1730.86	0.016						
GILBANEPM041222-1895	2	5/11/2022	1725.97	0.016	0.0000	0.0	5,000	No	50	No
GILBANEPM041222-1896	1	5/12/2022	1767.37	0.022						
GILBANEPM041222-1897	2	5/12/2022	1757.78	0.019	-0.0030	-3.0	5,000	No	50	No
GILBANEPM041222-1898	1	5/12/2022[2]	533.96	0.0099						
GILBANEPM041222-1899	2	5/12/2022[2]	533.34	0.019	0.0091	9.1	5,000	No	50	No
GILBANEPM041222-1900	1	5/17/2022	1733.43	0.025						
GILBANEPM041222-1901	2	5/17/2022	1723.16	0.030	0.0050	5.0	5,000	No	50	No
GILBANEPM041222-1902	1	5/18/2022	1735.36	0.036						
GILBANEPM041222-1903	2	5/18/2022	1718.87	0.035	-0.0010	-1.0	5,000	No	50	No
GILBANEPM041222-1904	1	5/19/2022	1741.13	0.039						
GILBANEPM041222-1905	2	5/19/2022	1728.36	0.032	-0.0070	-7.0	5,000	No	50	No
GILBANEPM041222-1906	1	5/19/2022[2]	554.34	0.056						
GILBANEPM041222-1907	2	5/19/2022[2]	554.66	0.055	-0.0010	-1.0	5,000	No	50	No
GILBANEPM042622-1908	1	5/24/2022	1719.02	0.042						
GILBANEPM042622-1909	2	5/24/2022	1714.42	0.038	-0.0040	-4.0	5,000	No	50	No
GILBANEPM042622-1910	1	5/25/2022	1751.97	0.037						
GILBANEPM042622-1911	2	5/25/2022	1739.20	0.031	-0.0060	-6.0	5,000	No	50	No
GILBANEPM042622-1912	1	5/26/2022	1726.43	0.086						
GILBANEPM042622-1913	2	5/26/2022	1721.34	0.024	-0.0620	-62.0	5,000	No	50	No
GILBANEPM042622-1914	1	5/26/2022[2]	477.34	0.024						
GILBANEPM042622-1915	2	5/26/2022[2]	475.02	0.017	-0.0070	-7.0	5,000	No	50	No

Notes:

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

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

[3]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^3 = cubic meters

mg/m^3 = milligrams per cubic meter

PEL = permissible exposure limit

PM10 = particulate matter smaller than 10 microns in diameter

ug/m^3 = micrograms per cubic meter

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ATTACHMENT 4
COPPER, LEAD, AND MANGANESE MONITORING RESULTS

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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[1]	Total Air Volume Monitored (m^3)	Concentration in Air (mg/m^3)	Exceedance (Yes/No)	Concentration in Air (mg/m^3)	Exceedance (Yes/No)	Concentration in Air (mg/m^3)	Exceedance (Yes/No)
GILBANETSP031522-1884	1	5/3/2022	1721.40	0.00004 J	No	0.0000027 J	No	0.000006 J	No
GILBANETSP031522-1885	2	5/3/2022	1726.95	0.000014 J	No	0.000005 J	No	0.000013 J	No
GILBANETSP031522-1886	1	5/4/2022	1712.46	0.000048 J	No	0.0000027 J	No	0.0000079 J	No
GILBANETSP031522-1887	2	5/4/2022	1703.60	0.0000087 J	No	0.000003 J	No	0.0000077 J	No
GILBANETSP031522-1888	1	5/5/2022[2]	1744.74	0.000035 J	No	0.0000051 J	No	0.000011 J	No
GILBANETSP031522-1889	2	5/5/2022[2]	1738.60	0.000023 J	No	0.0000067 J	No	0.00001 J	No
GILBANETSP031522-1890	1	5/5/2022	531.97	0.000037 J	No	0.000002 J	No	0.0000079 J	No
GILBANETSP031522-1891	2	5/5/2022	527.57	0.00037 J	No	0.0000054 J	No	0.000012 J	No
GILBANETSP041222-1892	1	5/10/2022	1703.34	0.000055	No	0.00000910	No	0.0000045	No
GILBANETSP041222-1893	2	5/10/2022	1693.05	0.00023	No	0.00000410	No	0.0000095	No
GILBANETSP041222-1894	1	5/11/2022	1730.86	0.000033	No	0.00000350	No	0.00000750	No
GILBANETSP041222-1895	2	5/11/2022	1725.97	0.000012	No	0.00000440	No	0.00000920	No
GILBANETSP041222-1896	1	5/12/2022	1767.37	0.000061	No	0.00001200	No	0.00001000	No
GILBANETSP041222-1897	2	5/12/2022	1757.78	0.000017	No	0.00000350	No	0.00001200	No
GILBANETSP041222-1898	1	5/12/2022[2]	533.96	0.000037	No	0.00000280	No	0.00000690	No
GILBANETSP041222-1899	2	5/12/2022[2]	533.34	0.000035	No	0.00000710	No	0.00001600	No
GILBANETSP041222-1900	1	5/17/2022	1733.43	0.000015	No	0.00000200	No	0.00000760	No
GILBANETSP041222-1901	2	5/17/2022	1723.16	0.000013	No	0.00000580	No	0.00001200	No
GILBANETSP041222-1902	1	5/18/2022	1735.36	0.000037	No	0.00000180	No	0.00000500	No
GILBANETSP041222-1903	2	5/18/2022	1718.87	0.000016	No	0.00000360	No	0.00000690	No
GILBANETSP041222-1904	1	5/19/2022	1741.13	0.000092	No	0.00000290	No	0.00000810	No
GILBANETSP041222-1905	2	5/19/2022	1728.36	0.000016	No	0.00000220	No	0.00000520	No
GILBANETSP041222-1906	1	5/19/2022[2]	554.34	0.000038	No	0.00000690	No	0.00002200	No
GILBANETSP041222-1907	2	5/19/2022[2]	554.66	0.000029	No	0.00001300	No	0.00002300	No
GILBANETSP042622-1908	1	5/24/2022	1719.02	0.000026	No	0.00000480	No	0.00000730	No
GILBANETSP042622-1909	2	5/24/2022	1714.42	0.000015	No	0.00000300	No	0.00000750	No
GILBANETSP042622-1910	1	5/25/2022	1751.97	0.000190	No	0.00000390	No	0.00000930	No
GILBANETSP042622-1911	2	5/25/2022	1739.20	0.000031	No	0.00000320	No	0.00000730	No
GILBANETSP042622-1912	1	5/26/2022	1726.43	0.000120	No	0.00001000	No	0.00003400	No
GILBANETSP042622-1913	2	5/26/2022	1721.34	0.000028	No	0.00000630	No	0.00001400	No
GILBANETSP042622-1914	1	5/26/2022[2]	477.34	0.000110	No	0.00000310	No	0.00001300	No
GILBANETSP042622-1915	2	5/26/2022[2]	475.02	0.000052	No	0.00000330	No	0.0000089	No

Notes:

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

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

Samples analyzed by Eurofins TestAmerica

Sample locations are shown on Figure 2-1

m^3 = cubic meters

mg/m^3 = milligrams per cubic meter

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

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ATTACHMENT 5

TOTAL SUSPENDED PARTICULATES MONITORING RESULTS

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Attachment 5: Total Suspended Particulates Monitoring Results

Sample, Date and Station Information			Sampler Run Information	Total Suspended Particulates			
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concentration in Air (mg/m^3)	Delta between Downwind and Upwind (mg/m^3)	Basewide HPNS Level (mg/m^3)	Exceedance (Yes/No)
GILBANETSP031522-1884	1	5/3/2022	1668.60	0.0428503 J			
GILBANETSP031522-1885	2	5/3/2022	1733.07	0.0775502 J	0.035	0.5	No
GILBANETSP031522-1886	1	5/4/2022	1658.62	0.0448566 J			
GILBANETSP031522-1887	2	5/4/2022	1707.87	0.0531071 J	0.008	0.5	No
GILBANETSP031522-1888	1	5/5/2022[2]	1670.62	0.0498617 J			
GILBANETSP031522-1889	2	5/5/2022[2]	1741.75	0.0626382 J	0.013	0.5	No
GILBANETSP031522-1890	1	5/5/2022	516.31	0.0269218 J			
GILBANETSP031522-1891	2	5/5/2022	530.25	0.038661 J	0.012	0.5	No
GILBANETSP041222-1892	1	5/10/2022	1629.20	0.0187822			
GILBANETSP041222-1893	2	5/10/2022	1697.99	0.0335102	0.015	0.5	No
GILBANETSP041222-1894	1	5/11/2022	1646.46	0.0245375			
GILBANETSP041222-1895	2	5/11/2022	1722.63	0.0323923	0.008	0.5	No
GILBANETSP041222-1896	1	5/12/2022	1684.77	0.0359693			
GILBANETSP041222-1897	2	5/12/2022	1758.76	0.0406536	0.005	0.5	No
GILBANETSP041222-1898	1	5/12/2022[2]	508.92	0.0062878			
GILBANETSP041222-1899	2	5/12/2022[2]	532.62	0.0469378	0.041	0.5	No
GILBANETSP041222-1900	1	5/17/2022	1653.65	0.0399117			
GILBANETSP041222-1901	2	5/17/2022	1723.64	0.0758279	0.036	0.5	No
GILBANETSP041222-1902	1	5/18/2022	1658.42	0.0515551			
GILBANETSP041222-1903	2	5/18/2022	1734.00	0.0585352	0.007	0.5	No
GILBANETSP041222-1904	1	5/19/2022	1666.40	0.0490278			
GILBANETSP041222-1905	2	5/19/2022	1732.70	0.0486524	-0.0004	0.5	No
GILBANETSP041222-1906	1	5/19/2022[2]	482.22	0.0966364			
GILBANETSP041222-1907	2	5/19/2022[2]	557.50	0.0965022	-0.0001	0.5	No
GILBANETSP042622-1908	1	5/24/2022	1639.04	0.059059			
GILBANETSP042622-1909	2	5/24/2022	1715.64	0.0616679	0.003	0.5	No
GILBANETSP042622-1910	1	5/25/2022	1670.87	0.0489565			
GILBANETSP042622-1911	2	5/25/2022	1745.79	0.0403829	-0.009	0.5	No
GILBANETSP042622-1912	1	5/26/2022	1647.72	0.1167067			
GILBANETSP042622-1913	2	5/26/2022	1723.08	0.0466606	-0.070	0.5	No
GILBANETSP042622-1914	1	5/26/2022[2]	458.13	0.0355794			
GILBANETSP042622-1915	2	5/26/2022[2]	480.50	0.0345473	-0.001	0.5	No

Notes:

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

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

Samples analyzed by Eurofins TestAmerica

Sample locations are shown on Figure 2-1

HPNS = Hunters Point Naval Shipyard

m^3 = cubic meters

mg/m^3 = milligrams per cubic meter

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ATTACHMENT 6

AIR SAMPLING RESULTS – PUBLIC EXPOSURE MONITORING

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Gilbane

AIR SAMPLE RESULTS - PUBLIC EXPOSURE MONITORING

Project Information			Effluent Air Concentration			Sampling Period	Color Codes
Contract / Task Order Number:	Project Title / Location:	Gilbane Project Number:		Alpha	Beta	Air samples collected	Value < 0.1 x Effluent Conc (i.e., < 10%)
N62473-17-D-0005 / F4332	Parcel E RA HPNS, SF, CA	J310000400	Radionuclide	Ra-226	Sr-90	between 02 May 2022	Value > 0.1 x Effluent Conc (i.e., > 10%)
Information effective as of: 29 Jun 2022			Effluent Conc (µCi/ml)	9.E-13	6.E-12	and 31 May 2022	Value > Effluent Conc (i.e., > 100%)

Sample Collection									Count Information								Sample Results				Initials	
Sample Number	Sample Type	Sample Location	Equip No	Ave Flow Rate (lpm)	Start Day Time	End Date Time	Elapsed Time (min)	Volume (ml)	Inst No	Count Date	Time (min)	Counting Units	Gross Activity		Net dpm		Activity (µCi/ml)		Effluent Conc (%)		Count Tech	Data Reviewer
													Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta		
AS-0537	Perimeter	MSE01	PE11	60	5/2/22 6:45	5/2/22 15:50	545	3.3E+07	D	05/09/22	1	cpm	0.00	5.65	0.0	12.5	0.0E+00	1.7E-13	***0.0%***	***2.9%***	BCS	CB
AS-0538	Perimeter	MSE02	PE12	60	5/2/22 6:35	5/2/22 15:42	547	3.3E+07	D	05/09/22	1	cpm	0.40	3.15	1.1	5.5	1.5E-14	7.5E-14	***1.7%***	***1.3%***	BCS	CB
AS-0539	Perimeter	MSE01	PE11	60	5/3/22 4:10	5/3/22 15:34	684	4.1E+07	D	05/09/22	1	cpm	0.10	4.95	0.3	10.6	3.1E-15	1.2E-13	***0.3%***	***1.9%***	BCS	CB
AS-0540	Perimeter	MSE02	PE12	60	5/3/22 4:00	5/3/22 15:30	690	4.1E+07	D	05/09/22	1	cpm	0.20	3.65	0.6	6.9	6.1E-15	7.5E-14	***0.7%***	***1.3%***	BCS	CB
AS-0541	Perimeter	MSE01	PE11	60	5/4/22 4:10	5/4/22 15:24	674	4.0E+07	D	05/09/22	1	cpm	0.05	4.30	0.1	8.7	1.6E-15	9.7E-14	***0.2%***	***1.6%***	BCS	CB
AS-0542	Perimeter	MSE02	PE12	60	5/4/22 4:00	5/4/22 15:18	678	4.1E+07	D	05/09/22	1	cpm	0.05	3.50	0.1	6.5	1.5E-15	7.2E-14	***0.2%***	***1.2%***	BCS	CB
AS-0543	Perimeter	MSE01	PE11	60	5/5/22 3:55	5/5/22 13:55	600	3.6E+07	D	05/09/22	1	cpm	0.20	4.45	0.6	9.2	7.0E-15	1.1E-13	***0.8%***	***1.9%***	BCS	CB
AS-0544	Perimeter	MSE02	PE12	60	5/5/22 4:00	5/5/22 14:02	602	3.6E+07	D	05/09/22	1	cpm	0.05	4.30	0.1	8.7	1.7E-15	1.1E-13	***0.2%***	***1.8%***	BCS	CB
AS-0545	Perimeter	MSE01	PE11	60	5/9/22 6:40	5/9/22 15:52	552	3.3E+07	D	05/16/22	1	cpm	0.15	4.25	0.4	8.6	5.7E-15	1.2E-13	***0.6%***	***1.9%***	BCS	CB
AS-0546	Perimeter	MSE02	PE12	60	5/9/22 6:56	5/9/22 15:30	514	3.1E+07	D	05/16/22	1	cpm	0.20	5.15	0.6	11.1	8.1E-15	1.6E-13	***0.9%***	***2.7%***	BCS	CB
AS-0547	Perimeter	MSE01	PE11	60	5/10/22 4:05	5/10/22 15:53	708	4.2E+07	D	05/16/22	1	cpm	0.15	3.10	0.4	5.4	4.4E-15	5.7E-14	***0.5%***	***0.9%***	BCS	CB
AS-0548	Perimeter	MSE02	PE12	60	5/10/22 4:15	5/10/22 15:49	694	4.2E+07	D	05/16/22	1	cpm	0.10	4.65	0.3	9.7	3.0E-15	1.1E-13	***0.3%***	***1.8%***	BCS	CB
AS-0549	Perimeter	MSE01	PE11	60	5/11/22 3:50	5/11/22 15:56	726	4.4E+07	D	05/16/22	1	cpm	0.05	3.85	0.1	7.5	1.4E-15	7.7E-14	***0.2%***	***1.3%***	BCS	CB
AS-0550	Perimeter	MSE02	PE12	60	5/11/22 4:00	5/11/22 15:48	708	4.2E+07	D	05/16/22	1	cpm	0.10	4.30	0.3	8.7	3.0E-15	9.3E-14	***0.3%***	***1.5%***	BCS	CB
AS-0551	Perimeter	MSE01	PE11	60	5/12/22 4:00	5/12/22 15:18	678	4.1E+07	D	05/16/22	1	cpm	0.10	4.70	0.3	9.9	3.1E-15	1.1E-13	***0.3%***	***1.8%***	BCS	CB
AS-0552	Perimeter	MSE02	PE12	60	5/12/22 4:10	5/12/22 14:16	606	3.6E+07	D	05/16/22	1	cpm	0.15	4.35	0.4	8.9	5.2E-15	1.1E-13	***0.6%***	***1.8%***	BCS	CB
AS-0553	Perimeter	MSE01	PE11	60	5/16/22 6:50	5/16/22 15:15	505	3.0E+07	E	05/31/22	1	cpm	0.40	4.10	2.5	8.8	3.7E-14	1.3E-13	***4.2%***	***2.2%***	BCS	CB
AS-0554	Perimeter	MSE02	PE12	60	5/16/22 6:40	5/16/22 15:07	507	3.0E+07	E	05/31/22	1	cpm	0.35	3.45	2.2	6.8	3.3E-14	1.0E-13	***3.6%***	***1.7%***	BCS	CB
AS-0555	Perimeter	MSe01	PE11	60	5/17/22 3:50	5/17/22 15:22	692	4.2E+07	E	05/31/22	1	cpm	0.10	4.70	0.6	10.6	6.8E-15	1.2E-13	***0.8%***	***1.9%***	BCS	CB
AS-0556	Perimeter	MSE02	PE12	60	5/17/22 3:55	5/17/22 15:19	684	4.1E+07	E	05/31/22	1	cpm	0.15	4.05	0.9	8.6	1.0E-14	9.5E-14	***1.2%***	***1.6%***	BCS	CB
AS-0557	Perimeter	MSE01	PE11	60	5/18/22 3:55	5/18/22 15:19	684	4.1E+07	E	05/31/22	1	cpm	0.05	4.85	0.3	11.1	3.5E-15	1.2E-13	***0.4%***	***2.0%***	BCS	CB
AS-0558	Perimeter	MSE02	PE12	60	5/18/22 4:00	5/18/22 15:12	672	4.0E+07	E	05/31/22	1	cpm	0.30	4.10	1.9	8.8	2.1E-14	9.8E-14	***2.3%***	***1.6%***	BCS	CB
AS-0559	Perimeter	MSE01	PE11	60	5/19/22 4:05	5/19/22 14:15	610	3.7E+07	E	05/31/22	1	cpm	0.25	4.30	1.6	9.4	1.9E-14	1.2E-13	***2.2%***	***1.9%***	BCS	CB
AS-0560	Perimeter	MSE02	PE12	60	5/19/22 4:00	5/19/22 14:19	619	3.7E+07	E	05/31/22	1	cpm	0.30	3.55	1.9	7.1	2.3E-14	8.6E-14	***2.5%***	***1.4%***	BCS	CB
AS-0561	Perimeter	MSE01	PE11	60	5/23/22 6:36	5/23/22 15:19	523	3.1E+07	E	05/31/22	1	cpm	0.40	4.90	2.5	11.2	3.6E-14	1.6E-13	***4.0%***	***2.7%***	BCS	CB
AS-0562	Perimeter	MSE02	PE12	60	5/23/22 6:35	5/23/22 15:23	528	3.2E+07	E	05/31/22	1	cpm	0.20	3.85	1.3	8.0	1.8E-14	1.1E-13	***2.0%***	***1.9%***	BCS	CB
AS-0563	Perimeter	MSE01	PE11	60	5/24/22 4:05	5/24/22 15:13	668	4.0E+07	E	05/31/22	1	cpm	0.15	3.25	0.9	6.2	1.1E-14	7.0E-14	***1.2%***	***1.2%***	BCS	CB
AS-0564	Perimeter	MSE02	PE12	60	5/24/22 3:55	5/24/22 15:09	674	4.0E+07	E	05/31/22	1	cpm	0.30	3.90	1.9	8.2	2.1E-14	9.1E-14	***2.3%***	***1.5%***	BCS	CB
AS-0565	Perimeter	MSE01	PE11	60	5/25/22 4:00	5/25/22 15:11	671	4.0E+07	E	05/31/22	1	cpm	0.05	3.85	0.3	8.0	3.5E-15	9.0E-14	***0.4%***	***1.5%***	BCS	CB
AS-0566	Perimeter	MSE02	PE12	60	5/25/22 3:50	5/25/22 15:09	679	4.1E+07	E	05/31/22	1	cpm	0.10	5.20	0.6	12.1	7.0E-15	1.3E-13	***0.8%***	***2.2%***	BCS	CB
AS-0567	Perimeter	MSE01	PE11	60	5/26/22 3:55	5/26/22 13:10	555	3.3E+07	E	05/31/22	1	cpm	0.15	3.85	0.9	8.0	1.3E-14	1.1E-13	***1.4%***	***1.8%***	BCS	CB
AS-0568	Perimeter	MSE02	PE12	60	5/26/22 4:00	5/26/22 13:09	549	3.3E+07	E	05/31/22	1	cpm	0.10	3.80	0.6	7.9	8.6E-15	1.1E-13	***1.0%***	***1.8%***	BCS	CB
AS-0569	Perimeter	MSE01	PE11	60	5/31/22 6:45	5/31/22 15:34	529	3.2E+07	E	06/06/22	1	cpm	0.35	4.25	2.2	9.2	3.1E-14	1.3E-13	***3.5%***	***2.2%***	BCS	CB
AS-0570	Perimeter	MSE02	PE12	60	5/31/22 6:35	5/31/22 15:30	535	3.2E+07	E	06/06/22	1	cpm	0.20	4.10	1.3	8.8	1.8E-14	1.2E-13	***2.0%***	***2.1%***	BCS	CB

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ATTACHMENT 7
LABORATORY REPORTS

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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

Report To :	Client Name:	GES - ASRC Industrial	Total Number of Pages:	5
	Attn:	[redacted]	P.O.#. :	J310000400-0015
	Client Address:	1501 West Fountainhead Parkway, Ste. #550	Date Received :	05/04/2022 14:51
	City, State, Zip:	Tempe, Arizona, 85282	Sample Collected By :	[redacted]

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

[redacted]

Released By: [redacted]

Title: Vice President Operations

Analyst: [redacted]

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

Date 5/11/2022

Job ID : 22050377
Analytical Method: NIOSH 7400-I2-Aug1994

Client: GES - ASRC Industrial Project: HPNS Parcel E Phase II J310000400 Attn: [redacted]

A&B Sample ID	Client Sample ID	Collected Date	Area/Person	Flow Rate L/m	Time On	Time Off	Total Time (min)	Volume (Liters)	Total Fields	Total Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
22050377.01	MSE01-042822	04/28/2022	Area	2			446	892	100	7	8.917	0.004		05/06/22	[redacted]
22050377.02	MSE02-042822	04/28/2022	Area	2			446	892	100	12.5	15.924	0.007		05/06/22	[redacted]
22050377.03	MSE01-050222	05/02/2022	Area	2			525	1050	100	2	2.548	< 0.003		05/06/22	[redacted]
22050377.04	MSE02-050222	05/02/2022	Area	2			529	1058	100	65.0	82.803	0.030		05/06/22	[redacted]

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

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

Sample Condition Checklist

A&B JobID : **22050377**	Date Received : **05/04/2022**	Time Received : **2:51PM**
Client Name : **GES - ASRC Industrial**		
Temperature : **19.8°C**	Sample pH : **NA**	
Thermometer ID : **IR3**	pH Paper ID : **NA**	
Perservative :		

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

Comments : Include actions taken to resolve discrepancies/problem:

No cooler was received, however samples are received in a box with a custody seal. Received black cassettes. ~EV 5/4/2022

Received by : [redacted]

Check in by/date : [redacted] / 05/04/2022

ab-s005-0321

Event ID: Air Monitoring May 2022

COC# KT050322ASB

Gilbane Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II J310000400

Project Manage [redacted]

Site Location: Hunters Point, San Francisco, CA 94124

Laboratory Name: A&B Labs

Address: 10100 East Fwy Ste. 100
Houston TX 77029

Contact Name: [redacted]

5/03/2022

Page: 1 of 1

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Asbestos	Analysis: Preservative: None / Container Type: Filter	Flow Rate = 2 L/min Special Instructions/Comments Total Time (min)
MSE01-042822 01A	4/28/2022	1411	NA	NA	1	AA	X		446
MSE02-042822 02A	4/28/2022	1403	NA	NA	1	AA	X		446
MSE01-050222 03A	5/02/2022	1549	NA	NA	1	AA	X		525
MSE02-050222 04A	5/02/2022	1537	NA	NA	1	AA	X		529

TP 5/3/22

Job ID:22050377

05/04/2022 GES - ASRC Industrial ACH

Sampled By: [redacted]

Signature:

Special Instructions: —

Send Results to: [redacted]

Turnaround Time: Standard

Sampler: [redacted]

Courier/Airbill No.: FedEx/ 7767 4706 1540

Relinquished By:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
[redacted] / Gilbane	5/3/22	1600	Fedex	5/3/22	1600
FEDEX	5-4-22	14:51	[redacted]	5-4-22	14:51

19.8°C IR3

CUSTODY SEAL

After printing this label:
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3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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

Laboratory Analysis Report

Job ID : 22050827

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:	[redacted]	P.O.#. :	J310000400-0015
	Client Address:	[redacted]	Date Received :	05/06/2022 16:27
	City, State, Zip:	Tempe, Arizona, 85282	Sample Collected By :	[redacted]

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-050322	5/3/2022 15:39	Cassette	22050827.01
MSE02-050322	5/3/2022 15:33	Cassette	22050827.02
MSE01-050422	5/4/2022 15:27	Cassette	22050827.03
MSE02-050422	5/4/2022 15:22	Cassette	22050827.04

[redacted]

Released By: [redacted]

Title: Vice President Operations

Analyst: [redacted]

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

Date 5/12/2022

Job ID : 22050827
Analytical Method: NIOSH 7400-I2-Aug1994

Client: GES - ASRC Industrial Project: HPNS Parcel E Phase II J310000400 Attn: [redacted]

A&B Sample ID	Client Sample ID	Collected Date	Area/Person	Flow Rate L/m	Time On	Time Off	Total Time (min)	Volume (Liters)	Total Fields	Total Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
22050827.01	MSE01-050322	05/03/2022	Area	2			522	1044	100	5	6.369	< 0.003		05/12/22	[redacted]
22050827.02	MSE02-050322	05/03/2022	Area	2			525	1050	100	4.0	5.096	< 0.003		05/12/22	[redacted]
22050827.03	MSE01-050422	05/04/2022	Area	2			537	1074	100	3	3.822	< 0.003		05/12/22	[redacted]
22050827.04	MSE02-050422	05/04/2022	Area	2			541	1082	100	19.5	24.841	0.009		05/12/22	[redacted]

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

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

Sample Condition Checklist

A&B JobID : **22050827**	Date Received : **05/06/2022**	Time Received : **4:27PM**
Client Name : **GES - ASRC Industrial**		
Temperature : **23.1°C**	Sample pH : **NA**	
Thermometer ID : **IR3**	pH Paper ID : **NA**	
Perservative :		

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

Comments : Include actions taken to resolve discrepancies/problem:

No cooler was received, however samples are received in a box with a custody seal. Received black cassettes. ~EV 5/9/2022

Received by : [redacted]

Check in by/date : [redacted] / 05/09/2022

0

Event ID: Air Monitoring May 2022

COC# KT050522ASB

Gilbane Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II I310000400

Project Manager: [redacted]

Site Location: Hunters Point, San Francisco, CA 94124

Laboratory Name: A&B Labs

Address: 10100 East Fwy Ste. 100, Houston TX 77029

Contact Name: [redacted]

5/05/2022

Page: 1 of 1

	Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Asbestos	Analysis: Preservative: None / Container Type: Filter	Flow Rate = 2 L/min Special Instructions/Comments Total Time (min)
01A	MSE01-050322	5/03/2022	1539	NA	NA	1	AA	X		522
02A	MSE02-050322	5/03/2022	1533	NA	NA	1	AA	X		525
03A	MSE01-050422	5/04/2022	1527	NA	NA	1	AA	X		537
04A	MSE02-050422	5/04/2022	1522	NA	NA	1	AA	X		541

TP 5/5/22

Job ID:22050827

05/06/2022 GES - ASRC Industrial ACH

Sampled By: [redacted]

Signature:

Special Instructions: —

Send Results to: [redacted]

Turnaround Time: Standard

Sampler: [redacted]

Courier/Airbill No.: FedEx/ 7767 6951 8538

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
[redacted] / Gilbane	5/5/22	1600	Fedex	5/5/22	1600
Fedex	5/6/22	~~16:47~~ 16:27	[redacted]	5/6/22	~~16:47~~ 16:27

23.1°C IR3

Page 5 of 5

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

Date: 5/5/22
Signature:

Laboratory Analysis Report

Job ID : 22051202

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:	[redacted]	P.O.#. :	J310000400-0015
	Client Address:	1501 West Fountainhead Parkway, Ste. #550	Date Received :	05/11/2022 16:06
	City, State, Zip:	Tempe, Arizona, 85282	Sample Collected By :	[redacted]

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-050522	5/5/2022 14:05	Cassette	22051202.01
MSE02-050522	5/5/2022 14:01	Cassette	22051202.02
MSE01-050922	5/9/2022 15:32	Cassette	22051202.03
MSE02-050922	5/9/2022 15:51	Cassette	22051202.04

[redacted]

Title: Vice President Operations

Analyst: [redacted]

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

Date 5/18/2022

Job ID : 22051202
Analytical Method: NIOSH 7400-I2-Aug1994

Client: GES - ASRC Industrial Project: HPNS Parcel E Phase II J310000400 Attn: [redacted]

A&B Sample ID	Client Sample ID	Collected Date	Area/Person	Flow Rate L/m	Time On	Time Off	Total Time (min)	Volume (Liters)	Total Fields	Total Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
22051202.01	MSE01-050522	05/05/2022	Area	2			448	896	100	1.5	1.911	< 0.003		05/18/22	[redacted]
22051202.02	MSE02-050522	05/05/2022	Area	2			454	908	100	1	1.274	< 0.003		05/18/22	[redacted]
22051202.03	MSE01-050922	05/09/2022	Area	2			524	1048	100	1	1.274	< 0.003		05/18/22	[redacted]
22051202.04	MSE02-050922	05/09/2022	Area	2			533	1066	100	10.0	12.739	0.005		05/18/22	[redacted]

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

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

Sample Condition Checklist

A&B JobID : **22051202**	Date Received : **05/11/2022**	Time Received : **4:06PM**
Client Name : **GES - ASRC Industrial**		
Temperature : **18.3°C**	Sample pH : **NA**	
Thermometer ID : **IR3**	pH Paper ID : **NA**	
Perservative :		

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

Comments : Include actions taken to resolve discrepancies/problem:

Black Cassettes. No cooler was received; however, sample are received in a bow with custody seal. ~JE 05/11/22

Received by : [redacted]

Check in by/date : [redacted] / 05/11/2022

ab-s005-0321

Event ID: Air Monitoring May 2022

COC# KT051022ASB

Gilbane

Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II I310000400

Project Manager: [redacted]

Site Location: Hunters Point, San Francisco, CA 94124

Laboratory Name: A&B Labs

Address: 10100 East Fwy Ste. 100, Houston TX 77029

Contact Name: [redacted]

5/10/2022

Page: 1 of 1

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Asbestos	Analysis: Preservative: None / Container Type: Filter	Flow Rate = 2 L/min Special Instructions/Comments Total Time (min)
MSE01-050522	5/05/2022	1405	NA	NA	1	AA	X		448 01A
MSE02-050522	5/05/2022	1401	NA	NA	1	AA	X		454 02A
MSE01-050922	5/09/2022	1532	NA	NA	1	AA	X		524 03A
MSE02-050922	5/09/2022	1551	NA	NA	1	AA	X		533 04A

Job ID:22051202

05/11/2022 GES - ASRC Industrial ACH

Sampled By: [redacted]

Signature:

Special Instructions: N/A

Send Results to: [redacted]

Turnaround Time: Standard

Sampler: [redacted]

Relinquished By/Affiliation: [redacted] / Gilbane FEDEX — Date: 5/10/22 — Time: 1600

Courier/Airbill No.: FedEx/ 7768 1072 6451

Received By/ Affiliation: FedEx — Date: 5/10/22 — Time: 1600

[redacted] — Date: 05/11/22 — Time: 1606

15.6° C 1B3

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Laboratory Analysis Report

Job ID : 22051587

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:	[redacted]	P.O.#. :	J310000400-0015
	Client Address:	1501 West Fountainhead Parkway, Ste. #550	Date Received :	05/13/2022 15:29
	City, State, Zip:	Tempe, Arizona, 85282	Sample Collected By :	[redacted]

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-051022	5/10/2022 15:36	Cassette	22051587.01
MSE02-051022	5/10/2022 15:27	Cassette	22051587.02
MSE01-051122	5/11/2022 15:54	Cassette	22051587.03
MSE02-051122	5/11/2022 15:45	Cassette	22051587.04

[redacted]

Released By: [redacted]

Title: Vice President Operations

Analyst: [redacted]

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

Date 5/20/2022

Job ID : 22051587
Analytical Method: NIOSH 7400-I2-Aug1994

Client: GES - ASRC Industrial Project: HPNS Parcel E Phase II J310000400 Attn: [redacted]

A&B Sample ID	Client Sample ID	Collected Date	Area/Person	Flow Rate L/m	Time On	Time Off	Total Time (min)	Volume (Liters)	Total Fields	Total Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
22051587.01	MSE01-051022	05/10/2022	Area	2			542	1084	100	4.5	5.732	< 0.002		05/20/22	[redacted]
22051587.02	MSE02-051022	05/10/2022	Area	2			547	1094	100	15.0	19.108	0.007		05/20/22	[redacted]
22051587.03	MSE01-051122	05/11/2022	Area	2			566	1132	100	3.5	4.459	< 0.002		05/20/22	[redacted]
22051587.04	MSE02-051122	05/11/2022	Area	2			566	1132	100	0	0.000	< 0.002		05/20/22	[redacted]

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

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

Sample Condition Checklist

A&B JobID : **22051587**	Date Received : **05/13/2022**	Time Received : **3:29PM**
Client Name : **GES - ASRC Industrial**		
Temperature : **18.7°C**	Sample pH : **N/A**	
Thermometer ID : **IR3**	pH Paper ID : **N/A**	
Perservative :		

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

Comments : Include actions taken to resolve discrepancies/problem:

No cooler was received however, samples received in box with custody seal. Received black cassettes. -CH 05/16/22

Received by : [redacted]

Check in by/date : [redacted] / 05/16/2022

ab-s005-0321

0

Event ID: Air Monitoring May 2022

COC# KT051222ASB

Gilbane Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II J310000400

Project Manager [redacted]

Site Location: Hunters Point, San Francisco, CA 94124

Laboratory Name: A&B Labs

Address: 10100 East Fwy Ste. 100, Houston TX 77029

Contact Name [redacted]

5/12/2022

Page: 1 of 1

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Analysis: Asbestos	Preservative: None	Container Type: Filter	Flow Rate = 2 L/min	Special Instructions/Comments Total Time (min)
MSE01-051022 01A	5/10/2022	1536	NA	NA	1	AA	X				542
MSE02-051022 02A	5/10/2022	1527	NA	NA	1	AA	X				547
MSE01-051122 03A	5/11/2022	1554	NA	NA	1	AA	X				566
MSE02-051122 04A	5/11/2022	1545	NA	NA	1	AA	X				566

IP 5/12/22

Job ID:22051587

05/13/2022 GES - ASRC Industrial ACH

Sampled By [redacted]

Signature:

Special Instructions: —

Send Results to: [redacted]

Turnaround Time: Standard

Sampler: [redacted]

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
[redacted] / Gilbane	5/12/22	1600	Fedex	5/12/22	1600
FedEx	5-13-22	1529	[redacted]	5-13-22	1529

Courier/Airbill No.: FedEx/ 7768 3091 2040

18.7° IR3 CW

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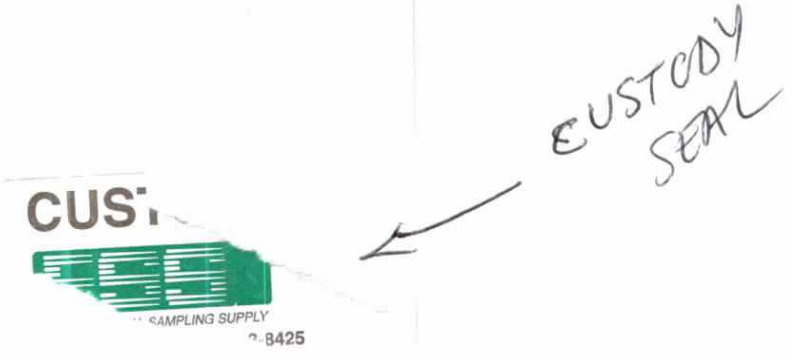
Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions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



Laboratory Analysis Report

Job ID : 22052024

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:	[redacted]	P.O.#. :	J310000400-0015
	Client Address:	[redacted]	Date Received :	05/18/2022 15:44
	City, State, Zip:	Tempe, Arizona, 85282	Sample Collected By :	[redacted]

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-051222	5/12/2022 14:24	Cassette	22052024.01
MSE02-051222	5/12/2022 14:12	Cassette	22052024.02
MSE01-051622	5/16/2022 15:15	Cassette	22052024.03
MSE02-051622	5/16/2022 15:09	Cassette	22052024.04

[redacted]

Released By: [redacted]

Title: Vice President Operations

Analyst: [redacted]

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

Date 5/25/2022

Job ID : 22052024
Analytical Method: NIOSH 7400-I2-Aug1994

Client: GES - ASRC Industrial Project: HPNS Parcel E Phase II J310000400 Attn: [redacted]

A&B Sample ID	Client Sample ID	Collected Date	Area/Person	Flow Rate L/m	Time On	Time Off	Total Time (min)	Volume (Liters)	Total Fields	Total Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
22052024.01	MSE01-051222	05/12/2022	Area	2			453	906	100	1	1.274	< 0.003		05/25/22	[redacted]
22052024.02	MSE02-051222	05/12/2022	Area	2			450	900	100	16.5	21.019	0.009		05/25/22	[redacted]
22052024.03	MSE01-051622	05/16/2022	Area	2			502	1004	100	3	3.822	< 0.003		05/25/22	[redacted]
22052024.04	MSE02-051622	05/16/2022	Area	2			507	1014	100	24.0	30.573	0.012		05/25/22	[redacted]

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

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

Sample Condition Checklist

A&B JobID : **22052024**	Date Received : **05/18/2022**	Time Received : **3:44PM**
Client Name : **GES - ASRC Industrial**		
Temperature : **23.7°C**	Sample pH : **NA**	
Thermometer ID : **IR3**	pH Paper ID : **NA**	
Perservative :		

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

Comments : Include actions taken to resolve discrepancies/problem:

Black Cassettes. Noo cooler was received; however, samples are received in a box with custody seal. ~JE 05/18/22

Received by : [redacted]

Check in by/date : [redacted] / 05/18/2022

0

Event ID: Air Monitoring May 2022

COC# KT051722ASB

Gilbane

Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II I310000400

Project Manage: [redacted]

Site Location: Hunters Point, San Francisco, CA 94124

Laboratory Name: A&B Labs

Address: 10100 East Fwy Ste. 100
Houston TX 77029

Contact Name: [redacted]

5/17/2022

Page: 1 of 1

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Asbestos	Analysis: Preservative: None / Container Type: Filter	Flow Rate = 2 L/min Special Instructions/Comments Total Time (min)
MSE01-051222	5/12/2022	1424	NA	NA	1	AA	X		453 01A
MSE02-051222	5/12/2022	1412	NA	NA	1	AA	X		450 02A
MSE01-051622	5/16/2022	1515	NA	NA	1	AA	X		502 03A
MSE02-051622	5/16/2022	1509	NA	NA	1	AA	X		507 04A

Job ID:22052024

05/18/2022 GES - ASRC Industrial ACH

Sampled By: [redacted]

Signature:

Special Instructions: None

Send Results to: [redacted]

Turnaround Time: Standard

Sampler: [redacted]

Relinquished By/Affiliation: [redacted] FEDEX

Date: 5/17/22 Time: 1600

Courier/Airbill No.: FedEx/ 7768 6824 7900

Received By/ Affiliation: Fed Ex [redacted]

Date: 5/17/22 Time: 1600
05/18/22 1544

23.7°C IR3

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

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

SEAL

Gilbert

Date: 5/17/22

Signature:

Laboratory Analysis Report

Job ID : 22052305

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:	[redacted]	P.O.#. :	J310000400-0015
	Client Address:	[redacted]	Date Received :	05/20/2022 15:24
	City, State, Zip:	Tempe, Arizona, 85282	Sample Collected By :	[redacted]

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-051722	5/17/2022 15:21	Cassette	22052305.01
MSE02-051722	5/17/2022 15:14	Cassette	22052305.02
MSE01-051822	5/18/2022 15:22	Cassette	22052305.03
MSE02-051822	5/18/2022 15:16	Cassette	22052305.04

[redacted]

Title: Vice President Operations

Analyst: [redacted]

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

Date 5/27/2022

Job ID : 22052305
Analytical Method: NIOSH 7400-I2-Aug1994

Client: GES - ASRC Industrial Project: HPNS Parcel E Phase II J310000400 Attn: [redacted]

A&B Sample ID	Client Sample ID	Collected Date	Area/Person	Flow Rate L/m	Time On	Time Off	Total Time (min)	Volume (Liters)	Total Fields	Total Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
22052305.01	MSE01-051722	05/17/2022	Area	2			514	1028	100	4.5	5.732	< 0.003		05/26/22	[redacted]
22052305.02	MSE02-051722	05/17/2022	Area	2			514	1028	100	6.0	7.643	0.003		05/26/22	[redacted]
22052305.03	MSE01-051822	05/18/2022	Area	2			521	1042	100	1	1.274	< 0.003		05/26/22	[redacted]
22052305.04	MSE02-051822	05/18/2022	Area	2			526	1052	100	1.5	1.911	< 0.003		05/26/22	[redacted]

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

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

Sample Condition Checklist

A&B JobID : **22052305**	Date Received : **05/20/2022**	Time Received : **3:24PM**
Client Name : **GES - ASRC Industrial**		
Temperature : **22.8°C**	Sample pH : **NA**	
Thermometer ID : **IR3**	pH Paper ID : **NA**	
Perservative :		

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

Comments : Include actions taken to resolve discrepancies/problem:

Received samples in black cassettes. No cooler was received, however samples are received in a box with a custody seal. ~EV 5/23/2022

Received by : [redacted]

Check in by/date [redacted] / 05/23/2022

ab-s005-0321

Phone : [redacted]

www.ablabs.com

0

Event ID: Air Monitoring May 2022

COC# KT051922ASB

Gilbane

Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II J310000400

Project Manag[redacted]

Site Location: Hunters Point, San Francisco, CA 94124

Laboratory Name: A&B Labs

Address: 10100 East Fwy Ste. 100
Houston TX 77029

Contact Nam[redacted]

5/19/2022

Page: 1 of 1

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Analysis: Asbestos	Preservative: None / Container Type: Filter	Flow Rate = 2 L/min Special Instructions/Comments Total Time (min)
MSE01-051722 01A	5/17/2022	1521	NA	NA	1	AA	X		514
MSE02-051722 02A	5/17/2022	1514	NA	NA	1	AA	X		514
MSE01-051822 03A	5/18/2022	1522	NA	NA	1	AA	X		521
MSE02-051822 04A	5/18/2022	1516	NA	NA	1	AA	X		526

Job ID:22052305

05/20/2022 GES - ASRC Industrial ACH

Sampled By: [redacted]

Signature: [redacted]

Special Instructions: None

Send Results to: [redacted]

Turnaround Time: Standard

Sampler: [redacted]

Courier/Airbill No.: FedEx/ 7768 9594 7502

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
[redacted] / Gilbane FedEx	5/19/22 5-20-22	1600 15:24	FedEx [redacted]	5/19/22 5-20-22	1600 15:24

22.5
IR3
MW

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

SHIP DATE: 19MAY22
ACTWGT: 1.00 LB
CAD: 254128867/INET4490

BILL SENDER

TO [redacted]
A & B LABS
10100 EAST FREEWAY, SUITE 100

HOUSTON TX 77029
[redacted] REF: J31000.400.00.18.04
INV:
PO: DEPT:

577J5/1BD6/FE4A

FedEx Express

FRI - 20 MAY 4:30P
STANDARD OVERNIGHT

TRK# 0201 7768 9594 7502

77029
IAH
TX-US

UL HBYA

this label:
nt' button on this page to print your label to your laser or inkjet printer.
ted page along the horizontal line.
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clare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx
apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit,
s, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the
clared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $1,000, e.g. jewelry,
ils, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current
e Guide.

1256033

Custody Seal
DATE 5/19/22
SIGNATURE

eurofins | Environment Testing TestAmerica

Gilbert

1256033

eurofins | Environment Testing TestAmerica

Laboratory Analysis Report

Job ID : 22052763

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:	[redacted]	P.O.#. :	J310000400-0015
	Client Address:	[redacted]	Date Received :	05/25/2022 15:47
	City, State, Zip:	Tempe, Arizona, 85282	Sample Collected By :	[redacted]

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-051922	5/19/2022 14:26	Cassette	22052763.01
MSE02-051922	5/19/2022 14:10	Cassette	22052763.02
MSE01-052322	5/23/2022 15:19	Cassette	22052763.03
MSE02-052322	5/23/2022 15:15	Cassette	22052763.04

[redacted]

Title: Vice President Operations

Analyst: [redacted]

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

Date 6/2/2022

Job ID : 22052763
Analytical Method: NIOSH 7400-I2-Aug1994

Client: GES - ASRC Industrial Project: HPNS Parcel E Phase II J310000400 Attn: [redacted]

A&B Sample ID	Client Sample ID	Collected Date	Area/Person	Flow Rate L/m	Time On	Time Off	Total Time (min)	Volume (Liters)	Total Fields	Total Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
22052763.01	MSE01-051922	05/19/2022	Area	2			470	940	100	3	3.822	< 0.003		06/02/22	[redacted]
22052763.02	MSE02-051922	05/19/2022	Area	2			465	930	100	23.0	29.299	0.012		06/02/22	[redacted]
22052763.03	MSE01-052322	05/23/2022	Area	2			500	1000	100	9.5	12.102	0.005		06/02/22	[redacted]
22052763.04	MSE02-052322	05/23/2022	Area	2			510	1020	100	0	0.000	< 0.003		06/02/22	[redacted]

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

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

Sample Condition Checklist

A&B JobID : **22052763**	Date Received : **05/25/2022**	Time Received : **3:47PM**
Client Name : **GES - ASRC Industrial**		
Temperature : **23.1°C**	Sample pH : **NA**	
Thermometer ID : **IR3**	pH Paper ID : **NA**	
Perservative :		

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

Comments : Include actions taken to resolve discrepancies/problem:

No cooler was received, however samples are received in a box with a custody seal. Received black cassettes. ~EV 5/26/2022

Received by : [redacted]

Check in by/date : [redacted] / 05/26/2022

0

Event ID: Air Monitoring May 2022

COC# KT052422ASB

Gilbane Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II J310000400

Project Manage: [redacted]

Site Location: Hunters Point, San Francisco, CA 94124

Laboratory Name: A&B Labs

Address: 10100 East Fwy Ste. 100
Houston TX 77029

Contact Name: [redacted]

5/24/2022

Page: 1 of 1

Analysis:

Preservative: None

Container Type: Filter

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Asbestos	Flow Rate = 2 L/min Special Instructions/Comments Total Time (min)
MSE01-051922 01A	5/19/2022	1426	NA	NA	1	AA	X	470
MSE02-051922 02A	5/19/2022	1410	NA	NA	1	AA	X	465
MSE01-052322 03A	5/23/2022	1519	NA	NA	1	AA	X	500
MSE02-052322 04A	5/23/2022	1515	NA	NA	1	AA	X	510

Job ID:22052763

05/25/2022 GES - ASRC Industrial ACH

Sampled By: [redacted]

Signature:

Special Instructions: None

Send Results to: [redacted]

Turnaround Time: Standard

Sample: [redacted]

Courier/Airbill No.: FedEx/ 7769 4410 5984

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
[redacted]/Gilbane	05/24/22	1600	Fedex	05/24/22	1600
FEDEX	5-25-22	15:47	[redacted]	5-25-22	15:47

23.1°
TR

Page 5 of 5

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

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

GEL Laboratories, LLC CUSTO
Person Collecting Sample (signati
Date Collected 5.24.22

Laboratory Analysis Report

Job ID : 22053033

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:	[redacted]	P.O.#. :	J310000400-0015
	Client Address:	[redacted]	Date Received :	05/27/2022 15:10
	City, State, Zip:	Tempe, Arizona, 85282	Sample Collected By :	[redacted]

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-052422	5/24/2022 15:18	Cassette	22053033.01
MSE02-052422	5/24/2022 15:15	Cassette	22053033.02
MSE01-052522	5/25/2022 15:15	Cassette	22053033.03
MSE02-052522	5/25/2022 15:11	Cassette	22053033.04

[redacted]

Released By: [redacted]

Title: Vice President Operations

Analyst: [redacted]

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

Date 6/6/2022

Job ID : 22053033
Analytical Method: NIOSH 7400-I2-Aug1994

Client: GES - ASRC Industrial Project: HPNS Parcel E Phase II J310000400 Attn: [redacted]

A&B Sample ID	Client Sample ID	Collected Date	Area/Person	Flow Rate L/m	Time On	Time Off	Total Time (min)	Volume (Liters)	Total Fields	Total Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
22053033.01	MSE01-052422	05/24/2022	Area	2			512	1024	100	6.0	7.643	0.003		06/03/22	[redacted]
22053033.02	MSE02-052422	05/24/2022	Area	2			521	1042	100	0	0.000	< 0.003		06/03/22	[redacted]
22053033.03	MSE01-052522	05/25/2022	Area	2			509	1018	100	9.0	11.465	0.004		06/03/22	[redacted]
22053033.04	MSE02-052522	05/25/2022	Area	2			517	1034	100	6	7.643	0.003		06/03/22	[redacted]

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

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

Sample Condition Checklist

A&B JobID : **22053033**	Date Received : **05/27/2022**	Time Received : **3:10PM**
Client Name : **GES - ASRC Industrial**		
Temperature : **23.1°C**	Sample pH : **NA**	
Thermometer ID : **IR3**	pH Paper ID : **NA**	
Perservative :		

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

Comments : Include actions taken to resolve discrepancies/problem:

Black Cassettes. No cooler was received; however, samples are received in a box with custody seal. ~JE 05/27/22

Received by : [redacted]

Check in by/date : [redacted] / 05/27/2022

ab-s005-0321

0

Event ID: Air Monitoring May 2022

COC# KT052622ASB

Gilbane

Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II I310000400

Project Manage: [redacted]

Site Location: Hunters Point, San Francisco, CA 94124

Laboratory Name: A&B Labs

Address: 10100 East Fwy Ste. 100
Houston TX 77029

Contact Nam: [redacted]

5/26/2022

Page: 1 of 1

Job ID:22053033

05/27/2022 GES - ASRC Industrial ACH

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Analysis: Asbestos	Preservative: None	Container Type: Filter	Flow Rate = 2 L/min Special Instructions/Comments Total Time (min)	
MSE01-052422	5/24/2022	1518	NA	NA	1	AA	X			512	01A
MSE02-052422	5/24/2022	1515	NA	NA	1	AA	X			521	02A
MSE01-052522	5/25/2022	1515	NA	NA	1	AA	X			509	03A
MSE02-052522	5/25/2022	1511	NA	NA	1	AA	X			517	04A

TP 5/26/22

Sampled By: [redacted]

Signature:

Special Instructions:

Send Results to: [redacted]

Turnaround Time: Standard

Sampler: [redacted]

Courier/Airbill No.: FedEx/ 7769 5675 2534

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
[redacted] /Gilbane	5/26/22	1600	FedEx	5/26/22	1600
FEDEX			[redacted]	05/27/22	1510

23.1°C
IR3

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Date: 5/26/22

ıre:

Laboratory Analysis Report

Job ID : 22060368

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:	[redacted]	P.O.#. :	J310000400-0015
	Client Address:	[redacted]	Date Received :	06/02/2022 16:09
	City, State, Zip:	Tempe, Arizona, 85282	Sample Collected By :	[redacted]

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-052622	5/26/2022 13:18	Cassette	22060368.01
MSE02-052622	5/26/2022 13:09	Cassette	22060368.02

[redacted]

Released By: [redacted]

Title: Vice President Operations

Analyst: [redacted]

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

Date 6/8/2022

Job ID : 22060368
Analytical Method: NIOSH 7400-I2-Aug1994

Client: GES - ASRC Industrial Project: HPNS Parcel E Phase II J310000400 Attn: [redacted]

A&B Sample ID	Client Sample ID	Collected Date	Area/Person	Flow Rate L/m	Time On	Time Off	Total Time (min)	Volume (Liters)	Total Fields	Total Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
22060368.01	MSE01-052622	05/26/2022	Area	2			402	804	100	0	0.000	< 0.003		06/06/22	[redacted]
22060368.02	MSE02-052622	05/26/2022	Area	2			403	806	100	3.5	4.459	< 0.003		06/06/22	[redacted]

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

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

Sample Condition Checklist

A&B JobID : **22060368**	Date Received : **06/02/2022**	Time Received : **4:09PM**
Client Name : **GES - ASRC Industrial**		
Temperature : **18.1°C**	Sample pH : **NA**	
Thermometer ID : **IR3**	pH Paper ID : **NA**	
Perservative :		

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

Comments : Include actions taken to resolve discrepancies/problem:

No cooler was received, however samples are received in a box with a custody seal. Received samples in black cassettes. ~EV 6/3/2022

Received by : [redacted]

Check in by/date : [redacted] 06/03/2022

ab-s005-0321

0

Event ID: Air Monitoring May 2022

COC# KT053122ASB

Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II J310000400
Project Manager: [redacted]
Site Location: Hunters Point, San Francisco, CA 94124

Laboratory Name: A&B Labs
Address: 10100 East Fwy Ste. 100, Houston TX 77029
Contact Name: [redacted]

5/31/2022
Page: 1 of 1

	Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Asbestos	Analysis: Preservative: None / Container Type: Filter	Flow Rate = 2 L/min Special Instructions/Comments Total Time (min)
01A	MSE01-052622	5/26/2022	1318	NA	NA	1	AA	X		402
02A	MSE02-052622	5/26/2022	1309	NA	NA	1	AA	X		403

TP 5/31/22

Job ID:22060368
06/02/2022 GES - ASRC Industrial ACH

Sampled B[redacted]
Signature: [redacted]
Special Instructions:
Send Results to: [redacted]
Turnaround Time: Standard

Sampler: [redacted]
Courier/Airbill No.: FedEx/ 7769 9983 5467

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
[redacted] Gilbanc	5/31/22	1600	Fedex	5/31/22	1600
Fedex	~~6.3.22~~ w	16:09	[redacted]	~~6.3.22~~ w	16:09
	6/2/22			6/2/22	

18.1 CO IR3

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Laboratory Analysis Report

Job ID : 22060448

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:	[redacted]	P.O.#. :	J310000400-0015
	Client Address:	1501 West Fountainhead Parkway, Ste. #550	Date Received :	06/03/2022 15:37
	City, State, Zip:	Tempe, Arizona, 85282	Sample Collected By :	[redacted]

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-053122	5/31/2022 15:14	Cassette	22060448.01
MSE02-053122	5/31/2022 15:07	Cassette	22060448.02
MSE01-060122	6/1/2022 15:41	Cassette	22060448.03
MSE02-060122	6/1/2022 15:37	Cassette	22060448.04

[redacted]

Released By: [redacted]

Title: Vice President Operations

Analyst: [redacted]

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

Date 6/10/2022

Job ID : 22060448
Analytical Method: NIOSH 7400-I2-Aug1994

Client: GES - ASRC Industrial Project: HPNS Parcel E Phase II J310000400 Attn: [redacted]

A&B Sample ID	Client Sample ID	Collected Date	Area/Person	Flow Rate L/m	Time On	Time Off	Total Time (min)	Volume (Liters)	Total Fields	Total Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
22060448.01	MSE01-053122	05/31/2022	Area	2			493	986	100	4.5	5.732	< 0.003		06/06/22	[redacted]
22060448.02	MSE02-053122	05/31/2022	Area	2			516	1032	100	2.0	2.548	< 0.003		06/06/22	[redacted]
22060448.03	MSE01-060122	06/01/2022	Area	2			535	1070	100	4.5	5.732	< 0.003		06/06/22	[redacted]
22060448.04	MSE02-060122	06/01/2022	Area	2			540	1080	100	6.5	8.280	0.003		06/06/22	[redacted]

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

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

Sample Condition Checklist

A&B JobID : **22060448**	Date Received : **06/03/2022**	Time Received : **3:37PM**
Client Name : **GES - ASRC Industrial**		
Temperature : **19.8°C**	Sample pH : **NA**	
Thermometer ID : **IR3**	pH Paper ID : **NA**	
Perservative :		

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

Comments : Include actions taken to resolve discrepancies/problem:

Black Cassettes. No cooler was received; however, samples are received in a box with custody seal. ~JE 06/03/22

Received by : [redacted]

Check in by/date [redacted] / 06/03/2022

0

Event ID: Air Monitoring June 2022

COC# KT060222ASB

Gilbane

Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II I310000400

Project Manage [redacted]

Site Location: Hunters Point, San Francisco, CA 94124

Laboratory Name: A&B Labs

Address: 10100 East Fwy Ste. 100
Houston TX 77029

Contact Name: [redacted]

6/02/2022

Page: 1 of 1

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Analysis: Asbestos	Preservative: None / Container Type: Filter	Special Instructions/Comments: Flow Rate = 2 L/min / Total Time (min)	
MSE01-053122	5/31/2022	1514	NA	NA	1	AA	X		493	01A
MSE02-053122	5/31/2022	1507	NA	NA	1	AA	X		516	02A
MSE01-060122	6/01/2022	1541	NA	NA	1	AA	X		535	03A
MSE02-060122	6/01/2022	1537	NA	NA	1	AA	X		540	04A

TP 6/2/22

Job ID:22060448

06/03/2022 GES - ASRC Industrial ACH

Sampled By: [redacted]

Signature: [redacted]

Special Instructions:

Send Results to: [redacted]

Turnaround Time: Standard

Sampler: [redacted]

Courier/Airbill No.: FedEx/ 7770 1157 0291

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
[redacted] Gilban	6/2/22	1600	Fedex	6/2/22	1600
			[redacted]	06/03/22	1537

19.8°C

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CUSTODY SEAL

ENVIRONMENTAL SAMPLING SUPPLY
www.essvial.com 800-233-8425

Signature: G. Ibane

Date: 6/2/22

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 320-87454-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

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

Attn: [redacted]

Authorized for release by:
5/11/2022 5:10:07 PM
[redacted]

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Definitions/Glossary

Client: GES-AIS, LLC
Job ID: 320-87454-1
Project/Site: Hunters Point, Parcel E, Phase 2

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

Job ID: 320-87454-1

Laboratory: Eurofins Sacramento

Narrative

Job Narrative
320-87454-1

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 19.1º 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.

GILBANEPM031522-1884 (320-87454-1) and GILBANEPM031522-1885 (320-87454-3)

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.

GILBANETSP031522-1884 (320-87454-2) and GILBANETSP031522-1885 (320-87454-4)

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: 320-87454-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM031522-1884 — Lab Sample ID: 320-87454-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0027		0.00070	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.040		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0060		0.00070	0.000098	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	32		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP031522-1884 — Lab Sample ID: 320-87454-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	42.8503		0.2997	0.2997	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM031522-1885 — Lab Sample ID: 320-87454-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0050		0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.014		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.013		0.00069	0.000097	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: GILBANETSP031522-1885 — Lab Sample ID: 320-87454-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	77.5502		0.2885	0.2885	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: GES-AIS, LLC
Job ID: 320-87454-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM031522-1884
Lab Sample ID: 320-87454-1
Date Collected: 05/03/22 06:58
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	0.0027		0.00070	0.00010	ug/m3 (Air)		05/09/22 12:00	05/09/22 15:23	1
Copper	0.040		0.0014	0.00010	ug/m3 (Air)		05/09/22 12:00	05/09/22 15:23	1
Manganese	0.0060		0.00070	0.000098	ug/m3 (Air)		05/09/22 12:00	05/09/22 15:23	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	32		0.29	0.29	ug/m3			05/05/22 08:00	1

Client Sample ID: GILBANETSP031522-1884
Lab Sample ID: 320-87454-2
Date Collected: 05/03/22 06:58
Matrix: Air
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	42.8503		0.2997	0.2997	ug/m3 (Air)			05/11/22 14:00	1

Client Sample ID: GILBANEPM031522-1885
Lab Sample ID: 320-87454-3
Date Collected: 05/03/22 06:48
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	0.0050		0.00069	0.00010	ug/m3 (Air)		05/09/22 12:00	05/09/22 15:27	1
Copper	0.014		0.0014	0.00010	ug/m3 (Air)		05/09/22 12:00	05/09/22 15:27	1
Manganese	0.013		0.00069	0.000097	ug/m3 (Air)		05/09/22 12:00	05/09/22 15:27	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	37		0.29	0.29	ug/m3			05/05/22 08:00	1

Client Sample ID: GILBANETSP031522-1885
Lab Sample ID: 320-87454-4
Date Collected: 05/03/22 06:48
Matrix: Air
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	77.5502		0.2885	0.2885	ug/m3 (Air)			05/11/22 14:00	1

QC Sample Results

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

Job ID: 320-87454-1

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

Analyte	MB Result	MB 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

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	0.240	0.239		ug/m3 (Air)		99	86 - 111
Copper	0.240	0.232		ug/m3 (Air)		97	85 - 110
Manganese	0.240	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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
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	1	15

QC Association Summary

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

Job ID: 320-87454-1

Metals

Pre Prep Batch: 586384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87454-1	GILBANEPM031522-1884	Total/NA	Air	Filter to Air	
320-87454-3	GILBANEPM031522-1885	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
320-87454-1	GILBANEPM031522-1884	Total/NA	Air	3050B	586384
320-87454-3	GILBANEPM031522-1885	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

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87454-1	GILBANEPM031522-1884	Total/NA	Air	6020	586403
320-87454-3	GILBANEPM031522-1885	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
320-87454-2	GILBANETSP031522-1884	Total/NA	Air	Filter to Air	
320-87454-4	GILBANETSP031522-1885	Total/NA	Air	Filter to Air	

Analysis Batch: 586989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87454-1	GILBANEPM031522-1884	Total/NA	Air	PM10	
320-87454-3	GILBANEPM031522-1885	Total/NA	Air	PM10	

Analysis Batch: 586991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87454-2	GILBANETSP031522-1884	Total/NA	Air	40CFR50 App B	586983
320-87454-4	GILBANETSP031522-1885	Total/NA	Air	40CFR50 App B	586983

Lab Chronicle

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

Job ID: 320-87454-1

Client Sample ID: GILBANEPM031522-1884

Lab Sample ID: 320-87454-1

Date Collected: 05/03/22 06:58

Matrix: Air

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					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 15:23	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0545 g	586989	05/05/22 08:00	JMD	TAL SAC

Client Sample ID: GILBANETSP031522-1884

Lab Sample ID: 320-87454-2

Date Collected: 05/03/22 06:58

Matrix: Air

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

Client Sample ID: GILBANEPM031522-1885

Lab Sample ID: 320-87454-3

Date Collected: 05/03/22 06:48

Matrix: Air

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					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 15:27	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0643 g	586989	05/05/22 08:00	JMD	TAL SAC

Client Sample ID: GILBANETSP031522-1885

Lab Sample ID: 320-87454-4

Date Collected: 05/03/22 06:48

Matrix: Air

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

Accreditation/Certification Summary

Client: GES-AIS, LLC
Job ID: 320-87454-1
Project/Site: Hunters Point, Parcel E, Phase 2

Laboratory: Eurofins Sacramento

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

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2468	01-20-24
Oregon	NELAP	4040	01-29-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
40CFR50 App B		Air	Total Suspended Particulates
PM10		Air	Particulate Matter as PM 10

Method Summary

Client: GES-AIS, LLC
Job ID: 320-87454-1
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

Sample Summary

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

Job ID: 320-87454-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-87454-1	GILBANEPM031522-1884	Air	05/03/22 06:58	05/04/22 09:45
320-87454-2	GILBANETSP031522-1884	Air	05/03/22 06:58	05/04/22 09:45
320-87454-3	GILBANEPM031522-1885	Air	05/03/22 06:48	05/04/22 09:45
320-87454-4	GILBANETSP031522-1885	Air	05/03/22 06:48	05/04/22 09:45

CHAIN-OF-CUSTODY RECORD

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

COC # KT050322AIR

Gilbane

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	Laboratory: EUROFINS ENVIRONMENT TESTING NORTHERN CALIFORNIA, LLC (EETN	Event: Parcel E Phase 2 Air Monitoring May 2022
Project Number: J310000400	POC [redacted]	
WBS Code: J310000400-016	Ship to: [redacted]	

Comments:

Equipment:

Code	Matrix
A	Air

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

320-87454 Chain of Custody

Event: Parcel E Phase 2 Air Monitoring May 2022

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: CAAIR - Air PM10	N0500 - Air TSP	SW6020 - Air Pb Mn Cu	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
						1	1	1						
1	GILBANEPM031522-1884	A	05/03/2022	0658	KT	X		X	AMSE1	N1	0.00	0.00	1	VOLUME: 1721.40 (M3)
2	GILBANETSP031522-1884	A	05/03/2022	0658	KT		X		AMSE1	N1	0.00	0.00	1	VOLUME: 1668.60 (M3)
3	GILBANEPM031522-1885	A	05/03/2022	0648	KT	X		X	AMSE2	N1	0.00	0.00	1	VOLUME: 1726.95 (M3)
4	GILBANETSP031522-1885	A	05/03/2022	0648	KT		X		AMSE2	N1	0.00	0.00	1	VOLUME: 1733.07 (M3)
5			TP 5/3/22											
6														
7														
8														
9														
10														

Turnaround Time: 5 days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[redacted]	5/3/22	1600	Fedex	5/3/22	1600
			[redacted]	5.4.22	0945

Shipping Date / Carrier / Airbill Number
Shipping Date: 5/3/2022 / FedEx 7767 4711 7650

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

Gilbane.Navy_COC_Field
May 03, 2022

19.1

Login Sample Receipt Checklist

Client: GES-AIS, LLC

Job Number: 320-87454-1

Login Number: 87454
List Number: 1
Creator: [redacted]

List Source: Eurofins Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	SEAL
Sample custody seals, if present, are intact.	True	
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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ANALYTICAL REPORT

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

Laboratory Job ID: 320-87609-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

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

Attn: [redacted]

[redacted]

Authorized for release by:
5/13/2022 6:23:18 PM

[redacted]

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Definitions/Glossary

Client: GES-AIS, LLC
Job ID: 320-87609-1
Project/Site: Hunters Point, Parcel E, Phase 2

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: 320-87609-1
Project/Site: Hunters Point, Parcel E, Phase 2

Job ID: 320-87609-1

Laboratory: Eurofins Sacramento

Narrative

Job Narrative
320-87609-1

Comments
No additional comments.

Receipt
The samples were received on 5/6/2022 10:05 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 17.1º 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.
GILBANEPM031522-1886 (320-87609-1), GILBANEPM031522-1887 (320-87609-3), GILBANEPM031522-1888 (320-87609-5) and GILBANEPM031522-1889 (320-87609-7)

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.
GILBANETSP031522-1886 (320-87609-2), GILBANETSP031522-1887 (320-87609-4), GILBANETSP031522-1888 (320-87609-6) and GILBANETSP031522-1889 (320-87609-8)

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

Job ID: 320-87609-1

Client Sample ID: GILBANEPM031522-1886 — Lab Sample ID: 320-87609-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0027		0.00070	0.00011	ug/m3 (Air)	1		6020	Total/NA
Copper	0.048		0.0014	0.00011	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0079		0.00070	0.000098	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	32		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP031522-1886 — Lab Sample ID: 320-87609-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	44.8566		0.3015	0.3015	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM031522-1887 — Lab Sample ID: 320-87609-3

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	0.0087		0.0014	0.00011	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0077		0.00070	0.000099	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	30		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP031522-1887 — Lab Sample ID: 320-87609-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	53.1071		0.2928	0.2928	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM031522-1888 — Lab Sample ID: 320-87609-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0051		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	0.011		0.00069	0.000096	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	33		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP031522-1888 — Lab Sample ID: 320-87609-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	49.8617		0.2993	0.2993	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM031522-1889 — Lab Sample ID: 320-87609-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0067		0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.023		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.010		0.00069	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	29		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP031522-1889 — Lab Sample ID: 320-87609-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	62.6382		0.2871	0.2871	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GILBANEPM031522-1886
Lab Sample ID: 320-87609-1
Date Collected: 05/04/22 06:31
Matrix: Air
Date Received: 05/06/22 10:05
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0027		0.00070	0.00011	ug/m3 (Air)		05/11/22 06:30	05/12/22 14:28	1
Copper	0.048		0.0014	0.00011	ug/m3 (Air)		05/11/22 06:30	05/12/22 14:28	1
Manganese	0.0079		0.00070	0.000098	ug/m3 (Air)		05/11/22 06:30	05/12/22 14:28	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	32		0.29	0.29	ug/m3			05/09/22 09:30	1

Client Sample ID: GILBANETSP031522-1886
Lab Sample ID: 320-87609-2
Date Collected: 05/04/22 06:31
Matrix: Air
Date Received: 05/06/22 10:05
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	44.8566		0.3015	0.3015	ug/m3 (Air)			05/09/22 09:30	1

Client Sample ID: GILBANEPM031522-1887
Lab Sample ID: 320-87609-3
Date Collected: 05/04/22 06:22
Matrix: Air
Date Received: 05/06/22 10:05
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)		05/11/22 06:30	05/12/22 14:37	1
Copper	0.0087		0.0014	0.00011	ug/m3 (Air)		05/11/22 06:30	05/12/22 14:37	1
Manganese	0.0077		0.00070	0.000099	ug/m3 (Air)		05/11/22 06:30	05/12/22 14:37	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	30		0.29	0.29	ug/m3			05/09/22 09:30	1

Client Sample ID: GILBANETSP031522-1887
Lab Sample ID: 320-87609-4
Date Collected: 05/04/22 06:22
Matrix: Air
Date Received: 05/06/22 10:05
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	53.1071		0.2928	0.2928	ug/m3 (Air)			05/09/22 09:30	1

Client Sample ID: GILBANEPM031522-1888
Lab Sample ID: 320-87609-5
Date Collected: 05/05/22 06:38
Matrix: Air
Date Received: 05/06/22 10:05
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0051		0.00069	0.00010	ug/m3 (Air)		05/11/22 06:30	05/12/22 14:40	1
Copper	0.035		0.0014	0.00010	ug/m3 (Air)		05/11/22 06:30	05/12/22 14:40	1
Manganese	0.011		0.00069	0.000096	ug/m3 (Air)		05/11/22 06:30	05/12/22 14:40	1

Client Sample ID: GILBANEPM031522-1888
Lab Sample ID: 320-87609-5
Date Collected: 05/05/22 06:38
Matrix: Air
Date Received: 05/06/22 10:05
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	33		0.29	0.29	ug/m3			05/09/22 09:30	1

Client Sample ID: GILBANETSP031522-1888
Lab Sample ID: 320-87609-6
Date Collected: 05/05/22 06:38
Matrix: Air
Date Received: 05/06/22 10:05
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	49.8617		0.2993	0.2993	ug/m3 (Air)			05/09/22 09:30	1

Client Sample ID: GILBANEPM031522-1889
Lab Sample ID: 320-87609-7
Date Collected: 05/05/22 06:29
Matrix: Air
Date Received: 05/06/22 10:05
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0067		0.00069	0.00010	ug/m3 (Air)		05/11/22 06:30	05/12/22 14:44	1
Copper	0.023		0.0014	0.00010	ug/m3 (Air)		05/11/22 06:30	05/12/22 14:44	1
Manganese	0.010		0.00069	0.000097	ug/m3 (Air)		05/11/22 06:30	05/12/22 14:44	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	29		0.29	0.29	ug/m3			05/09/22 09:30	1

Client Sample ID: GILBANETSP031522-1889
Lab Sample ID: 320-87609-8
Date Collected: 05/05/22 06:29
Matrix: Air
Date Received: 05/06/22 10:05
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	62.6382		0.2871	0.2871	ug/m3 (Air)			05/09/22 09:30	1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-586802/1-B
Matrix: Air
Analysis Batch: 587455

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 586805

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		05/11/22 06:30	05/12/22 14:19	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		05/11/22 06:30	05/12/22 14:19	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		05/11/22 06:30	05/12/22 14:19	1

Lab Sample ID: LCS 320-586802/2-B
Matrix: Air
Analysis Batch: 587455

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 586805

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	0.240	0.237		ug/m3 (Air)		99	86 - 111
Copper	0.240	0.242		ug/m3 (Air)		101	85 - 110
Manganese	0.240	0.238		ug/m3 (Air)		99	88 - 110

Lab Sample ID: LCSD 320-586802/3-B
Matrix: Air
Analysis Batch: 587455

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 586805

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	0.240	0.244		ug/m3 (Air)		102	86 - 111	3	15
Copper	0.240	0.246		ug/m3 (Air)		102	85 - 110	1	15
Manganese	0.240	0.252		ug/m3 (Air)		105	88 - 110	6	15

Metals

Pre Prep Batch: 586802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87609-1	GILBANEPM031522-1886	Total/NA	Air	Filter to Air	
320-87609-3	GILBANEPM031522-1887	Total/NA	Air	Filter to Air	
320-87609-5	GILBANEPM031522-1888	Total/NA	Air	Filter to Air	
320-87609-7	GILBANEPM031522-1889	Total/NA	Air	Filter to Air	
MB 320-586802/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-586802/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-586802/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 586805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87609-1	GILBANEPM031522-1886	Total/NA	Air	3050B	586802
320-87609-3	GILBANEPM031522-1887	Total/NA	Air	3050B	586802
320-87609-5	GILBANEPM031522-1888	Total/NA	Air	3050B	586802
320-87609-7	GILBANEPM031522-1889	Total/NA	Air	3050B	586802
MB 320-586802/1-B	Method Blank	Total/NA	Air	3050B	586802
LCS 320-586802/2-B	Lab Control Sample	Total/NA	Air	3050B	586802
LCSD 320-586802/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	586802

Analysis Batch: 587455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87609-1	GILBANEPM031522-1886	Total/NA	Air	6020	586805
320-87609-3	GILBANEPM031522-1887	Total/NA	Air	6020	586805
320-87609-5	GILBANEPM031522-1888	Total/NA	Air	6020	586805
320-87609-7	GILBANEPM031522-1889	Total/NA	Air	6020	586805
MB 320-586802/1-B	Method Blank	Total/NA	Air	6020	586805
LCS 320-586802/2-B	Lab Control Sample	Total/NA	Air	6020	586805
LCSD 320-586802/3-B	Lab Control Sample Dup	Total/NA	Air	6020	586805

General Chemistry

Pre Prep Batch: 586983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87609-2	GILBANETSP031522-1886	Total/NA	Air	Filter to Air	
320-87609-4	GILBANETSP031522-1887	Total/NA	Air	Filter to Air	
320-87609-6	GILBANETSP031522-1888	Total/NA	Air	Filter to Air	
320-87609-8	GILBANETSP031522-1889	Total/NA	Air	Filter to Air	

Analysis Batch: 587590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87609-1	GILBANEPM031522-1886	Total/NA	Air	PM10	
320-87609-3	GILBANEPM031522-1887	Total/NA	Air	PM10	
320-87609-5	GILBANEPM031522-1888	Total/NA	Air	PM10	
320-87609-7	GILBANEPM031522-1889	Total/NA	Air	PM10	

Analysis Batch: 587592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87609-2	GILBANETSP031522-1886	Total/NA	Air	40CFR50 App B	586983
320-87609-4	GILBANETSP031522-1887	Total/NA	Air	40CFR50 App B	586983
320-87609-6	GILBANETSP031522-1888	Total/NA	Air	40CFR50 App B	586983
320-87609-8	GILBANETSP031522-1889	Total/NA	Air	40CFR50 App B	586983

Lab Chronicle

Client: GES-AIS, LLC
Job ID: 320-87609-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM031522-1886
Lab Sample ID: 320-87609-1
Date Collected: 05/04/22 06:31
Matrix: Air
Date Received: 05/06/22 10:05

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					586802	05/11/22 06:01	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	586805	05/11/22 06:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			587455	05/12/22 14:28	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0553 g	587590	05/09/22 09:30	JMD	TAL SAC

Client Sample ID: GILBANETSP031522-1886
Lab Sample ID: 320-87609-2
Date Collected: 05/04/22 06:31
Matrix: Air
Date Received: 05/06/22 10:05

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			587592	05/09/22 09:30	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					586983	05/11/22 14:00	JMD	TAL SAC

Client Sample ID: GILBANEPM031522-1887
Lab Sample ID: 320-87609-3
Date Collected: 05/04/22 06:22
Matrix: Air
Date Received: 05/06/22 10:05

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					586802	05/11/22 06:01	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	586805	05/11/22 06:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			587455	05/12/22 14:37	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0517 g	587590	05/09/22 09:30	JMD	TAL SAC

Client Sample ID: GILBANETSP031522-1887
Lab Sample ID: 320-87609-4
Date Collected: 05/04/22 06:22
Matrix: Air
Date Received: 05/06/22 10:05

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			587592	05/09/22 09:30	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					586983	05/11/22 14:00	JMD	TAL SAC

Client Sample ID: GILBANEPM031522-1888
Lab Sample ID: 320-87609-5
Date Collected: 05/05/22 06:38
Matrix: Air
Date Received: 05/06/22 10:05

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					586802	05/11/22 06:01	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	586805	05/11/22 06:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			587455	05/12/22 14:40	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0573 g	587590	05/09/22 09:30	JMD	TAL SAC

Lab Chronicle

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

Job ID: 320-87609-1

Client Sample ID: GILBANETSP031522-1888

Lab Sample ID: 320-87609-6

Date Collected: 05/05/22 06:38

Matrix: Air

Date Received: 05/06/22 10:05

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			587592	05/09/22 09:30	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					586983	05/11/22 14:00	JMD	TAL SAC

Client Sample ID: GILBANEPM031522-1889

Lab Sample ID: 320-87609-7

Date Collected: 05/05/22 06:29

Matrix: Air

Date Received: 05/06/22 10:05

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					586802	05/11/22 06:01	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	586805	05/11/22 06:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			587455	05/12/22 14:44	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0508 g	587590	05/09/22 09:30	JMD	TAL SAC

Client Sample ID: GILBANETSP031522-1889

Lab Sample ID: 320-87609-8

Date Collected: 05/05/22 06:29

Matrix: Air

Date Received: 05/06/22 10:05

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			587592	05/09/22 09:30	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					586983	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

Accreditation/Certification Summary

Client: GES-AIS, LLC
Job ID: 320-87609-1
Project/Site: Hunters Point, Parcel E, Phase 2

Laboratory: Eurofins Sacramento

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

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2468	01-20-24
Oregon	NELAP	4040	01-29-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
40CFR50 App B		Air	Total Suspended Particulates
PM10		Air	Particulate Matter as PM 10

Method Summary

Client: GES-AIS, LLC
Job ID: 320-87609-1
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

Sample Summary

Client: GES-AIS, LLC
Job ID: 320-87609-1
Project/Site: Hunters Point, Parcel E, Phase 2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-87609-1	GILBANEPM031522-1886	Air	05/04/22 06:31	05/06/22 10:05
320-87609-2	GILBANETSP031522-1886	Air	05/04/22 06:31	05/06/22 10:05
320-87609-3	GILBANEPM031522-1887	Air	05/04/22 06:22	05/06/22 10:05
320-87609-4	GILBANETSP031522-1887	Air	05/04/22 06:22	05/06/22 10:05
320-87609-5	GILBANEPM031522-1888	Air	05/05/22 06:38	05/06/22 10:05
320-87609-6	GILBANETSP031522-1888	Air	05/05/22 06:38	05/06/22 10:05
320-87609-7	GILBANEPM031522-1889	Air	05/05/22 06:29	05/06/22 10:05
320-87609-8	GILBANETSP031522-1889	Air	05/05/22 06:29	05/06/22 10:05

CHAIN-OF-CUSTODY RECORD

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

COC # KT050522AIR

Gilbane

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	Laboratory: EUROFINS ENVIRONMENT TESTING NORTHERN CALIFORNIA, LLC (EETN	Event: Parcel E Phase 2 Air Monitoring May 2022
Project Number: J310000400	POC: [redacted]	
WBS Code: J310000400-016	Ship t	

Comments:

Equipment:

Code	Matrix
A	Air

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

320-87609 Chain of Custody

Event: Parcel E Phase 2 Air Monitoring May 2022

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: CAAIR - Air PM10	N0500 - Air TSP	SW6020 - Air Pb Mn Cu							Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
						1	1	1												
1	GILBANEPM031522-1886	A	05/04/2022	0631	KT	X		X							AMSE1	N1	0.00	0.00	1	VOLUME: 1712.46 (M3)
2	GILBANETSP031522-1886	A	05/04/2022	0631	KT		X								AMSE1	N1	0.00	0.00	1	VOLUME: 1658.62 (M3)
3	GILBANEPM031522-1887	A	05/04/2022	0622	KT	X		X							AMSE2	N1	0.00	0.00	1	VOLUME: 1703.60 (M3)
4	GILBANETSP031522-1887	A	05/04/2022	0622	KT		X								AMSE2	N1	0.00	0.00	1	VOLUME: 1707.87 (M3)
5	GILBANEPM031522-1888	A	05/05/2022	0638	KT	X		X							AMSE1	N1	0.00	0.00	1	VOLUME: 1744.74 (M3)
6	GILBANETSP031522-1888	A	05/05/2022	0638	KT		X								AMSE1	N1	0.00	0.00	1	VOLUME: 1670.62 (M3)
7	GILBANEPM031522-1889	A	05/05/2022	0629	KT	X		X							AMSE2	N1	0.00	0.00	1	VOLUME: 1738.60 (M3)
8	GILBANETSP031522-1889	A	05/05/2022	0629	KT		X								AMSE2	N1	0.00	0.00	1	VOLUME: 1741.75 (M3)
9									TP	5/5/22										
10																				

Turnaround Time: 5 days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[redacted]	5/5/22	1600	Fedex	5/5/22	1600
			[redacted]	5.6.22	1005

Shipping Date / Carrier / Airbill Number

Shipping Date: 5/5/2022 / FedEx 7767 6954 3480

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

Gilbane.Navy_COC_Field
May 05, 2022

17.1

Login Sample Receipt Checklist

Client: GES-AIS, LLC

Job Number: 320-87609-1

Login Number: 87609

List Source: Eurofins Sacramento

List Number: 1

Creator: [redacted]

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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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ANALYTICAL REPORT

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

Laboratory Job ID: 320-87735-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

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

Attn [redacted]

Authorized for release by:
[redacted]

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Definitions/Glossary

Client: GES-AIS, LLC
Job ID: 320-87735-1
Project/Site: Hunters Point, Parcel E, Phase 2

Qualifiers

Metals

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

Job ID: 320-87735-1

Job ID: 320-87735-1

Laboratory: Eurofins Sacramento

Narrative

Job Narrative
320-87735-1

Comments
No additional comments.

Receipt
The samples were received on 5/11/2022 10:00 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 19.4º 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.
GILBANEPM031522-1890 (320-87735-1) and GILBANEPM031522-1891 (320-87735-3)

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.
GILBANETSP031522-1890 (320-87735-2) and GILBANETSP031522-1891 (320-87735-4)

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

Job ID: 320-87735-1

Client Sample ID: GILBANEPM031522-1890 — Lab Sample ID: 320-87735-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0020	J	0.0023	0.00034	ug/m3 (Air)	1		6020	Total/NA
Copper	0.037		0.0045	0.00034	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0079		0.0023	0.00032	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	19		0.94	0.94	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP031522-1890 — Lab Sample ID: 320-87735-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	26.9218		0.9684	0.9684	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM031522-1891 — Lab Sample ID: 320-87735-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0054		0.0023	0.00034	ug/m3 (Air)	1		6020	Total/NA
Copper	0.37		0.0045	0.00034	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.012		0.0023	0.00032	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	34		1.2	1.2	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP031522-1891 — Lab Sample ID: 320-87735-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	38.6610		0.9430	0.9430	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM041222-1892 — Lab Sample ID: 320-87735-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0091		0.00070	0.00011	ug/m3 (Air)	1		6020	Total/NA
Copper	0.055		0.0014	0.00011	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0045		0.00070	0.000099	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	13		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP041222-1892 — Lab Sample ID: 320-87735-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	18.7822		0.3069	0.3069	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM041222-1893 — Lab Sample ID: 320-87735-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0041		0.00071	0.00011	ug/m3 (Air)	1		6020	Total/NA
Copper	0.23		0.0014	0.00011	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0095		0.00071	0.000099	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	23		0.30	0.30	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP041222-1893 — Lab Sample ID: 320-87735-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	33.5102		0.2945	0.2945	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: GES-AIS, LLC
Job ID: 320-87735-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM031522-1890
Lab Sample ID: 320-87735-1
Date Collected: 05/05/22 14:03
Matrix: Air
Date Received: 05/11/22 10:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0020	J	0.0023	0.00034	ug/m3 (Air)		05/17/22 06:00	05/17/22 10:28	1
Copper	0.037		0.0045	0.00034	ug/m3 (Air)		05/17/22 06:00	05/17/22 10:28	1
Manganese	0.0079		0.0023	0.00032	ug/m3 (Air)		05/17/22 06:00	05/17/22 10:28	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	19		0.94	0.94	ug/m3			05/12/22 11:00	1

Client Sample ID: GILBANETSP031522-1890
Lab Sample ID: 320-87735-2
Date Collected: 05/05/22 14:03
Matrix: Air
Date Received: 05/11/22 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	26.9218		0.9684	0.9684	ug/m3 (Air)			05/12/22 11:00	1

Client Sample ID: GILBANEPM031522-1891
Lab Sample ID: 320-87735-3
Date Collected: 05/05/22 13:50
Matrix: Air
Date Received: 05/11/22 10:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0054		0.0023	0.00034	ug/m3 (Air)		05/17/22 06:00	05/17/22 10:37	1
Copper	0.37		0.0045	0.00034	ug/m3 (Air)		05/17/22 06:00	05/17/22 10:37	1
Manganese	0.012		0.0023	0.00032	ug/m3 (Air)		05/17/22 06:00	05/17/22 10:37	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	34		1.2	1.2	ug/m3			05/12/22 11:00	1

Client Sample ID: GILBANETSP031522-1891
Lab Sample ID: 320-87735-4
Date Collected: 05/05/22 13:50
Matrix: Air
Date Received: 05/11/22 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	38.6610		0.9430	0.9430	ug/m3 (Air)			05/12/22 11:00	1

Client Sample ID: GILBANEPM041222-1892
Lab Sample ID: 320-87735-5
Date Collected: 05/10/22 06:34
Matrix: Air
Date Received: 05/11/22 10:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0091		0.00070	0.00011	ug/m3 (Air)		05/17/22 06:00	05/17/22 10:40	1
Copper	0.055		0.0014	0.00011	ug/m3 (Air)		05/17/22 06:00	05/17/22 10:40	1
Manganese	0.0045		0.00070	0.000099	ug/m3 (Air)		05/17/22 06:00	05/17/22 10:40	1

Client: GES-AIS, LLC
Job ID: 320-87735-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM041222-1892
Lab Sample ID: 320-87735-5
Date Collected: 05/10/22 06:34
Matrix: Air
Date Received: 05/11/22 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	13		0.29	0.29	ug/m3			05/12/22 11:00	1

Client Sample ID: GILBANETSP041222-1892
Lab Sample ID: 320-87735-6
Date Collected: 05/10/22 06:34
Matrix: Air
Date Received: 05/11/22 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	18.7822		0.3069	0.3069	ug/m3 (Air)			05/12/22 11:00	1

Client Sample ID: GILBANEPM041222-1893
Lab Sample ID: 320-87735-7
Date Collected: 05/10/22 06:20
Matrix: Air
Date Received: 05/11/22 10:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0041		0.00071	0.00011	ug/m3 (Air)		05/17/22 06:00	05/17/22 10:43	1
Copper	0.23		0.0014	0.00011	ug/m3 (Air)		05/17/22 06:00	05/17/22 10:43	1
Manganese	0.0095		0.00071	0.000099	ug/m3 (Air)		05/17/22 06:00	05/17/22 10:43	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	23		0.30	0.30	ug/m3			05/12/22 11:00	1

Client Sample ID: GILBANETSP041222-1893
Lab Sample ID: 320-87735-8
Date Collected: 05/10/22 06:20
Matrix: Air
Date Received: 05/11/22 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	33.5102		0.2945	0.2945	ug/m3 (Air)			05/12/22 11:00	1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-588236/1-B
Matrix: Air
Analysis Batch: 588367

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 588238

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		05/17/22 06:00	05/17/22 10:03	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		05/17/22 06:00	05/17/22 10:03	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		05/17/22 06:00	05/17/22 10:03	1

Lab Sample ID: LCS 320-588236/2-B
Matrix: Air
Analysis Batch: 588367

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 588238

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	0.240	0.241		ug/m3 (Air)		100	86 - 111
Copper	0.240	0.230		ug/m3 (Air)		96	85 - 110
Manganese	0.240	0.235		ug/m3 (Air)		98	88 - 110

Lab Sample ID: LCSD 320-588236/3-B
Matrix: Air
Analysis Batch: 588367

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 588238

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	0.240	0.249		ug/m3 (Air)		104	86 - 111	3	15
Copper	0.240	0.259		ug/m3 (Air)		108	85 - 110	12	15
Manganese	0.240	0.239		ug/m3 (Air)		100	88 - 110	2	15

QC Association Summary

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

Job ID: 320-87735-1

Metals

Pre Prep Batch: 588236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87735-1	GILBANEPM031522-1890	Total/NA	Air	Filter to Air	
320-87735-3	GILBANEPM031522-1891	Total/NA	Air	Filter to Air	
320-87735-5	GILBANEPM041222-1892	Total/NA	Air	Filter to Air	
320-87735-7	GILBANEPM041222-1893	Total/NA	Air	Filter to Air	
MB 320-588236/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-588236/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-588236/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 588238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87735-1	GILBANEPM031522-1890	Total/NA	Air	3050B	588236
320-87735-3	GILBANEPM031522-1891	Total/NA	Air	3050B	588236
320-87735-5	GILBANEPM041222-1892	Total/NA	Air	3050B	588236
320-87735-7	GILBANEPM041222-1893	Total/NA	Air	3050B	588236
MB 320-588236/1-B	Method Blank	Total/NA	Air	3050B	588236
LCS 320-588236/2-B	Lab Control Sample	Total/NA	Air	3050B	588236
LCSD 320-588236/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	588236

Analysis Batch: 588367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87735-1	GILBANEPM031522-1890	Total/NA	Air	6020	588238
320-87735-3	GILBANEPM031522-1891	Total/NA	Air	6020	588238
320-87735-5	GILBANEPM041222-1892	Total/NA	Air	6020	588238
320-87735-7	GILBANEPM041222-1893	Total/NA	Air	6020	588238
MB 320-588236/1-B	Method Blank	Total/NA	Air	6020	588238
LCS 320-588236/2-B	Lab Control Sample	Total/NA	Air	6020	588238
LCSD 320-588236/3-B	Lab Control Sample Dup	Total/NA	Air	6020	588238

General Chemistry

Pre Prep Batch: 588671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87735-2	GILBANETSP031522-1890	Total/NA	Air	Filter to Air	
320-87735-4	GILBANETSP031522-1891	Total/NA	Air	Filter to Air	
320-87735-6	GILBANETSP041222-1892	Total/NA	Air	Filter to Air	
320-87735-8	GILBANETSP041222-1893	Total/NA	Air	Filter to Air	

Analysis Batch: 588695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87735-1	GILBANEPM031522-1890	Total/NA	Air	PM10	
320-87735-3	GILBANEPM031522-1891	Total/NA	Air	PM10	
320-87735-5	GILBANEPM041222-1892	Total/NA	Air	PM10	
320-87735-7	GILBANEPM041222-1893	Total/NA	Air	PM10	

Analysis Batch: 588709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87735-2	GILBANETSP031522-1890	Total/NA	Air	40CFR50 App B	588671
320-87735-4	GILBANETSP031522-1891	Total/NA	Air	40CFR50 App B	588671
320-87735-6	GILBANETSP041222-1892	Total/NA	Air	40CFR50 App B	588671
320-87735-8	GILBANETSP041222-1893	Total/NA	Air	40CFR50 App B	588671

Lab Chronicle

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

Job ID: 320-87735-1

Client Sample ID: GILBANEPM031522-1890
Lab Sample ID: 320-87735-1
Date Collected: 05/05/22 14:03
Matrix: Air
Date Received: 05/11/22 10:00

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					588236	05/17/22 05:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	588238	05/17/22 06:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			588367	05/17/22 10:28	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0103 g	588695	05/12/22 11:00	JMD	TAL SAC

Client Sample ID: GILBANETSP031522-1890
Lab Sample ID: 320-87735-2
Date Collected: 05/05/22 14:03
Matrix: Air
Date Received: 05/11/22 10:00

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			588709	05/12/22 11:00	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					588671	05/18/22 16:09	JMD	TAL SAC

Client Sample ID: GILBANEPM031522-1891
Lab Sample ID: 320-87735-3
Date Collected: 05/05/22 13:50
Matrix: Air
Date Received: 05/11/22 10:00

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					588236	05/17/22 05:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	588238	05/17/22 06:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			588367	05/17/22 10:37	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0146 g	588695	05/12/22 11:00	JMD	TAL SAC

Client Sample ID: GILBANETSP031522-1891
Lab Sample ID: 320-87735-4
Date Collected: 05/05/22 13:50
Matrix: Air
Date Received: 05/11/22 10:00

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			588709	05/12/22 11:00	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					588671	05/18/22 16:09	JMD	TAL SAC

Client Sample ID: GILBANEPM041222-1892
Lab Sample ID: 320-87735-5
Date Collected: 05/10/22 06:34
Matrix: Air
Date Received: 05/11/22 10:00

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					588236	05/17/22 05:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	588238	05/17/22 06:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			588367	05/17/22 10:40	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0228 g	588695	05/12/22 11:00	JMD	TAL SAC

Lab Chronicle

Client: GES-AIS, LLC
Job ID: 320-87735-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANETSP041222-1892
Lab Sample ID: 320-87735-6
Date Collected: 05/10/22 06:34
Matrix: Air
Date Received: 05/11/22 10:00

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			588709	05/12/22 11:00	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					588671	05/18/22 16:09	JMD	TAL SAC

Client Sample ID: GILBANEPM041222-1893
Lab Sample ID: 320-87735-7
Date Collected: 05/10/22 06:20
Matrix: Air
Date Received: 05/11/22 10:00

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					588236	05/17/22 05:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	588238	05/17/22 06:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			588367	05/17/22 10:43	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0393 g	588695	05/12/22 11:00	JMD	TAL SAC

Client Sample ID: GILBANETSP041222-1893
Lab Sample ID: 320-87735-8
Date Collected: 05/10/22 06:20
Matrix: Air
Date Received: 05/11/22 10:00

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			588709	05/12/22 11:00	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					588671	05/18/22 16:09	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: 320-87735-1
Project/Site: Hunters Point, Parcel E, Phase 2

Laboratory: Eurofins Sacramento

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

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2468	05-17-22
Oregon	NELAP	4040	01-29-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
40CFR50 App B		Air	Total Suspended Particulates
PM10		Air	Particulate Matter as PM 10

Method Summary

Client: GES-AIS, LLC
Job ID: 320-87735-1
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

Sample Summary

Client: GES-AIS, LLC
Job ID: 320-87735-1
Project/Site: Hunters Point, Parcel E, Phase 2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-87735-1	GILBANEPM031522-1890	Air	05/05/22 14:03	05/11/22 10:00
320-87735-2	GILBANETSP031522-1890	Air	05/05/22 14:03	05/11/22 10:00
320-87735-3	GILBANEPM031522-1891	Air	05/05/22 13:50	05/11/22 10:00
320-87735-4	GILBANETSP031522-1891	Air	05/05/22 13:50	05/11/22 10:00
320-87735-5	GILBANEPM041222-1892	Air	05/10/22 06:34	05/11/22 10:00
320-87735-6	GILBANETSP041222-1892	Air	05/10/22 06:34	05/11/22 10:00
320-87735-7	GILBANEPM041222-1893	Air	05/10/22 06:20	05/11/22 10:00
320-87735-8	GILBANETSP041222-1893	Air	05/10/22 06:20	05/11/22 10:00

CHAIN-OF-CUSTODY RECORD

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

COC # KT051022AIR

Gilbane

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	Laboratory: EUROFINS ENVIRONMENT TESTING NORTHERN CALIFORNIA, LLC (EETN	Event: Parcel E Phase 2 Air Monitoring May 2022
Project Number: J310000400	POC: [redacted]	
WBS Code: J310000400-016	Ship t[redacted]	

Comments:

Equipment:

Code	Matrix
A	Air

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

320-87735 Chain of Custody

	Event: Parcel E Phase 2 Air Monitoring May 2022					Analytical Test Method: CAAIR - Air PM10	N0500 - Air TSP	SW6020 - Air Pb Mn Cu												
						1	1	1												
	Sample ID	Matrix	Date	Time	Samp Init.											Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
1	GILBANEPM031522-1890	A	05/05/2022	1403	KT	X		X								AMSE1	N2	0.00	0.00	1	VOLUME: 531.97 (M3)
2	GILBANETSP031522-1890	A	05/05/2022	1403	KT		X									AMSE1	N2	0.00	0.00	1	VOLUME: 516.31 (M3)
3	GILBANEPM031522-1891	A	05/05/2022	1350	KT	X		X								AMSE2	N2	0.00	0.00	1	VOLUME: 527.57 (M3)
4	GILBANETSP031522-1891	A	05/05/2022	1350	KT		X									AMSE2	N2	0.00	0.00	1	VOLUME: 530.25 (M3)
5	GILBANEPM041222-1892	A	05/10/2022	0634	KT	X		X								AMSE1	N1	0.00	0.00	1	VOLUME: 1703.34 (M3)
6	GILBANETSP041222-1892	A	05/10/2022	0634	KT		X									AMSE1	N1	0.00	0.00	1	VOLUME: 1629.20 (M3)
7	GILBANEPM041222-1893	A	05/10/2022	0620	KT	X		X								AMSE2	N1	0.00	0.00	1	VOLUME:1693.05 (M3)
8	GILBANETSP041222-1893	A	05/10/2022	0620	KT		X									AMSE2	N1	0.00	0.00	1	VOLUME: 1697.99 (M3)
9																					
10																					

Turnaround Time: 5 days

[redacted]	Date	Time	Received by: *(Signature)*	Date	Time	Shipping Date / Carrier / Airbill Number
	5/10/22	1600	FedEx [redacted]	5/10/22	1600	Shipping Date: 5/10/2022 / FedEx 7768 1074 8630
				5-11-22	1000	Received by Laboratory: *(Signature, Date, Time)* & condition

19.4°C

Login Sample Receipt Checklist

Client: GES-AIS, LLC

Job Number: 320-87735-1

Login Number: 87735
List Number: 1
Creator: [redacted]

List Source: Eurofins Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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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ANALYTICAL REPORT

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

Laboratory Job ID: 320-87858-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

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

Attn: [redacted]

Authorized for release by:
5/20/2022 6:37:17 PM

[redacted]

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Definitions/Glossary

Client: GES-AIS, LLC
Job ID: 320-87858-1
Project/Site: Hunters Point, Parcel E, Phase 2

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

Job ID: 320-87858-1

Laboratory: Eurofins Sacramento

Narrative

Job Narrative
320-87858-1

Comments
No additional comments.

Receipt
The samples were received on 5/13/2022 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 21.1º C.

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

Detection Summary

Client: GES-AIS, LLC
Job ID: 320-87858-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM041222-1894 — Lab Sample ID: 320-87858-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0035		0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.033		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0075		0.00069	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	16		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP041222-1894 — Lab Sample ID: 320-87858-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	24.5375		0.3037	0.3037	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM041222-1895 — Lab Sample ID: 320-87858-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0044		0.00070	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.012		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0092		0.00070	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	16		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP041222-1895 — Lab Sample ID: 320-87858-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	32.3923		0.2903	0.2903	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM041222-1896 — Lab Sample ID: 320-87858-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.012		0.00068	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.061		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.010		0.00068	0.000095	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	22		0.28	0.28	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP041222-1896 — Lab Sample ID: 320-87858-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	35.9693		0.2968	0.2968	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM041222-1897 — Lab Sample ID: 320-87858-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0035		0.00068	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.017		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.012		0.00068	0.000096	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	19		0.28	0.28	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP041222-1897 — Lab Sample ID: 320-87858-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	40.6536		0.2843	0.2843	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GILBANEPM041222-1894
Lab Sample ID: 320-87858-1
Date Collected: 05/11/22 06:30
Matrix: Air
Date Received: 05/13/22 09:35
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0035		0.00069	0.00010	ug/m3 (Air)		05/19/22 06:30	05/19/22 12:55	1
Copper	0.033		0.0014	0.00010	ug/m3 (Air)		05/19/22 06:30	05/20/22 12:43	1
Manganese	0.0075		0.00069	0.000097	ug/m3 (Air)		05/19/22 06:30	05/19/22 12:55	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	16		0.29	0.29	ug/m3			05/16/22 11:30	1

Client Sample ID: GILBANETSP041222-1894
Lab Sample ID: 320-87858-2
Date Collected: 05/11/22 06:30
Matrix: Air
Date Received: 05/13/22 09:35
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	24.5375		0.3037	0.3037	ug/m3 (Air)			05/16/22 11:30	1

Client Sample ID: GILBANEPM041222-1895
Lab Sample ID: 320-87858-3
Date Collected: 05/11/22 06:20
Matrix: Air
Date Received: 05/13/22 09:35
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0044		0.00070	0.00010	ug/m3 (Air)		05/19/22 06:30	05/19/22 13:05	1
Copper	0.012		0.0014	0.00010	ug/m3 (Air)		05/19/22 06:30	05/20/22 12:46	1
Manganese	0.0092		0.00070	0.000097	ug/m3 (Air)		05/19/22 06:30	05/19/22 13:05	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	16		0.29	0.29	ug/m3			05/16/22 11:30	1

Client Sample ID: GILBANETSP041222-1895
Lab Sample ID: 320-87858-4
Date Collected: 05/11/22 06:20
Matrix: Air
Date Received: 05/13/22 09:35
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	32.3923		0.2903	0.2903	ug/m3 (Air)			05/16/22 11:30	1

Client Sample ID: GILBANEPM041222-1896
Lab Sample ID: 320-87858-5
Date Collected: 05/12/22 06:52
Matrix: Air
Date Received: 05/13/22 09:35
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.012		0.00068	0.00010	ug/m3 (Air)		05/19/22 06:30	05/19/22 13:08	1
Copper	0.061		0.0014	0.00010	ug/m3 (Air)		05/19/22 06:30	05/20/22 12:49	1
Manganese	0.010		0.00068	0.000095	ug/m3 (Air)		05/19/22 06:30	05/19/22 13:08	1

Client Sample ID: GILBANEPM041222-1896
Lab Sample ID: 320-87858-5

Date Collected: 05/12/22 06:52
Matrix: Air
Date Received: 05/13/22 09:35
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	22		0.28	0.28	ug/m3			05/16/22 11:30	1

Client Sample ID: GILBANETSP041222-1896
Lab Sample ID: 320-87858-6

Date Collected: 05/12/22 06:52
Matrix: Air
Date Received: 05/13/22 09:35
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	35.9693		0.2968	0.2968	ug/m3 (Air)			05/16/22 11:30	1

Client Sample ID: GILBANEPM041222-1897
Lab Sample ID: 320-87858-7

Date Collected: 05/12/22 06:43
Matrix: Air
Date Received: 05/13/22 09:35
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0035		0.00068	0.00010	ug/m3 (Air)		05/19/22 06:30	05/19/22 13:11	1
Copper	0.017		0.0014	0.00010	ug/m3 (Air)		05/19/22 06:30	05/20/22 12:53	1
Manganese	0.012		0.00068	0.000096	ug/m3 (Air)		05/19/22 06:30	05/19/22 13:11	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	19		0.28	0.28	ug/m3			05/16/22 11:30	1

Client Sample ID: GILBANETSP041222-1897
Lab Sample ID: 320-87858-8

Date Collected: 05/12/22 06:43
Matrix: Air
Date Received: 05/13/22 09:35
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	40.6536		0.2843	0.2843	ug/m3 (Air)			05/16/22 11:30	1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-588788/1-B
Matrix: Air
Analysis Batch: 589121

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 588793

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		05/19/22 06:30	05/19/22 12:27	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		05/19/22 06:30	05/19/22 12:27	1

Lab Sample ID: MB 320-588788/1-B
Matrix: Air
Analysis Batch: 589263

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 588793

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.0024	0.00018	ug/m3 (Air)		05/19/22 06:30	05/20/22 12:24	1

Lab Sample ID: LCS 320-588788/2-B
Matrix: Air
Analysis Batch: 589121

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 588793

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	0.240	0.250		ug/m3 (Air)		104	86 - 111
Manganese	0.240	0.234		ug/m3 (Air)		98	88 - 110

Lab Sample ID: LCS 320-588788/2-B
Matrix: Air
Analysis Batch: 589263

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 588793

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	0.240	0.242		ug/m3 (Air)		101	85 - 110

Lab Sample ID: LCSD 320-588788/3-B
Matrix: Air
Analysis Batch: 589121

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 588793

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	0.240	0.243		ug/m3 (Air)		101	86 - 111	3	15
Manganese	0.240	0.237		ug/m3 (Air)		99	88 - 110	1	15

Lab Sample ID: LCSD 320-588788/3-B
Matrix: Air
Analysis Batch: 589263

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 588793

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Copper	0.240	0.233		ug/m3 (Air)		97	85 - 110	4	15

QC Association Summary

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

Job ID: 320-87858-1

Metals

Pre Prep Batch: 588788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87858-1	GILBANEPM041222-1894	Total/NA	Air	Filter to Air	
320-87858-3	GILBANEPM041222-1895	Total/NA	Air	Filter to Air	
320-87858-5	GILBANEPM041222-1896	Total/NA	Air	Filter to Air	
320-87858-7	GILBANEPM041222-1897	Total/NA	Air	Filter to Air	
MB 320-588788/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-588788/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-588788/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 588793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87858-1	GILBANEPM041222-1894	Total/NA	Air	3050B	588788
320-87858-3	GILBANEPM041222-1895	Total/NA	Air	3050B	588788
320-87858-5	GILBANEPM041222-1896	Total/NA	Air	3050B	588788
320-87858-7	GILBANEPM041222-1897	Total/NA	Air	3050B	588788
MB 320-588788/1-B	Method Blank	Total/NA	Air	3050B	588788
LCS 320-588788/2-B	Lab Control Sample	Total/NA	Air	3050B	588788
LCSD 320-588788/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	588788

Analysis Batch: 589121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87858-1	GILBANEPM041222-1894	Total/NA	Air	6020	588793
320-87858-3	GILBANEPM041222-1895	Total/NA	Air	6020	588793
320-87858-5	GILBANEPM041222-1896	Total/NA	Air	6020	588793
320-87858-7	GILBANEPM041222-1897	Total/NA	Air	6020	588793
MB 320-588788/1-B	Method Blank	Total/NA	Air	6020	588793
LCS 320-588788/2-B	Lab Control Sample	Total/NA	Air	6020	588793
LCSD 320-588788/3-B	Lab Control Sample Dup	Total/NA	Air	6020	588793

Analysis Batch: 589263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87858-1	GILBANEPM041222-1894	Total/NA	Air	6020	588793
320-87858-3	GILBANEPM041222-1895	Total/NA	Air	6020	588793
320-87858-5	GILBANEPM041222-1896	Total/NA	Air	6020	588793
320-87858-7	GILBANEPM041222-1897	Total/NA	Air	6020	588793
MB 320-588788/1-B	Method Blank	Total/NA	Air	6020	588793
LCS 320-588788/2-B	Lab Control Sample	Total/NA	Air	6020	588793
LCSD 320-588788/3-B	Lab Control Sample Dup	Total/NA	Air	6020	588793

General Chemistry

Pre Prep Batch: 588931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87858-2	GILBANETSP041222-1894	Total/NA	Air	Filter to Air	
320-87858-4	GILBANETSP041222-1895	Total/NA	Air	Filter to Air	
320-87858-6	GILBANETSP041222-1896	Total/NA	Air	Filter to Air	
320-87858-8	GILBANETSP041222-1897	Total/NA	Air	Filter to Air	

Analysis Batch: 589341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87858-1	GILBANEPM041222-1894	Total/NA	Air	PM10	
320-87858-3	GILBANEPM041222-1895	Total/NA	Air	PM10	

General Chemistry (Continued)

Analysis Batch: 589341 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87858-5	GILBANEPM041222-1896	Total/NA	Air	PM10	
320-87858-7	GILBANEPM041222-1897	Total/NA	Air	PM10	

Analysis Batch: 589342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-87858-2	GILBANETSP041222-1894	Total/NA	Air	40CFR50 App B	588931
320-87858-4	GILBANETSP041222-1895	Total/NA	Air	40CFR50 App B	588931
320-87858-6	GILBANETSP041222-1896	Total/NA	Air	40CFR50 App B	588931
320-87858-8	GILBANETSP041222-1897	Total/NA	Air	40CFR50 App B	588931

Lab Chronicle

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

Job ID: 320-87858-1

Client Sample ID: GILBANEPM041222-1894
Lab Sample ID: 320-87858-1
Date Collected: 05/11/22 06:30
Matrix: Air
Date Received: 05/13/22 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					588788	05/19/22 05:30	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	588793	05/19/22 06:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			589121	05/19/22 12:55	SP	TAL SAC
Total/NA	Pre Prep	Filter to Air					588788	05/19/22 05:30	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	588793	05/19/22 06:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			589263	05/20/22 12:43	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0284 g	589341	05/16/22 11:30	JMD	TAL SAC

Client Sample ID: GILBANETSP041222-1894
Lab Sample ID: 320-87858-2
Date Collected: 05/11/22 06:30
Matrix: Air
Date Received: 05/13/22 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			589342	05/16/22 11:30	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					588931	05/19/22 11:55	JMD	TAL SAC

Client Sample ID: GILBANEPM041222-1895
Lab Sample ID: 320-87858-3
Date Collected: 05/11/22 06:20
Matrix: Air
Date Received: 05/13/22 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					588788	05/19/22 05:30	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	588793	05/19/22 06:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			589121	05/19/22 13:05	SP	TAL SAC
Total/NA	Pre Prep	Filter to Air					588788	05/19/22 05:30	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	588793	05/19/22 06:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			589263	05/20/22 12:46	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0280 g	589341	05/16/22 11:30	JMD	TAL SAC

Client Sample ID: GILBANETSP041222-1895
Lab Sample ID: 320-87858-4
Date Collected: 05/11/22 06:20
Matrix: Air
Date Received: 05/13/22 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			589342	05/16/22 11:30	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					588931	05/19/22 11:55	JMD	TAL SAC

Lab Chronicle

Client: GES-AIS, LLC
Job ID: 320-87858-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM041222-1896
Lab Sample ID: 320-87858-5
Date Collected: 05/12/22 06:52
Matrix: Air
Date Received: 05/13/22 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					588788	05/19/22 05:30	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	588793	05/19/22 06:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			589121	05/19/22 13:08	SP	TAL SAC
Total/NA	Pre Prep	Filter to Air					588788	05/19/22 05:30	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	588793	05/19/22 06:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			589263	05/20/22 12:49	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0390 g	589341	05/16/22 11:30	JMD	TAL SAC

Client Sample ID: GILBANETSP041222-1896
Lab Sample ID: 320-87858-6
Date Collected: 05/12/22 06:52
Matrix: Air
Date Received: 05/13/22 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			589342	05/16/22 11:30	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					588931	05/19/22 11:55	JMD	TAL SAC

Client Sample ID: GILBANEPM041222-1897
Lab Sample ID: 320-87858-7
Date Collected: 05/12/22 06:43
Matrix: Air
Date Received: 05/13/22 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					588788	05/19/22 05:30	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	588793	05/19/22 06:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			589121	05/19/22 13:11	SP	TAL SAC
Total/NA	Pre Prep	Filter to Air					588788	05/19/22 05:30	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	588793	05/19/22 06:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			589263	05/20/22 12:53	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0339 g	589341	05/16/22 11:30	JMD	TAL SAC

Client Sample ID: GILBANETSP041222-1897
Lab Sample ID: 320-87858-8
Date Collected: 05/12/22 06:43
Matrix: Air
Date Received: 05/13/22 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			589342	05/16/22 11:30	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					588931	05/19/22 11:55	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: 320-87858-1
Project/Site: Hunters Point, Parcel E, Phase 2

Laboratory: Eurofins Sacramento

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

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2468	01-20-24
Oregon	NELAP	4040	01-29-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
40CFR50 App B		Air	Total Suspended Particulates
PM10		Air	Particulate Matter as PM 10

Method Summary

Client: GES-AIS, LLC
Job ID: 320-87858-1
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

Sample Summary

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

Job ID: 320-87858-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-87858-1	GILBANEPM041222-1894	Air	05/11/22 06:30	05/13/22 09:35
320-87858-2	GILBANETSP041222-1894	Air	05/11/22 06:30	05/13/22 09:35
320-87858-3	GILBANEPM041222-1895	Air	05/11/22 06:20	05/13/22 09:35
320-87858-4	GILBANETSP041222-1895	Air	05/11/22 06:20	05/13/22 09:35
320-87858-5	GILBANEPM041222-1896	Air	05/12/22 06:52	05/13/22 09:35
320-87858-6	GILBANETSP041222-1896	Air	05/12/22 06:52	05/13/22 09:35
320-87858-7	GILBANEPM041222-1897	Air	05/12/22 06:43	05/13/22 09:35
320-87858-8	GILBANETSP041222-1897	Air	05/12/22 06:43	05/13/22 09:35

CHAIN-OF-CUSTODY RECORD

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

COC # KT051222AIR

Gilbane

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	Laboratory: EUROFINS ENVIRONMENT TESTING NORTHERN CALIFORNIA, LLC (EETN	Event: Parcel E Phase 2 Air Monitoring May 2022
Project Number: J310000400	PO[redacted]	
WBS Code: J310000400-016	Shi[redacted]	

Comments:

Equipment:

Code	Matrix
A	Air

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

320-87858 Chain of Custody

						Analytical Test Method	CAAIR - Air PM10	N0500 - Air TSP	SW6020 - Air Pb Mn Cu											
	Event: Parcel E Phase 2 Air Monitoring May 2022						1	1	1											
	Sample ID	Matrix	Date	Time	Samp Init.											Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
1	GILBANEPM041222-1894	A	05/11/2022	0630	KT		X		X							AMSE1	N1	0.00	0.00	1	VOLUME: 1730.86 (M3)
2	GILBANETSP041222-1894	A	05/11/2022	0630	KT			X								AMSE1	N1	0.00	0.00	1	VOLUME: 1646.46 (M3)
3	GILBANEPM041222-1895	A	05/11/2022	0620	KT		X		X							AMSE2	N1	0.00	0.00	1	VOLUME: 1725.97 (M3)
4	GILBANETSP041222-1895	A	05/11/2022	0620	KT			X								AMSE2	N1	0.00	0.00	1	VOLUME: 1722.63 (M3)
5	GILBANEPM041222-1896	A	05/12/2022	0652	KT		X		X							AMSE1	N1	0.00	0.00	1	VOLUME: 1767.37 (M3)
6	GILBANETSP041222-1896	A	05/12/2022	0652	KT			X								AMSE1	N1	0.00	0.00	1	VOLUME: 1684.77 (M3)
7	GILBANEPM041222-1897	A	05/12/2022	0643	KT		X		X							AMSE2	N1	0.00	0.00	1	VOLUME: 1757.78 (M3)
8	GILBANETSP041222-1897	A	05/12/2022	0643	KT			X								AMSE2	N1	0.00	0.00	1	VOLUME: 1758.76 (M3)
9																TP 5/12/22					
10																					

Turnaround Time: 5 days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[redacted]	5/12/22	1600	Fedex	5/12/22	1600
			[redacted] EETSAC	5/13/22	935

Shipping Date / Carrier / Airbill Number
Shipping Date: 5/12/2022 / FedEx 7768 3093 5431

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

21.1°C

Login Sample Receipt Checklist

Client: GES-AIS, LLC

Job Number: 320-87858-1

Login Number: 87858

List Source: Eurofins Sacramento

List Number: 1

Creator: [redacted]

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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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ANALYTICAL REPORT

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

Laboratory Job ID: 320-88029-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

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

Attn: [redacted]

Authorized for release by:
5/25/2022 3:18:26 PM

[redacted]

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Definitions/Glossary

Client: GES-AIS, LLC
Job ID: 320-88029-1
Project/Site: Hunters Point, Parcel E, Phase 2

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: 320-88029-1
Project/Site: Hunters Point, Parcel E, Phase 2

Job ID: 320-88029-1

Laboratory: Eurofins Sacramento

Narrative

Job Narrative
320-88029-1

Comments
No additional comments.

Receipt
The samples were received on 5/18/2022 10:00 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 20.9º C.

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

Detection Summary

Client: GES-AIS, LLC
Job ID: 320-88029-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM041222-1898 — Lab Sample ID: 320-88029-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0028		0.0022	0.00034	ug/m3 (Air)	1		6020	Total/NA
Copper	0.037		0.0045	0.00034	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0069		0.0022	0.00031	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	9.9		0.94	0.94	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP041222-1898 — Lab Sample ID: 320-88029-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	6.2878		0.9825	0.9825	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM041222-1899 — Lab Sample ID: 320-88029-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0071		0.0023	0.00034	ug/m3 (Air)	1		6020	Total/NA
Copper	0.035		0.0045	0.00034	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.016		0.0023	0.00032	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	19		0.94	0.94	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP041222-1899 — Lab Sample ID: 320-88029-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	46.9378		0.9388	0.9388	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM041222-1900 — Lab Sample ID: 320-88029-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0020		0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.015		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0076		0.00069	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	25		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP041222-1900 — Lab Sample ID: 320-88029-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	39.9117		0.3024	0.3024	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM041222-1901 — Lab Sample ID: 320-88029-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0058		0.00070	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.013		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.012		0.00070	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	30		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP041222-1901 — Lab Sample ID: 320-88029-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	75.8279		0.2901	0.2901	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GILBANEPM041222-1898
Lab Sample ID: 320-88029-1
Date Collected: 05/12/22 14:19
Matrix: Air
Date Received: 05/18/22 10:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0028		0.0022	0.00034	ug/m3 (Air)		05/23/22 07:00	05/23/22 16:27	1
Copper	0.037		0.0045	0.00034	ug/m3 (Air)		05/23/22 07:00	05/23/22 16:27	1
Manganese	0.0069		0.0022	0.00031	ug/m3 (Air)		05/23/22 07:00	05/23/22 16:27	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	9.9		0.94	0.94	ug/m3			05/19/22 09:15	1

Client Sample ID: GILBANETSP041222-1898
Lab Sample ID: 320-88029-2
Date Collected: 05/12/22 14:19
Matrix: Air
Date Received: 05/18/22 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	6.2878		0.9825	0.9825	ug/m3 (Air)			05/19/22 09:15	1

Client Sample ID: GILBANEPM041222-1899
Lab Sample ID: 320-88029-3
Date Collected: 05/12/22 14:09
Matrix: Air
Date Received: 05/18/22 10:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0071		0.0023	0.00034	ug/m3 (Air)		05/23/22 07:00	05/23/22 16:30	1
Copper	0.035		0.0045	0.00034	ug/m3 (Air)		05/23/22 07:00	05/23/22 16:30	1
Manganese	0.016		0.0023	0.00032	ug/m3 (Air)		05/23/22 07:00	05/23/22 16:30	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	19		0.94	0.94	ug/m3			05/19/22 09:15	1

Client Sample ID: GILBANETSP041222-1899
Lab Sample ID: 320-88029-4
Date Collected: 05/12/22 14:09
Matrix: Air
Date Received: 05/18/22 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	46.9378		0.9388	0.9388	ug/m3 (Air)			05/19/22 09:15	1

Client Sample ID: GILBANEPM041222-1900
Lab Sample ID: 320-88029-5
Date Collected: 05/17/22 06:48
Matrix: Air
Date Received: 05/18/22 10:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0020		0.00069	0.00010	ug/m3 (Air)		05/23/22 07:00	05/23/22 16:34	1
Copper	0.015		0.0014	0.00010	ug/m3 (Air)		05/23/22 07:00	05/23/22 16:34	1
Manganese	0.0076		0.00069	0.000097	ug/m3 (Air)		05/23/22 07:00	05/23/22 16:34	1

Client Sample ID: GILBANEPM041222-1900
Lab Sample ID: 320-88029-5
Date Collected: 05/17/22 06:48
Matrix: Air
Date Received: 05/18/22 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	25		0.29	0.29	ug/m3			05/19/22 09:15	1

Client Sample ID: GILBANETSP041222-1900
Lab Sample ID: 320-88029-6
Date Collected: 05/17/22 06:48
Matrix: Air
Date Received: 05/18/22 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	39.9117		0.3024	0.3024	ug/m3 (Air)			05/19/22 09:15	1

Client Sample ID: GILBANEPM041222-1901
Lab Sample ID: 320-88029-7
Date Collected: 05/17/22 06:37
Matrix: Air
Date Received: 05/18/22 10:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0058		0.00070	0.00010	ug/m3 (Air)		05/23/22 07:00	05/23/22 16:37	1
Copper	0.013		0.0014	0.00010	ug/m3 (Air)		05/23/22 07:00	05/23/22 16:37	1
Manganese	0.012		0.00070	0.000097	ug/m3 (Air)		05/23/22 07:00	05/23/22 16:37	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	30		0.29	0.29	ug/m3			05/19/22 09:15	1

Client Sample ID: GILBANETSP041222-1901
Lab Sample ID: 320-88029-8
Date Collected: 05/17/22 06:37
Matrix: Air
Date Received: 05/18/22 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	75.8279		0.2901	0.2901	ug/m3 (Air)			05/19/22 09:15	1

QC Sample Results

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

Job ID: 320-88029-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-589639/1-B
Matrix: Air
Analysis Batch: 589954

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 589655

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		05/23/22 07:00	05/23/22 15:49	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		05/23/22 07:00	05/23/22 15:49	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		05/23/22 07:00	05/23/22 15:49	1

Lab Sample ID: LCS 320-589639/2-B
Matrix: Air
Analysis Batch: 589954

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 589655

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	0.240	0.248		ug/m3 (Air)		103	86 - 111
Copper	0.240	0.242		ug/m3 (Air)		101	85 - 110
Manganese	0.240	0.242		ug/m3 (Air)		101	88 - 110

Lab Sample ID: LCSD 320-589639/3-B
Matrix: Air
Analysis Batch: 589954

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 589655

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	0.240	0.244		ug/m3 (Air)		102	86 - 111	2	15
Copper	0.240	0.244		ug/m3 (Air)		102	85 - 110	1	15
Manganese	0.240	0.251		ug/m3 (Air)		104	88 - 110	3	15

QC Association Summary

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

Job ID: 320-88029-1

Metals

Pre Prep Batch: 589639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88029-1	GILBANEPM041222-1898	Total/NA	Air	Filter to Air	
320-88029-3	GILBANEPM041222-1899	Total/NA	Air	Filter to Air	
320-88029-5	GILBANEPM041222-1900	Total/NA	Air	Filter to Air	
320-88029-7	GILBANEPM041222-1901	Total/NA	Air	Filter to Air	
MB 320-589639/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-589639/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-589639/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 589655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88029-1	GILBANEPM041222-1898	Total/NA	Air	3050B	589639
320-88029-3	GILBANEPM041222-1899	Total/NA	Air	3050B	589639
320-88029-5	GILBANEPM041222-1900	Total/NA	Air	3050B	589639
320-88029-7	GILBANEPM041222-1901	Total/NA	Air	3050B	589639
MB 320-589639/1-B	Method Blank	Total/NA	Air	3050B	589639
LCS 320-589639/2-B	Lab Control Sample	Total/NA	Air	3050B	589639
LCSD 320-589639/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	589639

Analysis Batch: 589954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88029-1	GILBANEPM041222-1898	Total/NA	Air	6020	589655
320-88029-3	GILBANEPM041222-1899	Total/NA	Air	6020	589655
320-88029-5	GILBANEPM041222-1900	Total/NA	Air	6020	589655
320-88029-7	GILBANEPM041222-1901	Total/NA	Air	6020	589655
MB 320-589639/1-B	Method Blank	Total/NA	Air	6020	589655
LCS 320-589639/2-B	Lab Control Sample	Total/NA	Air	6020	589655
LCSD 320-589639/3-B	Lab Control Sample Dup	Total/NA	Air	6020	589655

General Chemistry

Pre Prep Batch: 588931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88029-2	GILBANETSP041222-1898	Total/NA	Air	Filter to Air	
320-88029-4	GILBANETSP041222-1899	Total/NA	Air	Filter to Air	
320-88029-6	GILBANETSP041222-1900	Total/NA	Air	Filter to Air	
320-88029-8	GILBANETSP041222-1901	Total/NA	Air	Filter to Air	

Analysis Batch: 590258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88029-1	GILBANEPM041222-1898	Total/NA	Air	PM10	
320-88029-3	GILBANEPM041222-1899	Total/NA	Air	PM10	
320-88029-5	GILBANEPM041222-1900	Total/NA	Air	PM10	
320-88029-7	GILBANEPM041222-1901	Total/NA	Air	PM10	

Analysis Batch: 590259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88029-2	GILBANETSP041222-1898	Total/NA	Air	40CFR50 App B	588931
320-88029-4	GILBANETSP041222-1899	Total/NA	Air	40CFR50 App B	588931
320-88029-6	GILBANETSP041222-1900	Total/NA	Air	40CFR50 App B	588931
320-88029-8	GILBANETSP041222-1901	Total/NA	Air	40CFR50 App B	588931

Lab Chronicle

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

Job ID: 320-88029-1

Client Sample ID: GILBANEPM041222-1898
Lab Sample ID: 320-88029-1
Date Collected: 05/12/22 14:19
Matrix: Air
Date Received: 05/18/22 10:00

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					589639	05/23/22 06:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	589655	05/23/22 07:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			589954	05/23/22 16:27	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0053 g	590258	05/19/22 09:15	JMD	TAL SAC

Client Sample ID: GILBANETSP041222-1898
Lab Sample ID: 320-88029-2
Date Collected: 05/12/22 14:19
Matrix: Air
Date Received: 05/18/22 10:00

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			590259	05/19/22 09:15	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					588931	05/19/22 11:55	JMD	TAL SAC

Client Sample ID: GILBANEPM041222-1899
Lab Sample ID: 320-88029-3
Date Collected: 05/12/22 14:09
Matrix: Air
Date Received: 05/18/22 10:00

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					589639	05/23/22 06:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	589655	05/23/22 07:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			589954	05/23/22 16:30	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0101 g	590258	05/19/22 09:15	JMD	TAL SAC

Client Sample ID: GILBANETSP041222-1899
Lab Sample ID: 320-88029-4
Date Collected: 05/12/22 14:09
Matrix: Air
Date Received: 05/18/22 10:00

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			590259	05/19/22 09:15	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					588931	05/19/22 11:55	JMD	TAL SAC

Client Sample ID: GILBANEPM041222-1900
Lab Sample ID: 320-88029-5
Date Collected: 05/17/22 06:48
Matrix: Air
Date Received: 05/18/22 10:00

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					589639	05/23/22 06:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	589655	05/23/22 07:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			589954	05/23/22 16:34	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0438 g	590258	05/19/22 09:15	JMD	TAL SAC

Lab Chronicle

Client: GES-AIS, LLC
Job ID: 320-88029-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANETSP041222-1900
Lab Sample ID: 320-88029-6
Date Collected: 05/17/22 06:48
Matrix: Air
Date Received: 05/18/22 10:00

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			590259	05/19/22 09:15	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					588931	05/19/22 11:55	JMD	TAL SAC

Client Sample ID: GILBANEPM041222-1901
Lab Sample ID: 320-88029-7
Date Collected: 05/17/22 06:37
Matrix: Air
Date Received: 05/18/22 10:00

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					589639	05/23/22 06:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	589655	05/23/22 07:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			589954	05/23/22 16:37	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0514 g	590258	05/19/22 09:15	JMD	TAL SAC

Client Sample ID: GILBANETSP041222-1901
Lab Sample ID: 320-88029-8
Date Collected: 05/17/22 06:37
Matrix: Air
Date Received: 05/18/22 10:00

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			590259	05/19/22 09:15	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					588931	05/19/22 11:55	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: 320-88029-1
Project/Site: Hunters Point, Parcel E, Phase 2

Laboratory: Eurofins Sacramento

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

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2468	01-20-24
Oregon	NELAP	4040	01-29-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
40CFR50 App B		Air	Total Suspended Particulates
PM10		Air	Particulate Matter as PM 10

Method Summary

Client: GES-AIS, LLC
Job ID: 320-88029-1
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

Sample Summary

Client: GES-AIS, LLC
Job ID: 320-88029-1
Project/Site: Hunters Point, Parcel E, Phase 2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-88029-1	GILBANEPM041222-1898	Air	05/12/22 14:19	05/18/22 10:00
320-88029-2	GILBANETSP041222-1898	Air	05/12/22 14:19	05/18/22 10:00
320-88029-3	GILBANEPM041222-1899	Air	05/12/22 14:09	05/18/22 10:00
320-88029-4	GILBANETSP041222-1899	Air	05/12/22 14:09	05/18/22 10:00
320-88029-5	GILBANEPM041222-1900	Air	05/17/22 06:48	05/18/22 10:00
320-88029-6	GILBANETSP041222-1900	Air	05/17/22 06:48	05/18/22 10:00
320-88029-7	GILBANEPM041222-1901	Air	05/17/22 06:37	05/18/22 10:00
320-88029-8	GILBANETSP041222-1901	Air	05/17/22 06:37	05/18/22 10:00

CHAIN-OF-CUSTODY RECORD

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

COC # KT051722AIR

Gilbane

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	Laboratory: EUROFINS ENVIRONMENT TESTING NORTHERN CALIFORNIA, LLC (EETN	Event: Parcel E Phase 2 Air Monitoring May 2022
Project Number: J310000400	POC [redacted]	
WBS Code: J310000400-016	Ship	

Comments:

320-88029 Chain of Custody

Equipment:

Code	Matrix
A	Air

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

Event: Parcel E Phase 2 Air Monitoring May 2022

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: CAAIR - Air PM10	N0500 - Air TSP	SW6020 - Air Pb Mn Cu	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
						1	1	1						
1	GILBANEPM041222-1898	A	05/12/2022	1419	KT	X		X	AMSE1	N2	0.00	0.00	1	VOLUME: 533.96 (M3)
2	GILBANETSP041222-1898	A	05/12/2022	1419	KT		X		AMSE1	N2	0.00	0.00	1	VOLUME: 508.92 (M3)
3	GILBANEPM041222-1899	A	05/12/2022	1409	KT	X		X	AMSE2	N2	0.00	0.00	1	VOLUME0: 533.34 (M3)
4	GILBANETSP041222-1899	A	05/12/2022	1409	KT		X		AMSE2	N2	0.00	0.00	1	VOLUME: 532.62 (M3)
5	GILBANEPM041222-1900	A	05/17/2022	0648	KT	X		X	AMSE1	N1	0.00	0.00	1	VOLUME: 1733.43 (M3)
6	GILBANETSP041222-1900	A	05/17/2022	0648	KT		X		AMSE1	N1	0.00	0.00	1	VOLUME: 1653.65 (M3)
7	GILBANEPM041222-1901	A	05/17/2022	0637	KT	X		X	AMSE2	N1	0.00	0.00	1	VOLUME: 1723.16 (M3)
8	GILBANETSP041222-1901	A	05/17/2022	0637	KT		X		AMSE2	N1	0.00	0.00	1	VOLUME: 1723.64 (M3)
9														
10														

Turnaround Time: 5 days

[redacted]	Date	Time	**Received by:** *(Signature)*	Date	Time
	5/17/22	1600	[redacted]	5/17/22	1600
				5-18-22	1000

Shipping Date / Carrier / Airbill Number

Shipping Date: 5/17/2022 / FedEx 7768 6833 0415

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

Login Sample Receipt Checklist

Client: GES-AIS, LLC

Job Number: 320-88029-1

Login Number: 88029

List Source: Eurofins Sacramento

List Number: 1

Creator: [redacted]

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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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ANALYTICAL REPORT

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

Laboratory Job ID: 320-88125-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

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

[redacted]

Authorized for release by:
5/27/2022 6:13:22 PM

[redacted]

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Definitions/Glossary

Client: GES-AIS, LLC
Job ID: 320-88125-1
Project/Site: Hunters Point, Parcel E, Phase 2

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

Job ID: 320-88125-1

Laboratory: Eurofins Sacramento

Narrative

Job Narrative
320-88125-1

Comments
No additional comments.

Receipt
The samples were received on 5/20/2022 10:00 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 19.6º C.

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

Detection Summary

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

Job ID: 320-88125-1

Client Sample ID: GILBANEPM041222-1902 — Lab Sample ID: 320-88125-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0018		0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.037		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0050		0.00069	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	36		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP041222-1902 — Lab Sample ID: 320-88125-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	51.5551		0.3015	0.3015	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM041222-1903 — Lab Sample ID: 320-88125-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0036		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	0.0069		0.00070	0.000098	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	35		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP041222-1903 — Lab Sample ID: 320-88125-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	58.5352		0.2884	0.2884	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM041222-1904 — Lab Sample ID: 320-88125-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0029		0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.092		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0081		0.00069	0.000096	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	39		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP041222-1904 — Lab Sample ID: 320-88125-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	49.0278		0.3000	0.3000	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM041222-1905 — Lab Sample ID: 320-88125-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0022		0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.016		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0052		0.00069	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	32		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP041222-1905 — Lab Sample ID: 320-88125-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	48.6524		0.2886	0.2886	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GILBANEPM041222-1902
Lab Sample ID: 320-88125-1
Date Collected: 05/18/22 06:42
Matrix: Air
Date Received: 05/20/22 10:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0018		0.00069	0.00010	ug/m3 (Air)		05/26/22 08:15	05/26/22 10:05	1
Copper	0.037		0.0014	0.00010	ug/m3 (Air)		05/26/22 08:15	05/26/22 10:05	1
Manganese	0.0050		0.00069	0.000097	ug/m3 (Air)		05/26/22 08:15	05/26/22 10:05	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	36		0.29	0.29	ug/m3			05/23/22 10:30	1

Client Sample ID: GILBANETSP041222-1902
Lab Sample ID: 320-88125-2
Date Collected: 05/18/22 06:42
Matrix: Air
Date Received: 05/20/22 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	51.5551		0.3015	0.3015	ug/m3 (Air)			05/23/22 10:30	1

Client Sample ID: GILBANEPM041222-1903
Lab Sample ID: 320-88125-3
Date Collected: 05/18/22 06:31
Matrix: Air
Date Received: 05/20/22 10:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0036		0.00070	0.00010	ug/m3 (Air)		05/26/22 08:15	05/26/22 10:21	1
Copper	0.016		0.0014	0.00010	ug/m3 (Air)		05/26/22 08:15	05/26/22 10:21	1
Manganese	0.0069		0.00070	0.000098	ug/m3 (Air)		05/26/22 08:15	05/26/22 10:21	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	35		0.29	0.29	ug/m3			05/23/22 10:30	1

Client Sample ID: GILBANETSP041222-1903
Lab Sample ID: 320-88125-4
Date Collected: 05/18/22 06:31
Matrix: Air
Date Received: 05/20/22 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	58.5352		0.2884	0.2884	ug/m3 (Air)			05/23/22 10:30	1

Client Sample ID: GILBANEPM041222-1904
Lab Sample ID: 320-88125-5
Date Collected: 05/19/22 06:37
Matrix: Air
Date Received: 05/20/22 10:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0029		0.00069	0.00010	ug/m3 (Air)		05/26/22 08:15	05/26/22 10:24	1
Copper	0.092		0.0014	0.00010	ug/m3 (Air)		05/26/22 08:15	05/26/22 10:24	1
Manganese	0.0081		0.00069	0.000096	ug/m3 (Air)		05/26/22 08:15	05/26/22 10:24	1

Client Sample ID: GILBANEPM041222-1904
Lab Sample ID: 320-88125-5
Date Collected: 05/19/22 06:37
Matrix: Air
Date Received: 05/20/22 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	39		0.29	0.29	ug/m3			05/23/22 10:30	1

Client Sample ID: GILBANETSP041222-1904
Lab Sample ID: 320-88125-6
Date Collected: 05/19/22 06:37
Matrix: Air
Date Received: 05/20/22 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	49.0278		0.3000	0.3000	ug/m3 (Air)			05/23/22 10:30	1

Client Sample ID: GILBANEPM041222-1905
Lab Sample ID: 320-88125-7
Date Collected: 05/19/22 06:26
Matrix: Air
Date Received: 05/20/22 10:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0022		0.00069	0.00010	ug/m3 (Air)		05/26/22 08:15	05/26/22 10:28	1
Copper	0.016		0.0014	0.00010	ug/m3 (Air)		05/26/22 08:15	05/26/22 10:28	1
Manganese	0.0052		0.00069	0.000097	ug/m3 (Air)		05/26/22 08:15	05/26/22 10:28	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	32		0.29	0.29	ug/m3			05/23/22 10:30	1

Client Sample ID: GILBANETSP041222-1905
Lab Sample ID: 320-88125-8
Date Collected: 05/19/22 06:26
Matrix: Air
Date Received: 05/20/22 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	48.6524		0.2886	0.2886	ug/m3 (Air)			05/23/22 10:30	1

QC Sample Results

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

Job ID: 320-88125-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-590573/1-B
Matrix: Air
Analysis Batch: 590913

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 590589

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		05/26/22 08:15	05/26/22 09:55	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		05/26/22 08:15	05/26/22 09:55	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		05/26/22 08:15	05/26/22 09:55	1

Lab Sample ID: LCS 320-590573/2-B
Matrix: Air
Analysis Batch: 590913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 590589

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	0.240	0.248		ug/m3 (Air)		103	86 - 111
Copper	0.240	0.229		ug/m3 (Air)		95	85 - 110
Manganese	0.240	0.239		ug/m3 (Air)		100	88 - 110

Lab Sample ID: LCSD 320-590573/3-B
Matrix: Air
Analysis Batch: 590913

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 590589

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	0.240	0.246		ug/m3 (Air)		103	86 - 111	1	15
Copper	0.240	0.232		ug/m3 (Air)		97	85 - 110	1	15
Manganese	0.240	0.240		ug/m3 (Air)		100	88 - 110	1	15

QC Association Summary

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

Job ID: 320-88125-1

Metals

Pre Prep Batch: 590573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88125-1	GILBANEPM041222-1902	Total/NA	Air	Filter to Air	
320-88125-3	GILBANEPM041222-1903	Total/NA	Air	Filter to Air	
320-88125-5	GILBANEPM041222-1904	Total/NA	Air	Filter to Air	
320-88125-7	GILBANEPM041222-1905	Total/NA	Air	Filter to Air	
MB 320-590573/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-590573/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-590573/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 590589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88125-1	GILBANEPM041222-1902	Total/NA	Air	3050B	590573
320-88125-3	GILBANEPM041222-1903	Total/NA	Air	3050B	590573
320-88125-5	GILBANEPM041222-1904	Total/NA	Air	3050B	590573
320-88125-7	GILBANEPM041222-1905	Total/NA	Air	3050B	590573
MB 320-590573/1-B	Method Blank	Total/NA	Air	3050B	590573
LCS 320-590573/2-B	Lab Control Sample	Total/NA	Air	3050B	590573
LCSD 320-590573/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	590573

Analysis Batch: 590913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88125-1	GILBANEPM041222-1902	Total/NA	Air	6020	590589
320-88125-3	GILBANEPM041222-1903	Total/NA	Air	6020	590589
320-88125-5	GILBANEPM041222-1904	Total/NA	Air	6020	590589
320-88125-7	GILBANEPM041222-1905	Total/NA	Air	6020	590589
MB 320-590573/1-B	Method Blank	Total/NA	Air	6020	590589
LCS 320-590573/2-B	Lab Control Sample	Total/NA	Air	6020	590589
LCSD 320-590573/3-B	Lab Control Sample Dup	Total/NA	Air	6020	590589

General Chemistry

Pre Prep Batch: 591174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88125-2	GILBANETSP041222-1902	Total/NA	Air	Filter to Air	
320-88125-4	GILBANETSP041222-1903	Total/NA	Air	Filter to Air	
320-88125-6	GILBANETSP041222-1904	Total/NA	Air	Filter to Air	
320-88125-8	GILBANETSP041222-1905	Total/NA	Air	Filter to Air	

Analysis Batch: 591175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88125-1	GILBANEPM041222-1902	Total/NA	Air	PM10	
320-88125-3	GILBANEPM041222-1903	Total/NA	Air	PM10	
320-88125-5	GILBANEPM041222-1904	Total/NA	Air	PM10	
320-88125-7	GILBANEPM041222-1905	Total/NA	Air	PM10	

Analysis Batch: 591176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88125-2	GILBANETSP041222-1902	Total/NA	Air	40CFR50 App B	591174
320-88125-4	GILBANETSP041222-1903	Total/NA	Air	40CFR50 App B	591174
320-88125-6	GILBANETSP041222-1904	Total/NA	Air	40CFR50 App B	591174
320-88125-8	GILBANETSP041222-1905	Total/NA	Air	40CFR50 App B	591174

Lab Chronicle

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

Job ID: 320-88125-1

Client Sample ID: GILBANEPM041222-1902
Lab Sample ID: 320-88125-1
Date Collected: 05/18/22 06:42
Matrix: Air
Date Received: 05/20/22 10:00

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					590573	05/26/22 07:44	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	590589	05/26/22 08:15	NIM	TAL SAC
Total/NA	Analysis	6020		1			590913	05/26/22 10:05	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0618 g	591175	05/23/22 10:30	JMD	TAL SAC

Client Sample ID: GILBANETSP041222-1902
Lab Sample ID: 320-88125-2
Date Collected: 05/18/22 06:42
Matrix: Air
Date Received: 05/20/22 10:00

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			591176	05/23/22 10:30	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					591174	05/27/22 15:50	JMD	TAL SAC

Client Sample ID: GILBANEPM041222-1903
Lab Sample ID: 320-88125-3
Date Collected: 05/18/22 06:31
Matrix: Air
Date Received: 05/20/22 10:00

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					590573	05/26/22 07:44	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	590589	05/26/22 08:15	NIM	TAL SAC
Total/NA	Analysis	6020		1			590913	05/26/22 10:21	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0595 g	591175	05/23/22 10:30	JMD	TAL SAC

Client Sample ID: GILBANETSP041222-1903
Lab Sample ID: 320-88125-4
Date Collected: 05/18/22 06:31
Matrix: Air
Date Received: 05/20/22 10:00

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			591176	05/23/22 10:30	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					591174	05/27/22 15:50	JMD	TAL SAC

Client Sample ID: GILBANEPM041222-1904
Lab Sample ID: 320-88125-5
Date Collected: 05/19/22 06:37
Matrix: Air
Date Received: 05/20/22 10:00

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					590573	05/26/22 07:44	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	590589	05/26/22 08:15	NIM	TAL SAC
Total/NA	Analysis	6020		1			590913	05/26/22 10:24	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0673 g	591175	05/23/22 10:30	JMD	TAL SAC

Lab Chronicle

Client: GES-AIS, LLC
Job ID: 320-88125-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANETSP041222-1904
Lab Sample ID: 320-88125-6
Date Collected: 05/19/22 06:37
Matrix: Air
Date Received: 05/20/22 10:00

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			591176	05/23/22 10:30	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					591174	05/27/22 15:50	JMD	TAL SAC

Client Sample ID: GILBANEPM041222-1905
Lab Sample ID: 320-88125-7
Date Collected: 05/19/22 06:26
Matrix: Air
Date Received: 05/20/22 10:00

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					590573	05/26/22 07:44	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	590589	05/26/22 08:15	NIM	TAL SAC
Total/NA	Analysis	6020		1			590913	05/26/22 10:28	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0552 g	591175	05/23/22 10:30	JMD	TAL SAC

Client Sample ID: GILBANETSP041222-1905
Lab Sample ID: 320-88125-8
Date Collected: 05/19/22 06:26
Matrix: Air
Date Received: 05/20/22 10:00

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			591176	05/23/22 10:30	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					591174	05/27/22 15:50	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: 320-88125-1
Project/Site: Hunters Point, Parcel E, Phase 2

Laboratory: Eurofins Sacramento

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

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2468	01-20-24
Oregon	NELAP	4040	01-29-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
40CFR50 App B		Air	Total Suspended Particulates
PM10		Air	Particulate Matter as PM 10

Method Summary

Client: GES-AIS, LLC
Job ID: 320-88125-1
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

Sample Summary

Client: GES-AIS, LLC
Job ID: 320-88125-1
Project/Site: Hunters Point, Parcel E, Phase 2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-88125-1	GILBANEPM041222-1902	Air	05/18/22 06:42	05/20/22 10:00
320-88125-2	GILBANETSP041222-1902	Air	05/18/22 06:42	05/20/22 10:00
320-88125-3	GILBANEPM041222-1903	Air	05/18/22 06:31	05/20/22 10:00
320-88125-4	GILBANETSP041222-1903	Air	05/18/22 06:31	05/20/22 10:00
320-88125-5	GILBANEPM041222-1904	Air	05/19/22 06:37	05/20/22 10:00
320-88125-6	GILBANETSP041222-1904	Air	05/19/22 06:37	05/20/22 10:00
320-88125-7	GILBANEPM041222-1905	Air	05/19/22 06:26	05/20/22 10:00
320-88125-8	GILBANETSP041222-1905	Air	05/19/22 06:26	05/20/22 10:00

CHAIN-OF-CUSTODY RECORD

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

COC # KT051922AIR

Gilbane

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	Laboratory: EUROFINS ENVIRONMENT TESTING NORTHERN CALIFORNIA, LLC (EETN	Event: Parcel E Phase 2 Air Monitoring May 2022
Project Number: J310000400	POC [redacted]	
WBS Code: J310000400-016	Ship	

Comments:

Equipment:

Code	Matrix
A	Air

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

320-88125 Chain of Custody

Event: Parcel E Phase 2 Air Monitoring May 2022

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: CAAIR - Air PM10	N0500 - Air TSP	SW6020 - Air Pb Mn Cu	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
						1	1	1						
1	GILBANEPM041222-1902	A	05/18/2022	0642	KT	X		X	AMSE1	N1	0.00	0.00	1	VOLUME: 1735.36 (M3)
2	GILBANETSP041222-1902	A	05/18/2022	0642	KT		X		AMSE1	N1	0.00	0.00	1	VOLUME: 1658.42 (M3)
3	GILBANEPM041222-1903	A	05/18/2022	0631	KT	X		X	AMSE2	N1	0.00	0.00	1	VOLUME: 1718.87 (M3)
4	GILBANETSP041222-1903	A	05/18/2022	0631	KT		X		AMSE2	N1	0.00	0.00	1	VOLUME: 1734.00 (M3)
5	GILBANEPM041222-1904	A	05/19/2022	0637	KT	X		X	AMSE1	N1	0.00	0.00	1	VOLUME: 1741.13 (M3)
6	GILBANETSP041222-1904	A	05/19/2022	0637	KT		X		AMSE1	N1	0.00	0.00	1	VOLUME: 1666.40 (M3)
7	GILBANEPM041222-1905	A	05/19/2022	0626	KT	X		X	AMSE2	N1	0.00	0.00	1	VOLUME: 1728.36 (M3)
8	GILBANETSP041222-1905	A	05/19/2022	0626	KT		X		AMSE2	N1	0.00	0.00	1	VOLUME: 1732.70 (M3)
9														
10														

Turnaround Time: 5 days

[redacted]ure)	Date	Time	Received by: *(Signature)*	Date	Time
[redacted]	5/19/22	1600	FedEx	5/19/22	1600
			[redacted]	5.20.22	0900

Shipping Date / Carrier / Airbill Number

Shipping Date: 5/19/2022/ FedEx 7768 9600 6191

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

19.6°C

GES.Navy_COC_Field
May 19, 2022

Login Sample Receipt Checklist

Client: GES-AIS, LLC

Job Number: 320-88125-1

Login Number: 88125

List Source: Eurofins Sacramento

List Number: 1

Creator: [redacted]

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	1256035
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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ANALYTICAL REPORT

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

Laboratory Job ID: 320-88295-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

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

Attn: [redacted]

[redacted]

Authorized for release by:
6/2/2022 5:27:40 PM

[redacted]

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Definitions/Glossary

Client: GES-AIS, LLC
Job ID: 320-88295-1
Project/Site: Hunters Point, Parcel E, Phase 2

Qualifiers

Metals

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 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: 320-88295-1
Project/Site: Hunters Point, Parcel E, Phase 2

Job ID: 320-88295-1

Laboratory: Eurofins Sacramento

Narrative

Job Narrative
320-88295-1

Comments
No additional comments.

Receipt
The samples were received on 5/25/2022 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 17.6º C.

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

Detection Summary

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

Job ID: 320-88295-1

Client Sample ID: GILBANEPM041222-1906 — Lab Sample ID: 320-88295-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0069		0.0022	0.00032	ug/m3 (Air)	1		6020	Total/NA
Copper	0.038		0.0043	0.00032	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.022	B	0.0022	0.00030	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	56		0.90	0.90	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP041222-1906 — Lab Sample ID: 320-88295-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	96.6364		1.0369	1.0369	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM041222-1907 — Lab Sample ID: 320-88295-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.013		0.0022	0.00032	ug/m3 (Air)	1		6020	Total/NA
Copper	0.029		0.0043	0.00032	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.023	B	0.0022	0.00030	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	55		0.90	0.90	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP041222-1907 — Lab Sample ID: 320-88295-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	96.5022		0.8969	0.8969	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM042622-1908 — Lab Sample ID: 320-88295-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0048		0.00070	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.026		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0073	B	0.00070	0.000098	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	42		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP042622-1908 — Lab Sample ID: 320-88295-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	59.0590		0.3051	0.3051	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM042622-1909 — Lab Sample ID: 320-88295-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0030		0.00070	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.015		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0075	B	0.00070	0.000098	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	38		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP042622-1909 — Lab Sample ID: 320-88295-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	61.6679		0.2914	0.2914	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GILBANEPM041222-1906
Lab Sample ID: 320-88295-1
Date Collected: 05/19/22 14:21
Matrix: Air
Date Received: 05/25/22 10:30
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0069		0.0022	0.00032	ug/m3 (Air)		05/31/22 06:00	05/31/22 13:29	1
Copper	0.038		0.0043	0.00032	ug/m3 (Air)		05/31/22 06:00	05/31/22 13:29	1
Manganese	0.022	B	0.0022	0.00030	ug/m3 (Air)		05/31/22 06:00	05/31/22 13:29	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	56		0.90	0.90	ug/m3			05/26/22 08:15	1

Client Sample ID: GILBANETSP041222-1906
Lab Sample ID: 320-88295-2
Date Collected: 05/19/22 14:21
Matrix: Air
Date Received: 05/25/22 10:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	96.6364		1.0369	1.0369	ug/m3 (Air)			05/26/22 15:19	1

Client Sample ID: GILBANEPM041222-1907
Lab Sample ID: 320-88295-3
Date Collected: 05/19/22 14:11
Matrix: Air
Date Received: 05/25/22 10:30
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.013		0.0022	0.00032	ug/m3 (Air)		05/31/22 06:00	05/31/22 13:38	1
Copper	0.029		0.0043	0.00032	ug/m3 (Air)		05/31/22 06:00	05/31/22 13:38	1
Manganese	0.023	B	0.0022	0.00030	ug/m3 (Air)		05/31/22 06:00	05/31/22 13:38	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	55		0.90	0.90	ug/m3			05/26/22 08:15	1

Client Sample ID: GILBANETSP041222-1907
Lab Sample ID: 320-88295-4
Date Collected: 05/19/22 14:11
Matrix: Air
Date Received: 05/25/22 10:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	96.5022		0.8969	0.8969	ug/m3 (Air)			05/26/22 15:19	1

Client Sample ID: GILBANEPM042622-1908
Lab Sample ID: 320-88295-5
Date Collected: 05/24/22 06:46
Matrix: Air
Date Received: 05/25/22 10:30
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0048		0.00070	0.00010	ug/m3 (Air)		05/31/22 06:00	05/31/22 13:41	1
Copper	0.026		0.0014	0.00010	ug/m3 (Air)		05/31/22 06:00	05/31/22 13:41	1
Manganese	0.0073	B	0.00070	0.000098	ug/m3 (Air)		05/31/22 06:00	05/31/22 13:41	1

Client Sample ID: GILBANEPM042622-1908
Lab Sample ID: 320-88295-5
Date Collected: 05/24/22 06:46
Matrix: Air
Date Received: 05/25/22 10:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	42		0.29	0.29	ug/m3			05/26/22 08:15	1

Client Sample ID: GILBANETSP042622-1908
Lab Sample ID: 320-88295-6
Date Collected: 05/24/22 06:46
Matrix: Air
Date Received: 05/25/22 10:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	59.0590		0.3051	0.3051	ug/m3 (Air)			05/26/22 15:19	1

Client Sample ID: GILBANEPM042622-1909
Lab Sample ID: 320-88295-7
Date Collected: 05/24/22 06:36
Matrix: Air
Date Received: 05/25/22 10:30
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0030		0.00070	0.00010	ug/m3 (Air)		05/31/22 06:00	05/31/22 13:45	1
Copper	0.015		0.0014	0.00010	ug/m3 (Air)		05/31/22 06:00	05/31/22 13:45	1
Manganese	0.0075	B	0.00070	0.000098	ug/m3 (Air)		05/31/22 06:00	05/31/22 13:45	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	38		0.29	0.29	ug/m3			05/26/22 08:15	1

Client Sample ID: GILBANETSP042622-1909
Lab Sample ID: 320-88295-8
Date Collected: 05/24/22 06:36
Matrix: Air
Date Received: 05/25/22 10:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	61.6679		0.2914	0.2914	ug/m3 (Air)			05/26/22 15:19	1

QC Sample Results

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

Job ID: 320-88295-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-591367/1-B
Matrix: Air
Analysis Batch: 591672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 591419

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		05/31/22 06:00	05/31/22 13:19	1
Manganese	0.000229	J	0.0012	0.00017	ug/m3 (Air)		05/31/22 06:00	05/31/22 13:19	1

Lab Sample ID: MB 320-591367/1-B
Matrix: Air
Analysis Batch: 591951

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 591419

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.0024	0.00018	ug/m3 (Air)		05/31/22 06:00	06/01/22 13:44	1

Lab Sample ID: LCS 320-591367/2-B
Matrix: Air
Analysis Batch: 591672

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 591419

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	0.240	0.253		ug/m3 (Air)		106	86 - 111
Copper	0.240	0.235		ug/m3 (Air)		98	85 - 110
Manganese	0.240	0.243		ug/m3 (Air)		101	88 - 110

Lab Sample ID: LCSD 320-591367/3-B
Matrix: Air
Analysis Batch: 591672

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 591419

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	0.240	0.254		ug/m3 (Air)		106	86 - 111	0	15
Copper	0.240	0.229		ug/m3 (Air)		95	85 - 110	3	15
Manganese	0.240	0.234		ug/m3 (Air)		98	88 - 110	4	15

QC Association Summary

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

Job ID: 320-88295-1

Metals

Pre Prep Batch: 591367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88295-1	GILBANEPM041222-1906	Total/NA	Air	Filter to Air	
320-88295-3	GILBANEPM041222-1907	Total/NA	Air	Filter to Air	
320-88295-5	GILBANEPM042622-1908	Total/NA	Air	Filter to Air	
320-88295-7	GILBANEPM042622-1909	Total/NA	Air	Filter to Air	
MB 320-591367/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-591367/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-591367/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 591419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88295-1	GILBANEPM041222-1906	Total/NA	Air	3050B	591367
320-88295-3	GILBANEPM041222-1907	Total/NA	Air	3050B	591367
320-88295-5	GILBANEPM042622-1908	Total/NA	Air	3050B	591367
320-88295-7	GILBANEPM042622-1909	Total/NA	Air	3050B	591367
MB 320-591367/1-B	Method Blank	Total/NA	Air	3050B	591367
LCS 320-591367/2-B	Lab Control Sample	Total/NA	Air	3050B	591367
LCSD 320-591367/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	591367

Analysis Batch: 591672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88295-1	GILBANEPM041222-1906	Total/NA	Air	6020	591419
320-88295-3	GILBANEPM041222-1907	Total/NA	Air	6020	591419
320-88295-5	GILBANEPM042622-1908	Total/NA	Air	6020	591419
320-88295-7	GILBANEPM042622-1909	Total/NA	Air	6020	591419
MB 320-591367/1-B	Method Blank	Total/NA	Air	6020	591419
LCS 320-591367/2-B	Lab Control Sample	Total/NA	Air	6020	591419
LCSD 320-591367/3-B	Lab Control Sample Dup	Total/NA	Air	6020	591419

Analysis Batch: 591951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 320-591367/1-B	Method Blank	Total/NA	Air	6020	591419

General Chemistry

Pre Prep Batch: 591174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88295-2	GILBANETSP041222-1906	Total/NA	Air	Filter to Air	
320-88295-4	GILBANETSP041222-1907	Total/NA	Air	Filter to Air	
320-88295-6	GILBANETSP042622-1908	Total/NA	Air	Filter to Air	
320-88295-8	GILBANETSP042622-1909	Total/NA	Air	Filter to Air	

Analysis Batch: 592291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88295-1	GILBANEPM041222-1906	Total/NA	Air	PM10	
320-88295-3	GILBANEPM041222-1907	Total/NA	Air	PM10	
320-88295-5	GILBANEPM042622-1908	Total/NA	Air	PM10	
320-88295-7	GILBANEPM042622-1909	Total/NA	Air	PM10	

Analysis Batch: 592292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88295-2	GILBANETSP041222-1906	Total/NA	Air	40CFR50 App B	591174

General Chemistry (Continued)

Analysis Batch: 592292 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88295-4	GILBANETSP041222-1907	Total/NA	Air	40CFR50 App B	591174
320-88295-6	GILBANETSP042622-1908	Total/NA	Air	40CFR50 App B	591174
320-88295-8	GILBANETSP042622-1909	Total/NA	Air	40CFR50 App B	591174

Lab Chronicle

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

Job ID: 320-88295-1

Client Sample ID: GILBANEPM041222-1906
Lab Sample ID: 320-88295-1
Date Collected: 05/19/22 14:21
Matrix: Air
Date Received: 05/25/22 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					591367	05/31/22 05:34	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	591419	05/31/22 06:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			591672	05/31/22 13:29	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0310 g	592291	05/26/22 08:15	JMD	TAL SAC

Client Sample ID: GILBANETSP041222-1906
Lab Sample ID: 320-88295-2
Date Collected: 05/19/22 14:21
Matrix: Air
Date Received: 05/25/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			592292	05/26/22 15:19	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					591174	05/27/22 15:50	JMD	TAL SAC

Client Sample ID: GILBANEPM041222-1907
Lab Sample ID: 320-88295-3
Date Collected: 05/19/22 14:11
Matrix: Air
Date Received: 05/25/22 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					591367	05/31/22 05:34	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	591419	05/31/22 06:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			591672	05/31/22 13:38	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0304 g	592291	05/26/22 08:15	JMD	TAL SAC

Client Sample ID: GILBANETSP041222-1907
Lab Sample ID: 320-88295-4
Date Collected: 05/19/22 14:11
Matrix: Air
Date Received: 05/25/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			592292	05/26/22 15:19	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					591174	05/27/22 15:50	JMD	TAL SAC

Client Sample ID: GILBANEPM042622-1908
Lab Sample ID: 320-88295-5
Date Collected: 05/24/22 06:46
Matrix: Air
Date Received: 05/25/22 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					591367	05/31/22 05:34	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	591419	05/31/22 06:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			591672	05/31/22 13:41	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0726 g	592291	05/26/22 08:15	JMD	TAL SAC

Lab Chronicle

Client: GES-AIS, LLC
Job ID: 320-88295-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANETSP042622-1908
Lab Sample ID: 320-88295-6
Date Collected: 05/24/22 06:46
Matrix: Air
Date Received: 05/25/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			592292	05/26/22 15:19	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					591174	05/27/22 15:50	JMD	TAL SAC

Client Sample ID: GILBANEPM042622-1909
Lab Sample ID: 320-88295-7
Date Collected: 05/24/22 06:36
Matrix: Air
Date Received: 05/25/22 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					591367	05/31/22 05:34	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	591419	05/31/22 06:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			591672	05/31/22 13:45	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0659 g	592291	05/26/22 08:15	JMD	TAL SAC

Client Sample ID: GILBANETSP042622-1909
Lab Sample ID: 320-88295-8
Date Collected: 05/24/22 06:36
Matrix: Air
Date Received: 05/25/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			592292	05/26/22 15:19	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					591174	05/27/22 15:50	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: 320-88295-1
Project/Site: Hunters Point, Parcel E, Phase 2

Laboratory: Eurofins Sacramento

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

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2468	01-20-24
Oregon	NELAP	4040	01-29-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
40CFR50 App B		Air	Total Suspended Particulates
PM10		Air	Particulate Matter as PM 10

Method Summary

Client: GES-AIS, LLC
Job ID: 320-88295-1
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

Sample Summary

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

Job ID: 320-88295-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-88295-1	GILBANEPM041222-1906	Air	05/19/22 14:21	05/25/22 10:30
320-88295-2	GILBANETSP041222-1906	Air	05/19/22 14:21	05/25/22 10:30
320-88295-3	GILBANEPM041222-1907	Air	05/19/22 14:11	05/25/22 10:30
320-88295-4	GILBANETSP041222-1907	Air	05/19/22 14:11	05/25/22 10:30
320-88295-5	GILBANEPM042622-1908	Air	05/24/22 06:46	05/25/22 10:30
320-88295-6	GILBANETSP042622-1908	Air	05/24/22 06:46	05/25/22 10:30
320-88295-7	GILBANEPM042622-1909	Air	05/24/22 06:36	05/25/22 10:30
320-88295-8	GILBANETSP042622-1909	Air	05/24/22 06:36	05/25/22 10:30

CHAIN-OF-CUSTODY RECORD

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

COC # KT052422AIR

Gilbane

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	Laboratory: EUROFINS ENVIRONMENT TESTING NORTHERN CALIFORNIA, LLC (EETN	Event: Parcel E Phase 2 Air Monitoring May 2022
Project Number: J310000400	POC [redacted]	
WBS Code: J310000400-016	Ship	

Comments:

Equipment:

Code	Matrix
A	Air

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

320-88295 Chain of Custody

Event: Parcel E Phase 2 Air Monitoring May 2022

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: CAAIR - Air PM10	N0500 - Air TSP	SW6020 - Air Pb Mn Cu	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
						1	1	1						
1	GILBANEPM041222-1906	A	05/19/2022	1421	KT	X		X	AMSE1	N2	0.00	0.00	1	VOLUME: 554.34 (M3)
2	GILBANETSP041222-1906	A	05/19/2022	1421	KT		X		AMSE1	N2	0.00	0.00	1	VOLUME: 482.22 (M3)
3	GILBANEPM041222-1907	A	05/19/2022	1411	KT	X		X	AMSE2	N2	0.00	0.00	1	VOLUME: 554.66 (M3)
4	GILBANETSP041222-1907	A	05/19/2022	1411	KT		X		AMSE2	N2	0.00	0.00	1	VOLUME: 557.50 (M3)
5	GILBANEPM042622-1908	A	05/24/2022	0646	KT	X		X	AMSE1	N1	0.00	0.00	1	VOLUME: 1719.02 (M3)
6	GILBANETSP042622-1908	A	05/24/2022	0646	KT		X		AMSE1	N1	0.00	0.00	1	VOLUME: 1639.04 (M3)
7	GILBANEPM042622-1909	A	05/24/2022	0636	KT	X		X	AMSE2	N1	0.00	0.00	1	VOLUME: 1714.42 (M3)
8	GILBANETSP042622-1909	A	05/24/2022	0636	KT		X		AMSE2	N1	0.00	0.00	1	VOLUME: 1715.64 (M3)
9														
10														

Turnaround Time: 5 days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[redacted]	05/24/2022	1600	[redacted]	05/24/22	1600
				5.25.22	1030

Shipping Date / Carrier / Airbill Number
Shipping Date: 5/24/2022 / FedEx 7769 4412 4751

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

17.6°C

GES.Navy_COC_Field
May 24, 2022

Login Sample Receipt Checklist

Client: GES-AIS, LLC

Job Number: 320-88295-1

Login Number: 88295
List Number: 1
Creator: [redacted]

List Source: Eurofins Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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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ANALYTICAL REPORT

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

Laboratory Job ID: 320-88398-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

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

Attn: [redacted]

Authorized for release by:
6/6/2022 4:12:14 PM

[redacted]

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Definitions/Glossary

Client: GES-AIS, LLC
Job ID: 320-88398-1
Project/Site: Hunters Point, Parcel E, Phase 2

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

Job ID: 320-88398-1

Job ID: 320-88398-1

Laboratory: Eurofins Sacramento

Narrative

Job Narrative
320-88398-1

Comments
No additional comments.

Receipt
The samples were received on 5/27/2022 9:40 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
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

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

Job ID: 320-88398-1

Client Sample ID: GILBANEPM042622-1910 — Lab Sample ID: 320-88398-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0039		0.00068	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.19		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0093		0.00068	0.000096	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: GILBANETSP042622-1910 — Lab Sample ID: 320-88398-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	48.9565		0.2992	0.2992	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM042622-1911 — Lab Sample ID: 320-88398-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0032		0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.031		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0073		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: GILBANETSP042622-1911 — Lab Sample ID: 320-88398-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	40.3829		0.2864	0.2864	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM042622-1912 — Lab Sample ID: 320-88398-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.010		0.00070	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.12		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.034		0.00070	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	86		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP042622-1912 — Lab Sample ID: 320-88398-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	116.7067		0.3034	0.3034	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM042622-1913 — Lab Sample ID: 320-88398-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0063		0.00070	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.028		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.014		0.00070	0.000098	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	24		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP042622-1913 — Lab Sample ID: 320-88398-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	46.6606		0.2902	0.2902	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: GES-AIS, LLC
Job ID: 320-88398-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM042622-1910
Lab Sample ID: 320-88398-1
Date Collected: 05/25/22 06:48
Matrix: Air
Date Received: 05/27/22 09:40
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0039		0.00068	0.00010	ug/m3 (Air)		06/02/22 08:53	06/02/22 15:07	1
Copper	0.19		0.0014	0.00010	ug/m3 (Air)		06/02/22 08:53	06/02/22 15:07	1
Manganese	0.0093		0.00068	0.000096	ug/m3 (Air)		06/02/22 08:53	06/02/22 15:07	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	37		0.29	0.29	ug/m3			05/31/22 08:00	1

Client Sample ID: GILBANETSP042622-1910
Lab Sample ID: 320-88398-2
Date Collected: 05/25/22 06:48
Matrix: Air
Date Received: 05/27/22 09:40
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	48.9565		0.2992	0.2992	ug/m3 (Air)			05/31/22 08:00	1

Client Sample ID: GILBANEPM042622-1911
Lab Sample ID: 320-88398-3
Date Collected: 05/25/22 06:37
Matrix: Air
Date Received: 05/27/22 09:40
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0032		0.00069	0.00010	ug/m3 (Air)		06/02/22 08:53	06/02/22 15:16	1
Copper	0.031		0.0014	0.00010	ug/m3 (Air)		06/02/22 08:53	06/02/22 15:16	1
Manganese	0.0073		0.00069	0.000097	ug/m3 (Air)		06/02/22 08:53	06/02/22 15:16	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			05/31/22 08:00	1

Client Sample ID: GILBANETSP042622-1911
Lab Sample ID: 320-88398-4
Date Collected: 05/25/22 06:37
Matrix: Air
Date Received: 05/27/22 09:40
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	40.3829		0.2864	0.2864	ug/m3 (Air)			05/31/22 08:00	1

Client Sample ID: GILBANEPM042622-1912
Lab Sample ID: 320-88398-5
Date Collected: 05/26/22 06:37
Matrix: Air
Date Received: 05/27/22 09:40
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.010		0.00070	0.00010	ug/m3 (Air)		06/02/22 08:53	06/02/22 15:19	1
Copper	0.12		0.0014	0.00010	ug/m3 (Air)		06/02/22 08:53	06/02/22 15:19	1
Manganese	0.034		0.00070	0.000097	ug/m3 (Air)		06/02/22 08:53	06/02/22 15:19	1

Client Sample ID: GILBANEPM042622-1912
Lab Sample ID: 320-88398-5

Date Collected: 05/26/22 06:37
Matrix: Air
Date Received: 05/27/22 09:40
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	86		0.29	0.29	ug/m3			05/31/22 08:00	1

Client Sample ID: GILBANETSP042622-1912
Lab Sample ID: 320-88398-6

Date Collected: 05/26/22 06:37
Matrix: Air
Date Received: 05/27/22 09:40
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	116.7067		0.3034	0.3034	ug/m3 (Air)			05/31/22 08:00	1

Client Sample ID: GILBANEPM042622-1913
Lab Sample ID: 320-88398-7

Date Collected: 05/26/22 06:27
Matrix: Air
Date Received: 05/27/22 09:40
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0063		0.00070	0.00010	ug/m3 (Air)		06/02/22 08:53	06/02/22 15:23	1
Copper	0.028		0.0014	0.00010	ug/m3 (Air)		06/02/22 08:53	06/02/22 15:23	1
Manganese	0.014		0.00070	0.000098	ug/m3 (Air)		06/02/22 08:53	06/02/22 15:23	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	24		0.29	0.29	ug/m3			05/31/22 08:00	1

Client Sample ID: GILBANETSP042622-1913
Lab Sample ID: 320-88398-8

Date Collected: 05/26/22 06:27
Matrix: Air
Date Received: 05/27/22 09:40
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	46.6606		0.2902	0.2902	ug/m3 (Air)			05/31/22 08:00	1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-592059/1-B
Matrix: Air
Analysis Batch: 592447

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 592083

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		06/02/22 08:53	06/02/22 13:58	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		06/02/22 08:53	06/02/22 13:58	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		06/02/22 08:53	06/02/22 13:58	1

Lab Sample ID: LCS 320-592059/2-B
Matrix: Air
Analysis Batch: 592447

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 592083

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	0.240	0.245		ug/m3 (Air)		102	86 - 111
Copper	0.240	0.236		ug/m3 (Air)		98	85 - 110
Manganese	0.240	0.246		ug/m3 (Air)		103	88 - 110

Lab Sample ID: LCSD 320-592059/3-B
Matrix: Air
Analysis Batch: 592447

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 592083

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	0.240	0.246		ug/m3 (Air)		102	86 - 111	0	15
Copper	0.240	0.236		ug/m3 (Air)		98	85 - 110	0	15
Manganese	0.240	0.244		ug/m3 (Air)		102	88 - 110	1	15

QC Association Summary

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

Job ID: 320-88398-1

Metals

Pre Prep Batch: 592059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88398-1	GILBANEPM042622-1910	Total/NA	Air	Filter to Air	
320-88398-3	GILBANEPM042622-1911	Total/NA	Air	Filter to Air	
320-88398-5	GILBANEPM042622-1912	Total/NA	Air	Filter to Air	
320-88398-7	GILBANEPM042622-1913	Total/NA	Air	Filter to Air	
MB 320-592059/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-592059/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-592059/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 592083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88398-1	GILBANEPM042622-1910	Total/NA	Air	3050B	592059
320-88398-3	GILBANEPM042622-1911	Total/NA	Air	3050B	592059
320-88398-5	GILBANEPM042622-1912	Total/NA	Air	3050B	592059
320-88398-7	GILBANEPM042622-1913	Total/NA	Air	3050B	592059
MB 320-592059/1-B	Method Blank	Total/NA	Air	3050B	592059
LCS 320-592059/2-B	Lab Control Sample	Total/NA	Air	3050B	592059
LCSD 320-592059/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	592059

Analysis Batch: 592447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88398-1	GILBANEPM042622-1910	Total/NA	Air	6020	592083
320-88398-3	GILBANEPM042622-1911	Total/NA	Air	6020	592083
320-88398-5	GILBANEPM042622-1912	Total/NA	Air	6020	592083
320-88398-7	GILBANEPM042622-1913	Total/NA	Air	6020	592083
MB 320-592059/1-B	Method Blank	Total/NA	Air	6020	592083
LCS 320-592059/2-B	Lab Control Sample	Total/NA	Air	6020	592083
LCSD 320-592059/3-B	Lab Control Sample Dup	Total/NA	Air	6020	592083

General Chemistry

Pre Prep Batch: 593195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88398-2	GILBANETSP042622-1910	Total/NA	Air	Filter to Air	
320-88398-4	GILBANETSP042622-1911	Total/NA	Air	Filter to Air	
320-88398-6	GILBANETSP042622-1912	Total/NA	Air	Filter to Air	
320-88398-8	GILBANETSP042622-1913	Total/NA	Air	Filter to Air	

Analysis Batch: 593213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88398-1	GILBANEPM042622-1910	Total/NA	Air	PM10	
320-88398-3	GILBANEPM042622-1911	Total/NA	Air	PM10	
320-88398-5	GILBANEPM042622-1912	Total/NA	Air	PM10	
320-88398-7	GILBANEPM042622-1913	Total/NA	Air	PM10	

Analysis Batch: 593224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88398-2	GILBANETSP042622-1910	Total/NA	Air	40CFR50 App B	593195
320-88398-4	GILBANETSP042622-1911	Total/NA	Air	40CFR50 App B	593195
320-88398-6	GILBANETSP042622-1912	Total/NA	Air	40CFR50 App B	593195
320-88398-8	GILBANETSP042622-1913	Total/NA	Air	40CFR50 App B	593195

Lab Chronicle

Client: GES-AIS, LLC
Job ID: 320-88398-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM042622-1910
Lab Sample ID: 320-88398-1
Date Collected: 05/25/22 06:48
Matrix: Air
Date Received: 05/27/22 09:40

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					592059	06/02/22 08:16	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	592083	06/02/22 08:53	NIM	TAL SAC
Total/NA	Analysis	6020		1			592447	06/02/22 15:07	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0654 g	593213	05/31/22 08:00	JMD	TAL SAC

Client Sample ID: GILBANETSP042622-1910
Lab Sample ID: 320-88398-2
Date Collected: 05/25/22 06:48
Matrix: Air
Date Received: 05/27/22 09:40

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			593224	05/31/22 08:00	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					593195	06/06/22 14:57	JMD	TAL SAC

Client Sample ID: GILBANEPM042622-1911
Lab Sample ID: 320-88398-3
Date Collected: 05/25/22 06:37
Matrix: Air
Date Received: 05/27/22 09:40

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					592059	06/02/22 08:16	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	592083	06/02/22 08:53	NIM	TAL SAC
Total/NA	Analysis	6020		1			592447	06/02/22 15:16	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0541 g	593213	05/31/22 08:00	JMD	TAL SAC

Client Sample ID: GILBANETSP042622-1911
Lab Sample ID: 320-88398-4
Date Collected: 05/25/22 06:37
Matrix: Air
Date Received: 05/27/22 09:40

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			593224	05/31/22 08:00	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					593195	06/06/22 14:57	JMD	TAL SAC

Client Sample ID: GILBANEPM042622-1912
Lab Sample ID: 320-88398-5
Date Collected: 05/26/22 06:37
Matrix: Air
Date Received: 05/27/22 09:40

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					592059	06/02/22 08:16	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	592083	06/02/22 08:53	NIM	TAL SAC
Total/NA	Analysis	6020		1			592447	06/02/22 15:19	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.1491 g	593213	05/31/22 08:00	JMD	TAL SAC

Lab Chronicle

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

Job ID: 320-88398-1

Client Sample ID: GILBANETSP042622-1912

Lab Sample ID: 320-88398-6

Date Collected: 05/26/22 06:37

Matrix: Air

Date Received: 05/27/22 09:40

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			593224	05/31/22 08:00	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					593195	06/06/22 14:57	JMD	TAL SAC

Client Sample ID: GILBANEPM042622-1913

Lab Sample ID: 320-88398-7

Date Collected: 05/26/22 06:27

Matrix: Air

Date Received: 05/27/22 09:40

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					592059	06/02/22 08:16	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	592083	06/02/22 08:53	NIM	TAL SAC
Total/NA	Analysis	6020		1			592447	06/02/22 15:23	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0414 g	593213	05/31/22 08:00	JMD	TAL SAC

Client Sample ID: GILBANETSP042622-1913

Lab Sample ID: 320-88398-8

Date Collected: 05/26/22 06:27

Matrix: Air

Date Received: 05/27/22 09:40

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			593224	05/31/22 08:00	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					593195	06/06/22 14:57	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: 320-88398-1
Project/Site: Hunters Point, Parcel E, Phase 2

Laboratory: Eurofins Sacramento

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

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2468	01-20-24
Oregon	NELAP	4040	01-29-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
40CFR50 App B		Air	Total Suspended Particulates
PM10		Air	Particulate Matter as PM 10

Method Summary

Client: GES-AIS, LLC
Job ID: 320-88398-1
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

Sample Summary

Client: GES-AIS, LLC
Job ID: 320-88398-1
Project/Site: Hunters Point, Parcel E, Phase 2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-88398-1	GILBANEPM042622-1910	Air	05/25/22 06:48	05/27/22 09:40
320-88398-2	GILBANETSP042622-1910	Air	05/25/22 06:48	05/27/22 09:40
320-88398-3	GILBANEPM042622-1911	Air	05/25/22 06:37	05/27/22 09:40
320-88398-4	GILBANETSP042622-1911	Air	05/25/22 06:37	05/27/22 09:40
320-88398-5	GILBANEPM042622-1912	Air	05/26/22 06:37	05/27/22 09:40
320-88398-6	GILBANETSP042622-1912	Air	05/26/22 06:37	05/27/22 09:40
320-88398-7	GILBANEPM042622-1913	Air	05/26/22 06:27	05/27/22 09:40
320-88398-8	GILBANETSP042622-1913	Air	05/26/22 06:27	05/27/22 09:40

CHAIN-OF-CUSTODY RECORD

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

COC # KT052622AIR

Gilbane

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	Laboratory: EUROFINS ENVIRONMENT TESTING NORTHERN CALIFORNIA, LLC (EETN	Event: Parcel E Phase 2 Air Monitoring May 2022
Project Number: J310000400	POC [redacted]	
WBS Code: J310000400-016	Ship	

Comments:

Equipment:

Code	Matrix
A	Air

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

320-88398 Chain of Custody

Event: Parcel E Phase 2 Air Monitoring May 2022

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: CAAIR - Air PM10	N0500 - Air TSP	SW6020 - Air Pb Mn Cu	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
						1	1	1						
1	GILBANEPM042622-1910	A	05/25/2022	0648	KT	X		X	AMSE1	N1	0.00	0.00	1	VOLUME: 1751.97 (M3)
2	GILBANETSP042622-1910	A	05/25/2022	0648	KT		X		AMSE1	N1	0.00	0.00	1	VOLUME: 1670.87 (M3)
3	GILBANEPM042622-1911	A	05/25/2022	0637	KT	X		X	AMSE2	N1	0.00	0.00	1	VOLUME: 1739.20 (M3)
4	GILBANETSP042622-1911	A	05/25/2022	0637	KT		X		AMSE2	N1	0.00	0.00	1	VOLUME: 1745.79 (M3)
5	GILBANEPM042622-1912	A	05/26/2022	0637	KT	X		X	AMSE1	N1	0.00	0.00	1	VOLUME: 1726.43 (M3)
6	GILBANETSP042622-1912	A	05/26/2022	0637	KT		X		AMSE1	N1	0.00	0.00	1	VOLUME: 1647.72 (M3)
7	GILBANEPM042622-1913	A	05/26/2022	0627	KT	X		X	AMSE2	N1	0.00	0.00	1	VOLUME: 1721.34 (M3)
8	GILBANETSP042622-1913	A	05/26/2022	0627	KT		X		AMSE2	N1	0.00	0.00	1	VOLUME: 1723.08 (M3)
9									TP 5/26/22					
10														

Turnaround Time: 5 days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[redacted]	5/26/22	1600	FedEx	5/26/22	1600
			[redacted]	5/26/22	2140

Shipping Date / Carrier / Airbill Number
Shipping Date: 5/26/2022 / FedEx 7769 5677 1562

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

GES.Navy_COC_Field
May 26, 2022

19.1°C

Login Sample Receipt Checklist

Client: GES-AIS, LLC

Job Number: 320-88398-1

Login Number: 88398

List Source: Eurofins Sacramento

List Number: 1

Creator: [redacted]

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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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ANALYTICAL REPORT

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

Laboratory Job ID: 320-88535-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

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

Attn: [redacted]

[redacted]

Authorized for release by:
6/10/2022 8:42:16 AM

[redacted]

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Definitions/Glossary

Client: GES-AIS, LLC
Job ID: 320-88535-1
Project/Site: Hunters Point, Parcel E, Phase 2

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: 320-88535-1
Project/Site: Hunters Point, Parcel E, Phase 2

Job ID: 320-88535-1

Laboratory: Eurofins Sacramento

Narrative

Job Narrative
320-88535-1

Comments
No additional comments.

Receipt
The samples were received on 6/2/2022 9:00 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 21.1° C.

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

Detection Summary

Client: GES-AIS, LLC
Job ID: 320-88535-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM042622-1914 — Lab Sample ID: 320-88535-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0031		0.0025	0.00038	ug/m3 (Air)	1		6020	Total/NA
Copper	0.11		0.0050	0.00038	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.013		0.0025	0.00035	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	24		1.0	1.0	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP042622-1914 — Lab Sample ID: 320-88535-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	35.5794		1.0914	1.0914	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM042622-1915 — Lab Sample ID: 320-88535-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0033		0.0025	0.00038	ug/m3 (Air)	1		6020	Total/NA
Copper	0.052		0.0051	0.00038	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0089		0.0025	0.00035	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	17		1.1	1.1	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP042622-1915 — Lab Sample ID: 320-88535-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	34.5473		1.0406	1.0406	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: GES-AIS, LLC
Job ID: 320-88535-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM042622-1914
Lab Sample ID: 320-88535-1
Date Collected: 05/26/22 13:17
Matrix: Air
Date Received: 06/02/22 09:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0031		0.0025	0.00038	ug/m3 (Air)		06/07/22 08:30	06/08/22 14:07	1
Copper	0.11		0.0050	0.00038	ug/m3 (Air)		06/07/22 08:30	06/08/22 14:07	1
Manganese	0.013		0.0025	0.00035	ug/m3 (Air)		06/07/22 08:30	06/08/22 14:07	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	24		1.0	1.0	ug/m3			06/03/22 11:00	1

Client Sample ID: GILBANETSP042622-1914
Lab Sample ID: 320-88535-2
Date Collected: 05/26/22 13:17
Matrix: Air
Date Received: 06/02/22 09:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	35.5794		1.0914	1.0914	ug/m3 (Air)			06/03/22 11:00	1

Client Sample ID: GILBANEPM042622-1915
Lab Sample ID: 320-88535-3
Date Collected: 05/26/22 13:06
Matrix: Air
Date Received: 06/02/22 09:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0033		0.0025	0.00038	ug/m3 (Air)		06/07/22 08:30	06/08/22 14:23	1
Copper	0.052		0.0051	0.00038	ug/m3 (Air)		06/07/22 08:30	06/08/22 14:23	1
Manganese	0.0089		0.0025	0.00035	ug/m3 (Air)		06/07/22 08:30	06/08/22 14:23	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	17		1.1	1.1	ug/m3			06/03/22 11:00	1

Client Sample ID: GILBANETSP042622-1915
Lab Sample ID: 320-88535-4
Date Collected: 05/26/22 13:06
Matrix: Air
Date Received: 06/02/22 09:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	34.5473		1.0406	1.0406	ug/m3 (Air)			06/03/22 11:00	1

QC Sample Results

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

Job ID: 320-88535-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-593357/1-B
Matrix: Air
Analysis Batch: 594087

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 593375

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		06/07/22 08:30	06/08/22 13:47	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		06/07/22 08:30	06/08/22 13:47	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		06/07/22 08:30	06/08/22 13:47	1

Lab Sample ID: LCS 320-593357/2-B
Matrix: Air
Analysis Batch: 594087

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 593375

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	0.240	0.245		ug/m3 (Air)		102	86 - 111
Copper	0.240	0.249		ug/m3 (Air)		104	85 - 110
Manganese	0.240	0.253		ug/m3 (Air)		105	88 - 110

Lab Sample ID: LCSD 320-593357/3-B
Matrix: Air
Analysis Batch: 594087

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 593375

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	0.240	0.244		ug/m3 (Air)		102	86 - 111	0	15
Copper	0.240	0.252		ug/m3 (Air)		105	85 - 110	1	15
Manganese	0.240	0.255		ug/m3 (Air)		106	88 - 110	1	15

QC Association Summary

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

Job ID: 320-88535-1

Metals

Pre Prep Batch: 593357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88535-1	GILBANEPM042622-1914	Total/NA	Air	Filter to Air	
320-88535-3	GILBANEPM042622-1915	Total/NA	Air	Filter to Air	
MB 320-593357/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-593357/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-593357/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 593375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88535-1	GILBANEPM042622-1914	Total/NA	Air	3050B	593357
320-88535-3	GILBANEPM042622-1915	Total/NA	Air	3050B	593357
MB 320-593357/1-B	Method Blank	Total/NA	Air	3050B	593357
LCS 320-593357/2-B	Lab Control Sample	Total/NA	Air	3050B	593357
LCSD 320-593357/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	593357

Analysis Batch: 594087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88535-1	GILBANEPM042622-1914	Total/NA	Air	6020	593375
320-88535-3	GILBANEPM042622-1915	Total/NA	Air	6020	593375
MB 320-593357/1-B	Method Blank	Total/NA	Air	6020	593375
LCS 320-593357/2-B	Lab Control Sample	Total/NA	Air	6020	593375
LCSD 320-593357/3-B	Lab Control Sample Dup	Total/NA	Air	6020	593375

General Chemistry

Analysis Batch: 594204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88535-1	GILBANEPM042622-1914	Total/NA	Air	PM10	
320-88535-3	GILBANEPM042622-1915	Total/NA	Air	PM10	

Pre Prep Batch: 594206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88535-2	GILBANETSP042622-1914	Total/NA	Air	Filter to Air	
320-88535-4	GILBANETSP042622-1915	Total/NA	Air	Filter to Air	

Analysis Batch: 594207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-88535-2	GILBANETSP042622-1914	Total/NA	Air	40CFR50 App B	594206
320-88535-4	GILBANETSP042622-1915	Total/NA	Air	40CFR50 App B	594206

Lab Chronicle

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

Job ID: 320-88535-1

Client Sample ID: GILBANEPM042622-1914
Lab Sample ID: 320-88535-1
Date Collected: 05/26/22 13:17
Matrix: Air
Date Received: 06/02/22 09:00

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					593357	06/07/22 07:23	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	593375	06/07/22 08:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			594087	06/08/22 14:07	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0114 g	594204	06/03/22 11:00	JMD	TAL SAC

Client Sample ID: GILBANETSP042622-1914
Lab Sample ID: 320-88535-2
Date Collected: 05/26/22 13:17
Matrix: Air
Date Received: 06/02/22 09:00

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			594207	06/03/22 11:00	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					594206	06/09/22 15:54	JMD	TAL SAC

Client Sample ID: GILBANEPM042622-1915
Lab Sample ID: 320-88535-3
Date Collected: 05/26/22 13:06
Matrix: Air
Date Received: 06/02/22 09:00

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					593357	06/07/22 07:23	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	593375	06/07/22 08:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			594087	06/08/22 14:23	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0079 g	594204	06/03/22 11:00	JMD	TAL SAC

Client Sample ID: GILBANETSP042622-1915
Lab Sample ID: 320-88535-4
Date Collected: 05/26/22 13:06
Matrix: Air
Date Received: 06/02/22 09:00

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			594207	06/03/22 11:00	JMD	TAL SAC
Total/NA	Pre Prep	Filter to Air					594206	06/09/22 15:54	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: 320-88535-1
Project/Site: Hunters Point, Parcel E, Phase 2

Laboratory: Eurofins Sacramento

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

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2468	01-20-24
Oregon	NELAP	4040	01-29-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
40CFR50 App B		Air	Total Suspended Particulates
PM10		Air	Particulate Matter as PM 10

Method Summary

Client: GES-AIS, LLC
Job ID: 320-88535-1
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

Sample Summary

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

Job ID: 320-88535-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-88535-1	GILBANEPM042622-1914	Air	05/26/22 13:17	06/02/22 09:00
320-88535-2	GILBANETSP042622-1914	Air	05/26/22 13:17	06/02/22 09:00
320-88535-3	GILBANEPM042622-1915	Air	05/26/22 13:06	06/02/22 09:00
320-88535-4	GILBANETSP042622-1915	Air	05/26/22 13:06	06/02/22 09:00

CHAIN-OF-CUSTODY RECORD

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

COC # KT052622AAIR

Gilbane

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	Laboratory: EUROFINS ENVIRONMENT TESTING NORTHERN CALIFORNIA, LLC (EETN	Event: Parcel E Phase 2 Air Monitoring May 2022
Project Number: J310000400	POC: [redacted]	
WBS Code: J310000400-016	Ship [redacted]	

Comments:

Equipment:

Code	Matrix
A	Air

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

320-88535 Chain of Custody

Event: Parcel E Phase 2 Air Monitoring May 2022

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: CAAIR - Air PM10	N0500 - Air TSP	SW6020 - Air Pb Mn Cu	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
						1	1	1						
1	GILBANEPM042622-1914	A	05/26/2022	1317	KT	X		X	AMSE1	N2	0.00	0.00	1	VOLUME: 477.34 (M3)
2	GILBANETSP042622-1914	A	05/26/2022	1317	KT		X		AMSE1	N2	0.00	0.00	1	VOLUME: 458.13 (M3)
3	GILBANEPM042622-1915	A	05/26/2022	1306	KT	X		X	AMSE2	N2	0.00	0.00	1	VOLUME: 475.02 (M3)
4	GILBANETSP042622-1915	A	05/26/2022	1306	KT		X		AMSE2	N2	0.00	0.00	1	VOLUME: 480.50 (M3)
5														
6					TP			5/31/22						
7														
8														
9														
10														

Turnaround Time: 5 days

[redacted]	Date	Time	Received by: *(Signature)*	Date	Time	Shipping Date / Carrier / Airbill Number
	5/31/22	1600	Fedex	5/31/22	1600	Shipping Date: 5/31/2022 / FedEx 7769 9988 7660
			[redacted]	6-2-22	0900	**Received by Laboratory:** *(Signature, Date, Time)* **& condition**

GES.Navy_COC_Field
May 31, 2022

21.1°C

Login Sample Receipt Checklist

Client: GES-AIS, LLC

Job Number: 320-88535-1

Login Number: 88535

List Source: Eurofins Sacramento

List Number: 1

Creator: [redacted]

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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 | Environment Testing America

Eurofins Sacramento
Corrective Action Report

Title: Filter Weights Missed

Reference: 6894-20074

Initiated by: [redacted] **Date:** 16 May 2022

Description of Problem:
Prior to sending filters to samplers for field use, two constant weights are measured; then the average of the two weights is used as the tare weight of the filters. For several login groups' filters, a second weight was not acquired during the initial tare weight process. In order to acquire the tare weight of the filters, the value of the first weight was entered again in the second weight column on the particulate spreadsheet to allow calculation.

Investigation Planned or Completed:
For the analytical methods Particulate Matter by PM10 (PM10) and Total Suspended Particulate (TSP) samples' collection for the following login groups, it was found that the analyst at the time did not record a second weight for tare weight calculation: 320-87209, 320-87310, 320-87453, 320-87454, 320-87609 and 320-87735. The process for preparing air media (filters) for shipment was reviewed. It was found that the procedure is not well documented in the laboratory SOP. In addition, at the time these filters were prepared, a single analyst was trained in how to prepare the filters.

Root Cause Analysis
The root cause of not recording the second weight for tare weight calculation could not be definitively determined. It is presumed to be a user error resulting in either not performing or not saving the second weight. Contributing causes include the lack of a second analyst to review the media documentation prior to sending out and the lack of a defined procedure for documenting the media preparation.

Corrective Action Plan
To correct the presumed root cause of not recording the second weight for tare weight calculation in the Excel spreadsheet used, laboratory staff have been retrained regarding recording weights for PM10 and TSP; and staff have been trained to look for the initial weight instability check flag on the particulate data excel sheet when taking weights, as samples are flagged as "UNSTABLE" if two stable weights are not recorded. To correct the contributing causes and prevent recurrence, the laboratory has instituted a second-level review of the spreadsheets that contain the air filter initial masses prior to sending those filters out to clients. This review will be documented on the air media request form. In addition, a second analyst is to be trained on the process to provide redundancy for filter preparation. Finally, the SOP will be revised to include detailed direction for preparation of the filters and documentation of the preparation prior to sending to the client.

Reviewed by:

[redacted]

13 June 2022
Date

[redacted]

13 June 2022
Date