



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

December 1st, 2021 through December 31st, 2021

Approved for public release; distribution is unlimited



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CALIFORNIA**

December 1st, 2021 through December 31st, 2021

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Prepared for:



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BRAC PMO West
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Acronyms and Abbreviations

AMSR	<i>Air Monitoring Summary Report</i>
Cal/OSHA	<i>California Occupational Safety and Health Administration</i>
Cfm	<i>cubic feet per minute</i>
CFR	<i>Code of Federal Regulations</i>
CTO	<i>Contract Task Order</i>
DMCP	<i>Dust Monitoring and Control Plan</i>
DTSC	<i>State of California Department of Toxic Substances Control</i>
EPA	<i>United States Environmental Protection Agency</i>
fiber/cm ³	<i>fibers per cubic centimeter</i>
Gilbane	<i>Gilbane Federal</i>
HPNS	<i>Hunters Point Naval Shipyard</i>
L/min	<i>liters per minute</i>
mg/m ³	<i>milligrams per cubic meter</i>
Navy	<i>U.S. Department of the Navy</i>
NIOSH	<i>National Institute for Occupational Safety and Health</i>
PEL	<i>permissible exposure limit</i>
PM10	<i>particulate matter less than 10 microns in diameter</i>
RAWP	<i>Remedial Action Work Plan</i>
TSP	<i>total suspended particulates</i>
TWA	<i>time-weighted average</i>
µg/m ³	<i>micrograms per cubic meter</i>

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 December 1st, 2021 through December 31st, 2021 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 one 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 Hunters Point Station (APTIM HPNS – KCASANFR1504) 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 ($\mu\text{g}/\text{m}^3$).

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 $\mu\text{g}/\text{m}^3$	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.

$\mu\text{g}/\text{m}^3$ = micrograms per cubic meter

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

fiber/cm³ = fibers per cubic centimeter

HPNS = Hunters Point Naval Shipyard

mg/m³ = 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**. Data was collected from Station 1 in Parcel E and Station 2 in Parcel D-1 from December 1st to December 31st, 2021, during which Gilbane was grading, excavating, managing radiological screening yard pads and stockpiles, backfilling, importing, breaking concrete and rocks, and moving soil. Samples were not collected during periods of site inactivity, rain events, and/or while site work was limited to non-earth moving tasks. No samples were collected on December 13th due to rain and the site was closed from December 23rd to December 31st, 2021.

Construction and remediation activities conducted from December 1st to December 31st, 2021 did not result in the exceedance of the established threshold criteria, as described in detail below.

Asbestos results from December 1st to December 31st, 2021 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 December 1st to December 31st, 2021 did not exceed the threshold criteria presented in **Table 4-1**. The results are presented as **Attachment 3** and **Attachment 4**.

TSP results from December 1st to December 31st, 2021 did not exceed the threshold criteria presented in **Table 4-1**. The results are presented as **Attachment 5**.

Radiological air sampling results from December 1st to December 31st, 2021 did not exceed the threshold criteria presented in **Table 4-1**. The results are presented as **Attachment 6**.

Analytical laboratory reports are included as **Attachment 7** and were subjected to cursory review by the Project Chemist. No 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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Parcel E
Hunters Point Naval Shipyard
San Francisco, 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
12/1/2021	30.15	61.17	SSW
12/2/2021	30.17	57.62	N
12/6/2021	30.12	51.55	NNE
12/7/2021	30.08	54.86	ENE
12/8/2021	30.06	53.49	W
12/9/2021	30.04	53.53	WNW
12/14/2021	30.09	47.55	W
12/15/2021	30.14	51.44	S
12/16/2021	30.18	52.92	WNW
12/20/2021	30.18	48.43	ESE
12/21/2021	30.17	47.88	E
12/22/2021	30.09	48.01	NE

Notes:

Data collected using wunderground.com from APTIM HPNS - KCASANFR1504

°F = degree Fahrenheit

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)
MSE01-120121	12/01/21	1	510	1020	20.0	0.010	No
MSE02-120121	12/01/21	2	528	1056	15.5	0.007	No
MSE01-120221	12/02/21	1	413	826	19.5	0.012	No
MSE02-120221	12/02/21	2	437	874	18.0	0.010	No
MSE01-120621	12/06/21	1	501	1002	12.5	0.006	No
MSE02-120621	12/06/21	2	522	1044	15.0	0.007	No
MSE01-120721	12/07/21	1	506	1012	10.5	0.005	No
MSE02-120721	12/07/21	2	492	984	12.5	0.006	No
MSE01-120821	12/08/21	1	510	1020	12.5	0.006	No
MSE02-120821	12/08/21	2	536	1072	9.5	0.004	No
MSE01-120921	12/09/21	1	488	976	17.0	0.009	No
MSE02-120921	12/09/21	2	497	994	12.5	0.006	No
MSE01-121421	12/14/21	1	511	1022	17.0	0.008	No
MSE02-121421	12/14/21	2	541	1082	12.5	0.006	No
MSE01-121521	12/15/21	1	489	978	12.5	0.006	No
MSE02-121521	12/15/21	2	470	940	12.0	0.006	No
MSE01-121621	12/16/21	1	487	974	12.0	0.006	No
MSE02-121621	12/16/21	2	458	916	11.0	0.006	No
MSE01-122021	12/20/21	1	455	910	11.5	0.006	No
MSE02-122021	12/20/21	2	488	976	11.5	0.006	No
MSE01-122121	12/21/21	1	520	1040	10.5	0.005	No
MSE02-122121	12/21/21	2	543	1086	13.0	0.006	No
MSE01-122221	12/22/21	1	324	648	11.0	0.008	No
MSE02-122221	12/22/21	2	320	640	20.0	0.015	No

Notes:

¹Sample "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/cm³ = fibers per cubic centimeter

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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)	Concentration 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 ⁴ (ug/m ³)	Exceedance (Yes/No)
GILBANEPM110921-1603	1	12/01/2021	1752.43	0.0330						
GILBANEPM110921-1604	2	12/01/2021	1735.51	0.0250	-0.0080	-8.0	5,000	No	50	No
GILBANEPM110921-1605	1	12/02/2021	1750.68	0.0460						
GILBANEPM110921-1606	2	12/02/2021	1743.99	0.0470	0.0010	1.0	5,000	No	50	No
GILBANEPM110921-1607	1	12/02/2021 ²	502.03	0.0680						
GILBANEPM110921-1608	2	12/02/2021 ²	548.64	0.0620	0.0060	6.0	5,000	No	50	No
GILBANEPM110921-1609	1	12/07/2021	1739.41	0.0350						
GILBANEPM110921-1610	2	12/07/2021	1737.97	0.0330	0.0020	2.0	5,000	No	50	No
GILBANEPM112321-1611	1	12/08/2021	1706.52	0.0150						
GILBANEPM112321-1612	2	12/08/2021	1702.24	0.0150	0.0000	0.0	5,000	No	50	No
GILBANEPM112321-1613	1	12/09/2021 ³	1727.91	0.0073						
GILBANEPM112321-1614	2	12/09/2021 ³	1438.64	0.0089	0.0016	1.6	5,000	No	50	No
GILBANEPM112321-1615	1	12/09/2021 ²	599.45	0.0180						
GILBANEPM112321-1616	2	12/09/2021 ²	601.29	0.0088	-0.0092	-9.2	5,000	No	50	No
GILBANEPM112321-1617	1	12/15/2021	1717.02	0.0086						
GILBANEPM112321-1618	2	12/15/2021	1761.44	0.0063	-0.0023	-2.3	5,000	No	50	No
GILBANEPM112321-1619	1	12/16/2021	1724.36	0.0120						
GILBANEPM112321-1620	2	12/16/2021	1721.04	0.0062	-0.0058	-5.8	5,000	No	50	No
GILBANEPM112321-1621	1	12/16/2021 ²	590.85	0.0130						
GILBANEPM112321-1622	2	12/16/2021 ²	557.80	0.0075	-0.0055	-5.5	5,000	No	50	No
GILBANEPM112321-1623	1	12/21/2021	1710.10	0.0210						
GILBANEPM112321-1624	2	12/21/2021	1735.22	0.0150	-0.0060	-6.0	5,000	No	50	No
GILBANEPM112321-1625	1	12/22/2021	1781.42	0.0180						
GILBANEPM112321-1626	2	12/22/2021	1769.99	0.0170	0.0010	1.0	5,000	No	50	No
GILBANEPM120921-1642	1	12/22/2021 ²	391.98	0.0046						
GILBANEPM120921-1643	2	12/22/2021 ²	391.23	< 0.0013	0.0033	3.3	5,000	No	50	No

Notes:

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

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

³Generator malfunction

⁴PM10 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

m³ = cubic meters

mg/m³ = milligrams per cubic meter

PEL = permissible exposure limit

PM10 = particulate matter smaller than 10 microns in diameter

ug/m³ = micrograms per cubic meter

< = below detection limit

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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)
GILBANEPM110921-1603	1	12/01/2021	1752.43	0.000100	No	0.00000460	No	0.00001400	No
GILBANEPM110921-1604	2	12/01/2021	1735.51	0.000034	No	0.00000300	No	0.00000730	No
GILBANEPM110921-1605	1	12/02/2021	1750.68	0.000230	No	0.00000610	No	0.00001500	No
GILBANEPM110921-1606	2	12/02/2021	1743.99	0.000047	No	0.00000490	No	0.00001100	No
GILBANEPM110921-1607	1	12/02/2021 ²	502.03	0.000130	No	0.00000820 J+	No	0.00002300	No
GILBANEPM110921-1608	2	12/02/2021 ²	548.64	0.000034	No	0.00000470 J+	No	0.00001300	No
GILBANEPM110921-1609	1	12/07/2021	1739.41	0.000037	No	0.00000180 J+	No	0.00000500	No
GILBANEPM110921-1610	2	12/07/2021	1737.97	0.000012	No	0.00000140 J+	No	0.00000340	No
GILBANEPM112321-1611	1	12/08/2021	1706.52	0.000055	No	0.00000140 J+	No	0.00000480	No
GILBANEPM112321-1612	2	12/08/2021	1702.24	0.000019	No	0.00000110 J+	No	0.00000280	No
GILBANEPM112321-1613	1	12/09/2021 ³	1727.91	0.000015	No	< 0.00000069	No	0.00000130 J+	No
GILBANEPM112321-1614	2	12/09/2021 ³	1438.64	0.000036	No	0.00000099 J+	No	0.00000150 J+	No
GILBANEPM112321-1615	1	12/09/2021 ²	599.45	0.000170	No	0.00000590	No	0.00000950	No
GILBANEPM112321-1616	2	12/09/2021 ²	601.29	0.000033	No	0.00000180 J	No	0.00000330	No
GILBANEPM112321-1617	1	12/15/2021	1717.02	0.000120	No	0.00000079	No	0.00000190	No
GILBANEPM112321-1618	2	12/15/2021	1761.44	0.000043	No	0.00000050 J	No	0.00000130	No
GILBANEPM112321-1619	1	12/16/2021	1724.36	0.000056	No	0.00000076	No	0.00000290	No
GILBANEPM112321-1620	2	12/16/2021	1721.04	0.000017	No	0.00000038 J	No	0.00000063 J	No
GILBANEPM112321-1621	1	12/16/2021 ²	590.85	0.000110	No	0.00000130 J	No	0.00000530	No
GILBANEPM112321-1622	2	12/16/2021 ²	557.80	0.000037	No	0.00000110 J	No	0.00000370	No
GILBANEPM112321-1623	1	12/21/2021	1710.10	0.000170	No	0.00000160	No	0.00000410	No
GILBANEPM112321-1624	2	12/21/2021	1735.22	0.000024	No	0.00000160	No	0.00000210	No
GILBANEPM112321-1625	1	12/22/2021	1781.42	0.000130	No	0.00000150	No	0.00000350	No
GILBANEPM112321-1626	2	12/22/2021	1769.99	0.000044	No	0.00000120	No	0.00000220	No
GILBANEPM120921-1642	1	12/22/2021 ²	391.98	0.000180	No	0.00000150 J	No	0.00000460	No
GILBANEPM120921-1643	2	12/22/2021 ²	391.23	0.000046	No	0.00000078 J	No	0.00000560	No

Notes:

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

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

³Generator malfunction

Samples analyzed by Eurofins TestAmerica

Sample locations are shown on Figure 2-1

m³ = cubic meters

mg/m³ = milligrams per cubic meter

< = below detection limit

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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)
GILBANETSP110921-1603	1	12/01/2021	1665.53	0.0393268			
GILBANETSP110921-1604	2	12/01/2021	1744.49	0.0316425	-0.008	0.5	No
GILBANETSP110921-1605	1	12/02/2021	1661.72	0.0489854			
GILBANETSP110921-1606	2	12/02/2021	1747.55	0.0501845	0.001	0.5	No
GILBANETSP110921-1607	1	12/02/2021 ²	477.70	0.0820599			
GILBANETSP110921-1608	2	12/02/2021 ²	535.30	0.0592191	0.023	0.5	No
GILBANETSP110921-1609	1	12/07/2021	1682.18	0.0251459			
GILBANETSP110921-1610	2	12/07/2021	1737.93	0.0350417	-0.010	0.5	No
GILBANETSP112321-1611	1	12/08/2021	1631.37	0.0217609			
GILBANETSP112321-1612	2	12/08/2021	1719.63	0.0180853	0.013	0.5	No
GILBANETSP112321-1613	1	12/09/2021 ³	1662.81	0.0075775			
GILBANETSP112321-1614	2	12/09/2021 ³	1451.16	0.0117148	0.004	0.5	No
GILBANETSP112321-1615	1	12/09/2021 ²	570.45	0.0248926			
GILBANETSP112321-1616	2	12/09/2021 ²	614.85	0.0026023	-0.022	0.5	No
GILBANETSP112321-1617	1	12/15/2021	1652.08	0.0118638			
GILBANETSP112321-1618	2	12/15/2021	1798.06	0.0108450	-0.001	0.5	No
GILBANETSP112321-1619	1	12/16/2021	1655.83	0.0153397			
GILBANETSP112321-1620	2	12/16/2021	1746.97	0.0129939	-0.002	0.5	No
GILBANETSP112321-1621	1	12/16/2021 ²	566.43	0.0118285			
GILBANETSP112321-1622	2	12/16/2021 ²	558.44	0.0155791	0.004	0.5	No
GILBANETSP112321-1623	1	12/21/2021	1655.47	0.0246456			
GILBANETSP112321-1624	2	12/21/2021	1733.10	0.0211759	-0.003	0.5	No
GILBANETSP112321-1625	1	12/22/2021	1723.01	0.0179918			
GILBANETSP112321-1626	2	12/22/2021	1776.95	0.0223979	-0.004	0.5	No
GILBANETSP120921-1642	1	12/22/2021 ²	380.73	0.0105061			
GILBANETSP120921-1643	2	12/22/2021 ²	397.76	0.0030169	0.007	0.5	No

Notes:

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

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

³Generator malfunction

Samples analyzed by Eurofins TestAmerica

Sample locations are shown on Figure 2-1

HPNS = Hunters Point Naval Shipyard

m³ = cubic meters

mg/m³ = milligrams per cubic meter

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ATTACHMENT 6
AIR SAMPLING RESULTS –
PUBLIC EXPOSURE MONITORING

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Project Information									Effluent Air Concentration				Sampling Period				Color Codes					
Contract / Task Order Number: N62473-17-D-0005 / F4332			Project Title / Location: Parcel E RA HPNS, SF, CA			Gilbane Project Number: J310000400				Alpha	Beta	Air samples collected between 01 Dec 2021 and 22 Dec 2021				Value < 0.1 x Effluent Conc (i.e., < 10%)						
Information effective as of: 20 Jan 2022									Radionuclide	Ra-226	Sr-90					Value > 0.1 x Effluent Conc (i.e., > 10%)						
									Effluent Conc (µCi/ml)	9.E-13	6.E-12					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-0355	Perimeter	MSE01	PE09	60	12/1/21 4:25	12/1/21 15:40	675	4.1E+07	D	12/06/21	1	cpm	0.30	6.70	0.8	15.5	9.3E-15	1.7E-13	1.0%	2.9%	BCS	CB
AS-0356	Perimeter	MSE02	PE10	60	12/1/21 4:15	12/1/21 15:30	675	4.1E+07	D	12/06/21	1	cpm	0.10	5.90	0.3	13.2	3.1E-15	1.5E-13	0.3%	2.5%	BCS	CB
AS-0357	Perimeter	MSE01	PE09	60	12/2/21 3:55	12/2/21 14:23	628	3.8E+07	D	12/06/21	1	cpm	0.25	6.40	0.7	14.6	8.3E-15	1.8E-13	0.9%	2.9%	BCS	CB
AS-0358	Perimeter	MSE02	PE10	60	12/2/21 3:45	12/2/21 14:30	645	3.9E+07	D	12/06/21	1	cpm	0.25	7.10	0.7	16.6	8.1E-15	1.9E-13	0.9%	3.2%	BCS	CB
AS-0359	Perimeter	MSE01	PE09	60	12/6/21 6:40	12/6/21 15:45	545	3.3E+07	D	12/13/21	1	cpm	0.30	6.05	0.8	13.7	1.2E-14	1.9E-13	1.3%	3.1%	BCS	CB
AS-0360	Perimeter	MSE02	PE10	60	12/6/21 6:35	12/6/21 15:50	555	3.3E+07	D	12/13/21	1	cpm	0.20	4.75	0.6	10.0	7.5E-15	1.4E-13	0.8%	2.3%	BCS	CB
AS-0361	Perimeter	MSE01	PE09	60	12/7/21 4:37	12/7/21 15:30	653	3.9E+07	D	12/13/21	1	cpm	0.15	6.15	0.4	13.9	4.8E-15	1.6E-13	0.5%	2.7%	BCS	CB
AS-0362	Perimeter	MSE02	PE10	60	12/7/21 4:30	12/7/21 15:23	653	3.9E+07	D	12/13/21	1	cpm	0.35	5.15	1.0	11.1	1.1E-14	1.3E-13	1.2%	2.1%	BCS	CB
AS-0363	Perimeter	MSE01	PE09	60	12/8/21 4:25	12/8/21 15:50	685	4.1E+07	D	12/13/21	1	cpm	0.05	4.30	0.1	8.7	1.5E-15	9.6E-14	0.2%	1.6%	BCS	CB
AS-0364	Perimeter	MSE02	PE10	60	12/8/21 4:15	12/8/21 15:45	690	4.1E+07	D	12/13/21	1	cpm	0.25	4.95	0.7	10.6	7.6E-15	1.1E-13	0.8%	1.9%	BCS	CB
AS-0365	Perimeter	MSE01	PE09	60	12/9/21 4:27	12/9/21 15:05	638	3.8E+07	D	12/13/21	1	cpm	0.20	4.25	0.6	8.6	6.6E-15	1.0E-13	0.7%	1.7%	BCS	CB
AS-0366	Perimeter	MSE02	PE10	60	12/9/21 4:20	12/9/21 15:00	640	3.8E+07	D	12/13/21	1	cpm	0.20	3.85	0.6	7.5	6.5E-15	8.8E-14	0.7%	1.5%	BCS	CB
AS-0367	Perimeter	MSE01	PE09	60	12/13/21 6:40	12/13/21 15:45	545	3.3E+07	D	12/20/21	1	cpm	0.50	4.20	1.4	8.5	1.9E-14	1.2E-13	2.1%	1.9%	BCS	CB
AS-0368	Perimeter	MSE02	PE10	60	12/13/21 6:50	12/13/21 15:37	527	3.2E+07	D	12/20/21	1	cpm	0.20	3.65	0.6	6.9	7.9E-15	9.8E-14	0.9%	1.6%	BCS	CB
AS-0369	Perimeter	MSE01	PE09	60	12/14/21 4:18	12/14/21 15:50	692	4.2E+07	D	12/20/21	1	cpm	0.30	4.15	0.8	8.3	9.1E-15	9.0E-14	1.0%	1.5%	BCS	CB
AS-0370	Perimeter	MSE02	PE10	60	12/14/21 4:10	12/14/21 15:40	690	4.1E+07	D	12/20/21	1	cpm	0.10	4.45	0.3	9.2	3.0E-15	1.0E-13	0.3%	1.7%	BCS	CB
AS-0371	Perimeter	MSE01	PE09	60	12/15/21 4:30	12/15/21 15:15	645	3.9E+07	D	12/20/21	1	cpm	0.05	4.45	0.1	9.2	1.6E-15	1.1E-13	0.2%	1.8%	BCS	CB
AS-0372	Perimeter	MSE02	PE10	60	12/15/21 4:20	12/15/21 15:10	650	3.9E+07	D	12/20/21	1	cpm	0.05	4.55	0.1	9.4	1.6E-15	1.1E-13	0.2%	1.8%	BCS	CB
AS-0373	Perimeter	MSE01	PE09	60	12/16/21 4:25	12/16/21 14:10	585	3.5E+07	D	12/20/21	1	cpm	0.10	3.60	0.3	6.8	3.6E-15	8.7E-14	0.4%	1.4%	BCS	CB
AS-0374	Perimeter	MSE02	PE10	60	12/16/21 4:15	12/16/21 14:05	590	3.5E+07	D	12/20/21	1	cpm	0.25	5.75	0.7	12.8	8.9E-15	1.6E-13	1.0%	2.7%	BCS	CB
AS-0375	Perimeter	MSE01	PE09	60	12/20/21 6:35	12/20/21 14:40	485	2.9E+07	D	01/03/22	1	cpm	0.20	5.40	0.6	11.8	8.6E-15	1.8E-13	1.0%	3.1%	BCS	CB
AS-0376	Perimeter	MSE02	PE10	60	12/20/21 6:45	12/20/21 15:37	532	3.2E+07	D	01/03/22	1	cpm	0.20	3.65	0.6	6.9	7.9E-15	9.7E-14	0.9%	1.6%	BCS	CB
AS-0377	Perimeter	MSE01	PE09	60	12/21/21 4:10	12/21/21 16:00	710	4.3E+07	D	01/03/22	1	cpm	0.00	5.20	0.0	11.3	0.0E+00	1.2E-13	0.0%	2.0%	BCS	CB
AS-0378	Perimeter	MSE02	PE10	60	12/21/21 4:00	12/21/21 15:55	715	4.3E+07	D	01/03/22	1	cpm	0.25	5.05	0.7	10.8	7.3E-15	1.1E-13	0.8%	1.9%	BCS	CB
AS-0379	Perimeter	MSE01	PE09	60	12/22/21 6:25	12/22/21 14:00	455	2.7E+07	D	01/03/22	1	cpm	0.05	3.80	0.1	7.3	2.3E-15	1.2E-13	0.3%	2.0%	BCS	CB
AS-0380	Perimeter	MSE02	PE10	60	12/22/21 6:30	12/22/21 13:30	420	2.5E+07	D	01/03/22	1	cpm	0.10	4.75	0.3	10.0	5.0E-15	1.8E-13	0.6%	3.0%	BCS	CB

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ATTACHMENT 7

LABORATORY REPORTS

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Laboratory Analysis Report

Job ID : 21120468



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 : 12/06/2021 12:02
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
MSE01-113021	11/30/2021 16:05	Cassette	21120468.01
MSE02-113021	11/30/2021 16:00	Cassette	21120468.02
MSE01-120121	12/1/2021 15:47	Cassette	21120468.03
MSE02-120121	12/1/2021 15:53	Cassette	21120468.04

[REDACTED]
Released By: [REDACTED]
Title: Vice President Operations

Analyst: [REDACTED]

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ab-q210-0321

12/13/2021



**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 12/13/2021

Job ID : 21120468
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
21120468.01	MSE01-113021	11/30/2021	Area	2			535	1070	100	17.0	21.656	0.008		12/13/21	[REDACTED]
21120468.02	MSE02-113021	11/30/2021	Area	2			543	1086	100	20.0	25.478	0.009		12/13/21	[REDACTED]
21120468.03	MSE01-120121	12/01/2021	Area	2			510	1020	100	20	25.478	0.010		12/13/21	[REDACTED]
21120468.04	MSE02-120121	12/01/2021	Area	2			528	1056	100	15.5	19.745	0.007		12/13/21	[REDACTED]

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



Sample Condition Checklist

A&B JobID : 21120468	Date Received : 12/06/2021	Time Received : 12:02PM		
Client Name : GES - ASRC Industrial				
Temperature : 18.4°C	Sample pH : NA			
Thermometer ID : IR1	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 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
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 custody seal.

Received by : ██████████

Check in by/date : ██████████ / 12/06/2021

ab-s005-0321

Phone : ██████████

www.ablabs.com



Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II I310000400 Laboratory Name: A&B Labs Date: 12/2/2021
 Project Manager: [Redacted] Address: 10100 East Fwy Ste. 100 Contact Name: [Redacted] Page: 1 of 1
 Site Location: Hunters Point, San Francisco, CA 94124 Houston TX 77029

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Analysis:		Total Time (min)	Flow Rate = 2 L/min	Special Instructions/Comments
							Asbestos	Preservative:			
MSE01-113021	11/30/2021	1605	NA	NA	1	AA	X	None		535	01A
MSE02-113021	11/30/2021	1600	NA	NA	1	AA	X	Filter		543	02A
MSE01-120121	12/1/2021	1547	NA	NA	1	AA	X			510	03A
MSE02-120121	12/1/2021	1553	NA	NA	1	AA	X			528	04A

Job ID: 21120468



12/06/2021 GES - ASRC Industrial ACH

18.4" IRI
CA

Sampled By: <u>[Redacted]</u>	Sampler: <u>[Redacted]</u>	Courier/Airbill No.: FedEx/ 7753 7367 7785			
Signature: <u>[Redacted]</u>	Relinquished By/Affiliation: <u>[Redacted] / Gilbane</u>	Date: <u>12/2/21</u>	Time: <u>1600</u>	Received By/ Affiliation: <u>FedEx</u>	Date: <u>12/2/21</u>
Special Instructions: <u>None</u>	<u>FedEx</u>			<u>FEDEx</u>	<u>0942</u>
Send Results to: <u>[Redacted]</u>					
Turnaround Time: <u>Standard</u>					

ORIGIN ID: ICCA

200 FISHER STREET

SAN FRANCISCO, CA 94124
UNITED STATES US

SHIP DATE: 02DEC21
ACTWGT: 1.00 LB
CAD: 254128867/INET4400

BILL SENDER

TO

A & B LABS
10100 EAST FREEWAY, SUITE 100

HOUSTON TX 77029

REF J31000 400 00 18 04

INV
PO

DEPT



56D.UJ.E934.FE4A

FRI - 03 DEC 4:30P

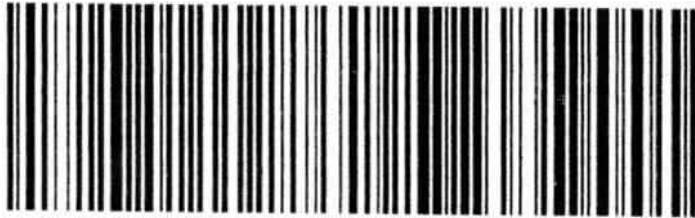
STANDARD OVERNIGHT

TRK#
0201

7753 7367 7785

UL HBYA

77029
TX-US IAH



After printing this label:

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CUSTOMER SEAL

Person Collecting Sample *[Signature]* S

Date Collected 12/02/21 Time Collect

Laboratory Analysis Report

Job ID : 21121131



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: 6
Attn: [REDACTED] P.O.#. : J310000400-0015
Client Address: 1501 West Fountainhead Parkway, Ste. #550 Date Received : 12/08/2021 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
MSE01-120221	12/2/2021 14:10	Cassette	21121131.01
MSE02-120221	12/2/2021 14:20	Cassette	21121131.02
MSE01-120621	12/6/2021 15:40	Cassette	21121131.03
MSE02-120621	12/6/2021 15:39	Cassette	21121131.04

[REDACTED]
Released By: [REDACTED]
Title: Vice President Operations

Analyst: [REDACTED]

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ab-q210-0321

12/15/2021



**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 12/15/2021

Job ID : 21121131
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
21121131.01	MSE01-120221	12/02/2021	Area	2			413	826	100	19.5	24.841	0.012		12/15/21	[REDACTED]
21121131.02	MSE02-120221	12/02/2021	Area	2			437	874	100	18.0	22.930	0.010		12/15/21	[REDACTED]
21121131.03	MSE01-120621	12/06/2021	Area	2			501	1002	100	12.5	15.924	0.006		12/15/21	[REDACTED]
21121131.04	MSE02-120621	12/06/2021	Area	2			522	1044	100	15	19.108	0.007		12/15/21	[REDACTED]

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



Sample Condition Checklist

A&B JobID : 21121131	Date Received : 12/08/2021	Time Received : 4:06PM		
Client Name : GES - ASRC Industrial				
Temperature : 21.4°C	Sample pH : N/A			
Thermometer ID : IR1	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 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
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. -CH 12/10/21

Received by : ██████████

Check in by/date : ██████████ / 12/10/2021

ab-s005-0321

Phone : ██████████

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Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II J310000400 Laboratory Name: A&B Labs Date: 12/7/2021
 Project Manager: [Redacted] Address: 10100 East Fwy Ste. 100 Contact Name: [Redacted] Page: 1 of 1
 Site Location: Hunters Point, San Francisco, CA 94124 Houston TX 77029

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Analysis:			Total Time (min)	Flow Rate = 2 L/min	Special Instructions/Comments
							Asbestos	Preservative:	Container Type:			
								None	Filter			
MSE01-120221 <u>01A</u>	12/2/2021	1410	NA	NA	1	AA	X				413	
MSE02-120221 <u>02A</u>	12/2/2021	1420	NA	NA	1	AA	X				437	
MSE01-120621 <u>03A</u>	12/6/2021	1540	NA	NA	1	AA	X				501	
MSE02-120621 <u>04A</u>	12/6/2021	1539	NA	NA	1	AA	X				522	

Job ID: 21121131



12/08/2021 GES - ASRC Industrial ACH

Sampled By: <u>[Redacted]</u>	Sampler: <u>Gilbane</u>	Courier/Airbill No.: FedEx/ 7754 1667 9317			
Signature: <u>[Redacted]</u>	Relinquished By/Affiliation: <u>[Redacted] / Gilbane</u>	Date: <u>12/7/21</u>	Time: <u>1600</u>	Received By/ Affiliation: <u>Fedex</u>	Date: <u>12/7/21</u> Time: <u>1600</u>
Special Instructions: <u>None</u>	<u>Fedex</u>	<u>12/9/21</u>	<u>1600</u>	<u>[Redacted]</u>	<u>12/8/21</u> <u>1600</u>
Send Results to: <u>[Redacted]</u>					
Turnaround Time: <u>Standard</u>					

214°C
JR1
CTK



TRACK ANOTHER SHIPMENT

775416679317
[ADD NICKNAME](#)



Delivered
Wednesday, 12/8/2021 at 3:26 pm



DELIVERED
Signed for by: [REDACTED]
[GET STATUS UPDATES](#)
[OBTAIN PROOF OF DELIVERY](#)

FROM
SAN FRANCISCO, CA US

TO
HOUSTON, TX US

[MANAGE DELIVERY](#)

Travel History

TIME ZONE
Local Scan Time



Wednesday, December 8, 2021

3:26 PM	HOUSTON, TX	Delivered
2:21 PM	HOUSTON, TX	On FedEx vehicle for delivery
1:48 PM	HOUSTON, TX	At local FedEx facility
10:58 AM	HOUSTON, TX	At destination sort facility
9:51 AM	INDIANAPOLIS, IN	Departed FedEx hub
6:18 AM	INDIANAPOLIS, IN	Arrived at FedEx hub

Tuesday, December 7, 2021

11:28 PM	OAKLAND, CA	Departed FedEx hub
9:30 PM	OAKLAND, CA	Arrived at FedEx hub

12/15/21, 5:12 PM

Detailed Tracking

6:00 PM

SAN FRANCISCO, CA

Left FedEx origin facility


4:21 PM

SAN FRANCISCO, CA

Picked up

12:09 PM

Shipment information sent to FedEx

Collapse History 

Shipment Facts

TRACKING NUMBER

775416679317

SERVICE

FedEx Standard Overnight

WEIGHT

1 lbs / 0.45 kgs

DELIVERY ATTEMPTS

1

DELIVERED TO

Receptionist/Front Desk

TOTAL PIECES

1

TOTAL SHIPMENT WEIGHT

1 lbs / 0.45 kgs

TERMS

Shipper

SHIPPER REFERENCE

J31000.400 00.18.04


PACKAGING

FedEx Box

SPECIAL HANDLING SECTION

Deliver Weekday

SHIP DATE

12/7/21 

STANDARD TRANSIT

12/8/21 before 4:30 pm 

ACTUAL DELIVERY

12/8/21 at 3:26 pm

Laboratory Analysis Report

Job ID : 21121211



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.#. : J310000400-015
Client Address: 1501 West Fountainhead Parkway, Ste. #550 Date Received : 12/10/2021 15:59
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
MSE01-120721	12/7/2021 15:56	Cassette	21121211.01
MSE02-120721	12/7/2021 15:20	Cassette	21121211.02
MSE01-120821	12/8/2021 15:40	Cassette	21121211.03
MSE02-120821	12/8/2021 15:50	Cassette	21121211.04

[REDACTED]
Released By: [REDACTED]
Title: Vice President Operations

Analyst: [REDACTED]

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ab-q210-0321

12/16/2021



**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 12/16/2021

Job ID : 21121211
 Analytical Method: NIOSH 7400-I2-Aug1994

Client: GES - ASRC Industrial			Project: HPNS Parcel E Phase II J310000400								Attn: Brett Womack				
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
21121211.01	MSE01-120721	12/07/2021	Area	2			506	1012	100	10.5	13.376	0.005		12/16/21	██████
21121211.02	MSE02-120721	12/07/2021	Area	2			492	984	100	12.5	15.924	0.006		12/16/21	██████
21121211.03	MSE01-120821	12/08/2021	Area	2			510	1020	100	12.5	15.924	0.006		12/16/21	██████
21121211.04	MSE02-120821	12/08/2021	Area	2			536	1072	100	9.5	12.102	0.004		12/16/21	██████

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



Sample Condition Checklist

A&B JobID : 21121211	Date Received : 12/10/2021	Time Received : 3:59PM		
Client Name : GES - ASRC Industrial				
Temperature : 17.5°C	Sample pH : NA			
Thermometer ID : IR1	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 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
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, sample are received in a box with custody seal.

Received by : ██████████

Check in by/date : ██████████ / 12/13/2021

ab-s005-0321

Phone : ██████████

www.ablabs.com



Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II J310000400 Laboratory Name: A&B Labs Date: 12/9/2021
 Project Manager: [Redacted] Address: 10100 East Fwy Ste. 100 Contact Name: [Redacted] Page: 1 of 1
 Site Location: Hunters Point, San Francisco, CA 94124 Houston TX 77029

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Analysis:		Total Time (min)	Special Instructions/Comments
							Asbestos	Preservative:		
MSE01-120721	12/7/2021	1556	NA	NA	1	AA	X		506	01A
MSE02-120721	12/7/2021	1520	NA	NA	1	AA	X		492	02A
MSE01-120821	12/8/2021	1540	NA	NA	1	AA	X		510	03A
MSE02-120821	12/8/2021	1550	NA	NA	1	AA	X		536	04A

Job ID: 21121211



12/10/2021 GES - ASRC Industrial ACH

Sampled By: <u>[Redacted]</u>	Sampler: <u>Gilbane</u>	Courier/Airbill No.: FedEx/ 7754 4488 8979				
Signature: <u>[Redacted]</u>	Relinquished By/Affiliation: <u>[Redacted] Gilbane</u>	Date: <u>12/9/21</u>	Time: <u>1600</u>	Received By/ Affiliation: <u>[Redacted] Fedex</u>	Date: <u>12/9/21</u>	Time: <u>1600</u>
Special Instructions: <u>None</u>					<u>12/10/21</u>	<u>1539</u>
Send Results to: <u>[Redacted]</u>						
Turnaround Time: <u>Standard</u>						

17.5°C
12/1

ORIGIN ID: JCCA

200 FISHER STREET

SAN FRANCISCO, CA 94124
UNITED STATES US

SHIP DATE: 09DEC21
ACTWGT: 1.00 LB
CAD: 254128867/NET4400

BILL SENDER

TO

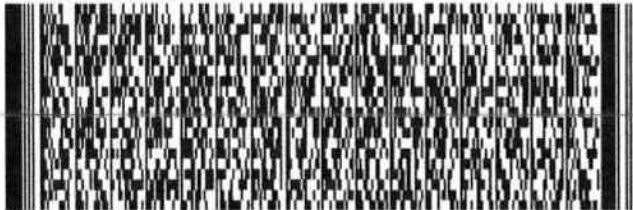
A & B LABS
10100 EAST FREEWAY, SUITE 100

HOUSTON TX 77029

REF: J31000400001804

INV:
PO:

DEPT:



FedEx
Express



J21227191801uv

56DJ0E934FE4A

FRI - 10 DEC 4:30P

STANDARD OVERNIGHT

TRK#

0201

7754 4989 8353

77029

TX-US

IAH

UL HBYA



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Laboratory Analysis Report

Job ID : 21121948



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 : 12/15/2021 17:12
City, State, Zip: Tempe, Arizona, 85282 Sample Collected By : Gilbane

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-120921	12/9/2021 15:14	Cassette	21121948.01
MSE02-120921	12/9/2021 15:07	Cassette	21121948.02

[REDACTED]
Released By: [REDACTED]
Title: Vice President Operations

Analyst: [REDACTED]

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ab-q210-0321

12/22/2021



**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 12/22/2021

Job ID : 21121948
Analytical Method: NIOSH 7400-I2-Aug1994

Client: GES - ASRC Industrial			Project: HPNS Parcel E Phase II J310000400						Attn: Brett Womack						
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
21121948.01	MSE01-120921	12/09/2021	Area	2			488	976	100	17.0	21.656	0.009		12/22/21	██████
21121948.02	MSE02-120921	12/09/2021	Area	2			497	994	100	12.5	15.924	0.006		12/22/21	██████

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



Sample Condition Checklist

A&B JobID : 21121948	Date Received : 12/15/2021	Time Received : 5:12PM		
Client Name : GES - ASRC Industrial				
Temperature : 18.7°C	Sample pH : NA			
Thermometer ID : IR1	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 <input type="checkbox"/> Soil <input type="checkbox"/> Liquid <input type="checkbox"/> Sludge <input type="checkbox"/> Solid <input type="checkbox"/> Cassette <input checked="" type="checkbox"/> Tube <input type="checkbox"/> Bulk <input type="checkbox"/> Badge <input type="checkbox"/> Food <input type="checkbox"/> Other <input type="checkbox"/>			
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 receive; however, samples are received in a box with a custody seal.

Received by : ██████████

Check in by/date : ██████████ / 12/20/2021

ab-s005-0321

Phone : ██████████

www.ablabs.com



Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II 1310000400 Laboratory Name: A&B Labs Date: 12/14/2021
 Project Manager: [Redacted] Address: 10100 East Fwy Ste. 100 Contact Name: [Redacted] Page: 1 of 1
 Site Location: Hunters Point, San Francisco, CA 94124 Houston TX 77029

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Analysis:			Total Time (min)	Special Instructions/Comments
							Asbestos	Preservative:	Container Type:		
MSE01-120921	12/9/2021	1514	NA	NA	1	AA	X	None	Filter	488	OIA
MSE02-120921	12/9/2021	1507	NA	NA	1	AA	X			497	OZA
<p style="text-align: right;">Flow Rate = 2 L/min</p>											

TP

Job ID:21121948



12/15/2021 GES - ASRC Industrial ACH

Sampled By: <u>Gilbane</u>	Sampler: <u>Gilbane</u>	Courier/Airbill No.: <u>FedEx/ 7754 8868 3683</u>
Signature: <u>[Redacted]</u>	Relinquished By/Affiliation: <u>[Redacted] / Gilbane</u>	Date: <u>12/14/21</u> Time: <u>1600</u>
Special Instructions: _____	<u>FEDEX</u>	Received By/ Affiliation: <u>Fedex</u> Date: <u>12/14/21</u> Time: <u>1600</u>
Send Results to: <u>[Redacted]</u>		<u>[Redacted]</u> Date: <u>12/15/21</u> Time: <u>1712</u>
Turnaround Time: <u>Standard</u>		<u>18.7°C</u> <u>121</u>

ORIGIN ID: ICCA

200 FISHER STREET

SAN FRANCISCO, CA 94124
UNITED STATES US

SHIP DATE: 14DEC21
ACTWGT: 1.00 LB
CAD: 254128867/INET4400

BILL SENDER

TO [REDACTED]

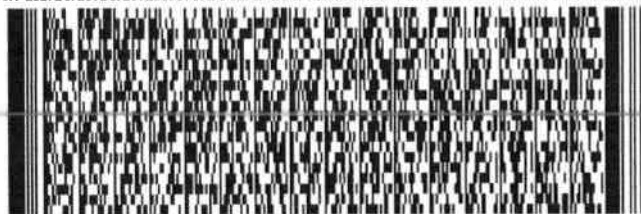
A & B LABS
10100 EAST FREEWAY, SUITE 100

HOUSTON TX 77029

REF J31000.400.00.18.04

INV
PO

DEPT



FedEx
Express



J31221191881ur

56D,01E934FE4A

WED - 15 DEC 4:30P
STANDARD OVERNIGHT

TRK# 7754 8868 3683
0201

UL HBYA

77029

TX-US IAH



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Laboratory Analysis Report

Job ID : 21122247



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 : 12/17/2021 16:17
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
MSE01-121421	12/14/2021 16:05	Cassette	21122247.01
MSE02-121421	12/14/2021 16:10	Cassette	21122247.02
MSE01-121521	12/15/2021 15:20	Cassette	21122247.03
MSE02-121521	12/15/2021 15:16	Cassette	21122247.04

[REDACTED]
Released By: [REDACTED]
Title: Vice President Operations

Analyst: [REDACTED]

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ab-q210-0321

12/28/2021



**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 # 30080**

Date 12/28/202

Job ID : 21122247
 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
21122247.01	MSE01-121421	12/14/2021	Area	2			511	1022	100	17.0	21.656	0.008		12/28/21	[REDACTED]
21122247.02	MSE02-121421	12/14/2021	Area	2			541	1082	100	12.5	15.924	0.006		12/28/21	[REDACTED]
21122247.03	MSE01-121521	12/15/2021	Area	2			489	978	100	12.5	15.924	0.006		12/28/21	[REDACTED]
21122247.04	MSE02-121521	12/15/2021	Area	2			470	940	100	12.0	15.287	0.006		12/28/21	[REDACTED]

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



Sample Condition Checklist

A&B JobID : 21122247	Date Received : 12/17/2021	Time Received : 4:17PM		
Client Name : GES - ASRC Industrial				
Temperature : 24.6°C	Sample pH : NA			
Thermometer ID : IR1	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 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
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 by : ██████████

Check in by/date : ██████████ / 12/21/2021

ab-s005-0321

Phone : ██████████

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Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II J310000400 Laboratory Name: A&B Labs Date: 12/16/2021
 Project Manager: [Redacted] Address: 10100 East Fwy Ste. 100 Contact Name: [Redacted] Page: 1 of 1
 Site Location: Hunters Point, San Francisco, CA 94124 Houston TX 77029

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Analysis:		Total Time (min)	Special Instructions/Comments
							Asbestos	Preservative:		
							None			
							Container Type:			
							Filter			
MSE01-121421	12/14/2021	1605	NA	NA	1	AA	X		511	01A
MSE02-121421	12/14/2021	1610	NA	NA	1	AA	X		541	02A
MSE01-121521	12/15/2021	1520	NA	NA	1	AA	X		489	03A
MSE02-121521	12/15/2021	1516	NA	NA	1	AA	X		470	04A

Job ID: 21122247



12/17/2021 GES - ASRC Industrial ACH

Sampled By: <u>[Redacted]</u>	Sampler: <u>Gilbane</u>	Courier/Airbill No.: FedEx/ 7755 2111 8986			
Signature: <u>[Redacted]</u>	Relinquished By/Affiliation: <u>[Redacted] Gilbane</u>	Date: <u>12/16/21</u>	Time: <u>1600</u>	Received By/ Affiliation: <u>Fedex</u>	Date: <u>12/16/21</u> Time: <u>1600</u>
Special Instructions: <u>None</u>	<u>FEDEX</u>			<u>[Redacted]</u>	<u>12-21-21</u> <u>1607</u> <u>12/17/21</u>
Send Results to: <u>[Redacted]</u>					
Turnaround Time: <u>Standard</u>					

TEMP: 24.6 °C

ORIGIN ID: JCCA

200 FISHER STREET

SAN FRANCISCO, CA 94124
UNITED STATES US

SHIP DATE: 16DEC21
ACTWGT: 1.00 LB
CAD: 254128867/INET4400

BILL SENDER

TO

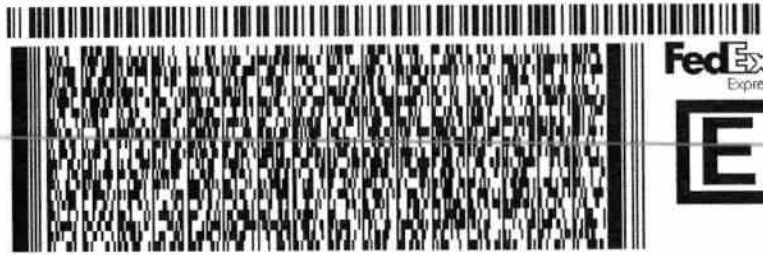
A & B LABS
10100 EAST FREEWAY, SUITE 100

HOUSTON TX 77029

REF J31000 400 00 18 04

INV
PO

DEPT



56DJ3E934/FE4A

FRI - 17 DEC 4:30P

STANDARD OVERNIGHT

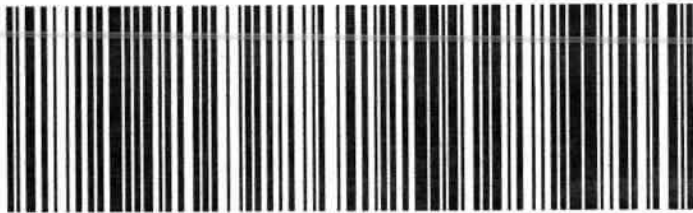
TRK# 7755 2111 8986
0201

UL HBYA

77029

TX-US

IAH



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CUSTOMER

12/16/21

Date:

[Signature]

Signature:

Laboratory Analysis Report

Job ID : 21122540



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 : 12/23/2021 10:05
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
MSE01-121621	12/16/2021 15:02	Cassette	21122540.01
MSE02-121621	12/16/2021 14:46	Cassette	21122540.02
MSE01-122021	12/20/2021 15:13	Cassette	21122540.03
MSE02-122021	12/20/2021 15:19	Cassette	21122540.04

[REDACTED]
Released By:

Title: Vice President Operations

Analyst: [REDACTED]

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ab-q210-0321

1/3/2022



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

Date 1/3/2022

Job ID : 21122540
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
21122540.01	MSE01-121621	12/16/2021	Area	2			487	974	100	12.0	15.287	0.006		01/03/22	[REDACTED]
21122540.02	MSE02-121621	12/16/2021	Area	2			458	916	100	11.0	14.013	0.006		01/03/22	[REDACTED]
21122540.03	MSE01-122021	12/20/2021	Area	2			455	910	100	11.5	14.650	0.006		01/03/22	[REDACTED]
21122540.04	MSE02-122021	12/20/2021	Area	2			488	976	100	11.5	14.650	0.006		01/03/22	[REDACTED]

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



Sample Condition Checklist

A&B JobID : 21122540	Date Received : 12/23/2021	Time Received : 10:05AM		
Client Name : GES - ASRC Industrial				
Temperature : 20.6°C	Sample pH : NA			
Thermometer ID : IR1	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 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
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, sample are received in a box with custody seal.

Received by : ██████████

Check in by/date : ██████████ / 12/23/2021

ab-s005-0321

Phone : ██████████

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Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II I310000400 Laboratory Name: A&B Labs Date: 12/21/2021
 Project Manager: [Redacted] Address: 10100 East Fwy Ste. 100 Contact Name: [Redacted] Page: 1 of 1
 Site Location: Hunters Point, San Francisco, CA 94124 Houston TX 77029

Analysis:

Job ID: 21122540



12/23/2021 GES - ASRC Industrial ACH

Total Time (min)

Flow Rate = 2 L/min

Special Instructions/Comments

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Asbestos	Preservative:	Container Type:	Total Time (min)	Special Instructions/Comments
MSE01-121621	12/16/2021	1502	NA	NA	1	AA	X	None	Filter	487	01A
MSE02-121621	12/16/2021	1446	NA	NA	1	AA	X			458	02A
MSE01-122021	12/20/2021	1513	NA	NA	1	AA	X			455	03A
MSE02-122021	12/20/2021	1519	NA	NA	1	AA	X			488	04A
TP											

Sampled By: <u>[Redacted]</u>	Sampler: <u>Gilbane</u>	Courier/Airbill No.: <u>FedEx/ 7755 3379 6318</u>
Signature: <u>[Redacted]</u>	Relinquished By/Affiliation: <u>[Redacted] / Gilbane</u>	Date: <u>12/21/21</u> Time: <u>1600</u>
Special Instructions: _____	<u>Fedex</u>	Received By/ Affiliation: <u>[Redacted]</u> Date: <u>12/21/21</u> Time: <u>1600</u>
Send Results to: <u>edawson@gilbaneco.com</u>		Date: <u>12/23/21</u> Time: <u>1005</u>
Turnaround Time: <u>Standard</u>		

Temp: 20.6
ID: IR7 BH

ORIGIN ID: ICCA

SHIP DATE: 21DEC21
ACTWGT: 1.00 LB
CAD: 254128867/NET4400

200 FISHER STREET

SAN FRANCISCO, CA 94124
UNITED STATES US

BILL SENDER

TO

A & B LABS
10100 EAST FREEWAY, SUITE 100

HOUSTON TX 77029

REF. J31000.400.00.18.04

INV.
PO

DEPT



56D.JS/ES34/FE4A

J21222112181UV

WED - 22 DEC 4:30P

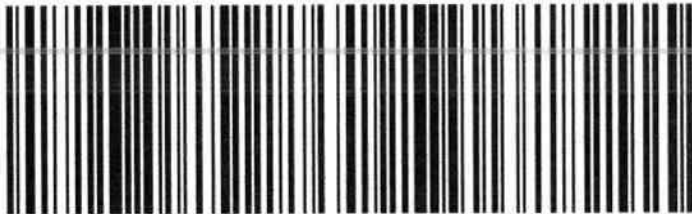
STANDARD OVERNIGHT

TRK# 7755 7133 0900
0201

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Laboratory Analysis Report

Job ID : 21122922



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 : 12/29/2021 10:01
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
MSE01-122121	12/21/2021 15:57	Cassette	21122922.01
MSE02-122121	12/21/2021 15:58	Cassette	21122922.02
MSE01-122221	12/22/2021 13:14	Cassette	21122922.03
MSE02-122221	12/22/2021 12:58	Cassette	21122922.04

[REDACTED]
Released By: [REDACTED]
Title: Vice President Operations

Analyst: [REDACTED]

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ab-q210-0321

1/6/2022



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

Date 1/6/2022

Job ID : 21122922
 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
21122922.01	MSE01-122121	12/21/2021	Area	2			520	1040	100	10.5	13.376	0.005		01/06/22	[REDACTED]
21122922.02	MSE02-122121	12/21/2021	Area	2			543	1086	100	13.0	16.561	0.006		01/06/22	[REDACTED]
21122922.03	MSE01-122221	12/22/2021	Area	2			324	648	100	11	14.013	0.008		01/06/22	[REDACTED]
21122922.04	MSE02-122221	12/22/2021	Area	2			320	640	100	20	25.478	0.015		01/06/22	[REDACTED]

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



Sample Condition Checklist

A&B JobID : 21122922		Date Received : 12/29/2021	Time Received : 10:01AM									
Client Name : GES - ASRC Industrial												
Temperature : 20.3°C		Sample pH : n/a										
Thermometer ID : IR1		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
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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. TG 12-29-2021

Received by : ██████████

Check in by/date : ██████████ / 12/29/2021

ab-s005-0321

Phone : ██████████

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Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II 1310000400 Laboratory Name: A&B Labs Date: 12/22/2021
 Project Manager: [Redacted] Address: 10100 East Fwy Ste. 100 Contact Name: [Redacted] Page: 1 of 1
 Site Location: Hunters Point, San Francisco, CA 94124 Houston TX 77029

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Analysis:		Total Time (min)	Flow Rate = 2 L/min	Special Instructions/Comments
							Asbestos	Preservative:			
MSE01-122121	01A 12/21/2021	1557	NA	NA	1	AA	X		520		
MSE02-122121	02A 12/21/2021	1558	NA	NA	1	AA	X		543		
MSE01-122221	03A 12/22/2021	1314	NA	NA	1	AA	X		324		
MSE02-122221	04A 12/22/2021	1258	NA	NA	1	AA	X		320		

Job ID: 21122922



12/29/2021 Gilbane ACH

Sampled By: [Redacted] Sampler: [Redacted] Courier/Airbill No.: FedEx/ 7755 8484 4840

Signature: [Redacted] Relinquished By/Affiliation: [Redacted] / Gilbane Date: 12/29/2021 Time: 1000 Received By/ Affiliation: Fed Ex Date: 12/29/21 Time: 1000

Special Instructions: None 1 FEDEX 12-29-21 [Redacted] 12-29-21 1001

Send Results to: [Redacted]

Turnaround Time: Standard

ORIGIN ID: JCCA

SHIP DATE: 22DEC21
ACTWGHT: 1.00 LB
CAD: 254128867INET4400

200 FISHER STREET

BILL SENDER

SAN FRANCISCO, CA 94124
UNITED STATES US

TO: [REDACTED]

A & B LABS

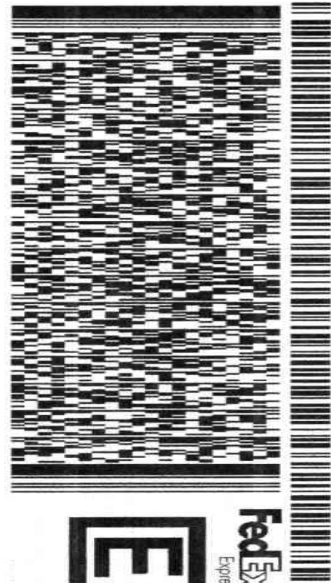
10100 EAST FREEMWAY, SUITE 100

HOUSTON TX 77029

56DJ3/E934/FE4A

REF: J31000:400:00:18:04

INV: [REDACTED]
PO: [REDACTED]
DEPT: [REDACTED]



J212321121601uv

THU - 23 DEC 4:30P

STANDARD OVERNIGHT

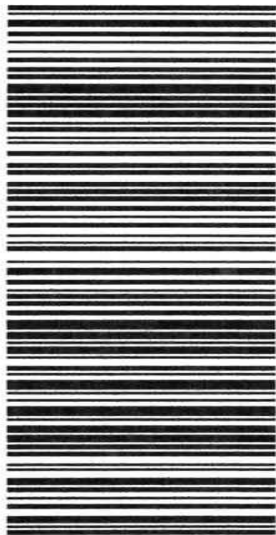
TRK# 7755 8484 4840
#0201

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ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: [REDACTED]

Laboratory Job ID: 320-82460-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

For:
Gilbane Federal
2355 E. Camelback Road
Suite 850
Phoenix, Arizona 85016

Attn: Ms. [REDACTED]

[REDACTED]

Authorized for release by:
12/13/2021 6:25:12 PM

[REDACTED]

LINKS

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results through
TotalAccess

Have a Question?



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www.eurofinsus.com/Env

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

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

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

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Definitions/Glossary

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

Job ID: 320-82460-1

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.
α	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: Gilbane Federal
Project/Site: Hunters Point, Parcel E, Phase 2

Job ID: 320-82460-1

Job ID: 320-82460-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-82460-1

Comments

No additional comments.

Receipt

The samples were received on 12/3/2021 10:45 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 16.7° C.

Metals

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

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Detection Summary

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

Job ID: 320-82460-1

Client Sample ID: GILBANEPM110921-1603

Lab Sample ID: 320-82460-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0046	B	0.00068	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.10		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.014	B	0.00068	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: GILBANETSP110921-1603

Lab Sample ID: 320-82460-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	39.3268		0.3002	0.3002	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM110921-1604

Lab Sample ID: 320-82460-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0030	B	0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.034		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0073	B	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: GILBANETSP110921-1604

Lab Sample ID: 320-82460-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	31.6425		0.2866	0.2866	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM110921-1605

Lab Sample ID: 320-82460-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0061	B	0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.23		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.015	B	0.00069	0.000096	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	46		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP110921-1605

Lab Sample ID: 320-82460-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	48.9854		0.3009	0.3009	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM110921-1606

Lab Sample ID: 320-82460-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0049	B	0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.047		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.011	B	0.00069	0.000096	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	47		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP110921-1606

Lab Sample ID: 320-82460-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	50.1845		0.2861	0.2861	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Sacramento

Client Sample Results

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

Job ID: 320-82460-1

Client Sample ID: GILBANEPM110921-1603

Lab Sample ID: 320-82460-1

Date Collected: 12/01/21 07:15

Matrix: Air

Date Received: 12/03/21 10:45

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0046	B	0.00068	0.00010	ug/m3 (Air)		12/13/21 07:00	12/13/21 12:56	1
Copper	0.10		0.0014	0.00010	ug/m3 (Air)		12/13/21 07:00	12/13/21 12:56	1
Manganese	0.014	B	0.00068	0.000096	ug/m3 (Air)		12/13/21 07:00	12/13/21 12:56	1

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			12/10/21 15:30	1

Client Sample ID: GILBANETSP110921-1603

Lab Sample ID: 320-82460-2

Date Collected: 12/01/21 07:15

Matrix: Air

Date Received: 12/03/21 10:45

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	39.3268		0.3002	0.3002	ug/m3 (Air)			12/10/21 15:30	1

Client Sample ID: GILBANEPM110921-1604

Lab Sample ID: 320-82460-3

Date Collected: 12/01/21 06:55

Matrix: Air

Date Received: 12/03/21 10:45

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0030	B	0.00069	0.00010	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:05	1
Copper	0.034		0.0014	0.00010	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:05	1
Manganese	0.0073	B	0.00069	0.000097	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:05	1

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			12/10/21 15:30	1

Client Sample ID: GILBANETSP110921-1604

Lab Sample ID: 320-82460-4

Date Collected: 12/01/21 06:55

Matrix: Air

Date Received: 12/03/21 10:45

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	31.6425		0.2866	0.2866	ug/m3 (Air)			12/10/21 15:30	1

Client Sample ID: GILBANEPM110921-1605

Lab Sample ID: 320-82460-5

Date Collected: 12/02/21 07:11

Matrix: Air

Date Received: 12/03/21 10:45

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0061	B	0.00069	0.00010	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:08	1
Copper	0.23		0.0014	0.00010	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:08	1
Manganese	0.015	B	0.00069	0.000096	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:08	1

Eurofins TestAmerica, Sacramento

Client Sample Results

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

Job ID: 320-82460-1

Client Sample ID: GILBANEPM110921-1605

Lab Sample ID: 320-82460-5

Date Collected: 12/02/21 07:11

Matrix: Air

Date Received: 12/03/21 10:45

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	46		0.29	0.29	ug/m3			12/10/21 15:30	1

Client Sample ID: GILBANETSP110921-1605

Lab Sample ID: 320-82460-6

Date Collected: 12/02/21 07:11

Matrix: Air

Date Received: 12/03/21 10:45

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	48.9854		0.3009	0.3009	ug/m3 (Air)			12/10/21 15:30	1

Client Sample ID: GILBANEPM110921-1606

Lab Sample ID: 320-82460-7

Date Collected: 12/02/21 07:02

Matrix: Air

Date Received: 12/03/21 10:45

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0049	B	0.00069	0.00010	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:11	1
Copper	0.047		0.0014	0.00010	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:11	1
Manganese	0.011	B	0.00069	0.000096	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:11	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	47		0.29	0.29	ug/m3			12/10/21 15:30	1

Client Sample ID: GILBANETSP110921-1606

Lab Sample ID: 320-82460-8

Date Collected: 12/02/21 07:02

Matrix: Air

Date Received: 12/03/21 10:45

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	50.1845		0.2861	0.2861	ug/m3 (Air)			12/10/21 15:30	1

QC Sample Results

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

Job ID: 320-82460-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-550309/1-B
Matrix: Air
Analysis Batch: 550545

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550334

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	0.000422	J	0.0012	0.00018	ug/m3 (Air)		12/13/21 07:00	12/13/21 12:01	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		12/13/21 07:00	12/13/21 12:01	1
Manganese	0.000450	J	0.0012	0.00017	ug/m3 (Air)		12/13/21 07:00	12/13/21 12:01	1

Lab Sample ID: LCS 320-550309/2-B
Matrix: Air
Analysis Batch: 550545

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550334

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.240	0.243		ug/m3 (Air)		101	85 - 110
Manganese	0.240	0.240		ug/m3 (Air)		100	88 - 110

Lab Sample ID: LCSD 320-550309/3-B
Matrix: Air
Analysis Batch: 550545

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 550334

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Lead	0.240	0.248		ug/m3 (Air)		103	86 - 111	2	15
Copper	0.240	0.247		ug/m3 (Air)		103	85 - 110	1	15
Manganese	0.240	0.241		ug/m3 (Air)		100	88 - 110	0	15

QC Association Summary

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

Job ID: 320-82460-1

Metals

Pre Prep Batch: 550309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82460-1	GILBANEPM110921-1603	Total/NA	Air	Filter to Air	
320-82460-3	GILBANEPM110921-1604	Total/NA	Air	Filter to Air	
320-82460-5	GILBANEPM110921-1605	Total/NA	Air	Filter to Air	
320-82460-7	GILBANEPM110921-1606	Total/NA	Air	Filter to Air	
MB 320-550309/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-550309/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-550309/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 550334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82460-1	GILBANEPM110921-1603	Total/NA	Air	3050B	550309
320-82460-3	GILBANEPM110921-1604	Total/NA	Air	3050B	550309
320-82460-5	GILBANEPM110921-1605	Total/NA	Air	3050B	550309
320-82460-7	GILBANEPM110921-1606	Total/NA	Air	3050B	550309
MB 320-550309/1-B	Method Blank	Total/NA	Air	3050B	550309
LCS 320-550309/2-B	Lab Control Sample	Total/NA	Air	3050B	550309
LCSD 320-550309/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	550309

Analysis Batch: 550545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82460-1	GILBANEPM110921-1603	Total/NA	Air	6020	550334
320-82460-3	GILBANEPM110921-1604	Total/NA	Air	6020	550334
320-82460-5	GILBANEPM110921-1605	Total/NA	Air	6020	550334
320-82460-7	GILBANEPM110921-1606	Total/NA	Air	6020	550334
MB 320-550309/1-B	Method Blank	Total/NA	Air	6020	550334
LCS 320-550309/2-B	Lab Control Sample	Total/NA	Air	6020	550334
LCSD 320-550309/3-B	Lab Control Sample Dup	Total/NA	Air	6020	550334

General Chemistry

Pre Prep Batch: 550388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82460-2	GILBANETSP110921-1603	Total/NA	Air	Filter to Air	
320-82460-4	GILBANETSP110921-1604	Total/NA	Air	Filter to Air	
320-82460-6	GILBANETSP110921-1605	Total/NA	Air	Filter to Air	
320-82460-8	GILBANETSP110921-1606	Total/NA	Air	Filter to Air	

Analysis Batch: 550577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82460-2	GILBANETSP110921-1603	Total/NA	Air	40CFR50 App B	550388
320-82460-4	GILBANETSP110921-1604	Total/NA	Air	40CFR50 App B	550388
320-82460-6	GILBANETSP110921-1605	Total/NA	Air	40CFR50 App B	550388
320-82460-8	GILBANETSP110921-1606	Total/NA	Air	40CFR50 App B	550388

Analysis Batch: 550579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82460-1	GILBANEPM110921-1603	Total/NA	Air	PM10	
320-82460-3	GILBANEPM110921-1604	Total/NA	Air	PM10	
320-82460-5	GILBANEPM110921-1605	Total/NA	Air	PM10	
320-82460-7	GILBANEPM110921-1606	Total/NA	Air	PM10	

Eurofins TestAmerica, Sacramento

Lab Chronicle

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

Job ID: 320-82460-1

Client Sample ID: GILBANEPM110921-1603

Lab Sample ID: 320-82460-1

Date Collected: 12/01/21 07:15

Matrix: Air

Date Received: 12/03/21 10:45

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					550309	12/13/21 06:05	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	550334	12/13/21 07:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			550545	12/13/21 12:56	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0574 g	550579	12/10/21 15:30	DPM	TAL SAC

Client Sample ID: GILBANETSP110921-1603

Lab Sample ID: 320-82460-2

Date Collected: 12/01/21 07:15

Matrix: Air

Date Received: 12/03/21 10:45

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			550577	12/10/21 15:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					550388	12/13/21 10:58	DPM	TAL SAC

Client Sample ID: GILBANEPM110921-1604

Lab Sample ID: 320-82460-3

Date Collected: 12/01/21 06:55

Matrix: Air

Date Received: 12/03/21 10:45

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					550309	12/13/21 06:05	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	550334	12/13/21 07:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			550545	12/13/21 13:05	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0441 g	550579	12/10/21 15:30	DPM	TAL SAC

Client Sample ID: GILBANETSP110921-1604

Lab Sample ID: 320-82460-4

Date Collected: 12/01/21 06:55

Matrix: Air

Date Received: 12/03/21 10:45

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			550577	12/10/21 15:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					550388	12/13/21 10:58	DPM	TAL SAC

Client Sample ID: GILBANEPM110921-1605

Lab Sample ID: 320-82460-5

Date Collected: 12/02/21 07:11

Matrix: Air

Date Received: 12/03/21 10:45

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					550309	12/13/21 06:05	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	550334	12/13/21 07:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			550545	12/13/21 13:08	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0812 g	550579	12/10/21 15:30	DPM	TAL SAC

Lab Chronicle

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

Job ID: 320-82460-1

Client Sample ID: GILBANETSP110921-1605

Lab Sample ID: 320-82460-6

Date Collected: 12/02/21 07:11

Matrix: Air

Date Received: 12/03/21 10:45

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			550577	12/10/21 15:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					550388	12/13/21 10:58	DPM	TAL SAC

Client Sample ID: GILBANEPM110921-1606

Lab Sample ID: 320-82460-7

Date Collected: 12/02/21 07:02

Matrix: Air

Date Received: 12/03/21 10:45

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					550309	12/13/21 06:05	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	550334	12/13/21 07:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			550545	12/13/21 13:11	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0814 g	550579	12/10/21 15:30	DPM	TAL SAC

Client Sample ID: GILBANETSP110921-1606

Lab Sample ID: 320-82460-8

Date Collected: 12/02/21 07:02

Matrix: Air

Date Received: 12/03/21 10:45

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			550577	12/10/21 15:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					550388	12/13/21 10:58	DPM	TAL SAC

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 320-82460-1

Laboratory: Eurofins TestAmerica, 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	01-29-22

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

Job ID: 320-82460-1

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 TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600



Sample Summary

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

Job ID: 320-82460-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-82460-1	GILBANEPM110921-1603	Air	12/01/21 07:15	12/03/21 10:45
320-82460-2	GILBANETSP110921-1603	Air	12/01/21 07:15	12/03/21 10:45
320-82460-3	GILBANEPM110921-1604	Air	12/01/21 06:55	12/03/21 10:45
320-82460-4	GILBANETSP110921-1604	Air	12/01/21 06:55	12/03/21 10:45
320-82460-5	GILBANEPM110921-1605	Air	12/02/21 07:11	12/03/21 10:45
320-82460-6	GILBANETSP110921-1605	Air	12/02/21 07:11	12/03/21 10:45
320-82460-7	GILBANEPM110921-1606	Air	12/02/21 07:02	12/03/21 10:45
320-82460-8	GILBANETSP110921-1606	Air	12/02/21 07:02	12/03/21 10:45

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**CHAIN-OF-CUSTODY
RECORD**

Gilbane Federal
Brett Womack
1655 Grant Street, Suite 1200, Concord, CA 94520
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COC # KT120221AIR



Project Name: Hunters Point Shipyard, Parcel E RA Phase 2
Project Number: J310000400
WBS Code: J310000400-016
Laboratory: Eurofins Environment Testing TestAmerica-Sacramento, West Sacramento, CA
POC: [Redacted]
Ship to: 880 Riverside Parkway, West Sacramento, CA 95605
Event: Parcel E Phase 2 Air Monitoring December 2021

Comments:

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 December 2021														
Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method	CAIR - Air PM10	NO500 - Air TSP	SW6020 - Air Pb Mn Cu	Location ID	Sample Type	Depth (ft bgs)		Cooler	Comments
											Top	Bottom		
1	GILBANEPM110921-1603	12/01/2021	0715	KT	X	X	X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1752.43
2	GILBANETSP110921-1603	12/01/2021	0715	KT	X	X	X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1665.53
3	GILBANEPM110921-1604	12/01/2021	0655	KT	X	X	X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1735.51
4	GILBANETSP110921-1604	12/01/2021	0655	KT	X	X	X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1744.49
5	GILBANEPM110921-1605	12/02/2021	0711	KT	X	X	X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1750.68
6	GILBANETSP110921-1605	12/02/2021	0711	KT	X	X	X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1661.72
7	GILBANEPM110921-1606	12/02/2021	0702	KT	X	X	X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1743.99
8	GILBANETSP110921-1606	12/02/2021	0702	KT	X	X	X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1747.55
9														
10														

Turnaround Time: 5 days

Signature	Date	Time	Received by: (Signature)	Date	Time	Shipping Date / Carrier / Airbill Number
[Redacted]	12/2/21	1600	[Redacted]	12/2/21	1600	Shipping Date: 12/2/2021 7753 7373 6284
			[Redacted]	12-3-21	1045	SO 12-3-21
						Received by Laboratory: (Signature, Date, Time) & condition

Login Sample Receipt Checklist

Client: Gilbane Federal

Job Number: 320-82460-1

Login Number: 82460

List Source: Eurofins TestAmerica, Sacramento

List Number: 1

Creator: [REDACTED]

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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	AMBIENT
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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: [REDACTED]

Laboratory Job ID: 320-82645-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

For:
Gilbane Federal
2355 E. Camelback Road
Suite 850
Phoenix, Arizona 85016

Attn: Ms. [REDACTED]
[REDACTED]

Authorized for release by:
12/14/2021 3:20:06 PM
[REDACTED]
[REDACTED]
[REDACTED]

LINKS

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

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

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Definitions/Glossary

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

Job ID: 320-82645-1

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.
α	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: Gilbane Federal
Project/Site: Hunters Point, Parcel E, Phase 2

Job ID: 320-82645-1

Job ID: 320-82645-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-82645-1

Comments

No additional comments.

Receipt

The samples were received on 12/8/2021 10:50 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 17.7° C.

Metals

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Detection Summary

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

Job ID: 320-82645-1

Client Sample ID: GILBANEPM110921-1607

Lab Sample ID: 320-82645-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0082	B	0.0024	0.00036	ug/m3 (Air)	1		6020	Total/NA
Copper	0.13		0.0048	0.00036	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.023	B	0.0024	0.00033	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	68		1.0	1.0	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP110921-1607

Lab Sample ID: 320-82645-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	82.0599		1.0467	1.0467	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM110921-1608

Lab Sample ID: 320-82645-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0047	B	0.0022	0.00033	ug/m3 (Air)	1		6020	Total/NA
Copper	0.034		0.0044	0.00033	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.013	B	0.0022	0.00031	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	62		0.91	0.91	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP110921-1608

Lab Sample ID: 320-82645-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	59.2191		0.9341	0.9341	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM110921-1609

Lab Sample ID: 320-82645-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0018	B	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	B	0.00069	0.000097	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: GILBANETSP110921-1609

Lab Sample ID: 320-82645-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	25.1459		0.2972	0.2972	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM110921-1610

Lab Sample ID: 320-82645-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0014	B	0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.012		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0034	B	0.00069	0.000097	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: GILBANETSP110921-1610

Lab Sample ID: 320-82645-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	35.0417		0.2877	0.2877	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Sacramento

Client Sample Results

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

Job ID: 320-82645-1

Client Sample ID: GILBANEPM110921-1607

Lab Sample ID: 320-82645-1

Date Collected: 12/02/21 14:15

Matrix: Air

Date Received: 12/08/21 10:50

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0082	B	0.0024	0.00036	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:28	1
Copper	0.13		0.0048	0.00036	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:28	1
Manganese	0.023	B	0.0024	0.00033	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:28	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	68		1.0	1.0	ug/m3			12/10/21 15:30	1

Client Sample ID: GILBANETSP110921-1607

Lab Sample ID: 320-82645-2

Date Collected: 12/02/21 14:15

Matrix: Air

Date Received: 12/08/21 10:50

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	82.0599		1.0467	1.0467	ug/m3 (Air)			12/10/21 15:30	1

Client Sample ID: GILBANEPM110921-1608

Lab Sample ID: 320-82645-3

Date Collected: 12/02/21 14:22

Matrix: Air

Date Received: 12/08/21 10:50

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0047	B	0.0022	0.00033	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:31	1
Copper	0.034		0.0044	0.00033	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:31	1
Manganese	0.013	B	0.0022	0.00031	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:31	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	62		0.91	0.91	ug/m3			12/10/21 15:30	1

Client Sample ID: GILBANETSP110921-1608

Lab Sample ID: 320-82645-4

Date Collected: 12/02/21 14:22

Matrix: Air

Date Received: 12/08/21 10:50

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	59.2191		0.9341	0.9341	ug/m3 (Air)			12/10/21 15:30	1

Client Sample ID: GILBANEPM110921-1609

Lab Sample ID: 320-82645-5

Date Collected: 12/07/21 07:18

Matrix: Air

Date Received: 12/08/21 10:50

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0018	B	0.00069	0.00010	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:34	1
Copper	0.037		0.0014	0.00010	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:34	1
Manganese	0.0050	B	0.00069	0.000097	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:34	1

Euofins TestAmerica, Sacramento

Client Sample Results

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

Job ID: 320-82645-1

Client Sample ID: GILBANEPM110921-1609

Lab Sample ID: 320-82645-5

Date Collected: 12/07/21 07:18

Matrix: Air

Date Received: 12/08/21 10:50

Sample Container: Folder/Filter

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			12/10/21 15:30	1

Client Sample ID: GILBANETSP110921-1609

Lab Sample ID: 320-82645-6

Date Collected: 12/07/21 07:18

Matrix: Air

Date Received: 12/08/21 10:50

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	25.1459		0.2972	0.2972	ug/m3 (Air)			12/10/21 15:30	1

Client Sample ID: GILBANEPM110921-1610

Lab Sample ID: 320-82645-7

Date Collected: 12/07/21 07:01

Matrix: Air

Date Received: 12/08/21 10:50

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0014	B	0.00069	0.00010	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:37	1
Copper	0.012		0.0014	0.00010	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:37	1
Manganese	0.0034	B	0.00069	0.000097	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:37	1

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			12/10/21 15:30	1

Client Sample ID: GILBANETSP110921-1610

Lab Sample ID: 320-82645-8

Date Collected: 12/07/21 07:01

Matrix: Air

Date Received: 12/08/21 10:50

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	35.0417		0.2877	0.2877	ug/m3 (Air)			12/10/21 15:30	1

QC Sample Results

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

Job ID: 320-82645-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-550309/1-B
Matrix: Air
Analysis Batch: 550545

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550334

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	0.000422	J	0.0012	0.00018	ug/m3 (Air)		12/13/21 07:00	12/13/21 12:01	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		12/13/21 07:00	12/13/21 12:01	1
Manganese	0.000450	J	0.0012	0.00017	ug/m3 (Air)		12/13/21 07:00	12/13/21 12:01	1

Lab Sample ID: LCS 320-550309/2-B
Matrix: Air
Analysis Batch: 550545

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550334

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Lead	0.240	0.253		ug/m3 (Air)		105	86 - 111
Copper	0.240	0.243		ug/m3 (Air)		101	85 - 110
Manganese	0.240	0.240		ug/m3 (Air)		100	88 - 110

Lab Sample ID: LCSD 320-550309/3-B
Matrix: Air
Analysis Batch: 550545

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 550334

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec. Limits	RPD	
		Result	Qualifier					RPD	Limit
Lead	0.240	0.248		ug/m3 (Air)		103	86 - 111	2	15
Copper	0.240	0.247		ug/m3 (Air)		103	85 - 110	1	15
Manganese	0.240	0.241		ug/m3 (Air)		100	88 - 110	0	15

QC Association Summary

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

Job ID: 320-82645-1

Metals

Pre Prep Batch: 550309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82645-1	GILBANEPM110921-1607	Total/NA	Air	Filter to Air	
320-82645-3	GILBANEPM110921-1608	Total/NA	Air	Filter to Air	
320-82645-5	GILBANEPM110921-1609	Total/NA	Air	Filter to Air	
320-82645-7	GILBANEPM110921-1610	Total/NA	Air	Filter to Air	
MB 320-550309/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-550309/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-550309/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 550334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82645-1	GILBANEPM110921-1607	Total/NA	Air	3050B	550309
320-82645-3	GILBANEPM110921-1608	Total/NA	Air	3050B	550309
320-82645-5	GILBANEPM110921-1609	Total/NA	Air	3050B	550309
320-82645-7	GILBANEPM110921-1610	Total/NA	Air	3050B	550309
MB 320-550309/1-B	Method Blank	Total/NA	Air	3050B	550309
LCS 320-550309/2-B	Lab Control Sample	Total/NA	Air	3050B	550309
LCSD 320-550309/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	550309

Analysis Batch: 550545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82645-1	GILBANEPM110921-1607	Total/NA	Air	6020	550334
320-82645-3	GILBANEPM110921-1608	Total/NA	Air	6020	550334
320-82645-5	GILBANEPM110921-1609	Total/NA	Air	6020	550334
320-82645-7	GILBANEPM110921-1610	Total/NA	Air	6020	550334
MB 320-550309/1-B	Method Blank	Total/NA	Air	6020	550334
LCS 320-550309/2-B	Lab Control Sample	Total/NA	Air	6020	550334
LCSD 320-550309/3-B	Lab Control Sample Dup	Total/NA	Air	6020	550334

General Chemistry

Pre Prep Batch: 550388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82645-2	GILBANETSP110921-1607	Total/NA	Air	Filter to Air	
320-82645-4	GILBANETSP110921-1608	Total/NA	Air	Filter to Air	
320-82645-6	GILBANETSP110921-1609	Total/NA	Air	Filter to Air	
320-82645-8	GILBANETSP110921-1610	Total/NA	Air	Filter to Air	

Analysis Batch: 550577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82645-2	GILBANETSP110921-1607	Total/NA	Air	40CFR50 App B	550388
320-82645-4	GILBANETSP110921-1608	Total/NA	Air	40CFR50 App B	550388
320-82645-6	GILBANETSP110921-1609	Total/NA	Air	40CFR50 App B	550388
320-82645-8	GILBANETSP110921-1610	Total/NA	Air	40CFR50 App B	550388

Analysis Batch: 550579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82645-1	GILBANEPM110921-1607	Total/NA	Air	PM10	
320-82645-3	GILBANEPM110921-1608	Total/NA	Air	PM10	
320-82645-5	GILBANEPM110921-1609	Total/NA	Air	PM10	
320-82645-7	GILBANEPM110921-1610	Total/NA	Air	PM10	

Lab Chronicle

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

Job ID: 320-82645-1

Client Sample ID: GILBANEPM110921-1607

Lab Sample ID: 320-82645-1

Date Collected: 12/02/21 14:15

Matrix: Air

Date Received: 12/08/21 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					550309	12/13/21 06:05	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	550334	12/13/21 07:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			550545	12/13/21 13:28	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0340 g	550579	12/10/21 15:30	DPM	TAL SAC

Client Sample ID: GILBANETSP110921-1607

Lab Sample ID: 320-82645-2

Date Collected: 12/02/21 14:15

Matrix: Air

Date Received: 12/08/21 10:50

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			550577	12/10/21 15:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					550388	12/13/21 10:58	DPM	TAL SAC

Client Sample ID: GILBANEPM110921-1608

Lab Sample ID: 320-82645-3

Date Collected: 12/02/21 14:22

Matrix: Air

Date Received: 12/08/21 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					550309	12/13/21 06:05	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	550334	12/13/21 07:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			550545	12/13/21 13:31	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0341 g	550579	12/10/21 15:30	DPM	TAL SAC

Client Sample ID: GILBANETSP110921-1608

Lab Sample ID: 320-82645-4

Date Collected: 12/02/21 14:22

Matrix: Air

Date Received: 12/08/21 10:50

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			550577	12/10/21 15:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					550388	12/13/21 10:58	DPM	TAL SAC

Client Sample ID: GILBANEPM110921-1609

Lab Sample ID: 320-82645-5

Date Collected: 12/07/21 07:18

Matrix: Air

Date Received: 12/08/21 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					550309	12/13/21 06:05	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	550334	12/13/21 07:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			550545	12/13/21 13:34	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0617 g	550579	12/10/21 15:30	DPM	TAL SAC

Lab Chronicle

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

Job ID: 320-82645-1

Client Sample ID: GILBANETSP110921-1609

Lab Sample ID: 320-82645-6

Date Collected: 12/07/21 07:18

Matrix: Air

Date Received: 12/08/21 10:50

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			550577	12/10/21 15:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					550388	12/13/21 10:58	DPM	TAL SAC

Client Sample ID: GILBANEPM110921-1610

Lab Sample ID: 320-82645-7

Date Collected: 12/07/21 07:01

Matrix: Air

Date Received: 12/08/21 10:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					550309	12/13/21 06:05	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	550334	12/13/21 07:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			550545	12/13/21 13:37	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0569 g	550579	12/10/21 15:30	DPM	TAL SAC

Client Sample ID: GILBANETSP110921-1610

Lab Sample ID: 320-82645-8

Date Collected: 12/07/21 07:01

Matrix: Air

Date Received: 12/08/21 10:50

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			550577	12/10/21 15:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					550388	12/13/21 10:58	DPM	TAL SAC

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 320-82645-1

Laboratory: Eurofins TestAmerica, 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	01-29-22

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

Job ID: 320-82645-1

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 TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600



Sample Summary

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

Job ID: 320-82645-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-82645-1	GILBANEPM110921-1607	Air	12/02/21 14:15	12/08/21 10:50
320-82645-2	GILBANETSP110921-1607	Air	12/02/21 14:15	12/08/21 10:50
320-82645-3	GILBANEPM110921-1608	Air	12/02/21 14:22	12/08/21 10:50
320-82645-4	GILBANETSP110921-1608	Air	12/02/21 14:22	12/08/21 10:50
320-82645-5	GILBANEPM110921-1609	Air	12/07/21 07:18	12/08/21 10:50
320-82645-6	GILBANETSP110921-1609	Air	12/07/21 07:18	12/08/21 10:50
320-82645-7	GILBANEPM110921-1610	Air	12/07/21 07:01	12/08/21 10:50
320-82645-8	GILBANETSP110921-1610	Air	12/07/21 07:01	12/08/21 10:50

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**CHAIN-OF-CUSTODY
RECORD**

Gilbane Federal
Brett Womack
1655 Grant Street, Suite 1200, Concord, CA 94520
bwomack@gilbaneco.com

COC # KT120721AIR



Project Name: Hunters Point Shipyard, Parcel E RA Phase 2
Project Number: J310000400
WBS Code: J310000400-016
Laboratory: Eurofins Environment Testing TestAmerica-Sacramento, West Sacramento, CA
POC: [Redacted]
Ship to: 880 Riverside Parkway, West Sacramento, CA 95605
Event: Parcel E Phase 2 Air Monitoring December 2021

Comments:

Code	Matrix
A	Air

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



Equipment:

Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method	CAIR - Air PM10	N0500 - Air TSP	SW620 - Air Pb Mn Cu	Location ID	Depth (ft bgs)		Cooler	Comments
										Top	Bottom		
1	A	12/02/2021	1415	KT	CAIR - Air PM10	X			AMSE1	0.00	0.00	1	VOLUME: 502.03
2	A	12/02/2021	1415	KT	N0500 - Air TSP	X			AMSE1	0.00	0.00	1	VOLUME: 477.70
3	A	12/02/2021	1422	KT	SW620 - Air Pb Mn Cu	X			AMSE2	0.00	0.00	1	VOLUME: 548.64
4	A	12/02/2021	1422	KT	CAIR - Air PM10	X			AMSE2	0.00	0.00	1	VOLUME: 535.30
5	A	12/07/2021	0718	KT	CAIR - Air PM10	X			AMSE1	0.00	0.00	1	VOLUME: 1739.41
6	A	12/07/2021	0718	KT	N0500 - Air TSP	X			AMSE1	0.00	0.00	1	VOLUME: 1682.18
7	A	12/07/2021	0701	KT	SW620 - Air Pb Mn Cu	X			AMSE2	0.00	0.00	1	VOLUME: 1737.97
8	A	12/07/2021	0701	KT	CAIR - Air PM10	X			AMSE2	0.00	0.00	1	VOLUME: 1737.93
9													
10													

Turnaround Time: 5 days

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Shipping Date / Carrier / Airbill Number
[Redacted]	12/7/21	1600	FedEx	12/7/21	1600	Shipping Date: 12/7/2021 / FedEx 7754 1671 7686
			[Redacted]	12-8-21	1600	

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

17.7



Login Sample Receipt Checklist

Client: Gilbane Federal

Job Number: 320-82645-1

Login Number: 82645

List Source: Eurofins TestAmerica, Sacramento

List Number: 1

Creator: [REDACTED]

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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.	True	
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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: [REDACTED]

Laboratory Job ID: 320-82770-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

For:
Gilbane Federal
2355 E. Camelback Road
Suite 850
Phoenix, Arizona 85016

Attn: Ms. [REDACTED]

[REDACTED]

Authorized for release by:
12/14/2021 3:23:33 PM

[REDACTED]

LINKS

Review your project
results through
TotalAccess

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www.eurofinsus.com/Env

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

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

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



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Definitions/Glossary

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

Job ID: 320-82770-1

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.
α	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: Gilbane Federal
Project/Site: Hunters Point, Parcel E, Phase 2

Job ID: 320-82770-1

Job ID: 320-82770-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-82770-1

Comments

No additional comments.

Receipt

The samples were received on 12/10/2021 11:30 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 17.6° C.

Metals

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

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Detection Summary

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

Job ID: 320-82770-1

Client Sample ID: GILBANEPM112321-1611

Lab Sample ID: 320-82770-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0014	B	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	0.0048	B	0.00070	0.000098	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	15		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP112321-1611

Lab Sample ID: 320-82770-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	21.7609		0.3065	0.3065	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM112321-1612

Lab Sample ID: 320-82770-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0011	B	0.00070	0.00011	ug/m3 (Air)	1		6020	Total/NA
Copper	0.019		0.0014	0.00011	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0028	B	0.00070	0.000099	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	15		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP112321-1612

Lab Sample ID: 320-82770-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	18.0853		0.2908	0.2908	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM112321-1613

Lab Sample ID: 320-82770-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.00068	J B	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	0.0013	B	0.00069	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	7.3		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP112321-1613

Lab Sample ID: 320-82770-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	7.5775		0.3007	0.3007	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM112321-1614

Lab Sample ID: 320-82770-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.00099	B	0.00083	0.00013	ug/m3 (Air)	1		6020	Total/NA
Copper	0.036		0.0017	0.00013	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0015	B	0.00083	0.00012	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	8.9		0.35	0.35	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP112321-1614

Lab Sample ID: 320-82770-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	11.7148		0.3446	0.3446	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Sacramento

Client Sample Results

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

Job ID: 320-82770-1

Client Sample ID: GILBANEPM112321-1611

Lab Sample ID: 320-82770-1

Date Collected: 12/08/21 07:00

Matrix: Air

Date Received: 12/10/21 11:30

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0014	B	0.00070	0.00011	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:41	1
Copper	0.055		0.0014	0.00011	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:41	1
Manganese	0.0048	B	0.00070	0.000098	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:41	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	15		0.29	0.29	ug/m3			12/10/21 15:30	1

Client Sample ID: GILBANETSP112321-1611

Lab Sample ID: 320-82770-2

Date Collected: 12/08/21 07:00

Matrix: Air

Date Received: 12/10/21 11:30

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	21.7609		0.3065	0.3065	ug/m3 (Air)			12/10/21 15:30	1

Client Sample ID: GILBANEPM112321-1612

Lab Sample ID: 320-82770-3

Date Collected: 12/08/21 06:47

Matrix: Air

Date Received: 12/10/21 11:30

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0011	B	0.00070	0.00011	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:44	1
Copper	0.019		0.0014	0.00011	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:44	1
Manganese	0.0028	B	0.00070	0.000099	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:44	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	15		0.29	0.29	ug/m3			12/10/21 15:30	1

Client Sample ID: GILBANETSP112321-1612

Lab Sample ID: 320-82770-4

Date Collected: 12/08/21 06:47

Matrix: Air

Date Received: 12/10/21 11:30

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	18.0853		0.2908	0.2908	ug/m3 (Air)			12/10/21 15:30	1

Client Sample ID: GILBANEPM112321-1613

Lab Sample ID: 320-82770-5

Date Collected: 12/09/21 07:00

Matrix: Air

Date Received: 12/10/21 11:30

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00068	J B	0.00069	0.00010	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:47	1
Copper	0.015		0.0014	0.00010	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:47	1
Manganese	0.0013	B	0.00069	0.000097	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:47	1

Eurofins TestAmerica, Sacramento

Client Sample Results

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

Job ID: 320-82770-1

Client Sample ID: GILBANEPM112321-1613

Lab Sample ID: 320-82770-5

Date Collected: 12/09/21 07:00

Matrix: Air

Date Received: 12/10/21 11:30

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	7.3		0.29	0.29	ug/m3			12/10/21 15:30	1

Client Sample ID: GILBANETSP112321-1613

Lab Sample ID: 320-82770-6

Date Collected: 12/09/21 07:00

Matrix: Air

Date Received: 12/10/21 11:30

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	7.5775		0.3007	0.3007	ug/m3 (Air)			12/10/21 15:30	1

Client Sample ID: GILBANEPM112321-1614

Lab Sample ID: 320-82770-7

Date Collected: 12/09/21 06:45

Matrix: Air

Date Received: 12/10/21 11:30

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00099	B	0.00083	0.00013	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:50	1
Copper	0.036		0.0017	0.00013	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:50	1
Manganese	0.0015	B	0.00083	0.00012	ug/m3 (Air)		12/13/21 07:00	12/13/21 13:50	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	8.9		0.35	0.35	ug/m3			12/10/21 15:30	1

Client Sample ID: GILBANETSP112321-1614

Lab Sample ID: 320-82770-8

Date Collected: 12/09/21 06:45

Matrix: Air

Date Received: 12/10/21 11:30

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	11.7148		0.3446	0.3446	ug/m3 (Air)			12/10/21 15:30	1

QC Sample Results

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

Job ID: 320-82770-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-550309/1-B
Matrix: Air
Analysis Batch: 550545

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 550334

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	0.000422	J	0.0012	0.00018	ug/m3 (Air)		12/13/21 07:00	12/13/21 12:01	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		12/13/21 07:00	12/13/21 12:01	1
Manganese	0.000450	J	0.0012	0.00017	ug/m3 (Air)		12/13/21 07:00	12/13/21 12:01	1

Lab Sample ID: LCS 320-550309/2-B
Matrix: Air
Analysis Batch: 550545

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 550334

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.240	0.243		ug/m3 (Air)		101	85 - 110
Manganese	0.240	0.240		ug/m3 (Air)		100	88 - 110

Lab Sample ID: LCSD 320-550309/3-B
Matrix: Air
Analysis Batch: 550545

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 550334

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Lead	0.240	0.248		ug/m3 (Air)		103	86 - 111	2	15
Copper	0.240	0.247		ug/m3 (Air)		103	85 - 110	1	15
Manganese	0.240	0.241		ug/m3 (Air)		100	88 - 110	0	15

QC Association Summary

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

Job ID: 320-82770-1

Metals

Pre Prep Batch: 550309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82770-1	GILBANEPM112321-1611	Total/NA	Air	Filter to Air	
320-82770-3	GILBANEPM112321-1612	Total/NA	Air	Filter to Air	
320-82770-5	GILBANEPM112321-1613	Total/NA	Air	Filter to Air	
320-82770-7	GILBANEPM112321-1614	Total/NA	Air	Filter to Air	
MB 320-550309/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-550309/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-550309/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 550334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82770-1	GILBANEPM112321-1611	Total/NA	Air	3050B	550309
320-82770-3	GILBANEPM112321-1612	Total/NA	Air	3050B	550309
320-82770-5	GILBANEPM112321-1613	Total/NA	Air	3050B	550309
320-82770-7	GILBANEPM112321-1614	Total/NA	Air	3050B	550309
MB 320-550309/1-B	Method Blank	Total/NA	Air	3050B	550309
LCS 320-550309/2-B	Lab Control Sample	Total/NA	Air	3050B	550309
LCSD 320-550309/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	550309

Analysis Batch: 550545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82770-1	GILBANEPM112321-1611	Total/NA	Air	6020	550334
320-82770-3	GILBANEPM112321-1612	Total/NA	Air	6020	550334
320-82770-5	GILBANEPM112321-1613	Total/NA	Air	6020	550334
320-82770-7	GILBANEPM112321-1614	Total/NA	Air	6020	550334
MB 320-550309/1-B	Method Blank	Total/NA	Air	6020	550334
LCS 320-550309/2-B	Lab Control Sample	Total/NA	Air	6020	550334
LCSD 320-550309/3-B	Lab Control Sample Dup	Total/NA	Air	6020	550334

General Chemistry

Pre Prep Batch: 550388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82770-2	GILBANETSP112321-1611	Total/NA	Air	Filter to Air	
320-82770-4	GILBANETSP112321-1612	Total/NA	Air	Filter to Air	
320-82770-6	GILBANETSP112321-1613	Total/NA	Air	Filter to Air	
320-82770-8	GILBANETSP112321-1614	Total/NA	Air	Filter to Air	

Analysis Batch: 550577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82770-2	GILBANETSP112321-1611	Total/NA	Air	40CFR50 App B	550388
320-82770-4	GILBANETSP112321-1612	Total/NA	Air	40CFR50 App B	550388
320-82770-6	GILBANETSP112321-1613	Total/NA	Air	40CFR50 App B	550388
320-82770-8	GILBANETSP112321-1614	Total/NA	Air	40CFR50 App B	550388

Analysis Batch: 550579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82770-1	GILBANEPM112321-1611	Total/NA	Air	PM10	
320-82770-3	GILBANEPM112321-1612	Total/NA	Air	PM10	
320-82770-5	GILBANEPM112321-1613	Total/NA	Air	PM10	
320-82770-7	GILBANEPM112321-1614	Total/NA	Air	PM10	

Eurofins TestAmerica, Sacramento

Lab Chronicle

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

Job ID: 320-82770-1

Client Sample ID: GILBANEPM112321-1611

Lab Sample ID: 320-82770-1

Date Collected: 12/08/21 07:00

Matrix: Air

Date Received: 12/10/21 11:30

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					550309	12/13/21 06:05	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	550334	12/13/21 07:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			550545	12/13/21 13:41	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0252 g	550579	12/10/21 15:30	DPM	TAL SAC

Client Sample ID: GILBANETSP112321-1611

Lab Sample ID: 320-82770-2

Date Collected: 12/08/21 07:00

Matrix: Air

Date Received: 12/10/21 11:30

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			550577	12/10/21 15:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					550388	12/13/21 10:58	DPM	TAL SAC

Client Sample ID: GILBANEPM112321-1612

Lab Sample ID: 320-82770-3

Date Collected: 12/08/21 06:47

Matrix: Air

Date Received: 12/10/21 11:30

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					550309	12/13/21 06:05	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	550334	12/13/21 07:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			550545	12/13/21 13:44	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0252 g	550579	12/10/21 15:30	DPM	TAL SAC

Client Sample ID: GILBANETSP112321-1612

Lab Sample ID: 320-82770-4

Date Collected: 12/08/21 06:47

Matrix: Air

Date Received: 12/10/21 11:30

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			550577	12/10/21 15:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					550388	12/13/21 10:58	DPM	TAL SAC

Client Sample ID: GILBANEPM112321-1613

Lab Sample ID: 320-82770-5

Date Collected: 12/09/21 07:00

Matrix: Air

Date Received: 12/10/21 11:30

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					550309	12/13/21 06:05	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	550334	12/13/21 07:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			550545	12/13/21 13:47	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0126 g	550579	12/10/21 15:30	DPM	TAL SAC

Lab Chronicle

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

Job ID: 320-82770-1

Client Sample ID: GILBANETSP112321-1613

Lab Sample ID: 320-82770-6

Date Collected: 12/09/21 07:00

Matrix: Air

Date Received: 12/10/21 11:30

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			550577	12/10/21 15:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					550388	12/13/21 10:58	DPM	TAL SAC

Client Sample ID: GILBANEPM112321-1614

Lab Sample ID: 320-82770-7

Date Collected: 12/09/21 06:45

Matrix: Air

Date Received: 12/10/21 11:30

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					550309	12/13/21 06:05	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	550334	12/13/21 07:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			550545	12/13/21 13:50	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0128 g	550579	12/10/21 15:30	DPM	TAL SAC

Client Sample ID: GILBANETSP112321-1614

Lab Sample ID: 320-82770-8

Date Collected: 12/09/21 06:45

Matrix: Air

Date Received: 12/10/21 11:30

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			550577	12/10/21 15:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					550388	12/13/21 10:58	DPM	TAL SAC

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 320-82770-1

Laboratory: Eurofins TestAmerica, 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	01-29-22

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

Job ID: 320-82770-1

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 TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600



Sample Summary

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

Job ID: 320-82770-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-82770-1	GILBANEPM112321-1611	Air	12/08/21 07:00	12/10/21 11:30
320-82770-2	GILBANETSP112321-1611	Air	12/08/21 07:00	12/10/21 11:30
320-82770-3	GILBANEPM112321-1612	Air	12/08/21 06:47	12/10/21 11:30
320-82770-4	GILBANETSP112321-1612	Air	12/08/21 06:47	12/10/21 11:30
320-82770-5	GILBANEPM112321-1613	Air	12/09/21 07:00	12/10/21 11:30
320-82770-6	GILBANETSP112321-1613	Air	12/09/21 07:00	12/10/21 11:30
320-82770-7	GILBANEPM112321-1614	Air	12/09/21 06:45	12/10/21 11:30
320-82770-8	GILBANETSP112321-1614	Air	12/09/21 06:45	12/10/21 11:30

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**CHAIN-OF-CUSTODY
RECORD**

Gilbane Federal
Brett Womack
1655 Grant Street, Suite 1200, Concord, CA 94520
bwomack@gilbaneco.com

COC # KT120921AIR



Project Name: Hunters Point Shipyard, Parcel E RA Phase 2
 Project Number: J310000400
 WBS Code: J310000400-016
 Laboratory: Eurofins Environment Testing TestAmerica-Sacramento, West Sacramento, CA
 POB: [Redacted]
 Ship to: 880 Riverside Parkway, West Sacramento, CA 95605
 Event: Parcel E Phase 2 Air Monitoring December 2021

Comments:

Equipment:

Analytical Test Method

CAIR - Air PM10	1	1	1	SW6020 - Air Pb Mn Cu
N0500 - Air TSP	1	1	1	

Code Matrix

Code	Matrix
A	Air

Container/Preservative

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

320-82770 Chain of Custody

Sample ID	Matrix	Date	Time	Samp Init.	CAIR - Air PM10	N0500 - Air TSP	SW6020 - Air Pb Mn Cu	Location ID	Sample Type	Depth (ft bgs)		Cooler	Comments
										Top	Bottom		
1	GILBANEPM112321-1611	12/08/2021	0700	KT	X	X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1706.52
2	GILBANEPM112321-1611	12/08/2021	0700	KT	X	X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1631.37
3	GILBANEPM112321-1612	12/08/2021	0647	KT	X	X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1702.24
4	GILBANEPM112321-1612	12/08/2021	0647	KT	X	X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1719.63
5	GILBANEPM112321-1613	12/09/2021	0700	KT	X	X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1727.91
6	GILBANEPM112321-1613	12/09/2021	0700	KT	X	X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1662.81
7	GILBANEPM112321-1614	12/09/2021	0645	KT	X	X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1438.64
8	GILBANEPM112321-1614	12/09/2021	0645	KT	X	X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1451.16
9	TP												
10													

Turnaround Time: 5 days

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[Redacted]	12/19/21	1600	Fedex	12/19/21	1600
[Redacted]			[Redacted]	12-10-21	1130
[Redacted]			[Redacted]		
Received by Laboratory: (Signature, Date, Time) & condition					

17.6



Login Sample Receipt Checklist

Client: Gilbane Federal

Job Number: 320-82770-1

Login Number: 82770

List Source: Eurofins TestAmerica, Sacramento

List Number: 1

Creator: [REDACTED]

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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	AMBIENT TEMP
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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: [REDACTED]

Laboratory Job ID: 320-82961-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

For:
Gilbane Federal
2355 E. Camelback Road
Suite 850
Phoenix, Arizona 85016

Attn: [REDACTED]

Authorized for release by:
12/23/2021 4:24:08 PM

[REDACTED]
[REDACTED]
[REDACTED]

LINKS

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results through
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www.eurofinsus.com/Env

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

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

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

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Definitions/Glossary

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

Job ID: 320-82961-1

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.
α	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: Gilbane Federal
Project/Site: Hunters Point, Parcel E, Phase 2

Job ID: 320-82961-1

Job ID: 320-82961-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-82961-1

Comments

No additional comments.

Receipt

The samples were received on 12/15/2021 11:00 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 14.5° C.

Metals

Method 40CFR50 App B: Sample GILBANETSP112321-1616 (320-82961-4) was received with damage to corners of the sampling filter.

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



Detection Summary

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

Job ID: 320-82961-1

Client Sample ID: GILBANEPM112321-1615

Lab Sample ID: 320-82961-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0059		0.0020	0.00030	ug/m3 (Air)	1		6020	Total/NA
Copper	0.17		0.0040	0.00030	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0095		0.0020	0.00028	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	18		0.83	0.83	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP112321-1615

Lab Sample ID: 320-82961-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	24.8926		0.8765	0.8765	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM112321-1616

Lab Sample ID: 320-82961-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0018	J	0.0020	0.00030	ug/m3 (Air)	1		6020	Total/NA
Copper	0.033		0.0040	0.00030	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0033		0.0020	0.00028	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	8.8		0.83	0.83	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP112321-1616

Lab Sample ID: 320-82961-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	2.6023		0.8132	0.8132	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Sacramento

Client Sample Results

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

Job ID: 320-82961-1

Client Sample ID: GILBANEPM112321-1615

Lab Sample ID: 320-82961-1

Date Collected: 12/09/21 15:20

Matrix: Air

Date Received: 12/15/21 11:00

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0059		0.0020	0.00030	ug/m3 (Air)		12/23/21 09:31	12/23/21 11:41	1
Copper	0.17		0.0040	0.00030	ug/m3 (Air)		12/23/21 09:31	12/23/21 11:41	1
Manganese	0.0095		0.0020	0.00028	ug/m3 (Air)		12/23/21 09:31	12/23/21 11:41	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	18		0.83	0.83	ug/m3			12/21/21 18:00	1

Client Sample ID: GILBANETSP112321-1615

Lab Sample ID: 320-82961-2

Date Collected: 12/09/21 15:20

Matrix: Air

Date Received: 12/15/21 11:00

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	24.8926		0.8765	0.8765	ug/m3 (Air)			12/21/21 18:00	1

Client Sample ID: GILBANEPM112321-1616

Lab Sample ID: 320-82961-3

Date Collected: 12/09/21 15:08

Matrix: Air

Date Received: 12/15/21 11:00

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0018	J	0.0020	0.00030	ug/m3 (Air)		12/23/21 09:31	12/23/21 12:03	1
Copper	0.033		0.0040	0.00030	ug/m3 (Air)		12/23/21 09:31	12/23/21 12:03	1
Manganese	0.0033		0.0020	0.00028	ug/m3 (Air)		12/23/21 09:31	12/23/21 12:03	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	8.8		0.83	0.83	ug/m3			12/21/21 18:00	1

Client Sample ID: GILBANETSP112321-1616

Lab Sample ID: 320-82961-4

Date Collected: 12/09/21 15:08

Matrix: Air

Date Received: 12/15/21 11:00

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	2.6023		0.8132	0.8132	ug/m3 (Air)			12/21/21 18:00	1

QC Sample Results

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

Job ID: 320-82961-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-553406/1-B
Matrix: Air
Analysis Batch: 553630

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 553408

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		12/23/21 09:31	12/23/21 11:31	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		12/23/21 09:31	12/23/21 11:31	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		12/23/21 09:31	12/23/21 11:31	1

Lab Sample ID: LCS 320-553406/2-B
Matrix: Air
Analysis Batch: 553630

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 553408

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	0.257		ug/m3 (Air)		107	85 - 110
Manganese	0.240	0.262		ug/m3 (Air)		109	88 - 110

Lab Sample ID: LCSD 320-553406/3-B
Matrix: Air
Analysis Batch: 553630

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 553408

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	0.240	0.239		ug/m3 (Air)		100	86 - 111	1	15
Copper	0.240	0.254		ug/m3 (Air)		106	85 - 110	1	15
Manganese	0.240	0.260		ug/m3 (Air)		108	88 - 110	1	15

QC Association Summary

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

Job ID: 320-82961-1

Metals

Pre Prep Batch: 553406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82961-1	GILBANEPM112321-1615	Total/NA	Air	Filter to Air	
320-82961-3	GILBANEPM112321-1616	Total/NA	Air	Filter to Air	
MB 320-553406/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-553406/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-553406/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 553408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82961-1	GILBANEPM112321-1615	Total/NA	Air	3050B	553406
320-82961-3	GILBANEPM112321-1616	Total/NA	Air	3050B	553406
MB 320-553406/1-B	Method Blank	Total/NA	Air	3050B	553406
LCS 320-553406/2-B	Lab Control Sample	Total/NA	Air	3050B	553406
LCSD 320-553406/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	553406

Analysis Batch: 553630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82961-1	GILBANEPM112321-1615	Total/NA	Air	6020	553408
320-82961-3	GILBANEPM112321-1616	Total/NA	Air	6020	553408
MB 320-553406/1-B	Method Blank	Total/NA	Air	6020	553408
LCS 320-553406/2-B	Lab Control Sample	Total/NA	Air	6020	553408
LCSD 320-553406/3-B	Lab Control Sample Dup	Total/NA	Air	6020	553408

General Chemistry

Pre Prep Batch: 553541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82961-2	GILBANETSP112321-1615	Total/NA	Air	Filter to Air	
320-82961-4	GILBANETSP112321-1616	Total/NA	Air	Filter to Air	

Analysis Batch: 553572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82961-1	GILBANEPM112321-1615	Total/NA	Air	PM10	
320-82961-3	GILBANEPM112321-1616	Total/NA	Air	PM10	

Analysis Batch: 553574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-82961-2	GILBANETSP112321-1615	Total/NA	Air	40CFR50 App B	553541
320-82961-4	GILBANETSP112321-1616	Total/NA	Air	40CFR50 App B	553541

Lab Chronicle

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

Job ID: 320-82961-1

Client Sample ID: GILBANEPM112321-1615

Lab Sample ID: 320-82961-1

Date Collected: 12/09/21 15:20

Matrix: Air

Date Received: 12/15/21 11:00

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					553406	12/23/21 09:28	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	553408	12/23/21 09:31	NIM	TAL SAC
Total/NA	Analysis	6020		1			553630	12/23/21 11:41	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0107 g	553572	12/21/21 18:00	DPM	TAL SAC

Client Sample ID: GILBANETSP112321-1615

Lab Sample ID: 320-82961-2

Date Collected: 12/09/21 15:20

Matrix: Air

Date Received: 12/15/21 11:00

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			553574	12/21/21 18:00	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					553541	12/23/21 14:16	DPM	TAL SAC

Client Sample ID: GILBANEPM112321-1616

Lab Sample ID: 320-82961-3

Date Collected: 12/09/21 15:08

Matrix: Air

Date Received: 12/15/21 11:00

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					553406	12/23/21 09:28	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	553408	12/23/21 09:31	NIM	TAL SAC
Total/NA	Analysis	6020		1			553630	12/23/21 12:03	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0053 g	553572	12/21/21 18:00	DPM	TAL SAC

Client Sample ID: GILBANETSP112321-1616

Lab Sample ID: 320-82961-4

Date Collected: 12/09/21 15:08

Matrix: Air

Date Received: 12/15/21 11:00

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			553574	12/21/21 18:00	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					553541	12/23/21 14:16	DPM	TAL SAC

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 320-82961-1

Laboratory: Eurofins TestAmerica, 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	01-29-22

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

Job ID: 320-82961-1

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 TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600



Sample Summary

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

Job ID: 320-82961-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-82961-1	GILBANEPM112321-1615	Air	12/09/21 15:20	12/15/21 11:00
320-82961-2	GILBANETSP112321-1615	Air	12/09/21 15:20	12/15/21 11:00
320-82961-3	GILBANEPM112321-1616	Air	12/09/21 15:08	12/15/21 11:00
320-82961-4	GILBANETSP112321-1616	Air	12/09/21 15:08	12/15/21 11:00

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**CHAIN-OF-CUSTODY
RECORD**

Gilbane Federal
Brett Womack
1655 Grant Street, Suite 1200, Concord, CA 94520
bwomack@gilbaneco.com

COC # KT121421AIR



Project Name: Hunters Point Shipyard, Parcel E RA Phase 2
 Project Number: J310000400
 WBS Code: J310000400-016
 Laboratory: Eurofins Environment Testing TestAmerica-Sacramento, West Sacramento, CA
 POC: [Redacted]
 Ship to: 880 Riverside Parkway, West Sacramento, CA 95605
 Event: Parcel E Phase 2 Air Monitoring December 2021

Comments:

Equipment:

Analytical Test Method

CAAIR - Air PM10	1	1	1
N0500 - Air TSP	1	1	1
SW6020 - Air Pb Mn Cu	1	1	1

Code Matrix

A	Air
---	-----

Container/Preservative

1	1x 250-ml. Plastic, 4 Degrees C
1	1x Envelope, None

Barcode: 320-82961 Chain of Custody

Event: Parcel E Phase 2 Air Monitoring December 2021

Sample ID	Matrix	Date	Time	Samp Init.	Sample Type	Location ID	Depth (ft bgs)		Cooler	Comments
							Top	Bottom		
1	GILBANEPM112321-1615	A	12/09/2021	1520	KT	AMSE1	0.00	0.00	1	VOLUME: 599.45
2	GILBANETSP112321-1615	A	12/09/2021	1520	KT	AMSE1	0.00	0.00	1	VOLUME: 570.45
3	GILBANEPM112321-1616	A	12/09/2021	1508	KT	AMSE2	0.00	0.00	1	VOLUME: 601.29
4	GILBANETSP112321-1616	A	12/09/2021	1508	KT	AMSE2	0.00	0.00	1	VOLUME: 614.85
5	TP									
6										
7										
8										
9										
10										

Turnaround Time: 5 days

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[Redacted]	12/14/21	1600	Fedex	12/14/21	1600
			[Redacted]	12/14/21	1100

Shipping Date / Carrier / Airbill Number
 Shipping Date: 12/14/2021 / FedEx 7754 8872 7035

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

Login Sample Receipt Checklist

Client: Gilbane Federal

Job Number: 320-82961-1

Login Number: 82961

List Source: Eurofins TestAmerica, Sacramento

List Number: 1

Creator: [REDACTED]

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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	ambient
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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: [REDACTED]

Laboratory Job ID: 320-83145-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

For:
Gilbane Federal
2355 E. Camelback Road
Suite 850
Phoenix, Arizona 85016

Attn: Ms. [REDACTED]

[REDACTED]

Authorized for release by:
12/27/2021 9:21:46 AM

[REDACTED]

LINKS

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results through
TotalAccess

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www.eurofinsus.com/Env

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

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

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

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Definitions/Glossary

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

Job ID: 320-83145-1

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.
α	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: Gilbane Federal
Project/Site: Hunters Point, Parcel E, Phase 2

Job ID: 320-83145-1

Job ID: 320-83145-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-83145-1

Comments

No additional comments.

Receipt

The samples were received on 12/17/2021 11:00 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 17.3° C.

Metals

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

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Detection Summary

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

Job ID: 320-83145-1

Client Sample ID: GILBANEPM112321-1617

Lab Sample ID: 320-83145-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.00079		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	0.0019		0.00070	0.000098	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	8.6		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP112321-1617

Lab Sample ID: 320-83145-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	11.8638		0.3026	0.3026	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM112321-1618

Lab Sample ID: 320-83145-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.00050	J	0.00068	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.043		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0013		0.00068	0.000095	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	6.3		0.28	0.28	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP112321-1618

Lab Sample ID: 320-83145-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	10.8450		0.2781	0.2781	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM112321-1619

Lab Sample ID: 320-83145-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.00076		0.00070	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.056		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0029		0.00070	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	12		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP112321-1619

Lab Sample ID: 320-83145-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	15.3397		0.3020	0.3020	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM112321-1620

Lab Sample ID: 320-83145-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.00038	J	0.00070	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.017		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.00063	J	0.00070	0.000098	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	6.2		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP112321-1620

Lab Sample ID: 320-83145-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	12.9939		0.2862	0.2862	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Sacramento

Client Sample Results

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

Job ID: 320-83145-1

Client Sample ID: GILBANEPM112321-1617

Lab Sample ID: 320-83145-1

Date Collected: 12/15/21 07:11

Matrix: Air

Date Received: 12/17/21 11:00

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00079		0.00070	0.00010	ug/m3 (Air)		12/23/21 09:31	12/23/21 12:06	1
Copper	0.12		0.0014	0.00010	ug/m3 (Air)		12/23/21 09:31	12/23/21 12:06	1
Manganese	0.0019		0.00070	0.000098	ug/m3 (Air)		12/23/21 09:31	12/23/21 12:06	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	8.6		0.29	0.29	ug/m3			12/21/21 18:00	1

Client Sample ID: GILBANETSP112321-1617

Lab Sample ID: 320-83145-2

Date Collected: 12/15/21 07:11

Matrix: Air

Date Received: 12/17/21 11:00

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	11.8638		0.3026	0.3026	ug/m3 (Air)			12/21/21 18:00	1

Client Sample ID: GILBANEPM112321-1618

Lab Sample ID: 320-83145-3

Date Collected: 12/15/21 07:19

Matrix: Air

Date Received: 12/17/21 11:00

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00050	J	0.00068	0.00010	ug/m3 (Air)		12/23/21 09:31	12/23/21 12:10	1
Copper	0.043		0.0014	0.00010	ug/m3 (Air)		12/23/21 09:31	12/23/21 12:10	1
Manganese	0.0013		0.00068	0.000095	ug/m3 (Air)		12/23/21 09:31	12/23/21 12:10	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	6.3		0.28	0.28	ug/m3			12/21/21 18:00	1

Client Sample ID: GILBANETSP112321-1618

Lab Sample ID: 320-83145-4

Date Collected: 12/15/21 07:19

Matrix: Air

Date Received: 12/17/21 11:00

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	10.8450		0.2781	0.2781	ug/m3 (Air)			12/21/21 18:00	1

Client Sample ID: GILBANEPM112321-1619

Lab Sample ID: 320-83145-5

Date Collected: 12/16/21 06:51

Matrix: Air

Date Received: 12/17/21 11:00

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00076		0.00070	0.00010	ug/m3 (Air)		12/23/21 09:31	12/23/21 12:13	1
Copper	0.056		0.0014	0.00010	ug/m3 (Air)		12/23/21 09:31	12/23/21 12:13	1
Manganese	0.0029		0.00070	0.000097	ug/m3 (Air)		12/23/21 09:31	12/23/21 12:13	1

Euofins TestAmerica, Sacramento

Client Sample Results

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

Job ID: 320-83145-1

Client Sample ID: GILBANEPM112321-1619

Lab Sample ID: 320-83145-5

Date Collected: 12/16/21 06:51

Matrix: Air

Date Received: 12/17/21 11:00

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	12		0.29	0.29	ug/m3			12/21/21 18:00	1

Client Sample ID: GILBANETSP112321-1619

Lab Sample ID: 320-83145-6

Date Collected: 12/16/21 06:51

Matrix: Air

Date Received: 12/17/21 11:00

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	15.3397		0.3020	0.3020	ug/m3 (Air)			12/21/21 18:00	1

Client Sample ID: GILBANEPM112321-1620

Lab Sample ID: 320-83145-7

Date Collected: 12/16/21 07:05

Matrix: Air

Date Received: 12/17/21 11:00

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00038	J	0.00070	0.00010	ug/m3 (Air)		12/23/21 09:31	12/23/21 12:16	1
Copper	0.017		0.0014	0.00010	ug/m3 (Air)		12/23/21 09:31	12/23/21 12:16	1
Manganese	0.00063	J	0.00070	0.000098	ug/m3 (Air)		12/23/21 09:31	12/23/21 12:16	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	6.2		0.29	0.29	ug/m3			12/21/21 18:00	1

Client Sample ID: GILBANETSP112321-1620

Lab Sample ID: 320-83145-8

Date Collected: 12/16/21 07:05

Matrix: Air

Date Received: 12/17/21 11:00

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	12.9939		0.2862	0.2862	ug/m3 (Air)			12/21/21 18:00	1

QC Sample Results

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

Job ID: 320-83145-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-553406/1-B
Matrix: Air
Analysis Batch: 553630

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 553408

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		12/23/21 09:31	12/23/21 11:31	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		12/23/21 09:31	12/23/21 11:31	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		12/23/21 09:31	12/23/21 11:31	1

Lab Sample ID: LCS 320-553406/2-B
Matrix: Air
Analysis Batch: 553630

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 553408

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	0.257		ug/m3 (Air)		107	85 - 110
Manganese	0.240	0.262		ug/m3 (Air)		109	88 - 110

Lab Sample ID: LCSD 320-553406/3-B
Matrix: Air
Analysis Batch: 553630

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 553408

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	0.240	0.239		ug/m3 (Air)		100	86 - 111	1	15
Copper	0.240	0.254		ug/m3 (Air)		106	85 - 110	1	15
Manganese	0.240	0.260		ug/m3 (Air)		108	88 - 110	1	15

QC Association Summary

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

Job ID: 320-83145-1

Metals

Pre Prep Batch: 553406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83145-1	GILBANEPM112321-1617	Total/NA	Air	Filter to Air	
320-83145-3	GILBANEPM112321-1618	Total/NA	Air	Filter to Air	
320-83145-5	GILBANEPM112321-1619	Total/NA	Air	Filter to Air	
320-83145-7	GILBANEPM112321-1620	Total/NA	Air	Filter to Air	
MB 320-553406/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-553406/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-553406/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 553408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83145-1	GILBANEPM112321-1617	Total/NA	Air	3050B	553406
320-83145-3	GILBANEPM112321-1618	Total/NA	Air	3050B	553406
320-83145-5	GILBANEPM112321-1619	Total/NA	Air	3050B	553406
320-83145-7	GILBANEPM112321-1620	Total/NA	Air	3050B	553406
MB 320-553406/1-B	Method Blank	Total/NA	Air	3050B	553406
LCS 320-553406/2-B	Lab Control Sample	Total/NA	Air	3050B	553406
LCSD 320-553406/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	553406

Analysis Batch: 553630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83145-1	GILBANEPM112321-1617	Total/NA	Air	6020	553408
320-83145-3	GILBANEPM112321-1618	Total/NA	Air	6020	553408
320-83145-5	GILBANEPM112321-1619	Total/NA	Air	6020	553408
320-83145-7	GILBANEPM112321-1620	Total/NA	Air	6020	553408
MB 320-553406/1-B	Method Blank	Total/NA	Air	6020	553408
LCS 320-553406/2-B	Lab Control Sample	Total/NA	Air	6020	553408
LCSD 320-553406/3-B	Lab Control Sample Dup	Total/NA	Air	6020	553408

General Chemistry

Pre Prep Batch: 553541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83145-2	GILBANETSP112321-1617	Total/NA	Air	Filter to Air	
320-83145-4	GILBANETSP112321-1618	Total/NA	Air	Filter to Air	
320-83145-6	GILBANETSP112321-1619	Total/NA	Air	Filter to Air	
320-83145-8	GILBANETSP112321-1620	Total/NA	Air	Filter to Air	

Analysis Batch: 553572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83145-1	GILBANEPM112321-1617	Total/NA	Air	PM10	
320-83145-3	GILBANEPM112321-1618	Total/NA	Air	PM10	
320-83145-5	GILBANEPM112321-1619	Total/NA	Air	PM10	
320-83145-7	GILBANEPM112321-1620	Total/NA	Air	PM10	

Analysis Batch: 553574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83145-2	GILBANETSP112321-1617	Total/NA	Air	40CFR50 App B	553541
320-83145-4	GILBANETSP112321-1618	Total/NA	Air	40CFR50 App B	553541
320-83145-6	GILBANETSP112321-1619	Total/NA	Air	40CFR50 App B	553541
320-83145-8	GILBANETSP112321-1620	Total/NA	Air	40CFR50 App B	553541

Eurofins TestAmerica, Sacramento

Lab Chronicle

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

Job ID: 320-83145-1

Client Sample ID: GILBANEPM112321-1617

Lab Sample ID: 320-83145-1

Date Collected: 12/15/21 07:11

Matrix: Air

Date Received: 12/17/21 11:00

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					553406	12/23/21 09:28	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	553408	12/23/21 09:31	NIM	TAL SAC
Total/NA	Analysis	6020		1			553630	12/23/21 12:06	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0148 g	553572	12/21/21 18:00	DPM	TAL SAC

Client Sample ID: GILBANETSP112321-1617

Lab Sample ID: 320-83145-2

Date Collected: 12/15/21 07:11

Matrix: Air

Date Received: 12/17/21 11:00

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			553574	12/21/21 18:00	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					553541	12/23/21 14:16	DPM	TAL SAC

Client Sample ID: GILBANEPM112321-1618

Lab Sample ID: 320-83145-3

Date Collected: 12/15/21 07:19

Matrix: Air

Date Received: 12/17/21 11:00

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					553406	12/23/21 09:28	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	553408	12/23/21 09:31	NIM	TAL SAC
Total/NA	Analysis	6020		1			553630	12/23/21 12:10	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0111 g	553572	12/21/21 18:00	DPM	TAL SAC

Client Sample ID: GILBANETSP112321-1618

Lab Sample ID: 320-83145-4

Date Collected: 12/15/21 07:19

Matrix: Air

Date Received: 12/17/21 11:00

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			553574	12/21/21 18:00	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					553541	12/23/21 14:16	DPM	TAL SAC

Client Sample ID: GILBANEPM112321-1619

Lab Sample ID: 320-83145-5

Date Collected: 12/16/21 06:51

Matrix: Air

Date Received: 12/17/21 11:00

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					553406	12/23/21 09:28	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	553408	12/23/21 09:31	NIM	TAL SAC
Total/NA	Analysis	6020		1			553630	12/23/21 12:13	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0204 g	553572	12/21/21 18:00	DPM	TAL SAC

Lab Chronicle

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

Job ID: 320-83145-1

Client Sample ID: GILBANETSP112321-1619

Lab Sample ID: 320-83145-6

Date Collected: 12/16/21 06:51

Matrix: Air

Date Received: 12/17/21 11:00

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			553574	12/21/21 18:00	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					553541	12/23/21 14:16	DPM	TAL SAC

Client Sample ID: GILBANEPM112321-1620

Lab Sample ID: 320-83145-7

Date Collected: 12/16/21 07:05

Matrix: Air

Date Received: 12/17/21 11:00

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					553406	12/23/21 09:28	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	553408	12/23/21 09:31	NIM	TAL SAC
Total/NA	Analysis	6020		1			553630	12/23/21 12:16	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0106 g	553572	12/21/21 18:00	DPM	TAL SAC

Client Sample ID: GILBANETSP112321-1620

Lab Sample ID: 320-83145-8

Date Collected: 12/16/21 07:05

Matrix: Air

Date Received: 12/17/21 11:00

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			553574	12/21/21 18:00	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					553541	12/23/21 14:16	DPM	TAL SAC

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 320-83145-1

Laboratory: Eurofins TestAmerica, 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	01-29-22

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

Job ID: 320-83145-1

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 TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600



Sample Summary

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

Job ID: 320-83145-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-83145-1	GILBANEPM112321-1617	Air	12/15/21 07:11	12/17/21 11:00
320-83145-2	GILBANETSP112321-1617	Air	12/15/21 07:11	12/17/21 11:00
320-83145-3	GILBANEPM112321-1618	Air	12/15/21 07:19	12/17/21 11:00
320-83145-4	GILBANETSP112321-1618	Air	12/15/21 07:19	12/17/21 11:00
320-83145-5	GILBANEPM112321-1619	Air	12/16/21 06:51	12/17/21 11:00
320-83145-6	GILBANETSP112321-1619	Air	12/16/21 06:51	12/17/21 11:00
320-83145-7	GILBANEPM112321-1620	Air	12/16/21 07:05	12/17/21 11:00
320-83145-8	GILBANETSP112321-1620	Air	12/16/21 07:05	12/17/21 11:00

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**CHAIN-OF-CUSTODY
RECORD**

Gilbane Federal
Brett Womack
1655 Grant Street, Suite 1200, Concord, CA 94520
bwomack@gilbaneco.com

COC # KT121621AIR



Project Name: Hunters Point Shipyard, Parcel E RA Phase 2
Project Number: J310000400
WBS Code: J310000400-016
Laboratory: Eurofins Environment Testing TestAmerica-Sacramento, West Sacramento, CA
POC: [Redacted]
Ship to: 880 Riverside Parkway, West Sacramento, CA 95605
Event: Parcel E Phase 2 Air Monitoring December 2021

Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method		Location ID	Sample Type	Depth (ft bgs)		Cooler	Comments
					CAIR - Air PM10	N0500 - Air TSP			Top - Bottom	Top - Bottom		
1	A	12/15/2021	0711	KT	X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1717.02
2	A	12/15/2021	0711	KT	X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1652.08
3	A	12/15/2021	0719	KT	X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1761.44
4	A	12/15/2021	0719	KT	X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1798.06
5	A	12/16/2021	0651	KT	X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1724.36
6	A	12/16/2021	0651	KT	X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1655.83
7	A	12/16/2021	0705	KT	X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1721.04
8	A	12/16/2021	0705	KT	X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1746.97
9												
10												



Code	Matrix
A	Air

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Shipping Date / Carrier / Airbill Number
[Redacted]	12/16/21	1600	Fedex	12/16/21	1600	Shipping Date: 12/16/2021 / FedEx 7755 2117 7139
			[Redacted]	12/17/21	1100	

Turnaround Time: 5 days

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

1730



Login Sample Receipt Checklist

Client: Gilbane Federal

Job Number: 320-83145-1

Login Number: 83145

List Source: Eurofins TestAmerica, Sacramento

List Number: 1

Creator: [REDACTED]

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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	No ice per client request.
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?	N/A	
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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins TestAmerica, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: [REDACTED]

Laboratory Job ID: 320-83289-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

For:
Gilbane Federal
2355 E. Camelback Road
Suite 850
Phoenix, Arizona 85016

Attn: Ms. [REDACTED]
[REDACTED]

Authorized for release by:
12/30/2021 10:17:41 AM
[REDACTED]

LINKS

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results through
TotalAccess

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www.eurofinsus.com/Env

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

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

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



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Definitions/Glossary

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

Job ID: 320-83289-1

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.
α	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: Gilbane Federal
Project/Site: Hunters Point, Parcel E, Phase 2

Job ID: 320-83289-1

Job ID: 320-83289-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-83289-1

Comments

No additional comments.

Receipt

The samples were received on 12/22/2021 11:10 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 18.1° C.

Metals

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

- 1
- 2
- 3
- 4
- 5
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- 7
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- 9
- 10
- 11
- 12
- 13
- 14

Detection Summary

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

Job ID: 320-83289-1

Client Sample ID: GILBANEPM112321-1621

Lab Sample ID: 320-83289-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0013	J B	0.0020	0.00030	ug/m3 (Air)	1		6020	Total/NA
Copper	0.11		0.0041	0.00030	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0053	B	0.0020	0.00028	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	13		0.85	0.85	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP112321-1621

Lab Sample ID: 320-83289-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	11.8285		0.8827	0.8827	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM112321-1622

Lab Sample ID: 320-83289-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0011	J B	0.0022	0.00032	ug/m3 (Air)	1		6020	Total/NA
Copper	0.037		0.0043	0.00032	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0037	B	0.0022	0.00030	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	7.5		0.90	0.90	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP112321-1622

Lab Sample ID: 320-83289-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	15.5791		0.8954	0.8954	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM112321-1623

Lab Sample ID: 320-83289-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0016	B	0.00070	0.00011	ug/m3 (Air)	1		6020	Total/NA
Copper	0.17		0.0014	0.00011	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0041	B	0.00070	0.000098	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	21		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP112321-1623

Lab Sample ID: 320-83289-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	24.6456		0.3020	0.3020	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM112321-1624

Lab Sample ID: 320-83289-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0016	B	0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.024		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0021	B	0.00069	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	15		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP112321-1624

Lab Sample ID: 320-83289-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	21.1759		0.2885	0.2885	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Sacramento

Client Sample Results

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

Job ID: 320-83289-1

Client Sample ID: GILBANEPM112321-1621

Lab Sample ID: 320-83289-1

Date Collected: 12/16/21 15:02

Matrix: Air

Date Received: 12/22/21 11:10

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0013	J B	0.0020	0.00030	ug/m3 (Air)		12/28/21 12:23	12/28/21 17:19	1
Copper	0.11		0.0041	0.00030	ug/m3 (Air)		12/28/21 12:23	12/28/21 17:19	1
Manganese	0.0053	B	0.0020	0.00028	ug/m3 (Air)		12/28/21 12:23	12/28/21 17:19	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	13		0.85	0.85	ug/m3			12/26/21 10:30	1

Client Sample ID: GILBANETSP112321-1621

Lab Sample ID: 320-83289-2

Date Collected: 12/16/21 15:02

Matrix: Air

Date Received: 12/22/21 11:10

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	11.8285		0.8827	0.8827	ug/m3 (Air)			12/26/21 10:30	1

Client Sample ID: GILBANEPM112321-1622

Lab Sample ID: 320-83289-3

Date Collected: 12/16/21 14:48

Matrix: Air

Date Received: 12/22/21 11:10

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0011	J B	0.0022	0.00032	ug/m3 (Air)		12/28/21 12:23	12/28/21 17:29	1
Copper	0.037		0.0043	0.00032	ug/m3 (Air)		12/28/21 12:23	12/28/21 17:29	1
Manganese	0.0037	B	0.0022	0.00030	ug/m3 (Air)		12/28/21 12:23	12/28/21 17:29	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	7.5		0.90	0.90	ug/m3			12/26/21 10:30	1

Client Sample ID: GILBANETSP112321-1622

Lab Sample ID: 320-83289-4

Date Collected: 12/16/21 14:48

Matrix: Air

Date Received: 12/22/21 11:10

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	15.5791		0.8954	0.8954	ug/m3 (Air)			12/26/21 10:30	1

Client Sample ID: GILBANEPM112321-1623

Lab Sample ID: 320-83289-5

Date Collected: 12/21/21 07:14

Matrix: Air

Date Received: 12/22/21 11:10

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0016	B	0.00070	0.00011	ug/m3 (Air)		12/28/21 12:23	12/28/21 17:32	1
Copper	0.17		0.0014	0.00011	ug/m3 (Air)		12/28/21 12:23	12/28/21 17:32	1
Manganese	0.0041	B	0.00070	0.000098	ug/m3 (Air)		12/28/21 12:23	12/28/21 17:32	1

Euofins TestAmerica, Sacramento

Client Sample Results

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

Job ID: 320-83289-1

Client Sample ID: GILBANEPM112321-1623

Lab Sample ID: 320-83289-5

Date Collected: 12/21/21 07:14

Matrix: Air

Date Received: 12/22/21 11:10

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	21		0.29	0.29	ug/m3			12/26/21 10:30	1

Client Sample ID: GILBANETSP112321-1623

Lab Sample ID: 320-83289-6

Date Collected: 12/21/21 07:14

Matrix: Air

Date Received: 12/22/21 11:10

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	24.6456		0.3020	0.3020	ug/m3 (Air)			12/26/21 10:30	1

Client Sample ID: GILBANEPM112321-1624

Lab Sample ID: 320-83289-7

Date Collected: 12/21/21 06:47

Matrix: Air

Date Received: 12/22/21 11:10

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0016	B	0.00069	0.00010	ug/m3 (Air)		12/28/21 12:23	12/28/21 17:36	1
Copper	0.024		0.0014	0.00010	ug/m3 (Air)		12/28/21 12:23	12/28/21 17:36	1
Manganese	0.0021	B	0.00069	0.000097	ug/m3 (Air)		12/28/21 12:23	12/28/21 17:36	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	15		0.29	0.29	ug/m3			12/26/21 10:30	1

Client Sample ID: GILBANETSP112321-1624

Lab Sample ID: 320-83289-8

Date Collected: 12/21/21 06:47

Matrix: Air

Date Received: 12/22/21 11:10

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	21.1759		0.2885	0.2885	ug/m3 (Air)			12/26/21 10:30	1

QC Sample Results

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

Job ID: 320-83289-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-554399/1-B
Matrix: Air
Analysis Batch: 554701

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 554410

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	0.000191	J	0.0012	0.00018	ug/m3 (Air)		12/28/21 12:23	12/28/21 16:37	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		12/28/21 12:23	12/28/21 16:37	1
Manganese	0.000252	J	0.0012	0.00017	ug/m3 (Air)		12/28/21 12:23	12/28/21 16:37	1

Lab Sample ID: LCS 320-554399/2-B
Matrix: Air
Analysis Batch: 554701

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 554410

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.240	0.256		ug/m3 (Air)		107	85 - 110
Manganese	0.240	0.256		ug/m3 (Air)		107	88 - 110

Lab Sample ID: LCSD 320-554399/3-B
Matrix: Air
Analysis Batch: 554701

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 554410

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
Lead	0.240	0.255		ug/m3 (Air)		106	86 - 111	3	15
Copper	0.240	0.262		ug/m3 (Air)		109	85 - 110	2	15
Manganese	0.240	0.264		ug/m3 (Air)		110	88 - 110	3	15

QC Association Summary

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

Job ID: 320-83289-1

Metals

Pre Prep Batch: 554399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83289-1	GILBANEPM112321-1621	Total/NA	Air	Filter to Air	
320-83289-3	GILBANEPM112321-1622	Total/NA	Air	Filter to Air	
320-83289-5	GILBANEPM112321-1623	Total/NA	Air	Filter to Air	
320-83289-7	GILBANEPM112321-1624	Total/NA	Air	Filter to Air	
MB 320-554399/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-554399/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-554399/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 554410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83289-1	GILBANEPM112321-1621	Total/NA	Air	3050B	554399
320-83289-3	GILBANEPM112321-1622	Total/NA	Air	3050B	554399
320-83289-5	GILBANEPM112321-1623	Total/NA	Air	3050B	554399
320-83289-7	GILBANEPM112321-1624	Total/NA	Air	3050B	554399
MB 320-554399/1-B	Method Blank	Total/NA	Air	3050B	554399
LCS 320-554399/2-B	Lab Control Sample	Total/NA	Air	3050B	554399
LCSD 320-554399/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	554399

Analysis Batch: 554701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83289-1	GILBANEPM112321-1621	Total/NA	Air	6020	554410
320-83289-3	GILBANEPM112321-1622	Total/NA	Air	6020	554410
320-83289-5	GILBANEPM112321-1623	Total/NA	Air	6020	554410
320-83289-7	GILBANEPM112321-1624	Total/NA	Air	6020	554410
MB 320-554399/1-B	Method Blank	Total/NA	Air	6020	554410
LCS 320-554399/2-B	Lab Control Sample	Total/NA	Air	6020	554410
LCSD 320-554399/3-B	Lab Control Sample Dup	Total/NA	Air	6020	554410

General Chemistry

Pre Prep Batch: 553541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83289-2	GILBANETSP112321-1621	Total/NA	Air	Filter to Air	
320-83289-4	GILBANETSP112321-1622	Total/NA	Air	Filter to Air	
320-83289-6	GILBANETSP112321-1623	Total/NA	Air	Filter to Air	
320-83289-8	GILBANETSP112321-1624	Total/NA	Air	Filter to Air	

Analysis Batch: 554593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83289-1	GILBANEPM112321-1621	Total/NA	Air	PM10	
320-83289-3	GILBANEPM112321-1622	Total/NA	Air	PM10	
320-83289-5	GILBANEPM112321-1623	Total/NA	Air	PM10	
320-83289-7	GILBANEPM112321-1624	Total/NA	Air	PM10	

Analysis Batch: 554594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83289-2	GILBANETSP112321-1621	Total/NA	Air	40CFR50 App B	553541
320-83289-4	GILBANETSP112321-1622	Total/NA	Air	40CFR50 App B	553541
320-83289-6	GILBANETSP112321-1623	Total/NA	Air	40CFR50 App B	553541
320-83289-8	GILBANETSP112321-1624	Total/NA	Air	40CFR50 App B	553541

Eurofins TestAmerica, Sacramento

Lab Chronicle

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

Job ID: 320-83289-1

Client Sample ID: GILBANEPM112321-1621

Lab Sample ID: 320-83289-1

Date Collected: 12/16/21 15:02

Matrix: Air

Date Received: 12/22/21 11:10

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					554399	12/28/21 11:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	554410	12/28/21 12:23	NIM	TAL SAC
Total/NA	Analysis	6020		1			554701	12/28/21 17:19	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0076 g	554593	12/26/21 10:30	DPM	TAL SAC

Client Sample ID: GILBANETSP112321-1621

Lab Sample ID: 320-83289-2

Date Collected: 12/16/21 15:02

Matrix: Air

Date Received: 12/22/21 11:10

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					553541	12/23/21 14:16	DPM	TAL SAC
Total/NA	Analysis	40CFR50 App B		1			554594	12/26/21 10:30	DPM	TAL SAC

Client Sample ID: GILBANEPM112321-1622

Lab Sample ID: 320-83289-3

Date Collected: 12/16/21 14:48

Matrix: Air

Date Received: 12/22/21 11:10

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					554399	12/28/21 11:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	554410	12/28/21 12:23	NIM	TAL SAC
Total/NA	Analysis	6020		1			554701	12/28/21 17:29	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0042 g	554593	12/26/21 10:30	DPM	TAL SAC

Client Sample ID: GILBANETSP112321-1622

Lab Sample ID: 320-83289-4

Date Collected: 12/16/21 14:48

Matrix: Air

Date Received: 12/22/21 11:10

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					553541	12/23/21 14:16	DPM	TAL SAC
Total/NA	Analysis	40CFR50 App B		1			554594	12/26/21 10:30	DPM	TAL SAC

Client Sample ID: GILBANEPM112321-1623

Lab Sample ID: 320-83289-5

Date Collected: 12/21/21 07:14

Matrix: Air

Date Received: 12/22/21 11:10

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					554399	12/28/21 11:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	554410	12/28/21 12:23	NIM	TAL SAC
Total/NA	Analysis	6020		1			554701	12/28/21 17:32	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0366 g	554593	12/26/21 10:30	DPM	TAL SAC

Lab Chronicle

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

Job ID: 320-83289-1

Client Sample ID: GILBANETSP112321-1623

Lab Sample ID: 320-83289-6

Date Collected: 12/21/21 07:14

Matrix: Air

Date Received: 12/22/21 11:10

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					553541	12/23/21 14:16	DPM	TAL SAC
Total/NA	Analysis	40CFR50 App B		1			554594	12/26/21 10:30	DPM	TAL SAC

Client Sample ID: GILBANEPM112321-1624

Lab Sample ID: 320-83289-7

Date Collected: 12/21/21 06:47

Matrix: Air

Date Received: 12/22/21 11:10

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					554399	12/28/21 11:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	554410	12/28/21 12:23	NIM	TAL SAC
Total/NA	Analysis	6020		1			554701	12/28/21 17:36	JMD	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0266 g	554593	12/26/21 10:30	DPM	TAL SAC

Client Sample ID: GILBANETSP112321-1624

Lab Sample ID: 320-83289-8

Date Collected: 12/21/21 06:47

Matrix: Air

Date Received: 12/22/21 11:10

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					553541	12/23/21 14:16	DPM	TAL SAC
Total/NA	Analysis	40CFR50 App B		1			554594	12/26/21 10:30	DPM	TAL SAC

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 320-83289-1

Laboratory: Eurofins TestAmerica, 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	01-29-22

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

Job ID: 320-83289-1

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 TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600



Sample Summary

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

Job ID: 320-83289-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-83289-1	GILBANEPM112321-1621	Air	12/16/21 15:02	12/22/21 11:10
320-83289-2	GILBANETSP112321-1621	Air	12/16/21 15:02	12/22/21 11:10
320-83289-3	GILBANEPM112321-1622	Air	12/16/21 14:48	12/22/21 11:10
320-83289-4	GILBANETSP112321-1622	Air	12/16/21 14:48	12/22/21 11:10
320-83289-5	GILBANEPM112321-1623	Air	12/21/21 07:14	12/22/21 11:10
320-83289-6	GILBANETSP112321-1623	Air	12/21/21 07:14	12/22/21 11:10
320-83289-7	GILBANEPM112321-1624	Air	12/21/21 06:47	12/22/21 11:10
320-83289-8	GILBANETSP112321-1624	Air	12/21/21 06:47	12/22/21 11:10

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**CHAIN-OF-CUSTODY
RECORD**

Gilbane Federal
Brett Womack
1655 Grant Street, Suite 1200, Concord, CA 94520
bwomack@gilbaneco.com

COC # KT12121AIR



Project Name: Hunters Point Shipyard, Parcel E RA Phase 2
Project Number: J310000400
WBS Code: J310000400-016
Laboratory: Eurofins Environment Testing TestAmerica-Sacramento, West Sacramento, CA
POC: [Redacted]
Ship to: 880 Riverside Parkway, West Sacramento, CA 95605
Event: Parcel E Phase 2 Air Monitoring December 2021

Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method		Location ID	Sample Type	Depth (ft bgs)		Cooler	Comments
					CAAIR - Air PM10	N0500 - Air TSP			Top - Bottom	Bottom		
1	A	12/16/2021	1502	KT	X	X	AMSE1	N2	0.00	0.00	1	VOLUME: 590.85
2	A	12/16/2021	1502	KT	X	X	AMSE1	N2	0.00	0.00	1	VOLUME: 566.43
3	A	12/16/2021	1448	KT	X	X	AMSE2	N2	0.00	0.00	1	VOLUME: 557.80
4	A	12/16/2021	1448	KT	X	X	AMSE2	N2	0.00	0.00	1	VOLUME: 558.44
5	A	12/21/2021	0714	KT	X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1710.10
6	A	12/21/2021	0714	KT	X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1655.47
7	A	12/21/2021	0647	KT	X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1735.22
8	A	12/21/2021	0647	KT	X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1733.10
9												
10												



Code	Matrix
A	Air

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

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Shipping Date / Carrier / Airbill Number
[Redacted]	12/21/21	1600	Fedex	12/21/21	1600	Shipping Date: 12/21/2021 / FedEx 7755 3384 9278
			[Redacted]	12/21/21	1110	
						Received by Laboratory: (Signature, Date, Time) & condition

Turnaround Time: 5 days



Login Sample Receipt Checklist

Client: Gilbane Federal

Job Number: 320-83289-1

Login Number: 83289

List Source: Eurofins TestAmerica, Sacramento

List Number: 1

Creator: [REDACTED]

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

Eurofins Northern California, Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: [REDACTED]

Laboratory Job ID: 320-83411-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

For:
Gilbane Federal
2355 E. Camelback Road
Suite 850
Phoenix, Arizona 85016

Attn: [REDACTED]

Authorized for release by:
1/4/2022 3:29:29 PM

[REDACTED]

LINKS

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

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

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

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Definitions/Glossary

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

Job ID: 320-83411-1

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.
α	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: Gilbane Federal
Project/Site: Hunters Point, Parcel E, Phase 2

Job ID: 320-83411-1

Job ID: 320-83411-1

Laboratory: Eurofins Northern California, Sacramento

Narrative

Job Narrative
320-83411-1

Comments

No additional comments.

Receipt

The samples were received on 12/28/2021 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 16.1° C.

Metals

Method PM10: Light particulate loading observed for GILBANEP120921-1643 (320-83411-7). The corners of the filter show some fraying.

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



Detection Summary

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

Job ID: 320-83411-1

Client Sample ID: GILBANEPM112321-1625

Lab Sample ID: 320-83411-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0015		0.00067	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.13		0.0013	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0035		0.00067	0.000094	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	18		0.28	0.28	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP112321-1625

Lab Sample ID: 320-83411-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	17.9918		0.2902	0.2902	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM112321-1626

Lab Sample ID: 320-83411-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0012		0.00068	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.044		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0022		0.00068	0.000095	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	17		0.28	0.28	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP112321-1626

Lab Sample ID: 320-83411-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	22.3979		0.2814	0.2814	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM120921-1642

Lab Sample ID: 320-83411-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0015	J	0.0031	0.00046	ug/m3 (Air)	1		6020	Total/NA
Copper	0.18		0.0061	0.00046	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0046		0.0031	0.00043	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	4.6		1.3	1.3	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP120921-1642

Lab Sample ID: 320-83411-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	10.5061		1.3133	1.3133	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM120921-1643

Lab Sample ID: 320-83411-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.00078	J	0.0031	0.00046	ug/m3 (Air)	1		6020	Total/NA
Copper	0.046		0.0061	0.00046	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0056		0.0031	0.00043	ug/m3 (Air)	1		6020	Total/NA

Client Sample ID: GILBANETSP120921-1643

Lab Sample ID: 320-83411-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	3.0169		1.2570	1.2570	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Northern California, Sacramento

Client Sample Results

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

Job ID: 320-83411-1

Client Sample ID: GILBANEPM112321-1625

Lab Sample ID: 320-83411-1

Date Collected: 12/22/21 07:38

Matrix: Air

Date Received: 12/28/21 10:30

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0015		0.00067	0.00010	ug/m3 (Air)		01/03/22 06:30	01/03/22 13:47	1
Copper	0.13		0.0013	0.00010	ug/m3 (Air)		01/03/22 06:30	01/03/22 13:47	1
Manganese	0.0035		0.00067	0.000094	ug/m3 (Air)		01/03/22 06:30	01/03/22 13:47	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	18		0.28	0.28	ug/m3			12/28/21 18:00	1

Client Sample ID: GILBANETSP112321-1625

Lab Sample ID: 320-83411-2

Date Collected: 12/22/21 07:38

Matrix: Air

Date Received: 12/28/21 10:30

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	17.9918		0.2902	0.2902	ug/m3 (Air)			12/28/21 18:00	1

Client Sample ID: GILBANEPM112321-1626

Lab Sample ID: 320-83411-3

Date Collected: 12/22/21 07:16

Matrix: Air

Date Received: 12/28/21 10:30

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0012		0.00068	0.00010	ug/m3 (Air)		01/03/22 06:30	01/03/22 13:57	1
Copper	0.044		0.0014	0.00010	ug/m3 (Air)		01/03/22 06:30	01/03/22 13:57	1
Manganese	0.0022		0.00068	0.000095	ug/m3 (Air)		01/03/22 06:30	01/03/22 13:57	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	17		0.28	0.28	ug/m3			12/28/21 18:00	1

Client Sample ID: GILBANETSP112321-1626

Lab Sample ID: 320-83411-4

Date Collected: 12/22/21 07:16

Matrix: Air

Date Received: 12/28/21 10:30

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	22.3979		0.2814	0.2814	ug/m3 (Air)			12/28/21 18:00	1

Client Sample ID: GILBANEPM120921-1642

Lab Sample ID: 320-83411-5

Date Collected: 12/22/21 13:14

Matrix: Air

Date Received: 12/28/21 10:30

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0015	J	0.0031	0.00046	ug/m3 (Air)		01/03/22 06:30	01/03/22 14:00	1
Copper	0.18		0.0061	0.00046	ug/m3 (Air)		01/03/22 06:30	01/03/22 14:00	1
Manganese	0.0046		0.0031	0.00043	ug/m3 (Air)		01/03/22 06:30	01/03/22 14:00	1

Eurofins Northern California, Sacramento

Client Sample Results

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

Job ID: 320-83411-1

Client Sample ID: GILBANEPM120921-1642

Lab Sample ID: 320-83411-5

Date Collected: 12/22/21 13:14

Matrix: Air

Date Received: 12/28/21 10:30

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	4.6		1.3	1.3	ug/m3			12/28/21 18:00	1

Client Sample ID: GILBANETSP120921-1642

Lab Sample ID: 320-83411-6

Date Collected: 12/22/21 13:14

Matrix: Air

Date Received: 12/28/21 10:30

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	10.5061		1.3133	1.3133	ug/m3 (Air)			12/28/21 18:00	1

Client Sample ID: GILBANEPM120921-1643

Lab Sample ID: 320-83411-7

Date Collected: 12/22/21 13:04

Matrix: Air

Date Received: 12/28/21 10:30

Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00078	J	0.0031	0.00046	ug/m3 (Air)		01/03/22 06:30	01/03/22 14:03	1
Copper	0.046		0.0061	0.00046	ug/m3 (Air)		01/03/22 06:30	01/03/22 14:03	1
Manganese	0.0056		0.0031	0.00043	ug/m3 (Air)		01/03/22 06:30	01/03/22 14:03	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	ND		1.3	1.3	ug/m3			12/28/21 18:00	1

Client Sample ID: GILBANETSP120921-1643

Lab Sample ID: 320-83411-8

Date Collected: 12/22/21 13:04

Matrix: Air

Date Received: 12/28/21 10:30

Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	3.0169		1.2570	1.2570	ug/m3 (Air)			12/28/21 18:00	1

QC Sample Results

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

Job ID: 320-83411-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-555534/1-B
Matrix: Air
Analysis Batch: 555712

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 555543

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		01/03/22 06:30	01/03/22 13:36	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		01/03/22 06:30	01/03/22 13:36	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		01/03/22 06:30	01/03/22 13:36	1

Lab Sample ID: LCS 320-555534/2-B
Matrix: Air
Analysis Batch: 555712

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 555543

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.240	0.238		ug/m3 (Air)		99	86 - 111
Copper	0.240	0.257		ug/m3 (Air)		107	85 - 110
Manganese	0.240	0.260		ug/m3 (Air)		108	88 - 110

Lab Sample ID: LCSD 320-555534/3-B
Matrix: Air
Analysis Batch: 555712

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 555543

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	0.240	0.241		ug/m3 (Air)		100	86 - 111	1	15

Lab Sample ID: LCSD 320-555534/3-B
Matrix: Air
Analysis Batch: 555913

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 555543

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	0.240	0.254		ug/m3 (Air)		106	85 - 110	1	15
Manganese	0.240	0.259		ug/m3 (Air)		108	88 - 110	0	15

QC Association Summary

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

Job ID: 320-83411-1

Metals

Pre Prep Batch: 555534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83411-1	GILBANEPM112321-1625	Total/NA	Air	Filter to Air	
320-83411-3	GILBANEPM112321-1626	Total/NA	Air	Filter to Air	
320-83411-5	GILBANEPM120921-1642	Total/NA	Air	Filter to Air	
320-83411-7	GILBANEPM120921-1643	Total/NA	Air	Filter to Air	
MB 320-555534/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-555534/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-555534/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 555543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83411-1	GILBANEPM112321-1625	Total/NA	Air	3050B	555534
320-83411-3	GILBANEPM112321-1626	Total/NA	Air	3050B	555534
320-83411-5	GILBANEPM120921-1642	Total/NA	Air	3050B	555534
320-83411-7	GILBANEPM120921-1643	Total/NA	Air	3050B	555534
MB 320-555534/1-B	Method Blank	Total/NA	Air	3050B	555534
LCS 320-555534/2-B	Lab Control Sample	Total/NA	Air	3050B	555534
LCSD 320-555534/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	555534

Analysis Batch: 555712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83411-1	GILBANEPM112321-1625	Total/NA	Air	6020	555543
320-83411-3	GILBANEPM112321-1626	Total/NA	Air	6020	555543
320-83411-5	GILBANEPM120921-1642	Total/NA	Air	6020	555543
320-83411-7	GILBANEPM120921-1643	Total/NA	Air	6020	555543
MB 320-555534/1-B	Method Blank	Total/NA	Air	6020	555543
LCS 320-555534/2-B	Lab Control Sample	Total/NA	Air	6020	555543
LCSD 320-555534/3-B	Lab Control Sample Dup	Total/NA	Air	6020	555543

Analysis Batch: 555913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 320-555534/3-B	Lab Control Sample Dup	Total/NA	Air	6020	555543

General Chemistry

Pre Prep Batch: 555915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83411-2	GILBANETSP112321-1625	Total/NA	Air	Filter to Air	
320-83411-4	GILBANETSP112321-1626	Total/NA	Air	Filter to Air	
320-83411-6	GILBANETSP120921-1642	Total/NA	Air	Filter to Air	
320-83411-8	GILBANETSP120921-1643	Total/NA	Air	Filter to Air	

Analysis Batch: 555927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83411-1	GILBANEPM112321-1625	Total/NA	Air	PM10	
320-83411-3	GILBANEPM112321-1626	Total/NA	Air	PM10	
320-83411-5	GILBANEPM120921-1642	Total/NA	Air	PM10	
320-83411-7	GILBANEPM120921-1643	Total/NA	Air	PM10	

Analysis Batch: 555928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83411-2	GILBANETSP112321-1625	Total/NA	Air	40CFR50 App B	555915

Eurofins Northern California, Sacramento

QC Association Summary

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

Job ID: 320-83411-1

General Chemistry (Continued)

Analysis Batch: 555928 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83411-4	GILBANETSP112321-1626	Total/NA	Air	40CFR50 App B	555915
320-83411-6	GILBANETSP120921-1642	Total/NA	Air	40CFR50 App B	555915
320-83411-8	GILBANETSP120921-1643	Total/NA	Air	40CFR50 App B	555915

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Lab Chronicle

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

Job ID: 320-83411-1

Client Sample ID: GILBANEPM112321-1625

Lab Sample ID: 320-83411-1

Date Collected: 12/22/21 07:38

Matrix: Air

Date Received: 12/28/21 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					555534	01/03/22 06:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	555543	01/03/22 06:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			555712	01/03/22 13:47	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0325 g	555927	12/28/21 18:00	JMD	TAL SAC

Client Sample ID: GILBANETSP112321-1625

Lab Sample ID: 320-83411-2

Date Collected: 12/22/21 07:38

Matrix: Air

Date Received: 12/28/21 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					555915	12/28/21 18:00	JMD	TAL SAC
Total/NA	Analysis	40CFR50 App B		1			555928	12/28/21 18:00	JMD	TAL SAC

Client Sample ID: GILBANEPM112321-1626

Lab Sample ID: 320-83411-3

Date Collected: 12/22/21 07:16

Matrix: Air

Date Received: 12/28/21 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					555534	01/03/22 06:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	555543	01/03/22 06:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			555712	01/03/22 13:57	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0296 g	555927	12/28/21 18:00	JMD	TAL SAC

Client Sample ID: GILBANETSP112321-1626

Lab Sample ID: 320-83411-4

Date Collected: 12/22/21 07:16

Matrix: Air

Date Received: 12/28/21 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					555915	12/28/21 18:00	JMD	TAL SAC
Total/NA	Analysis	40CFR50 App B		1			555928	12/28/21 18:00	JMD	TAL SAC

Client Sample ID: GILBANEPM120921-1642

Lab Sample ID: 320-83411-5

Date Collected: 12/22/21 13:14

Matrix: Air

Date Received: 12/28/21 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					555534	01/03/22 06:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	555543	01/03/22 06:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			555712	01/03/22 14:00	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0018 g	555927	12/28/21 18:00	JMD	TAL SAC

Lab Chronicle

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

Job ID: 320-83411-1

Client Sample ID: GILBANETSP120921-1642

Lab Sample ID: 320-83411-6

Date Collected: 12/22/21 13:14

Matrix: Air

Date Received: 12/28/21 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					555915	12/28/21 18:00	JMD	TAL SAC
Total/NA	Analysis	40CFR50 App B		1			555928	12/28/21 18:00	JMD	TAL SAC

Client Sample ID: GILBANEPM120921-1643

Lab Sample ID: 320-83411-7

Date Collected: 12/22/21 13:04

Matrix: Air

Date Received: 12/28/21 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					555534	01/03/22 06:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	555543	01/03/22 06:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			555712	01/03/22 14:03	SP	TAL SAC
Total/NA	Analysis	PM10		1	0 g	-0.0021 g	555927	12/28/21 18:00	JMD	TAL SAC

Client Sample ID: GILBANETSP120921-1643

Lab Sample ID: 320-83411-8

Date Collected: 12/22/21 13:04

Matrix: Air

Date Received: 12/28/21 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					555915	12/28/21 18:00	JMD	TAL SAC
Total/NA	Analysis	40CFR50 App B		1			555928	12/28/21 18:00	JMD	TAL SAC

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 320-83411-1

Laboratory: Eurofins Northern California, 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	01-29-22

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

Job ID: 320-83411-1

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 Northern California, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

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

Job ID: 320-83411-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-83411-1	GILBANEPM112321-1625	Air	12/22/21 07:38	12/28/21 10:30
320-83411-2	GILBANETSP112321-1625	Air	12/22/21 07:38	12/28/21 10:30
320-83411-3	GILBANEPM112321-1626	Air	12/22/21 07:16	12/28/21 10:30
320-83411-4	GILBANETSP112321-1626	Air	12/22/21 07:16	12/28/21 10:30
320-83411-5	GILBANEPM120921-1642	Air	12/22/21 13:14	12/28/21 10:30
320-83411-6	GILBANETSP120921-1642	Air	12/22/21 13:14	12/28/21 10:30
320-83411-7	GILBANEPM120921-1643	Air	12/22/21 13:04	12/28/21 10:30
320-83411-8	GILBANETSP120921-1643	Air	12/22/21 13:04	12/28/21 10:30

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**CHAIN-OF-CUSTODY
RECORD**

Gilbane Federal
Brett Wornack
1655 Grant Street, Suite 1200, Concord, CA 94520
bwornack@gilbaneco.com

COC # KT122221AIR



Project Name: Hunters Point Shipyard, Parcel E RA Phase 2
Project Number: J310000400
WBS Code: J310000400-016
Laboratory: Eurofins Environment Testing TestAmerica-Sacramento, West Sacramento, CA
POC: [Redacted]
Ship to: 880 Riverside Parkway, West Sacramento, CA 95605
Event: Parcel E Phase 2 Air Monitoring December 2021

Comments:

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 December 2021													
Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method	CAIR - Air PM10	N0500 - Air TSP	SW620 - Air Pb Mn Cu	Location ID	Sample Type	Depth (ft bgs) Top - Bottom	Cooler	Comments
1	A	12/22/2021	0738	KT	CAIR - Air PM10	X	X	X	AMSE1	N1	0.00 0.00	1	VOLUME: 1761.42
2	A	12/22/2021	0738	KT	N0500 - Air TSP	X	X		AMSE1	N1	0.00 0.00	1	VOLUME: 1723.01
3	A	12/22/2021	0716	KT	CAIR - Air PM10	X	X	X	AMSE2	N1	0.00 0.00	1	VOLUME: 1769.99
4	A	12/22/2021	0716	KT	N0500 - Air TSP	X	X		AMSE2	N1	0.00 0.00	1	VOLUME: 1776.95
5	A	12/22/2021	1314	KT	CAIR - Air PM10	X	X	X	AMSE1	N2	0.00 0.00	1	VOLUME: 391.98
6	A	12/22/2021	1314	KT	N0500 - Air TSP	X	X		AMSE1	N2	0.00 0.00	1	VOLUME: 360.73
7	A	12/22/2021	1304	KT	CAIR - Air PM10	X	X	X	AMSE2	N2	0.00 0.00	1	VOLUME: 391.23
8	A	12/22/2021	1304	KT	N0500 - Air TSP	X	X		AMSE2	N2	0.00 0.00	1	VOLUME: 397.76
9													
10													

Turnaround Time: 5 days

Received by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Shipping Date / Carrier / Airbill Number
[Redacted]	12/27/21	1030	[Redacted]	12/27/21	1030	Shipping Date: 12/27/2021 / Fed Ex 7755 8483 9040
[Redacted]			[Redacted]			Received by Laboratory: (Signature, Date, Time) & condition

Login Sample Receipt Checklist

Client: Gilbane Federal

Job Number: 320-83411-1

Login Number: 83411

List Source: Eurofins Northern California, 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	

