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

July 1st, 2021 through July 31st, 2021

Approved for public release; distribution is unlimited

DCN: GLBN-0005-4332-0067

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Contract Number: N62473-17-D-0005; Task Order No. N6247317F4332

Table of Contents

List of Attachments

List of Figures

List of Tables

Acronyms and Abbreviations

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

1.0 Introduction

This Air Monitoring Summary Report (AMSR) was prepared by Gilbane Federal (Gilbane) as requested by the United States Department of the Navy (Navy) under Radiological Environmental Multiple Award Contract N62473-17-D-0005, Contract Task Order (CTO) N6247317F4332. Gilbane is performing air monitoring at Hunters Point Naval Shipyard (HPNS) in accordance with the Final Dust Monitoring and Control Plan (DMCP), included as Appendix E to *Final Remedial Action Work Plan, Parcel E Remedial Action Phase 2, Hunters Point Naval Shipyard, San Francisco, California* (RAWP; Gilbane, 2019a). The Dust Monitoring and Control Plan (DMCP) describes the procedures that minimize dust during work activities and requires air monitoring to ensure these procedures are effective. The DMCP helps prevent exposure of residents and construction crews to potential airborne chemicals of concern, and dust from the work area.

This summary report describes the following:

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

This AMSR summarizes the air monitoring activities conducted by Gilbane at HPNS from July 1st, 2021 through July 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 (Bayview Manor - KCASANFR1775 and 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 Bayview Manor - KCASANFR1775 and APTIM HPNS – KCASANFR1504 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]), and for lead in accordance with a modified EPA Method 12.

3.3 TSP

TSP samples were collected with a high-volume (39 to 60 cubic feet per minute [cfm]) air sampler in accordance with EPA's reference sampling method for TSP, described in 40 CFR 50, Subpart B. Each sample was collected on a filter over an approximately 8 to 24-hour period (depending on the duration of the work activity). The filter was then weighed to determine the amount of TSP collected. The resulting concentration was compared to the HPNS Basewide level listed below to minimize permissible dust releases from the site.

3.4 Radionuclides of Concern

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

The radiological air sample concentration is counted on a Low Background Protean WPC-9950 and analyzed for gross alpha and beta activity. The calculated airborne concentration in microcuries is then compared to the effluent concentration limit specified in Table 2 of Appendix B to 10 CFR 20. The effluent concentration of a given radionuclide in air which, if inhaled continuously over the course of a year, results in an exposure equal to the annual regulatory limit specified in 10 CFR 20.1302. The threshold for radiological effluent concentration in air samples is 10 percent of the effluent concentration, which ensures work practices are evaluated and modified as necessary to ensure the limit is not reached.

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

4.0 Air Monitoring Data Interpretation and Action Levels

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

The resulting deltas for PM10 and TSP and analytical data from air monitoring metals and radiological samples were compared with the threshold criteria listed in **Table 4-1** reproduced from Table 1 of the approved DMCP (Appendix E of the RAWP [Gilbane, 2019a]. The PM10 delta was additionally compared to the criterion taken from the *Technical Memorandum: Draft Dust Action Levels for Parcel E, Hunters Point Shipyard, San Francisco, California* (Department of Toxic Substances Control [DTSC] 2017) of 50 micrograms per cubic meter (ug/m^3).

Table 4-1: Air Monitoring Threshold Criteria

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

Notes:

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

µg/m^3 = micrograms per cubic meter

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

fiber/cm^3 = fiber per cubic centimeter

HPNS = Hunters Point Naval Shipyard

mg/m^3 = milligrams per cubic meter

PEL = permissible exposure limit

PM10 = particulate matter less than 10 microns in diameter

TSP = total suspended particulates

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5.0 Air Monitoring Results

Weather information (including ambient pressure and temperature data) is presented in the table included as **Attachment 1**. Data was collected from Station 1 in Parcel E and Station 2 in Parcel D-1 from July 1st to July 31st, 2021, during which Gilbane was preparing the site for excavation. Samples were not collected during periods of site inactivity, rain events, and/or while site work was limited to non-earth moving tasks. The site was closed from July 16th to July 31st, 2021.

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

Asbestos results from July 1st to July 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 July 1st to July 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 July 1st to July 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 July 1st to July 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), 1998. Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Ambient Air Specific Methods.

Gilbane Federal, 2019a. Final Remedial Action Work Plan, Parcel E Remedial Action, Phase 2, Hunters Point Naval Shipyard, San Francisco, California. October

Gilbane Federal, 2019b. Radiological Procedure PR-RP-150 *Radiological Survey and Sampling, Version 01,* October 1.

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FIGURES

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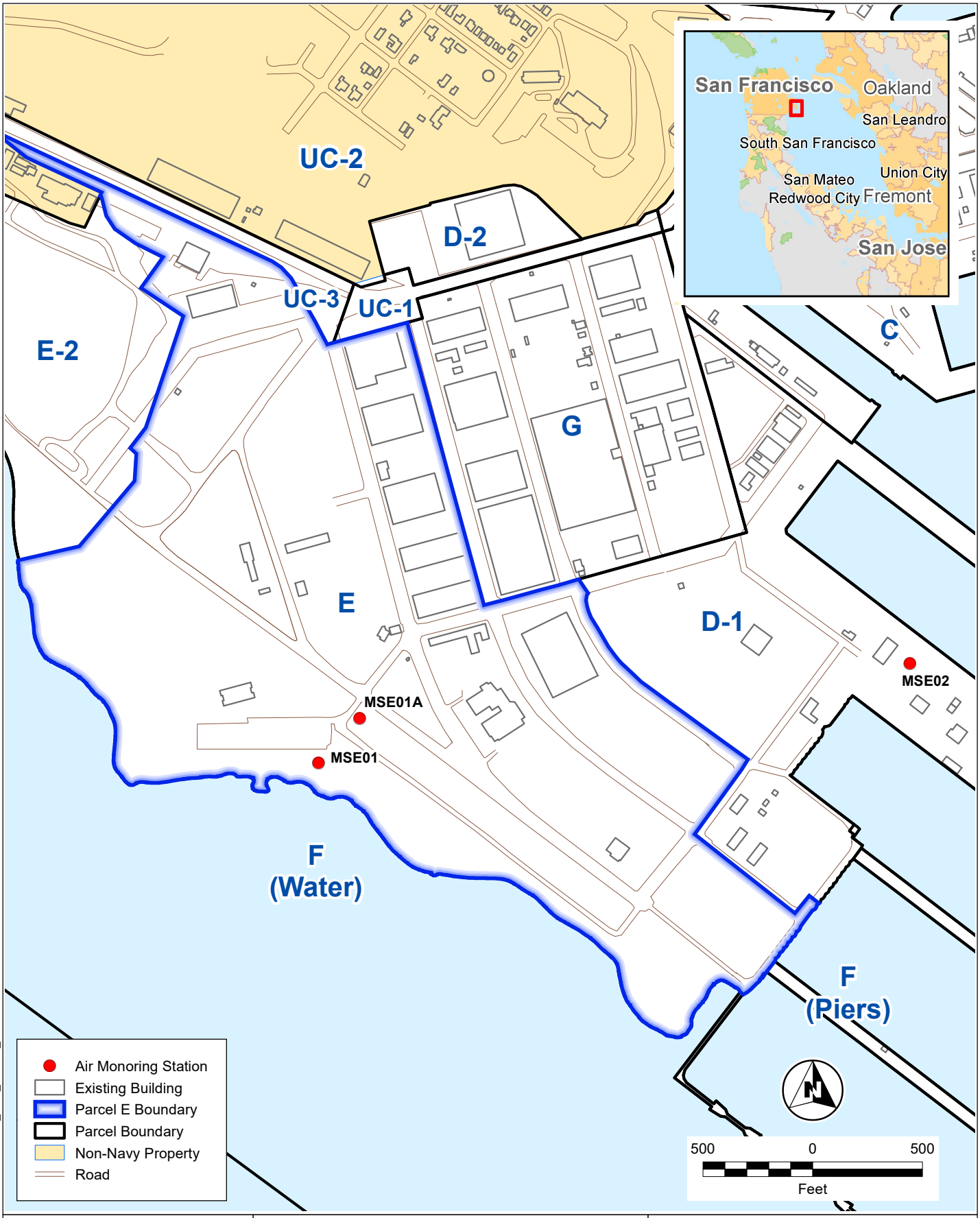

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Gilbane

Parcel E
Hunters Point Naval Shipyard
San Franscisco, California

Figure 2-1
Air Monitoring Stations

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ATTACHMENT 1

AMBIENT PRESSURE, TEMPERATURE, AND PREVALENT WIND DIRECTION MONITORING RESULTS

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

Start Date	Ambient Pressure (in Hg)	Ambient Temperature (°F)	Prevalent Wind Direction
7/1/2021[1]	29.93	59.05	SW
7/6/2021[2]	30.06	57.48	W
7/7/2021[2]	29.96	56.38	W
7/8/2021[2]	29.90	62.39	W
7/9/2021[2]	29.97	67.20	W
7/12/2021[2]	29.97	54.82	WSW
7/13/2021[2]	29.98	56.40	WSW
7/14/2021[2]	30.01	58.20	WSW
7/15/2021[2]	30.08	56.82	WSW

Notes:

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

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

°F = degree Fareheit

in Hg = inches of mercury

E = East

N = North

S = South

W = West

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ATTACHMENT 2
ASBESTOS MONITORING RESULTS

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Attachment 2: Asbestos Monitoring Results

Sample, Date and Station Information			Sampler Run Information		Asbestos Fibers		
Sample ID	Sample Start Date[1]	Monitoring Station	Duration of Run (min)	Total Air Volume Monitored (L)	Asbestos (fibers)	Conc Asbestos (fibers/cm^3)	Exceedance (Yes/No)
MSE01-070121	07/01/21	1	250	500	10.5	0.010	No
MSE02-070121	07/01/21	2	253	506	14.0	0.014	No
MSE01-070621	07/06/21	1	395	790	26.5	0.016	No
MSE02-070621	07/06/21	2	359	718	13.5	0.009	No
MSE01-070721	07/07/21	1	460	920	18.0	0.010	No
MSE02-070721	07/07/21	2	530	1060	11.5	0.005	No
MSE01-070821	07/08/21	1	472	944	11.0	0.006	No
MSE02-070821	07/08/21	2	488	976	11.0	0.006	No
MSE01-070921	07/09/21	1	454	908	16.0	0.019	No
MSE02-070921	07/09/21	2	450	900	11.5	0.006	No
MSE01-071221	07/12/21	1	459	918	11.5	0.006	No
MSE02-071221	07/12/21	2	488	976	9.5	0.005	No
MSE01-071321	07/13/21	1	488	976	12.0	0.006	No
MSE02-071321	07/13/21	2	505	1010	14.5	0.007	No
MSE01-071421	07/14/21	1	513	1026	13.0	0.006	No
MSE02-071421	07/14/21	2	525	1050	14.0	0.007	No
MSE01-071521	07/15/21	1	351	702	11.5	0.008	No
MSE02-071521	07/15/21	2	465	930	8.5	0.004	No

Notes:

[1]Sample "start" date indicates the date upon which sample collection began.

Samples analyzed by A&B Labs

Sample locations are shown on Figure 2-1

min = minutes

L = liter

fibers/cm^3 = 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)	Concen-tration in Air (mg/m^3)	Delta between Downwind and Upwind (mg/m^3)	Delta between Downwind and Upwind (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level[4] (ug/m^3)	Exceedance (Yes/No)
GILBANEPM061721-1282	1	7/1/2021	1673.94	0.0054						
GILBANEPM061721-1283	2	7/1/2021	1696.31	0.0058	0.0004	0.4	5,000	No	50	No
GILBANEPM061721-1284	1	7/1/2021[2]	304.34	0.0062						
GILBANEPM061721-1285	2	7/1/2021[2]	310.31	0.0064	0.0002	0.2	5,000	No	50	No
GILBANEPM061721-1286	1	7/7/2021	1643.13	0.011						
GILBANEPM061721-1287	2	7/7/2021	1578.70	0.015	0.0040	4.0	5,000	No	50	No
GILBANEPM062921-1288	1	7/8/2021	1744.60	0.02						
GILBANEPM062921-1289	2	7/8/2021	1752.27	0.022	0.0020	2.0	5,000	No	50	No
GILBANEPM062921-1290	1	7/9/2021	1732.86	0.038						
GILBANEPM062921-1291	2	7/9/2021	1780.86	0.027	-0.0110	-11.0	5,000	No	50	No
GILBANEPM062921-1292	1	7/9/2021[2]	554.45	0.048						
GILBANEPM062921-1293	2	7/9/2021[2]	553.59	0.03	-0.0180	-18.0	5,000	No	50	No
GILBANEPM062921-1294	1	7/13/2021	1719.82	0.012						
GILBANEPM062921-1295	2	7/13/2021	1738.06	0.012	0.0000	0.0	5,000	No	50	No
GILBANEPM062921-1296	1	7/14/2021	1732.51	0.01						
GILBANEPM062921-1297	2	7/14/2021	1715.05	0.0098	-0.0002	-0.2	5,000	No	50	No

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

Sample, Date and Station Information			Sampler Run Information	PM10						
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concen-tration in Air (mg/m^3)	Delta between Downwind and Upwind (mg/m^3)	Delta between Downwind and Upwind (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level[4] (ug/m^3)	Exceedance (Yes/No)
GILBANEPM062921-1298	1	7/15/2021	1842.43	0.0087						
GILBANEPM062921-1299	2	7/15/2021[3]	441.36	0.0023	-0.0064	-6.4	5,000	No	50	No
GILBANEPM062921-1300	1	7/15/2021[2]	721.80	0.0094						
GILBANEPM062921-1301	2	7/15/2021[2]	421.64	0.005	-0.0044	-4.4	5,000	No	50	No

Notes:

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

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

[3]Motor malfunction

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

Samples analyzed by Eurofins TestAmerica

Sample locations are shown on Figure 2-1

Cal/OSHA = California Division of Occupational Safety and Health

HERO = Human and Ecological Risk Office

m^3 = cubic meters

mg/m^3 = milligrams per cubic meter

PEL = permissible exposure limit

PM_{10} = particulate matter smaller than 10 microns in diameter

ug/m^3 = micrograms per cubic meter

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)
GILBANEPM061721-1282	1	7/1/2021	1673.94	0.00002	No	0.000001	No	0.0000013 J+	No
GILBANEPM061721-1283	2	7/1/2021	1696.31	0.000035	No	0.00000039 J	No	0.0000013 J+	No
GILBANEPM061721-1284	1	7/1/2021[2]	304.34	0.000027	No	0.0000016 J	No	0.0000026 J	No
GILBANEPM061721-1285	2	7/1/2021[2]	310.31	0.00004	No	0.0000011 J	No	0.000003 J	No
GILBANEPM061721-1286	1	7/7/2021	1643.13	0.000018	No	0.0000011	No	0.0000022	No
GILBANEPM061721-1287	2	7/7/2021	1578.70	0.00016	No	0.000001	No	0.0000027	No
GILBANEPM062921-1288	1	7/8/2021	1744.60	0.000026	No	0.00000069	No	0.0000018	No
GILBANEPM062921-1289	2	7/8/2021	1752.27	0.00011	No	0.00000046 J	No	0.0000024	No
GILBANEPM062921-1290	1	7/9/2021	1732.86	0.00033	No	0.0000059	No	0.000012	No
GILBANEPM062921-1291	2	7/9/2021	1780.86	0.000075	No	0.0000028	No	0.0000035	No
GILBANEPM062921-1292	1	7/9/2021[2]	554.45	0.00018	No	0.0000083	No	0.000021	No
GILBANEPM062921-1293	2	7/9/2021[2]	553.59	0.000036	No	0.0000038	No	0.0000093	No
GILBANEPM062921-1294	1	7/13/2021	1719.82	0.000099	No	0.0000007	No	0.000002	No
GILBANEPM062921-1295	2	7/13/2021	1738.06	0.00013	No	0.00000055 J	No	0.0000025	No
GILBANEPM062921-1296	1	7/14/2021	1732.51	0.000031	No	0.00000058 J	No	0.0000021	No
GILBANEPM062921-1297	2	7/14/2021	1715.05	0.000064	No	0.00000049 J	No	0.0000022	No
GILBANEPM062921-1298	1	7/15/2021	1842.43	0.000013	No	0.0000011 J	No	0.0000031	No
GILBANEPM062921-1299	2	7/15/2021[3]	721.80	0.00018	No	0.0000028	No	0.0000051	No
GILBANEPM062921-1300	1	7/15/2021[2]	441.36	0.000034	No	0.0000012	No	0.0000037	No
GILBANEPM062921-1301	2	7/15/2021[2]	421.64	0.000052	No	0.0000016 J	No	0.000005	No

Notes:

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

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

[3]Motor malfunction

Samples analyzed by Eurofins TestAmerica

Sample locations are shown on Figure 2-1

m^3 = cubic meters

mg/m^3 = milligrams per cubic meter

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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)
GILBANETSP061721-1282	1	7/1/2021	1682.15	0.008501			
GILBANETSP061721-1283	2	7/1/2021	1618.69	0.0069192	-0.002	0.5	No
GILBANETSP061721-1284	1	7/1/2021[2]	305.62	0.0078529			
GILBANETSP061721-1285	2	7/1/2021[2]	294.89	0.009156	0.001	0.5	No
GILBANETSP061721-1286	1	7/7/2021	1630.36	0.0240438			
GILBANETSP061721-1287	2	7/7/2021	1512.49	0.0173885	-0.007	0.5	No
GILBANETSP062921-1288	1	7/8/2021	1739.01	0.0280044			
GILBANETSP062921-1289	2	7/8/2021	1669.30	0.0286348	0.001	0.5	No
GILBANETSP062921-1290	1	7/9/2021	1737.20	0.0504835			
GILBANETSP062921-1291	2	7/9/2021	1664.10	0.040691	-0.010	0.5	No
GILBANETSP062921-1292	1	7/9/2021[2]	554.93	0.0693781			
GILBANETSP062921-1293	2	7/9/2021[2]	522.32	0.0480548	-0.021	0.5	No
GILBANETSP062921-1294	1	7/13/2021	1727.29	0.0157472			
GILBANETSP062921-1295	2	7/13/2021	1653.98	0.0151755	-0.001	0.5	No
GILBANETSP062921-1296	1	7/14/2021	1736.28	0.0203308			
GILBANETSP062921-1297	2	7/14/2021	1631.21	0.0184526	-0.002	0.5	No
GILBANETSP062921-1298	1	7/15/2021	1872.21	0.019923			

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)
GILBANETSP062921-1299	2	7/15/2021[3]	684.13	0.022218	0.002	0.5	No
GILBANETSP062921-1300	1	7/15/2021[2]	419.19	0.0045326			
GILBANETSP062921-1301	2	7/15/2021[2]	407.45	0.0090809	0.005	0.5	No

Notes:

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

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

[3]Motor malfunction

Samples analyzed by Eurofins TestAmerica

Sample locations are shown on Figure 2-1

HPNS = Hunters Point Naval Shipyard

m^3 = cubic meters

mg/m^3 = milligrams per cubic meter

ATTACHMENT 6

AIR SAMPLING RESULTS – PUBLIC EXPOSURE MONITORING

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Gilbane

AIR SAMPLE RESULTS - PUBLIC EXPOSURE MONITORING

Project Information			Effluent Air Concentration			Sampling Period	Color Codes
Contract / Task Order Number:	Project Title / Location:	Gilbane Project Number:		Alpha	Beta	Air samples collected	Value < 0.1 x Effluent Conc (i.e., < 10%)
N62473-17-D-0005 / F4332	Parcel E RA HPNS, SF, CA	J310000400	Radionuclide	Ra-226	Sr-90	between 01 Jul 2021	Value > 0.1 x Effluent Conc (i.e., > 10%)
Information effective as of: 07 Aug 2021			Effluent Conc (µCi/ml)	9.E-13	6.E-12	and 15 Jul 2021	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-0237	Perimeter	MSE01	PE09	60	7/1/21 4:55	7/1/21 11:18	383	2.3E+07	C	07/06/21	1	cpm	0.10	3.80	0.3	7.4	5.5E-15	1.4E-13	***0.6%***	***2.4%***	DVT	BCS
AS-0238	Perimeter	MSE02	PE10	60	7/1/21 4:45	7/1/21 11:34	409	2.5E+07	C	07/06/21	1	cpm	0.20	3.60	0.6	6.8	1.0E-14	1.3E-13	***1.1%***	***2.1%***	DVT	BCS
AS-0239	Perimeter	MSE01	PE09	60	7/6/21 8:06	7/6/21 15:00	414	2.5E+07	C	07/13/21	1	cpm	0.25	5.05	0.7	10.9	1.3E-14	2.0E-13	***1.4%***	***3.3%***	DVT	BCS
AS-0240	Perimeter	MSE02	PE10	60	7/6/21 8:10	7/6/21 14:55	405	2.4E+07	C	07/13/21	1	cpm	0.15	5.15	0.4	11.2	7.8E-15	2.1E-13	***0.9%***	***3.5%***	DVT	BCS
AS-0241	Perimeter	MSE01	PE09	60	7/7/21 5:05	7/7/21 14:16	551	3.3E+07	C	07/13/21	1	cpm	0.25	2.85	0.7	4.7	9.6E-15	6.4E-14	***1.1%***	***1.1%***	DVT	BCS
AS-0242	Perimeter	MSE02	PE10	60	7/7/21 4:55	7/7/21 14:01	546	3.3E+07	C	07/13/21	1	cpm	0.25	4.30	0.7	8.8	9.7E-15	1.2E-13	***1.1%***	***2.0%***	DVT	BCS
AS-0243	Perimeter	MSE01	PE09	60	7/8/21 5:00	7/8/21 14:10	550	3.3E+07	C	07/13/21	1	cpm	0.10	3.85	0.3	7.5	3.8E-15	1.0E-13	***0.4%***	***1.7%***	DVT	BCS
AS-0244	Perimeter	MSE02	PE10	60	7/8/21 4:55	7/8/21 14:15	560	3.4E+07	C	07/13/21	1	cpm	0.15	4.00	0.4	8.0	5.6E-15	1.1E-13	***0.6%***	***1.8%***	DVT	BCS
AS-0245	Perimeter	MSE01	PE09	60	7/9/21 5:10	7/9/21 13:40	510	3.1E+07	C	07/13/21	1	cpm	0.20	5.10	0.6	11.1	8.3E-15	1.6E-13	***0.9%***	***2.7%***	DVT	BCS
AS-0246	Perimeter	MSE02	PE10	60	7/9/21 5:15	7/9/21 13:30	495	3.0E+07	C	07/13/21	1	cpm	0.05	3.35	0.1	6.1	2.1E-15	9.3E-14	***0.2%***	***1.5%***	DVT	BCS
AS-0247	Perimeter	MSE01	PE09	60	7/12/21 6:35	7/12/21 15:35	540	3.2E+07	C	08/05/21	1	cpm	0.05	4.00	0.1	8.0	2.0E-15	1.1E-13	***0.2%***	***1.8%***	DVT	CB
AS-0248	Perimeter	MSE02	PE10	60	7/12/21 6:45	7/12/21 15:10	505	3.0E+07	C	08/05/21	1	cpm	0.10	3.85	0.3	7.5	4.2E-15	1.1E-13	***0.5%***	***1.9%***	DVT	CB
AS-0249	Perimeter	MSE01	PE09	60	7/13/21 4:45	7/13/21 15:45	660	4.0E+07	C	08/05/21	1	cpm	0.10	4.45	0.3	9.2	3.2E-15	1.1E-13	***0.4%***	***1.8%***	DVT	CB
AS-0250	Perimeter	MSE02	PE10	60	7/13/21 4:55	7/13/21 15:35	640	3.8E+07	C	08/05/21	1	cpm	0.10	4.30	0.3	8.8	3.3E-15	1.0E-13	***0.4%***	***1.7%***	DVT	CB
AS-0251	Perimeter	MSE01	PE09	60	7/14/21 4:45	7/14/21 15:35	650	3.9E+07	C	08/05/21	1	cpm	0.20	3.55	0.6	6.7	6.5E-15	7.7E-14	***0.7%***	***1.3%***	DVT	CB
AS-0252	Perimeter	MSE02	PE10	60	7/14/21 4:55	7/14/21 15:45	650	3.9E+07	C	08/05/21	1	cpm	0.15	3.80	0.4	7.4	4.9E-15	8.5E-14	***0.5%***	***1.4%***	DVT	CB
AS-0253	Perimeter	MSE01	PE09	60	7/15/21 4:40	7/15/21 13:30	530	3.2E+07	C	08/05/21	1	cpm	0.35	3.55	1.0	6.7	1.4E-14	9.5E-14	***1.5%***	***1.6%***	DVT	CB
AS-0254	Perimeter	MSE02	PE10	60	7/15/21 4:55	7/15/21 13:35	520	3.1E+07	C	08/05/21	1	cpm	0.05	4.15	0.1	8.4	2.0E-15	1.2E-13	***0.2%***	***2.0%***	DVT	CB

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ATTACHMENT 7
LABORATORY REPORTS

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Laboratory Analysis Report

Job ID : 21070695

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:	Gilbane	Total Number of Pages:	5
	Attn:	[redacted]	P.O.#. :	J310000400-0015
	Client Address:	1655 Grant Street, Suite 1200	Date Received :	07/08/2021 03:41
	City, State, Zip:	Concord, California, 94520	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
MSE01-070121	7/1/2021 11:10	Cassette	21070695.01
MSE02-070121	7/1/2021 11:00	Cassette	21070695.02

[redacted]

Released By: [redacted]

Title: [redacted]

Analyst: [redacted]

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

Date 7/15/2021

Job ID : 21070695
Analytical Method: NIOSH 7400-I2-Aug1994

Client: Gilbane 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
21070695.01	MSE01-070121	07/01/2021	Area	2			250	500	100	10.5	13.376	0.010		07/15/21	[redacted]
21070695.02	MSE02-070121	07/01/2021	Area	2			253	506	100	14.0	17.834	0.014		07/15/21	[redacted]

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

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

Sample Condition Checklist

A&B JobID : **21070695**	Date Received : **07/08/2021**	Time Received : **3:41AM**
Client Name : **Gilbane**		
Temperature : **19.8-0.1cf=19.7°C**	Sample pH : **N/A**	
Thermometer ID : **1709629**	pH Paper ID : **N/A**	
Perservative :		

	Check Points	Yes	No	N/A
1.	**Cooler seal present and signed.**			X
2.	**Sample(s) in a cooler.**		X	
3.	**If yes, ice in cooler.**			X
4.	**Sample(s) received with chain-of-custody.**	X		
5.	**C-O-C signed and dated.**	X		
6.	**Sample(s) received with signed sample custody seal.**		X	
7.	**Sample containers arrived intact. (If no comment).**	X		
8.	**Matrix :** **Water** ☐ **Soil** ☐ **Liquid** ☐ **Sludge** ☐ **Solid** ☐ **Cassette** ☑ **Tube** ☐ **Bulk** ☐ **Badge** ☐ **Food** ☐ **Other** ☐			
9.	**Sample(s) were received in appropriate container(s).**	X		
10.	**Sample(s) were received with proper preservative**			X
11.	**All samples were logged 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 within the hold time.**	X		
16.	**VOA vials completely filled.**			X
17.	**Sample accepted.**	X		
18	**Has client been contacted about sub-out**			X

Comments : Include actions taken to resolve discrepancies/problem:

Received in box with custody seal.

Received by : [redacted]

Check in by/date : [redacted] / 07/09/2021

Event ID: Air Monitoring

COC# KT070621ASB

Gilbane — Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II I310000400

Project Manager: [redacted]

Site Location: Hunters Point, San Francisco, CA 94124

Laboratory Name: A&B Labs

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

Contact Name: [redacted]

Date: 7/06/2021

Page: 1 of 1

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Asbestos	Analysis: Preservative: None; Container Type: Filter	Flow Rate = 2 L/min; Special Instructions/Comments; Total Time (min)
MSE01-070121	7/01/2021	1110	NA	NA	1	AA	X		250
MSE02-070121	7/01/2021	1100	NA	NA	1	AA	X		253

Job ID:21070695

Sampled By: [redacted]

Sampler: [redacted]

Courier/Airbill No.: FedEx/ 774168705847

Special Instructions: None

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
[redacted]	7/6/21	1400	FedEx	7/6/21	1400
FEDEX	7-8-21		[redacted]	7-8-21	1541

Send Results to: edawson@gilbaneco.com; ktom@gilbaneco.com

Turnaround Time: Standard

TEMP: 19.2-0.1 = 19.1°C ID: 1709629

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

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

Laboratory Analysis Report

Job ID : 21070776

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:	Gilbane	Total Number of Pages:	5
	Attn:	[redacted]	P.O.#. :	J310000400-0015
	Client Address:	1655 Grant Street, Suite 1200	Date Received :	07/12/2021 08:56
	City, State, Zip:	Concord, California, 94520	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 - 070621	7/6/2021 5:13	Cassette	21070776.01
MSE02 - 070621	7/6/2021 5:07	Cassette	21070776.02
MSE01 - 070721	7/7/2021 14:47	Cassette	21070776.03
MSE02 - 070721	7/7/2021 14:52	Cassette	21070776.04

[redacted]

Released By: [redacted]

Title: [redacted]

Analyst: [redacted]

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

Date 7/19/2021

Job ID : 21070776
Analytical Method: NIOSH 7400-I2-Aug1994

Client: Gilbane 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
21070776.01	MSE01 - 070621	07/06/2021	Area	2			395	790	100	26.5	33.758	0.016		07/19/21	[redacted]
21070776.02	MSE02 - 070621	07/06/2021	Area	2			359	718	100	13.5	17.197	0.009		07/19/21	[redacted]
21070776.03	MSE01 - 070721	07/07/2021	Area	2			460	920	100	18.0	22.930	0.010		07/19/21	[redacted]
21070776.04	MSE02 - 070721	07/07/2021	Area	2			530	1060	100	11.5	14.650	0.005		07/19/21	[redacted]

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

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

Sample Condition Checklist

A&B JobID : **21070776**	Date Received : **07/12/2021**	Time Received : **8:56AM**
Client Name : **Gilbane**		
Temperature : **27.0-0.1cf=26.9°C**	Sample pH : **n/a**	
Thermometer ID : **1709629**	pH Paper ID : **n/a**	
Perservative :		

	Check Points	Yes	No	N/A
1.	**Cooler seal present and signed.**			X
2.	**Sample(s) in a cooler.**		X	
3.	**If yes, ice in cooler.**			X
4.	**Sample(s) received with chain-of-custody.**	X		
5.	**C-O-C signed and dated.**	X		
6.	**Sample(s) received with signed sample custody seal.**		X	
7.	**Sample containers arrived intact. (If no comment).**	X		
8.	**Matrix :** **Water** ☐ **Soil** ☐ **Liquid** ☐ **Sludge** ☐ **Solid** ☐ **Cassette** ☑ **Tube** ☐ **Bulk** ☐ **Badge** ☐ **Food** ☐ **Other** ☐			
9.	**Sample(s) were received in appropriate container(s).**	X		
10.	**Sample(s) were received with proper preservative**			X
11.	**All samples were logged 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 within 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 were received in box w/ custody seal. TG 07-12-2021

Received by : [redacted]

Check in by/date : [redacted] 07/12/2021

Event ID: Air Monitoring

COC# KT070821ASB

Gilbane

Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II J310000400

Project Manager: [redacted]

Site Location: Hunters Point, San Francisco, CA 94124

Laboratory Name: A&B Labs

Address: 10100 East Fwy Ste. 100
Houston TX 77029

Contact Name: [redacted]

Date: 7/08/2021

Page: 1 of 1

	Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Analysis: Asbestos	Preservative: None	Container Type: Filter	Flow Rate = 2 L/min Special Instructions/Comments Total Time (min)
1A	MSE01-070621	7/06/2021	1513	NA	NA	1	AA	X			395
2A	MSE02-070621	7/06/2021	1507	NA	NA	1	AA	X			359
3A	MSE01-070721	7/07/2021	1447	NA	NA	1	AA	X			460
4A	MSE02-070721	7/07/2021	1452	NA	NA	1	AA	X			530

Job ID:21070776

[redacted]

Sampled By: J [redacted] Gilbane

Sampler: Gilbane - [redacted]

Courier/Airbill No.: FedEx/ 7742 0771 5838

Special Instructions: None

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
Gilbane [redacted]	07/08/21	1600	FedEx	7/8/21	1600
FEDEX 7-12-21			[redacted] 7/12/21		0854

Send Results to: edawson@gilbaneco.com
ktom@gilbaneco.com

Turnaround Time: Standard

TEMP: 22.4 - 0.1 - 21.6°C IR: 17491.78

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

SHIP DATE: 08JUL21
ACTWGT: 1.00 LB
CAD: 102700259/INET4340

BILL SENDER

TO [redacted]
A & B LABS
10100 EAST FREEWAY, SUITE 100
HOUSTON TX 77029

INV: [redacted]
PO:
REF: J310000400 B.00.0908000
DEPT:

56DJ2/0265/FE4A

J211321033101uv

FedEx Express

TRK# 0201 7742 0771 5838

FRI - 09 JUL 4:30P
STANDARD OVERNIGHT

UL HBYA

77029 IAH
TX-US

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

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

CUSTODY SEAL

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

[redacted]

ECURE

Date: 07/08/21

Signature: [redacted]

Laboratory Analysis Report

Job ID : 21071140

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:	Gilbane	Total Number of Pages:	5
	Attn:	[redacted]	P.O.#. :	J310000400-0015
	Client Address:	1655 Grant Street, Suite 1200	Date Received :	07/14/2021 17:20
	City, State, Zip:	Concord, California, 94520	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
MSE01-070821	7/8/2021 15:00	Cassette	21071140.01
MSE02-070821	7/8/2021 15:05	Cassette	21071140.02
MSE01-070921	7/9/2021 14:36	Cassette	21071140.03
MSE02-070921	7/9/2021 14:21	Cassette	21071140.04
MSE01-071221	7/12/2021 15:20	Cassette	21071140.05
MSE02-071221	7/12/2021 15:29	Cassette	21071140.06

[redacted]

Analyst: [redacted]

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

Date 7/21/2021

Job ID : 21071140
Analytical Method: NIOSH 7400-I2-Aug1994

Client: Gilbane 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
21071140.01	MSE01-070821	07/08/2021	Area	2			472	944	100	11.0	14.013	0.006		07/19/21	[redacted]
21071140.02	MSE02-070821	07/08/2021	Area	2			488	976	100	11.0	14.013	0.006		07/19/21	[redacted]
21071140.03	MSE01-070921	07/09/2021	Area	2			454	908	100	16.0	20.382	0.019		07/19/21	[redacted]
21071140.04	MSE02-070921	07/09/2021	Area	2			450	900	100	11.5	14.650	0.006		07/19/21	[redacted]
21071140.05	MSE01-071221	07/12/2021	Area	2			459	918	100	11.5	14.650	0.006		07/19/21	[redacted]
21071140.06	MSE02-071221	07/12/2021	Area	2			488	976	100	9.5	12.102	0.005		07/19/21	[redacted]

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

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

Sample Condition Checklist

A&B JobID : **21071140**	Date Received : **07/14/2021**	Time Received : **5:20PM**
Client Name : **Gilbane**		
Temperature : **21.3-0.1cf=21.2°C**	Sample pH : **n/a**	
Thermometer ID : **1709629**	pH Paper ID : **n/a**	
Perservative :		

	Check Points	Yes	No	N/A
1.	**Cooler seal present and signed.**	X		
2.	**Sample(s) in a cooler.**		X	
3.	**If yes, ice in cooler.**			X
4.	**Sample(s) received with chain-of-custody.**	X		
5.	**C-O-C signed and dated.**	X		
6.	**Sample(s) received with signed sample custody seal.**		X	
7.	**Sample containers arrived intact. (If no comment).**	X		
8.	**Matrix :** **Water** ☐ **Soil** ☐ **Liquid** ☐ **Sludge** ☐ **Solid** ☐ **Cassette** ☑ **Tube** ☐ **Bulk** ☐ **Badge** ☐ **Food** ☐ **Other** ☐			
9.	**Sample(s) were received in appropriate container(s).**	X		
10.	**Sample(s) were received with proper preservative**			X
11.	**All samples were logged 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 within the hold time.**	X		
16.	**VOA vials completely filled.**			X
17.	**Sample accepted.**	X		
18	**Has client been contacted about sub-out**			X

Comments : Include actions taken to resolve discrepancies/problem:

Received by : [redacted]

Check in by/date [redacted] / 07/15/2021

Event ID: Air Monitoring

Job ID:21071140
07/14/2021 Gilbane ACH

COC# KT071321ASB

Gilbane

Chain-Of-Custody

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

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

Date: 7/13/2021
Page: 1 of 1

	Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Analysis: Asbestos	Preservative: None / Container Type: Filter	Flow Rate = 2 L/min; Special Instructions/Comments: Total Time (min)
D1A	MSE01-070821	7/08/2021	1500	NA	NA	1	AA	X		472
D2A	MSE02-070821	7/08/2021	1505	NA	NA	1	AA	X		488
D3A	MSE01-070921	7/09/2021	1436	NA	NA	1	AA	X		454
D4A	MSE02-070921	7/09/2021	1421	NA	NA	1	AA	X		450
D5A	MSE01-071221	7/12/2021	1520	NA	NA	1	AA	X		459
D6A	MSE02-071221	7/12/2021	1529	NA	NA	1	AA	X		488

[redacted]

Sampled By: [redacted] Gilbane

Sampler: [redacted] Gilbane

Courier/Airbill No.: FedEx/ 7742 3765 6301

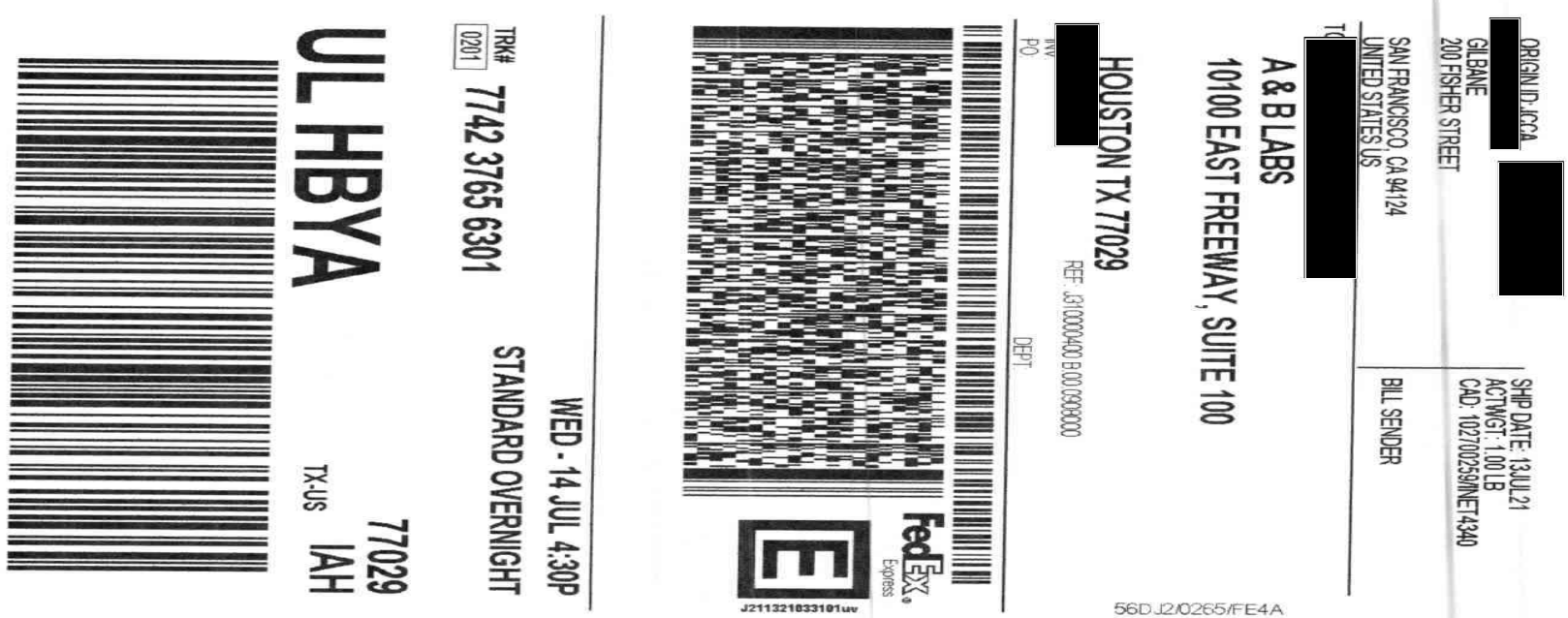
Special Instructions: none

Send Results to: edawson@gilbaneco.com
ktom@gilbaneco.com

Turnaround Time: Standard

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
[redacted] - Gilbane	7/13/21	1600	Fedex	7/13/21	1600
Fedex			[redacted]	7.14.21	1720

21-3-0.1=21.2 CHROMIUM



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

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

Laboratory Analysis Report

Job ID : 21071407

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:	Gilbane	Total Number of Pages:	5
	Attn:	[redacted]	P.O.#. :	J310000400-0015
	Client Address:	1655 Grant Street, Suite 1200	Date Received :	07/16/2021 15:52
	City, State, Zip:	Concord, California, 94520	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
MSE01-071321	7/13/2021 15:35	Cassette	21071407.01
MSE02-071321	7/13/2021 15:40	Cassette	21071407.02
MSE01-071421	7/14/2021 15:32	Cassette	21071407.03
MSE02-071421	7/14/2021 15:35	Cassette	21071407.04

[redacted]

Analyst: [redacted]

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

Date 7/26/2021

Job ID : 21071407
Analytical Method: NIOSH 7400-I2-Aug1994

Client: Gilbane 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
21071407.01	MSE01-071321	07/13/2021	Area	2			488	976	100	12.0	15.287	0.006		07/26/21	[redacted]
21071407.02	MSE02-071321	07/13/2021	Area	2			505	1010	100	14.5	18.471	0.007		07/26/21	[redacted]
21071407.03	MSE01-071421	07/14/2021	Area	2			513	1026	100	13.0	16.561	0.006		07/26/21	[redacted]
21071407.04	MSE02-071421	07/14/2021	Area	2			525	1050	100	14.0	17.834	0.007		07/26/21	[redacted]

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

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

Sample Condition Checklist

A&B JobID : **21071407**	Date Received : **07/16/2021**	Time Received : **3:52PM**
Client Name : **Gilbane**		
Temperature : **24.1-0.1cf=24.0°C**	Sample pH : **n/a**	
Thermometer ID : **1709629**	pH Paper ID : **n/a**	
Perservative :		

	Check Points	Yes	No	N/A
1.	**Cooler seal present and signed.**	X		
2.	**Sample(s) in a cooler.**		X	
3.	**If yes, ice in cooler.**			X
4.	**Sample(s) received with chain-of-custody.**	X		
5.	**C-O-C signed and dated.**	X		
6.	**Sample(s) received with signed sample custody seal.**		X	
7.	**Sample containers arrived intact. (If no comment).**	X		
8.	**Matrix :** **Water** ☐ **Soil** ☐ **Liquid** ☐ **Sludge** ☐ **Solid** ☐ **Cassette** ☐ **Tube** ☐ **Bulk** ☐ **Badge** ☐ **Food** ☐ **Other** ☐			
9.	**Sample(s) were received in appropriate container(s).**	X		
10.	**Sample(s) were received with proper preservative**			X
11.	**All samples were logged 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 within 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 were received in a box sealed with a custody seal - ACH

Received by : [redacted]

Check in by/date : [redacted] / 07/19/2021

Event ID: Air Monitoring

Job ID:21071407

07/16/2021 Gilbane ACH

COC# KT071521ASB

Gilbane

Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II J310000400

Project Manager: [redacted]

Site Location: Hunters Point, San Francisco, CA 94124

Laboratory Name: A&B Labs

Address: 10100 East Fwy Ste. 100
Houston TX 77029

Contact Name: [redacted]

Date: 7/15/2021

Page: 1 of 1

	Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Asbestos	Analysis: Preservative: None / Container Type: Filter	Flow Rate = 2 L/min; Special Instructions/Comments; Total Time (min)
01A	MSE01-071321	7/13/2021	1535	NA	NA	1	AA	X		488
02A	MSE02-071321	7/13/2021	1540	NA	NA	1	AA	X		505
03A	MSE01-071421	7/14/2021	1532	NA	NA	1	AA	X		513
04A	MSE02-071421	7/14/2021	1535	NA	NA	1	AA	X		525

Sampled B[redacted]

Sampler: [redacted]

Courier/Airbill No.: FedEx/ 7742 6279 7338

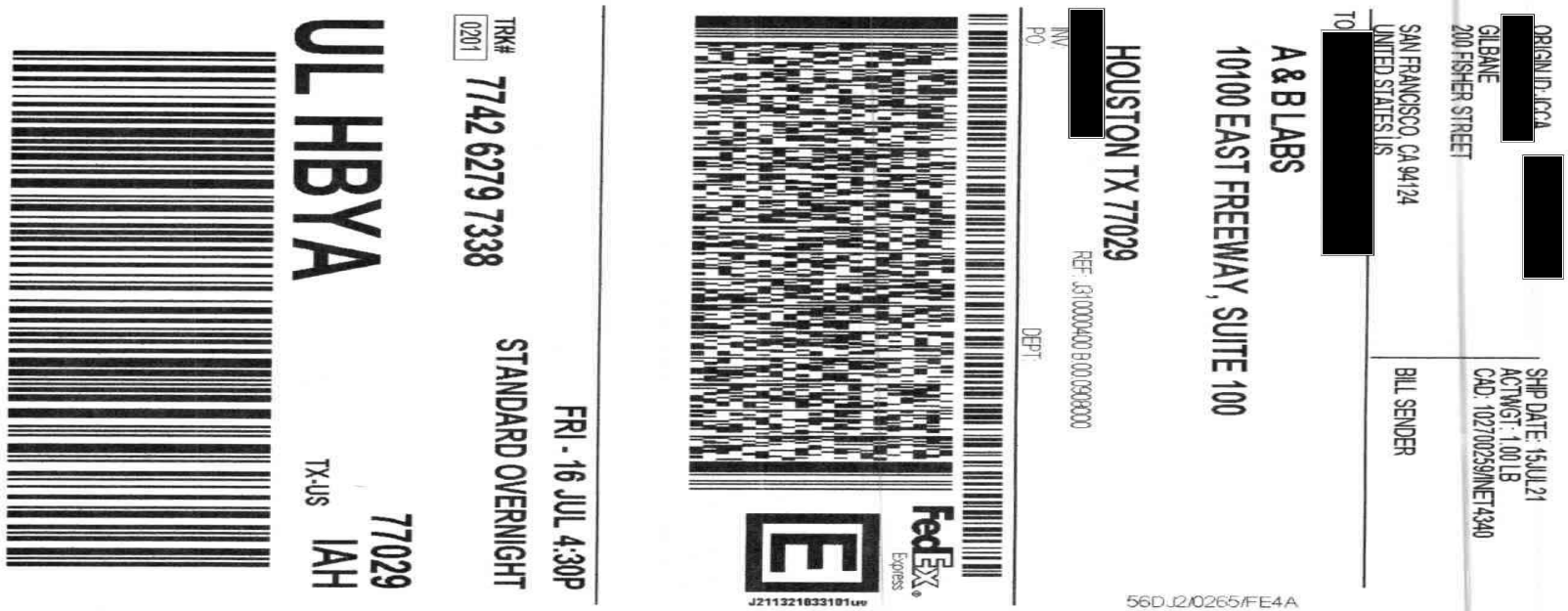
Special Instructions: None

Relinquished By/Affiliation	Date:	Time:	Received By/ Affiliation:	Date:	Time:
[redacted] / Gilbane	7/15/21	1600	Fed Ex	7/15/21	1600
[redacted] / FEDEX	7-16-21		[redacted]	7-16-21	1542

Send Results to: edawson@gilbaneco.com
ktom@gilbaneco.com

Turnaround Time: Standard

TEMP: 24.1 ± 0.1°C = 24.0°C ID: 1709629



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

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

Laboratory Analysis Report

Job ID : 21071813

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:	Gilbane	Total Number of Pages:	5
	Attn:	[redacted]	P.O.#. :	J310000400-0015
	Client Address:	1655 Grant Street, Suite 1200	Date Received :	07/21/2021 15:04
	City, State, Zip:	Concord, California, 94520	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
MSE01-071521	7/15/2021 13:53	Cassette	21071813.01
MSE02-071521	7/15/2021 15:33	Cassette	21071813.02

[redacted]

Analyst: [redacted]

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

Date 7/30/2021

Job ID : 21071813
Analytical Method: NIOSH 7400-I2-Aug1994

Client: Gilbane 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
21071813.01	MSE01-071521	07/15/2021	Area	2			351	702	100	11.5	14.650	0.008		07/29/21	[redacted]
21071813.02	MSE02-071521	07/15/2021	Area	2			465	930	100	8.5	10.828	0.004		07/29/21	[redacted]

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

Sample Condition Checklist

A&B JobID : **21071813**	Date Received : **07/21/2021**	Time Received : **3:04PM**
Client Name : **Gilbane**		
Temperature : **22.1-0.1cf=22.0°C**	Sample pH : **N/A**	
Thermometer ID : **1709629**	pH Paper ID : **N/A**	
Perservative :		

	Check Points	Yes	No	N/A
1.	**Cooler seal present and signed.**	X		
2.	**Sample(s) in a cooler.**		X	
3.	**If yes, ice in cooler.**			X
4.	**Sample(s) received with chain-of-custody.**	X		
5.	**C-O-C signed and dated.**	X		
6.	**Sample(s) received with signed sample custody seal.**		X	
7.	**Sample containers arrived intact. (If no comment).**	X		
8.	**Matrix :** **Water** ☐ **Soil** ☐ **Liquid** ☐ **Sludge** ☐ **Solid** ☐ **Cassette** ☑ **Tube** ☐ **Bulk** ☐ **Badge** ☐ **Food** ☐ **Other** ☐			
9.	**Sample(s) were received in appropriate container(s).**	X		
10.	**Sample(s) were received with proper preservative**			X
11.	**All samples were logged 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 within 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 were received in box with custody seal. -CH 07/22/21. Per client email - The sample ID is wrong on the COC and should read "MSE02-071521". - ACH 7/30/2021

Received by : [redacted]

Check in by/date : [redacted] / 07/22/2021

Event ID: Air Monitoring

COC# KT070201ASB

Gilbane

Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II I310000400

Project Manager: [redacted]

Site Location: Hunters Point, San Francisco, CA 94124

Laboratory Name: A&B Labs

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

Contact Name: [redacted]

Date: 7/20/2021

Page: 1 of 1

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Analysis: Asbestos	Preservative: None / Container Type: Filter	Flow Rate = 2 L/min Special Instructions/Comments Total Time (min)
MSE01-071521 01A	7/15/2021	1353	NA	NA	1	AA	X		351
MSE02-062921 02A	7/15/2021	1533	NA	NA	1	AA	X		465

Job ID:21071813

07/21/2021 Gilbane ACH

[redacted]

Sampled By: [redacted]

Signature:

Special Instructions: None

Send Results to: edawson@gilbaneco.com; ktom@gilbaneco.com

Turnaround Time: Standard

Sampler: [redacted]

Courier/Airbill No.: FedEx/ 7742 9478 9770

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
[redacted] / Gilbane	7/20/21	1400	FedEx	7/20/21	1400
FEDEX	7.21.21	15:04	[redacted]	7.21.21	15:04

TEMP: 22.1-0.1=22.0°C ID: 1709029

[redacted]
GILBANE
200 FISHER STREET

SAN FRANCISCO, CA 94124
UNITED STATES US

SHIP DATE: 20JUL21
ACTWGT: 1.00 LB
CAD: 102700259/INET4400

BILL SENDER

TO [redacted]

A & B LABS
10100 EAST FREEWAY, SUITE 100

HOUSTON TX 77029

[redacted]
REF: J310000400 B 00 0908000
INV:
PO: DEPT:

FedEx Express

FedEx Ship Manager - Print Your Label(s)

56DJ20265/FE4A

WED - 21 JUL 4:30P
STANDARD OVERNIGHT

TRK# 0201 **7742 9478 9770**

UL HBYA

77029
TX-US **IAH**

4L

CUSTODY SEAL

Date: 7/20/21

Signature: [redacted]

[redacted]

From: [redacted] <alishar@ablabs.com>
Sent: Friday, July 30, 2021 9:56 AM
To: [redacted]
Cc: scarpenter@ablabs.com[redacted]
Subject: Re: FW: FW: Job ID 21071813 Report, HPNS Parcel E Phase II J310000400
Attachments: 21071813.pdf

[EXTERNAL]

Please see attached.

[redacted]

[redacted]

A&B Environmental Services, Inc. dba A&B Labs
10100 East Freeway, Suite 100
Houston, Texas 77029
[redacted]
alishar@ablabs.com

On Fri, Jul 30, 2021 at 11:06 AM [redacted] <TBeer@gilbaneco.com> wrote:

[redacted],

Thankyou, but we still need it exactly in the format “MSE02-071521” based on intense scrutiny from the regulatory oversight.

Thanks,

[redacted]

[redacted] | Environmental | **Gilbane**

1655 Grant Street, Suite 1200, Concord, CA 94520

[redacted]

From: [redacted] <alishar@ablabs.com>
Sent: Friday, July 30, 2021 9:00 AM
To: [redacted] <TBeer@GilbaneCo.com>
Cc: [redacted] <KTom@GilbaneCo.com>; scarpenter@ablabs.com
Subject: Re: FW: Job ID 21071813 Report, HPNS Parcel E Phase II J310000400

[EXTERNAL]

Good morning!

Attached is the revised report requested.

[redacted]

[redacted]

A&B Environmental Services, Inc. dba A&B Labs
10100 East Freeway, Suite 100
Houston, Texas 77029

[redacted]
[redacted]
alishar@ablabs.com

On Thu, Jul 29, 2021 at 5:03 PM [redacted] <TBeer@gilbaneco.com> wrote:

> Hi [redacted],
>
> I am taking over for Evelyn while she is out until next week. Our QC didn't catch this until [redacted] just noticed that one of the sample IDs is wrong on the COC and should read "MSE02-71521". Please change it and re-issue the report.

Thanks,

[redacted]

[redacted] | Environmental | **Gilbane**

1655 Grant Street, Suite 1200, Concord, CA 94520

[redacted]

From: [redacted] <KTom@GilbaneCo.com>
Sent: Thursday, July 29, 2021 2:46 PM
To: [redacted] <TBeer@GilbaneCo.com>
Subject: FW: Job ID 21071813 Report, HPNS Parcel E Phase II J310000400

[redacted]

[redacted] | Federal Division

Gilbane Building Company | Celebrating 150 Years

1655 Grant Street, Suite 1200 | Concord, CA 94520

[redacted]

From: A & B Labs <info@ablabs.com>
Sent: Thursday, July 29, 2021 2:43 PM
To: [redacted] <EDawson@GilbaneCo.com>; [redacted] <KTom@GilbaneCo.com>; [redacted] <COsorio@GilbaneCo.com>; [redacted] <RWeekly@GilbaneCo.com>
Subject: Job ID 21071813 Report, HPNS Parcel E Phase II J310000400

[EXTERNAL]

Date : 7/29/2021 4:47:37 PM
From : **A & B Labs** <info@ablabs.com>
Subject : A&B Job ID 21071813,
Project Name : Report, HPNS Parcel E Phase II J310000400
Date Received : 7/21/2021
To : EDawson@gilbaneco.com

Attached please find your final report for A&B Job ID 21071813.
If you have questions regarding your laboratory report or other request, please contact any of the following:

We appreciate your business and would like to be your valued business partner. Please help us improve our service by participating in this "One Minute Survey" below:

One Minute Survey

In appreciation of your participation in the survey your name will be included in monthly lottery drawing for a $100 visa gift card.

Thank you for choosing A&B Labs.
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ANALYTICAL REPORT

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

Laboratory Job ID: 320-75720-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

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

Attn [redacted]

[redacted]

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.

Table of Contents

Definitions/Glossary

Client: Gilbane Federal
Job ID: 320-75720-1
Project/Site: Hunters Point, Parcel E, Phase 2

Qualifiers

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

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

Job ID: 320-75720-1

Job ID: 320-75720-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-75720-1

Comments
No additional comments.

Receipt
The samples were received on 7/2/2021 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 18.1º C.

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

Detection Summary

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

Job ID: 320-75720-1

Client Sample ID: GILBANEPM061721-1280 — Lab Sample ID: 320-75720-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0016		0.00068	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.033	B	0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0038	B	0.00068	0.000095	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: GILBANETSP061721-1280 — Lab Sample ID: 320-75720-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	24.6776		0.2817	0.2817	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM061721-1281 — Lab Sample ID: 320-75720-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.00072		0.00067	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.046	B	0.0013	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0025	B	0.00067	0.000094	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	16		0.28	0.28	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP061721-1281 — Lab Sample ID: 320-75720-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	18.8841		0.2960	0.2960	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM061721-1282 — Lab Sample ID: 320-75720-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0010		0.00072	0.00011	ug/m3 (Air)	1		6020	Total/NA
Copper	0.020	B	0.0014	0.00011	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0013	B	0.00072	0.00010	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	5.4		0.30	0.30	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP061721-1282 — Lab Sample ID: 320-75720-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	8.5010		0.2972	0.2972	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM061721-1283 — Lab Sample ID: 320-75720-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.00039	J	0.00071	0.00011	ug/m3 (Air)	1		6020	Total/NA
Copper	0.035	B	0.0014	0.00011	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0013	B	0.00071	0.000099	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	5.8		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP061721-1283 — Lab Sample ID: 320-75720-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	6.9192		0.3089	0.3089	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Gilbane Federal
Job ID: 320-75720-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM061721-1280
Lab Sample ID: 320-75720-1
Date Collected: 06/30/21 07:49
Matrix: Air
Date Received: 07/02/21 09:30
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0016		0.00068	0.00010	ug/m3 (Air)		07/12/21 07:00	07/12/21 14:59	1
Copper	0.033	B	0.0014	0.00010	ug/m3 (Air)		07/12/21 07:00	07/12/21 14:59	1
Manganese	0.0038	B	0.00068	0.000095	ug/m3 (Air)		07/12/21 07:00	07/12/21 14:59	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			07/07/21 13:00	1

Client Sample ID: GILBANETSP061721-1280
Lab Sample ID: 320-75720-2
Date Collected: 06/30/21 07:49
Matrix: Air
Date Received: 07/02/21 09:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	24.6776		0.2817	0.2817	ug/m3 (Air)			07/07/21 13:00	1

Client Sample ID: GILBANEPM061721-1281
Lab Sample ID: 320-75720-3
Date Collected: 06/30/21 07:25
Matrix: Air
Date Received: 07/02/21 09:30
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00072		0.00067	0.00010	ug/m3 (Air)		07/12/21 07:00	07/12/21 15:09	1
Copper	0.046	B	0.0013	0.00010	ug/m3 (Air)		07/12/21 07:00	07/12/21 15:09	1
Manganese	0.0025	B	0.00067	0.000094	ug/m3 (Air)		07/12/21 07:00	07/12/21 15:09	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	16		0.28	0.28	ug/m3			07/07/21 13:00	1

Client Sample ID: GILBANETSP061721-1281
Lab Sample ID: 320-75720-4
Date Collected: 06/30/21 07:25
Matrix: Air
Date Received: 07/02/21 09:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	18.8841		0.2960	0.2960	ug/m3 (Air)			07/07/21 13:00	1

Client Sample ID: GILBANEPM061721-1282
Lab Sample ID: 320-75720-5
Date Collected: 07/01/21 06:55
Matrix: Air
Date Received: 07/02/21 09:30
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0010		0.00072	0.00011	ug/m3 (Air)		07/12/21 07:00	07/12/21 15:12	1
Copper	0.020	B	0.0014	0.00011	ug/m3 (Air)		07/12/21 07:00	07/12/21 15:12	1
Manganese	0.0013	B	0.00072	0.00010	ug/m3 (Air)		07/12/21 07:00	07/12/21 15:12	1

Client Sample ID: GILBANEPM061721-1282
Lab Sample ID: 320-75720-5
Date Collected: 07/01/21 06:55
Matrix: Air
Date Received: 07/02/21 09:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	5.4		0.30	0.30	ug/m3			07/07/21 13:00	1

Client Sample ID: GILBANETSP061721-1282
Lab Sample ID: 320-75720-6
Date Collected: 07/01/21 06:55
Matrix: Air
Date Received: 07/02/21 09:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	8.5010		0.2972	0.2972	ug/m3 (Air)			07/07/21 13:00	1

Client Sample ID: GILBANEPM061721-1283
Lab Sample ID: 320-75720-7
Date Collected: 07/01/21 06:42
Matrix: Air
Date Received: 07/02/21 09:30
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00039	J	0.00071	0.00011	ug/m3 (Air)		07/12/21 07:00	07/12/21 15:15	1
Copper	0.035	B	0.0014	0.00011	ug/m3 (Air)		07/12/21 07:00	07/12/21 15:15	1
Manganese	0.0013	B	0.00071	0.000099	ug/m3 (Air)		07/12/21 07:00	07/12/21 15:15	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	5.8		0.29	0.29	ug/m3			07/07/21 13:00	1

Client Sample ID: GILBANETSP061721-1283
Lab Sample ID: 320-75720-8
Date Collected: 07/01/21 06:42
Matrix: Air
Date Received: 07/02/21 09:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	6.9192		0.3089	0.3089	ug/m3 (Air)			07/07/21 13:00	1

QC Sample Results

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

Job ID: 320-75720-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-505719/1-B
Matrix: Air
Analysis Batch: 505973

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 505720

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		07/12/21 07:00	07/12/21 14:56	1
Copper	0.000191	J	0.0024	0.00018	ug/m3 (Air)		07/12/21 07:00	07/12/21 14:56	1
Manganese	0.000703	J	0.0012	0.00017	ug/m3 (Air)		07/12/21 07:00	07/12/21 14:56	1

Lab Sample ID: LCS 320-505719/2-B
Matrix: Air
Analysis Batch: 505973

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 505720

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.240	0.245		ug/m3 (Air)		102	86 - 111
Copper	0.240	0.251		ug/m3 (Air)		105	85 - 110
Manganese	0.240	0.237		ug/m3 (Air)		99	88 - 110

Lab Sample ID: LCSD 320-505719/3-B
Matrix: Air
Analysis Batch: 505973

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 505720

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	0.240	0.231		ug/m3 (Air)		96	86 - 111	6	15
Copper	0.240	0.247		ug/m3 (Air)		103	85 - 110	2	15
Manganese	0.240	0.226		ug/m3 (Air)		94	88 - 110	5	15

QC Association Summary

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

Job ID: 320-75720-1

Metals

Pre Prep Batch: 505719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75720-1	GILBANEPM061721-1280	Total/NA	Air	Filter to Air	
320-75720-3	GILBANEPM061721-1281	Total/NA	Air	Filter to Air	
320-75720-5	GILBANEPM061721-1282	Total/NA	Air	Filter to Air	
320-75720-7	GILBANEPM061721-1283	Total/NA	Air	Filter to Air	
MB 320-505719/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-505719/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-505719/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 505720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75720-1	GILBANEPM061721-1280	Total/NA	Air	3050B	505719
320-75720-3	GILBANEPM061721-1281	Total/NA	Air	3050B	505719
320-75720-5	GILBANEPM061721-1282	Total/NA	Air	3050B	505719
320-75720-7	GILBANEPM061721-1283	Total/NA	Air	3050B	505719
MB 320-505719/1-B	Method Blank	Total/NA	Air	3050B	505719
LCS 320-505719/2-B	Lab Control Sample	Total/NA	Air	3050B	505719
LCSD 320-505719/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	505719

Analysis Batch: 505973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75720-1	GILBANEPM061721-1280	Total/NA	Air	6020	505720
320-75720-3	GILBANEPM061721-1281	Total/NA	Air	6020	505720
320-75720-5	GILBANEPM061721-1282	Total/NA	Air	6020	505720
320-75720-7	GILBANEPM061721-1283	Total/NA	Air	6020	505720
MB 320-505719/1-B	Method Blank	Total/NA	Air	6020	505720
LCS 320-505719/2-B	Lab Control Sample	Total/NA	Air	6020	505720
LCSD 320-505719/3-B	Lab Control Sample Dup	Total/NA	Air	6020	505720

General Chemistry

Pre Prep Batch: 504779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75720-2	GILBANETSP061721-1280	Total/NA	Air	Filter to Air	
320-75720-4	GILBANETSP061721-1281	Total/NA	Air	Filter to Air	
320-75720-6	GILBANETSP061721-1282	Total/NA	Air	Filter to Air	
320-75720-8	GILBANETSP061721-1283	Total/NA	Air	Filter to Air	

Analysis Batch: 505853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75720-1	GILBANEPM061721-1280	Total/NA	Air	PM10	
320-75720-3	GILBANEPM061721-1281	Total/NA	Air	PM10	
320-75720-5	GILBANEPM061721-1282	Total/NA	Air	PM10	
320-75720-7	GILBANEPM061721-1283	Total/NA	Air	PM10	

Analysis Batch: 505854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75720-2	GILBANETSP061721-1280	Total/NA	Air	40CFR50 App B	504779
320-75720-4	GILBANETSP061721-1281	Total/NA	Air	40CFR50 App B	504779
320-75720-6	GILBANETSP061721-1282	Total/NA	Air	40CFR50 App B	504779
320-75720-8	GILBANETSP061721-1283	Total/NA	Air	40CFR50 App B	504779

Lab Chronicle

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

Job ID: 320-75720-1

Client Sample ID: GILBANEPM061721-1280
Lab Sample ID: 320-75720-1
Date Collected: 06/30/21 07:49
Matrix: Air
Date Received: 07/02/21 09:30

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					505719	07/12/21 06:30	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	505720	07/12/21 07:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			505973	07/12/21 14:59	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0319 g	505853	07/07/21 13:00	DPM	TAL SAC

Client Sample ID: GILBANETSP061721-1280
Lab Sample ID: 320-75720-2
Date Collected: 06/30/21 07:49
Matrix: Air
Date Received: 07/02/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			505854	07/07/21 13:00	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					504779	07/07/21 13:29	DPM	TAL SAC

Client Sample ID: GILBANEPM061721-1281
Lab Sample ID: 320-75720-3
Date Collected: 06/30/21 07:25
Matrix: Air
Date Received: 07/02/21 09:30

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					505719	07/12/21 06:30	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	505720	07/12/21 07:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			505973	07/12/21 15:09	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0293 g	505853	07/07/21 13:00	DPM	TAL SAC

Client Sample ID: GILBANETSP061721-1281
Lab Sample ID: 320-75720-4
Date Collected: 06/30/21 07:25
Matrix: Air
Date Received: 07/02/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			505854	07/07/21 13:00	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					504779	07/07/21 13:29	DPM	TAL SAC

Client Sample ID: GILBANEPM061721-1282
Lab Sample ID: 320-75720-5
Date Collected: 07/01/21 06:55
Matrix: Air
Date Received: 07/02/21 09:30

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					505719	07/12/21 06:30	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	505720	07/12/21 07:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			505973	07/12/21 15:12	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0090 g	505853	07/07/21 13:00	DPM	TAL SAC

Lab Chronicle

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

Job ID: 320-75720-1

Client Sample ID: GILBANETSP061721-1282

Lab Sample ID: 320-75720-6
Date Collected: 07/01/21 06:55
Matrix: Air
Date Received: 07/02/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			505854	07/07/21 13:00	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					504779	07/07/21 13:29	DPM	TAL SAC

Client Sample ID: GILBANEPM061721-1283

Lab Sample ID: 320-75720-7
Date Collected: 07/01/21 06:42
Matrix: Air
Date Received: 07/02/21 09:30

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					505719	07/12/21 06:30	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	505720	07/12/21 07:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			505973	07/12/21 15:15	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0099 g	505853	07/07/21 13:00	DPM	TAL SAC

Client Sample ID: GILBANETSP061721-1283

Lab Sample ID: 320-75720-8
Date Collected: 07/01/21 06:42
Matrix: Air
Date Received: 07/02/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			505854	07/07/21 13:00	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					504779	07/07/21 13:29	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
Job ID: 320-75720-1
Project/Site: Hunters Point, Parcel E, Phase 2

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	01-30-23

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

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

Method Summary

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

Job ID: 320-75720-1

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: 320-75720-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-75720-1	GILBANEPM061721-1280	Air	06/30/21 07:49	07/02/21 09:30	
320-75720-2	GILBANETSP061721-1280	Air	06/30/21 07:49	07/02/21 09:30	
320-75720-3	GILBANEPM061721-1281	Air	06/30/21 07:25	07/02/21 09:30	
320-75720-4	GILBANETSP061721-1281	Air	06/30/21 07:25	07/02/21 09:30	
320-75720-5	GILBANEPM061721-1282	Air	07/01/21 06:55	07/02/21 09:30	
320-75720-6	GILBANETSP061721-1282	Air	07/01/21 06:55	07/02/21 09:30	
320-75720-7	GILBANEPM061721-1283	Air	07/01/21 06:42	07/02/21 09:30	
320-75720-8	GILBANETSP061721-1283	Air	07/01/21 06:42	07/02/21 09:30	

CHAIN-OF-CUSTODY RECORD

Gilbane Federal
[redacted]
1655 Grant Street, Suite 1200, Concord, CA 94520
bwomack@gilbaneco.com

COC # KT070121AIR

Gilbane

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

Comments:

Equipment:

Code	Matrix
A	Air

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

320-75720 Chain of Custody

						Analytical Test Method												
	Event: Parcel E Phase 2 Air Monitoring					CAAIR - Air PM10	N0500 - Air TSP	SW6020 - Air Pb Mn Cu										
						1	1	1										
	Sample ID	Matrix	Date	Time	Samp Init.										Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
1	GILBANEPM061721-1280	A	06/30/2021	0749	KT	X		X							AMSE1	N1	0.00	0.00	1	VOLUME: 1774.36
2	GILBANETSP061721-1280	A	06/30/2021	0749	KT		X								AMSE1	N1	0.00	0.00	1	VOLUME: 1774.89
3	GILBANEPM061721-1281	A	06/30/2021	0725	KT	X		X							AMSE2	N1	0.00	0.00	1	VOLUME: 1778.96
4	GILBANETSP061721-1281	A	06/30/2021	0725	KT		X								AMSE2	N1	0.00	0.00	1	VOLUME: 1689.25
5	GILBANEPM061721-1282	A	07/01/2021	0655	KT	X		X							AMSE1	N1	0.00	0.00	1	VOLUME: 1673.94
6	GILBANETSP061721-1282	A	07/01/2021	0655	KT		X								AMSE1	N1	0.00	0.00	1	VOLUME: 1682.15
7	GILBANEPM061721-1283	A	07/01/2021	0642	KT	X		X							AMSE2	N1	0.00	0.00	1	VOLUME: 1696.31
8	GILBANETSP061721-1283	A	07/01/2021	0642	KT		X								AMSE2	N1	0.00	0.00	1	VOLUME: 1618.69
9																				[redacted]
10																				

Turnaround Time: 5 days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[redacted]					

Shipping Date / Carrier / Airbill Number

Shipping Date: 7/1/2021 / FedEx 7741 5561 9564

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

Login Sample Receipt Checklist

Client: Gilbane Federal

Job Number: 320-75720-1

Login Number: 75720

List Source: Eurofins TestAmerica, 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.	N/A	
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?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 320-75840-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

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

A[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Table of Contents

Definitions/Glossary

Client: Gilbane Federal
Job ID: 320-75840-1
Project/Site: Hunters Point, Parcel E, Phase 2

Qualifiers

Metals

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

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

Job ID: 320-75840-1

Job ID: 320-75840-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-75840-1

Comments
No additional comments.

Receipt
The samples were received on 7/7/2021 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 19.2º C.

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

Detection Summary

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

Job ID: 320-75840-1

Client Sample ID: GILBANEPM061721-1284 — Lab Sample ID: 320-75840-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0016	J	0.0039	0.00059	ug/m3 (Air)	1		6020	Total/NA
Copper	0.027		0.0079	0.00059	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0026	J	0.0039	0.00055	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	6.2		1.6	1.6	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP061721-1284 — Lab Sample ID: 320-75840-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	7.8529		1.6360	1.6360	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM061721-1285 — Lab Sample ID: 320-75840-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0011	J	0.0039	0.00058	ug/m3 (Air)	1		6020	Total/NA
Copper	0.040		0.0077	0.00058	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0030	J	0.0039	0.00054	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	6.4		1.6	1.6	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP061721-1285 — Lab Sample ID: 320-75840-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	9.1560		1.6955	1.6955	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Gilbane Federal
Job ID: 320-75840-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM061721-1284
Lab Sample ID: 320-75840-1
Date Collected: 07/01/21 11:11
Matrix: Air
Date Received: 07/07/21 11:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0016	J	0.0039	0.00059	ug/m3 (Air)		07/13/21 08:00	07/13/21 16:39	1
Copper	0.027		0.0079	0.00059	ug/m3 (Air)		07/13/21 08:00	07/13/21 16:39	1
Manganese	0.0026	J	0.0039	0.00055	ug/m3 (Air)		07/13/21 08:00	07/13/21 16:39	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	6.2		1.6	1.6	ug/m3			07/11/21 10:30	1

Client Sample ID: GILBANETSP061721-1284
Lab Sample ID: 320-75840-2
Date Collected: 07/01/21 11:11
Matrix: Air
Date Received: 07/07/21 11:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	7.8529		1.6360	1.6360	ug/m3 (Air)			07/11/21 10:30	1

Client Sample ID: GILBANEPM061721-1285
Lab Sample ID: 320-75840-3
Date Collected: 07/01/21 11:01
Matrix: Air
Date Received: 07/07/21 11:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0011	J	0.0039	0.00058	ug/m3 (Air)		07/13/21 08:00	07/13/21 17:01	1
Copper	0.040		0.0077	0.00058	ug/m3 (Air)		07/13/21 08:00	07/13/21 17:01	1
Manganese	0.0030	J	0.0039	0.00054	ug/m3 (Air)		07/13/21 08:00	07/14/21 11:04	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	6.4		1.6	1.6	ug/m3			07/11/21 10:30	1

Client Sample ID: GILBANETSP061721-1285
Lab Sample ID: 320-75840-4
Date Collected: 07/01/21 11:01
Matrix: Air
Date Received: 07/07/21 11:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	9.1560		1.6955	1.6955	ug/m3 (Air)			07/11/21 10:30	1

QC Sample Results

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

Job ID: 320-75840-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-506039/1-B
Matrix: Air
Analysis Batch: 506447

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 506040

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		07/13/21 08:00	07/13/21 16:30	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		07/13/21 08:00	07/13/21 16:30	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		07/13/21 08:00	07/13/21 16:30	1

Lab Sample ID: LCS 320-506039/2-B
Matrix: Air
Analysis Batch: 506447

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 506040

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.240	0.216		ug/m3 (Air)		90	86 - 111
Copper	0.240	0.220		ug/m3 (Air)		92	85 - 110
Manganese	0.240	0.217		ug/m3 (Air)		90	88 - 110

Lab Sample ID: LCSD 320-506039/3-B
Matrix: Air
Analysis Batch: 506447

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 506040

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	0.240	0.230		ug/m3 (Air)		96	86 - 111	6	15
Copper	0.240	0.233		ug/m3 (Air)		97	85 - 110	6	15
Manganese	0.240	0.236		ug/m3 (Air)		98	88 - 110	8	15

QC Association Summary

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

Job ID: 320-75840-1

Metals

Pre Prep Batch: 506039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75840-1	GILBANEPM061721-1284	Total/NA	Air	Filter to Air	
320-75840-3	GILBANEPM061721-1285	Total/NA	Air	Filter to Air	
MB 320-506039/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-506039/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-506039/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 506040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75840-1	GILBANEPM061721-1284	Total/NA	Air	3050B	506039
320-75840-3	GILBANEPM061721-1285	Total/NA	Air	3050B	506039
MB 320-506039/1-B	Method Blank	Total/NA	Air	3050B	506039
LCS 320-506039/2-B	Lab Control Sample	Total/NA	Air	3050B	506039
LCSD 320-506039/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	506039

Analysis Batch: 506447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75840-1	GILBANEPM061721-1284	Total/NA	Air	6020	506040
320-75840-3	GILBANEPM061721-1285	Total/NA	Air	6020	506040
MB 320-506039/1-B	Method Blank	Total/NA	Air	6020	506040
LCS 320-506039/2-B	Lab Control Sample	Total/NA	Air	6020	506040
LCSD 320-506039/3-B	Lab Control Sample Dup	Total/NA	Air	6020	506040

Analysis Batch: 506746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75840-3	GILBANEPM061721-1285	Total/NA	Air	6020	506040

General Chemistry

Pre Prep Batch: 505852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75840-2	GILBANETSP061721-1284	Total/NA	Air	Filter to Air	
320-75840-4	GILBANETSP061721-1285	Total/NA	Air	Filter to Air	

Analysis Batch: 506224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75840-2	GILBANETSP061721-1284	Total/NA	Air	40CFR50 App B	505852
320-75840-4	GILBANETSP061721-1285	Total/NA	Air	40CFR50 App B	505852

Analysis Batch: 506238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75840-1	GILBANEPM061721-1284	Total/NA	Air	PM10	
320-75840-3	GILBANEPM061721-1285	Total/NA	Air	PM10	

Lab Chronicle

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

Job ID: 320-75840-1

Client Sample ID: GILBANEPM061721-1284

Lab Sample ID: 320-75840-1
Date Collected: 07/01/21 11:11
Matrix: Air
Date Received: 07/07/21 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					506039	07/13/21 07:45	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	506040	07/13/21 08:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			506447	07/13/21 16:39	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0019 g	506238	07/11/21 10:30	DPM	TAL SAC

Client Sample ID: GILBANETSP061721-1284

Lab Sample ID: 320-75840-2
Date Collected: 07/01/21 11:11
Matrix: Air
Date Received: 07/07/21 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			506224	07/11/21 10:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					505852	07/12/21 13:12	DPM	TAL SAC

Client Sample ID: GILBANEPM061721-1285

Lab Sample ID: 320-75840-3
Date Collected: 07/01/21 11:01
Matrix: Air
Date Received: 07/07/21 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					506039	07/13/21 07:45	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	506040	07/13/21 08:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			506447	07/13/21 17:01	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					506039	07/13/21 07:45	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	506040	07/13/21 08:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			506746	07/14/21 11:04	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0020 g	506238	07/11/21 10:30	DPM	TAL SAC

Client Sample ID: GILBANETSP061721-1285

Lab Sample ID: 320-75840-4
Date Collected: 07/01/21 11:01
Matrix: Air
Date Received: 07/07/21 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			506224	07/11/21 10:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					505852	07/12/21 13:12	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
Job ID: 320-75840-1
Project/Site: Hunters Point, Parcel E, Phase 2

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	01-30-23

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

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

Method Summary

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

Job ID: 320-75840-1

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: 320-75840-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-75840-1	GILBANEPM061721-1284	Air	07/01/21 11:11	07/07/21 11:00	
320-75840-2	GILBANETSP061721-1284	Air	07/01/21 11:11	07/07/21 11:00	
320-75840-3	GILBANEPM061721-1285	Air	07/01/21 11:01	07/07/21 11:00	
320-75840-4	GILBANETSP061721-1285	Air	07/01/21 11:01	07/07/21 11:00	

CHAIN-OF-CUSTODY RECORD

[redacted]
1655 Grant Street, Suite 1200, Concord, CA 94520
bwomack@gilbaneco.com

COC # KT070621AIR

Gilbane

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

Comments:

Equipment:

Code	Matrix
A	Air

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

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: CAAIR - Air PM10	N0500 - Air TSP	SW6020 - Air Pb Mn Cu	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
	Event: Parcel E Phase 2 Air Monitoring					1	1	1						
1	GILBANEPM061721-1284	A	07/01/2021	1111	KT	X		X	AMSE1	N2	0.00	0.00	1	VOLUME: 304.34
2	GILBANETSP061721-1284	A	07/01/2021	1111	KT		X		AMSE1	N2	0.00	0.00	1	VOLUME: 305.62
3	GILBANEPM061721-1285	A	07/01/2021	1101	KT	X		X	AMSE2	N2	0.00	0.00	1	VOLUME: 310.31
4	GILBANETSP061721-1285	A	07/01/2021	1101	KT		X		AMSE2	N2	0.00	0.00	1	VOLUME: 294.89
5														
6														

Turnaround Time: 5 days

[redacted]

320-75840 Chain of Custody

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[redacted]					

Shipping Date / Carrier / Airbill Number

Shipping Date: 7/6/2021/FedEx 7741 6868 9620

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

19.2°C

Login Sample Receipt Checklist

Client: Gilbane Federal

Job Number: 320-75840-1

Login Number: 75840

List Source: Eurofins TestAmerica, 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?	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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 320-75995-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

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

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

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.

Table of Contents

Definitions/Glossary

Client: Gilbane Federal
Job ID: 320-75995-1
Project/Site: Hunters Point, Parcel E, Phase 2

Qualifiers

Metals

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

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

Job ID: 320-75995-1

Job ID: 320-75995-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-75995-1

Comments
No additional comments.

Receipt
The samples were received on 7/9/2021 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 18.9º C.

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

Detection Summary

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

Job ID: 320-75995-1

Client Sample ID: GILBANEPM061721-1286 — Lab Sample ID: 320-75995-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0011		0.00073	0.00011	ug/m3 (Air)	1		6020	Total/NA
Copper	0.018		0.0015	0.00011	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0022		0.00073	0.00010	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	11		0.30	0.30	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP061721-1286 — Lab Sample ID: 320-75995-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	24.0438		0.3067	0.3067	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM061721-1287 — Lab Sample ID: 320-75995-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0010		0.00076	0.00011	ug/m3 (Air)	1		6020	Total/NA
Copper	0.16		0.0015	0.00011	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0027		0.00076	0.00011	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	15		0.32	0.32	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP061721-1287 — Lab Sample ID: 320-75995-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	17.3885		0.3306	0.3306	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM062921-1288 — Lab Sample ID: 320-75995-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.00069		0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.026		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0018		0.00069	0.000096	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	20		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP062921-1288 — Lab Sample ID: 320-75995-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	28.0044		0.2875	0.2875	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM062921-1289 — Lab Sample ID: 320-75995-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.00046	J	0.00068	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.11		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0024		0.00068	0.000096	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	22		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP062921-1289 — Lab Sample ID: 320-75995-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	28.6348		0.2995	0.2995	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GILBANEPM061721-1286
Lab Sample ID: 320-75995-1
Date Collected: 07/07/21 07:00
Matrix: Air
Date Received: 07/09/21 09:45
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0011		0.00073	0.00011	ug/m3 (Air)		07/13/21 08:00	07/13/21 17:04	1
Copper	0.018		0.0015	0.00011	ug/m3 (Air)		07/13/21 08:00	07/13/21 17:04	1
Manganese	0.0022		0.00073	0.00010	ug/m3 (Air)		07/13/21 08:00	07/14/21 11:07	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	11		0.30	0.30	ug/m3			07/11/21 10:30	1

Client Sample ID: GILBANETSP061721-1286
Lab Sample ID: 320-75995-2
Date Collected: 07/07/21 07:00
Matrix: Air
Date Received: 07/09/21 09:45
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	24.0438		0.3067	0.3067	ug/m3 (Air)			07/11/21 10:30	1

Client Sample ID: GILBANEPM061721-1287
Lab Sample ID: 320-75995-3
Date Collected: 07/07/21 06:47
Matrix: Air
Date Received: 07/09/21 09:45
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0010		0.00076	0.00011	ug/m3 (Air)		07/13/21 08:00	07/13/21 17:07	1
Copper	0.16		0.0015	0.00011	ug/m3 (Air)		07/13/21 08:00	07/13/21 17:07	1
Manganese	0.0027		0.00076	0.00011	ug/m3 (Air)		07/13/21 08:00	07/14/21 11:10	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	15		0.32	0.32	ug/m3			07/11/21 10:30	1

Client Sample ID: GILBANETSP061721-1287
Lab Sample ID: 320-75995-4
Date Collected: 07/07/21 06:47
Matrix: Air
Date Received: 07/09/21 09:45
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	17.3885		0.3306	0.3306	ug/m3 (Air)			07/11/21 10:30	1

Client Sample ID: GILBANEPM062921-1288
Lab Sample ID: 320-75995-5
Date Collected: 07/08/21 07:05
Matrix: Air
Date Received: 07/09/21 09:45
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00069		0.00069	0.00010	ug/m3 (Air)		07/13/21 08:00	07/13/21 17:10	1
Copper	0.026		0.0014	0.00010	ug/m3 (Air)		07/13/21 08:00	07/13/21 17:10	1
Manganese	0.0018		0.00069	0.000096	ug/m3 (Air)		07/13/21 08:00	07/14/21 11:13	1

Client Sample Results

Client: Gilbane Federal
Job ID: 320-75995-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM062921-1288
Lab Sample ID: 320-75995-5
Date Collected: 07/08/21 07:05
Matrix: Air
Date Received: 07/09/21 09:45
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	20		0.29	0.29	ug/m3			07/11/21 10:30	1

Client Sample ID: GILBANETSP062921-1288
Lab Sample ID: 320-75995-6
Date Collected: 07/08/21 07:05
Matrix: Air
Date Received: 07/09/21 09:45
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	28.0044		0.2875	0.2875	ug/m3 (Air)			07/11/21 10:30	1

Client Sample ID: GILBANEPM062921-1289
Lab Sample ID: 320-75995-7
Date Collected: 07/08/21 06:53
Matrix: Air
Date Received: 07/09/21 09:45
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00046	J	0.00068	0.00010	ug/m3 (Air)		07/13/21 08:00	07/13/21 17:14	1
Copper	0.11		0.0014	0.00010	ug/m3 (Air)		07/13/21 08:00	07/13/21 17:14	1
Manganese	0.0024		0.00068	0.000096	ug/m3 (Air)		07/13/21 08:00	07/14/21 11:16	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	22		0.29	0.29	ug/m3			07/11/21 10:30	1

Client Sample ID: GILBANETSP062921-1289
Lab Sample ID: 320-75995-8
Date Collected: 07/08/21 06:53
Matrix: Air
Date Received: 07/09/21 09:45
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	28.6348		0.2995	0.2995	ug/m3 (Air)			07/11/21 10:30	1

QC Sample Results

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

Job ID: 320-75995-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-506039/1-B
Matrix: Air
Analysis Batch: 506447

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 506040

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		07/13/21 08:00	07/13/21 16:30	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		07/13/21 08:00	07/13/21 16:30	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		07/13/21 08:00	07/13/21 16:30	1

Lab Sample ID: LCS 320-506039/2-B
Matrix: Air
Analysis Batch: 506447

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 506040

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.240	0.216		ug/m3 (Air)		90	86 - 111
Copper	0.240	0.220		ug/m3 (Air)		92	85 - 110
Manganese	0.240	0.217		ug/m3 (Air)		90	88 - 110

Lab Sample ID: LCSD 320-506039/3-B
Matrix: Air
Analysis Batch: 506447

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 506040

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	0.240	0.230		ug/m3 (Air)		96	86 - 111	6	15
Copper	0.240	0.233		ug/m3 (Air)		97	85 - 110	6	15
Manganese	0.240	0.236		ug/m3 (Air)		98	88 - 110	8	15

QC Association Summary

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

Job ID: 320-75995-1

Metals

Pre Prep Batch: 506039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75995-1	GILBANEPM061721-1286	Total/NA	Air	Filter to Air	
320-75995-3	GILBANEPM061721-1287	Total/NA	Air	Filter to Air	
320-75995-5	GILBANEPM062921-1288	Total/NA	Air	Filter to Air	
320-75995-7	GILBANEPM062921-1289	Total/NA	Air	Filter to Air	
MB 320-506039/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-506039/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-506039/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 506040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75995-1	GILBANEPM061721-1286	Total/NA	Air	3050B	506039
320-75995-3	GILBANEPM061721-1287	Total/NA	Air	3050B	506039
320-75995-5	GILBANEPM062921-1288	Total/NA	Air	3050B	506039
320-75995-7	GILBANEPM062921-1289	Total/NA	Air	3050B	506039
MB 320-506039/1-B	Method Blank	Total/NA	Air	3050B	506039
LCS 320-506039/2-B	Lab Control Sample	Total/NA	Air	3050B	506039
LCSD 320-506039/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	506039

Analysis Batch: 506447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75995-1	GILBANEPM061721-1286	Total/NA	Air	6020	506040
320-75995-3	GILBANEPM061721-1287	Total/NA	Air	6020	506040
320-75995-5	GILBANEPM062921-1288	Total/NA	Air	6020	506040
320-75995-7	GILBANEPM062921-1289	Total/NA	Air	6020	506040
MB 320-506039/1-B	Method Blank	Total/NA	Air	6020	506040
LCS 320-506039/2-B	Lab Control Sample	Total/NA	Air	6020	506040
LCSD 320-506039/3-B	Lab Control Sample Dup	Total/NA	Air	6020	506040

Analysis Batch: 506746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75995-1	GILBANEPM061721-1286	Total/NA	Air	6020	506040
320-75995-3	GILBANEPM061721-1287	Total/NA	Air	6020	506040
320-75995-5	GILBANEPM062921-1288	Total/NA	Air	6020	506040
320-75995-7	GILBANEPM062921-1289	Total/NA	Air	6020	506040

General Chemistry

Pre Prep Batch: 505852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75995-2	GILBANETSP061721-1286	Total/NA	Air	Filter to Air	
320-75995-4	GILBANETSP061721-1287	Total/NA	Air	Filter to Air	
320-75995-6	GILBANETSP062921-1288	Total/NA	Air	Filter to Air	
320-75995-8	GILBANETSP062921-1289	Total/NA	Air	Filter to Air	

Analysis Batch: 506224

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75995-2	GILBANETSP061721-1286	Total/NA	Air	40CFR50 App B	505852
320-75995-4	GILBANETSP061721-1287	Total/NA	Air	40CFR50 App B	505852
320-75995-6	GILBANETSP062921-1288	Total/NA	Air	40CFR50 App B	505852
320-75995-8	GILBANETSP062921-1289	Total/NA	Air	40CFR50 App B	505852

QC Association Summary

Client: Gilbane Federal
Job ID: 320-75995-1
Project/Site: Hunters Point, Parcel E, Phase 2

General Chemistry

Analysis Batch: 506238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75995-1	GILBANEPM061721-1286	Total/NA	Air	PM10	
320-75995-3	GILBANEPM061721-1287	Total/NA	Air	PM10	
320-75995-5	GILBANEPM062921-1288	Total/NA	Air	PM10	
320-75995-7	GILBANEPM062921-1289	Total/NA	Air	PM10	

Lab Chronicle

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

Job ID: 320-75995-1

Client Sample ID: GILBANEPM061721-1286
Lab Sample ID: 320-75995-1
Date Collected: 07/07/21 07:00
Matrix: Air
Date Received: 07/09/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					506039	07/13/21 07:45	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	506040	07/13/21 08:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			506447	07/13/21 17:04	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					506039	07/13/21 07:45	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	506040	07/13/21 08:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			506746	07/14/21 11:07	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0178 g	506238	07/11/21 10:30	DPM	TAL SAC

Client Sample ID: GILBANETSP061721-1286
Lab Sample ID: 320-75995-2
Date Collected: 07/07/21 07:00
Matrix: Air
Date Received: 07/09/21 09:45

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			506224	07/11/21 10:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					505852	07/12/21 13:12	DPM	TAL SAC

Client Sample ID: GILBANEPM061721-1287
Lab Sample ID: 320-75995-3
Date Collected: 07/07/21 06:47
Matrix: Air
Date Received: 07/09/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					506039	07/13/21 07:45	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	506040	07/13/21 08:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			506447	07/13/21 17:07	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					506039	07/13/21 07:45	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	506040	07/13/21 08:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			506746	07/14/21 11:10	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0229 g	506238	07/11/21 10:30	DPM	TAL SAC

Client Sample ID: GILBANETSP061721-1287
Lab Sample ID: 320-75995-4
Date Collected: 07/07/21 06:47
Matrix: Air
Date Received: 07/09/21 09:45

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			506224	07/11/21 10:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					505852	07/12/21 13:12	DPM	TAL SAC

Lab Chronicle

Client: Gilbane Federal
Job ID: 320-75995-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM062921-1288
Lab Sample ID: 320-75995-5
Date Collected: 07/08/21 07:05
Matrix: Air
Date Received: 07/09/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					506039	07/13/21 07:45	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	506040	07/13/21 08:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			506447	07/13/21 17:10	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					506039	07/13/21 07:45	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	506040	07/13/21 08:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			506746	07/14/21 11:13	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0353 g	506238	07/11/21 10:30	DPM	TAL SAC

Client Sample ID: GILBANETSP062921-1288
Lab Sample ID: 320-75995-6
Date Collected: 07/08/21 07:05
Matrix: Air
Date Received: 07/09/21 09:45

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			506224	07/11/21 10:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					505852	07/12/21 13:12	DPM	TAL SAC

Client Sample ID: GILBANEPM062921-1289
Lab Sample ID: 320-75995-7
Date Collected: 07/08/21 06:53
Matrix: Air
Date Received: 07/09/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					506039	07/13/21 07:45	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	506040	07/13/21 08:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			506447	07/13/21 17:14	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					506039	07/13/21 07:45	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	506040	07/13/21 08:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			506746	07/14/21 11:16	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0378 g	506238	07/11/21 10:30	DPM	TAL SAC

Client Sample ID: GILBANETSP062921-1289
Lab Sample ID: 320-75995-8
Date Collected: 07/08/21 06:53
Matrix: Air
Date Received: 07/09/21 09:45

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			506224	07/11/21 10:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					505852	07/12/21 13:12	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
Job ID: 320-75995-1
Project/Site: Hunters Point, Parcel E, Phase 2

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	01-30-23

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

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

Method Summary

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

Job ID: 320-75995-1

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: 320-75995-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-75995-1	GILBANEPM061721-1286	Air	07/07/21 07:00	07/09/21 09:45	
320-75995-2	GILBANETSP061721-1286	Air	07/07/21 07:00	07/09/21 09:45	
320-75995-3	GILBANEPM061721-1287	Air	07/07/21 06:47	07/09/21 09:45	
320-75995-4	GILBANETSP061721-1287	Air	07/07/21 06:47	07/09/21 09:45	
320-75995-5	GILBANEPM062921-1288	Air	07/08/21 07:05	07/09/21 09:45	
320-75995-6	GILBANETSP062921-1288	Air	07/08/21 07:05	07/09/21 09:45	
320-75995-7	GILBANEPM062921-1289	Air	07/08/21 06:53	07/09/21 09:45	
320-75995-8	GILBANETSP062921-1289	Air	07/08/21 06:53	07/09/21 09:45	

CHAIN-OF-CUSTODY RECORD

Gilbane Federal
[redacted]
1655 Grant Street, Suite 1200, Concord, CA 94520
bwomack@gilbaneco.com

COC # KT070821AIR

Gilbane

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

Comments:

nine

Equipment:

Code	Matrix
A	Air

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

320-75995 Chain of Custody

						Analytical Test Method													
						CAAIR - Air PM10	N0500 - Air TSP	SW6020 - Air Pb Mn Cu											
	Event: Parcel E Phase 2 Air Monitoring					1	1	1											
	Sample ID	Matrix	Date	Time	Samp Init.											Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
1	GILBANEPM061721-1286	A	07/07/2021	0700	KT	X		X								AMSE1	N1	0.00	0.00	1	VOLUME: 1643.13
2	GILBANETSP061721-1286	A	07/07/2021	0700	KT		X									AMSE1	N1	0.00	0.00	1	VOLUME: 1630.36
3	GILBANEPM061721-1287	A	07/07/2021	0647	KT	X		X								AMSE2	N1	0.00	0.00	1	VOLUME: 1578.70
4	GILBANETSP061721-1287	A	07/07/2021	0647	KT		X									AMSE2	N1	0.00	0.00	1	VOLUME: 1512.49
5	GILBANEPM062921-1288	A	07/08/2021	0705	KT	X		X								AMSE1	N1	0.00	0.00	1	VOLUME: 1744.60
6	GILBANETSP062921-1288	A	07/08/2021	0705	KT		X									AMSE1	N1	0.00	0.00	1	VOLUME: 1739.01
7	GILBANEPM062921-1289	A	07/08/2021	0653	KT	X		X								AMSE2	N1	0.00	0.00	1	VOLUME: 1752.27
8	GILBANETSP062921-1289	A	07/08/2021	0653	KT		X									AMSE2	N1	0.00	0.00	1	VOLUME: 1669.30
9																					
10																					

Turnaround Time: 5 days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[redacted]			[redacted]		

Shipping Date / Carrier / Airbill Number

Shipping Date: 7/8/2021/FedEx 7742 0775 3600
M 7-9-21
09:45

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

18.9°C

Login Sample Receipt Checklist

Client: Gilbane Federal

Job Number: 320-75995-1

Login Number: 75995

List Source: Eurofins TestAmerica, Sacramento

List Number: 1

Creator [redacted]

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 320-76173-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

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

Attn: [redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Table of Contents

Definitions/Glossary

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

Job ID: 320-76173-1

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.
¤	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: 320-76173-1

Job ID: 320-76173-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-76173-1

Comments
No additional comments.

Receipt
The samples were received on 7/14/2021 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 20.1º C.

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

Detection Summary

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

Job ID: 320-76173-1

Client Sample ID: GILBANEPM062921-1290 — Lab Sample ID: 320-76173-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0059		0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.33		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.012		0.00069	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	38		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP062921-1290 — Lab Sample ID: 320-76173-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	50.4835		0.2878	0.2878	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM062921-1291 — Lab Sample ID: 320-76173-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0028		0.00067	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.075		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	27		0.28	0.28	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP062921-1291 — Lab Sample ID: 320-76173-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	40.6910		0.3041	0.3041	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM062921-1292 — Lab Sample ID: 320-76173-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0083		0.0022	0.00032	ug/m3 (Air)	1		6020	Total/NA
Copper	0.18		0.0043	0.00032	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.021		0.0022	0.00030	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	48		0.90	0.90	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP062921-1292 — Lab Sample ID: 320-76173-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	69.3781		0.9010	0.9010	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM062921-1293 — Lab Sample ID: 320-76173-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0038		0.0022	0.00033	ug/m3 (Air)	1		6020	Total/NA
Copper	0.036		0.0044	0.00033	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0093		0.0022	0.00031	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	30		0.93	0.93	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP062921-1293 — Lab Sample ID: 320-76173-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	48.0548		0.9573	0.9573	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM062921-1294 — Lab Sample ID: 320-76173-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.00070		0.00070	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.099		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0020		0.00070	0.000098	ug/m3 (Air)	1		6020	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Sacramento

Detection Summary

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

Job ID: 320-76173-1

Client Sample ID: GILBANEPM062921-1294 (Continued) — Lab Sample ID: 320-76173-9

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Particulate Matter as PM 10	12		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP062921-1294 — Lab Sample ID: 320-76173-10

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	15.7472		0.2895	0.2895	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM062921-1295 — Lab Sample ID: 320-76173-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.00055	J	0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.13		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0025		0.00069	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: GILBANETSP062921-1295 — Lab Sample ID: 320-76173-12

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	15.1755		0.3023	0.3023	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GILBANEPM062921-1290
Lab Sample ID: 320-76173-1
Date Collected: 07/09/21 06:58
Matrix: Air
Date Received: 07/14/21 09:45
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0059		0.00069	0.00010	ug/m3 (Air)		07/19/21 10:03	07/19/21 18:28	1
Copper	0.33		0.0014	0.00010	ug/m3 (Air)		07/19/21 10:03	07/19/21 18:28	1
Manganese	0.012		0.00069	0.000097	ug/m3 (Air)		07/19/21 10:03	07/19/21 18:28	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	38		0.29	0.29	ug/m3			07/15/21 15:45	1

Client Sample ID: GILBANETSP062921-1290
Lab Sample ID: 320-76173-2
Date Collected: 07/09/21 06:58
Matrix: Air
Date Received: 07/14/21 09:45
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	50.4835		0.2878	0.2878	ug/m3 (Air)			07/15/21 15:45	1

Client Sample ID: GILBANEPM062921-1291
Lab Sample ID: 320-76173-3
Date Collected: 07/09/21 06:46
Matrix: Air
Date Received: 07/14/21 09:45
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0028		0.00067	0.00010	ug/m3 (Air)		07/19/21 10:03	07/19/21 18:38	1
Copper	0.075		0.0013	0.00010	ug/m3 (Air)		07/19/21 10:03	07/19/21 18:38	1
Manganese	0.0035		0.00067	0.000094	ug/m3 (Air)		07/19/21 10:03	07/19/21 18:38	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	27		0.28	0.28	ug/m3			07/15/21 15:45	1

Client Sample ID: GILBANETSP062921-1291
Lab Sample ID: 320-76173-4
Date Collected: 07/09/21 06:46
Matrix: Air
Date Received: 07/14/21 09:45
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	40.6910		0.3041	0.3041	ug/m3 (Air)			07/15/21 15:45	1

Client Sample ID: GILBANEPM062921-1292
Lab Sample ID: 320-76173-5
Date Collected: 07/09/21 14:37
Matrix: Air
Date Received: 07/14/21 09:45
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0083		0.0022	0.00032	ug/m3 (Air)		07/19/21 10:03	07/19/21 18:41	1
Copper	0.18		0.0043	0.00032	ug/m3 (Air)		07/19/21 10:03	07/19/21 18:41	1
Manganese	0.021		0.0022	0.00030	ug/m3 (Air)		07/19/21 10:03	07/19/21 18:41	1

Client Sample ID: GILBANEPM062921-1292
Lab Sample ID: 320-76173-5
Date Collected: 07/09/21 14:37
Matrix: Air
Date Received: 07/14/21 09:45
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	48		0.90	0.90	ug/m3			07/15/21 15:45	1

Client Sample ID: GILBANETSP062921-1292
Lab Sample ID: 320-76173-6
Date Collected: 07/09/21 14:37
Matrix: Air
Date Received: 07/14/21 09:45
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	69.3781		0.9010	0.9010	ug/m3 (Air)			07/15/21 15:45	1

Client Sample ID: GILBANEPM062921-1293
Lab Sample ID: 320-76173-7
Date Collected: 07/09/21 14:19
Matrix: Air
Date Received: 07/14/21 09:45
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0038		0.0022	0.00033	ug/m3 (Air)		07/19/21 10:03	07/19/21 18:44	1
Copper	0.036		0.0044	0.00033	ug/m3 (Air)		07/19/21 10:03	07/19/21 18:44	1
Manganese	0.0093		0.0022	0.00031	ug/m3 (Air)		07/19/21 10:03	07/19/21 18:44	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	30		0.93	0.93	ug/m3			07/15/21 15:45	1

Client Sample ID: GILBANETSP062921-1293
Lab Sample ID: 320-76173-8
Date Collected: 07/09/21 14:19
Matrix: Air
Date Received: 07/14/21 09:45
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	48.0548		0.9573	0.9573	ug/m3 (Air)			07/15/21 15:45	1

Client Sample ID: GILBANEPM062921-1294
Lab Sample ID: 320-76173-9
Date Collected: 07/13/21 07:23
Matrix: Air
Date Received: 07/14/21 09:45
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00070		0.00070	0.00010	ug/m3 (Air)		07/19/21 10:03	07/19/21 18:48	1
Copper	0.099		0.0014	0.00010	ug/m3 (Air)		07/19/21 10:03	07/19/21 18:48	1
Manganese	0.0020		0.00070	0.000098	ug/m3 (Air)		07/19/21 10:03	07/19/21 18:48	1

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			07/15/21 15:45	1

Client Sample ID: GILBANETSP062921-1294
Lab Sample ID: 320-76173-10
Date Collected: 07/13/21 07:23
Matrix: Air
Date Received: 07/14/21 09:45
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	15.7472		0.2895	0.2895	ug/m3 (Air)			07/15/21 15:45	1

Client Sample ID: GILBANEPM062921-1295
Lab Sample ID: 320-76173-11
Date Collected: 07/13/21 07:11
Matrix: Air
Date Received: 07/14/21 09:45
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00055	J	0.00069	0.00010	ug/m3 (Air)		07/19/21 10:03	07/19/21 18:51	1
Copper	0.13		0.0014	0.00010	ug/m3 (Air)		07/19/21 10:03	07/19/21 18:51	1
Manganese	0.0025		0.00069	0.000097	ug/m3 (Air)		07/19/21 10:03	07/19/21 18:51	1

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			07/15/21 15:45	1

Client Sample ID: GILBANETSP062921-1295
Lab Sample ID: 320-76173-12
Date Collected: 07/13/21 07:11
Matrix: Air
Date Received: 07/14/21 09:45
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	15.1755		0.3023	0.3023	ug/m3 (Air)			07/15/21 15:45	1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-507937/1-B
Matrix: Air
Analysis Batch: 508299

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 507980

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		07/19/21 10:03	07/19/21 18:06	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		07/19/21 10:03	07/19/21 18:06	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		07/19/21 10:03	07/19/21 18:06	1

Lab Sample ID: LCS 320-507937/2-B
Matrix: Air
Analysis Batch: 508299

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 507980

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.240	0.225		ug/m3 (Air)		94	86 - 111
Copper	0.240	0.243		ug/m3 (Air)		101	85 - 110
Manganese	0.240	0.242		ug/m3 (Air)		101	88 - 110

Lab Sample ID: LCSD 320-507937/3-B
Matrix: Air
Analysis Batch: 508299

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 507980

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	0.240	0.221		ug/m3 (Air)		92	86 - 111	2	15
Copper	0.240	0.249		ug/m3 (Air)		104	85 - 110	2	15
Manganese	0.240	0.248		ug/m3 (Air)		103	88 - 110	3	15

QC Association Summary

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

Job ID: 320-76173-1

Metals

Pre Prep Batch: 507937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76173-1	GILBANEPM062921-1290	Total/NA	Air	Filter to Air	
320-76173-3	GILBANEPM062921-1291	Total/NA	Air	Filter to Air	
320-76173-5	GILBANEPM062921-1292	Total/NA	Air	Filter to Air	
320-76173-7	GILBANEPM062921-1293	Total/NA	Air	Filter to Air	
320-76173-9	GILBANEPM062921-1294	Total/NA	Air	Filter to Air	
320-76173-11	GILBANEPM062921-1295	Total/NA	Air	Filter to Air	
MB 320-507937/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-507937/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-507937/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 507980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76173-1	GILBANEPM062921-1290	Total/NA	Air	3050B	507937
320-76173-3	GILBANEPM062921-1291	Total/NA	Air	3050B	507937
320-76173-5	GILBANEPM062921-1292	Total/NA	Air	3050B	507937
320-76173-7	GILBANEPM062921-1293	Total/NA	Air	3050B	507937
320-76173-9	GILBANEPM062921-1294	Total/NA	Air	3050B	507937
320-76173-11	GILBANEPM062921-1295	Total/NA	Air	3050B	507937
MB 320-507937/1-B	Method Blank	Total/NA	Air	3050B	507937
LCS 320-507937/2-B	Lab Control Sample	Total/NA	Air	3050B	507937
LCSD 320-507937/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	507937

Analysis Batch: 508299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76173-1	GILBANEPM062921-1290	Total/NA	Air	6020	507980
320-76173-3	GILBANEPM062921-1291	Total/NA	Air	6020	507980
320-76173-5	GILBANEPM062921-1292	Total/NA	Air	6020	507980
320-76173-7	GILBANEPM062921-1293	Total/NA	Air	6020	507980
320-76173-9	GILBANEPM062921-1294	Total/NA	Air	6020	507980
320-76173-11	GILBANEPM062921-1295	Total/NA	Air	6020	507980
MB 320-507937/1-B	Method Blank	Total/NA	Air	6020	507980
LCS 320-507937/2-B	Lab Control Sample	Total/NA	Air	6020	507980
LCSD 320-507937/3-B	Lab Control Sample Dup	Total/NA	Air	6020	507980

General Chemistry

Pre Prep Batch: 508018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76173-2	GILBANETSP062921-1290	Total/NA	Air	Filter to Air	
320-76173-4	GILBANETSP062921-1291	Total/NA	Air	Filter to Air	
320-76173-6	GILBANETSP062921-1292	Total/NA	Air	Filter to Air	
320-76173-8	GILBANETSP062921-1293	Total/NA	Air	Filter to Air	
320-76173-10	GILBANETSP062921-1294	Total/NA	Air	Filter to Air	
320-76173-12	GILBANETSP062921-1295	Total/NA	Air	Filter to Air	

Analysis Batch: 508021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76173-1	GILBANEPM062921-1290	Total/NA	Air	PM10	
320-76173-3	GILBANEPM062921-1291	Total/NA	Air	PM10	
320-76173-5	GILBANEPM062921-1292	Total/NA	Air	PM10	
320-76173-7	GILBANEPM062921-1293	Total/NA	Air	PM10	

General Chemistry (Continued)

Analysis Batch: 508021 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76173-9	GILBANEPM062921-1294	Total/NA	Air	PM10	
320-76173-11	GILBANEPM062921-1295	Total/NA	Air	PM10	

Analysis Batch: 508059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76173-2	GILBANETSP062921-1290	Total/NA	Air	40CFR50 App B	508018
320-76173-4	GILBANETSP062921-1291	Total/NA	Air	40CFR50 App B	508018
320-76173-6	GILBANETSP062921-1292	Total/NA	Air	40CFR50 App B	508018
320-76173-8	GILBANETSP062921-1293	Total/NA	Air	40CFR50 App B	508018
320-76173-10	GILBANETSP062921-1294	Total/NA	Air	40CFR50 App B	508018
320-76173-12	GILBANETSP062921-1295	Total/NA	Air	40CFR50 App B	508018

Lab Chronicle

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

Job ID: 320-76173-1

Client Sample ID: GILBANEPM062921-1290
Lab Sample ID: 320-76173-1
Date Collected: 07/09/21 06:58
Matrix: Air
Date Received: 07/14/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					507937	07/19/21 09:01	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	507980	07/19/21 10:03	NIM	TAL SAC
Total/NA	Analysis	6020		1			508299	07/19/21 18:28	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0664 g	508021	07/15/21 15:45	DPM	TAL SAC

Client Sample ID: GILBANETSP062921-1290
Lab Sample ID: 320-76173-2
Date Collected: 07/09/21 06:58
Matrix: Air
Date Received: 07/14/21 09:45

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			508059	07/15/21 15:45	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					508018	07/19/21 11:24	DPM	TAL SAC

Client Sample ID: GILBANEPM062921-1291
Lab Sample ID: 320-76173-3
Date Collected: 07/09/21 06:46
Matrix: Air
Date Received: 07/14/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					507937	07/19/21 09:01	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	507980	07/19/21 10:03	NIM	TAL SAC
Total/NA	Analysis	6020		1			508299	07/19/21 18:38	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0484 g	508021	07/15/21 15:45	DPM	TAL SAC

Client Sample ID: GILBANETSP062921-1291
Lab Sample ID: 320-76173-4
Date Collected: 07/09/21 06:46
Matrix: Air
Date Received: 07/14/21 09:45

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			508059	07/15/21 15:45	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					508018	07/19/21 11:24	DPM	TAL SAC

Client Sample ID: GILBANEPM062921-1292
Lab Sample ID: 320-76173-5
Date Collected: 07/09/21 14:37
Matrix: Air
Date Received: 07/14/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					507937	07/19/21 09:01	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	507980	07/19/21 10:03	NIM	TAL SAC
Total/NA	Analysis	6020		1			508299	07/19/21 18:41	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0266 g	508021	07/15/21 15:45	DPM	TAL SAC

Lab Chronicle

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

Job ID: 320-76173-1

Client Sample ID: GILBANETSP062921-1292
Lab Sample ID: 320-76173-6
Date Collected: 07/09/21 14:37
Matrix: Air
Date Received: 07/14/21 09:45

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			508059	07/15/21 15:45	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					508018	07/19/21 11:24	DPM	TAL SAC

Client Sample ID: GILBANEPM062921-1293
Lab Sample ID: 320-76173-7
Date Collected: 07/09/21 14:19
Matrix: Air
Date Received: 07/14/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					507937	07/19/21 09:01	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	507980	07/19/21 10:03	NIM	TAL SAC
Total/NA	Analysis	6020		1			508299	07/19/21 18:44	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0161 g	508021	07/15/21 15:45	DPM	TAL SAC

Client Sample ID: GILBANETSP062921-1293
Lab Sample ID: 320-76173-8
Date Collected: 07/09/21 14:19
Matrix: Air
Date Received: 07/14/21 09:45

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			508059	07/15/21 15:45	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					508018	07/19/21 11:24	DPM	TAL SAC

Client Sample ID: GILBANEPM062921-1294
Lab Sample ID: 320-76173-9
Date Collected: 07/13/21 07:23
Matrix: Air
Date Received: 07/14/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					507937	07/19/21 09:01	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	507980	07/19/21 10:03	NIM	TAL SAC
Total/NA	Analysis	6020		1			508299	07/19/21 18:48	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0204 g	508021	07/15/21 15:45	DPM	TAL SAC

Client Sample ID: GILBANETSP062921-1294
Lab Sample ID: 320-76173-10
Date Collected: 07/13/21 07:23
Matrix: Air
Date Received: 07/14/21 09:45

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			508059	07/15/21 15:45	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					508018	07/19/21 11:24	DPM	TAL SAC

Lab Chronicle

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

Job ID: 320-76173-1

Client Sample ID: GILBANEPM062921-1295

Lab Sample ID: 320-76173-11

Date Collected: 07/13/21 07:11
Matrix: Air
Date Received: 07/14/21 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					507937	07/19/21 09:01	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	507980	07/19/21 10:03	NIM	TAL SAC
Total/NA	Analysis	6020		1			508299	07/19/21 18:51	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0213 g	508021	07/15/21 15:45	DPM	TAL SAC

Client Sample ID: GILBANETSP062921-1295

Lab Sample ID: 320-76173-12

Date Collected: 07/13/21 07:11
Matrix: Air
Date Received: 07/14/21 09:45

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			508059	07/15/21 15:45	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					508018	07/19/21 11:24	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
Job ID: 320-76173-1
Project/Site: Hunters Point, Parcel E, Phase 2

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	01-30-23

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

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

Method Summary

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

Job ID: 320-76173-1

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: 320-76173-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-76173-1	GILBANEPM062921-1290	Air	07/09/21 06:58	07/14/21 09:45	
320-76173-2	GILBANETSP062921-1290	Air	07/09/21 06:58	07/14/21 09:45	
320-76173-3	GILBANEPM062921-1291	Air	07/09/21 06:46	07/14/21 09:45	
320-76173-4	GILBANETSP062921-1291	Air	07/09/21 06:46	07/14/21 09:45	
320-76173-5	GILBANEPM062921-1292	Air	07/09/21 14:37	07/14/21 09:45	
320-76173-6	GILBANETSP062921-1292	Air	07/09/21 14:37	07/14/21 09:45	
320-76173-7	GILBANEPM062921-1293	Air	07/09/21 14:19	07/14/21 09:45	
320-76173-8	GILBANETSP062921-1293	Air	07/09/21 14:19	07/14/21 09:45	
320-76173-9	GILBANEPM062921-1294	Air	07/13/21 07:23	07/14/21 09:45	
320-76173-10	GILBANETSP062921-1294	Air	07/13/21 07:23	07/14/21 09:45	
320-76173-11	GILBANEPM062921-1295	Air	07/13/21 07:11	07/14/21 09:45	
320-76173-12	GILBANETSP062921-1295	Air	07/13/21 07:11	07/14/21 09:45	

CHAIN-OF-CUSTODY RECORD

Gilbane Federal [redacted]
1655 Grant Street, Suite 1200, Concord, CA 94520
bwomack@gilbaneco.com

COC # KT071321AIR

Gilbane

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

Comments:

Equipment:

Code	Matrix
A	Air

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

320-76173 Chain of Custody

						Analytical Test Method															
						CAAIR - Air PM10	N0500 - Air TSP	SW6020 - Air Pb Mn Cu													
	Event: Parcel E Phase 2 Air Monitoring					1	1	1													
	Sample ID	Matrix	Date	Time	Samp Init.												Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
1	GILBANEPM062921-1290	A	07/09/2021	0658	KT	X		X									AMSE1	N1	0.00	0.00	1	VOLUME: 1732.86
2	GILBANETSP062921-1290	A	07/09/2021	0658	KT		X										AMSE1	N1	0.00	0.00	1	VOLUME: 1737.20
3	GILBANEPM062921-1291	A	07/09/2021	0646	KT	X		X									AMSE2	N1	0.00	0.00	1	VOLUME: 1780.86
4	GILBANETSP062921-1291	A	07/09/2021	0646	KT		X										AMSE2	N1	0.00	0.00	1	VOLUME: 1664.10
5	GILBANEPM062921-1292	A	07/09/2021	1437	KT	X		X									AMSE1	N1	0.00	0.00	1	VOLUME: 554.45
6	GILBANETSP062921-1292	A	07/09/2021	1437	KT		X										AMSE1	N1	0.00	0.00	1	VOLUME: 554.93
7	GILBANEPM062921-1293	A	07/09/2021	1419	KT	X		X									AMSE2	N1	0.00	0.00	1	VOLUME: 553.59
8	GILBANETSP062921-1293	A	07/09/2021	1419	KT		X										AMSE2	N1	0.00	0.00	1	VOLUME: 522.32
9	GILBANEPM062921-1294	A	07/13/2021	0723	KT	X		X									AMSE1	N1	0.00	0.00	1	VOLUME: 1719.82
10	GILBANETSP062921-1294	A	07/13/2021	0723	KT		X										AMSE1	N1	0.00	0.00	1	VOLUME: 1727.29
11	GILBANEPM062921-1295	A	07/13/2021	0711	KT	X		X									AMSE2	N1	0.00	0.00	1	VOLUME: 1738.06

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[redacted]			[redacted]		

Shipping Date / Carrier / Airbill Number

Shipping Date: 7/13/2021/FedEx 7742 3770 3150

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

20.1°C

CHAIN-OF-CUSTODY RECORD

Gilbane Federal
[redacted]
1655 Grant Street, Suite 1200, Concord, CA 94520
bwomack@gilbaneco.com

COC # KT071321AIR

Gilbane

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

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

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: CAAIR - Air PM10	N0500 - Air TSP	SW6020 - Air Pb Mn Cu	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
						1	1	1						
12	GILBANETSP062921-1295	A	07/13/2021	0711	KT		X		AMSE2	N1	0.00	0.00	1	VOLUME: 1653.98
13														
14														
15														
16														
17														
18														
19														
20														
21														

Turnaround Time: 5 days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[redacted]					

Shipping Date / Carrier / Airbill Number

Shipping Date: 7/13/2021/FedEx 7742 3770 3150

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

~~20.0~~ °C 07/9/21 20.1 °C

Login Sample Receipt Checklist

Client: Gilbane Federal

Job Number: 320-76173-1

Login Number: 76173

List Source: Eurofins TestAmerica, 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	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?	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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 320-76327-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

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

Attn: [redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

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.

Table of Contents

Definitions/Glossary

Client: Gilbane Federal
Job ID: 320-76327-1
Project/Site: Hunters Point, Parcel E, Phase 2

Qualifiers

Metals

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

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

Job ID: 320-76327-1

Job ID: 320-76327-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-76327-1

Comments
No additional comments.

Receipt
The samples were received on 7/16/2021 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 18.9º C.

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

Detection Summary

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

Job ID: 320-76327-1

Client Sample ID: GILBANEPM062921-1296 — Lab Sample ID: 320-76327-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.00058	J	0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.031		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0021		0.00069	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	10		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP062921-1296 — Lab Sample ID: 320-76327-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	20.3308		0.2880	0.2880	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM062921-1297 — Lab Sample ID: 320-76327-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.00049	J	0.00070	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.064		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0022		0.00070	0.000098	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	9.8		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP062921-1297 — Lab Sample ID: 320-76327-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	18.4526		0.3065	0.3065	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM062921-1298 — Lab Sample ID: 320-76327-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0012		0.00065	0.000098	ug/m3 (Air)	1		6020	Total/NA
Copper	0.034		0.0013	0.000098	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0037		0.00065	0.000091	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	8.7		0.27	0.27	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP062921-1298 — Lab Sample ID: 320-76327-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	19.9230		0.2671	0.2671	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM062921-1299 — Lab Sample ID: 320-76327-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0028		0.0017	0.00025	ug/m3 (Air)	1		6020	Total/NA
Copper	0.18		0.0033	0.00025	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0051		0.0017	0.00023	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	9.4		0.69	0.69	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP062921-1299 — Lab Sample ID: 320-76327-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	22.2180		0.7309	0.7309	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Gilbane Federal
Job ID: 320-76327-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM062921-1296
Lab Sample ID: 320-76327-1
Date Collected: 07/14/21 06:56
Matrix: Air
Date Received: 07/16/21 09:30
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00058	J	0.00069	0.00010	ug/m3 (Air)		07/22/21 10:00	07/22/21 17:28	1
Copper	0.031		0.0014	0.00010	ug/m3 (Air)		07/22/21 10:00	07/22/21 17:28	1
Manganese	0.0021		0.00069	0.000097	ug/m3 (Air)		07/22/21 10:00	07/22/21 17:28	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	10		0.29	0.29	ug/m3			07/19/21 10:30	1

Client Sample ID: GILBANETSP062921-1296
Lab Sample ID: 320-76327-2
Date Collected: 07/14/21 06:56
Matrix: Air
Date Received: 07/16/21 09:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	20.3308		0.2880	0.2880	ug/m3 (Air)			07/19/21 10:30	1

Client Sample ID: GILBANEPM062921-1297
Lab Sample ID: 320-76327-3
Date Collected: 07/14/21 06:45
Matrix: Air
Date Received: 07/16/21 09:30
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00049	J	0.00070	0.00010	ug/m3 (Air)		07/22/21 10:00	07/22/21 17:38	1
Copper	0.064		0.0014	0.00010	ug/m3 (Air)		07/22/21 10:00	07/22/21 17:38	1
Manganese	0.0022		0.00070	0.000098	ug/m3 (Air)		07/22/21 10:00	07/22/21 17:38	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	9.8		0.29	0.29	ug/m3			07/19/21 10:30	1

Client Sample ID: GILBANETSP062921-1297
Lab Sample ID: 320-76327-4
Date Collected: 07/14/21 06:45
Matrix: Air
Date Received: 07/16/21 09:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	18.4526		0.3065	0.3065	ug/m3 (Air)			07/19/21 10:30	1

Client Sample ID: GILBANEPM062921-1298
Lab Sample ID: 320-76327-5
Date Collected: 07/15/21 07:58
Matrix: Air
Date Received: 07/16/21 09:30
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0012		0.00065	0.000098	ug/m3 (Air)		07/22/21 10:00	07/22/21 17:41	1
Copper	0.034		0.0013	0.000098	ug/m3 (Air)		07/22/21 10:00	07/22/21 17:41	1
Manganese	0.0037		0.00065	0.000091	ug/m3 (Air)		07/22/21 10:00	07/22/21 17:41	1

Client Sample ID: GILBANEPM062921-1298
Lab Sample ID: 320-76327-5
Date Collected: 07/15/21 07:58
Matrix: Air
Date Received: 07/16/21 09:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	8.7		0.27	0.27	ug/m3			07/19/21 10:30	1

Client Sample ID: GILBANETSP062921-1298
Lab Sample ID: 320-76327-6
Date Collected: 07/15/21 07:58
Matrix: Air
Date Received: 07/16/21 09:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	19.9230		0.2671	0.2671	ug/m3 (Air)			07/19/21 10:30	1

Client Sample ID: GILBANEPM062921-1299
Lab Sample ID: 320-76327-7
Date Collected: 07/15/21 07:40
Matrix: Air
Date Received: 07/16/21 09:30
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0028		0.0017	0.00025	ug/m3 (Air)		07/22/21 10:00	07/22/21 17:44	1
Copper	0.18		0.0033	0.00025	ug/m3 (Air)		07/22/21 10:00	07/22/21 17:44	1
Manganese	0.0051		0.0017	0.00023	ug/m3 (Air)		07/22/21 10:00	07/22/21 17:44	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	9.4		0.69	0.69	ug/m3			07/19/21 10:30	1

Client Sample ID: GILBANETSP062921-1299
Lab Sample ID: 320-76327-8
Date Collected: 07/15/21 07:40
Matrix: Air
Date Received: 07/16/21 09:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	22.2180		0.7309	0.7309	ug/m3 (Air)			07/19/21 10:30	1

QC Sample Results

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

Job ID: 320-76327-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-509195/1-B
Matrix: Air
Analysis Batch: 509543

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 509219

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		07/22/21 10:00	07/22/21 17:02	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		07/22/21 10:00	07/22/21 17:02	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		07/22/21 10:00	07/22/21 17:02	1

Lab Sample ID: LCS 320-509195/2-B
Matrix: Air
Analysis Batch: 509543

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 509219

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	0.240		ug/m3 (Air)		100	85 - 110
Manganese	0.240	0.238		ug/m3 (Air)		99	88 - 110

Lab Sample ID: LCSD 320-509195/3-B
Matrix: Air
Analysis Batch: 509543

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 509219

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	0.240	0.225		ug/m3 (Air)		94	86 - 111	5	15
Copper	0.240	0.237		ug/m3 (Air)		99	85 - 110	1	15
Manganese	0.240	0.234		ug/m3 (Air)		97	88 - 110	2	15

QC Association Summary

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

Job ID: 320-76327-1

Metals

Pre Prep Batch: 509195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76327-1	GILBANEPM062921-1296	Total/NA	Air	Filter to Air	
320-76327-3	GILBANEPM062921-1297	Total/NA	Air	Filter to Air	
320-76327-5	GILBANEPM062921-1298	Total/NA	Air	Filter to Air	
320-76327-7	GILBANEPM062921-1299	Total/NA	Air	Filter to Air	
MB 320-509195/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-509195/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-509195/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 509219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76327-1	GILBANEPM062921-1296	Total/NA	Air	3050B	509195
320-76327-3	GILBANEPM062921-1297	Total/NA	Air	3050B	509195
320-76327-5	GILBANEPM062921-1298	Total/NA	Air	3050B	509195
320-76327-7	GILBANEPM062921-1299	Total/NA	Air	3050B	509195
MB 320-509195/1-B	Method Blank	Total/NA	Air	3050B	509195
LCS 320-509195/2-B	Lab Control Sample	Total/NA	Air	3050B	509195
LCSD 320-509195/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	509195

Analysis Batch: 509543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76327-1	GILBANEPM062921-1296	Total/NA	Air	6020	509219
320-76327-3	GILBANEPM062921-1297	Total/NA	Air	6020	509219
320-76327-5	GILBANEPM062921-1298	Total/NA	Air	6020	509219
320-76327-7	GILBANEPM062921-1299	Total/NA	Air	6020	509219
MB 320-509195/1-B	Method Blank	Total/NA	Air	6020	509219
LCS 320-509195/2-B	Lab Control Sample	Total/NA	Air	6020	509219
LCSD 320-509195/3-B	Lab Control Sample Dup	Total/NA	Air	6020	509219

General Chemistry

Pre Prep Batch: 508018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76327-2	GILBANETSP062921-1296	Total/NA	Air	Filter to Air	
320-76327-4	GILBANETSP062921-1297	Total/NA	Air	Filter to Air	
320-76327-6	GILBANETSP062921-1298	Total/NA	Air	Filter to Air	
320-76327-8	GILBANETSP062921-1299	Total/NA	Air	Filter to Air	

Analysis Batch: 509458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76327-2	GILBANETSP062921-1296	Total/NA	Air	40CFR50 App B	508018
320-76327-4	GILBANETSP062921-1297	Total/NA	Air	40CFR50 App B	508018
320-76327-6	GILBANETSP062921-1298	Total/NA	Air	40CFR50 App B	508018
320-76327-8	GILBANETSP062921-1299	Total/NA	Air	40CFR50 App B	508018

Analysis Batch: 509459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76327-1	GILBANEPM062921-1296	Total/NA	Air	PM10	
320-76327-3	GILBANEPM062921-1297	Total/NA	Air	PM10	
320-76327-5	GILBANEPM062921-1298	Total/NA	Air	PM10	
320-76327-7	GILBANEPM062921-1299	Total/NA	Air	PM10	

Lab Chronicle

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

Job ID: 320-76327-1

Client Sample ID: GILBANEPM062921-1296
Lab Sample ID: 320-76327-1
Date Collected: 07/14/21 06:56
Matrix: Air
Date Received: 07/16/21 09:30

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					509195	07/22/21 09:41	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	509219	07/22/21 10:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			509543	07/22/21 17:28	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0174 g	509459	07/19/21 10:30	DPM	TAL SAC

Client Sample ID: GILBANETSP062921-1296
Lab Sample ID: 320-76327-2
Date Collected: 07/14/21 06:56
Matrix: Air
Date Received: 07/16/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			509458	07/19/21 10:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					508018	07/19/21 11:24	DPM	TAL SAC

Client Sample ID: GILBANEPM062921-1297
Lab Sample ID: 320-76327-3
Date Collected: 07/14/21 06:45
Matrix: Air
Date Received: 07/16/21 09:30

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					509195	07/22/21 09:41	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	509219	07/22/21 10:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			509543	07/22/21 17:38	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0168 g	509459	07/19/21 10:30	DPM	TAL SAC

Client Sample ID: GILBANETSP062921-1297
Lab Sample ID: 320-76327-4
Date Collected: 07/14/21 06:45
Matrix: Air
Date Received: 07/16/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			509458	07/19/21 10:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					508018	07/19/21 11:24	DPM	TAL SAC

Client Sample ID: GILBANEPM062921-1298
Lab Sample ID: 320-76327-5
Date Collected: 07/15/21 07:58
Matrix: Air
Date Received: 07/16/21 09:30

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					509195	07/22/21 09:41	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	509219	07/22/21 10:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			509543	07/22/21 17:41	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0161 g	509459	07/19/21 10:30	DPM	TAL SAC

Lab Chronicle

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

Job ID: 320-76327-1

Client Sample ID: GILBANETSP062921-1298

Lab Sample ID: 320-76327-6
Date Collected: 07/15/21 07:58
Matrix: Air
Date Received: 07/16/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			509458	07/19/21 10:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					508018	07/19/21 11:24	DPM	TAL SAC

Client Sample ID: GILBANEPM062921-1299

Lab Sample ID: 320-76327-7
Date Collected: 07/15/21 07:40
Matrix: Air
Date Received: 07/16/21 09:30

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					509195	07/22/21 09:41	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	509219	07/22/21 10:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			509543	07/22/21 17:44	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0068 g	509459	07/19/21 10:30	DPM	TAL SAC

Client Sample ID: GILBANETSP062921-1299

Lab Sample ID: 320-76327-8
Date Collected: 07/15/21 07:40
Matrix: Air
Date Received: 07/16/21 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			509458	07/19/21 10:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					508018	07/19/21 11:24	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
Job ID: 320-76327-1
Project/Site: Hunters Point, Parcel E, Phase 2

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	01-30-23

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

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

Method Summary

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

Job ID: 320-76327-1

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: 320-76327-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-76327-1	GILBANEPM062921-1296	Air	07/14/21 06:56	07/16/21 09:30
320-76327-2	GILBANETSP062921-1296	Air	07/14/21 06:56	07/16/21 09:30
320-76327-3	GILBANEPM062921-1297	Air	07/14/21 06:45	07/16/21 09:30
320-76327-4	GILBANETSP062921-1297	Air	07/14/21 06:45	07/16/21 09:30
320-76327-5	GILBANEPM062921-1298	Air	07/15/21 07:58	07/16/21 09:30
320-76327-6	GILBANETSP062921-1298	Air	07/15/21 07:58	07/16/21 09:30
320-76327-7	GILBANEPM062921-1299	Air	07/15/21 07:40	07/16/21 09:30
320-76327-8	GILBANETSP062921-1299	Air	07/15/21 07:40	07/16/21 09:30

CHAIN-OF-CUSTODY RECORD

Gilbane Federal
[redacted]
1655 Grant Street, Suite 1200, Concord, CA 94520
bwomack@gilbaneco.com

COC # KT071521AIR

Gilbane

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

Comments:

Equipment:

Code	Matrix
A	Air

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

320-76327 Chain of Custody

	Sample ID	Matrix	Date	Time	Samp Init.	Analytical Test Method: CAAIR - Air PM10	N0500 - Air TSP	SW6020 - Air Pb Mn Cu						Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
	Event: Parcel E Phase 2 Air Monitoring					1	1	1											
1	GILBANEPM062921-1296	A	07/14/2021	0656	KT	X		X						AMSE1	N1	0.00	0.00	1	VOLUME: 1732.51
2	GILBANETSP062921-1296	A	07/14/2021	0656	KT		X							AMSE1	N1	0.00	0.00	1	VOLUME: 1736.28
3	GILBANEPM062921-1297	A	07/14/2021	0645	KT	X		X						AMSE2	N1	0.00	0.00	1	VOLUME: 1715.05
4	GILBANETSP062921-1297	A	07/14/2021	0645	KT		X							AMSE2	N1	0.00	0.00	1	VOLUME: 1631.21
5	GILBANEPM062921-1298	A	07/15/2021	0758	KT	X		X						AMSE1	N1	0.00	0.00	1	VOLUME: 1842.43
6	GILBANETSP062921-1298	A	07/15/2021	0758	KT		X							AMSE1	N1	0.00	0.00	1	VOLUME: 1872.21
7	GILBANEPM062921-1299	A	07/15/2021	0740	KT	X		X						AMSE2	N1	0.00	0.00	1	VOLUME: 721.80
8	GILBANETSP062921-1299	A	07/15/2021	0740	KT		X							AMSE2	N1	0.00	0.00	1	VOLUME: 684.13
9																			[redacted]
10																			

Turnaround Time: 5 days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[redacted]			[redacted]		

Shipping Date / Carrier / Airbill Number

Shipping Date: 7/15/2021/FedEx 7742 6284 3400

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

Page 15 of 16

7/23/2021

Login Sample Receipt Checklist

Client: Gilbane Federal

Job Number: 320-76327-1

Login Number: 76327

List Source: Eurofins TestAmerica, 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	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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 320-76507-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

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

Attn [redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Table of Contents

Definitions/Glossary

Client: Gilbane Federal
Job ID: 320-76507-1
Project/Site: Hunters Point, Parcel E, Phase 2

Qualifiers

Metals

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

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

Job ID: 320-76507-1

Job ID: 320-76507-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-76507-1

Comments
No additional comments.

Receipt
The samples were received on 7/21/2021 9:50 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 20.3º C.

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

Detection Summary

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

Job ID: 320-76507-1

Client Sample ID: GILBANEPM062921-1300 — Lab Sample ID: 320-76507-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0011	J	0.0027	0.00041	ug/m3 (Air)	1		6020	Total/NA
Copper	0.013		0.0054	0.00041	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0031		0.0027	0.00038	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	2.3		1.1	1.1	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP062921-1300 — Lab Sample ID: 320-76507-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	4.5326		1.1928	1.1928	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM062921-1301 — Lab Sample ID: 320-76507-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0016	J	0.0028	0.00043	ug/m3 (Air)	1		6020	Total/NA
Copper	0.052		0.0057	0.00043	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0050		0.0028	0.00040	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	5.0		1.2	1.2	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP062921-1301 — Lab Sample ID: 320-76507-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	9.0809		1.2271	1.2271	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Gilbane Federal
Job ID: 320-76507-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM062921-1300
Lab Sample ID: 320-76507-1
Date Collected: 07/15/21 13:55
Matrix: Air
Date Received: 07/21/21 09:50
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0011	J	0.0027	0.00041	ug/m3 (Air)		07/27/21 09:00	07/27/21 18:38	1
Copper	0.013		0.0054	0.00041	ug/m3 (Air)		07/27/21 09:00	07/27/21 18:38	1
Manganese	0.0031		0.0027	0.00038	ug/m3 (Air)		07/27/21 09:00	07/28/21 12:33	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	2.3		1.1	1.1	ug/m3			07/25/21 12:40	1

Client Sample ID: GILBANETSP062921-1300
Lab Sample ID: 320-76507-2
Date Collected: 07/15/21 13:55
Matrix: Air
Date Received: 07/21/21 09:50
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	4.5326		1.1928	1.1928	ug/m3 (Air)			07/25/21 12:40	1

Client Sample ID: GILBANEPM062921-1301
Lab Sample ID: 320-76507-3
Date Collected: 07/15/21 13:34
Matrix: Air
Date Received: 07/21/21 09:50
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0016	J	0.0028	0.00043	ug/m3 (Air)		07/27/21 09:00	07/27/21 18:48	1
Copper	0.052		0.0057	0.00043	ug/m3 (Air)		07/27/21 09:00	07/27/21 18:48	1
Manganese	0.0050		0.0028	0.00040	ug/m3 (Air)		07/27/21 09:00	07/28/21 12:42	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	5.0		1.2	1.2	ug/m3			07/25/21 12:40	1

Client Sample ID: GILBANETSP062921-1301
Lab Sample ID: 320-76507-4
Date Collected: 07/15/21 13:34
Matrix: Air
Date Received: 07/21/21 09:50
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	9.0809		1.2271	1.2271	ug/m3 (Air)			07/25/21 12:40	1

QC Sample Results

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

Job ID: 320-76507-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-510566/1-B
Matrix: Air
Analysis Batch: 510908

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 510624

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		07/27/21 09:00	07/27/21 18:06	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		07/27/21 09:00	07/27/21 18:06	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		07/27/21 09:00	07/27/21 18:06	1

Lab Sample ID: LCS 320-510566/2-B
Matrix: Air
Analysis Batch: 510908

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 510624

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.240	0.245		ug/m3 (Air)		102	86 - 111
Copper	0.240	0.262		ug/m3 (Air)		109	85 - 110
Manganese	0.240	0.252		ug/m3 (Air)		105	88 - 110

Lab Sample ID: LCSD 320-510566/3-B
Matrix: Air
Analysis Batch: 510908

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 510624

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	0.240	0.256		ug/m3 (Air)		107	86 - 111	5	15
Copper	0.240	0.264		ug/m3 (Air)		110	85 - 110	1	15
Manganese	0.240	0.252		ug/m3 (Air)		105	88 - 110	0	15

QC Association Summary

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

Job ID: 320-76507-1

Metals

Pre Prep Batch: 510566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76507-1	GILBANEPM062921-1300	Total/NA	Air	Filter to Air	
320-76507-3	GILBANEPM062921-1301	Total/NA	Air	Filter to Air	
MB 320-510566/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-510566/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-510566/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 510624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76507-1	GILBANEPM062921-1300	Total/NA	Air	3050B	510566
320-76507-3	GILBANEPM062921-1301	Total/NA	Air	3050B	510566
MB 320-510566/1-B	Method Blank	Total/NA	Air	3050B	510566
LCS 320-510566/2-B	Lab Control Sample	Total/NA	Air	3050B	510566
LCSD 320-510566/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	510566

Analysis Batch: 510908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76507-1	GILBANEPM062921-1300	Total/NA	Air	6020	510624
320-76507-3	GILBANEPM062921-1301	Total/NA	Air	6020	510624
MB 320-510566/1-B	Method Blank	Total/NA	Air	6020	510624
LCS 320-510566/2-B	Lab Control Sample	Total/NA	Air	6020	510624
LCSD 320-510566/3-B	Lab Control Sample Dup	Total/NA	Air	6020	510624

Analysis Batch: 511093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76507-1	GILBANEPM062921-1300	Total/NA	Air	6020	510624
320-76507-3	GILBANEPM062921-1301	Total/NA	Air	6020	510624

General Chemistry

Pre Prep Batch: 510690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76507-2	GILBANETSP062921-1300	Total/NA	Air	Filter to Air	
320-76507-4	GILBANETSP062921-1301	Total/NA	Air	Filter to Air	

Analysis Batch: 510693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76507-1	GILBANEPM062921-1300	Total/NA	Air	PM10	
320-76507-3	GILBANEPM062921-1301	Total/NA	Air	PM10	

Analysis Batch: 510715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-76507-2	GILBANETSP062921-1300	Total/NA	Air	40CFR50 App B	510690
320-76507-4	GILBANETSP062921-1301	Total/NA	Air	40CFR50 App B	510690

Lab Chronicle

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

Job ID: 320-76507-1

Client Sample ID: GILBANEPM062921-1300
Lab Sample ID: 320-76507-1
Date Collected: 07/15/21 13:55
Matrix: Air
Date Received: 07/21/21 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					510566	07/27/21 08:45	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	510624	07/27/21 09:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			510908	07/27/21 18:38	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					510566	07/27/21 08:45	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	510624	07/27/21 09:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			511093	07/28/21 12:33	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0010 g	510693	07/25/21 12:40	DPM	TAL SAC

Client Sample ID: GILBANETSP062921-1300
Lab Sample ID: 320-76507-2
Date Collected: 07/15/21 13:55
Matrix: Air
Date Received: 07/21/21 09:50

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			510715	07/25/21 12:40	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					510690	07/27/21 12:11	DPM	TAL SAC

Client Sample ID: GILBANEPM062921-1301
Lab Sample ID: 320-76507-3
Date Collected: 07/15/21 13:34
Matrix: Air
Date Received: 07/21/21 09:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					510566	07/27/21 08:45	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	510624	07/27/21 09:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			510908	07/27/21 18:48	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					510566	07/27/21 08:45	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	510624	07/27/21 09:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			511093	07/28/21 12:42	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0021 g	510693	07/25/21 12:40	DPM	TAL SAC

Client Sample ID: GILBANETSP062921-1301
Lab Sample ID: 320-76507-4
Date Collected: 07/15/21 13:34
Matrix: Air
Date Received: 07/21/21 09:50

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			510715	07/25/21 12:40	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					510690	07/27/21 12:11	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
Job ID: 320-76507-1
Project/Site: Hunters Point, Parcel E, Phase 2

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	01-30-23

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

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

Method Summary

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

Job ID: 320-76507-1

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: 320-76507-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-76507-1	GILBANEPM062921-1300	Air	07/15/21 13:55	07/21/21 09:50
320-76507-2	GILBANETSP062921-1300	Air	07/15/21 13:55	07/21/21 09:50
320-76507-3	GILBANEPM062921-1301	Air	07/15/21 13:34	07/21/21 09:50
320-76507-4	GILBANETSP062921-1301	Air	07/15/21 13:34	07/21/21 09:50

CHAIN-OF-CUSTODY RECORD

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

COC # KT072021AIR

Gilbane

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

Comments:

Equipment:

Code	Matrix
A	Air

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

320-76507 Chain of Custody

						Analytical Test Method															
						CAAIR - Air PM10	N0500 - Air TSP	SW6020 - Air Pb Mn Cu													
	Event: Parcel E Phase 2 Air Monitoring					1	1	1													
	Sample ID	Matrix	Date	Time	Samp Init.											Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
1	GILBANEPM062921-1300	A	07/15/2021	1355	KT	X		X								AMSE1	N2	0.00	0.00	1	VOLUME: 441.36
2	GILBANETSP062921-1300	A	07/15/2021	1355	KT		X									AMSE1	N2	0.00	0.00	1	VOLUME: 419.19
3	GILBANEPM062921-1301	A	07/15/2021	1334	KT	X		X								AMSE2	N2	0.00	0.00	1	VOLUME: 421.64
4	GILBANETSP062921-1301	A	07/15/2021	1334	KT		X									AMSE2	N2	0.00	0.00	1	VOLUME: 407.45
5																					
6																					

Turnaround Time: 5 days

[redacted]

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[redacted]					

Shipping Date / Carrier / Airbill Number

Shipping Date: 7/20/2021/FedEx 7742 9488 8445

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

Login Sample Receipt Checklist

Client: Gilbane Federal

Job Number: 320-76507-1

Login Number: 76507

List Source: Eurofins TestAmerica, 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	Ambient temperature used
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	