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

June 1st, 2021 through June 30th, 2021

Approved for public release; distribution is unlimited

DCN: GLBN-0005-4332-0066

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Prepared for:

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Acronyms and Abbreviations

AMSR ..... *Air Monitoring Summary Report*
Cal/OSHA ..... *California Occupational Safety and Health Administration*
Cfm ..... *cubic feet per minute*
CFR ..... *Code of Federal Regulations*
CTO ..... *Contract Task Order*
DMCP ..... *Dust Monitoring and Control Plan*
DTSC ..... *State of California Department of Toxic Substances Control*
EPA ..... *United States Environmental Protection Agency*
fiber/cm^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 June 1st, 2021 through June 30th, 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) 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 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 June 1st to June 30th, 2021, during which Gilbane was breaking concrete, clearing lay-down pad, organizing concrete, importing soil, potholing, grading and preparing 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.

Construction and remediation activities conducted from June 1st through June 30th, 2021, did not result in the exceedance of the established threshold criteria, as described in detail below.

Asbestos results from June 1st through June 30th, 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 June 1st through June 30th, 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 June 1st through June 30th, 2021 did not exceed the threshold criteria presented in **Table 4-1**. The results are presented as **Attachment 5**.

Radiological air sampling results from June 1st through June 30th, 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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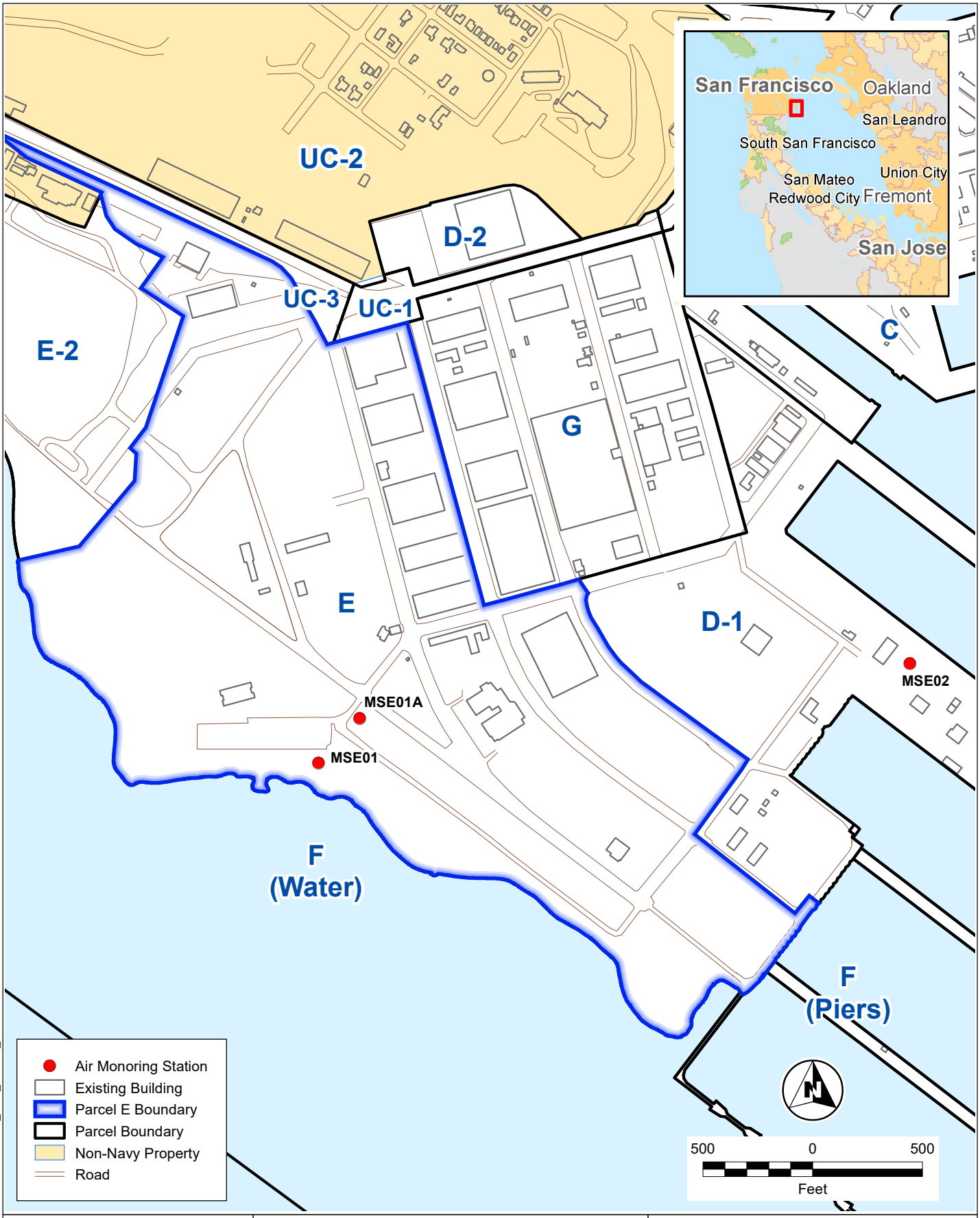
FIGURES



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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
6/1/2021	29.93	54.11	WSW
6/2/2021	29.89	53.59	WSW
6/3/2021	29.86	55.96	SW
6/4/2021	29.96	54.36	SW
6/7/2021	29.92	55.44	W
6/8/2021	30.08	55.48	W
6/9/2021	30.19	55.42	W
6/10/2021	30.24	58.14	WSW
6/14/2021	30.06	59.27	WSW
6/15/2021	30.05	62.37	WSW
6/16/2021	29.90	64.92	WSW
6/17/2021	29.77	68.42	W
6/21/2021	29.92	62.36	WSW
6/22/2021	29.89	62.61	SW
6/23/2021	29.96	61.29	WSW
6/24/2021	30.03	62.41	WSW
6/28/2021	29.81	57.48	WSW
6/29/2021	29.81	58.37	WSW
6/30/2021	29.90	58.12	SW

Notes:

Data collected using wunderground.com from Bayview Manor - KCASANFR1775.

°F = degree Fareheit

in Hg = inches of mercury

E = East

N = North

S = South

W = West

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)
MSE01-060121	06/01/21	1	470	940	15.5	0.008	No
MSE02-060121	06/01/21	2	472	944	16.0	0.008	No
MSE01-060221	06/02/21	1	488	976	22.5	0.011	No
MSE02-060221	06/02/21	2	476	952	15.0	0.007	No
MSE01-060321	06/03/21	1	484	968	16.5	0.008	No
MSE02-060321	06/03/21	2	475	950	20.0	0.010	No
MSE01-060421	06/04/21	1	384	768	21.0	0.013	No
MSE02-060421	06/04/21	2	408	816	18.5	0.011	No
MSE01-060721	06/07/21	1	445	890	20.0	0.011	No
MSE02-060721	06/07/21	2	400	800	14.5	0.009	No
MSE01-060821	06/08/21	1	445	890	23.5	0.013	No
MSE02-060821	06/08/21	2	449	898	18.5	0.010	No
MSE01-060921	06/09/21	1	500	1000	15.5	0.008	No
MSE02-060921	06/09/21	2	512	1024	13.5	0.006	No
MSE01-061021	06/10/21	1	472	944	24.5	0.013	No
MSE02-061021	06/10/21	2	494	988	12.5	0.006	No
MSE01-061421	06/14/21	1	455	910	20.0	0.011	No
MSE02-061421	06/14/21	2	503	1006	21.5	0.010	No
MSE01-061521	06/15/21	1	499	998	18.5	0.009	No
MSE02-061521	06/15/21	2	509	1018	12.5	0.006	No
MSE01-061621	06/16/21	1	503	1006	13.0	0.006	No
MSE02-061621	06/16/21	2	521	1042	13.5	0.006	No
MSE01-061721	06/17/21	1	461	922	11.5	0.006	No
MSE02-061721	06/17/21	2	465	930	13.0	0.007	No
MSE01-062121	06/21/21	1	501	1002	14.5	0.007	No
MSE02-062121	06/21/21	2	465	930	16.0	0.008	No
3	06/22/21	1	466	932	16.0	0.008	No

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)
MSE02-062221	06/22/21	2	475	950	9.0	0.005	No
MSE01-062321	06/23/21	1	457	914	12.5	0.007	No
MSE02-062321	06/23/21	2	463	926	14.0	0.007	No
MSE01-062421	06/24/21	1	466	932	19.5	0.010	No
MSE02-062421	06/24/21	2	469	938	14.5	0.008	No
MSE01-062821	06/28/21	1	468	936	13.5	0.007	No
MSE02-062821	06/28/21	2	477	954	11.0	0.006	No
MSE01-062921	06/29/21	1	502	1004	9.5	0.005	No
MSE02-062921	06/29/21	2	531	1062	9.0	0.004	No
MSE01-063021	06/30/21	1	470	940	9.0	0.005	No
MSE02-063021	06/30/21	2	495	990	9.5	0.005	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

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	PM10						
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concen-tration in Air (mg/m^3)	Delta between Downwind and Upwind (mg/m^3)	Delta between Downwind and Upwind (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level[3] (ug/m^3)	Exceedance (Yes/No)
GILBANEPM051321-1203	1	6/2/21	1746.53	0.013						
GILBANEPM051321-1204	2	6/2/21	1735.34	0.0074	-0.006	-5.6	5,000	No	50	No
GILBANEPM051321-1205	1	6/3/21	1737.14	0.0033						
GILBANEPM051321-1206	2	6/3/21	749.97	0.0023	-0.001	-1.0	5,000	No	50	No
GILBANEPM051321-1207	1	6/4/21	1704.85	0.021						
GILBANEPM051321-1208	2	6/4/21	1673.13	0.023	0.002	2.0	5,000	No	50	No
GILBANEPM051321-1209	1	6/4/21[2]	466.44	0.023						
GILBANEPM051321-1210	2	6/4/21[2]	493.31	0.025	0.002	2.0	5,000	No	50	No
GILBANEPM051321-1211	1	6/8/21	1750.43	0.017						
GILBANEPM051321-1212	2	6/8/21	1684.65	0.0078	-0.009	-9.2	5,000	No	50	No
GILBANEPM051321-1213	1	6/9/21	1668.48	0.0087						
GILBANEPM051321-1214	2	6/9/21	1660.13	0.013	0.004	4.3	5,000	No	50	No
GILBANEPM051321-1215	1	6/10/21	1743.64	0.0072						
GILBANEPM051321-1216	2	6/10/21	1733.84	0.014	0.007	6.8	5,000	No	50	No
GILBANEPM051321-1217	1	6/10/21[2]	577.46	0.0066						
GILBANEPM051321-1218	2	6/10/21[2]	598.95	0.012	0.005	5.4	5,000	No	50	No
GILBANEPM051921-1219	1	6/15/21	1669.52	0.0072						
GILBANEPM051921-1220	2	6/15/21	1682.51	0.0062	-0.001	-1.0	5,000	No	50	No
GILBANEPM051921-1221	1	6/16/21	1729.39	0.021						
GILBANEPM051921-1222	2	6/16/21	1730.52	0.022	0.001	1.0	5,000	No	50	No
GILBANEPM051921-1223	1	6/17/21	1742.72	0.038						
GILBANEPM051921-1224	2	6/17/21	1742.72	0.032	-0.006	-6.0	5,000	No	50	No
GILBANEPM051921-1225	1	6/17/21[2]	559.15	0.055						
GILBANEPM051921-1226	2	6/17/21[2]	573.10	0.043	-0.012	-12.0	5,000	No	50	No
GILBANEPM051921-1227	1	6/22/21	1754.56	0.0066						
GILBANEPM051921-1228	2	6/22/21	1726.14	0.0079	0.001	1.3	5,000	No	50	No
GILBANEPM061721-1272	1	6/23/21	1722.54	0.0068						

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

Sample, Date and Station Information			Sampler Run	PM10						
Sample ID	Monitoring Station	Sample End Date[1]	Total Air Volume Monitored (m^3)	Concen-tration in Air (mg/m^3)	Delta between Downwind and Upwind (mg/m^3)	Delta between Downwind and Upwind (ug/m^3)	Cal/OSHA PEL (ug/m^3)	Exceedance (Yes/No)	HERO Action Level[3] (ug/m^3)	Exceedance (Yes/No)
GILBANEPM061721-1273	2	6/23/21	1737.32	0.0061	-0.001	-0.7	5,000	No	50	No
GILBANEPM061721-1274	1	6/24/21	1729.53	0.0050						
GILBANEPM061721-1275	2	6/24/21	1731.70	0.0068	0.002	1.8	5,000	No	50	No
GILBANEPM061721-1276	1	6/24/21[2]	561.53	0.0039						
GILBANEPM061721-1277	2	6/24/21[2]	570.27	0.0058	0.002	1.9	5,000	No	50	No
GILBANEPM061721-1278	1	6/29/21	1704.51	0.0093						
GILBANEPM061721-1279	2	6/29/21	1717.48	0.0075	-0.002	-1.8	5,000	No	50	No

Notes:

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

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

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

Samples analyzed by Eurofins TestAmerica

Sample locations are shown on Figure 2-1

Cal/OSHA = California Division of Occupational Safety and Health

HERO = Human and Ecological Risk Office

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)
GILBANEPM051321-1203	1	6/2/21	1746.53	0.000048	No	0.0000021	No	0.0000065	No
GILBANEPM051321-1204	2	6/2/21	1735.34	0.000020	No	0.0000013	No	0.0000033	No
GILBANEPM051321-1205	1	6/3/21	1737.14	0.000012	No	0.0000011	No	0.0000019	No
GILBANEPM051321-1206	2	6/3/21	749.97	0.000029	No	0.00000089 J	No	0.0000024	No
GILBANEPM051321-1207	1	6/4/21	1704.85	0.000028	No	0.0000022	No	0.000006	No
GILBANEPM051321-1208	2	6/4/21	1673.13	0.000150	No	0.0000017	No	0.000005	No
GILBANEPM051321-1209	1	6/4/21[2]	466.44	0.000054	No	0.0000039	No	0.0000076	No
GILBANEPM051321-1210	2	6/4/21[2]	493.31	0.000220	No	0.0000023 J	No	0.000008	No
GILBANEPM051321-1211	1	6/8/21	1750.43	0.000027	No	0.0000027	No	0.0000035	No
GILBANEPM051321-1212	2	6/8/21	1684.65	0.000047	No	0.0000047	No	0.000011	No
GILBANEPM051321-1213	1	6/9/21	1668.48	0.000012	No	0.000001	No	0.0000019	No
GILBANEPM051321-1214	2	6/9/21	1660.13	0.000260	No	0.0000037	No	0.000003	No
GILBANEPM051321-1215	1	6/10/21	1743.64	0.000009	No	0.00000094	No	0.000002	No
GILBANEPM051321-1216	2	6/10/21	1733.84	0.000094	No	0.0000019	No	0.0000068	No
GILBANEPM051321-1217	1	6/10/21[2]	577.46	0.000015	No	0.0000014 J	No	0.0000028	No
GILBANEPM051321-1218	2	6/10/21[2]	598.95	0.000063	No	0.000003	No	0.0000074	No
GILBANEPM051921-1219	1	6/15/21	1669.52	0.000021	No	0.0000012	No	0.0000024	No
GILBANEPM051921-1220	2	6/15/21	1682.51	0.000011	No	0.0000011	No	0.0000027	No
GILBANEPM051921-1221	1	6/16/21	1729.39	0.000056	No	0.0000059	No	0.0000042	No
GILBANEPM051921-1222	2	6/16/21	1730.52	0.000022	No	0.0000017	No	0.0000043	No
GILBANEPM051921-1223	1	6/17/21	1742.72	0.000060	No	0.0000047	No	0.000010	No
GILBANEPM051921-1224	2	6/17/21	1742.72	0.000086	No	0.0000023	No	0.0000062	No
GILBANEPM051921-1225	1	6/17/21[2]	559.15	0.000095	No	0.0000070	No	0.000022	No

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)
GILBANEPM051921-1226	2	6/17/21[2]	573.10	0.000130	No	0.0000058	No	0.000013	No
GILBANEPM051921-1227	1	6/22/21	1754.56	0.000030	No	0.0000012	No	0.0000029	No
GILBANEPM051921-1228	2	6/22/21	1726.14	0.000095	No	0.0000007	No	0.0000025	No
GILBANEPM061721-1272	1	6/23/21	1722.54	0.000026	No	0.0000032	No	0.0000036	No
GILBANEPM061721-1273	2	6/23/21	1737.32	0.000081	No	0.00000061 J	No	0.0000021	No
GILBANEPM061721-1274	1	6/24/21	1729.53	0.000022	No	0.0000011	No	0.0000025	No
GILBANEPM061721-1275	2	6/24/21	1731.70	0.000047	No	0.00000079	No	0.0000031	No
GILBANEPM061721-1276	1	6/24/21[2]	561.53	0.000023	No	0.0000026	No	0.000003	No
GILBANEPM061721-1277	2	6/24/21[2]	570.27	0.000096	No	0.000002 J	No	0.0000046	No
GILBANEPM061721-1278	1	6/29/21	1704.51	0.000054	No	0.000001	No	0.0000028	No
GILBANEPM061721-1279	2	6/29/21	1717.48	0.000016	No	0.0000008	No	0.0000017	No

Notes:

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

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

Samples analyzed by Eurofins TestAmerica

Sample locations are shown on Figure 2-1

m^3 = cubic meters

mg/m^3 = milligrams per cubic meter

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)
GILBANETSP051321-1203	1	6/2/21	1660.44	0.0197538			
GILBANETSP051321-1204	2	6/2/21	1736.01	0.0153801	-0.004	0.5	No
GILBANETSP051321-1205	1	6/3/21	1645.95	0.0078374			
GILBANETSP051321-1206	2	6/3/21	754.98	0.0098016	0.002	0.5	No
GILBANETSP051321-1207	1	6/4/21	1615.32	0.0347919			
GILBANETSP051321-1208	2	6/4/21	1677.75	0.0270601	-0.008	0.5	No
GILBANETSP051321-1209	1	6/4/21[2]	444.51	0.0332951			
GILBANETSP051321-1210	2	6/4/21[2]	499.49	0.0360368	0.003	0.5	No
GILBANETSP051321-1211	1	6/8/21	1721.46	0.0406632			
GILBANETSP051321-1212	2	6/8/21	1594.10	0.0363842	-0.004	0.5	No
GILBANETSP051321-1213	1	6/9/21	1653.88	0.0169903			
GILBANETSP051321-1214	2	6/9/21	1583.13	0.0162337	-0.001	0.5	No
GILBANETSP051321-1215	1	6/10/21	1735.45	0.0155003			
GILBANETSP051321-1216	2	6/10/21	1649.20	0.0196459	0.004	0.5	No
GILBANETSP051321-1217	1	6/10/21[2]	569.82	0.0150925			
GILBANETSP051321-1218	2	6/10/21[2]	569.01	0.0140595	-0.001	0.5	No
GILBANETSP051921-1219	1	6/15/21	1673.56	0.0138029			
GILBANETSP051921-1220	2	6/15/21	1639.24	0.0078085	-0.006	0.5	No
GILBANETSP051921-1221	1	6/16/21	1736.49	0.0346100			
GILBANETSP051921-1222	2	6/16/21	1660.05	0.0337339	-0.001	0.5	No

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)
GILBANETSP051921-1223	1	6/17/21	1771.23	0.0627248			
GILBANETSP051921-1224	2	6/17/21	1663.31	0.0410026	-0.022	0.5	No
GILBANETSP051921-1225	1	6/17/21[2]	541.98	0.0957600			
GILBANETSP051921-1226	2	6/17/21[2]	544.86	0.0565283	-0.039	0.5	No
GILBANETSP051921-1227	1	6/22/21	1793.02	0.0121583			
GILBANETSP051921-1228	2	6/22/21	1670.02	0.0105388	-0.002	0.5	No
GILBANETSP061721-1272	1	6/23/21	1726.90	0.0188778			
GILBANETSP061721-1273	2	6/23/21	1653.93	0.0105204	-0.008	0.5	No
GILBANETSP061721-1274	1	6/24/21	1718.90	0.0132643			
GILBANETSP061721-1275	2	6/24/21	1649.68	0.0085471	-0.005	0.5	No
GILBANETSP061721-1276	1	6/24/21[2]	576.51	0.0098871			
GILBANETSP061721-1277	2	6/24/21[2]	549.02	0.0087429	-0.001	0.5	No
GILBANETSP061721-1278	1	6/29/21	1694.25	0.0159363			
GILBANETSP061721-1279	2	6/29/21	1636.46	0.0122826	-0.004	0.5	No

Notes:

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

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

Samples analyzed by Eurofins TestAmerica

Sample locations are shown on Figure 2-1

HPNS = Hunters Point Naval Shipyard

m^3 = cubic meters

mg/m^3 = milligrams per cubic meter

ATTACHMENT 6

AIR SAMPLING RESULTS – PUBLIC EXPOSURE MONITORING

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Gilbane

AIR SAMPLE RESULTS - PUBLIC EXPOSURE MONITORING

Project Information		
Contract / Task Order Number:	Project Title / Location:	Gilbane Project Number:
N62473-17-D-0005 / F4332	Parcel E RA HPNS, SF, CA	J310000400
Information effective as of: 14 Jul 2021		

Effluent Air Concentration		
	Alpha	Beta
Radionuclide	Ra-226	Sr-90
Effluent Conc (µCi/ml)	9.E-13	6.E-12

Sampling Period
Air samples collected between 01 Jun 2021 and 30 Jun 2021

Color Codes
Value < 0.1 x Effluent Conc (i.e., < 10%)
Value > 0.1 x Effluent Conc (i.e., > 10%)
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-0199	Perimeter	MSE01	PE09	60	6/1/21 6:49	6/1/21 15:50	541	3.2E+07	C	06/08/21	1	cpm	0.20	4.35	0.6	8.9	7.8E-15	1.2E-13	***0.9%***	***2.1%***	DVT	BCS
AS-0200	Perimeter	MSE02	PE10	60	6/1/21 7:00	6/1/21 15:40	520	3.1E+07	C	06/08/21	1	cpm	0.25	4.00	0.7	8.0	1.0E-14	1.1E-13	***1.1%***	***1.9%***	DVT	BCS
AS-0201	Perimeter	MSE01	PE09	60	6/2/21 5:10	6/2/21 15:45	635	3.8E+07	C	06/08/21	1	cpm	0.00	3.95	0.0	7.8	0.0E+00	9.2E-14	***0.0%***	***1.5%***	DVT	BCS
AS-0202	Perimeter	MSE02	PE10	60	6/2/21 5:05	6/2/21 15:30	625	3.8E+07	C	06/08/21	1	cpm	0.15	3.65	0.4	7.0	5.1E-15	8.4E-14	***0.6%***	***1.4%***	DVT	BCS
AS-0203	Perimeter	MSE01	PE09	60	6/3/21 5:05	6/3/21 15:40	635	3.8E+07	C	06/08/21	1	cpm	0.05	3.60	0.1	6.8	1.7E-15	8.1E-14	***0.2%***	***1.3%***	DVT	BCS
AS-0204	Perimeter	MSE02	PE10	60	6/3/21 5:10	6/3/21 15:00	590	3.5E+07	C	06/08/21	1	cpm	0.15	3.90	0.4	7.7	5.4E-15	9.8E-14	***0.6%***	***1.6%***	DVT	BCS
AS-0205	Perimeter	MSE01	PE09	60	6/4/21 5:05	6/4/21 13:29	504	3.0E+07	C	06/08/21	1	cpm	0.15	4.05	0.4	8.1	6.3E-15	1.2E-13	***0.7%***	***2.0%***	DVT	BCS
AS-0206	Perimeter	MSE02	PE10	60	6/4/21 5:00	6/4/21 13:49	529	3.2E+07	C	06/08/21	1	cpm	0.10	4.80	0.3	10.2	4.0E-15	1.5E-13	***0.4%***	***2.4%***	DVT	BCS
AS-0207	Perimeter	MSE01	PE09	60	6/7/21 6:42	6/7/21 15:25	523	3.1E+07	C	06/14/21	1	cpm	0.35	4.85	1.0	10.4	1.4E-14	1.5E-13	***1.6%***	***2.5%***	DVT	BCS
AS-0208	Perimeter	MSE02	PE10	60	6/7/21 7:19	6/7/21 15:30	491	2.9E+07	C	06/14/21	1	cpm	0.20	4.30	0.6	8.8	8.6E-15	1.3E-13	***1.0%***	***2.2%***	DVT	BCS
AS-0209	Perimeter	MSE01	PE09	60	6/8/21 5:05	6/8/21 15:30	625	3.8E+07	C	06/14/21	1	cpm	0.30	3.90	0.8	7.7	1.0E-14	9.2E-14	***1.1%***	***1.5%***	DVT	BCS
AS-0210	Perimeter	MSE02	PE10	60	6/8/21 5:00	6/8/21 15:35	635	3.8E+07	C	06/14/21	1	cpm	0.30	4.05	0.8	8.1	1.0E-14	9.6E-14	***1.1%***	***1.6%***	DVT	BCS
AS-0211	Perimeter	MSE01	PE09	60	6/9/21 4:30	6/9/21 15:40	670	4.0E+07	C	06/14/21	1	cpm	0.10	3.40	0.3	6.3	3.1E-15	7.0E-14	***0.3%***	***1.2%***	DVT	BCS
AS-0212	Perimeter	MSE02	PE10	60	6/9/21 4:20	6/9/21 14:30	610	3.7E+07	C	06/14/21	1	cpm	0.05	4.55	0.1	9.5	1.7E-15	1.2E-13	***0.2%***	***2.0%***	DVT	BCS
AS-0213	Perimeter	MSE01	PE09	60	6/10/21 4:45	6/10/21 15:15	630	3.8E+07	C	06/14/21	1	cpm	0.15	3.45	0.4	6.4	5.0E-15	7.6E-14	***0.6%***	***1.3%***	DVT	BCS
AS-0214	Perimeter	MSE02	PE10	60	6/10/21 4:35	6/10/21 15:00	625	3.8E+07	C	06/14/21	1	cpm	0.30	4.90	0.8	10.5	1.0E-14	1.3E-13	***1.1%***	***2.1%***	DVT	BCS
AS-0215	Perimeter	MSE01	PE09	60	6/14/21 6:42	6/14/21 15:00	498	3.0E+07	C	06/21/21	1	cpm	0.00	3.80	0.0	7.4	0.0E+00	1.1E-13	***0.0%***	***1.9%***	DVT	BCS
AS-0216	Perimeter	MSE02	PE10	60	6/14/21 6:32	6/14/21 15:15	523	3.1E+07	C	06/21/21	1	cpm	0.15	4.85	0.4	10.4	6.0E-15	1.5E-13	***0.7%***	***2.5%***	DVT	BCS
AS-0217	Perimeter	MSE01	PE09	60	6/15/21 5:00	6/15/21 15:15	615	3.7E+07	C	06/21/21	1	cpm	0.15	3.30	0.4	6.0	5.1E-15	7.3E-14	***0.6%***	***1.2%***	DVT	BCS
AS-0218	Perimeter	MSE02	PE10	60	6/15/21 4:50	6/15/21 15:30	640	3.8E+07	C	06/21/21	1	cpm	0.05	4.25	0.1	8.7	1.6E-15	1.0E-13	***0.2%***	***1.7%***	DVT	BCS
AS-0219	Perimeter	MSE01	PE09	60	6/16/21 5:05	6/16/21 15:05	600	3.6E+07	C	06/21/21	1	cpm	0.25	3.15	0.7	5.5	8.8E-15	6.9E-14	***1.0%***	***1.2%***	DVT	BCS
AS-0220	Perimeter	MSE02	PE10	60	6/16/21 4:55	6/16/21 15:15	620	3.7E+07	C	06/21/21	1	cpm	0.25	4.45	0.7	9.2	8.5E-15	1.1E-13	***0.9%***	***1.9%***	DVT	BCS
AS-0221	Perimeter	MSE01	PE09	60	6/17/21 4:50	6/17/21 15:15	625	3.7E+07	C	06/21/21	1	cpm	0.35	4.70	1.0	9.9	1.2E-14	1.2E-13	***1.3%***	***2.0%***	DVT	BCS
AS-0222	Perimeter	MSE02	PE10	60	6/17/21 4:40	6/17/21 15:30	650	3.9E+07	C	06/21/21	1	cpm	0.35	4.75	1.0	10.1	1.1E-14	1.2E-13	***1.3%***	***1.9%***	DVT	BCS
AS-0223	Perimeter	MSE01	PE09	60	6/21/21 6:30	6/21/21 15:30	540	3.2E+07	C	06/28/21	1	cpm	0.25	4.15	0.7	8.4	9.8E-15	1.2E-13	***1.1%***	***1.9%***	DVT	BCS
AS-0224	Perimeter	MSE02	PE10	60	6/21/21 6:33	6/21/21 15:45	552	3.3E+07	C	06/28/21	1	cpm	0.15	3.95	0.4	7.8	5.7E-15	1.1E-13	***0.6%***	***1.8%***	DVT	BCS
AS-0225	Perimeter	MSE01	PE09	60	6/22/21 5:05	6/22/21 15:15	610	3.7E+07	C	06/28/21	1	cpm	0.05	4.15	0.1	8.4	1.7E-15	1.0E-13	***0.2%***	***1.7%***	DVT	BCS
AS-0226	Perimeter	MSE02	PE10	60	6/22/21 4:55	6/22/21 15:00	605	3.6E+07	C	06/28/21	1	cpm	0.15	3.55	0.4	6.7	5.2E-15	8.3E-14	***0.6%***	***1.4%***	DVT	BCS
AS-0227	Perimeter	MSE01	PE09	60	6/23/21 4:55	6/23/21 15:00	605	3.6E+07	C	06/28/21	1	cpm	0.10	3.15	0.3	5.5	3.5E-15	6.9E-14	***0.4%***	***1.1%***	DVT	BCS
AS-0228	Perimeter	MSE02	PE10	60	6/23/21 4:50	6/23/21 14:45	595	3.6E+07	C	06/28/21	1	cpm	0.00	3.50	0.0	6.5	0.0E+00	8.2E-14	***0.0%***	***1.4%***	DVT	BCS
AS-0229	Perimeter	MSE01	PE09	60	6/24/21 6:45	6/24/21 15:30	525	3.2E+07	C	06/28/21	1	cpm	0.05	3.15	0.1	5.5	2.0E-15	7.9E-14	***0.2%***	***1.3%***	DVT	BCS
AS-0230	Perimeter	MSE02	PE10	60	6/24/21 6:30	6/24/21 15:15	525	3.1E+07	C	06/28/21	1	cpm	0.10	3.50	0.3	6.5	4.0E-15	9.3E-14	***0.4%***	***1.6%***	DVT	BCS
AS-0231	Perimeter	MSE01	PE09	60	6/28/21 7:12	6/28/21 15:30	498	3.0E+07	C	07/06/21	1	cpm	0.10	3.50	0.3	6.5	4.2E-15	9.9E-14	***0.5%***	***1.6%***	DVT	BCS
AS-0232	Perimeter	MSE02	PE10	60	6/28/21 7:21	6/28/21 15:25	484	2.9E+07	C	07/06/21	1	cpm	0.05	4.60	0.1	9.7	2.2E-15	1.5E-13	***0.2%***	***2.5%***	DVT	BCS

Gilbane

AIR SAMPLE RESULTS - PUBLIC EXPOSURE MONITORING

Project Information		
Contract / Task Order Number:	Project Title / Location:	Gilbane Project Number:
N62473-17-D-0005 / F4332	Parcel E RA HPNS, SF, CA	J310000400
Information effective as of: 14 Jul 2021		

Effluent Air Concentration		
	Alpha	Beta
Radionuclide	Ra-226	Sr-90
Effluent Conc (µCi/ml)	9.E-13	6.E-12

Sampling Period
Air samples collected between 01 Jun 2021 and 30 Jun 2021

Color Codes
Value < 0.1 x Effluent Conc (i.e., < 10%)
Value > 0.1 x Effluent Conc (i.e., > 10%)
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-0233	Perimeter	MSE01	PE09	60	6/29/21 5:00	6/29/21 15:20	620	3.7E+07	C	07/06/21	1	cpm	0.05	3.85	0.1	7.5	1.7E-15	9.1E-14	***0.2%***	***1.5%***	DVT	BCS
AS-0234	Perimeter	MSE02	PE10	60	6/29/21 4:55	6/29/21 15:10	615	3.7E+07	C	07/06/21	1	cpm	0.25	3.80	0.7	7.4	8.6E-15	9.0E-14	***1.0%***	***1.5%***	DVT	BCS
AS-0235	Perimeter	MSE01	PE09	60	6/30/21 5:05	6/30/21 15:30	625	3.8E+07	C	07/06/21	1	cpm	0.10	3.75	0.3	7.2	3.4E-15	8.7E-14	***0.4%***	***1.5%***	DVT	BCS
AS-0236	Perimeter	MSE02	PE10	60	6/30/21 4:55	6/30/21 15:15	620	3.7E+07	C	07/06/21	1	cpm	0.20	4.75	0.6	10.1	6.8E-15	1.2E-13	***0.8%***	***2.0%***	DVT	BCS

ATTACHMENT 7
LABORATORY REPORTS

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Laboratory Analysis Report

Job ID : 21060458

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:	4
	Attn:	[redacted]	P.O.#. :	J310000400-0015
	Client Address:	1655 Grant Street, Suite 1200	Date Received :	06/04/2021 15:20
	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
MSE01-060121	6/1/2021 15:30	Cassette	21060458.01
MSE02-060121	6/1/2021 15:50	Cassette	21060458.02
MSE01-060221	6/2/2021 15:52	Cassette	21060458.03
MSE02-060221	6/2/2021 15:58	Cassette	21060458.04

[redacted]

[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 6/10/2021

Job ID : 21060458
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
21060458.01	MSE01-060121	06/01/2021	Area	2			470	940	100	15.5	19.745	0.008		06/10/21	[redacted]
21060458.02	MSE02-060121	06/01/2021	Area	2			472	944	100	16.0	20.382	0.008		06/10/21	[redacted]
21060458.03	MSE01-060221	06/02/2021	Area	2			488	976	100	22.5	28.662	0.011		06/10/21	[redacted]
21060458.04	MSE02-060221	06/02/2021	Area	2			476	952	100	15.0	19.108	0.007		06/10/21	[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 : **21060458**	Date Received : **06/04/2021**	Time Received : **3:20PM**
Client Name : **Gilbane**		
Temperature : **24.8-0.1CF=24.7°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:

Samples received in a box with a custody seal. -ANA 6-4-21.

Received by : [redacted]

Check in by/date [redacted] / 06/04/2021

Event ID: Air Monitoring

COC# KT060321ASB

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: 6/3/2021

Page: 1 of 1

Job ID:21060458

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)
MSE01-060121 01A	6/1/2021	1530	NA	NA	1	AA	X		470
MSE02-060121 02A	6/1/2021	1550	NA	NA	1	AA	X		472
MSE01-060221 03A	6/2/2021	1552	NA	NA	1	AA	X		488
MSE02-060221 04A	6/2/2021	1558	NA	NA	1	AA	X		476

Sampled By: [redacted]

Signature: [redacted]

Special Instructions: None

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

Turnaround Time: Standard

Sampler: [redacted]

Courier/Airbill No.: FedEx/ 7739 0327 5951

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
[redacted]					

10: 1096 29 TEMP: 24.8 - 0.1 = 24.7 C [redacted]

Laboratory Analysis Report

Job ID : 21060873

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:	4
	Attn:	[redacted]	P.O.#. :	J310000400-0015
	Client Address:	1655 Grant Street, Suite 1200	Date Received :	06/09/2021 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
MSE01-060321	6/3/2021 15:52	Cassette	21060873.01
MSE02-060321	6/3/2021 15:58	Cassette	21060873.02
MSE01-060421	6/4/2021 13:35	Cassette	21060873.03
MSE02-060421	6/4/2021 14:17	Cassette	21060873.04
MSE01-060721	6/7/2021 15:45	Cassette	21060873.05
MSE02-060721	6/7/2021 15:32	Cassette	21060873.06

[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 6/21/2021

Job ID : 21060873
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
21060873.01	MSE01-060321	06/03/2021	Area	2			484	968	100	16.5	21.019	0.008		06/18/21	[redacted]
21060873.02	MSE02-060321	06/03/2021	Area	2			475	950	100	20.0	25.478	0.010		06/18/21	[redacted]
21060873.03	MSE01-060421	06/04/2021	Area	2			384	768	100	21.0	26.752	0.013		06/18/21	[redacted]
21060873.04	MSE02-060421	06/04/2021	Area	2			408	816	100	18.5	23.567	0.011		06/18/21	[redacted]
21060873.05	MSE01-060721	06/07/2021	Area	2			445	890	100	20.0	25.478	0.011		06/18/21	[redacted]
21060873.06	MSE02-060721	06/07/2021	Area	2			400	800	100	14.5	18.471	0.009		06/18/21	[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 : **21060873**	Date Received : **06/09/2021**	Time Received : **5:20PM**
Client Name : **Gilbane**		
Temperature : **34.0-0.1cf=33.9°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:

Received in box with C/S attached. -VH 06-10-21

Received by : [redacted]

Check in by/date [redacted] / 06/10/2021

Event ID: Air Monitoring

COC# KT060821ASB

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: 6/8/2021

Page: 1 of 1

Job ID:21060873

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)
MSE01-060321 01A	6/3/2021	1552	NA	NA	1	AA	X		484
MSE02-060321 02A	6/3/2021	1558	NA	NA	1	AA	X		475
MSE01-060421 03A	6/4/2021	1335	NA	NA	1	AA	X		384
MSE02-060421 04A	6/4/2021	1417	NA	NA	1	AA	X		408
MSE01-060721 05A	6/7/2021	1545	NA	NA	1	AA	X		445
MSE02-060721 06A	6/7/2021	1532	NA	NA	1	AA	X		400

[redacted]

Sampled By: [redacted]

Signature: [redacted]

Special Instructions: Non

Sampler: [redacted]

Courier/Airbill No.: FedEx/ 7739 4004 9585

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
[redacted]					

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

Turnaround Time: Standard

34.0-0.1=33.9°C 17092029

Laboratory Analysis Report

Job ID : 21061093

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:	4
	Attn:	[redacted]	P.O.#. :	J310000400-0015
	Client Address:	1655 Grant Street, Suite 1200	Date Received :	06/11/2021 12:45
	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
MSE01-060821	6/8/2021	Cassette	21061093.01
MSE02-060821	6/8/2021	Cassette	21061093.02
MSE01-060921	6/9/2021	Cassette	21061093.03
MSE02-060921	6/9/2021	Cassette	21061093.04

[redacted]

[redacted]

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

Date 6/18/2021

Job ID : 21061093
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
21061093.01	MSE01-060821	06/08/2021	Area	2			445	890	100	23.5	29.936	0.013		06/18/21	[redacted]
21061093.02	MSE02-060821	06/08/2021	Area	2			449	898	100	18.5	23.567	0.010		06/18/21	[redacted]
21061093.03	MSE01-060921	06/09/2021	Area	2			500	1000	100	15.5	19.745	0.008		06/18/21	[redacted]
21061093.04	MSE02-060921	06/09/2021	Area	2			512	1024	100	13.5	17.197	0.006		06/18/21	[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 : **21061093**	Date Received : **06/11/2021**	Time Received : **12:45PM**
Client Name : **Gilbane**		
Temperature : **15.3-0.1cf=15.2°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:

No cooler, received in box with cooler seal. CH 06/11/21

Received by : [redacted] [redacted] [redacted]

Event ID: Air Monitoring

COC# KT061021ASB

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: 6/10/2021

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)
MSE01-060821 01A	6/8/2021	1552	NA	NA	1	AA	X			445
MSE02-060821 02A	6/8/2021	1540	NA	NA	1	AA	X			449
MSE01-060921 03A	6/9/2021	1539	NA	NA	1	AA	X			500
MSE02-060921 04A	6/9/2021	1540	NA	NA	1	AA	X			512

Job ID:21061093

Sampled By: [redacted]

Signature: [redacted]

Special Instructions: None

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

Turnaround Time: Standard

Sampler: [redacted]

Courier/Airbill No.: FedEx/ 7739 6650 0717

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
[redacted]					

TEMP: 15.3 - 0.1(f = 15.7°C

Laboratory Analysis Report

Job ID : 21061413

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:	4
	Attn:	[redacted]	P.O.#. :	J310000400-0015
	Client Address:	1655 Grant Street, Suite 1200	Date Received :	06/16/2021 16:39
	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
MSE01-061021	6/10/2021	Cassette	21061413.01
MSE02-061021	6/10/2021	Cassette	21061413.02
MSE01-061421	6/14/2021	Cassette	21061413.03
MSE02-061421	6/14/2021	Cassette	21061413.04

[redacted]

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

Date 6/23/2021

Job ID : 21061413
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
21061413.01	MSE01-061021	06/10/2021	Area	2			472	944	100	24.5	31.210	0.013		06/23/21	[redacted]
21061413.02	MSE02-061021	06/10/2021	Area	2			494	988	100	12.5	15.924	0.006		06/23/21	[redacted]
21061413.03	MSE01-061421	06/14/2021	Area	2			455	910	100	20.0	25.478	0.011		06/23/21	[redacted]
21061413.04	MSE02-061421	06/14/2021	Area	2			503	1006	100	21.5	27.389	0.010		06/23/21	[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 : **21061413**	Date Received : **06/16/2021**	Time Received : **4:39PM**
Client Name : **Gilbane**		
Temperature : **22.3-0.1cf=22.2°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 in box with custody seal. -VH 6-16-21

[redacted] [redacted] [redacted] [redacted]

Event ID: Air Monitoring

COC# KT061521ASB

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: 6/15/2021

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)
MSE01-061021	6/10/2021	1505	NA	NA	1	AA	X		472
MSE02-061021	6/10/2021	1519	NA	NA	1	AA	X		494
MSE01-061421	6/14/2021	1545	NA	NA	1	AA	X		455
MSE02-061421	6/14/2021	1600	NA	NA	1	AA	X		503

Job ID:21061413

[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/ 7740 0418 1871

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
[redacted]					

TEMP: 22.3 - 0.1 - 22.2 °C ID: T0916179

Laboratory Analysis Report

Job ID : 21061680

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 1310000400

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 :	06/21/2021 08:00
	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
MSE01-061521	6/15/2021 15:33	Cassette	21061680.01
MSE02-061521	6/15/2021 15:30	Cassette	21061680.02
MSE01-061621	6/16/2021 15:31	Cassette	21061680.03
MSE02-061621	6/16/2021 15:35	Cassette	21061680.04

[redacted]

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

Date 6/30/2021

Job ID : 21061680
Analytical Method: NIOSH 7400-I2-Aug1994

Client: Gilbane Project: HPNS Parcel E Phase II 1310000400 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
21061680.01	MSE01-061521	06/15/2021	Area	2			499	998	100	18.5	23.567	0.009		06/30/21	[redacted]
21061680.02	MSE02-061521	06/15/2021	Area	2			509	1018	100	12.5	15.924	0.006		06/30/21	[redacted]
21061680.03	MSE01-061621	06/16/2021	Area	2			503	1006	100	13.0	16.561	0.006		06/30/21	[redacted]
21061680.04	MSE02-061621	06/16/2021	Area	2			521	1042	100	13.5	17.197	0.006		06/30/21	[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 : **21061680**	Date Received : **06/21/2021**	Time Received : **8:00AM**
Client Name : **Gilbane**		
Temperature : **22.5-0.1cf=22.4°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:

[redacted] [redacted] [redacted] [redacted]

Event ID: Air Monitoring

COC# KT061721ASB

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: 6/17/2021

Page: 1 of 1

Job ID:21061680

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)	
MSE01-061521	6/15/2021	1533	NA	NA	1	AA	X	499	01A
MSE02-061521	6/15/2021	1530	NA	NA	1	AA	X	509	02A
MSE01-061621	6/16/2021	1531	NA	NA	1	AA	X	503	03A
MSE02-061621	6/16/2021	1535	NA	NA	1	AA	X	521	04A

[redacted]

Sampled By: [redacted]

Signature: [redacted]

Special Instructions: NONE

22.5-0.1 = 22.4°C

1709629 IAT

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

Turnaround Time: Standard

Sampler: [redacted]

Courier/Airbill No.: FedEx/ 7740 2846 8078

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
[redacted]					

ORIGIN ID: (925) 250-6097
GILBANE
200 FISHER STREET
SAN FRANCISCO, CA 94124
UNITED STATES US

SHIP DATE: 17JUN21
ACTWGT: 1.00 LB
CAD: 102700259/INET4340

BILL SENDER

[redacted]

A & B LABS
10100 EAST FREEWAY, SUITE 100
HOUSTON TX 77029
(713) 453-6060
INV
PO

REF: J3100004400 B 000909000

DEPT

560J3/B387/FE4A

FedEx Express

J211216231601uu

E

FRI - 18 JUN 4:30P
STANDARD OVERNIGHT

TRK# 0201 7740 2846 8078

77029
TX-US IAH

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[redacted]

Laboratory Analysis Report

Job ID : 21062060

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 :	06/23/2021 14:45
	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
MSE01-061721	6/17/2021 14:53	Cassette	21062060.01
MSE02-061721	6/17/2021 14:44	Cassette	21062060.02
MSE01-062121	6/21/2021 15:25	Cassette	21062060.03
MSE02-062121	6/21/2021 15:18	Cassette	21062060.04

[redacted]

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

Date 6/30/2021

Job ID : 21062060
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
21062060.01	MSE01-061721	06/17/2021	Area	2			461	922	100	11.5	14.650	0.006		06/30/21	[redacted]
21062060.02	MSE02-061721	06/17/2021	Area	2			465	930	100	13.0	16.561	0.007		06/30/21	[redacted]
21062060.03	MSE01-062121	06/21/2021	Area	2			501	1002	100	14.5	18.471	0.007		06/30/21	[redacted]
21062060.04	MSE02-062121	06/21/2021	Area	2			465	930	100	16.0	20.382	0.008		06/30/21	[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 : **21062060**	Date Received : **06/23/2021**	Time Received : **2:45PM**
Client Name : **Gilbane**		
Temperature : **22.9-0.1cf=22.8°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:

[redacted] TGillespie [redacted] [redacted]

Event ID: Air Monitoring

COC# KT062221ASB

Gilbane Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II J310000400

Project Manager: Brett Womack

Site Location: Hunters Point, San Francisco, CA 94124

Laboratory Name: A&B Labs

Address: 10100 East Fwy Ste. 100 Houston TX 77029

Contact Name: Alisha Hughes

Date: 6/22/2021

Page: 1 of 1

Job ID:21062060

	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	MSE01-061721	6/17/2021	1453	NA	NA	1	AA	X		461
02A	MSE02-061721	6/17/2021	1444	NA	NA	1	AA	X		465
03A	MSE01-062121	6/21/2021	1525	NA	NA	1	AA	X		501
04A	MSE02-062121	6/21/2021	1518	NA	NA	1	AA	X		465

[redacted]

Sampled By: [redacted]

Signature: [redacted]

Special Instructions: Nine

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

Turnaround Time: Standard

Sampler: [redacted]

Courier/Airbill No.: FedEx/ 7740 6719 0697

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
[redacted]					

[redacted]

TEMP: 22-9-0-1 = 22.8°C ID: 1709629 [redacted]

ORIGIN ID: [redacted] (925) 250-6097
GILBANE
200 FISHER STREET
SAN FRANCISCO, CA 94124
UNITED STATES US

SHIP DATE: 22JUN21
ACTWGT: 1.00 LB
CAD: 102700259/INET4340

BILL SENDER

TO [redacted]
A & B LABS
10100 EAST FREEWAY, SUITE 100
HOUSTON TX 77029
(713) 453-6060
INV
PO
REF: 3310000400 B00 0000000
DEPT

56DJ3/B387/FE4A

J211321033101uv

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TRK# 0201 7740 6719 0697

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[redacted]

Laboratory Analysis Report

Job ID : 21062293

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 :	06/28/2021 10:00
	City, State, Zip:	Concord, California, 94520	Sample Collected By :	[redacted]r

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-062221	6/22/2021 15:18	Cassette	21062293.01
MSE02-062221	6/22/2021 15:15	Cassette	21062293.02
MSE01-062321	6/23/2021 15:00	Cassette	21062293.03
MSE02-062321	6/23/2021 14:55	Cassette	21062293.04

[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 7/6/2021

Job ID : 21062293
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
21062293.01	MSE01-062221	06/22/2021	Area	2			466	932	100	16.0	20.382	0.008		06/30/21	[redacted]
21062293.02	MSE02-062221	06/22/2021	Area	2			475	950	100	9.0	11.465	0.005		06/30/21	[redacted]
21062293.03	MSE01-062321	06/23/2021	Area	2			457	914	100	12.5	15.924	0.007		06/30/21	[redacted]
21062293.04	MSE02-062321	06/23/2021	Area	2			463	926	100	14.0	17.834	0.007		06/30/21	[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 : **21062293**	Date Received : **06/28/2021**	Time Received : **10:00AM**
Client Name : **Gilbane**		
Temperature : **21.2-0.1cf=21.1°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. TG 06-28-2021

[redacted]

Event ID: Air Monitoring

COC# KT062421ASB

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: 6/24/2021

Page: 1 of 1

Job ID:21062293

	Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Analysis: Sample Matrix	Analysis: Asbestos
1A	MSE01-062221	6/22/2021	1518	NA	NA	1	AA	X
2A	MSE02-062221	6/22/2021	1515	NA	NA	1	AA	X
3A	MSE01-062321	6/23/2021	1500	NA	NA	1	AA	X
4A	MSE02-062321	6/23/2021	1455	NA	NA	1	AA	X

Preservative: None

Container Type: Filter

Flow Rate = 2 L/min

Special Instructions/Comments
Total Time (min)

466
475
457
463

[redacted]

Sampled By: [redacted]

Signature:

Special Instructions: NONE

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

Turnaround Time: Standard

Sample[redacted]

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:

Courier/Airbill No.: FedEx/ 7740 9064 3568

[redacted]

TEMP: 21.2 - 0.1 = 21.1°C IR 1119629 [redacted]

ORIGIN ID:JCCA (925) 250-6097
GILBANE
200 FISHER STREET
SAN FRANCISCO, CA 94124
UNITED STATES US

SHIP DATE: 24JUN21
ACTWGT: 1.00 LB
CAD: 102700259/INET4340

BILL SENDER

TO [redacted]
A & B LABS
10100 EAST FREEWAY, SUITE 100
HOUSTON TX 77029
(713) 453-6060
INV
PO
REF: J31000400 B 00 0000000
DEPT

56DJ3/B387/FE4A

J211321033101uv

FedEx Express

TRK# 0201 7740 9064 3568

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[redacted]

Laboratory Analysis Report

Job ID : 21070111

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:	4
	Attn:	[redacted]	P.O.#. :	J310000400-0015
	Client Address:	1655 Grant Street, Suite 1200	Date Received :	06/30/2021 16:2[redacted]
	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
MSE01-062421	6/24/2021 15:00	Cassette	21070111.01
MSE02-062421	6/24/2021 14:51	Cassette	21070111.02
MSE01-062821	6/28/2021 15:28	Cassette	21070111.03
MSE02-062821	6/28/2021 15:19	Cassette	21070111.04

[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 7/8/2021

Job ID : 21070111
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
21070111.01	MSE01-062421	06/24/2021	Area	2			466	932	100	19.5	24.841	0.010		07/08/21	[redacted]
21070111.02	MSE02-062421	06/24/2021	Area	2			469	938	100	14.5	18.471	0.008		07/08/21	[redacted]
21070111.03	MSE01-062821	06/28/2021	Area	2			468	936	100	13.5	17.197	0.007		07/08/21	[redacted]
21070111.04	MSE02-062821	06/28/2021	Area	2			477	954	100	11.0	14.013	0.006		07/08/21	[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 : **21070111**	Date Received : **06/30/2021**	Time Received : **4:21PM**
Client Name : **Gilbane**		
Temperature : **20.2-0.1cf=20.1°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:

Samples received in a box with a custody seal. -ANA 7-2-21.

[redacted] VHernandez [redacted] [redacted]

Event ID: Air Monitoring

COC# KT062921ASB

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: 6/29/2021

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)
MSE01-062421 01A	6/24/2021	1500	NA	NA	1	AA	X		466
MSE02-062421 02A	6/24/2021	1451	NA	NA	1	AA	X		469
MSE01-062821 03A	6/28/2021	1528	NA	NA	1	AA	X		468
MSE02-062821 04A	6/28/2021	1519	NA	NA	1	AA	X		477

Job ID:21070111

Sampled By: [redacted]

Sampler: [redacted]

Courier/Airbill No.: FedEx/ 7741 2935 5854

Relinquished By/Affiliation: | Date: | Time: | Received By/ Affiliation: | Date: | Time:

Special Instructions: None

[redacted]

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

Turnaround Time: Standard

20.2 - 0.1 = 20.1°C

1709620

Laboratory Analysis Report

Job ID : 21070251

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 :	07/02/2021 15:19
	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
MSE01-062921	6/29/2021 15:32	Cassette	21070251.01
MSE02-062921	6/29/2021 15:49	Cassette	21070251.02
MSE01-063021	6/30/2021 15:38	Cassette	21070251.03
MSE02-063021	6/30/2021 15:43	Cassette	21070251.04

[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 7/12/2021

Job ID : 21070251
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
21070251.01	MSE01-062921	06/29/2021	Area	2			502	1004	100	9.5	12.102	0.005		07/12/21	[redacted]
21070251.02	MSE02-062921	06/29/2021	Area	2			531	1062	100	9.0	11.465	0.004		07/12/21	[redacted]
21070251.03	MSE01-063021	06/30/2021	Area	2			470	940	100	9	11.465	0.005		07/12/21	[redacted]
21070251.04	MSE02-063021	06/30/2021	Area	2			495	990	100	9.5	12.102	0.005		07/12/21	[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 : **21070251**	Date Received : **07/02/2021**	Time Received : **3:19PM**
Client Name : **Gilbane**		
Temperature : **22.2-0.1cf=22.1°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:

[redacted] [redacted] [redacted] [redacted]

[redacted]s005-0321

Event ID: Air Monitoring

COC# KT070121ASB

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: 7/01/2021

Page: 1 of 1

Job ID:21070251

	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)
D1A	MSE01-062921	6/29/2021	1532	NA	NA	1	AA	X		502
D2A	MSE02-062921	6/29/2021	1549	NA	NA	1	AA	X		531
D3A	MSE01-063021	6/30/2021	1538	NA	NA	1	AA	X		470
D4A	MSE02-063021	6/30/2021	1543	NA	NA	1	AA	X		495

Sampled By: [redacted]

Sampler: [redacted]

Courier/Airbill No.: FedEx/ 7741 5559 7213

Relinquished By/Affiliation: Date: Time: Received By/ Affiliation: Date: Time:

Special Instructions: None

[redacted]

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

Turnaround Time: Standard

22.2-0.1 = 22.1 C 17091629

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.

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eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 320-74537-1
Client Project/Site: Hunters Point, Parcel E, Phase 2
Revision: 1

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

Attn: Ms. [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: 320-74537-1
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: 320-74537-1

Job ID: 320-74537-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-74537-1

Revision
This report was revised to include narration concerning the custody seal. No data changed as a result of this revision.

Receipt
The samples were received on 6/4/2021 10:10 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 17.5º C.

No custody seal was noted at the time of sample receipt.

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: 320-74537-1

Client Sample ID: GILBANEPM051321-1203 — Lab Sample ID: 320-74537-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0021		0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.048		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0065		0.00069	0.000096	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	13		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051321-1203 — Lab Sample ID: 320-74537-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	19.7538		0.3011	0.3011	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM051321-1204 — Lab Sample ID: 320-74537-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0013		0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.020		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0033		0.00069	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	7.4		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051321-1204 — Lab Sample ID: 320-74537-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	15.3801		0.2880	0.2880	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM051321-1205 — Lab Sample ID: 320-74537-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0011		0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.012		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0019		0.00069	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	3.3		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051321-1205 — Lab Sample ID: 320-74537-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	7.8374		0.3038	0.3038	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM051321-1206 — Lab Sample ID: 320-74537-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.00089	J	0.0016	0.00024	ug/m3 (Air)	1		6020	Total/NA
Copper	0.029		0.0032	0.00024	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0024		0.0016	0.00022	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	2.3		0.67	0.67	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051321-1206 — Lab Sample ID: 320-74537-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	9.8016		0.6623	0.6623	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: 320-74537-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM051321-1203
Lab Sample ID: 320-74537-1
Date Collected: 06/02/21 07:38
Matrix: Air
Date Received: 06/04/21 10:10
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0021		0.00069	0.00010	ug/m3 (Air)		06/11/21 06:30	06/11/21 11:37	1
Copper	0.048		0.0014	0.00010	ug/m3 (Air)		06/11/21 06:30	06/11/21 11:37	1
Manganese	0.0065		0.00069	0.000096	ug/m3 (Air)		06/11/21 06:30	06/11/21 11:37	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	13		0.29	0.29	ug/m3			06/08/21 08:10	1

Client Sample ID: GILBANETSP051321-1203
Lab Sample ID: 320-74537-2
Date Collected: 06/02/21 07:38
Matrix: Air
Date Received: 06/04/21 10:10
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	19.7538		0.3011	0.3011	ug/m3 (Air)			06/08/21 08:10	1

Client Sample ID: GILBANEPM051321-1204
Lab Sample ID: 320-74537-3
Date Collected: 06/02/21 07:55
Matrix: Air
Date Received: 06/04/21 10:10
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0013		0.00069	0.00010	ug/m3 (Air)		06/11/21 06:30	06/11/21 11:47	1
Copper	0.020		0.0014	0.00010	ug/m3 (Air)		06/11/21 06:30	06/11/21 11:47	1
Manganese	0.0033		0.00069	0.000097	ug/m3 (Air)		06/11/21 06:30	06/11/21 11:47	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	7.4		0.29	0.29	ug/m3			06/08/21 08:10	1

Client Sample ID: GILBANETSP051321-1204
Lab Sample ID: 320-74537-4
Date Collected: 06/02/21 07:55
Matrix: Air
Date Received: 06/04/21 10:10
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	15.3801		0.2880	0.2880	ug/m3 (Air)			06/08/21 08:10	1

Client Sample ID: GILBANEPM051321-1205
Lab Sample ID: 320-74537-5
Date Collected: 06/03/21 07:40
Matrix: Air
Date Received: 06/04/21 10:10
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0011		0.00069	0.00010	ug/m3 (Air)		06/11/21 06:30	06/11/21 11:50	1
Copper	0.012		0.0014	0.00010	ug/m3 (Air)		06/11/21 06:30	06/11/21 11:50	1
Manganese	0.0019		0.00069	0.000097	ug/m3 (Air)		06/11/21 06:30	06/11/21 11:50	1

Client: Gilbane Federal
Job ID: 320-74537-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM051321-1205
Lab Sample ID: 320-74537-5
Date Collected: 06/03/21 07:40
Matrix: Air
Date Received: 06/04/21 10:10
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	3.3		0.29	0.29	ug/m3			06/08/21 08:10	1

Client Sample ID: GILBANETSP051321-1205
Lab Sample ID: 320-74537-6
Date Collected: 06/03/21 07:40
Matrix: Air
Date Received: 06/04/21 10:10
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	7.8374		0.3038	0.3038	ug/m3 (Air)			06/08/21 08:10	1

Client Sample ID: GILBANEPM051321-1206
Lab Sample ID: 320-74537-7
Date Collected: 06/03/21 08:00
Matrix: Air
Date Received: 06/04/21 10:10
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00089	J	0.0016	0.00024	ug/m3 (Air)		06/11/21 06:30	06/11/21 11:53	1
Copper	0.029		0.0032	0.00024	ug/m3 (Air)		06/11/21 06:30	06/11/21 11:53	1
Manganese	0.0024		0.0016	0.00022	ug/m3 (Air)		06/11/21 06:30	06/11/21 11:53	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	2.3		0.67	0.67	ug/m3			06/08/21 08:10	1

Client Sample ID: GILBANETSP051321-1206
Lab Sample ID: 320-74537-8
Date Collected: 06/03/21 08:00
Matrix: Air
Date Received: 06/04/21 10:10
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	9.8016		0.6623	0.6623	ug/m3 (Air)			06/08/21 08:10	1

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

Job ID: 320-74537-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-497578/1-B
Matrix: Air
Analysis Batch: 497741

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 497587

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		06/11/21 06:30	06/11/21 11:15	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		06/11/21 06:30	06/11/21 11:15	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		06/11/21 06:30	06/11/21 11:15	1

Lab Sample ID: LCS 320-497578/2-B
Matrix: Air
Analysis Batch: 497741

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 497587

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.240	0.222		ug/m3 (Air)		92	86 - 111
Copper	0.240	0.226		ug/m3 (Air)		94	85 - 110
Manganese	0.240	0.227		ug/m3 (Air)		95	88 - 110

Lab Sample ID: LCSD 320-497578/3-B
Matrix: Air
Analysis Batch: 497741

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 497587

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	0.240	0.234		ug/m3 (Air)		97	86 - 111	5	15
Copper	0.240	0.231		ug/m3 (Air)		96	85 - 110	2	15
Manganese	0.240	0.234		ug/m3 (Air)		98	88 - 110	3	15

QC Association Summary

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

Job ID: 320-74537-1

Metals

Pre Prep Batch: 497578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-74537-1	GILBANEPM051321-1203	Total/NA	Air	Filter to Air	
320-74537-3	GILBANEPM051321-1204	Total/NA	Air	Filter to Air	
320-74537-5	GILBANEPM051321-1205	Total/NA	Air	Filter to Air	
320-74537-7	GILBANEPM051321-1206	Total/NA	Air	Filter to Air	
MB 320-497578/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-497578/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-497578/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 497587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-74537-1	GILBANEPM051321-1203	Total/NA	Air	3050B	497578
320-74537-3	GILBANEPM051321-1204	Total/NA	Air	3050B	497578
320-74537-5	GILBANEPM051321-1205	Total/NA	Air	3050B	497578
320-74537-7	GILBANEPM051321-1206	Total/NA	Air	3050B	497578
MB 320-497578/1-B	Method Blank	Total/NA	Air	3050B	497578
LCS 320-497578/2-B	Lab Control Sample	Total/NA	Air	3050B	497578
LCSD 320-497578/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	497578

Analysis Batch: 497741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-74537-1	GILBANEPM051321-1203	Total/NA	Air	6020	497587
320-74537-3	GILBANEPM051321-1204	Total/NA	Air	6020	497587
320-74537-5	GILBANEPM051321-1205	Total/NA	Air	6020	497587
320-74537-7	GILBANEPM051321-1206	Total/NA	Air	6020	497587
MB 320-497578/1-B	Method Blank	Total/NA	Air	6020	497587
LCS 320-497578/2-B	Lab Control Sample	Total/NA	Air	6020	497587
LCSD 320-497578/3-B	Lab Control Sample Dup	Total/NA	Air	6020	497587

General Chemistry

Pre Prep Batch: 496709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-74537-2	GILBANETSP051321-1203	Total/NA	Air	Filter to Air	
320-74537-4	GILBANETSP051321-1204	Total/NA	Air	Filter to Air	
320-74537-6	GILBANETSP051321-1205	Total/NA	Air	Filter to Air	
320-74537-8	GILBANETSP051321-1206	Total/NA	Air	Filter to Air	

Analysis Batch: 497667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-74537-2	GILBANETSP051321-1203	Total/NA	Air	40CFR50 App B	496709
320-74537-4	GILBANETSP051321-1204	Total/NA	Air	40CFR50 App B	496709
320-74537-6	GILBANETSP051321-1205	Total/NA	Air	40CFR50 App B	496709
320-74537-8	GILBANETSP051321-1206	Total/NA	Air	40CFR50 App B	496709

Analysis Batch: 497671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-74537-1	GILBANEPM051321-1203	Total/NA	Air	PM10	
320-74537-3	GILBANEPM051321-1204	Total/NA	Air	PM10	
320-74537-5	GILBANEPM051321-1205	Total/NA	Air	PM10	
320-74537-7	GILBANEPM051321-1206	Total/NA	Air	PM10	

Lab Chronicle

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

Job ID: 320-74537-1

Client Sample ID: GILBANEPM051321-1203
Lab Sample ID: 320-74537-1
Date Collected: 06/02/21 07:38
Matrix: Air
Date Received: 06/04/21 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					497578	06/11/21 06:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	497587	06/11/21 06:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			497741	06/11/21 11:37	IM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0225 g	497671	06/08/21 08:10	DPM	TAL SAC

Client Sample ID: GILBANETSP051321-1203
Lab Sample ID: 320-74537-2
Date Collected: 06/02/21 07:38
Matrix: Air
Date Received: 06/04/21 10:10

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			497667	06/08/21 08:10	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					496709	06/08/21 14:23	DPM	TAL SAC

Client Sample ID: GILBANEPM051321-1204
Lab Sample ID: 320-74537-3
Date Collected: 06/02/21 07:55
Matrix: Air
Date Received: 06/04/21 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					497578	06/11/21 06:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	497587	06/11/21 06:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			497741	06/11/21 11:47	IM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0129 g	497671	06/08/21 08:10	DPM	TAL SAC

Client Sample ID: GILBANETSP051321-1204
Lab Sample ID: 320-74537-4
Date Collected: 06/02/21 07:55
Matrix: Air
Date Received: 06/04/21 10:10

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			497667	06/08/21 08:10	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					496709	06/08/21 14:23	DPM	TAL SAC

Client Sample ID: GILBANEPM051321-1205
Lab Sample ID: 320-74537-5
Date Collected: 06/03/21 07:40
Matrix: Air
Date Received: 06/04/21 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					497578	06/11/21 06:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	497587	06/11/21 06:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			497741	06/11/21 11:50	IM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0058 g	497671	06/08/21 08:10	DPM	TAL SAC

Lab Chronicle

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

Job ID: 320-74537-1

Client Sample ID: GILBANETSP051321-1205

Lab Sample ID: 320-74537-6

Date Collected: 06/03/21 07:40

Matrix: Air

Date Received: 06/04/21 10:10

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			497667	06/08/21 08:10	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					496709	06/08/21 14:23	DPM	TAL SAC

Client Sample ID: GILBANEPM051321-1206

Lab Sample ID: 320-74537-7

Date Collected: 06/03/21 08:00

Matrix: Air

Date Received: 06/04/21 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					497578	06/11/21 06:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	497587	06/11/21 06:30	NIM	TAL SAC
Total/NA	Analysis	6020		1			497741	06/11/21 11:53	IM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0017 g	497671	06/08/21 08:10	DPM	TAL SAC

Client Sample ID: GILBANETSP051321-1206

Lab Sample ID: 320-74537-8

Date Collected: 06/03/21 08:00

Matrix: Air

Date Received: 06/04/21 10:10

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			497667	06/08/21 08:10	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					496709	06/08/21 14:23	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: 320-74537-1
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: 320-74537-1

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: 320-74537-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-74537-1	GILBANEPM051321-1203	Air	06/02/21 07:38	06/04/21 10:10	
320-74537-2	GILBANETSP051321-1203	Air	06/02/21 07:38	06/04/21 10:10	
320-74537-3	GILBANEPM051321-1204	Air	06/02/21 07:55	06/04/21 10:10	
320-74537-4	GILBANETSP051321-1204	Air	06/02/21 07:55	06/04/21 10:10	
320-74537-5	GILBANEPM051321-1205	Air	06/03/21 07:40	06/04/21 10:10	
320-74537-6	GILBANETSP051321-1205	Air	06/03/21 07:40	06/04/21 10:10	
320-74537-7	GILBANEPM051321-1206	Air	06/03/21 08:00	06/04/21 10:10	
320-74537-8	GILBANETSP051321-1206	Air	06/03/21 08:00	06/04/21 10:10	

CHAIN-OF-CUSTODY RECORD

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

COC # KT060321AIR

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

320-74537 Chain of Custody

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						
1	GILBANEPM051321-1203	A	06/02/2021	0738	KT	X		X	AMSE1	N1	0.00	0.00	1	VOLUME: 1746.53
2	GILBANETSP051321-1203	A	06/02/2021	0738	KT		X		AMSE1	N1	0.00	0.00	1	VOLUME: 1660.44
3	GILBANEPM051321-1204	A	06/02/2021	0755	KT	X		X	AMSE2	N1	0.00	0.00	1	VOLUME: 1735.34
4	GILBANETSP051321-1204	A	06/02/2021	0755	KT		X		AMSE2	N1	0.00	0.00	1	VOLUME: 1736.01
5	GILBANEPM051321-1205	A	06/03/2021	0740	KT	X		X	AMSE1	N1	0.00	0.00	1	VOLUME: 1737.14
6	GILBANETSP051321-1205	A	06/03/2021	0740	KT		X		AMSE1	N1	0.00	0.00	1	VOLUME: 1645.95
7	GILBANEPM051321-1206	A	06/03/2021	0800	KT	X		X	AMSE2	N1	0.00	0.00	1	VOLUME: 749.97
8	GILBANETSP051321-1206	A	06/03/2021	0800	KT		X		AMSE2	N1	0.00	0.00	1	VOLUME: 754.98
9														
10														

Turnaround Time: 5 days

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

Shipping Date / Carrier / Airbill Number

Shipping Date: 6/3/2021 / FedEx 7739 0329 5060

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

17.5°C

Login Sample Receipt Checklist

Client: Gilbane Federal

Job Number: 320-74537-1

Login Number: 74537

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.	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: 320-74732-1
Client Project/Site: Hunters Point, Parcel E, Phase 2

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

Attn: Ms. [redacted]

[redacted]

Authorized for release by:
[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: 320-74732-1
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: 320-74732-1

Job ID: 320-74732-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-74732-1

Comments
No additional comments.

Receipt
The samples were received on 6/9/2021 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 16.7º 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: 320-74732-1

Client Sample ID: GILBANEPM051321-1207 — Lab Sample ID: 320-74732-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0022		0.00070	0.00011	ug/m3 (Air)	1		6020	Total/NA
Copper	0.028		0.0014	0.00011	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0060		0.00070	0.000099	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	21		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051321-1207 — Lab Sample ID: 320-74732-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	34.7919		0.3095	0.3095	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM051321-1208 — Lab Sample ID: 320-74732-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0017		0.00072	0.00011	ug/m3 (Air)	1		6020	Total/NA
Copper	0.15		0.0014	0.00011	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0050		0.00072	0.00010	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	23		0.30	0.30	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051321-1208 — Lab Sample ID: 320-74732-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	27.0601		0.2980	0.2980	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM051321-1209 — Lab Sample ID: 320-74732-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0039		0.0026	0.00039	ug/m3 (Air)	1		6020	Total/NA
Copper	0.054		0.0051	0.00039	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0076		0.0026	0.00036	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	23		1.1	1.1	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051321-1209 — Lab Sample ID: 320-74732-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	33.2951		1.1248	1.1248	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM051321-1210 — Lab Sample ID: 320-74732-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0023	J	0.0024	0.00036	ug/m3 (Air)	1		6020	Total/NA
Copper	0.22		0.0049	0.00036	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0080		0.0024	0.00034	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	25		1.0	1.0	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051321-1210 — Lab Sample ID: 320-74732-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	36.0368		1.0010	1.0010	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM051321-1211 — Lab Sample ID: 320-74732-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0027		0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.027		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0035		0.00069	0.000096	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: 320-74732-1

Client Sample ID: GILBANEPM051321-1211 (Continued) — Lab Sample ID: 320-74732-9

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Particulate Matter as PM 10	17		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051321-1211 — Lab Sample ID: 320-74732-10

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	40.6632		0.2905	0.2905	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM051321-1212 — Lab Sample ID: 320-74732-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0047		0.00071	0.00011	ug/m3 (Air)	1		6020	Total/NA
Copper	0.047		0.0014	0.00011	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.011		0.00071	0.00010	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	7.8		0.30	0.30	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051321-1212 — Lab Sample ID: 320-74732-12

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	36.3842		0.3137	0.3137	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: 320-74732-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM051321-1207
Lab Sample ID: 320-74732-1
Date Collected: 06/04/21 07:04
Matrix: Air
Date Received: 06/09/21 09:50
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0022		0.00070	0.00011	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:32	1
Copper	0.028		0.0014	0.00011	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:32	1
Manganese	0.0060		0.00070	0.000099	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:32	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	21		0.29	0.29	ug/m3			06/11/21 12:00	1

Client Sample ID: GILBANETSP051321-1207
Lab Sample ID: 320-74732-2
Date Collected: 06/04/21 07:04
Matrix: Air
Date Received: 06/09/21 09:50
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	34.7919		0.3095	0.3095	ug/m3 (Air)			06/11/21 12:00	1

Client Sample ID: GILBANEPM051321-1208
Lab Sample ID: 320-74732-3
Date Collected: 06/04/21 07:20
Matrix: Air
Date Received: 06/09/21 09:50
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0017		0.00072	0.00011	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:42	1
Copper	0.15		0.0014	0.00011	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:42	1
Manganese	0.0050		0.00072	0.00010	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:42	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	23		0.30	0.30	ug/m3			06/11/21 12:00	1

Client Sample ID: GILBANETSP051321-1208
Lab Sample ID: 320-74732-4
Date Collected: 06/04/21 07:20
Matrix: Air
Date Received: 06/09/21 09:50
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	27.0601		0.2980	0.2980	ug/m3 (Air)			06/11/21 12:00	1

Client Sample ID: GILBANEPM051321-1209
Lab Sample ID: 320-74732-5
Date Collected: 06/04/21 13:35
Matrix: Air
Date Received: 06/09/21 09:50
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0039		0.0026	0.00039	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:45	1
Copper	0.054		0.0051	0.00039	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:45	1
Manganese	0.0076		0.0026	0.00036	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:45	1

Client Sample ID: GILBANEPM051321-1209
Lab Sample ID: 320-74732-5
Date Collected: 06/04/21 13:35
Matrix: Air
Date Received: 06/09/21 09:50
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	23		1.1	1.1	ug/m3			06/11/21 12:00	1

Client Sample ID: GILBANETSP051321-1209
Lab Sample ID: 320-74732-6
Date Collected: 06/04/21 13:35
Matrix: Air
Date Received: 06/09/21 09:50
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	33.2951		1.1248	1.1248	ug/m3 (Air)			06/11/21 12:00	1

Client Sample ID: GILBANEPM051321-1210
Lab Sample ID: 320-74732-7
Date Collected: 06/04/21 14:24
Matrix: Air
Date Received: 06/09/21 09:50
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0023	J	0.0024	0.00036	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:48	1
Copper	0.22		0.0049	0.00036	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:48	1
Manganese	0.0080		0.0024	0.00034	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:48	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	25		1.0	1.0	ug/m3			06/11/21 12:00	1

Client Sample ID: GILBANETSP051321-1210
Lab Sample ID: 320-74732-8
Date Collected: 06/04/21 14:24
Matrix: Air
Date Received: 06/09/21 09:50
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	36.0368		1.0010	1.0010	ug/m3 (Air)			06/11/21 12:00	1

Client Sample ID: GILBANEPM051321-1211
Lab Sample ID: 320-74732-9
Date Collected: 06/08/21 08:20
Matrix: Air
Date Received: 06/09/21 09:50
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0027		0.00069	0.00010	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:52	1
Copper	0.027		0.0014	0.00010	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:52	1
Manganese	0.0035		0.00069	0.000096	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:52	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	17		0.29	0.29	ug/m3			06/11/21 12:00	1

Client Sample Results

Client: Gilbane Federal
Job ID: 320-74732-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANETSP051321-1211
Lab Sample ID: 320-74732-10
Date Collected: 06/08/21 08:20
Matrix: Air
Date Received: 06/09/21 09:50
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	40.6632		0.2905	0.2905	ug/m3 (Air)			06/11/21 12:00	1

Client Sample ID: GILBANEPM051321-1212
Lab Sample ID: 320-74732-11
Date Collected: 06/08/21 07:56
Matrix: Air
Date Received: 06/09/21 09:50
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0047		0.00071	0.00011	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:55	1
Copper	0.047		0.0014	0.00011	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:55	1
Manganese	0.011		0.00071	0.00010	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:55	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	7.8		0.30	0.30	ug/m3			06/11/21 12:00	1

Client Sample ID: GILBANETSP051321-1212
Lab Sample ID: 320-74732-12
Date Collected: 06/08/21 07:56
Matrix: Air
Date Received: 06/09/21 09:50
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	36.3842		0.3137	0.3137	ug/m3 (Air)			06/11/21 12:00	1

QC Sample Results

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

Job ID: 320-74732-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-498132/1-B
Matrix: Air
Analysis Batch: 498588

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 498143

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:10	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:10	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:10	1

Lab Sample ID: LCS 320-498132/2-B
Matrix: Air
Analysis Batch: 498588

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 498143

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	0.237		ug/m3 (Air)		99	85 - 110
Manganese	0.240	0.233		ug/m3 (Air)		97	88 - 110

Lab Sample ID: LCSD 320-498132/3-B
Matrix: Air
Analysis Batch: 498588

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 498143

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	0.240	0.237		ug/m3 (Air)		99	86 - 111	0	15
Copper	0.240	0.233		ug/m3 (Air)		97	85 - 110	2	15
Manganese	0.240	0.231		ug/m3 (Air)		96	88 - 110	1	15

QC Association Summary

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

Job ID: 320-74732-1

Metals

Pre Prep Batch: 498132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-74732-1	GILBANEPM051321-1207	Total/NA	Air	Filter to Air	
320-74732-3	GILBANEPM051321-1208	Total/NA	Air	Filter to Air	
320-74732-5	GILBANEPM051321-1209	Total/NA	Air	Filter to Air	
320-74732-7	GILBANEPM051321-1210	Total/NA	Air	Filter to Air	
320-74732-9	GILBANEPM051321-1211	Total/NA	Air	Filter to Air	
320-74732-11	GILBANEPM051321-1212	Total/NA	Air	Filter to Air	
MB 320-498132/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-498132/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-498132/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 498143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-74732-1	GILBANEPM051321-1207	Total/NA	Air	3050B	498132
320-74732-3	GILBANEPM051321-1208	Total/NA	Air	3050B	498132
320-74732-5	GILBANEPM051321-1209	Total/NA	Air	3050B	498132
320-74732-7	GILBANEPM051321-1210	Total/NA	Air	3050B	498132
320-74732-9	GILBANEPM051321-1211	Total/NA	Air	3050B	498132
320-74732-11	GILBANEPM051321-1212	Total/NA	Air	3050B	498132
MB 320-498132/1-B	Method Blank	Total/NA	Air	3050B	498132
LCS 320-498132/2-B	Lab Control Sample	Total/NA	Air	3050B	498132
LCSD 320-498132/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	498132

Analysis Batch: 498588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-74732-1	GILBANEPM051321-1207	Total/NA	Air	6020	498143
320-74732-3	GILBANEPM051321-1208	Total/NA	Air	6020	498143
320-74732-5	GILBANEPM051321-1209	Total/NA	Air	6020	498143
320-74732-7	GILBANEPM051321-1210	Total/NA	Air	6020	498143
320-74732-9	GILBANEPM051321-1211	Total/NA	Air	6020	498143
320-74732-11	GILBANEPM051321-1212	Total/NA	Air	6020	498143
MB 320-498132/1-B	Method Blank	Total/NA	Air	6020	498143
LCS 320-498132/2-B	Lab Control Sample	Total/NA	Air	6020	498143
LCSD 320-498132/3-B	Lab Control Sample Dup	Total/NA	Air	6020	498143

General Chemistry

Pre Prep Batch: 497413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-74732-2	GILBANETSP051321-1207	Total/NA	Air	Filter to Air	
320-74732-4	GILBANETSP051321-1208	Total/NA	Air	Filter to Air	
320-74732-6	GILBANETSP051321-1209	Total/NA	Air	Filter to Air	
320-74732-8	GILBANETSP051321-1210	Total/NA	Air	Filter to Air	
320-74732-10	GILBANETSP051321-1211	Total/NA	Air	Filter to Air	
320-74732-12	GILBANETSP051321-1212	Total/NA	Air	Filter to Air	

Analysis Batch: 498210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-74732-1	GILBANEPM051321-1207	Total/NA	Air	PM10	
320-74732-3	GILBANEPM051321-1208	Total/NA	Air	PM10	
320-74732-5	GILBANEPM051321-1209	Total/NA	Air	PM10	
320-74732-7	GILBANEPM051321-1210	Total/NA	Air	PM10	

General Chemistry (Continued)

Analysis Batch: 498210 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-74732-9	GILBANEPM051321-1211	Total/NA	Air	PM10	
320-74732-11	GILBANEPM051321-1212	Total/NA	Air	PM10	

Analysis Batch: 498212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-74732-2	GILBANETSP051321-1207	Total/NA	Air	40CFR50 App B	497413
320-74732-4	GILBANETSP051321-1208	Total/NA	Air	40CFR50 App B	497413
320-74732-6	GILBANETSP051321-1209	Total/NA	Air	40CFR50 App B	497413
320-74732-8	GILBANETSP051321-1210	Total/NA	Air	40CFR50 App B	497413
320-74732-10	GILBANETSP051321-1211	Total/NA	Air	40CFR50 App B	497413
320-74732-12	GILBANETSP051321-1212	Total/NA	Air	40CFR50 App B	497413

Lab Chronicle

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

Job ID: 320-74732-1

Client Sample ID: GILBANEPM051321-1207
Lab Sample ID: 320-74732-1
Date Collected: 06/04/21 07:04
Matrix: Air
Date Received: 06/09/21 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					498132	06/14/21 07:21	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	498143	06/14/21 08:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			498588	06/15/21 04:32	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0352 g	498210	06/11/21 12:00	DPM	TAL SAC

Client Sample ID: GILBANETSP051321-1207
Lab Sample ID: 320-74732-2
Date Collected: 06/04/21 07:04
Matrix: Air
Date Received: 06/09/21 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					497413	06/10/21 14:21	DPM	TAL SAC
Total/NA	Analysis	40CFR50 App B		1			498212	06/11/21 12:00	DPM	TAL SAC

Client Sample ID: GILBANEPM051321-1208
Lab Sample ID: 320-74732-3
Date Collected: 06/04/21 07:20
Matrix: Air
Date Received: 06/09/21 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					498132	06/14/21 07:21	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	498143	06/14/21 08:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			498588	06/15/21 04:42	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0381 g	498210	06/11/21 12:00	DPM	TAL SAC

Client Sample ID: GILBANETSP051321-1208
Lab Sample ID: 320-74732-4
Date Collected: 06/04/21 07:20
Matrix: Air
Date Received: 06/09/21 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					497413	06/10/21 14:21	DPM	TAL SAC
Total/NA	Analysis	40CFR50 App B		1			498212	06/11/21 12:00	DPM	TAL SAC

Client Sample ID: GILBANEPM051321-1209
Lab Sample ID: 320-74732-5
Date Collected: 06/04/21 13:35
Matrix: Air
Date Received: 06/09/21 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					498132	06/14/21 07:21	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	498143	06/14/21 08:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			498588	06/15/21 04:45	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0109 g	498210	06/11/21 12:00	DPM	TAL SAC

Lab Chronicle

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

Job ID: 320-74732-1

Client Sample ID: GILBANETSP051321-1209
Lab Sample ID: 320-74732-6
Date Collected: 06/04/21 13:35
Matrix: Air
Date Received: 06/09/21 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					497413	06/10/21 14:21	DPM	TAL SAC
Total/NA	Analysis	40CFR50 App B		1			498212	06/11/21 12:00	DPM	TAL SAC

Client Sample ID: GILBANEPM051321-1210
Lab Sample ID: 320-74732-7
Date Collected: 06/04/21 14:24
Matrix: Air
Date Received: 06/09/21 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					498132	06/14/21 07:21	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	498143	06/14/21 08:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			498588	06/15/21 04:48	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0121 g	498210	06/11/21 12:00	DPM	TAL SAC

Client Sample ID: GILBANETSP051321-1210
Lab Sample ID: 320-74732-8
Date Collected: 06/04/21 14:24
Matrix: Air
Date Received: 06/09/21 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					497413	06/10/21 14:21	DPM	TAL SAC
Total/NA	Analysis	40CFR50 App B		1			498212	06/11/21 12:00	DPM	TAL SAC

Client Sample ID: GILBANEPM051321-1211
Lab Sample ID: 320-74732-9
Date Collected: 06/08/21 08:20
Matrix: Air
Date Received: 06/09/21 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					498132	06/14/21 07:21	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	498143	06/14/21 08:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			498588	06/15/21 04:52	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0294 g	498210	06/11/21 12:00	DPM	TAL SAC

Client Sample ID: GILBANETSP051321-1211
Lab Sample ID: 320-74732-10
Date Collected: 06/08/21 08:20
Matrix: Air
Date Received: 06/09/21 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					497413	06/10/21 14:21	DPM	TAL SAC
Total/NA	Analysis	40CFR50 App B		1			498212	06/11/21 12:00	DPM	TAL SAC

Lab Chronicle

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

Job ID: 320-74732-1

Client Sample ID: GILBANEPM051321-1212

Lab Sample ID: 320-74732-11

Date Collected: 06/08/21 07:56
Matrix: Air
Date Received: 06/09/21 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					498132	06/14/21 07:21	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	498143	06/14/21 08:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			498588	06/15/21 04:55	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0131 g	498210	06/11/21 12:00	DPM	TAL SAC

Client Sample ID: GILBANETSP051321-1212

Lab Sample ID: 320-74732-12

Date Collected: 06/08/21 07:56
Matrix: Air
Date Received: 06/09/21 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					497413	06/10/21 14:21	DPM	TAL SAC
Total/NA	Analysis	40CFR50 App B		1			498212	06/11/21 12:00	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: 320-74732-1
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: 320-74732-1

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: 320-74732-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-74732-1	GILBANEPM051321-1207	Air	06/04/21 07:04	06/09/21 09:50	
320-74732-2	GILBANETSP051321-1207	Air	06/04/21 07:04	06/09/21 09:50	
320-74732-3	GILBANEPM051321-1208	Air	06/04/21 07:20	06/09/21 09:50	
320-74732-4	GILBANETSP051321-1208	Air	06/04/21 07:20	06/09/21 09:50	
320-74732-5	GILBANEPM051321-1209	Air	06/04/21 13:35	06/09/21 09:50	
320-74732-6	GILBANETSP051321-1209	Air	06/04/21 13:35	06/09/21 09:50	
320-74732-7	GILBANEPM051321-1210	Air	06/04/21 14:24	06/09/21 09:50	
320-74732-8	GILBANETSP051321-1210	Air	06/04/21 14:24	06/09/21 09:50	
320-74732-9	GILBANEPM051321-1211	Air	06/08/21 08:20	06/09/21 09:50	
320-74732-10	GILBANETSP051321-1211	Air	06/08/21 08:20	06/09/21 09:50	
320-74732-11	GILBANEPM051321-1212	Air	06/08/21 07:56	06/09/21 09:50	
320-74732-12	GILBANETSP051321-1212	Air	06/08/21 07:56	06/09/21 09:50	

CHAIN-OF-CUSTODY RECORD

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

COC # KT060821AIR

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]rpen@testamericainc.com	
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

320-74732 Chain of Custody

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						
1	GILBANEPM051321-1207	A	06/04/2021	0704	KT	X		X	AMSE1	N1	0.00	0.00	1	VOLUME: 1704.85
2	GILBANETSP051321-1207	A	06/04/2021	0704	KT		X		AMSE1	N1	0.00	0.00	1	VOLUME: 1615.32
3	GILBANEPM051321-1208	A	06/04/2021	0720	KT	X		X	AMSE2	N1	0.00	0.00	1	VOLUME: 1673.13
4	GILBANETSP051321-1208	A	06/04/2021	0720	KT		X		AMSE2	N1	0.00	0.00	1	VOLUME: 1677.75
5	GILBANEPM051321-1209	A	06/04/2021	1335	KT	X		X	AMSE1	N1	0.00	0.00	1	VOLUME: 466.44
6	GILBANETSP051321-1209	A	06/04/2021	1335	KT		X		AMSE1	N1	0.00	0.00	1	VOLUME: 444.51
7	GILBANEPM051321-1210	A	06/04/2021	1424	KT	X		X	AMSE2	N1	0.00	0.00	1	VOLUME: 493.31
8	GILBANETSP051321-1210	A	06/04/2021	1424	KT		X		AMSE2	N1	0.00	0.00	1	VOLUME: 499.49
9	GILBANEPM051321-1211	A	06/08/2021	0820	KT	X		X	AMSE1	N1	0.00	0.00	1	VOLUME: 1750.43
10	GILBANETSP051321-1211	A	06/08/2021	0820	KT		X		AMSE1	N1	0.00	0.00	1	VOLUME: 1721.46
11	GILBANEPM051321-1212	A	06/08/2021	0756	KT	X		X	AMSE2	N1	0.00	0.00	1	VOLUME: 1684.65

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time	Shipping Date / Carrier / Airbill Number
[redacted]						Shipping Date: 6/8/2021 / FedEx 7739 4007 6020
						Received by Laboratory: *(Signature, Date, Time)* **& condition**

CHAIN-OF-CUSTODY RECORD

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

COC # KT060821AIR

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	GILBANETSP051321-1212	A	06/08/2021	0756	KT		X		AMSE2	N1	0.00	0.00	1	VOLUME: 1594.10
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: 6/8/2021 / FedEx 7739 4007 6020

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

Login Sample Receipt Checklist

Client: Gilbane Federal

Job Number: 320-74732-1

Login Number: 74732

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	
Cooler Temperature is acceptable.	True	Ambient
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <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: 320-74839-1
Client Project/Site: Hunters Point, Parcel E, Phase 2
Revision: 1

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

[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.

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Table of Contents

Definitions/Glossary

Client: Gilbane Federal
Job ID: 320-74839-1
Project/Site: Hunters Point, Parcel E, Phase 2

Glossary

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

Case Narrative

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

Job ID: 320-74839-1

Job ID: 320-74839-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-74839-1

Revision
This report was revised July 8, 2021 to provide a correct sample receipt checklist. No data changed as a result of this revision.

Receipt
The samples were received on 6/11/2021 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 19.5º 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: 320-74839-1

Client Sample ID: GILBANEPM051321-1213 — Lab Sample ID: 320-74839-1

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	0.012		0.0014	0.00011	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0019		0.00072	0.00010	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	8.7		0.30	0.30	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051321-1213 — Lab Sample ID: 320-74839-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	16.9903		0.3023	0.3023	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM051321-1214 — Lab Sample ID: 320-74839-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0037		0.00072	0.00011	ug/m3 (Air)	1		6020	Total/NA
Copper	0.26		0.0014	0.00011	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0030		0.00072	0.00010	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	13		0.30	0.30	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051321-1214 — Lab Sample ID: 320-74839-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	16.2337		0.3158	0.3158	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM051321-1215 — Lab Sample ID: 320-74839-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.00094		0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.0094		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0020		0.00069	0.000096	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	7.2		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051321-1215 — Lab Sample ID: 320-74839-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	15.5003		0.2881	0.2881	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM051321-1216 — Lab Sample ID: 320-74839-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0019		0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.094		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0068		0.00069	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	14		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051321-1216 — Lab Sample ID: 320-74839-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	19.6459		0.3032	0.3032	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: 320-74839-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM051321-1213
Lab Sample ID: 320-74839-1
Date Collected: 06/09/21 07:19
Matrix: Air
Date Received: 06/11/21 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)		06/14/21 08:00	06/15/21 05:11	1
Copper	0.012		0.0014	0.00011	ug/m3 (Air)		06/14/21 08:00	06/15/21 05:11	1
Manganese	0.0019		0.00072	0.00010	ug/m3 (Air)		06/14/21 08:00	06/15/21 05:11	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	8.7		0.30	0.30	ug/m3			06/11/21 12:00	1

Client Sample ID: GILBANETSP051321-1213
Lab Sample ID: 320-74839-2
Date Collected: 06/09/21 07:19
Matrix: Air
Date Received: 06/11/21 09:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	16.9903		0.3023	0.3023	ug/m3 (Air)			06/11/21 12:00	1

Client Sample ID: GILBANEPM051321-1214
Lab Sample ID: 320-74839-3
Date Collected: 06/09/21 07:00
Matrix: Air
Date Received: 06/11/21 09:30
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0037		0.00072	0.00011	ug/m3 (Air)		06/14/21 08:00	06/15/21 05:14	1
Copper	0.26		0.0014	0.00011	ug/m3 (Air)		06/14/21 08:00	06/15/21 05:14	1
Manganese	0.0030		0.00072	0.00010	ug/m3 (Air)		06/14/21 08:00	06/15/21 05:14	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	13		0.30	0.30	ug/m3			06/11/21 12:00	1

Client Sample ID: GILBANETSP051321-1214
Lab Sample ID: 320-74839-4
Date Collected: 06/09/21 07:00
Matrix: Air
Date Received: 06/11/21 09:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	16.2337		0.3158	0.3158	ug/m3 (Air)			06/11/21 12:00	1

Client Sample ID: GILBANEPM051321-1215
Lab Sample ID: 320-74839-5
Date Collected: 06/10/21 07:10
Matrix: Air
Date Received: 06/11/21 09:30
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00094		0.00069	0.00010	ug/m3 (Air)		06/14/21 08:00	06/15/21 05:18	1
Copper	0.0094		0.0014	0.00010	ug/m3 (Air)		06/14/21 08:00	06/15/21 05:18	1
Manganese	0.0020		0.00069	0.000096	ug/m3 (Air)		06/14/21 08:00	06/15/21 05:18	1

Client: Gilbane Federal
Job ID: 320-74839-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM051321-1215
Lab Sample ID: 320-74839-5
Date Collected: 06/10/21 07:10
Matrix: Air
Date Received: 06/11/21 09:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	7.2		0.29	0.29	ug/m3			06/11/21 12:00	1

Client Sample ID: GILBANETSP051321-1215
Lab Sample ID: 320-74839-6
Date Collected: 06/10/21 07:10
Matrix: Air
Date Received: 06/11/21 09:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	15.5003		0.2881	0.2881	ug/m3 (Air)			06/11/21 12:00	1

Client Sample ID: GILBANEPM051321-1216
Lab Sample ID: 320-74839-7
Date Collected: 06/10/21 06:58
Matrix: Air
Date Received: 06/11/21 09:30
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0019		0.00069	0.00010	ug/m3 (Air)		06/14/21 08:00	06/15/21 05:21	1
Copper	0.094		0.0014	0.00010	ug/m3 (Air)		06/14/21 08:00	06/15/21 05:21	1
Manganese	0.0068		0.00069	0.000097	ug/m3 (Air)		06/14/21 08:00	06/15/21 05:21	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	14		0.29	0.29	ug/m3			06/11/21 12:00	1

Client Sample ID: GILBANETSP051321-1216
Lab Sample ID: 320-74839-8
Date Collected: 06/10/21 06:58
Matrix: Air
Date Received: 06/11/21 09:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	19.6459		0.3032	0.3032	ug/m3 (Air)			06/11/21 12:00	1

QC Sample Results

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

Job ID: 320-74839-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-498132/1-B
Matrix: Air
Analysis Batch: 498588

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 498143

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:10	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:10	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		06/14/21 08:00	06/15/21 04:10	1

Lab Sample ID: LCS 320-498132/2-B
Matrix: Air
Analysis Batch: 498588

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 498143

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	0.237		ug/m3 (Air)		99	85 - 110
Manganese	0.240	0.233		ug/m3 (Air)		97	88 - 110

Lab Sample ID: LCSD 320-498132/3-B
Matrix: Air
Analysis Batch: 498588

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 498143

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	0.240	0.237		ug/m3 (Air)		99	86 - 111	0	15
Copper	0.240	0.233		ug/m3 (Air)		97	85 - 110	2	15
Manganese	0.240	0.231		ug/m3 (Air)		96	88 - 110	1	15

QC Association Summary

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

Job ID: 320-74839-1

Metals

Pre Prep Batch: 498132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-74839-1	GILBANEPM051321-1213	Total/NA	Air	Filter to Air	
320-74839-3	GILBANEPM051321-1214	Total/NA	Air	Filter to Air	
320-74839-5	GILBANEPM051321-1215	Total/NA	Air	Filter to Air	
320-74839-7	GILBANEPM051321-1216	Total/NA	Air	Filter to Air	
MB 320-498132/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-498132/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-498132/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 498143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-74839-1	GILBANEPM051321-1213	Total/NA	Air	3050B	498132
320-74839-3	GILBANEPM051321-1214	Total/NA	Air	3050B	498132
320-74839-5	GILBANEPM051321-1215	Total/NA	Air	3050B	498132
320-74839-7	GILBANEPM051321-1216	Total/NA	Air	3050B	498132
MB 320-498132/1-B	Method Blank	Total/NA	Air	3050B	498132
LCS 320-498132/2-B	Lab Control Sample	Total/NA	Air	3050B	498132
LCSD 320-498132/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	498132

Analysis Batch: 498588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-74839-1	GILBANEPM051321-1213	Total/NA	Air	6020	498143
320-74839-3	GILBANEPM051321-1214	Total/NA	Air	6020	498143
320-74839-5	GILBANEPM051321-1215	Total/NA	Air	6020	498143
320-74839-7	GILBANEPM051321-1216	Total/NA	Air	6020	498143
MB 320-498132/1-B	Method Blank	Total/NA	Air	6020	498143
LCS 320-498132/2-B	Lab Control Sample	Total/NA	Air	6020	498143
LCSD 320-498132/3-B	Lab Control Sample Dup	Total/NA	Air	6020	498143

General Chemistry

Pre Prep Batch: 498175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-74839-2	GILBANETSP051321-1213	Total/NA	Air	Filter to Air	
320-74839-4	GILBANETSP051321-1214	Total/NA	Air	Filter to Air	
320-74839-6	GILBANETSP051321-1215	Total/NA	Air	Filter to Air	
320-74839-8	GILBANETSP051321-1216	Total/NA	Air	Filter to Air	

Analysis Batch: 498210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-74839-1	GILBANEPM051321-1213	Total/NA	Air	PM10	
320-74839-3	GILBANEPM051321-1214	Total/NA	Air	PM10	
320-74839-5	GILBANEPM051321-1215	Total/NA	Air	PM10	
320-74839-7	GILBANEPM051321-1216	Total/NA	Air	PM10	

Analysis Batch: 498212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-74839-2	GILBANETSP051321-1213	Total/NA	Air	40CFR50 App B	498175
320-74839-4	GILBANETSP051321-1214	Total/NA	Air	40CFR50 App B	498175
320-74839-6	GILBANETSP051321-1215	Total/NA	Air	40CFR50 App B	498175
320-74839-8	GILBANETSP051321-1216	Total/NA	Air	40CFR50 App B	498175

Lab Chronicle

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

Job ID: 320-74839-1

Client Sample ID: GILBANEPM051321-1213
Lab Sample ID: 320-74839-1
Date Collected: 06/09/21 07:19
Matrix: Air
Date Received: 06/11/21 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					498132	06/14/21 07:21	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	498143	06/14/21 08:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			498588	06/15/21 05:11	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0145 g	498210	06/11/21 12:00	DPM	TAL SAC

Client Sample ID: GILBANETSP051321-1213
Lab Sample ID: 320-74839-2
Date Collected: 06/09/21 07:19
Matrix: Air
Date Received: 06/11/21 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			498212	06/11/21 12:00	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					498175	06/14/21 09:44	DPM	TAL SAC

Client Sample ID: GILBANEPM051321-1214
Lab Sample ID: 320-74839-3
Date Collected: 06/09/21 07:00
Matrix: Air
Date Received: 06/11/21 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					498132	06/14/21 07:21	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	498143	06/14/21 08:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			498588	06/15/21 05:14	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0224 g	498210	06/11/21 12:00	DPM	TAL SAC

Client Sample ID: GILBANETSP051321-1214
Lab Sample ID: 320-74839-4
Date Collected: 06/09/21 07:00
Matrix: Air
Date Received: 06/11/21 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			498212	06/11/21 12:00	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					498175	06/14/21 09:44	DPM	TAL SAC

Client Sample ID: GILBANEPM051321-1215
Lab Sample ID: 320-74839-5
Date Collected: 06/10/21 07:10
Matrix: Air
Date Received: 06/11/21 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					498132	06/14/21 07:21	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	498143	06/14/21 08:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			498588	06/15/21 05:18	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0126 g	498210	06/11/21 12:00	DPM	TAL SAC

Lab Chronicle

Client: Gilbane Federal
Job ID: 320-74839-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANETSP051321-1215
Lab Sample ID: 320-74839-6
Date Collected: 06/10/21 07:10
Matrix: Air
Date Received: 06/11/21 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			498212	06/11/21 12:00	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					498175	06/14/21 09:44	DPM	TAL SAC

Client Sample ID: GILBANEPM051321-1216
Lab Sample ID: 320-74839-7
Date Collected: 06/10/21 06:58
Matrix: Air
Date Received: 06/11/21 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					498132	06/14/21 07:21	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	498143	06/14/21 08:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			498588	06/15/21 05:21	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0249 g	498210	06/11/21 12:00	DPM	TAL SAC

Client Sample ID: GILBANETSP051321-1216
Lab Sample ID: 320-74839-8
Date Collected: 06/10/21 06:58
Matrix: Air
Date Received: 06/11/21 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			498212	06/11/21 12:00	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					498175	06/14/21 09:44	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: 320-74839-1
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: 320-74839-1

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: 320-74839-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-74839-1	GILBANEPM051321-1213	Air	06/09/21 07:19	06/11/21 09:30	
320-74839-2	GILBANETSP051321-1213	Air	06/09/21 07:19	06/11/21 09:30	
320-74839-3	GILBANEPM051321-1214	Air	06/09/21 07:00	06/11/21 09:30	
320-74839-4	GILBANETSP051321-1214	Air	06/09/21 07:00	06/11/21 09:30	
320-74839-5	GILBANEPM051321-1215	Air	06/10/21 07:10	06/11/21 09:30	
320-74839-6	GILBANETSP051321-1215	Air	06/10/21 07:10	06/11/21 09:30	
320-74839-7	GILBANEPM051321-1216	Air	06/10/21 06:58	06/11/21 09:30	
320-74839-8	GILBANETSP051321-1216	Air	06/10/21 06:58	06/11/21 09:30	

CHAIN-OF-CUSTODY RECORD

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

COC # KT061021AIR

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 [redacted] 95605	

Comments:

Equipment:

Code	Matrix
A	Air

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

320-74839 Chain of Custody

Analytical Test Method

Event: Parcel E Phase 2 Air Monitoring

#	Sample ID	Matrix	Date	Time	Samp Init.	CAAIR - Air PM10 (1)	N0500 - Air TSP (1)	SW6020 - Air Pb Mn Cu (1)	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
1	GILBANEPM051321-1213	A	06/09/2021	0719	KT	X		X	AMSE1	N1	0.00	0.00	1	VOLUME: 1668.48
2	GILBANETSP051321-1213	A	06/09/2021	0719	KT		X		AMSE1	N1	0.00	0.00	1	VOLUME: 1653.88
3	GILBANEPM051321-1214	A	06/09/2021	0700	KT	X		X	AMSE2	N1	0.00	0.00	1	VOLUME: 1660.13
4	GILBANETSP051321-1214	A	06/09/2021	0700	KT		X		AMSE2	N1	0.00	0.00	1	VOLUME: 1583.13
5	GILBANEPM051321-1215	A	06/10/2021	0710	KT	X		X	AMSE1	N1	0.00	0.00	1	VOLUME: 1743.64
6	GILBANETSP051321-1215	A	06/10/2021	0710	KT		X		AMSE1	N1	0.00	0.00	1	VOLUME: 1735.45
7	GILBANEPM051321-1216	A	06/10/2021	0658	KT	X		X	AMSE2	N1	0.00	0.00	1	VOLUME: 1733.84
8	GILBANETSP051321-1216	A	06/10/2021	0658	KT		X		AMSE2	N1	0.00	0.00	1	VOLUME: 1649.20
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: 6/10/2021 / FedEx 7739 6648 3099

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

19.5

Gilbane.Navy_COC_Field
June 10, 2021

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

Login Sample Receipt Checklist

Client: Gilbane Federal

Job Number: 320-74839-1

Login Number: 74839

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	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 320-75123-1
Client Project/Site: Hunters Point, Parcel E, Phase 2
Revision: 1

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

[redacted]

[redacted]

[redacted]

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

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

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

Table of Contents

Definitions/Glossary

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

Job ID: 320-75123-1

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: 320-75123-1

Job ID: 320-75123-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Revision
This report was revised July 8, 2021 to provide a correct sample receipt checklist. No data changed as a result of this revision.

Receipt
The samples were received on 6/18/2021 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 21.4º 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: 320-75123-1

Client Sample ID: GILBANEPM051921-1221 — Lab Sample ID: 320-75123-1

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	0.056		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0042		0.00069	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	21		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051921-1221 — Lab Sample ID: 320-75123-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	34.6100		0.2879	0.2879	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM051921-1222 — Lab Sample ID: 320-75123-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0017		0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.022		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0043		0.00069	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	22		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051921-1222 — Lab Sample ID: 320-75123-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	33.7339		0.3012	0.3012	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM051921-1223 — Lab Sample ID: 320-75123-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0047		0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.060		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.010		0.00069	0.000096	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	38		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051921-1223 — Lab Sample ID: 320-75123-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	62.7248		0.2823	0.2823	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM051921-1224 — Lab Sample ID: 320-75123-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0023		0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.086		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0062		0.00069	0.000096	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	32		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051921-1224 — Lab Sample ID: 320-75123-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	41.0026		0.3006	0.3006	ug/m3 (Air)	1		40CFR50 App B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

Job ID: 320-75123-1

Client Sample ID: GILBANEPM051921-1221
Lab Sample ID: 320-75123-1
Date Collected: 06/16/21 07:04
Matrix: Air
Date Received: 06/18/21 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)		06/23/21 12:06	06/23/21 19:39	1
Copper	0.056		0.0014	0.00010	ug/m3 (Air)		06/23/21 12:06	06/23/21 19:39	1
Manganese	0.0042		0.00069	0.000097	ug/m3 (Air)		06/23/21 12:06	06/23/21 19:39	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	21		0.29	0.29	ug/m3			06/21/21 10:40	1

Client Sample ID: GILBANETSP051921-1221
Lab Sample ID: 320-75123-2
Date Collected: 06/16/21 07:04
Matrix: Air
Date Received: 06/18/21 09:45
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	34.6100		0.2879	0.2879	ug/m3 (Air)			06/21/21 10:40	1

Client Sample ID: GILBANEPM051921-1222
Lab Sample ID: 320-75123-3
Date Collected: 06/16/21 06:45
Matrix: Air
Date Received: 06/18/21 09:45
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0017		0.00069	0.00010	ug/m3 (Air)		06/23/21 12:06	06/23/21 19:49	1
Copper	0.022		0.0014	0.00010	ug/m3 (Air)		06/23/21 12:06	06/23/21 19:49	1
Manganese	0.0043		0.00069	0.000097	ug/m3 (Air)		06/23/21 12:06	06/23/21 19:49	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			06/21/21 10:40	1

Client Sample ID: GILBANETSP051921-1222
Lab Sample ID: 320-75123-4
Date Collected: 06/16/21 06:45
Matrix: Air
Date Received: 06/18/21 09:45
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	33.7339		0.3012	0.3012	ug/m3 (Air)			06/21/21 10:40	1

Client Sample ID: GILBANEPM051921-1223
Lab Sample ID: 320-75123-5
Date Collected: 06/17/21 07:06
Matrix: Air
Date Received: 06/18/21 09:45
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0047		0.00069	0.00010	ug/m3 (Air)		06/23/21 12:06	06/23/21 19:52	1
Copper	0.060		0.0014	0.00010	ug/m3 (Air)		06/23/21 12:06	06/23/21 19:52	1
Manganese	0.010		0.00069	0.000096	ug/m3 (Air)		06/23/21 12:06	06/23/21 19:52	1

Client Sample Results

Client: Gilbane Federal
Job ID: 320-75123-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM051921-1223
Lab Sample ID: 320-75123-5
Date Collected: 06/17/21 07:06
Matrix: Air
Date Received: 06/18/21 09:45
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	38		0.29	0.29	ug/m3			06/21/21 10:40	1

Client Sample ID: GILBANETSP051921-1223
Lab Sample ID: 320-75123-6
Date Collected: 06/17/21 07:06
Matrix: Air
Date Received: 06/18/21 09:45
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	62.7248		0.2823	0.2823	ug/m3 (Air)			06/21/21 10:40	1

Client Sample ID: GILBANEPM051921-1224
Lab Sample ID: 320-75123-7
Date Collected: 06/17/21 06:50
Matrix: Air
Date Received: 06/18/21 09:45
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0023		0.00069	0.00010	ug/m3 (Air)		06/23/21 12:06	06/23/21 19:55	1
Copper	0.086		0.0014	0.00010	ug/m3 (Air)		06/23/21 12:06	06/23/21 19:55	1
Manganese	0.0062		0.00069	0.000096	ug/m3 (Air)		06/23/21 12:06	06/23/21 19:55	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	32		0.29	0.29	ug/m3			06/21/21 10:40	1

Client Sample ID: GILBANETSP051921-1224
Lab Sample ID: 320-75123-8
Date Collected: 06/17/21 06:50
Matrix: Air
Date Received: 06/18/21 09:45
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	41.0026		0.3006	0.3006	ug/m3 (Air)			06/21/21 10:40	1

QC Sample Results

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

Job ID: 320-75123-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-500791/1-B
Matrix: Air
Analysis Batch: 501180

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 500863

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		06/23/21 12:06	06/23/21 19:17	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		06/23/21 12:06	06/23/21 19:17	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		06/23/21 12:06	06/23/21 19:17	1

Lab Sample ID: LCS 320-500791/2-B
Matrix: Air
Analysis Batch: 501180

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 500863

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.240	0.231		ug/m3 (Air)		96	86 - 111
Copper	0.240	0.253		ug/m3 (Air)		105	85 - 110
Manganese	0.240	0.244		ug/m3 (Air)		102	88 - 110

Lab Sample ID: LCSD 320-500791/3-B
Matrix: Air
Analysis Batch: 501180

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 500863

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	0.240	0.234		ug/m3 (Air)		97	86 - 111	1	15
Copper	0.240	0.254		ug/m3 (Air)		106	85 - 110	0	15
Manganese	0.240	0.246		ug/m3 (Air)		102	88 - 110	0	15

QC Association Summary

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

Job ID: 320-75123-1

Metals

Pre Prep Batch: 500791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75123-1	GILBANEPM051921-1221	Total/NA	Air	Filter to Air	
320-75123-3	GILBANEPM051921-1222	Total/NA	Air	Filter to Air	
320-75123-5	GILBANEPM051921-1223	Total/NA	Air	Filter to Air	
320-75123-7	GILBANEPM051921-1224	Total/NA	Air	Filter to Air	
MB 320-500791/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-500791/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-500791/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 500863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75123-1	GILBANEPM051921-1221	Total/NA	Air	3050B	500791
320-75123-3	GILBANEPM051921-1222	Total/NA	Air	3050B	500791
320-75123-5	GILBANEPM051921-1223	Total/NA	Air	3050B	500791
320-75123-7	GILBANEPM051921-1224	Total/NA	Air	3050B	500791
MB 320-500791/1-B	Method Blank	Total/NA	Air	3050B	500791
LCS 320-500791/2-B	Lab Control Sample	Total/NA	Air	3050B	500791
LCSD 320-500791/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	500791

Analysis Batch: 501180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75123-1	GILBANEPM051921-1221	Total/NA	Air	6020	500863
320-75123-3	GILBANEPM051921-1222	Total/NA	Air	6020	500863
320-75123-5	GILBANEPM051921-1223	Total/NA	Air	6020	500863
320-75123-7	GILBANEPM051921-1224	Total/NA	Air	6020	500863
MB 320-500791/1-B	Method Blank	Total/NA	Air	6020	500863
LCS 320-500791/2-B	Lab Control Sample	Total/NA	Air	6020	500863
LCSD 320-500791/3-B	Lab Control Sample Dup	Total/NA	Air	6020	500863

General Chemistry

Pre Prep Batch: 500231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75123-2	GILBANETSP051921-1221	Total/NA	Air	Filter to Air	
320-75123-4	GILBANETSP051921-1222	Total/NA	Air	Filter to Air	
320-75123-6	GILBANETSP051921-1223	Total/NA	Air	Filter to Air	
320-75123-8	GILBANETSP051921-1224	Total/NA	Air	Filter to Air	

Analysis Batch: 501109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75123-1	GILBANEPM051921-1221	Total/NA	Air	PM10	
320-75123-3	GILBANEPM051921-1222	Total/NA	Air	PM10	
320-75123-5	GILBANEPM051921-1223	Total/NA	Air	PM10	
320-75123-7	GILBANEPM051921-1224	Total/NA	Air	PM10	

Analysis Batch: 501110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75123-2	GILBANETSP051921-1221	Total/NA	Air	40CFR50 App B	500231
320-75123-4	GILBANETSP051921-1222	Total/NA	Air	40CFR50 App B	500231
320-75123-6	GILBANETSP051921-1223	Total/NA	Air	40CFR50 App B	500231
320-75123-8	GILBANETSP051921-1224	Total/NA	Air	40CFR50 App B	500231

Lab Chronicle

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

Job ID: 320-75123-1

Client Sample ID: GILBANEPM051921-1221
Lab Sample ID: 320-75123-1
Date Collected: 06/16/21 07:04
Matrix: Air
Date Received: 06/18/21 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					500791	06/23/21 10:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	500863	06/23/21 12:06	NIM	TAL SAC
Total/NA	Analysis	6020		1			501180	06/23/21 19:39	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0361 g	501109	06/21/21 10:40	DPM	TAL SAC

Client Sample ID: GILBANETSP051921-1221
Lab Sample ID: 320-75123-2
Date Collected: 06/16/21 07:04
Matrix: Air
Date Received: 06/18/21 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			501110	06/21/21 10:40	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					500231	06/21/21 13:45	DPM	TAL SAC

Client Sample ID: GILBANEPM051921-1222
Lab Sample ID: 320-75123-3
Date Collected: 06/16/21 06:45
Matrix: Air
Date Received: 06/18/21 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					500791	06/23/21 10:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	500863	06/23/21 12:06	NIM	TAL SAC
Total/NA	Analysis	6020		1			501180	06/23/21 19:49	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0375 g	501109	06/21/21 10:40	DPM	TAL SAC

Client Sample ID: GILBANETSP051921-1222
Lab Sample ID: 320-75123-4
Date Collected: 06/16/21 06:45
Matrix: Air
Date Received: 06/18/21 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			501110	06/21/21 10:40	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					500231	06/21/21 13:45	DPM	TAL SAC

Client Sample ID: GILBANEPM051921-1223
Lab Sample ID: 320-75123-5
Date Collected: 06/17/21 07:06
Matrix: Air
Date Received: 06/18/21 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					500791	06/23/21 10:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	500863	06/23/21 12:06	NIM	TAL SAC
Total/NA	Analysis	6020		1			501180	06/23/21 19:52	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0662 g	501109	06/21/21 10:40	DPM	TAL SAC

Lab Chronicle

Client: Gilbane Federal
Job ID: 320-75123-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANETSP051921-1223
Lab Sample ID: 320-75123-6
Date Collected: 06/17/21 07:06
Matrix: Air
Date Received: 06/18/21 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			501110	06/21/21 10:40	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					500231	06/21/21 13:45	DPM	TAL SAC

Client Sample ID: GILBANEPM051921-1224
Lab Sample ID: 320-75123-7
Date Collected: 06/17/21 06:50
Matrix: Air
Date Received: 06/18/21 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					500791	06/23/21 10:00	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	500863	06/23/21 12:06	NIM	TAL SAC
Total/NA	Analysis	6020		1			501180	06/23/21 19:55	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0552 g	501109	06/21/21 10:40	DPM	TAL SAC

Client Sample ID: GILBANETSP051921-1224
Lab Sample ID: 320-75123-8
Date Collected: 06/17/21 06:50
Matrix: Air
Date Received: 06/18/21 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			501110	06/21/21 10:40	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					500231	06/21/21 13:45	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: 320-75123-1
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: 320-75123-1

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: 320-75123-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-75123-1	GILBANEPM051921-1221	Air	06/16/21 07:04	06/18/21 09:45	
320-75123-2	GILBANETSP051921-1221	Air	06/16/21 07:04	06/18/21 09:45	
320-75123-3	GILBANEPM051921-1222	Air	06/16/21 06:45	06/18/21 09:45	
320-75123-4	GILBANETSP051921-1222	Air	06/16/21 06:45	06/18/21 09:45	
320-75123-5	GILBANEPM051921-1223	Air	06/17/21 07:06	06/18/21 09:45	
320-75123-6	GILBANETSP051921-1223	Air	06/17/21 07:06	06/18/21 09:45	
320-75123-7	GILBANEPM051921-1224	Air	06/17/21 06:50	06/18/21 09:45	
320-75123-8	GILBANETSP051921-1224	Air	06/17/21 06:50	06/18/21 09:45	

CHAIN-OF-CUSTODY RECORD

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

COC # KT061721AIR

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

320-75123 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.																				
1	GILBANEPM051921-1221	A	06/16/2021	0704	KT	X		X																	
2	GILBANETSP051921-1221	A	06/16/2021	0704	KT		X																		
3	GILBANEPM051921-1222	A	06/16/2021	0645	KT	X		X																	
4	GILBANETSP051921-1222	A	06/16/2021	0645	KT		X																		
5	GILBANEPM051921-1223	A	06/17/2021	0706	KT	X		X																	
6	GILBANETSP051921-1223	A	06/17/2021	0706	KT		X																		
7	GILBANEPM051921-1224	A	06/17/2021	0650	KT	X		X																	
8	GILBANETSP051921-1224	A	06/17/2021	0650	KT		X																		
9	[redacted]																								
10																									

Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
AMSE1	N1	0.00	0.00	1	VOLUME: 1729.39
AMSE1	N1	0.00	0.00	1	VOLUME: 1736.49
AMSE2	N1	0.00	0.00	1	VOLUME: 1730.52
AMSE2	N1	0.00	0.00	1	VOLUME: 1660.05
AMSE1	N1	0.00	0.00	1	VOLUME: 1742.72
AMSE1	N1	0.00	0.00	1	VOLUME: 1771.23
AMSE2	N1	0.00	0.00	1	VOLUME: 1742.72
AMSE2	N1	0.00	0.00	1	VOLUME: 1663.31

Turnaround Time: 5 days

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

Shipping Date / Carrier / Airbill Number

Shipping Date: 6/17/2021 / 7740 2848 7809

21.4°c

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

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021 (Rev 1)

Gilbane.Navy_COC_Field
June 17, 2021

Login Sample Receipt Checklist

Client: Gilbane Federal

Job Number: 320-75123-1

Login Number: 75123

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	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 320-75313-1
Client Project/Site: Hunters Point, Parcel E, Phase 2
Revision: 1

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

[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.

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

Table of Contents

Definitions/Glossary

Client: Gilbane Federal
Job ID: 320-75313-1
Project/Site: Hunters Point, Parcel E, Phase 2

Glossary

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

Case Narrative

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

Job ID: 320-75313-1

Job ID: 320-75313-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-75313-1

Revision
This report was revised July 8, 2021 to provide a correct sample receipt checklist. No data changed as a result of this revision.

Receipt
The samples were received on 6/23/2021 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 16.9º 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: 320-75313-1

Client Sample ID: GILBANEPM051921-1225 — Lab Sample ID: 320-75313-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0070		0.0021	0.00032	ug/m3 (Air)	1		6020	Total/NA
Copper	0.095		0.0043	0.00032	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.022		0.0021	0.00030	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	55		0.89	0.89	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051921-1225 — Lab Sample ID: 320-75313-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	95.7600		0.9225	0.9225	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM051921-1226 — Lab Sample ID: 320-75313-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0058		0.0021	0.00031	ug/m3 (Air)	1		6020	Total/NA
Copper	0.13		0.0042	0.00031	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.013		0.0021	0.00029	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	43		0.87	0.87	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051921-1226 — Lab Sample ID: 320-75313-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	56.5283		0.9177	0.9177	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM051921-1227 — Lab Sample ID: 320-75313-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0012		0.00068	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.030		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0029		0.00068	0.000096	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	6.6		0.28	0.28	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051921-1227 — Lab Sample ID: 320-75313-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	12.1583		0.2789	0.2789	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM051921-1228 — Lab Sample ID: 320-75313-7

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	0.095		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0025		0.00070	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	7.9		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP051921-1228 — Lab Sample ID: 320-75313-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	10.5388		0.2994	0.2994	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: 320-75313-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM051921-1225
Lab Sample ID: 320-75313-1
Date Collected: 06/17/21 14:53
Matrix: Air
Date Received: 06/23/21 10:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0070		0.0021	0.00032	ug/m3 (Air)		06/29/21 06:10	06/29/21 19:02	1
Copper	0.095		0.0043	0.00032	ug/m3 (Air)		06/29/21 06:10	06/29/21 19:02	1
Manganese	0.022		0.0021	0.00030	ug/m3 (Air)		06/29/21 06:10	06/29/21 19:02	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	55		0.89	0.89	ug/m3			06/25/21 09:15	1

Client Sample ID: GILBANETSP051921-1225
Lab Sample ID: 320-75313-2
Date Collected: 06/17/21 14:53
Matrix: Air
Date Received: 06/23/21 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	95.7600		0.9225	0.9225	ug/m3 (Air)			06/25/21 09:15	1

Client Sample ID: GILBANEPM051921-1226
Lab Sample ID: 320-75313-3
Date Collected: 06/17/21 14:44
Matrix: Air
Date Received: 06/23/21 10:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0058		0.0021	0.00031	ug/m3 (Air)		06/29/21 06:10	06/29/21 19:11	1
Copper	0.13		0.0042	0.00031	ug/m3 (Air)		06/29/21 06:10	06/29/21 19:11	1
Manganese	0.013		0.0021	0.00029	ug/m3 (Air)		06/29/21 06:10	06/29/21 19:11	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	43		0.87	0.87	ug/m3			06/25/21 09:15	1

Client Sample ID: GILBANETSP051921-1226
Lab Sample ID: 320-75313-4
Date Collected: 06/17/21 14:44
Matrix: Air
Date Received: 06/23/21 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	56.5283		0.9177	0.9177	ug/m3 (Air)			06/25/21 09:15	1

Client Sample ID: GILBANEPM051921-1227
Lab Sample ID: 320-75313-5
Date Collected: 06/22/21 07:28
Matrix: Air
Date Received: 06/23/21 10:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0012		0.00068	0.00010	ug/m3 (Air)		06/29/21 06:10	06/29/21 19:14	1
Copper	0.030		0.0014	0.00010	ug/m3 (Air)		06/29/21 06:10	06/29/21 19:14	1
Manganese	0.0029		0.00068	0.000096	ug/m3 (Air)		06/29/21 06:10	06/29/21 19:14	1

Client: Gilbane Federal
Job ID: 320-75313-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM051921-1227
Lab Sample ID: 320-75313-5
Date Collected: 06/22/21 07:28
Matrix: Air
Date Received: 06/23/21 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	6.6		0.28	0.28	ug/m3			06/25/21 09:15	1

Client Sample ID: GILBANETSP051921-1227
Lab Sample ID: 320-75313-6
Date Collected: 06/22/21 07:28
Matrix: Air
Date Received: 06/23/21 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	12.1583		0.2789	0.2789	ug/m3 (Air)			06/25/21 09:15	1

Client Sample ID: GILBANEPM051921-1228
Lab Sample ID: 320-75313-7
Date Collected: 06/22/21 07:14
Matrix: Air
Date Received: 06/23/21 10:00
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)		06/29/21 06:10	06/29/21 19:18	1
Copper	0.095		0.0014	0.00010	ug/m3 (Air)		06/29/21 06:10	06/29/21 19:18	1
Manganese	0.0025		0.00070	0.000097	ug/m3 (Air)		06/29/21 06:10	06/29/21 19:18	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	7.9		0.29	0.29	ug/m3			06/25/21 09:15	1

Client Sample ID: GILBANETSP051921-1228
Lab Sample ID: 320-75313-8
Date Collected: 06/22/21 07:14
Matrix: Air
Date Received: 06/23/21 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	10.5388		0.2994	0.2994	ug/m3 (Air)			06/25/21 09:15	1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-502738/1-B
Matrix: Air
Analysis Batch: 502990

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 502748

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		06/29/21 06:10	06/29/21 18:39	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		06/29/21 06:10	06/29/21 18:39	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		06/29/21 06:10	06/29/21 18:39	1

Lab Sample ID: LCS 320-502738/2-B
Matrix: Air
Analysis Batch: 502990

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 502748

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.240	0.241		ug/m3 (Air)		100	86 - 111
Copper	0.240	0.252		ug/m3 (Air)		105	85 - 110
Manganese	0.240	0.245		ug/m3 (Air)		102	88 - 110

Lab Sample ID: LCSD 320-502738/3-B
Matrix: Air
Analysis Batch: 502990

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 502748

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	0.240	0.242		ug/m3 (Air)		101	86 - 111	1	15
Copper	0.240	0.261		ug/m3 (Air)		109	85 - 110	4	15
Manganese	0.240	0.251		ug/m3 (Air)		105	88 - 110	2	15

QC Association Summary

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

Job ID: 320-75313-1

Metals

Pre Prep Batch: 502738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75313-1	GILBANEPM051921-1225	Total/NA	Air	Filter to Air	
320-75313-3	GILBANEPM051921-1226	Total/NA	Air	Filter to Air	
320-75313-5	GILBANEPM051921-1227	Total/NA	Air	Filter to Air	
320-75313-7	GILBANEPM051921-1228	Total/NA	Air	Filter to Air	
MB 320-502738/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-502738/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-502738/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 502748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75313-1	GILBANEPM051921-1225	Total/NA	Air	3050B	502738
320-75313-3	GILBANEPM051921-1226	Total/NA	Air	3050B	502738
320-75313-5	GILBANEPM051921-1227	Total/NA	Air	3050B	502738
320-75313-7	GILBANEPM051921-1228	Total/NA	Air	3050B	502738
MB 320-502738/1-B	Method Blank	Total/NA	Air	3050B	502738
LCS 320-502738/2-B	Lab Control Sample	Total/NA	Air	3050B	502738
LCSD 320-502738/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	502738

Analysis Batch: 502990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75313-1	GILBANEPM051921-1225	Total/NA	Air	6020	502748
320-75313-3	GILBANEPM051921-1226	Total/NA	Air	6020	502748
320-75313-5	GILBANEPM051921-1227	Total/NA	Air	6020	502748
320-75313-7	GILBANEPM051921-1228	Total/NA	Air	6020	502748
MB 320-502738/1-B	Method Blank	Total/NA	Air	6020	502748
LCS 320-502738/2-B	Lab Control Sample	Total/NA	Air	6020	502748
LCSD 320-502738/3-B	Lab Control Sample Dup	Total/NA	Air	6020	502748

General Chemistry

Pre Prep Batch: 502939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75313-2	GILBANETSP051921-1225	Total/NA	Air	Filter to Air	
320-75313-4	GILBANETSP051921-1226	Total/NA	Air	Filter to Air	
320-75313-6	GILBANETSP051921-1227	Total/NA	Air	Filter to Air	
320-75313-8	GILBANETSP051921-1228	Total/NA	Air	Filter to Air	

Analysis Batch: 503010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75313-2	GILBANETSP051921-1225	Total/NA	Air	40CFR50 App B	502939
320-75313-4	GILBANETSP051921-1226	Total/NA	Air	40CFR50 App B	502939
320-75313-6	GILBANETSP051921-1227	Total/NA	Air	40CFR50 App B	502939
320-75313-8	GILBANETSP051921-1228	Total/NA	Air	40CFR50 App B	502939

Analysis Batch: 503012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75313-1	GILBANEPM051921-1225	Total/NA	Air	PM10	
320-75313-3	GILBANEPM051921-1226	Total/NA	Air	PM10	
320-75313-5	GILBANEPM051921-1227	Total/NA	Air	PM10	
320-75313-7	GILBANEPM051921-1228	Total/NA	Air	PM10	

Lab Chronicle

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

Job ID: 320-75313-1

Client Sample ID: GILBANEPM051921-1225
Lab Sample ID: 320-75313-1
Date Collected: 06/17/21 14:53
Matrix: Air
Date Received: 06/23/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					502738	06/29/21 05:50	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	502748	06/29/21 06:10	NIM	TAL SAC
Total/NA	Analysis	6020		1			502990	06/29/21 19:02	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0306 g	503012	06/25/21 09:15	DPM	TAL SAC

Client Sample ID: GILBANETSP051921-1225
Lab Sample ID: 320-75313-2
Date Collected: 06/17/21 14:53
Matrix: Air
Date Received: 06/23/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			503010	06/25/21 09:15	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					502939	06/29/21 17:46	DPM	TAL SAC

Client Sample ID: GILBANEPM051921-1226
Lab Sample ID: 320-75313-3
Date Collected: 06/17/21 14:44
Matrix: Air
Date Received: 06/23/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					502738	06/29/21 05:50	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	502748	06/29/21 06:10	NIM	TAL SAC
Total/NA	Analysis	6020		1			502990	06/29/21 19:11	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0245 g	503012	06/25/21 09:15	DPM	TAL SAC

Client Sample ID: GILBANETSP051921-1226
Lab Sample ID: 320-75313-4
Date Collected: 06/17/21 14:44
Matrix: Air
Date Received: 06/23/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			503010	06/25/21 09:15	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					502939	06/29/21 17:46	DPM	TAL SAC

Client Sample ID: GILBANEPM051921-1227
Lab Sample ID: 320-75313-5
Date Collected: 06/22/21 07:28
Matrix: Air
Date Received: 06/23/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					502738	06/29/21 05:50	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	502748	06/29/21 06:10	NIM	TAL SAC
Total/NA	Analysis	6020		1			502990	06/29/21 19:14	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0116 g	503012	06/25/21 09:15	DPM	TAL SAC

Lab Chronicle

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

Job ID: 320-75313-1

Client Sample ID: GILBANETSP051921-1227

Lab Sample ID: 320-75313-6
Date Collected: 06/22/21 07:28
Matrix: Air
Date Received: 06/23/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			503010	06/25/21 09:15	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					502939	06/29/21 17:46	DPM	TAL SAC

Client Sample ID: GILBANEPM051921-1228

Lab Sample ID: 320-75313-7
Date Collected: 06/22/21 07:14
Matrix: Air
Date Received: 06/23/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					502738	06/29/21 05:50	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	502748	06/29/21 06:10	NIM	TAL SAC
Total/NA	Analysis	6020		1			502990	06/29/21 19:18	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0136 g	503012	06/25/21 09:15	DPM	TAL SAC

Client Sample ID: GILBANETSP051921-1228

Lab Sample ID: 320-75313-8
Date Collected: 06/22/21 07:14
Matrix: Air
Date Received: 06/23/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			503010	06/25/21 09:15	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					502939	06/29/21 17:46	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: 320-75313-1
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: 320-75313-1

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: 320-75313-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-75313-1	GILBANEPM051921-1225	Air	06/17/21 14:53	06/23/21 10:00	
320-75313-2	GILBANETSP051921-1225	Air	06/17/21 14:53	06/23/21 10:00	
320-75313-3	GILBANEPM051921-1226	Air	06/17/21 14:44	06/23/21 10:00	
320-75313-4	GILBANETSP051921-1226	Air	06/17/21 14:44	06/23/21 10:00	
320-75313-5	GILBANEPM051921-1227	Air	06/22/21 07:28	06/23/21 10:00	
320-75313-6	GILBANETSP051921-1227	Air	06/22/21 07:28	06/23/21 10:00	
320-75313-7	GILBANEPM051921-1228	Air	06/22/21 07:14	06/23/21 10:00	
320-75313-8	GILBANETSP051921-1228	Air	06/22/21 07:14	06/23/21 10:00	

CHAIN-OF-CUSTODY RECORD

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

COC # KT062221AIR

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:

320-75313 Chain of Custody

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						
1	GILBANEPM051921-1225	A	06/17/2021	1453	KT	X		X	AMSE1	N2	0.00	0.00	1	VOLUME: 559.15
2	GILBANETSP051921-1225	A	06/17/2021	1453	KT		X		AMSE1	N2	0.00	0.00	1	VOLUME: 541.98
3	GILBANEPM051921-1226	A	06/17/2021	1444	KT	X		X	AMSE2	N2	0.00	0.00	1	VOLUME: 573.10
4	GILBANETSP051921-1226	A	06/17/2021	1444	KT		X		AMSE2	N2	0.00	0.00	1	VOLUME: 544.86
5	GILBANEPM051921-1227	A	06/22/2021	0728	KT	X		X	AMSE1	N1	0.00	0.00	1	VOLUME: 1754.56
6	GILBANETSP051921-1227	A	06/22/2021	0728	KT		X		AMSE1	N1	0.00	0.00	1	VOLUME: 1793.02
7	GILBANEPM051921-1228	A	06/22/2021	0714	KT	X		X	AMSE2	N1	0.00	0.00	1	VOLUME: 1726.14
8	GILBANETSP051921-1228	A	06/22/2021	0714	KT		X		AMSE2	N1	0.00	0.00	1	VOLUME: 1670.02
9														
10														

Turnaround Time: NA

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

Shipping Date / Carrier / Airbill Number

Shipping Date: 6/22/2021/FedEx 774067211975

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

16.9°C

Login Sample Receipt Checklist

Client: Gilbane Federal

Job Number: 320-75313-1

Login Number: 75313

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	

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 320-75415-1
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: 320-75415-1
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: 320-75415-1

Job ID: 320-75415-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-75415-1

Comments
No additional comments.

Receipt
The samples were received on 6/25/2021 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 17.4º 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: 320-75415-1

Client Sample ID: GILBANEPM061721-1272 — Lab Sample ID: 320-75415-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0032		0.00070	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.026		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0036		0.00070	0.000098	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	6.8		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP061721-1272 — Lab Sample ID: 320-75415-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	18.8778		0.2895	0.2895	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM061721-1273 — Lab Sample ID: 320-75415-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.00061	J	0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.081		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	6.1		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP061721-1273 — Lab Sample ID: 320-75415-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	10.5204		0.3023	0.3023	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM061721-1274 — Lab Sample ID: 320-75415-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0011		0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.022		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	5.0		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP061721-1274 — Lab Sample ID: 320-75415-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	13.2643		0.2909	0.2909	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM061721-1275 — Lab Sample ID: 320-75415-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.00079		0.00069	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.047		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0031		0.00069	0.000097	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	6.8		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP061721-1275 — Lab Sample ID: 320-75415-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	8.5471		0.3031	0.3031	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: 320-75415-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM061721-1272
Lab Sample ID: 320-75415-1
Date Collected: 06/23/21 07:19
Matrix: Air
Date Received: 06/25/21 09:30
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0032		0.00070	0.00010	ug/m3 (Air)		07/01/21 10:00	07/01/21 16:46	1
Copper	0.026		0.0014	0.00010	ug/m3 (Air)		07/01/21 10:00	07/01/21 16:46	1
Manganese	0.0036		0.00070	0.000098	ug/m3 (Air)		07/01/21 10:00	07/01/21 16:46	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	6.8		0.29	0.29	ug/m3			06/28/21 11:00	1

Client Sample ID: GILBANETSP061721-1272
Lab Sample ID: 320-75415-2
Date Collected: 06/23/21 07:19
Matrix: Air
Date Received: 06/25/21 09:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	18.8778		0.2895	0.2895	ug/m3 (Air)			06/28/21 11:00	1

Client Sample ID: GILBANEPM061721-1273
Lab Sample ID: 320-75415-3
Date Collected: 06/23/21 07:07
Matrix: Air
Date Received: 06/25/21 09:30
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00061	J	0.00069	0.00010	ug/m3 (Air)		07/01/21 10:00	07/01/21 16:56	1
Copper	0.081		0.0014	0.00010	ug/m3 (Air)		07/01/21 10:00	07/01/21 16:56	1
Manganese	0.0021		0.00069	0.000097	ug/m3 (Air)		07/01/21 10:00	07/01/21 16:56	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	6.1		0.29	0.29	ug/m3			06/28/21 11:00	1

Client Sample ID: GILBANETSP061721-1273
Lab Sample ID: 320-75415-4
Date Collected: 06/23/21 07:07
Matrix: Air
Date Received: 06/25/21 09:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	10.5204		0.3023	0.3023	ug/m3 (Air)			06/28/21 11:00	1

Client Sample ID: GILBANEPM061721-1274
Lab Sample ID: 320-75415-5
Date Collected: 06/24/21 07:10
Matrix: Air
Date Received: 06/25/21 09:30
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0011		0.00069	0.00010	ug/m3 (Air)		07/01/21 10:00	07/01/21 16:59	1
Copper	0.022		0.0014	0.00010	ug/m3 (Air)		07/01/21 10:00	07/01/21 16:59	1
Manganese	0.0025		0.00069	0.000097	ug/m3 (Air)		07/01/21 10:00	07/01/21 16:59	1

Client Sample Results

Client: Gilbane Federal
Job ID: 320-75415-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM061721-1274
Lab Sample ID: 320-75415-5
Date Collected: 06/24/21 07:10
Matrix: Air
Date Received: 06/25/21 09:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	5.0		0.29	0.29	ug/m3			06/28/21 11:00	1

Client Sample ID: GILBANETSP061721-1274
Lab Sample ID: 320-75415-6
Date Collected: 06/24/21 07:10
Matrix: Air
Date Received: 06/25/21 09:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	13.2643		0.2909	0.2909	ug/m3 (Air)			06/28/21 11:00	1

Client Sample ID: GILBANEPM061721-1275
Lab Sample ID: 320-75415-7
Date Collected: 06/24/21 06:58
Matrix: Air
Date Received: 06/25/21 09:30
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00079		0.00069	0.00010	ug/m3 (Air)		07/01/21 10:00	07/01/21 17:02	1
Copper	0.047		0.0014	0.00010	ug/m3 (Air)		07/01/21 10:00	07/01/21 17:02	1
Manganese	0.0031		0.00069	0.000097	ug/m3 (Air)		07/01/21 10:00	07/01/21 17:02	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	6.8		0.29	0.29	ug/m3			06/28/21 11:00	1

Client Sample ID: GILBANETSP061721-1275
Lab Sample ID: 320-75415-8
Date Collected: 06/24/21 06:58
Matrix: Air
Date Received: 06/25/21 09:30
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	8.5471		0.3031	0.3031	ug/m3 (Air)			06/28/21 11:00	1

QC Sample Results

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

Job ID: 320-75415-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-503429/1-B
Matrix: Air
Analysis Batch: 503778

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 503438

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		07/01/21 10:00	07/01/21 16:24	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		07/01/21 10:00	07/01/21 16:24	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		07/01/21 10:00	07/01/21 16:24	1

Lab Sample ID: LCS 320-503429/2-B
Matrix: Air
Analysis Batch: 503778

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 503438

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.240	0.235		ug/m3 (Air)		98	86 - 111
Copper	0.240	0.257		ug/m3 (Air)		107	85 - 110
Manganese	0.240	0.249		ug/m3 (Air)		104	88 - 110

Lab Sample ID: LCSD 320-503429/3-B
Matrix: Air
Analysis Batch: 503778

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 503438

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	0.240	0.237		ug/m3 (Air)		99	86 - 111	1	15
Copper	0.240	0.255		ug/m3 (Air)		106	85 - 110	1	15
Manganese	0.240	0.251		ug/m3 (Air)		104	88 - 110	0	15

Metals

Pre Prep Batch: 503429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75415-1	GILBANEPM061721-1272	Total/NA	Air	Filter to Air	
320-75415-3	GILBANEPM061721-1273	Total/NA	Air	Filter to Air	
320-75415-5	GILBANEPM061721-1274	Total/NA	Air	Filter to Air	
320-75415-7	GILBANEPM061721-1275	Total/NA	Air	Filter to Air	
MB 320-503429/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-503429/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-503429/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 503438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75415-1	GILBANEPM061721-1272	Total/NA	Air	3050B	503429
320-75415-3	GILBANEPM061721-1273	Total/NA	Air	3050B	503429
320-75415-5	GILBANEPM061721-1274	Total/NA	Air	3050B	503429
320-75415-7	GILBANEPM061721-1275	Total/NA	Air	3050B	503429
MB 320-503429/1-B	Method Blank	Total/NA	Air	3050B	503429
LCS 320-503429/2-B	Lab Control Sample	Total/NA	Air	3050B	503429
LCSD 320-503429/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	503429

Analysis Batch: 503778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75415-1	GILBANEPM061721-1272	Total/NA	Air	6020	503438
320-75415-3	GILBANEPM061721-1273	Total/NA	Air	6020	503438
320-75415-5	GILBANEPM061721-1274	Total/NA	Air	6020	503438
320-75415-7	GILBANEPM061721-1275	Total/NA	Air	6020	503438
MB 320-503429/1-B	Method Blank	Total/NA	Air	6020	503438
LCS 320-503429/2-B	Lab Control Sample	Total/NA	Air	6020	503438
LCSD 320-503429/3-B	Lab Control Sample Dup	Total/NA	Air	6020	503438

General Chemistry

Pre Prep Batch: 502939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75415-2	GILBANETSP061721-1272	Total/NA	Air	Filter to Air	
320-75415-4	GILBANETSP061721-1273	Total/NA	Air	Filter to Air	
320-75415-6	GILBANETSP061721-1274	Total/NA	Air	Filter to Air	
320-75415-8	GILBANETSP061721-1275	Total/NA	Air	Filter to Air	

Analysis Batch: 503838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75415-1	GILBANEPM061721-1272	Total/NA	Air	PM10	
320-75415-3	GILBANEPM061721-1273	Total/NA	Air	PM10	
320-75415-5	GILBANEPM061721-1274	Total/NA	Air	PM10	
320-75415-7	GILBANEPM061721-1275	Total/NA	Air	PM10	

Analysis Batch: 503839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75415-2	GILBANETSP061721-1272	Total/NA	Air	40CFR50 App B	502939
320-75415-4	GILBANETSP061721-1273	Total/NA	Air	40CFR50 App B	502939
320-75415-6	GILBANETSP061721-1274	Total/NA	Air	40CFR50 App B	502939
320-75415-8	GILBANETSP061721-1275	Total/NA	Air	40CFR50 App B	502939

Lab Chronicle

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

Job ID: 320-75415-1

Client Sample ID: GILBANEPM061721-1272
Lab Sample ID: 320-75415-1
Date Collected: 06/23/21 07:19
Matrix: Air
Date Received: 06/25/21 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					503429	07/01/21 09:48	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	503438	07/01/21 10:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			503778	07/01/21 16:46	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0117 g	503838	06/28/21 11:00	DPM	TAL SAC

Client Sample ID: GILBANETSP061721-1272
Lab Sample ID: 320-75415-2
Date Collected: 06/23/21 07:19
Matrix: Air
Date Received: 06/25/21 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			503839	06/28/21 11:00	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					502939	06/29/21 17:46	DPM	TAL SAC

Client Sample ID: GILBANEPM061721-1273
Lab Sample ID: 320-75415-3
Date Collected: 06/23/21 07:07
Matrix: Air
Date Received: 06/25/21 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					503429	07/01/21 09:48	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	503438	07/01/21 10:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			503778	07/01/21 16:56	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0106 g	503838	06/28/21 11:00	DPM	TAL SAC

Client Sample ID: GILBANETSP061721-1273
Lab Sample ID: 320-75415-4
Date Collected: 06/23/21 07:07
Matrix: Air
Date Received: 06/25/21 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			503839	06/28/21 11:00	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					502939	06/29/21 17:46	DPM	TAL SAC

Client Sample ID: GILBANEPM061721-1274
Lab Sample ID: 320-75415-5
Date Collected: 06/24/21 07:10
Matrix: Air
Date Received: 06/25/21 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					503429	07/01/21 09:48	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	503438	07/01/21 10:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			503778	07/01/21 16:59	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0087 g	503838	06/28/21 11:00	DPM	TAL SAC

Lab Chronicle

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

Job ID: 320-75415-1

Client Sample ID: GILBANETSP061721-1274

Lab Sample ID: 320-75415-6

Date Collected: 06/24/21 07:10

Matrix: Air

Date Received: 06/25/21 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			503839	06/28/21 11:00	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					502939	06/29/21 17:46	DPM	TAL SAC

Client Sample ID: GILBANEPM061721-1275

Lab Sample ID: 320-75415-7

Date Collected: 06/24/21 06:58

Matrix: Air

Date Received: 06/25/21 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					503429	07/01/21 09:48	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	503438	07/01/21 10:00	NIM	TAL SAC
Total/NA	Analysis	6020		1			503778	07/01/21 17:02	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0118 g	503838	06/28/21 11:00	DPM	TAL SAC

Client Sample ID: GILBANETSP061721-1275

Lab Sample ID: 320-75415-8

Date Collected: 06/24/21 06:58

Matrix: Air

Date Received: 06/25/21 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			503839	06/28/21 11:00	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					502939	06/29/21 17:46	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: 320-75415-1
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: 320-75415-1

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: 320-75415-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-75415-1	GILBANEPM061721-1272	Air	06/23/21 07:19	06/25/21 09:30	
320-75415-2	GILBANETSP061721-1272	Air	06/23/21 07:19	06/25/21 09:30	
320-75415-3	GILBANEPM061721-1273	Air	06/23/21 07:07	06/25/21 09:30	
320-75415-4	GILBANETSP061721-1273	Air	06/23/21 07:07	06/25/21 09:30	
320-75415-5	GILBANEPM061721-1274	Air	06/24/21 07:10	06/25/21 09:30	
320-75415-6	GILBANETSP061721-1274	Air	06/24/21 07:10	06/25/21 09:30	
320-75415-7	GILBANEPM061721-1275	Air	06/24/21 06:58	06/25/21 09:30	
320-75415-8	GILBANETSP061721-1275	Air	06/24/21 06:58	06/25/21 09:30	

CHAIN-OF-CUSTODY RECORD

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

COC # KT062421AIR

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

320-75415 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	GILBANEPM061721-1272	A	06/23/2021	0719	KT	X		X								AMSE1	N1	0.00	0.00	1	VOLUME:1722.54
2	GILBANETSP061721-1272	A	06/23/2021	0719	KT		X									AMSE1	N1	0.00	0.00	1	VOLUME: 1726.90
3	GILBANEPM061721-1273	A	06/23/2021	0707	KT	X		X								AMSE2	N1	0.00	0.00	1	VOLUME: 1737.32
4	GILBANETSP061721-1273	A	06/23/2021	0707	KT		X									AMSE2	N1	0.00	0.00	1	VOLUME: 1653.93
5	GILBANEPM061721-1274	A	06/24/2021	0710	KT	X		X								AMSE1	N1	0.00	0.00	1	VOLUME: 1729.53
6	GILBANETSP061721-1274	A	06/24/2021	0710	KT		X									AMSE1	N1	0.00	0.00	1	VOLUME: 1718.90
7	GILBANEPM061721-1275	A	06/24/2021	0658	KT	X		X								AMSE2	N1	0.00	0.00	1	VOLUME: 1731.70
8	GILBANETSP061721-1275	A	06/24/2021	0658	KT		X									AMSE2	N1	0.00	0.00	1	VOLUME: 1649.68
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: 6/24/2021/FedEx 7740 9068 7420

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

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7/2/2021

Login Sample Receipt Checklist

Client: Gilbane Federal

Job Number: 320-75415-1

Login Number: 75415

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: 320-75596-1
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]

[redacted]

Table of Contents

Definitions/Glossary

Client: Gilbane Federal
Job ID: 320-75596-1
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: 320-75596-1

Job ID: 320-75596-1

Laboratory: Eurofins TestAmerica, Sacramento

Narrative

Job Narrative
320-75596-1

Comments
No additional comments.

Receipt
The samples were received on 6/30/2021 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 21.2º 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: 320-75596-1

Client Sample ID: GILBANEPM061721-1276 — Lab Sample ID: 320-75596-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0026		0.0021	0.00032	ug/m3 (Air)	1		6020	Total/NA
Copper	0.023		0.0043	0.00032	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0030		0.0021	0.00030	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	3.9		0.89	0.89	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP061721-1276 — Lab Sample ID: 320-75596-2

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	9.8871		0.8673	0.8673	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM061721-1277 — Lab Sample ID: 320-75596-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0020	J	0.0021	0.00032	ug/m3 (Air)	1		6020	Total/NA
Copper	0.096		0.0042	0.00032	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0046		0.0021	0.00029	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	5.8		0.88	0.88	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP061721-1277 — Lab Sample ID: 320-75596-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	8.7429		0.9107	0.9107	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM061721-1278 — Lab Sample ID: 320-75596-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.0010		0.00070	0.00011	ug/m3 (Air)	1		6020	Total/NA
Copper	0.054		0.0014	0.00011	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0028		0.00070	0.000099	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	9.3		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP061721-1278 — Lab Sample ID: 320-75596-6

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	15.9363		0.2951	0.2951	ug/m3 (Air)	1		40CFR50 App B	Total/NA

Client Sample ID: GILBANEPM061721-1279 — Lab Sample ID: 320-75596-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.00080		0.00070	0.00010	ug/m3 (Air)	1		6020	Total/NA
Copper	0.016		0.0014	0.00010	ug/m3 (Air)	1		6020	Total/NA
Manganese	0.0017		0.00070	0.000098	ug/m3 (Air)	1		6020	Total/NA
Particulate Matter as PM 10	7.5		0.29	0.29	ug/m3	1		PM10	Total/NA

Client Sample ID: GILBANETSP061721-1279 — Lab Sample ID: 320-75596-8

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Suspended Particulates	12.2826		0.3055	0.3055	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: 320-75596-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM061721-1276
Lab Sample ID: 320-75596-1
Date Collected: 06/24/21 15:00
Matrix: Air
Date Received: 06/30/21 10:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0026		0.0021	0.00032	ug/m3 (Air)		07/07/21 08:15	07/07/21 12:44	1
Copper	0.023		0.0043	0.00032	ug/m3 (Air)		07/07/21 08:15	07/07/21 12:44	1
Manganese	0.0030		0.0021	0.00030	ug/m3 (Air)		07/07/21 08:15	07/07/21 12:44	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	3.9		0.89	0.89	ug/m3			07/01/21 16:30	1

Client Sample ID: GILBANETSP061721-1276
Lab Sample ID: 320-75596-2
Date Collected: 06/24/21 15:00
Matrix: Air
Date Received: 06/30/21 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	9.8871		0.8673	0.8673	ug/m3 (Air)			07/01/21 16:30	1

Client Sample ID: GILBANEPM061721-1277
Lab Sample ID: 320-75596-3
Date Collected: 06/24/21 14:52
Matrix: Air
Date Received: 06/30/21 10:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0020	J	0.0021	0.00032	ug/m3 (Air)		07/07/21 08:15	07/07/21 12:47	1
Copper	0.096		0.0042	0.00032	ug/m3 (Air)		07/07/21 08:15	07/07/21 12:47	1
Manganese	0.0046		0.0021	0.00029	ug/m3 (Air)		07/07/21 08:15	07/07/21 12:47	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	5.8		0.88	0.88	ug/m3			07/01/21 16:30	1

Client Sample ID: GILBANETSP061721-1277
Lab Sample ID: 320-75596-4
Date Collected: 06/24/21 14:52
Matrix: Air
Date Received: 06/30/21 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	8.7429		0.9107	0.9107	ug/m3 (Air)			07/01/21 16:30	1

Client Sample ID: GILBANEPM061721-1278
Lab Sample ID: 320-75596-5
Date Collected: 06/29/21 07:08
Matrix: Air
Date Received: 06/30/21 10:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0010		0.00070	0.00011	ug/m3 (Air)		07/07/21 08:15	07/07/21 13:03	1
Copper	0.054		0.0014	0.00011	ug/m3 (Air)		07/07/21 08:15	07/07/21 13:03	1
Manganese	0.0028		0.00070	0.000099	ug/m3 (Air)		07/07/21 08:15	07/07/21 13:03	1

Client Sample Results

Client: Gilbane Federal
Job ID: 320-75596-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANEPM061721-1278
Lab Sample ID: 320-75596-5
Date Collected: 06/29/21 07:08
Matrix: Air
Date Received: 06/30/21 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	9.3		0.29	0.29	ug/m3			07/01/21 16:30	1

Client Sample ID: GILBANETSP061721-1278
Lab Sample ID: 320-75596-6
Date Collected: 06/29/21 07:08
Matrix: Air
Date Received: 06/30/21 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	15.9363		0.2951	0.2951	ug/m3 (Air)			07/01/21 16:30	1

Client Sample ID: GILBANEPM061721-1279
Lab Sample ID: 320-75596-7
Date Collected: 06/29/21 06:55
Matrix: Air
Date Received: 06/30/21 10:00
Sample Container: Folder/Filter

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00080		0.00070	0.00010	ug/m3 (Air)		07/07/21 08:15	07/07/21 13:06	1
Copper	0.016		0.0014	0.00010	ug/m3 (Air)		07/07/21 08:15	07/07/21 13:06	1
Manganese	0.0017		0.00070	0.000098	ug/m3 (Air)		07/07/21 08:15	07/07/21 13:06	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Particulate Matter as PM 10	7.5		0.29	0.29	ug/m3			07/01/21 16:30	1

Client Sample ID: GILBANETSP061721-1279
Lab Sample ID: 320-75596-8
Date Collected: 06/29/21 06:55
Matrix: Air
Date Received: 06/30/21 10:00
Sample Container: Folder/Filter

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Particulates	12.2826		0.3055	0.3055	ug/m3 (Air)			07/01/21 16:30	1

QC Sample Results

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

Job ID: 320-75596-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 320-504599/1-B
Matrix: Air
Analysis Batch: 504913

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 504603

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.0012	0.00018	ug/m3 (Air)		07/07/21 08:15	07/07/21 12:03	1
Copper	ND		0.0024	0.00018	ug/m3 (Air)		07/07/21 08:15	07/07/21 12:03	1
Manganese	ND		0.0012	0.00017	ug/m3 (Air)		07/07/21 08:15	07/07/21 12:03	1

Lab Sample ID: LCS 320-504599/2-B
Matrix: Air
Analysis Batch: 504913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 504603

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.240	0.222		ug/m3 (Air)		92	86 - 111
Copper	0.240	0.228		ug/m3 (Air)		95	85 - 110
Manganese	0.240	0.226		ug/m3 (Air)		94	88 - 110

Lab Sample ID: LCSD 320-504599/3-B
Matrix: Air
Analysis Batch: 504913

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 504603

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	0.240	0.222		ug/m3 (Air)		93	86 - 111	0	15
Copper	0.240	0.230		ug/m3 (Air)		96	85 - 110	1	15
Manganese	0.240	0.233		ug/m3 (Air)		97	88 - 110	3	15

QC Association Summary

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

Job ID: 320-75596-1

Metals

Pre Prep Batch: 504599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75596-1	GILBANEPM061721-1276	Total/NA	Air	Filter to Air	
320-75596-3	GILBANEPM061721-1277	Total/NA	Air	Filter to Air	
320-75596-5	GILBANEPM061721-1278	Total/NA	Air	Filter to Air	
320-75596-7	GILBANEPM061721-1279	Total/NA	Air	Filter to Air	
MB 320-504599/1-B	Method Blank	Total/NA	Air	Filter to Air	
LCS 320-504599/2-B	Lab Control Sample	Total/NA	Air	Filter to Air	
LCSD 320-504599/3-B	Lab Control Sample Dup	Total/NA	Air	Filter to Air	

Prep Batch: 504603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75596-1	GILBANEPM061721-1276	Total/NA	Air	3050B	504599
320-75596-3	GILBANEPM061721-1277	Total/NA	Air	3050B	504599
320-75596-5	GILBANEPM061721-1278	Total/NA	Air	3050B	504599
320-75596-7	GILBANEPM061721-1279	Total/NA	Air	3050B	504599
MB 320-504599/1-B	Method Blank	Total/NA	Air	3050B	504599
LCS 320-504599/2-B	Lab Control Sample	Total/NA	Air	3050B	504599
LCSD 320-504599/3-B	Lab Control Sample Dup	Total/NA	Air	3050B	504599

Analysis Batch: 504913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75596-1	GILBANEPM061721-1276	Total/NA	Air	6020	504603
320-75596-3	GILBANEPM061721-1277	Total/NA	Air	6020	504603
320-75596-5	GILBANEPM061721-1278	Total/NA	Air	6020	504603
320-75596-7	GILBANEPM061721-1279	Total/NA	Air	6020	504603
MB 320-504599/1-B	Method Blank	Total/NA	Air	6020	504603
LCS 320-504599/2-B	Lab Control Sample	Total/NA	Air	6020	504603
LCSD 320-504599/3-B	Lab Control Sample Dup	Total/NA	Air	6020	504603

General Chemistry

Pre Prep Batch: 504779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75596-2	GILBANETSP061721-1276	Total/NA	Air	Filter to Air	
320-75596-4	GILBANETSP061721-1277	Total/NA	Air	Filter to Air	
320-75596-6	GILBANETSP061721-1278	Total/NA	Air	Filter to Air	
320-75596-8	GILBANETSP061721-1279	Total/NA	Air	Filter to Air	

Analysis Batch: 504874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75596-2	GILBANETSP061721-1276	Total/NA	Air	40CFR50 App B	504779
320-75596-4	GILBANETSP061721-1277	Total/NA	Air	40CFR50 App B	504779
320-75596-6	GILBANETSP061721-1278	Total/NA	Air	40CFR50 App B	504779
320-75596-8	GILBANETSP061721-1279	Total/NA	Air	40CFR50 App B	504779

Analysis Batch: 504875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-75596-1	GILBANEPM061721-1276	Total/NA	Air	PM10	
320-75596-3	GILBANEPM061721-1277	Total/NA	Air	PM10	
320-75596-5	GILBANEPM061721-1278	Total/NA	Air	PM10	
320-75596-7	GILBANEPM061721-1279	Total/NA	Air	PM10	

Lab Chronicle

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

Job ID: 320-75596-1

Client Sample ID: GILBANEPM061721-1276
Lab Sample ID: 320-75596-1
Date Collected: 06/24/21 15:00
Matrix: Air
Date Received: 06/30/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					504599	07/07/21 07:48	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	504603	07/07/21 08:15	NIM	TAL SAC
Total/NA	Analysis	6020		1			504913	07/07/21 12:44	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0022 g	504875	07/01/21 16:30	DPM	TAL SAC

Client Sample ID: GILBANETSP061721-1276
Lab Sample ID: 320-75596-2
Date Collected: 06/24/21 15:00
Matrix: Air
Date Received: 06/30/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			504874	07/01/21 16:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					504779	07/07/21 13:29	DPM	TAL SAC

Client Sample ID: GILBANEPM061721-1277
Lab Sample ID: 320-75596-3
Date Collected: 06/24/21 14:52
Matrix: Air
Date Received: 06/30/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					504599	07/07/21 07:48	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	504603	07/07/21 08:15	NIM	TAL SAC
Total/NA	Analysis	6020		1			504913	07/07/21 12:47	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0033 g	504875	07/01/21 16:30	DPM	TAL SAC

Client Sample ID: GILBANETSP061721-1277
Lab Sample ID: 320-75596-4
Date Collected: 06/24/21 14:52
Matrix: Air
Date Received: 06/30/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			504874	07/01/21 16:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					504779	07/07/21 13:29	DPM	TAL SAC

Client Sample ID: GILBANEPM061721-1278
Lab Sample ID: 320-75596-5
Date Collected: 06/29/21 07:08
Matrix: Air
Date Received: 06/30/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					504599	07/07/21 07:48	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	504603	07/07/21 08:15	NIM	TAL SAC
Total/NA	Analysis	6020		1			504913	07/07/21 13:03	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0158 g	504875	07/01/21 16:30	DPM	TAL SAC

Lab Chronicle

Client: Gilbane Federal
Job ID: 320-75596-1
Project/Site: Hunters Point, Parcel E, Phase 2

Client Sample ID: GILBANETSP061721-1278
Lab Sample ID: 320-75596-6
Date Collected: 06/29/21 07:08
Matrix: Air
Date Received: 06/30/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			504874	07/01/21 16:30	DPM	TAL SAC
Total/NA	Pre Prep	Filter to Air					504779	07/07/21 13:29	DPM	TAL SAC

Client Sample ID: GILBANEPM061721-1279
Lab Sample ID: 320-75596-7
Date Collected: 06/29/21 06:55
Matrix: Air
Date Received: 06/30/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Pre Prep	Filter to Air					504599	07/07/21 07:48	NIM	TAL SAC
Total/NA	Prep	3050B			0.08333 Sample	100 mL	504603	07/07/21 08:15	NIM	TAL SAC
Total/NA	Analysis	6020		1			504913	07/07/21 13:06	DPM	TAL SAC
Total/NA	Analysis	PM10		1	0 g	0.0128 g	504875	07/01/21 16:30	DPM	TAL SAC

Client Sample ID: GILBANETSP061721-1279
Lab Sample ID: 320-75596-8
Date Collected: 06/29/21 06:55
Matrix: Air
Date Received: 06/30/21 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	40CFR50 App B		1			504874	07/01/21 16:30	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: 320-75596-1
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: 320-75596-1

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: 320-75596-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
320-75596-1	GILBANEPM061721-1276	Air	06/24/21 15:00	06/30/21 10:00	
320-75596-2	GILBANETSP061721-1276	Air	06/24/21 15:00	06/30/21 10:00	
320-75596-3	GILBANEPM061721-1277	Air	06/24/21 14:52	06/30/21 10:00	
320-75596-4	GILBANETSP061721-1277	Air	06/24/21 14:52	06/30/21 10:00	
320-75596-5	GILBANEPM061721-1278	Air	06/29/21 07:08	06/30/21 10:00	
320-75596-6	GILBANETSP061721-1278	Air	06/29/21 07:08	06/30/21 10:00	
320-75596-7	GILBANEPM061721-1279	Air	06/29/21 06:55	06/30/21 10:00	
320-75596-8	GILBANETSP061721-1279	Air	06/29/21 06:55	06/30/21 10:00	

CHAIN-OF-CUSTODY RECORD

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

COC # KT062921AIR

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

320-75596 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	GILBANEPM061721-1276	A	06/24/2021	1500	KT	X		X								AMSE1	N2	0.00	0.00	1	VOLUME: 561.53
2	GILBANETSP061721-1276	A	06/24/2021	1500	KT		X									AMSE1	N2	0.00	0.00	1	VOLUME: 576.51
3	GILBANEPM061721-1277	A	06/24/2021	1452	KT	X		X								AMSE2	N2	0.00	0.00	1	VOLUME: 570.27
4	GILBANETSP061721-1277	A	06/24/2021	1452	KT		X									AMSE2	N2	0.00	0.00	1	VOLUME: 549.02
5	GILBANEPM061721-1278	A	06/29/2021	0708	KT	X		X								AMSE1	N1	0.00	0.00	1	VOLUME: 1704.51
6	GILBANETSP061721-1278	A	06/29/2021	0708	KT		X									AMSE1	N1	0.00	0.00	1	VOLUME: 1694.25
7	GILBANEPM061721-1279	A	06/29/2021	0655	KT	X		X								AMSE2	N1	0.00	0.00	1	VOLUME: 1717.48
8	GILBANETSP061721-1279	A	06/29/2021	0655	KT		X									AMSE2	N1	0.00	0.00	1	VOLUME: 1636.46
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: 6/29/2021/FedEx 7741 2938 8320

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

21.2°C

Login Sample Receipt Checklist

Client: Gilbane Federal

Job Number: 320-75596-1

Login Number: 75596

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	