Naval Facilities Engineering 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

April 1st, 2021 through April 30th, 2021

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Prepared for:

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Naval Facilities Engineering Command Southwest
BRAC PMO West
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Contract Number: N62473-17-D-0005; Task Order No. N6247317F4332
DCN: GLBN-0005-4332-0062

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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/cm3……*fiber per cubic centimeter*

Gilbane……..*Gilbane Federal*

HERO……*Human and Ecological Risk Office*

HPNS……*Hunters Point Naval Shipyard*

L/min……*liters per minute*

mg/m3……..milligrams per cubic meter

Navy……*U.S. Department of the Navy*

NIOSH……*National Institute for Occupational Safety and Health*

PDR……..personal data-logging real-time

PEL……*permissible exposure limit*

PM10……*particulate matter less than 10 microns in diameter*

RAWP……Remedial Action Work Plan

TSP……*total suspended particulates*

TWA……*time-weighted average*

µg/m3……*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 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 April 1st, 2021 through April 30th, 2021 and compares the results with the established action levels presented in the DMCP (Appendix E of the RAWP [Gilbane, 2019a]).

2.0 Monitoring Site Locations

Air monitoring stations were deployed at one upwind and one downwind location from the work area whenever active soil handling operations were in progress. Based on past meteorological data, the prevalent wind direction at HPNS was from the west or west-southwest. The locations of Parcel E air monitoring stations are presented on Figure 2-1.

Air monitoring was performed to estimate and assess the impact of field activities. The locations of air monitoring stations were determined based on the prevailing wind direction and were modified as needed for accessibility and worker safety considerations. Wind direction was monitored daily using a windsock and confirmed with the prevalent wind direction recorded for the Hunters Point Station (APTIM HPNS - KCASANFR1504, APTIM HPNS - KCASANFR994, or San Francisco International (KSFO)) 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)
3. Total suspended particulates (TSP) and Metals (Copper, Lead, and Manganese)
4. Radiological air samplers.

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.

3.2 PM10

Filter-based PM10 data are collected to ensure the protection of public health and safety during construction operations. Filter-based PM10 data are generated by sampling with calibrated air monitoring equipment that are operated continuously over a period of time (usually 8 or 24 hours) in accordance with the U.S. Environmental Protection Agency (EPA) reference sampling method for PM10 as described in 40 CFR 50, Subpart J, during which time 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 sample results are gravimetrically determined, after which the results are validated for quality assurance. In this way the precise amount of PM10 present in each cubic meter of air is determined.

3.3 TSP, Copper, Lead, and Manganese

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 Title 40 Code of Federal Regulations (CFR), Part 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. Once the filter weight was determined, the sample was analyzed for copper and manganese in accordance with one of the IO-3 methods identified in 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.

3.4 Radionuclides of Concern

Radiological air samples were collected with a LV-1 low-volume air sampler. Air filters are 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 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 air monitoring 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, 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. Negative results indicating that the upwind concentration was greater than the downwind concentration, or instances where no delta was calculated due to non-detected results, 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 Criterion	Threshold Criteria Reference
Asbestos	0.1 fiber/cm^3	Cal/OSHA PEL
PM10	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

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 April 1st to April 30th, 2021, during which Gilbane was shoring, extending a crane pad, extending shoreline, breaking rock, removing debris from the shoreline, 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 April 1st through April 30th, 2021, did not result in the exceedance of the established threshold criteria, as described in detail below.

Asbestos results from April 1st through April 30th, 2021 did not exceed the project-specific screening criteria presented in Table 4-1. The results are presented as Attachment 2.

PM10 results from April 1st through April 30th, 2021 did not exceed the project-specific screening criteria presented in Table 4-1. The results are presented as Attachment 3.

TSP, lead, manganese, and copper results from April 1st through April 30th, 2021 did not exceed the project-specific screening criteria presented in Table 4-1. The results are presented as Attachments 4 and 5.

Radiological air sampling results from April 1st through April 30th, 2021 did not exceed the project-specific screening 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.

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.

FIGURES

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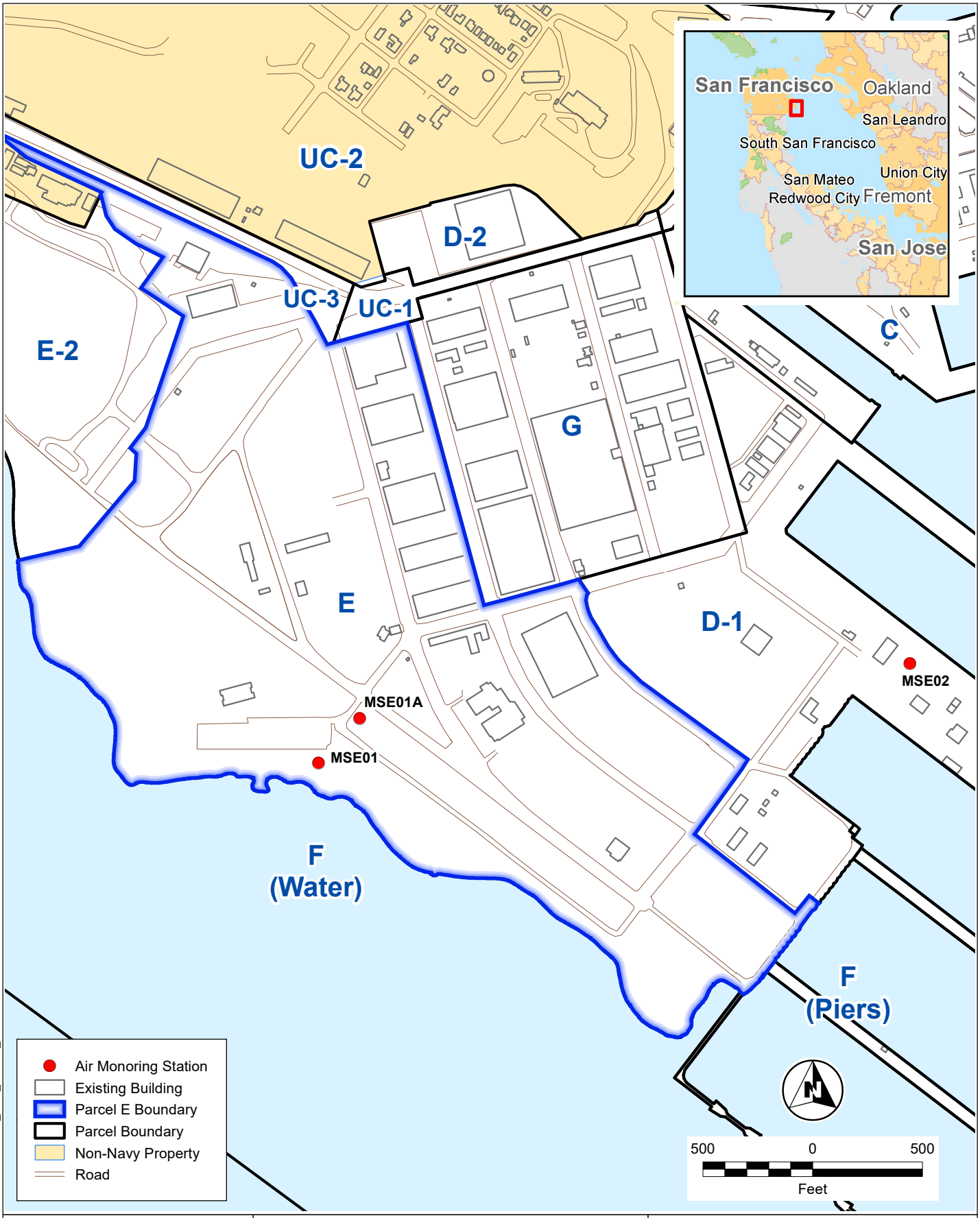

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Gilbane

Parcel E
Hunters Point Naval Shipyard
San Franscisco, California

Figure 2-1
Air Monitoring Stations

ATTACHMENTS

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ATTACHMENT 1

AMBIENT PRESSURE AND TEMPERATURE MONITORING RESULTS

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Attachment 1
Ambient Pressure, Temperature, and Prevalent Wind Direction Monitoring Results
Remedial Action Parcel E, Phase 2
Hunters Point Naval Shipyard, San Francisco, California

Start Date	Ambient Pressure (in Hg)	Ambient Temperature (°F)	Prevalent Wind Direction
4/1/2021[1]	29.99	59.05	NW
4/2/2021[1]	30.18	51.91	W
4/3/2021[1]	30.23	54.59	WSW
4/5/2021[1]	30.11	51.04	W
4/6/2021[1]	30.16	51.19	W
4/7/2021[1]	30.24	50.67	W
4/8/2021[1]	30.20	51.87	W
4/9/2021[1]	30.21	51.52	W
4/12/2021[1]	29.91	51.00	W
4/13/2021[1]	29.93	51.51	WSW
4/14/2021[1]	30.05	52.80	SW
4/15/2021[1]	30.11	54.60	W
4/19/2021[2]	30.03	55.43	W
4/20/2021[1]	29.92	53.03	W
4/21/2021[3]	29.95	51.95	WNW
4/22/2021[3]	30.02	54.04	WNW
4/26/2021[1]	30.01	52.64	W
4/27/2021[1]	30.13	56.87	WSW
4/28/2021[1]	30.24	59.33	W
4/29/2021[3]	30.27	54.28	WNW

Notes:

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

[2]Data collected using wunderground.com from San Francisco International (KSFO).

[3]Data collected using wunderground.com from Hunters Point - KCASANFR994.

°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
Remedial Action Parcel E, Phase 2
Hunters Point Naval Shipyard, San Francisco, California

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)
MSE01-040121	04/01/21	1	504	1008	14.5	0.007	No
MSE02-040121	04/01/21	2	509	1018	12.0	0.006	No
MSE01-040221	04/02/21	1	459	918	14.0	0.007	No
MSE02-040221	04/02/21	2	481	962	10.0	0.005	No
MSE01-040321	04/03/21	1	410	820	10.0	0.006	No
MSE02-040321	04/03/21	2	423	846	8.0	0.005	No
MSE01-040521	04/05/21	1	528	1056	8.5	0.004	No
MSE02-040521	04/05/21	2	530	1060	10.5	0.005	No
MSE01-040621	04/06/21	1	548	1096	11.5	0.005	No
MSE02-040621	04/06/21	2	564	1128	12.0	0.005	No
MSE01-040721	04/07/21	1	422	844	10.0	0.006	No
MSE02-040721	04/07/21	2	432	864	8.5	0.005	No
MSE01-040821	04/08/21	1	482	964	9.5	0.005	No
MSE02-040821	04/08/21	2	461	922	10.5	0.006	No
MSE01-040921	04/09/21	1	423	846	7.0	0.004	No
MSE02-040921	04/09/21	2	443	886	9.0	0.005	No
MSE01-041221	04/12/21	1	402	804	12.5	0.008	No
MSE02-041221	04/12/21	2	358	716	7.5	0.005	No
MSE01-041321	04/13/21	1	463	926	14.5	0.008	No
MSE02-041321	04/13/21	2	482	964	11.0	0.006	No
MSE01-041421	04/14/21	1	433	866	9.5	0.005	No
MSE02-041421	04/14/21	2	455	910	10.5	0.006	No
MSE01-041521	04/15/21	1	455	910	11.5	0.006	No
MSE02-041521	04/15/21	2	461	922	13.5	0.007	No
MSE01-041921	04/19/21	1	441	882	12.5	0.007	No
MSE02-041921	04/19/21	2	452	904	10.0	0.005	No
MSE01-042021	04/20/21	1	460	920	11.0	0.006	No
MSE02-042021	04/20/21	2	454	908	12.0	0.006	No
MSE01-042121	04/21/21	1	452	904	10.5	0.006	No
MSE02-042121	04/21/21	2	466	932	9.0	0.005	No
MSE01-042221	04/22/21	1	419	838	15.5	0.009	No
MSE02-042221	04/22/21	2	427	854	12.5	0.007	No
MSE01-042621	04/26/21	1	437	874	10.5	0.006	No
MSE02-042621	04/26/21	2	463	926	13.5	0.007	No
MSE01-042721	04/27/21	1	453	906	10.5	0.006	No
MSE02-042721	04/27/21	2	455	910	8.0	0.004	No
MSE01-042821	04/28/21	1	482	964	12.0	0.006	No
MSE02-042821	04/28/21	2	438	876	9.0	0.005	No
MSE01-042921	04/29/21	1	301	602	11.0	0.009	No
MSE02-042921	04/29/21	2	324	648	9.0	0.007	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

PM10 MONITORING RESULTS

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Attachment 3
Particulate Matter, Smaller than Ten Microns (PM10) Monitoring Results
Remedial Action Parcel E, Phase 2
Hunters Point Naval Shipyard, San Francisco, California

Sample, Date and Station Information			Sampler Run Information	PM10s						
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)
Q0424254-MSE01	1	4/1/21	1647.67	0.036						
Q0424255-MSE02	2	4/1/21	1669.64	0.018	-0.018	-18.0	5,000	No	50	No
Q0424256-MSE01	1	4/2/21	1608.41	0.035						
Q0424257-MSE02	2	4/2/21	1637.10	0.021	-0.014	-14.0	5,000	No	50	No
Q0424258-MSE01	1	4/3/21	1682.38	0.023						
Q0424259-MSE02	2	4/3/21	1693.99	0.016	-0.007	-7.0	5,000	No	50	No
Q0424260-MSE01	1	4/3/21[2]	459.89	0.014						
Q0424261-MSE02	2	4/3/21[2]	490.16	0.0093	-0.005	-4.7	5,000	No	50	No
Q0424262-MSE01	1	4/6/21	1619.35	0.018						
Q0424263-MSE02	2	4/6/21	1637.71	0.014	-0.004	-4.0	5,000	No	50	No
Q0424264-MSE01	1	4/7/21	1632.25	0.025						
Q0424265-MSE02	2	4/7/21	1646.81	0.025	0.000	0.0	5,000	No	50	No
Q0424266-MSE01	1	4/8/21	1639.06	0.035						
Q0424267-MSE02	2	4/8/21	1645.54	0.016	-0.019	-19.0	5,000	No	50	No
Q0424268-MSE01	1	4/9/21	1640.70	0.029						
Q0424269-MSE02	2	4/9/21	1672.96	0.025	-0.004	-4.0	5,000	No	50	No
Q0424270-MSE01	1	4/9/21[2]	340.99	0.060						
Q0424271-MSE02	2	4/9/21[2]	368.45	0.024	-0.036	-36.0	5,000	No	50	No
Q0424272-MSE01	1	4/13/21	1679.52	0.044						
Q0424273-MSE02	2	4/13/21	1624.13	0.057	0.013	13.0	5,000	No	50	No
Q0424274-MSE01	1	4/14/21	1774.85	0.045						
Q0424275-MSE02	2	4/14/21	1760.31	0.069	0.024	24.0	5,000	No	50	No
Q0424276-MSE01	1	4/15/21	1731.56	0.043						
Q0424277-MSE02	2	4/15/21	1723.68	0.043	0.000	0.0	5,000	No	50	No
Q0424278-MSE01	1	4/15/21[2]	535.05	0.047						
Q0424279-MSE02	2	4/15/21[2]	558.42	0.047	0.000	0.0	5,000	No	50	No

Attachment 3
Particulate Matter, Smaller than Ten Microns (PM10) Monitoring Results
Remedial Action Parcel E, Phase 2
Hunters Point Naval Shipyard, San Francisco, California

Sample, Date and Station Information			Sampler Run Information	PM10s						
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)
Q0424280-MSE01	1	4/20/21	1713.37	0.021						
Q0424281-MSE02	2	4/20/21	1737.35	0.025	-0.004	-4.0	5,000	No	50	No
Q0424282-MSE01	1	4/21/21	1729.03	0.031						
Q0424283-MSE02	2	4/21/21	1746.56	0.040	0.009	9.0	5,000	No	50	No
Q0424284-MSE01	1	4/22/21	1763.01	0.029						
Q0424285-MSE02	2	4/22/21	1774.05	0.028	-0.001	-1.0	5,000	No	50	No
Q0424286-MSE01	1	4/22/21[2]	459.43	<0.0022						
Q0424287-MSE02	2	4/22/21[2]	490.90	<0.0020	0.000	-0.2	5,000	No	50	No
Q0424288-MSE01	1	4/27/21	1739.07	0.014						
Q0424289-MSE02	2	4/27/21	1749.38	0.011	-0.003	-3.0	5,000	No	50	No
Q0424290-MSE01	1	4/28/21	1762.73	0.016						
Q0424291-MSE02	2	4/28/21	1716.16	0.022	0.006	6.0	5,000	No	50	No
Q0424292-MSE01	1	4/29/21	1715.62	0.021						
Q0424293-MSE02[3]	2	4/29/21	1809.82	0.0090	-0.012	-12.0	5,000	No	50	No
Q0424294-MSE01	1	4/29/21[2]	384.26	0.0080						
Q0424295-MSE02	2	4/29/21[2]	378.60	<0.0026	-0.005	-5.4	5,000	No	50	No

Notes:

[1]Sample "end" date indicates the date upon which sample collection ended.

[2]Sample collected in the afternoon

[3]Motor malfunction

Samples analyzed by ALS Environmental

Sample locations are shown on Figure 2-1

DTSC = Department of Toxic Substances Control

m^3 = cubic meters

mg = milligrams

mg/m^3 = milligrams per cubic meter

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

ATTACHMENT 4

TSP MONITORING RESULTS

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Attachment 4
Total Suspended Particulates Monitoring Results
Remedial Action Parcel E, Phase 2
Hunters Point Naval Shipyard, San Francisco, California

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)	Concen-tration in Air (mg/m^3)	Delta between Downwind and Upwind (mg/m^3)	Basewide HPNS Level (mg/m^3)	Exceedance (Yes/No)
9894253-MSE01	1	4/1/21	1682.28	0.038			
9894254-MSE02	2	4/1/21	1702.16	0.03	-0.008	0.5	No
9894255-MSE01	1	4/2/21	1604.99	0.045			
9894256-MSE02	2	4/2/21	1669.15	0.03	-0.015	0.5	No
9894257-MSE01	1	4/3/21	1703.93	0.026			
9894258-MSE02	2	4/3/21	1725.78	0.026	0.000	0.5	No
9894259-MSE01	1	4/3/21[2]	460.30	0.013			
9894260-MSE02	2	4/3/21[2]	503.13	0.012	-0.001	0.5	No
9894261-MSE01	1	4/6/21	1551.88	0.017			
9894262-MSE02	2	4/6/21	1672.15	0.019	0.002	0.5	No
9894264-MSE01	1	4/7/21	1679.89	0.026			
9894263-MSE02	2	4/7/21	1681.51	0.033	0.007	0.5	No
9894265-MSE01	1	4/8/21	1633.23	0.025			
9894266-MSE02	2	4/8/21	1681.08	0.020	-0.005	0.5	No
9894267-MSE01	1	4/9/21	1640.60	0.023			
9894268-MSE02	2	4/9/21	1701.41	0.022	-0.001	0.5	No
9894269-MSE01	1	4/9/21[2]	343.78	0.0041			
9894270-MSE02	2	4/9/21[2]	380.48	<0.0026	-0.002	0.5	No
9894271-MSE01	1	4/13/21	1680.54	0.051			
9894272-MSE02	2	4/13/21	1557.44	0.047	-0.004	0.5	No
9894273-MSE01	1	4/14/21	1778.03	0.054			
9894274-MSE02	2	4/14/21	1688.02	0.056	0.002	0.5	No
9894276-MSE01	1	4/15/21	1729.11	0.038			
9894275-MSE02	2	4/15/21	1662.29	0.053	0.015	0.5	No
9894277-MSE01	1	4/15/21[2]	534.17	0.045			
9894278-MSE02	2	4/15/21[2]	541.73	0.034	-0.011	0.5	No
9894279-MSE01	1	4/20/21	1735.25	0.037			
9894280-MSE02	2	4/20/21	1671.03	0.032	-0.005	0.5	No
9894281-MSE01	1	4/21/21	1746.99	0.054			
9894282-MSE02	2	4/21/21	1680.02	0.047	-0.007	0.5	No
9894283-MSE01	1	4/22/21	1744.25	0.042			
9894284-MSE02	2	4/22/21	1704.61	0.038	-0.004	0.5	No
9894285-MSE01	1	4/22/21[2]	465.34	0.019			
9894286-MSE02	2	4/22/21[2]	467.15	0.019	0.000	0.5	No
9894287-MSE01	1	4/27/21	1737.42	0.017			
9894288-MSE02	2	4/27/21	1676.76	0.015	-0.002	0.5	No

Attachment 4
Total Suspended Particulates Monitoring Results
Remedial Action Parcel E, Phase 2
Hunters Point Naval Shipyard, San Francisco, California

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)	Concen-tration in Air (mg/m^3)	Delta between Downwind and Upwind (mg/m^3)	Basewide HPNS Level (mg/m^3)	Exceedance (Yes/No)
9894289-MSE01	1	4/28/21	1722.95	0.034			
9894290-MSE02	2	4/28/21	1651.25	0.024	-0.010	0.5	No
9894291-MSE01	1	4/29/21	1797.38	0.039			
9894292-MSE02	2	4/29/21	1733.71	0.024	-0.015	0.5	No
9894293-MSE01	1	4/29/21[2]	384.86	0.015			No
9894294-MSE02	2	4/29/21[2]	311.20	0.0085	-0.007	0.5	No

Notes:
[1]Sample "end" date indicates the date upon which sample collection ended.
[2]Sample collected in the afternoon
Samples analyzed by ALS Environmental
Sample locations are shown on Figure 2-1
-- indicates difference was not calculated
< = below detection limit
HPNS = Hunters Point Naval Shipyard
mg = milligrams
mg/m^3 = milligrams per cubic meter
m^3 = cubic meters
NA = not applicable
ug = micrograms

ATTACHMENT 5

COPPER, LEAD, AND MANGANESE MONITORING RESULTS

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Attachment 5
Copper, Lead, and Manganese Monitoring Results
Remedial Action Parcel E, Phase 2
Hunters Point Naval Shipyard, San Francisco, California

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)	Concen-tration in Air (mg/m^3)	Exceedance (Yes/No)	Concen-tration in Air (mg/m^3)	Exceedance (Yes/No)	Concen-tration in Air (mg/m^3)	Exceedance (Yes/No)
9894253-MSE01	1	4/1/21	1682.28	0.00029	No	<0.000015	No	<0.000031	No
9894254-MSE02	2	4/1/21	1702.16	0.00024	No	<0.000015	No	<0.000015	No
9894255-MSE01	1	4/2/21	1604.99	0.00029	No	0.000016	No	<0.000062	No
9894256-MSE02	2	4/2/21	1669.15	0.000075	No	<0.000015	No	<0.00006	No
9894257-MSE01	1	4/3/21	1703.93	0.000082	No	<0.000015	No	<0.000059	No
9894258-MSE02	2	4/3/21	1725.78	0.0001	No	<0.000014	No	<0.000058	No
9894259-MSE01	1	4/3/21[2]	460.30	<0.00022	No	<0.000054	No	<0.00022 UJ	No
9894260-MSE02	2	4/3/21[2]	503.13	<0.0002	No	<0.00005	No	<0.0002	No
9894261-MSE01	1	4/6/21	1551.88	0.000096	No	<0.000016	No	<0.000064	No
9894262-MSE02	2	4/6/21	1672.15	0.00013	No	<0.000015	No	<0.000060	No
9894264-MSE01	1	4/7/21	1679.89	0.000087	No	<0.000015	No	<0.000015	No
9894263-MSE02	2	4/7/21	1681.51	0.000092 J-	No	<0.000015	No	<0.000015 UJ	No
9894265-MSE01	1	4/8/21	1633.23	0.00007	No	<0.000015	No	<0.000015	No
9894266-MSE02	2	4/8/21	1681.08	0.000042	No	<0.000015	No	<0.000015	No
9894267-MSE01	1	4/9/21	1640.60	0.000088	No	<0.000015	No	<0.000015	No
9894268-MSE02	2	4/9/21	1701.41	0.000074	No	<0.000015	No	<0.000015	No
9894269-MSE01	1	4/9/21[2]	343.78	<0.000073	No	<0.000073	No	<0.000073	No
9894270-MSE02	2	4/9/21[2]	380.48	<0.000066	No	<0.000066	No	<0.000066	No
9894271-MSE01	1	4/13/21	1680.54	0.00017	No	<0.000015	No	0.000019	No
9894272-MSE02	2	4/13/21	1557.44	0.000074	No	<0.000016	No	0.000017	No
9894273-MSE01	1	4/14/21	1778.03	0.00017	No	<0.000014	No	0.000016	No
9894274-MSE02	2	4/14/21	1688.02	0.00016	No	<0.000015	No	0.000021	No
9894276-MSE01	1	4/15/21	1729.11	0.00014	No	<0.000014	No	<0.000014	No
9894275-MSE02	2	4/15/21	1662.29	0.00016	No	<0.000015	No	0.000028	No
9894277-MSE01	1	4/15/21[2]	534.17	0.00011	No	<0.000047	No	<0.000047	No
9894278-MSE02	2	4/15/21[2]	541.73	0.00017	No	<0.000046	No	<0.000046	No
9894279-MSE01	1	4/20/21	1735.25	0.000057	No	<0.000014	No	<0.000014	No
9894280-MSE02	2	4/20/21	1671.03	0.00002	No	<0.000015	No	<0.000015	No
9894281-MSE01	1	4/21/21	1746.99	0.00014	No	<0.000014	No	0.000017	No
9894282-MSE02	2	4/21/21	1680.02	0.00013	No	<0.000015	No	<0.000015	No
9894283-MSE01	1	4/22/21	1744.25	0.0001	No	<0.000014	No	<0.000014	No
9894284-MSE02	2	4/22/21	1704.61	0.00012	No	<0.000015	No	<0.000015	No
9894285-MSE01	1	4/22/21[2]	465.34	0.00011	No	<0.000054	No	<0.000054	No
9894286-MSE02	2	4/22/21[2]	467.15	0.00012	No	<0.000054	No	<0.000054	No
9894287-MSE01	1	4/27/21	1737.42	0.00012	No	<0.000014	No	<0.000014	No
9894288-MSE02	2	4/27/21	1676.76	0.000091	No	<0.000015	No	<0.000015	No
9894289-MSE01	1	4/28/21	1722.95	0.000088	No	<0.000015	No	0.000019	No
9894290-MSE02	2	4/28/21	1651.25	0.00026	No	<0.000015	No	0.000042	No
9894291-MSE01	1	4/29/21	1797.38	0.00013	No	<0.000014	No	0.000036	No
9894292-MSE02	2	4/29/21	1733.71	0.00044	No	<0.000014	No	0.000017	No
9894293-MSE01	1	4/29/21[2]	384.86	0.000067	No	<0.000065	No	<0.000065	No

Attachment 5
Copper, Lead, and Manganese Monitoring Results
Remedial Action Parcel E, Phase 2
Hunters Point Naval Shipyard, San Francisco, California

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)	Concen-tration in Air (mg/m^3)	Exceedance (Yes/No)	Concen-tration in Air (mg/m^3)	Exceedance (Yes/No)	Concen-tration in Air (mg/m^3)	Exceedance (Yes/No)
9894294-MSE02	2	4/29/21[2]	311.20	<0.00008	No	<0.00008	No	<0.00008	No

Notes:
[1]Sample "end" date indicates the date upon which sample collection ended.
[2]Sample collected in the afternoon
Samples analyzed by ALS Environmental
Sample locations are shown on Figure 2-1
mg/m^3 = milligrams per cubic meter
J = estimated value
m^3 = cubic meters
UJ = not detected; associated detection limit estimated

ATTACHMENT 6

RADIOLOGICAL AIR MONITORING RESULTS

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Gilbane

AIR SAMPLE RESULTS - PUBLIC EXPOSURE MONITORING

Project Information			Effluent Air Concentration			Sampling Period	Color Codes	
Contract / Task Order Number:	Project Title / Location:	Gilbane Project Number:		Alpha	Beta	Air samples collected	Value < MDC	Value < 0.1 x Effluent Conc
N62473-17-D-0005 / F4332	Parcel E RA HPNS, SF, CA	J310000400	Radionuclide	Ra-226	Sr-90	between April 1, 2021	< 72 hr decay time	Value > 0.1 x Effluent Conc
Information effective as of: 5/18/2021			Effluent Conc (µCi/ml)	9.E-13	6.E-12	and April 30, 2021	Data reviewed	Value > Effluent Conc

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-0153	Perimeter	MSC01	PE06	60	4/1/21 6:30	4/1/21 15:55	565	3.4E+07	C	4/7/21	1	cpm	0.300	4.050	0.8	8.1	1.1E-14	1.1E-13	***1.2%***	***1.8%***	*DVT*	*BCS*
AS-0154	Perimeter	MSC02	PE05	60	4/1/21 6:38	4/1/21 15:40	542	3.3E+07	C	4/7/21	1	cpm	0.100	5.250	0.3	11.5	3.9E-15	1.6E-13	***0.4%***	***2.7%***	*DVT*	*BCS*
AS-0155	Perimeter	MSC01	PE06	60	4/2/21 6:14	4/2/21 15:30	556	3.3E+07	C	4/7/21	1	cpm	0.100	5.550	0.3	12.4	3.8E-15	1.7E-13	***0.4%***	***2.8%***	*DVT*	*BCS*
AS-0156	Perimeter	MSC02	PE05	60	4/2/21 6:25	4/2/21 15:45	560	3.4E+07	C	4/7/21	1	cpm	0.000	4.100	0.0	8.2	0.0E+00	1.1E-13	***0.0%***	***1.8%***	*DVT*	*BCS*
AS-0157	Perimeter	MSC01	PE06	60	4/3/21 7:09	4/3/21 15:18	489	2.9E+07	C	4/7/21	1	cpm	0.350	4.650	1.0	9.8	1.5E-14	1.5E-13	***1.7%***	***2.5%***	*DVT*	*BCS*
AS-0158	Perimeter	MSC02	PE05	60	4/3/21 7:17	4/3/21 15:24	487	2.9E+07	C	4/7/21	1	cpm	0.050	3.550	0.1	6.7	2.2E-15	1.0E-13	***0.2%***	***1.7%***	*DVT*	*BCS*
AS-0159	Perimeter	MSC01	PE06	60	4/5/21 6:14	4/5/21 15:45	571	3.4E+07	C	4/13/21	1	cpm	0.350	4.550	1.0	9.5	1.3E-14	1.3E-13	***1.4%***	***2.1%***	*DVT*	*BCS*
AS-0160	Perimeter	MSC02	PE05	60	4/5/21 6:23	4/5/21 15:53	570	3.4E+07	C	4/13/21	1	cpm	0.100	4.350	0.3	8.9	3.7E-15	1.2E-13	***0.4%***	***2.0%***	*DVT*	*BCS*
AS-0161	Perimeter	MSC01	PE06	60	4/6/21 6:20	4/6/21 15:50	570	3.4E+07	C	4/13/21	1	cpm	0.050	4.800	0.1	10.2	1.8E-15	1.3E-13	***0.2%***	***2.2%***	*DVT*	*BCS*
AS-0162	Perimeter	MSC02	PE05	60	4/6/21 5:30	4/6/21 15:30	600	3.6E+07	C	4/13/21	1	cpm	0.100	5.200	0.3	11.4	3.5E-15	1.4E-13	***0.4%***	***2.4%***	*DVT*	*BCS*
AS-0163	Perimeter	MSC01	PE07	60	4/7/21 6:35	4/7/21 15:00	505	3.0E+07	C	4/13/21	1	cpm	0.100	4.400	0.3	9.1	4.2E-15	1.4E-13	***0.5%***	***2.3%***	*DVT*	*BCS*
AS-0164	Perimeter	MSC02	PE08	60	4/7/21 6:45	4/7/21 15:05	500	3.0E+07	C	4/13/21	1	cpm	0.300	3.700	0.8	7.1	1.3E-14	1.1E-13	***1.4%***	***1.8%***	*DVT*	*BCS*
AS-0165	Perimeter	MSC01	PE07	60	4/8/21 6:30	4/8/21 15:00	510	3.1E+07	C	4/13/21	1	cpm	0.150	4.350	0.4	8.9	6.2E-15	1.3E-13	***0.7%***	***2.2%***	*DVT*	*BCS*
AS-0166	Perimeter	MSC02	PE08	60	4/8/21 5:00	4/8/21 15:20	620	3.7E+07	C	4/13/21	1	cpm	0.350	3.750	1.0	7.2	1.2E-14	8.8E-14	***1.3%***	***1.5%***	*DVT*	*BCS*
AS-0167	Perimeter	MSC01	PE07	60	4/9/21 5:00	4/9/21 13:29	509	3.1E+07	C	4/13/21	1	cpm	0.000	4.500	0.0	9.4	0.0E+00	1.4E-13	***0.0%***	***2.3%***	*DVT*	*BCS*
AS-0168	Perimeter	MSC02	PE08	60	4/9/21 5:10	4/9/21 13:18	488	2.9E+07	C	4/13/21	1	cpm	0.100	4.300	0.3	8.8	4.3E-15	1.4E-13	***0.5%***	***2.3%***	*DVT*	*BCS*
AS-0169	Perimeter	MSC01	PE07	60	4/12/21 7:07	4/12/21 15:45	518	3.1E+07	C	4/19/21	1	cpm	0.000	4.800	0.0	10.2	0.0E+00	1.5E-13	***0.0%***	***2.5%***	*DVT*	*BCS*
AS-0170	Perimeter	MSC02	PE08	60	4/12/21 7:02	4/12/21 15:30	508	3.0E+07	C	4/19/21	1	cpm	0.150	4.350	0.4	8.9	6.2E-15	1.3E-13	***0.7%***	***2.2%***	*DVT*	*BCS*
AS-0171	Perimeter	MSC01	PE07	60	4/13/21 5:00	4/13/21 15:45	645	3.9E+07	C	4/19/21	1	cpm	0.200	4.050	0.6	8.1	6.5E-15	9.4E-14	***0.7%***	***1.6%***	*DVT*	*BCS*
AS-0172	Perimeter	MSC02	PE08	60	4/13/21 5:10	4/13/21 15:35	625	3.7E+07	C	4/19/21	1	cpm	0.300	3.500	0.8	6.5	1.0E-14	7.8E-14	***1.1%***	***1.3%***	*DVT*	*BCS*
AS-0173	Perimeter	MSC01	PE07	60	4/14/21 4:50	4/14/21 15:30	640	3.8E+07	C	4/19/21	1	cpm	0.300	4.050	0.8	8.1	9.9E-15	9.5E-14	***1.1%***	***1.6%***	*DVT*	*BCS*
AS-0174	Perimeter	MSC02	PE08	60	4/14/21 5:00	4/14/21 15:20	620	3.7E+07	C	4/19/21	1	cpm	0.300	4.200	0.8	8.5	1.0E-14	1.0E-13	***1.1%***	***1.7%***	*DVT*	*BCS*
AS-0175	Perimeter	MSC01	PE07	60	4/15/21 4:57	4/15/21 15:20	623	3.7E+07	C	4/19/21	1	cpm	0.300	4.150	0.8	8.4	1.0E-14	1.0E-13	***1.1%***	***1.7%***	*DVT*	*BCS*
AS-0176	Perimeter	MSC02	PE08	60	4/15/21 5:05	4/15/21 15:30	625	3.8E+07	C	4/19/21	1	cpm	0.250	4.250	0.7	8.7	8.4E-15	1.0E-13	***0.9%***	***1.7%***	*DVT*	*BCS*
AS-0177	Perimeter	MSC01	PE07	60	4/19/21 6:38	4/19/21 15:38	540	3.2E+07	C	4/26/21	1	cpm	0.200	4.650	0.6	9.8	7.8E-15	1.4E-13	***0.9%***	***2.3%***	*DVT*	*BCS*
AS-0178	Perimeter	MSC02	PE08	60	4/19/21 6:32	4/19/21 15:32	540	3.2E+07	C	4/26/21	1	cpm	0.200	3.850	0.6	7.5	7.8E-15	1.0E-13	***0.9%***	***1.7%***	*DVT*	*BCS*
AS-0179	Perimeter	MSC01	PE07	60	4/20/21 4:50	4/20/21 15:15	625	3.7E+07	C	4/26/21	1	cpm	0.050	4.350	0.1	8.9	1.7E-15	1.1E-13	***0.2%***	***1.8%***	*DVT*	*BCS*
AS-0180	Perimeter	MSC02	PE08	60	4/20/21 5:00	4/20/21 15:00	600	3.6E+07	C	4/26/21	1	cpm	0.200	4.300	0.6	8.8	7.0E-15	1.1E-13	***0.8%***	***1.8%***	*DVT*	*BCS*

Gilbane

AIR SAMPLE RESULTS - PUBLIC EXPOSURE MONITORING

Project Information			Effluent Air Concentration			Sampling Period	Color Codes	
Contract / Task Order Number:	Project Title / Location:	Gilbane Project Number:		Alpha	Beta	Air samples collected	Value < MDC	Value < 0.1 x Effluent Conc
N62473-17-D-0005 / F4332	Parcel E RA HPNS, SF, CA	J310000400	Radionuclide	Ra-226	Sr-90	between April 1, 2021	< 72 hr decay time	Value > 0.1 x Effluent Conc
Information effective as of: 5/18/2021			Effluent Conc (µCi/ml)	9.E-13	6.E-12	and April 30, 2021	Data reviewed	Value > Effluent Conc

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-0181	Perimeter	MSC01	PE07	60	4/21/21 4:50	4/21/21 15:15	625	3.7E+07	C	4/26/21	1	cpm	0.150	3.900	0.4	7.7	5.1E-15	9.2E-14	***0.6%***	***1.5%***	*DVT*	*BCS*
AS-0182	Perimeter	MSC02	PE08	60	4/21/21 5:05	4/21/21 15:30	625	3.8E+07	C	4/26/21	1	cpm	0.200	4.600	0.6	9.7	6.7E-15	1.2E-13	***0.7%***	***1.9%***	*DVT*	*BCS*
AS-0183	Perimeter	MSC01	PE07	60	4/22/21 4:50	4/22/21 14:30	580	3.5E+07	C	4/26/21	1	cpm	0.100	4.650	0.3	9.8	3.6E-15	1.3E-13	***0.4%***	***2.1%***	*DVT*	*BCS*
AS-0184	Perimeter	MSC02	PE08	60	4/22/21 5:00	4/22/21 15:00	600	3.6E+07	C	4/26/21	1	cpm	0.300	4.100	0.8	8.2	1.1E-14	1.0E-13	***1.2%***	***1.7%***	*DVT*	*BCS*
AS-0185	Perimeter	MSC01	PE07	60	4/26/21 6:35	4/26/21 15:30	535	3.2E+07	C	5/3/21	1	cpm	0.100	4.250	0.3	8.7	3.9E-15	1.2E-13	***0.4%***	***2.0%***	*DVT*	*BCS*
AS-0186	Perimeter	MSC02	PE08	60	4/26/21 6:36	4/26/21 15:34	538	3.2E+07	C	5/3/21	1	cpm	0.050	4.450	0.1	9.2	2.0E-15	1.3E-13	***0.2%***	***2.1%***	*DVT*	*BCS*
AS-0187	Perimeter	MSC01	PE07	60	4/27/21 4:55	4/27/21 15:06	611	3.7E+07	C	5/3/21	1	cpm	0.100	4.750	0.3	10.1	3.5E-15	1.2E-13	***0.4%***	***2.1%***	*DVT*	*BCS*
AS-0188	Perimeter	MSC02	PE08	60	4/27/21 5:05	4/27/21 15:14	609	3.7E+07	C	5/3/21	1	cpm	0.150	3.400	0.4	6.3	5.2E-15	7.7E-14	***0.6%***	***1.3%***	*DVT*	*BCS*
AS-0189	Perimeter	MSC01	PE07	60	4/28/21 4:50	4/28/21 15:20	630	3.8E+07	C	5/3/21	1	cpm	0.100	4.200	0.3	8.5	3.3E-15	1.0E-13	***0.4%***	***1.7%***	*DVT*	*BCS*
AS-0190	Perimeter	MSC02	PE08	60	4/28/21 5:00	4/28/21 15:40	640	3.8E+07	C	5/3/21	1	cpm	0.200	4.700	0.6	9.9	6.6E-15	1.2E-13	***0.7%***	***1.9%***	*DVT*	*BCS*
AS-0191	Perimeter	MSC01	PE07	60	4/29/21 4:50	4/29/21 14:00	550	3.3E+07	C	5/3/21	1	cpm	0.100	4.200	0.3	8.5	3.8E-15	1.2E-13	***0.4%***	***1.9%***	*DVT*	*BCS*
AS-0192	Perimeter	MSC02	PE08	60	4/29/21 5:00	4/29/21 14:10	550	3.3E+07	C	5/3/21	1	cpm	0.050	3.000	0.1	5.1	1.9E-15	7.0E-14	***0.2%***	***1.2%***	*DVT*	*BCS*

ATTACHMENT 7

LABORATORY REPORTS

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12-Apr-2021

Brett Womack
Gilbane Company
2730 Shadelands Drive
Walnut Creek, CA 94598

Re: **HPNS Parcel E; J310000400-016** Work Order: **21040210**

Dear Brett,

ALS Environmental received 8 samples on 05-Apr-2021 11:49 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 12.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Rob Nieman

Electronically approved by: Rob Nieman

Rob Nieman
Project Manager

Report of Laboratory Analysis

ALS Environmental

Date: 12-Apr-21

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
Work Order: **21040210**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
21040210-01	Q0424252-MSE01	Air		3/31/2021 07:58	4/5/2021 11:49	☐
21040210-02	9894251-MSE01	Air		3/31/2021 07:58	4/5/2021 11:49	☐
21040210-03	Q0424253-MSE02	Air		3/31/2021 07:30	4/5/2021 11:49	☐
21040210-04	9894252-MSE02	Air		3/31/2021 07:30	4/5/2021 11:49	☐
21040210-05	Q0424254-MSE01	Air		4/1/2021 07:58	4/5/2021 11:49	☐
21040210-06	9894253-MSE01	Air		4/1/2021 07:58	4/5/2021 11:49	☐
21040210-07	Q0424255-MSE02	Air		4/1/2021 07:48	4/5/2021 11:49	☐
21040210-08	9894254-MSE02	Air		4/1/2021 07:48	4/5/2021 11:49	☐

ALS Environmental

Date: 12-Apr-21

Client:	Gilbane Company
Project:	HPNS Parcel E; J310000400-016
Work Order:	21040210

Case Narrative

The sample condition upon receipt was acceptable except where noted.

Results relate only to the items tested and are not blank corrected unless indicated.

ALS is an EPA recognized NLLAP laboratory for lead paint, soil, and dust wipe analyses under its AIHA-LAP accreditation.

All sampling information was provided by the client.

ALS Environmental

Date: *12-Apr-21*

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016

Work Order: 21040210

Analytical Results

Lab ID: 21040210-01A
Client Sample ID: Q0424252-MSE01

Collection Date: 3/31/2021 7:58:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1569210**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**42**	**1.0**	**0.027**	

Lab ID: 21040210-02A
Client Sample ID: 9894251-MSE01

Collection Date: 3/31/2021 7:58:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1618470**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Total suspended particulate	**66**	**1.0**	**0.041**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1618470**	Analyst: **AZ**
Date Analyzed: 4/12/2021 14:12		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**710**	**25**	**0.00044**	
Lead	ND	25	<0.000015	
Manganese	**50**	**25**	**0.000031**	

Lab ID: 21040210-03A
Client Sample ID: Q0424253-MSE02

Collection Date: 3/31/2021 7:30:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1675090**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**31**	**1.0**	**0.019**	

Note:

Client: Gilbane Company **Work Order:** 21040210
Project: HPNS Parcel E; J310000400-016

Analytical Results

Lab ID: 21040210-04A **Collection Date:** 3/31/2021 7:30:00 AM
Client Sample ID: 9894252-MSE02 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1710930**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**49**	**1.0**	**0.029**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1710930**	Analyst: **AZ**
Date Analyzed: 4/12/2021 14:15		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**470**	**25**	**0.00028**	
Lead	**26**	**25**	**0.000015**	
Manganese	ND	25	<0.000015	

Lab ID: 21040210-05A **Collection Date:** 4/1/2021 7:58:00 AM
Client Sample ID: Q0424254-MSE01 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1647670**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**59**	**1.0**	**0.036**	

Lab ID: 21040210-06A **Collection Date:** 4/1/2021 7:58:00 AM
Client Sample ID: 9894253-MSE01 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1682280**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Total suspended particulate	**65**	**1.0**	**0.038**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1682280**	Analyst: **AZ**
Date Analyzed: 4/12/2021 14:19		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**490**	**25**	**0.00029**	
Lead	ND	25	<0.000015	
Manganese	**52**	**25**	**0.000031**	

Note:

ALS Environmental

Date: *12-Apr-21*

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016

Work Order: 21040210

Analytical Results

Lab ID: 21040210-07A
Client Sample ID: Q0424255-MSE02

Collection Date: 4/1/2021 7:48:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1669640**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**31**	**1.0**	**0.018**	

Lab ID: 21040210-08A
Client Sample ID: 9894254-MSE02

Collection Date: 4/1/2021 7:48:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1702160**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Total suspended particulate	**51**	**1.0**	**0.030**	
METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1702160**	Analyst: **AZ**
Date Analyzed: 4/12/2021 14:23		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**410**	**25**	**0.00024**	
Lead	ND	25	<0.000015	
Manganese	**26**	**25**	**0.000015**	

Note:

QC BATCH REPORT

Batch ID: **R190607** Instrument ID: **BAL2** Method: **TSP**

DUP Sample ID: **21040210-02A DUP** Units: **mg/sample** Analysis Date: **4/9/2021**

Client ID: **9894251-MSE01** Run ID: **BAL2_210409A** SeqNo: **2436628** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total suspended particulate	65.27	1.0	0	0	0		65.85	0.885	20	

DUP Sample ID: **21040375-02A DUP** Units: **mg/sample** Analysis Date: **4/9/2021**

Client ID: Run ID: **BAL2_210409A** SeqNo: **2436633** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total suspended particulate	71.55	1.0	0	0	0		71.52	0.0419	20	

The following samples were analyzed in this batch:

21040210-02A 21040210-04A 21040210-06A
21040210-08A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Gilbane Company
Work Order: 21040210
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **R190608** Instrument ID: **BAL2** Method: **PM10**

DUP Sample ID: **21040210-01A DUP** Units: **mg/sample** Analysis Date: **4/9/2021**
Client ID: **Q0424252-MSE01** Run ID: **BAL2_210409B** SeqNo: **2436656** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Particulate as PM10	41.94	1.0	0	0	0		42.15	0.499	20	

DUP Sample ID: **21040375-01A DUP** Units: **mg/sample** Analysis Date: **4/9/2021**
Client ID: Run ID: **BAL2_210409B** SeqNo: **2436661** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Particulate as PM10	57.28	1.0	0	0	0		56.58	1.23	20	

The following samples were analyzed in this batch:

21040210-01A 21040210-03A 21040210-05A
21040210-07A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Gilbane Company
Work Order: 21040210
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **73772** Instrument ID: **ICP3** Method: **E12**

MBLK Sample ID: **MBLK-73772-73772** Units: **µg/sample** Analysis Date: **4/12/2021 02:00 PM**
Client ID: Run ID: **ICP3_210412A** SeqNo: **2438001** Prep Date: **4/12/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	ND	100								
Lead	ND	25								
Manganese	ND	100								

LCS Sample ID: **LCS-73772-73772** Units: **µg/sample** Analysis Date: **4/12/2021 02:04 PM**
Client ID: Run ID: **ICP3_210412A** SeqNo: **2438002** Prep Date: **4/12/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	355.8	100	450	0	79.1	75-125	0			
Lead	431.5	25	450	0	95.9	75-125	0			
Manganese	342.9	100	450	0	76.2	75-125	0			

LCSD Sample ID: **LCSD-73772-73772** Units: **µg/sample** Analysis Date: **4/12/2021 02:08 PM**
Client ID: Run ID: **ICP3_210412A** SeqNo: **2438003** Prep Date: **4/12/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	356.1	100	450	0	79.1	75-125	355.8	0.0759	20	
Lead	435.7	25	450	0	96.8	75-125	431.5	0.965	20	
Manganese	344.8	100	450	0	76.6	75-125	342.9	0.563	20	

MS Sample ID: **21040375-10A MS** Units: **µg/sample** Analysis Date: **4/12/2021 03:02 PM**
Client ID: Run ID: **ICP3_210412A** SeqNo: **2438013** Prep Date: **4/12/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	390.2	100	450	41.5	77.5	75-125	0			
Lead	440.2	25	450	0	97.8	75-125	0			
Manganese	346.1	100	450	0	76.9	75-125	0			

MSD Sample ID: **21040375-10A MSD** Units: **µg/sample** Analysis Date: **4/12/2021 03:06 PM**
Client ID: Run ID: **ICP3_210412A** SeqNo: **2438014** Prep Date: **4/12/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	373.3	100	450	41.5	73.7	75-125	390.2	4.43	20	S
Lead	442.1	25	450	0	98.2	75-125	440.2	0.428	20	
Manganese	334.7	100	450	0	74.4	75-125	346.1	3.34	20	S

The following samples were analyzed in this batch:

21040210-02A 21040210-04A 21040210-06A
21040210-08A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Environmental

Date: 12-Apr-21

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
WorkOrder: **21040210**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
E	EPA Method
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SDL	Sample Detection Limit
SW	SW-846 Method

Units Reported	Description
µg/sample	
mg/sample	

ALS Environmental

Sample Receipt Checklist

Client Name: **GILBANE-WALNUTCREEK** Date/Time Received: **05-Apr-21 11:49**

Work Order: **21040210** Received by: **SMS**

Checklist completed by: Jan Wilcox (eSignature) 06-Apr-21 (Date) Reviewed by: Rob Nieman (eSignature) 09-Apr-21 (Date)

Matrices: air

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☑	No ☐	Not Present ☐
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☐	No ☑	
Temperature(s)/Thermometer(s):			
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

21040210

CHAIN-OF-CUSTODY RECORD

Gilbane Federal
[redacted]
1655 Grant Street, Suite 1200, Concord, CA 94520
[redacted]

COC # KT-040121

Gilbane

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	Laboratory: ALS Laboratory Group, Cincinnati, OH	Event: Parcel E Phase 2 Air Monitoring
Project Number: J310000400	POC: [redacted]	
WBS Code: J310000400-016	Ship to: 4388 Glendale Milford Rd., Blue Ash, OH 45242	

Comments:

Equipment:

Code	Matrix
A	Air

Code	Container/Preservative
1	
1	1x Envelope, None

Event: Parcel E Phase 2 Air Monitoring

	Sample ID	Matrix	Date	Time	Samp Init.	CAAIR - Air PM10	E12 - Air Pb Mn Cu	N0500 - Air TSP	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
	Analytical Test Method					1	1	1						
1	Q0424252-MSE01	A	03/31/2021	0758	KT	X			AMSE1	N1	0.00	0.00	1	VOLUME: 1569.21
2	9894251-MSE01	A	03/31/2021	0758	KT		X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1618.47
3	Q0424253-MSE02	A	03/31/2021	0730	KT	X			AMSE2	N1	0.00	0.00	1	VOLUME: 1675.09
4	9894252-MSE02	A	03/31/2021	0730	KT		X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1710.93
5	Q0424254-MSE01	A	04/01/2021	0758	KT	X			AMSE1	N1	0.00	0.00	1	VOLUME: 1647.67
6	9894253-MSE01	A	04/01/2021	0758	KT		X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1682.28
7	Q0424255-MSE02	A	04/01/2021	0748	KT	X			AMSE2	N1	0.00	0.00	1	VOLUME: 1669.64
8	9894254-MSE02	A	04/01/2021	0748	KT		X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1702.16

Turnaround Time: 5 Days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[signature]	4/2/21	1000	[signature]	4/2/21	1000
			[signature]	4/5/21	1149

Shipping Date / Carrier / Airbill Number

Shipping Date: 4/1/2021 7733 2047 2174

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

13-Apr-2021

Brett Womack
Gilbane Company
2730 Shadelands Drive
Walnut Creek, CA 94598

Re: **HPNS Parcel E; J310000400-016** Work Order: **21040375**

Dear Brett,

ALS Environmental received 16 samples on 07-Apr-2021 11:03 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 16.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Rob Nieman

Electronically approved by: Rob Nieman

Rob Nieman
Project Manager

Report of Laboratory Analysis

ALS Environmental

Date: 13-Apr-21

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
Work Order: **21040375**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
21040375-01	Q0424256-MSE01	Air		4/2/2021 07:45	4/7/2021 11:03	☐
21040375-02	9894255-MSE01	Air		4/2/2021 07:45	4/7/2021 11:03	☐
21040375-03	Q0424257-MSE02	Air		4/2/2021 07:34	4/7/2021 11:03	☐
21040375-04	9894256-MSE02	Air		4/2/2021 07:34	4/7/2021 11:03	☐
21040375-05	Q0424258-MSE01	Air		4/3/2021 08:38	4/7/2021 11:03	☐
21040375-06	9894257-MSE01	Air		4/3/2021 08:38	4/7/2021 11:03	☐
21040375-07	Q0424259-MSE02	Air		4/3/2021 08:20	4/7/2021 11:03	☐
21040375-08	9894258-MSE02	Air		4/3/2021 08:20	4/7/2021 11:03	☐
21040375-09	Q0424260-MSE01	Air		4/3/2021 15:35	4/7/2021 11:03	☐
21040375-10	9894259-MSE01	Air		4/3/2021 15:35	4/7/2021 11:03	☐
21040375-11	Q0424261-MSE02	Air		4/3/2021 15:25	4/7/2021 11:03	☐
21040375-12	9894260-MSE02	Air		4/3/2021 15:25	4/7/2021 11:03	☐
21040375-13	Q0424262-MSE01	Air		4/6/2021 07:43	4/7/2021 11:03	☐
21040375-14	9894261-MSE01	Air		4/6/2021 07:43	4/7/2021 11:03	☐
21040375-15	Q0424263-MSE02	Air		4/6/2021 07:30	4/7/2021 11:03	☐
21040375-16	9894262-MSE02	Air		4/6/2021 07:30	4/7/2021 11:03	☐

ALS Environmental

Date: 13-Apr-21

Client:	Gilbane Company
Project:	HPNS Parcel E; J310000400-016
Work Order:	21040375

Case Narrative

The sample condition upon receipt was acceptable except where noted.

Results relate only to the items tested and are not blank corrected unless indicated.

ALS is an EPA recognized NLLAP laboratory for lead paint, soil, and dust wipe analyses under its AIHA-LAP accreditation.

All sampling information was provided by the client.

ALS Environmental

Date: *13-Apr-21*

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016

Work Order: 21040375

Analytical Results

Lab ID: 21040375-01A
Collection Date: 4/2/2021 7:45:00 AM
Client Sample ID: Q0424256-MSE01
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1608410**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**57**	**1.0**	**0.035**	

Lab ID: 21040375-02A
Collection Date: 4/2/2021 7:45:00 AM
Client Sample ID: 9894255-MSE01
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1604990**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**72**	**1.0**	**0.045**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1604990**	Analyst: **AZ**
Date Analyzed: 4/12/2021 14:27		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**460**	**100**	**0.00029**	
Lead	**26**	**25**	**0.000016**	
Manganese	ND	100	<0.000062	

Lab ID: 21040375-03A
Collection Date: 4/2/2021 7:34:00 AM
Client Sample ID: Q0424257-MSE02
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1637100**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**35**	**1.0**	**0.021**	

Note:

Client: Gilbane Company **Work Order:** 21040375
Project: HPNS Parcel E; J310000400-016

Analytical Results

Lab ID: 21040375-04A **Collection Date:** 4/2/2021 7:34:00 AM
Client Sample ID: 9894256-MSE02 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1669150**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**50**	**1.0**	**0.030**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1669150**	Analyst: **AZ**
Date Analyzed: 4/12/2021 14:31		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**130**	**100**	**0.000075**	
Lead	ND	25	<0.000015	
Manganese	ND	100	<0.000060	

Lab ID: 21040375-05A **Collection Date:** 4/3/2021 8:38:00 AM
Client Sample ID: Q0424258-MSE01 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1682380**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**39**	**1.0**	**0.023**	

Lab ID: 21040375-06A **Collection Date:** 4/3/2021 8:38:00 AM
Client Sample ID: 9894257-MSE01 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1703930**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**44**	**1.0**	**0.026**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1703930**	Analyst: **AZ**
Date Analyzed: 4/12/2021 14:51		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**140**	**100**	**0.000082**	
Lead	ND	25	<0.000015	
Manganese	ND	100	<0.000059	

Note:

Client: Gilbane Company **Work Order:** 21040375
Project: HPNS Parcel E; J310000400-016

Analytical Results

Lab ID: 21040375-07A **Collection Date:** 4/3/2021 8:20:00 AM
Client Sample ID: Q0424259-MSE02 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1693990**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**28**	**1.0**	**0.016**	

Lab ID: 21040375-08A **Collection Date:** 4/3/2021 8:20:00 AM
Client Sample ID: 9894258-MSE02 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1725780**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**44**	**1.0**	**0.026**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1725780**	Analyst: **AZ**
Date Analyzed: 4/12/2021 14:55		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**180**	**100**	**0.00010**	
Lead	ND	25	<0.000014	
Manganese	ND	100	<0.000058	

Lab ID: 21040375-09A **Collection Date:** 4/3/2021 3:35:00 PM
Client Sample ID: Q0424260-MSE01 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **459890**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**6.3**	**1.0**	**0.014**	

Note:

Client: Gilbane Company **Work Order:** 21040375
Project: HPNS Parcel E; J310000400-016

Analytical Results

Lab ID: 21040375-10A **Collection Date:** 4/3/2021 3:35:00 PM
Client Sample ID: 9894259-MSE01 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **460300**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**5.9**	**1.0**	**0.013**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **460300**	Analyst: **AZ**
Date Analyzed: 4/12/2021 14:58		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	ND	100	<0.00022	
Lead	ND	25	<0.000054	
Manganese	ND	100	<0.00022	

Lab ID: 21040375-11A **Collection Date:** 4/3/2021 3:25:00 PM
Client Sample ID: Q0424261-MSE02 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **490160**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**4.6**	**1.0**	**0.0093**	

Lab ID: 21040375-12A **Collection Date:** 4/3/2021 3:25:00 PM
Client Sample ID: 9894260-MSE02 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **503130**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**5.9**	**1.0**	**0.012**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **503130**	Analyst: **AZ**
Date Analyzed: 4/12/2021 15:10		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	ND	100	<0.00020	
Lead	ND	25	<0.000050	
Manganese	ND	100	<0.00020	

Note:

Client: Gilbane Company **Work Order:** 21040375
Project: HPNS Parcel E; J310000400-016

Analytical Results

Lab ID: 21040375-13A **Collection Date:** 4/6/2021 7:43:00 AM
Client Sample ID: Q0424262-MSE01 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1619350**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**30**	**1.0**	**0.018**	

Lab ID: 21040375-14A **Collection Date:** 4/6/2021 7:43:00 AM
Client Sample ID: 9894261-MSE01 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1551880**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**27**	**1.0**	**0.017**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1551880**	Analyst: **AZ**
Date Analyzed: 4/12/2021 15:13		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**150**	**100**	**0.000096**	
Lead	ND	25	<0.000016	
Manganese	ND	100	<0.000064	

Lab ID: 21040375-15A **Collection Date:** 4/6/2021 7:30:00 AM
Client Sample ID: Q0424263-MSE02 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1637710**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**23**	**1.0**	**0.014**	

Note:

ALS Environmental

Date: *13-Apr-21*

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016

Work Order: 21040375

Analytical Results

Lab ID: 21040375-16A
Client Sample ID: 9894262-MSE02

Collection Date: 4/6/2021 7:30:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1672150**	Analyst: **SRL**
Date Analyzed: 4/9/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**32**	**1.0**	**0.019**	
METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1672150**	Analyst: **AZ**
Date Analyzed: 4/12/2021 15:17		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**220**	**100**	**0.00013**	
Lead	ND	25	<0.000015	
Manganese	ND	100	<0.000060	

Note:

QC BATCH REPORT

Batch ID: **R190607** Instrument ID: **BAL2** Method: **TSP**

DUP Sample ID: **21040210-02A DUP** Units: **mg/sample** Analysis Date: **4/9/2021**

Client ID: Run ID: **BAL2_210409A** SeqNo: **2436628** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total suspended particulate	65.27	1.0	0	0	0		65.85	0.885	20	

DUP Sample ID: **21040375-02A DUP** Units: **mg/sample** Analysis Date: **4/9/2021**

Client ID: **9894255-MSE01** Run ID: **BAL2_210409A** SeqNo: **2436633** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total suspended particulate	71.55	1.0	0	0	0		71.52	0.0419	20	

The following samples were analyzed in this batch:

21040375-02A	21040375-04A	21040375-06A
21040375-08A	21040375-10A	21040375-12A
21040375-14A	21040375-16A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Gilbane Company
Work Order: 21040375
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **R190608** Instrument ID: **BAL2** Method: **PM10**

DUP Sample ID: **21040210-01A DUP** Units: **mg/sample** Analysis Date: **4/9/2021**
Client ID: Run ID: **BAL2_210409B** SeqNo: **2436656** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Particulate as PM10	41.94	1.0	0	0	0		42.15	0.499	20	

DUP Sample ID: **21040375-01A DUP** Units: **mg/sample** Analysis Date: **4/9/2021**
Client ID: **Q0424256-MSE01** Run ID: **BAL2_210409B** SeqNo: **2436661** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Particulate as PM10	57.28	1.0	0	0	0		56.58	1.23	20	

The following samples were analyzed in this batch:

21040375-01A	21040375-03A	21040375-05A
21040375-07A	21040375-09A	21040375-11A
21040375-13A	21040375-15A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Gilbane Company
Work Order: 21040375
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **73772** Instrument ID: **ICP3** Method: **E12**

MBLK Sample ID: **MBLK-73772-73772** Units: **µg/sample** Analysis Date: **4/12/2021 02:00 PM**
Client ID: Run ID: **ICP3_210412A** SeqNo: **2438001** Prep Date: **4/12/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	ND	100								
Lead	ND	25								
Manganese	ND	100								

LCS Sample ID: **LCS-73772-73772** Units: **µg/sample** Analysis Date: **4/12/2021 02:04 PM**
Client ID: Run ID: **ICP3_210412A** SeqNo: **2438002** Prep Date: **4/12/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	355.8	100	450	0	79.1	75-125	0			
Lead	431.5	25	450	0	95.9	75-125	0			
Manganese	342.9	100	450	0	76.2	75-125	0			

LCSD Sample ID: **LCSD-73772-73772** Units: **µg/sample** Analysis Date: **4/12/2021 02:08 PM**
Client ID: Run ID: **ICP3_210412A** SeqNo: **2438003** Prep Date: **4/12/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	356.1	100	450	0	79.1	75-125	355.8	0.0759	20	
Lead	435.7	25	450	0	96.8	75-125	431.5	0.965	20	
Manganese	344.8	100	450	0	76.6	75-125	342.9	0.563	20	

MS Sample ID: **21040375-10A MS** Units: **µg/sample** Analysis Date: **4/12/2021 03:02 PM**
Client ID: **9894259-MSE01** Run ID: **ICP3_210412A** SeqNo: **2438013** Prep Date: **4/12/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	390.2	100	450	41.5	77.5	75-125	0			
Lead	440.2	25	450	0	97.8	75-125	0			
Manganese	346.1	100	450	0	76.9	75-125	0			

MSD Sample ID: **21040375-10A MSD** Units: **µg/sample** Analysis Date: **4/12/2021 03:06 PM**
Client ID: **9894259-MSE01** Run ID: **ICP3_210412A** SeqNo: **2438014** Prep Date: **4/12/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	373.3	100	450	41.5	73.7	75-125	390.2	4.43	20	S
Lead	442.1	25	450	0	98.2	75-125	440.2	0.428	20	
Manganese	334.7	100	450	0	74.4	75-125	346.1	3.34	20	S

The following samples were analyzed in this batch:

21040375-02A	21040375-04A	21040375-06A
21040375-08A	21040375-10A	21040375-12A
21040375-14A	21040375-16A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Environmental

Date: 13-Apr-21

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
WorkOrder: **21040375**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
E	EPA Method
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SDL	Sample Detection Limit
SW	SW-846 Method

Units Reported	Description
µg/sample	
mg/sample	

ALS Environmental

Sample Receipt Checklist

Client Name: **GILBANE-WALNUTCREEK** Date/Time Received: **07-Apr-21 11:03**

Work Order: **21040375** Received by: **JNW**

Checklist completed by: Rob Nieman 12-Apr-21 Reviewed by: Rob Nieman 12-Apr-21

eSignature / Date / eSignature / Date

Matrices:

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☐
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☐	No ☑	
Temperature(s)/Thermometer(s):			
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☐	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

CHAIN-OF-CUSTODY RECORD

Gilbane Federal
[redacted]
1655 Grant Street, Suite 1200, Concord, CA 94520
[redacted]

COC # KT040621

21040375

Gilbane

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	Laboratory: ALS Laboratory Group, Cincinnati, OH	Event: Parcel E Phase 2 Air Monitoring
Project Number: J310000400	POC: [redacted]	
WBS Code: J310000400-016	Ship to: 4388 Glendale Milford Rd., Blue Ash, OH 45242	

Comments:

Equipment:

Code	Matrix
A	Air

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

						Analytical Test Method	CAAIR - Air PM10	E12 - Air Pb Mn Cu	N0500 - Air TSP										
	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	Q0424256-MSE01	A	04/02/2021	0745	KT		X									AMSE1	N1	0.00	0.00	1	VOLUME: 1608.41
2	9894255-MSE01	A	04/02/2021	0745	KT			X	X							AMSE1	N1	0.00	0.00	1	VOLUME: 1604.99
3	Q0424257-MSE02	A	04/02/2021	0734	KT		X									AMSE2	N1	0.00	0.00	1	VOLUME: 1637.10
4	9894256-MSE02	A	04/02/2021	0734	KT			X	X							AMSE2	N1	0.00	0.00	1	VOLUME: 1669.15
5	Q0424258-MSE01	A	04/03/2021	0838	KT		X									AMSE1	N1	0.00	0.00	1	VOLUME: 1682.38
6	9894257-MSE01	A	04/03/2021	0838	KT			X	X							AMSE1	N1	0.00	0.00	1	VOLUME: 1703.93
7	Q0424259-MSE02	A	04/03/2021	0820	KT		X									AMSE2	N1	0.00	0.00	1	VOLUME: 1693.99
8	9894258-MSE02	A	04/03/2021	0820	KT			X	X							AMSE2	N1	0.00	0.00	1	VOLUME: 1725.78
9	Q0424260-MSE01	A	04/03/2021	1535	KT		X									AMSE1	N1	0.00	0.00	1	VOLUME: 459.89
10	9894259-MSE01	A	04/03/2021	1535	KT			X	X							AMSE1	N1	0.00	0.00	1	VOLUME: 460.30
11	Q0424261-MSE02	A	04/03/2021	1525	KT		X									AMSE2	N1	0.00	0.00	1	VOLUME: 490.16

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[signature]	4/6/21	1200	FedEx	4/6/21	1200
			[signature] ALS	4/7/21	1103

Shipping Date / Carrier / Airbill Number

Shipping Date: 4/6/2021/FedEx 773364958806 w/ custody seals

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

CHAIN-OF-CUSTODY RECORD

Gilbane Federal
[redacted]
1655 Grant Street, Suite 1200, Concord, CA 94520
[redacted]

COC # KT040621

2104037S

Gilbane

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	Laboratory: ALS Laboratory Group, Cincinnati, OH	Event: Parcel E Phase 2 Air Monitoring
Project Number: J310000400	POC: [redacted]	
WBS Code: J310000400-016	Ship to: 4388 Glendale Milford Rd., Blue Ash, OH 45242	

Comments:

Equipment:

Code	Matrix
A	Air

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

Analytical Test Method: CAAIR - Air PM10; E12 - Air Pb Mn Cu; N0500 - Air TSP

Event: Parcel E Phase 2 Air Monitoring — CAAIR - Air PM10: 1; E12 - Air Pb Mn Cu: 1; N0500 - Air TSP: 1

	Sample ID	Matrix	Date	Time	Samp Init.	CAAIR - Air PM10	E12 - Air Pb Mn Cu	N0500 - Air TSP	Location ID	Sample Type	Depth (ft bgs) Top	Bottom	Cooler	Comments
12	9894260-MSE02	A	04/03/2021	1525	KT		X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 503.13
13	Q0424262-MSE01	A	04/06/2021	0743	KT	X			AMSE1	N1	0.00	0.00	1	VOLUME: 1619.35
14	9894261-MSE01	A	04/06/2021	0743	KT		X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1551.88
15	Q0424263-MSE02	A	04/06/2021	0730	KT	X			AMSE2	N1	0.00	0.00	1	VOLUME: 1637.71
16	9894262-MSE02	A	04/06/2021	0730	KT		X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1672.15
17														
18														

Turnaround Time: 5 days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[signature]	4/6/21	1200	FedEx	4/6/21	1200
			[signature] ALS	4/7/21	1103

Shipping Date / Carrier / Airbill Number

Shipping Date: 4/6/2021/FedEx 773364958806

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

Laboratory Analysis Report

Job ID : 21040543

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:	Brett Womack	P.O.#. :	J310000400-0015
	Client Address:	1655 Grant Street, Suite 1200	Date Received :	04/08/2021 11:30
	City, State, Zip:	Concord, California, 94520	Sample Collected By :	Kimberly Tom

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-040121	4/1/2021 16:32	Cassette	21040543.01
MSE02-040121	4/1/2021 16:22	Cassette	21040543.02
MSE01-040221	4/2/2021 15:30	Cassette	21040543.03
MSE02-040221	4/2/2021 15:40	Cassette	21040543.04
MSE01-040321	4/3/2021 15:25	Cassette	21040543.05
MSE02-040321	4/3/2021 15:30	Cassette	21040543.06
MSE01-040521	4/5/2021 16:38	Cassette	21040543.07
MSE02-040521	4/5/2021 16:30	Cassette	21040543.08

Released By: Alisha Hughes

Title: Project Manager

Analyst:

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

Date 4/13/2021

Job ID : 21040543
Analytical Method: NIOSH 7400-I2-Aug1994

Client: Gilbane Project: HPNS Parcel E Phase II J310000400 Attn: Brett Womack

A&B Sample ID	Client Sample ID	Collected Date	Area/Person	Flow Rate L/m	Time On	Time Off	Total Time (min)	Volume (Liters)	Total Fields	Total Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
21040543.01	MSE01-040121	04/01/2021	Area	2			504	1008	100	14.5	18.471	0.007		04/13/21	Habedi
21040543.02	MSE02-040121	04/01/2021	Area	2			509	1018	100	12.0	15.287	0.006		04/13/21	Habedi
21040543.03	MSE01-040221	04/02/2021	Area	2			459	918	100	14.0	17.834	0.007		04/13/21	Habedi
21040543.04	MSE02-040221	04/02/2021	Area	2			481	962	100	10.0	12.739	0.005		04/13/21	Habedi
21040543.05	MSE01-040321	04/03/2021	Area	2			410	820	100	10.0	12.739	0.006		04/13/21	Habedi
21040543.06	MSE02-040321	04/03/2021	Area	2			423	846	100	8	10.191	0.005		04/13/21	Habedi
21040543.07	MSE01-040521	04/05/2021	Area	2			528	1056	100	8.5	10.828	0.004		04/13/21	Habedi
21040543.08	MSE02-040521	04/05/2021	Area	2			530	1060	100	10.5	13.376	0.005		04/13/21	Habedi

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 : **21040543**	Date Received : **04/08/2021**	Time Received : **11:30AM**
Client Name : **Gilbane**		
Temperature : **21.9°C**	Sample pH : **N/A**	
Thermometer ID : **102002320**	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 box with C/S. JM 4-8-21; 05, 06= same sx ID labeled by C/T. -VH 04-12-21

Received by : JMontemayor

Check in by/date : JMontemayor / 04/08/2021

Event ID: Air Monitoring

COC# KT040621ASB

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: 4/6/2021

Page: 1 of 1

Analysis: Asbestos
Preservative: None
Container Type: Filter

★ Job ID:21040543

Flow Rate = 2 L/min

Sample ID		Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Asbestos	Special Instructions/Comments Total Time (min)
MSE01-040121	01A	4/01/2021	1632	NA	NA	1	AA	X	504
MSE02-040121	02A	4/01/2021	1622	NA	NA	1	AA	X	509
MSE01-040221	03A	4/02/2021	1530	NA	NA	1	AA	X	459
MSE02-040221	04A	4/02/2021	1540	NA	NA	1	AA	X	481
MSE01-040321	05A	4/03/2021	1525	NA	NA	1	AA	X	410
MSE02-040321	06A	4/03/2021	1530	NA	NA	1	AA	X	423
MSE01-040521	07A	4/05/2021	1638	NA	NA	1	AA	X	528
MSE02-040521	08A	4/05/2021	1630	NA	NA	1	AA	X	530

Sampled By: Kimberly T

Signature: [signature]

Special Instructions: none

Send Results to: [redacted]

Turnaround Time: Standard

Sampler: Kimberly T

Courier/Airbill No.: FedEx/ 7733 5786 4807

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
Kimberly Tam / Gilbane	4/6/21	1200	FedEx	4/6/21	1200
FedEx			[signature]	4-8-21	1130

NC 21.9°C 10200582D c/s

16-Apr-2021

Brett Womack
Gilbane Company
2730 Shadelands Drive
Walnut Creek, CA 94598

Re: **HPNS Parcel E; J310000400-016** Work Order: **21040568**

Dear Brett,

ALS Environmental received 8 samples on 09-Apr-2021 11:36 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 12.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Rob Nieman

Electronically approved by: Rob Nieman

Rob Nieman
Project Manager

Report of Laboratory Analysis

ALS Environmental

Date: 16-Apr-21

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
Work Order: **21040568**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
21040568-01	Q0424264-MSE01	Air		4/7/2021 07:45	4/9/2021 11:36	☐
21040568-02	9894264-MSE01	Air		4/7/2021 07:45	4/9/2021 11:36	☐
21040568-03	Q0424265-MSE02	Air		4/7/2021 07:32	4/9/2021 11:36	☐
21040568-04	9894263-MSE02	Air		4/7/2021 07:32	4/9/2021 11:36	☐
21040568-05	Q0424266-MSE01	Air		4/8/2021 08:00	4/9/2021 11:36	☐
21040568-06	9894265-MSE01	Air		4/8/2021 08:00	4/9/2021 11:36	☐
21040568-07	Q0424267-MSE02	Air		4/8/2021 07:35	4/9/2021 11:36	☐
21040568-08	9894266-MSE02	Air		4/8/2021 07:35	4/9/2021 11:36	☐

ALS Environmental

Date: 16-Apr-21

Client:	Gilbane Company
Project:	HPNS Parcel E; J310000400-016
Work Order:	21040568

Case Narrative

The sample condition upon receipt was acceptable except where noted.

Results relate only to the items tested and are not blank corrected unless indicated.

ALS is an EPA recognized NLLAP laboratory for lead paint, soil, and dust wipe analyses under its AIHA-LAP accreditation.

All sampling information was provided by the client.

ALS Environmental

Date: *16-Apr-21*

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016

Work Order: 21040568

Analytical Results

Lab ID: 21040568-01A
Client Sample ID: Q0424264-MSE01

Collection Date: 4/7/2021 7:45:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1632250**	Analyst: **SRL**
Date Analyzed: 4/14/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**42**	**1.0**	**0.025**	

Lab ID: 21040568-02A
Client Sample ID: 9894264-MSE01

Collection Date: 4/7/2021 7:45:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1679890**	Analyst: **SRL**
Date Analyzed: 4/14/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**44**	**1.0**	**0.026**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1679890**	Analyst: **AZ**
Date Analyzed: 4/15/2021 22:01		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**150**	**25**	**0.000087**	
Lead	ND	25	<0.000015	
Manganese	ND	25	<0.000015	

Lab ID: 21040568-03A
Client Sample ID: Q0424265-MSE02

Collection Date: 4/7/2021 7:32:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1646810**	Analyst: **SRL**
Date Analyzed: 4/14/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**42**	**1.0**	**0.025**	

Note:

Client: Gilbane Company **Work Order:** 21040568
Project: HPNS Parcel E; J310000400-016

Analytical Results

Lab ID: 21040568-04A **Collection Date:** 4/7/2021 7:32:00 AM
Client Sample ID: 9894263-MSE02 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1681510**	Analyst: **SRL**
Date Analyzed: 4/14/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**56**	**1.0**	**0.033**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1681510**	Analyst: **AZ**
Date Analyzed: 4/15/2021 22:04		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**150**	**25**	**0.000092**	
Lead	ND	25	<0.000015	
Manganese	ND	25	<0.000015	

Lab ID: 21040568-05A **Collection Date:** 4/8/2021 8:00:00 AM
Client Sample ID: Q0424266-MSE01 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1639060**	Analyst: **SRL**
Date Analyzed: 4/14/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**58**	**1.0**	**0.035**	

Lab ID: 21040568-06A **Collection Date:** 4/8/2021 8:00:00 AM
Client Sample ID: 9894265-MSE01 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1633230**	Analyst: **SRL**
Date Analyzed: 4/14/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**41**	**1.0**	**0.025**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1633230**	Analyst: **AZ**
Date Analyzed: 4/15/2021 22:16		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**110**	**25**	**0.000070**	
Lead	ND	25	<0.000015	
Manganese	ND	25	<0.000015	

Note:

ALS Environmental

Date: *16-Apr-21*

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016

Work Order: 21040568

Analytical Results

Lab ID: 21040568-07A
Client Sample ID: Q0424267-MSE02

Collection Date: 4/8/2021 7:35:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1645540**	Analyst: **SRL**
Date Analyzed: 4/14/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**26**	**1.0**	**0.016**	

Lab ID: 21040568-08A
Client Sample ID: 9894266-MSE02

Collection Date: 4/8/2021 7:35:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1681080**	Analyst: **SRL**
Date Analyzed: 4/14/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**33**	**1.0**	**0.020**	
METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1681080**	Analyst: **AZ**
Date Analyzed: 4/15/2021 22:20		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**71**	**25**	**0.000042**	
Lead	ND	25	<0.000015	
Manganese	ND	25	<0.000015	

Note:

Client: Gilbane Company

Work Order: 21040568

Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **R190753** Instrument ID: **BAL2** Method: **TSP**

DUP Sample ID: **21040568-04A DUP** Units: **mg/sample** Analysis Date: **4/14/2021**

Client ID: **9894263-MSE02** Run ID: **BAL2_210414A** SeqNo: **2439594** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total suspended particulate	55.22	1.0	0	0	0		55.71	0.883	20	

The following samples were analyzed in this batch:

21040568-02A 21040568-04A 21040568-06A
21040568-08A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Gilbane Company
Work Order: 21040568
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **R190754** Instrument ID: **BAL2** Method: **PM10**

DUP Sample ID: **21040568-01A DUP** Units: **mg/sample** Analysis Date: **4/14/2021**
Client ID: **Q0424264-MSE01** Run ID: **BAL2_210414B** SeqNo: **2439598** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Particulate as PM10	41.35	1.0	0	0	0		41.57	0.531	20	

The following samples were analyzed in this batch:

21040568-01A 21040568-03A 21040568-05A
21040568-07A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Gilbane Company
Work Order: 21040568
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **73886** Instrument ID: **ICP1** Method: **E12**

MBLK Sample ID: **MBLK-73886-73886** Units: **µg/sample** Analysis Date: **4/15/2021 09:49 PM**
Client ID: Run ID: **ICP1_210415B** SeqNo: **2441858** Prep Date: **4/15/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	ND	100								
Lead	ND	25								
Manganese	ND	100								

LCS Sample ID: **LCS-73886-73886** Units: **µg/sample** Analysis Date: **4/15/2021 09:53 PM**
Client ID: Run ID: **ICP1_210415B** SeqNo: **2441859** Prep Date: **4/15/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	346	100	450	0	76.9	75-125	0			
Lead	373	25	450	0	82.9	75-125	0			
Manganese	339.9	100	450	0	75.5	75-125	0			

LCSD Sample ID: **LCSD-73886-73886** Units: **µg/sample** Analysis Date: **4/15/2021 09:57 PM**
Client ID: Run ID: **ICP1_210415B** SeqNo: **2441860** Prep Date: **4/15/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	355.1	100	450	0	78.9	75-125	346	2.62	20	
Lead	378.8	25	450	0	84.2	75-125	373	1.56	20	
Manganese	347.8	100	450	0	77.3	75-125	339.9	2.3	20	

MS Sample ID: **21040568-04A MS** Units: **µg/sample** Analysis Date: **4/15/2021 10:08 PM**
Client ID: **9894263-MSE02** Run ID: **ICP1_210415B** SeqNo: **2441863** Prep Date: **4/15/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	487.4	100	450	154	74.1	75-125	0			S
Lead	368.2	25	450	4.016	80.9	75-125	0			
Manganese	335.9	100	450	14.26	71.5	75-125	0			S

MSD Sample ID: **21040568-04A MSD** Units: **µg/sample** Analysis Date: **4/15/2021 10:12 PM**
Client ID: **9894263-MSE02** Run ID: **ICP1_210415B** SeqNo: **2441864** Prep Date: **4/15/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	522	100	450	154	81.8	75-125	487.4	6.87	20	
Lead	380.2	25	450	4.016	83.6	75-125	368.2	3.21	20	
Manganese	350.7	100	450	14.26	74.8	75-125	335.9	4.3	20	S

The following samples were analyzed in this batch:

21040568-02A 21040568-04A 21040568-06A
21040568-08A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Environmental

Date: 16-Apr-21

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
WorkOrder: **21040568**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
E	EPA Method
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SDL	Sample Detection Limit
SW	SW-846 Method

Units Reported	Description
µg/sample	
mg/sample	

ALS Environmental

Sample Receipt Checklist

Client Name: **GILBANE-WALNUTCREEK** Date/Time Received: **09-Apr-21 11:36**

Work Order: **21040568** Received by: **SMS**

Checklist completed by: Stephanie Harrington 12-Apr-21 Reviewed by: Rob Nieman 13-Apr-21

eSignature / Date / eSignature / Date

Matrices:

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☐	No ☑	
Temperature(s)/Thermometer(s):			
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

21040568

CHAIN-OF-CUSTODY RECORD

Gilbane Federal
[redacted]
1655 Grant Street, Suite 1200, Concord, CA 94520
[redacted]

COC # KT040821

Gilbane

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	Laboratory: ALS Laboratory Group, Cincinnati, OH	Event: Parcel E Phase 2 Air Monitoring
Project Number: J310000400	POC: [redacted]	
WBS Code: J310000400-016	Ship to: 4388 Glendale Milford Rd., Blue Ash, OH 45242	

Comments:

Equipment:

Code	Matrix
A	Air

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

						Analytical Test Method													
						CAAIR - Air PM10	E12 - Air Pb Mn Cu	N0500 - Air TSP											
	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	Q0424264-MSE01	A	04/07/2021	0745	KT	X										AMSE1	N1	0.00	0.00	1	VOLUME: 1632.25
2	9894264-MSE01	A	04/07/2021	0745	KT		X	X								AMSE1	N1	0.00	0.00	1	VOLUME: 1679.89
3	Q0424265-MSE02	A	04/07/2021	0732	KT	X										AMSE2	N1	0.00	0.00	1	VOLUME: 1646.81
4	9894263-MSE02	A	04/07/2021	0732	KT		X	X								AMSE2	N1	0.00	0.00	1	VOLUME: 1681.51
5	Q0424266-MSE01	A	04/08/2021	0800	KT	X										AMSE1	N1	0.00	0.00	1	VOLUME: 1639.06
6	9894265-MSE01	A	04/08/2021	0800	KT		X	X								AMSE1	N1	0.00	0.00	1	VOLUME: 1633.23
7	Q0424267-MSE02	A	04/08/2021	0735	KT	X										AMSE2	N1	0.00	0.00	1	VOLUME: 1645.54
8	9894266-MSE02	A	04/08/2021	0735	KT		X	X								AMSE2	N1	0.00	0.00	1	VOLUME: 1681.08
9																					
10																					

Turnaround Time: 5 days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[signature]	4/8/21	1300	FedEx	4/8/21	1300
			[signature]	4/9/21	1136

Shipping Date / Carrier / Airbill Number

Shipping Date: 4/8/2021 / FedEx 7733 9042 7708

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

DELIVERY METHOD: US MAIL UPS DHL CLIENT DROP BOX (FEDEX) ALS COURIER

COOLING METHOD: (NONE) COOLER WET ICE ICE PACK

CUSTODY SEALS: NONE COOLER (PACKAGE) SAMPLES

COOLER TEMP: _____ °C IR#: 119059

Laboratory Analysis Report

Job ID : 21040786

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:	Brett Womack	P.O.#. :	J310000400-0015
	Client Address:	1655 Grant Street, Suite 1200	Date Received :	04/12/2021 10:00
	City, State, Zip:	Concord, California, 94520	Sample Collected By :	K. Tom

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-040621	4/6/2021 16:52	Cassette	21040786.01
MSE02-040621	4/6/2021 16:56	Cassette	21040786.02
MSE01-040721	4/7/2021 14:52	Cassette	21040786.03
MSE02-040721	4/7/2021 14:50	Cassette	21040786.04

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Analyst:

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

Date 4/15/2021

Job ID : 21040786
Analytical Method: NIOSH 7400-I2-Aug1994

Client: Gilbane Project: HPNS Parcel E Phase II J310000400 Attn: Brett Womack

A&B Sample ID	Client Sample ID	Collected Date	Area/Person	Flow Rate L/m	Time On	Time Off	Total Time (min)	Volume (Liters)	Total Fields	Total Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
21040786.01	MSE01-040621	04/06/2021	Area	2			548	1096	100	11.5	14.650	0.005		04/15/21	Habedi
21040786.02	MSE02-040621	04/06/2021	Area	2			564	1128	100	12.0	15.287	0.005		04/15/21	Habedi
21040786.03	MSE01-040721	04/07/2021	Area	2			422	844	100	10.0	12.739	0.006		04/15/21	Habedi
21040786.04	MSE02-040721	04/07/2021	Area	2			432	864	100	8.5	10.828	0.005		04/15/21	Habedi

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 : **21040786**	Date Received : **04/12/2021**	Time Received : **10:00AM**
Client Name : **Gilbane**		
Temperature : **23.1°C**	Sample pH : **N/A**	
Thermometer ID : **102002320**	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:

C/S on box. JM 4-12-21

Received by : JMontemayor

Check in by/date : JMontemayor / 04/12/2021

Event ID: Air Monitoring

COC# KT040821ASB

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: 4/8/2021

Page: 1 of 1

* Job ID:21040786

Analysis: Asbestos — Preservative: None — Container Type: Filter

Flow Rate = 2 L/min

Sample ID		Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Asbestos	Special Instructions/Comments Total Time (min)
MSE01-040621	01A	4/06/2021	1652	NA	NA	1	AA	X	548
MSE02-040621	02A	4/06/2021	1656	NA	NA	1	AA	X	564
MSE01-040721	03A	4/07/2021	1452	NA	NA	1	AA	X	422
MSE02-040721	04A	4/07/2021	1450	NA	NA	1	AA	X	432

Sampled By: K. Tom

Signature: [signature]

Special Instructions: None

Send Results to: [redacted]

Turnaround Time: Standard

Sampler: K. Tom

Courier/Airbill No.: FedEx/ 7733 9038 4046

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
K. Tom / Gilbane FedEx	4/8/21	1300	Fed Ex	4/8/21	1300
				4-12-21	1000

23.1°C 10800320

21-Apr-2021

Brett Womack
Gilbane Company
2730 Shadelands Drive
Walnut Creek, CA 94598

Re: **HPNS Parcel E; J310000400-016** Work Order: **21040856**

Dear Brett,

ALS Environmental received 12 samples on 14-Apr-2021 11:45 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 14.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Rob Nieman

Electronically approved by: Rob Nieman

Rob Nieman
Project Manager

Report of Laboratory Analysis

ALS Environmental

Date: 21-Apr-21

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
Work Order: **21040856**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
21040856-01	Q0424268-MSE01	Air		4/9/2021 08:13	4/14/2021 11:45	☐
21040856-02	9894267-MSE01	Air		4/9/2021 08:13	4/14/2021 11:45	☐
21040856-03	Q0424269-MSE02	Air		4/9/2021 08:03	4/14/2021 11:45	☐
21040856-04	9894268-MSE02	Air		4/9/2021 08:03	4/14/2021 11:45	☐
21040856-05	Q0424270-MSE01	Air		4/9/2021 13:18	4/14/2021 11:45	☐
21040856-06	9894269-MSE01	Air		4/9/2021 13:18	4/14/2021 11:45	☐
21040856-07	Q0424271-MSE02	Air		4/9/2021 13:30	4/14/2021 11:45	☐
21040856-08	9894270-MSE02	Air		4/9/2021 13:30	4/14/2021 11:45	☐
21040856-09	Q0424272-MSE01	Air		4/13/2021 07:55	4/14/2021 11:45	☐
21040856-10	9894271-MSE01	Air		4/13/2021 07:55	4/14/2021 11:45	☐
21040856-11	Q0424273-MSE02	Air		4/13/2021 07:41	4/14/2021 11:45	☐
21040856-12	9894272-MSE02	Air		4/13/2021 07:41	4/14/2021 11:45	☐

ALS Environmental

Date: 21-Apr-21

Client:	Gilbane Company
Project:	HPNS Parcel E; J310000400-016
Work Order:	21040856

Case Narrative

The sample condition upon receipt was acceptable except where noted.

Results relate only to the items tested and are not blank corrected unless indicated.

ALS is an EPA recognized NLLAP laboratory for lead paint, soil, and dust wipe analyses under its AIHA-LAP accreditation.

All sampling information was provided by the client.

ALS Environmental

Date: *21-Apr-21*

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016

Work Order: 21040856

Analytical Results

Lab ID: 21040856-01A
Collection Date: 4/9/2021 8:13:00 AM
Client Sample ID: Q0424268-MSE01
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1640700**	Analyst: **SRL**
Date Analyzed: 4/21/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**47**	**1.0**	**0.029**	

Lab ID: 21040856-02A
Collection Date: 4/9/2021 8:13:00 AM
Client Sample ID: 9894267-MSE01
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1640600**	Analyst: **SRL**
Date Analyzed: 4/21/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**38**	**1.0**	**0.023**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1640600**	Analyst: **AZ**
Date Analyzed: 4/21/2021 14:46		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**140**	**25**	**0.000088**	
Lead	ND	25	<0.000015	
Manganese	ND	25	<0.000015	

Lab ID: 21040856-03A
Collection Date: 4/9/2021 8:03:00 AM
Client Sample ID: Q0424269-MSE02
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1672960**	Analyst: **SRL**
Date Analyzed: 4/21/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**42**	**1.0**	**0.025**	

Note:

Client: Gilbane Company **Work Order:** 21040856
Project: HPNS Parcel E; J310000400-016

Analytical Results

Lab ID: 21040856-04A **Collection Date:** 4/9/2021 8:03:00 AM
Client Sample ID: 9894268-MSE02 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1701410**	Analyst: **SRL**
Date Analyzed: 4/21/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**37**	**1.0**	**0.022**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1701410**	Analyst: **AZ**
Date Analyzed: 4/21/2021 14:58		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**130**	**25**	**0.000074**	
Lead	ND	25	<0.000015	
Manganese	ND	25	<0.000015	

Lab ID: 21040856-05A **Collection Date:** 4/9/2021 1:18:00 PM
Client Sample ID: Q0424270-MSE01 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **340990**	Analyst: **SRL**
Date Analyzed: 4/21/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**20**	**1.0**	**0.060**	

Lab ID: 21040856-06A **Collection Date:** 4/9/2021 1:18:00 PM
Client Sample ID: 9894269-MSE01 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **343780**	Analyst: **SRL**
Date Analyzed: 4/21/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**1.4**	**1.0**	**0.0041**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **343780**	Analyst: **AZ**
Date Analyzed: 4/21/2021 15:02		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	ND	25	<0.000073	
Lead	ND	25	<0.000073	
Manganese	ND	25	<0.000073	

Note:

Client: Gilbane Company **Work Order:** 21040856
Project: HPNS Parcel E; J310000400-016

Analytical Results

Lab ID: 21040856-07A **Collection Date:** 4/9/2021 1:30:00 PM
Client Sample ID: Q0424271-MSE02 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **368450**	Analyst: **SRL**
Date Analyzed: 4/21/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**9.0**	**1.0**	**0.024**	

Lab ID: 21040856-08A **Collection Date:** 4/9/2021 1:30:00 PM
Client Sample ID: 9894270-MSE02 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **380480**	Analyst: **SRL**
Date Analyzed: 4/21/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	ND	1.0	<0.0026	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **380480**	Analyst: **AZ**
Date Analyzed: 4/21/2021 15:05		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	ND	25	<0.000066	
Lead	ND	25	<0.000066	
Manganese	ND	25	<0.000066	

Lab ID: 21040856-09A **Collection Date:** 4/13/2021 7:55:00 AM
Client Sample ID: Q0424272-MSE01 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1679520**	Analyst: **SRL**
Date Analyzed: 4/21/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**73**	**1.0**	**0.044**	

Note:

Client: Gilbane Company **Work Order:** 21040856
Project: HPNS Parcel E; J310000400-016

Analytical Results

Lab ID: 21040856-10A **Collection Date:** 4/13/2021 7:55:00 AM
Client Sample ID: 9894271-MSE01 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1680540**	Analyst: **SRL**
Date Analyzed: 4/21/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Total suspended particulate	**86**	**1.0**	**0.051**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1680540**	Analyst: **AZ**
Date Analyzed: 4/21/2021 15:17		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**290**	**25**	**0.00017**	
Lead	ND	25	<0.000015	
Manganese	**33**	**25**	**0.000019**	

Lab ID: 21040856-11A **Collection Date:** 4/13/2021 7:41:00 AM
Client Sample ID: Q0424273-MSE02 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1624130**	Analyst: **SRL**
Date Analyzed: 4/21/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**93**	**1.0**	**0.057**	

Lab ID: 21040856-12A **Collection Date:** 4/13/2021 7:41:00 AM
Client Sample ID: 9894272-MSE02 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1557440**	Analyst: **SRL**
Date Analyzed: 4/21/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Total suspended particulate	**73**	**1.0**	**0.047**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1557440**	Analyst: **AZ**
Date Analyzed: 4/21/2021 15:21		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**110**	**25**	**0.000074**	
Lead	ND	25	<0.000016	
Manganese	**26**	**25**	**0.000017**	

Note:

QC BATCH REPORT

Batch ID: **R190988** Instrument ID: **BAL2** Method: **TSP**

DUP Sample ID: **21040856-02A DUP** Units: **mg/sample** Analysis Date: **4/21/2021**

Client ID: **9894267-MSE01** Run ID: **BAL2_210421A** SeqNo: **2446223** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total suspended particulate	37.07	1.0	0	0	0		37.99	2.45	20	

The following samples were analyzed in this batch:

21040856-02A	21040856-04A	21040856-06A
21040856-08A	21040856-10A	21040856-12A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Gilbane Company
Work Order: 21040856
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **R190989** Instrument ID: **BAL2** Method: **PM10**

DUP Sample ID: **21040856-11A DUP** Units: **mg/sample** Analysis Date: **4/21/2021**

Client ID: **Q0424273-MSE02** Run ID: **BAL2_210421B** SeqNo: **2446235** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Particulate as PM10	92.77	1.0	0	0	0		92.76	0.0108	20	

The following samples were analyzed in this batch:

21040856-01A	21040856-03A	21040856-05A
21040856-07A	21040856-09A	21040856-11A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Gilbane Company
Work Order: 21040856
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **74013** Instrument ID: **ICP3** Method: **E12**

MBLK Sample ID: **MBLK-74013-74013** Units: **µg/sample** Analysis Date: **4/21/2021 02:35 PM**
Client ID: Run ID: **ICP3_210421B** SeqNo: **2446630** Prep Date: **4/21/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	ND	100								
Lead	ND	25								
Manganese	ND	100								

LCS Sample ID: **LCS-74013-74013** Units: **µg/sample** Analysis Date: **4/21/2021 02:39 PM**
Client ID: Run ID: **ICP3_210421B** SeqNo: **2446631** Prep Date: **4/21/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	361.5	100	450	0	80.3	75-125	0			
Lead	395.3	25	450	0	87.8	75-125	0			
Manganese	365.6	100	450	0	81.2	75-125	0			

LCSD Sample ID: **LCSD-74013-74013** Units: **µg/sample** Analysis Date: **4/21/2021 02:43 PM**
Client ID: Run ID: **ICP3_210421B** SeqNo: **2446632** Prep Date: **4/21/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	380.7	100	450	0	84.6	75-125	361.5	5.17	20	
Lead	402.8	25	450	0	89.5	75-125	395.3	1.86	20	
Manganese	382.8	100	450	0	85.1	75-125	365.6	4.61	20	

MS Sample ID: **21040856-02A MS** Units: **µg/sample** Analysis Date: **4/21/2021 02:50 PM**
Client ID: **9894267-MSE01** Run ID: **ICP3_210421B** SeqNo: **2446634** Prep Date: **4/21/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	516.2	100	450	143.8	82.7	75-125	0			
Lead	406.8	25	450	11.72	87.8	75-125	0			
Manganese	398.1	100	450	15.18	85.1	75-125	0			

MSD Sample ID: **21040856-02A MSD** Units: **µg/sample** Analysis Date: **4/21/2021 02:54 PM**
Client ID: **9894267-MSE01** Run ID: **ICP3_210421B** SeqNo: **2446635** Prep Date: **4/21/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	496.4	100	450	143.8	78.3	75-125	516.2	3.91	20	
Lead	397.5	25	450	11.72	85.7	75-125	406.8	2.29	20	
Manganese	368.9	100	450	15.18	78.6	75-125	398.1	7.6	20	

The following samples were analyzed in this batch:

21040856-02A	21040856-04A	21040856-06A
21040856-08A	21040856-10A	21040856-12A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Environmental

Date: 21-Apr-21

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
WorkOrder: **21040856**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
E	EPA Method
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SDL	Sample Detection Limit
SW	SW-846 Method

Units Reported	Description
µg/sample	
mg/sample	

ALS Environmental

Sample Receipt Checklist

Client Name: **GILBANE-WALNUTCREEK** Date/Time Received: **14-Apr-21 11:45**

Work Order: **21040856** Received by: **SNH**

Checklist completed by: Stephanie Harrington (eSignature) 14-Apr-21 (Date) Reviewed by: Rob Nieman (eSignature) 16-Apr-21 (Date)

Matrices:

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☐	No ☑	
Temperature(s)/Thermometer(s):			
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

CHAIN-OF-CUSTODY RECORD

Gilbane Federal
[redacted]
1655 Grant Street, Suite 1200, Concord, CA 94520
[redacted]

21040856

COC # KT041321

Gilbane

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	Laboratory: ALS Laboratory Group, Cincinnati, OH	Event: Parcel E Phase 2 Air Monitoring
Project Number: J310000400	POC: [redacted]	
WBS Code: J310000400-016	Ship to: 4388 Glendale Milford Rd., Blue Ash, OH 45242	

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	E12 - Air Pb Mn Cu	N0500 - Air TSP							Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
						1	1	1												
1	Q0424268-MSE01	A	04/09/2021	0813	KT	X									AMSE1	N1	0.00	0.00	1	VOLUME: 1640.70
2	9894267-MSE01	A	04/09/2021	0813	KT		X	X							AMSE1	N1	0.00	0.00	1	VOLUME: 1640.60
3	Q0424269-MSE02	A	04/09/2021	0803	KT	X									AMSE2	N1	0.00	0.00	1	VOLUME: 1672.96
4	9894268-MSE02	A	04/09/2021	0803	KT		X	X							AMSE2	N1	0.00	0.00	1	VOLUME: 1701.41
5	Q0424270-MSE01	A	04/09/2021	1318	KT	X									AMSE1	N1	0.00	0.00	1	VOLUME: 340.99
6	9894269-MSE01	A	04/09/2021	1318	KT		X	X							AMSE1	N1	0.00	0.00	1	VOLUME: 343.78
7	Q0424271-MSE02	A	04/09/2021	1330	KT	X									AMSE2	N1	0.00	0.00	1	VOLUME: 368.45
8	9894270-MSE02	A	04/09/2021	1330	KT		X	X							AMSE2	N1	0.00	0.00	1	VOLUME: 380.48
9	Q0424272-MSE01	A	04/13/2021	0755	KT	X									AMSE1	N1	0.00	0.00	1	VOLUME: 1679.52
10	9894271-MSE01	A	04/13/2021	0755	KT		X	X							AMSE1	N1	0.00	0.00	1	VOLUME: 1680.54
11	Q0424273-MSE02	A	04/13/2021	0741	KT	X									AMSE2	N1	0.00	0.00	1	VOLUME: 1624.13

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[signature]	4/13/21	1400	FedEx	4/13/21	1400
			[signature] 4-14-21		1145

Shipping Date / Carrier / Airbill Number

Shipping Date: 4/13/2021 / FedEx 7734 2953 1453

Fedex - Custody Seal

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

CHAIN-OF-CUSTODY RECORD

Gilbane Federal
[redacted]
1655 Grant Street, Suite 1200, Concord, CA 94520
[redacted]

21040856

COC # KT041321

Gilbane

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	Laboratory: ALS Laboratory Group, Cincinnati, OH	Event: Parcel E Phase 2 Air Monitoring
Project Number: J310000400	POC: [redacted]	
WBS Code: J310000400-016	Ship to: 4388 Glendale Milford Rd., Blue Ash, OH 45242	

Comments:

Equipment:

Code	Matrix
A	Air

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

	Sample ID	Matrix	Date	Time	Samp Init.	CAAIR - Air PM10	E12 - Air Pb Mn Cu	N0500 - Air TSP	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
	Event: Parcel E Phase 2 Air Monitoring					1	1	1						
12	9894272-MSE02	A	04/13/2021	0741	KT		X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1557.44
13														
14														
15														
16														
17														
18														
19														
20														

Turnaround Time: 5 days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[signature]	4/13/21	1400	FedEx	4/13/21	1400
			[signature]	4-14-21	1145

Shipping Date / Carrier / Airbill Number

Shipping Date: 4/13/2021 / FedEx 7734 2953 1453

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

26-Apr-2021

Brett Womack
Gilbane Company
2730 Shadelands Drive
Walnut Creek, CA 94598

Re: **HPNS Parcel E; J310000400-016** Work Order: **21041053**

Dear Brett,

ALS Environmental received 8 samples on 16-Apr-2021 10:20 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 12.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Rob Nieman

Electronically approved by: Rob Nieman

Rob Nieman
Project Manager

Report of Laboratory Analysis

ALS Environmental

Date: 26-Apr-21

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
Work Order: **21041053**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
21041053-01	Q0424274-MSE01	Air		4/14/2021 08:15	4/15/2021 13:00	☐
21041053-02	9894273-MSE01	Air		4/14/2021 08:15	4/15/2021 13:00	☐
21041053-03	Q0424275-MSE02	Air		4/14/2021 07:53	4/15/2021 13:00	☐
21041053-04	9894274-MSE02	Air		4/14/2021 07:53	4/15/2021 13:00	☐
21041053-05	Q0424276-MSE01	Air		4/15/2021 07:55	4/15/2021 13:00	☐
21041053-06	9894276-MSE01	Air		4/15/2021 07:55	4/15/2021 13:00	☐
21041053-07	Q0424277-MSE02	Air		4/15/2021 07:41	4/15/2021 13:00	☐
21041053-08	9894275-MSE02	Air		4/15/2021 07:41	4/15/2021 13:00	☐

ALS Environmental

Date: 26-Apr-21

Client:	Gilbane Company
Project:	HPNS Parcel E; J310000400-016
Work Order:	21041053

Case Narrative

The sample condition upon receipt was acceptable except where noted.

Results relate only to the items tested and are not blank corrected unless indicated.

ALS is an EPA recognized NLLAP laboratory for lead paint, soil, and dust wipe analyses under its AIHA-LAP accreditation.

All sampling information was provided by the client.

ALS Environmental

Date: *26-Apr-21*

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016

Work Order: 21041053

Analytical Results

Lab ID: 21041053-01A
Client Sample ID: Q0424274-MSE01

Collection Date: 4/14/2021 8:15:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1774850**	Analyst: **SRL**
Date Analyzed: 4/23/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**80**	**1.0**	**0.045**	

Lab ID: 21041053-02A
Client Sample ID: 9894273-MSE01

Collection Date: 4/14/2021 8:15:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1778030**	Analyst: **SRL**
Date Analyzed: 4/23/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Total suspended particulate	**96**	**1.0**	**0.054**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1778030**	Analyst: **SRL**
Date Analyzed: 4/26/2021 13:38		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**300**	**25**	**0.00017**	
Lead	ND	25	<0.000014	
Manganese	**28**	**25**	**0.000016**	

Lab ID: 21041053-03A
Client Sample ID: Q0424275-MSE02

Collection Date: 4/14/2021 7:53:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1760310**	Analyst: **SRL**
Date Analyzed: 4/23/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**120**	**1.0**	**0.069**	

Note:

Client: Gilbane Company **Work Order:** 21041053
Project: HPNS Parcel E; J310000400-016

Analytical Results

Lab ID: 21041053-04A **Collection Date:** 4/14/2021 7:53:00 AM
Client Sample ID: 9894274-MSE02 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1688020**	Analyst: **SRL**
Date Analyzed: 4/23/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Total suspended particulate	**94**	**1.0**	**0.056**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1688020**	Analyst: **SRL**
Date Analyzed: 4/26/2021 13:58		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**270**	**25**	**0.00016**	
Lead	ND	25	<0.000015	
Manganese	**36**	**25**	**0.000021**	

Lab ID: 21041053-05A **Collection Date:** 4/15/2021 7:55:00 AM
Client Sample ID: Q0424276-MSE01 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1731560**	Analyst: **SRL**
Date Analyzed: 4/23/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**74**	**1.0**	**0.043**	

Lab ID: 21041053-06A **Collection Date:** 4/15/2021 7:55:00 AM
Client Sample ID: 9894276-MSE01 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1729110**	Analyst: **SRL**
Date Analyzed: 4/23/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**66**	**1.0**	**0.038**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1729110**	Analyst: **SRL**
Date Analyzed: 4/26/2021 14:02		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**240**	**25**	**0.00014**	
Lead	ND	25	<0.000014	
Manganese	ND	25	<0.000014	

Note:

Client: Gilbane Company **Work Order:** 21041053
Project: HPNS Parcel E; J310000400-016

Analytical Results

Lab ID: 21041053-07A **Collection Date:** 4/15/2021 7:41:00 AM
Client Sample ID: Q0424277-MSE02 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1723680**	Analyst: **SRL**
Date Analyzed: 4/23/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**74**	**1.0**	**0.043**	

Lab ID: 21041053-08A **Collection Date:** 4/15/2021 7:41:00 AM
Client Sample ID: 9894275-MSE02 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1662290**	Analyst: **SRL**
Date Analyzed: 4/23/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Total suspended particulate	**89**	**1.0**	**0.053**	
METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1662290**	Analyst: **SRL**
Date Analyzed: 4/26/2021 14:05		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**270**	**25**	**0.00016**	
Lead	ND	25	<0.000015	
Manganese	**47**	**25**	**0.000028**	

Note:

QC BATCH REPORT

Batch ID: **R191090** Instrument ID: **BAL2** Method: **TSP**

DUP Sample ID: **21041053-02A DUP** Units: **mg/sample** Analysis Date: **4/23/2021**

Client ID: **9894273-MSE01** Run ID: **BAL2_210423A** SeqNo: **2448497** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total suspended particulate	98.62	1.0	0	0	0		96.32	2.36	20	

The following samples were analyzed in this batch:

21041053-02A 21041053-04A 21041053-06A
21041053-08A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Gilbane Company
Work Order: 21041053
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **R191091** Instrument ID: **BAL2** Method: **PM10**

DUP Sample ID: **21041278-07A DUP** Units: **mg/sample** Analysis Date: **4/23/2021**
Client ID: Run ID: **BAL2_210423B** SeqNo: **2448513** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Particulate as PM10	43.42	1.0	0	0	0		43.19	0.531	20	

The following samples were analyzed in this batch:

21041053-01A 21041053-03A 21041053-05A
21041053-07A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Gilbane Company
Work Order: 21041053
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **74084** Instrument ID: **ICP3** Method: **E12**

MBLK Sample ID: **MBLK-74084-74084** Units: **µg/sample** Analysis Date: **4/26/2021 01:27 PM**
Client ID: Run ID: **ICP3_210426A** SeqNo: **2449794** Prep Date: **4/23/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	ND	100								
Lead	ND	25								
Manganese	ND	100								

LCS Sample ID: **LCS-74084-74084** Units: **µg/sample** Analysis Date: **4/26/2021 01:31 PM**
Client ID: Run ID: **ICP3_210426A** SeqNo: **2449795** Prep Date: **4/23/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	392.1	100	450	0	87.1	75-125	0			
Lead	410.3	25	450	0	91.2	75-125	0			
Manganese	393.1	100	450	0	87.4	75-125	0			

LCSD Sample ID: **LCSD-74084-74084** Units: **µg/sample** Analysis Date: **4/26/2021 01:35 PM**
Client ID: Run ID: **ICP3_210426A** SeqNo: **2449796** Prep Date: **4/23/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	418.1	100	450	0	92.9	75-125	392.1	6.42	20	
Lead	440.4	25	450	0	97.9	75-125	410.3	7.08	20	
Manganese	416.5	100	450	0	92.6	75-125	393.1	5.79	20	

MS Sample ID: **21041053-02A MS** Units: **µg/sample** Analysis Date: **4/26/2021 01:50 PM**
Client ID: **9894273-MSE01** Run ID: **ICP3_210426A** SeqNo: **2449798** Prep Date: **4/23/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	699.3	100	450	302.2	88.2	75-125	0			
Lead	432	25	450	17.29	92.2	75-125	0			
Manganese	422.8	100	450	28.34	87.7	75-125	0			

MSD Sample ID: **21041053-02A MSD** Units: **µg/sample** Analysis Date: **4/26/2021 01:54 PM**
Client ID: **9894273-MSE01** Run ID: **ICP3_210426A** SeqNo: **2449799** Prep Date: **4/23/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	707.8	100	450	302.2	90.1	75-125	699.3	1.22	20	
Lead	446.5	25	450	17.29	95.4	75-125	432	3.3	20	
Manganese	433.8	100	450	28.34	90.1	75-125	422.8	2.56	20	

The following samples were analyzed in this batch:

21041053-02A 21041053-04A 21041053-06A
21041053-08A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Environmental

Date: 26-Apr-21

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
WorkOrder: **21041053**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
E	EPA Method
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SDL	Sample Detection Limit
SW	SW-846 Method

Units Reported	Description
µg/sample	
mg/sample	

ALS Environmental

Sample Receipt Checklist

Client Name: **GILBANE-WALNUTCREEK** Date/Time Received: **16-Apr-21 10:20**

Work Order: **21041053** Received by: **SNH**

Checklist completed by: Stephanie Harrington (eSignature) 17-Apr-21 (Date) Reviewed by: Rob Nieman (eSignature) 20-Apr-21 (Date)

Matrices:

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☐	No ☑	
Temperature(s)/Thermometer(s):			
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

CHAIN-OF-CUSTODY RECORD

Gilbane Federal
[redacted]
1655 Grant Street, Suite 1200, Concord, CA 94520
[redacted]

21041053

COC # KT041521

Gilbane

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	Laboratory: ALS Laboratory Group, Cincinnati, OH	Event: Parcel E Phase 2 Air Monitoring
Project Number: J310000400	POC: [redacted]	
WBS Code: J310000400-016	Ship to: 4388 Glendale Milford Rd., Blue Ash, OH 45242	

Comments:

Equipment:

Code	Matrix
A	Air

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

	Sample ID	Matrix	Date	Time	Samp Init.	CAAIR - Air PM10	E12 - Air Pb Mn Cu	N0500 - Air TSP	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
	Event: Parcel E Phase 2 Air Monitoring					1	1	1						
1	Q0424274-MSE01	A	04/14/2021	0815	KT	X			AMSE1	N1	0.00	0.00	1	VOLUME: 1774.85
2	9894273-MSE01	A	04/14/2021	0815	KT		X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1778.03
3	Q0424275-MSE02	A	04/14/2021	0753	KT	X			AMSE2	N1	0.00	0.00	1	VOLUME: 1760.31
4	9894274-MSE02	A	04/14/2021	0753	KT		X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1688.02
5	Q0424276-MSE01	A	04/15/2021	0755	KT	X			AMSE1	N1	0.00	0.00	1	VOLUME: 1731.56
6	9894276-MSE01	A	04/15/2021	0755	KT		X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1729.11
7	Q0424277-MSE02	A	04/15/2021	0741	KT	X			AMSE2	N1	0.00	0.00	1	VOLUME: 1723.68
8	9894275-MSE02	A	04/15/2021	0741	KT		X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1662.29
9														
10														

Turnaround Time: 5 days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[signature]	4/15/21	1300	FedEx	4/15/21	1300

Shipping Date / Carrier / Airbill Number

Shipping Date: 4/15/2021 / FedEx 7734 5604 3321

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

4-16-21
1020

Gilbane.Navy_COC_Field
April 15, 2021

fedex - Custody Seal

Laboratory Analysis Report

Job ID : 21041069

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:	Brett Womack	P.O.#. :	J310000400-0015
	Client Address:	1655 Grant Street, Suite 1200	Date Received :	04/14/2021 17:15
	City, State, Zip:	Concord, California, 94520	Sample Collected By :	Kimberly Tom

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-040821	4/8/2021 15:42	Cassette	21041069.01
MSE02-040821	4/8/2021 15:41	Cassette	21041069.02
MSE01-040921	4/9/2021 15:20	Cassette	21041069.03
MSE02-040921	4/9/2021 15:30	Cassette	21041069.04
MSE01-041221	4/12/2021 15:30	Cassette	21041069.05
MSE02-041221	4/12/2021 15:20	Cassette	21041069.06

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Analyst:

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

Date 4/21/2021

Job ID : 21041069
Analytical Method: NIOSH 7400-I2-Aug1994

Client: Gilbane Project: HPNS Parcel E Phase II J310000400 Attn: Brett Womack

A&B Sample ID	Client Sample ID	Collected Date	Area/Person	Flow Rate L/m	Time On	Time Off	Total Time (min)	Volume (Liters)	Total Fields	Total Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
21041069.01	MSE01-040821	04/08/2021	Area	2			482	964	100	9.5	12.102	0.005		04/20/21	Habedi
21041069.02	MSE02-040821	04/08/2021	Area	2			461	922	100	10.5	13.376	0.006		04/20/21	Habedi
21041069.03	MSE01-040921	04/09/2021	Area	2			423	846	100	7	8.917	0.004		04/20/21	Habedi
21041069.04	MSE02-040921	04/09/2021	Area	2			443	886	100	9	11.465	0.005		04/20/21	Habedi
21041069.05	MSE01-041221	04/12/2021	Area	2			402	804	100	12.5	15.924	0.008		04/20/21	Habedi
21041069.06	MSE02-041221	04/12/2021	Area	2			358	716	100	7.5	9.554	0.005		04/20/21	Habedi

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 : **21041069**	Date Received : **04/14/2021**	Time Received : **5:15PM**
Client Name : **Gilbane**		
Temperature : **21.8°C**	Sample pH : **N/A**	
Thermometer ID : **102002320**	pH Paper ID : **N/A**	
Perservative :		

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

Comments : Include actions taken to resolve discrepancies/problem:

Received by : JMontemayor

Check in by/date : JMontemayor / 04/14/2021

Event ID: Air Monitoring

COC# KT041321ASB

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: 4/13/2021

Page: 1 of 1

* Job ID:21041069

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)
MSE01-040821 01A	4/08/2021	1542	NA	NA	1	AA	X		482
MSE02-040821 02A	4/08/2021	1541	NA	NA	1	AA	X		461
MSE01-040921 03A	4/09/2021	1520	NA	NA	1	AA	X		423
MSE02-040921 04A	4/09/2021	1530	NA	NA	1	AA	X		443
MSE01-041221 05A	4/12/2021	1530	NA	NA	1	AA	X		402
MSE02-041221 06A	4/12/2021	1520	NA	NA	1	AA	X		358

Sampled By: Kimberly Tom

Signature:

Special Instructions: None

21.8° 10202320

Send Results to: [redacted]

Turnaround Time: Standard

Sampler: Kimberly Tom

Courier/Airbill No.: FedEx/ 7733 9038 4046

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
Kimberly / Gilbane	4/13/21	1400	FedEx	4/13/21	1400
~~Fedex~~ FedEx			Amanda Oballe	4.14.21	1715

28-Apr-2021

Brett Womack
Gilbane Company
2730 Shadelands Drive
Walnut Creek, CA 94598

Re: **HPNS Parcel E; J310000400-016** Work Order: **21041278**

Dear Brett,

ALS Environmental received 8 samples on 21-Apr-2021 02:00 PM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 12.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Rob Nieman

Electronically approved by: Rob Nieman

Rob Nieman
Project Manager

Report of Laboratory Analysis

ALS Environmental

Date: 28-Apr-21

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
Work Order: **21041278**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
21041278-01	Q0424278-MSE01	Air		4/15/2021 15:22	4/20/2021 14:00	☐
21041278-02	9894277-MSE01	Air		4/15/2021 15:22	4/20/2021 14:00	☐
21041278-03	Q0424279-MSE02	Air		4/15/2021 15:30	4/20/2021 14:00	☐
21041278-04	9894278-MSE02	Air		4/15/2021 15:30	4/20/2021 14:00	☐
21041278-05	Q0424280-MSE01	Air		4/20/2021 07:56	4/20/2021 14:00	☐
21041278-06	9894279-MSE01	Air		4/20/2021 07:56	4/20/2021 14:00	☐
21041278-07	Q0424281-MSE02	Air		4/20/2021 07:46	4/20/2021 14:00	☐
21041278-08	9894280-MSE02	Air		4/20/2021 07:46	4/20/2021 14:00	☐

ALS Environmental

Date: 28-Apr-21

Client:	Gilbane Company
Project:	HPNS Parcel E; J310000400-016
Work Order:	21041278

Case Narrative

The sample condition upon receipt was acceptable except where noted.

Results relate only to the items tested and are not blank corrected unless indicated.

ALS is an EPA recognized NLLAP laboratory for lead paint, soil, and dust wipe analyses under its AIHA-LAP accreditation.

All sampling information was provided by the client.

ALS Environmental

Date: *28-Apr-21*

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016

Work Order: 21041278

Analytical Results

Lab ID: 21041278-01A
Client Sample ID: Q0424278-MSE01

Collection Date: 4/15/2021 3:22:00 PM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **535050**	Analyst: **SRL**
Date Analyzed: 4/23/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**25**	**1.0**	**0.047**	

Lab ID: 21041278-02A
Client Sample ID: 9894277-MSE01

Collection Date: 4/15/2021 3:22:00 PM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **534170**	Analyst: **SRL**
Date Analyzed: 4/23/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**24**	**1.0**	**0.045**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **534170**	Analyst: **SRL**
Date Analyzed: 4/26/2021 14:09		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**57**	**25**	**0.00011**	
Lead	ND	25	<0.000047	
Manganese	ND	25	<0.000047	

Lab ID: 21041278-03A
Client Sample ID: Q0424279-MSE02

Collection Date: 4/15/2021 3:30:00 PM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **558420**	Analyst: **SRL**
Date Analyzed: 4/23/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**26**	**1.0**	**0.047**	

Note:

Client: Gilbane Company **Work Order:** 21041278
Project: HPNS Parcel E; J310000400-016

Analytical Results

Lab ID: 21041278-04A **Collection Date:** 4/15/2021 3:30:00 PM
Client Sample ID: 9894278-MSE02 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **541730**	Analyst: **SRL**
Date Analyzed: 4/23/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**18**	**1.0**	**0.034**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **541730**	Analyst: **SRL**
Date Analyzed: 4/26/2021 14:13		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**91**	**25**	**0.00017**	
Lead	ND	25	<0.000046	
Manganese	ND	25	<0.000046	

Lab ID: 21041278-05A **Collection Date:** 4/20/2021 7:56:00 AM
Client Sample ID: Q0424280-MSE01 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1713370**	Analyst: **SRL**
Date Analyzed: 4/23/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**36**	**1.0**	**0.021**	

Lab ID: 21041278-06A **Collection Date:** 4/20/2021 7:56:00 AM
Client Sample ID: 9894279-MSE01 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1735250**	Analyst: **SRL**
Date Analyzed: 4/23/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**64**	**1.0**	**0.037**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1735250**	Analyst: **SRL**
Date Analyzed: 4/26/2021 14:17		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**98**	**25**	**0.000057**	
Lead	ND	25	<0.000014	
Manganese	ND	25	<0.000014	

Note:

Client: Gilbane Company **Work Order:** 21041278
Project: HPNS Parcel E; J310000400-016

Analytical Results

Lab ID: 21041278-07A **Collection Date:** 4/20/2021 7:46:00 AM
Client Sample ID: Q0424281-MSE02 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1737350**	Analyst: **SRL**
Date Analyzed: 4/23/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**43**	**1.0**	**0.025**	

Lab ID: 21041278-08A **Collection Date:** 4/20/2021 7:46:00 AM
Client Sample ID: 9894280-MSE02 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1671030**	Analyst: **SRL**
Date Analyzed: 4/23/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**54**	**1.0**	**0.032**	
METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1671030**	Analyst: **SRL**
Date Analyzed: 4/26/2021 14:21		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**34**	**25**	**0.000020**	
Lead	ND	25	<0.000015	
Manganese	ND	25	<0.000015	

Note:

ALS Environmental

Date: 28-Apr-21

Client: Gilbane Company

QC BATCH REPORT

Work Order: 21041278

Project: HPNS Parcel E; J310000400-016

Batch ID: **R191090** Instrument ID: **BAL2** Method: **TSP**

DUP Sample ID: **21041053-02A DUP** Units: **mg/sample** Analysis Date: **4/23/2021**

Client ID: Run ID: **BAL2_210423A** SeqNo: **2448497** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total suspended particulate	98.62	1.0	0	0	0		96.32	2.36	20	

The following samples were analyzed in this batch:

21041278-02A 21041278-04A 21041278-06A
21041278-08A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Gilbane Company
Work Order: 21041278
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **R191091** Instrument ID: **BAL2** Method: **PM10**

DUP	Sample ID: **21041278-07A DUP**				Units: **mg/sample**		Analysis Date: **4/23/2021**			
Client ID: **Q0424281-MSE02**		Run ID: **BAL2_210423B**			SeqNo: **2448513**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Particulate as PM10	43.42	1.0	0	0	0		43.19	0.531	20	

The following samples were analyzed in this batch:

21041278-01A 21041278-03A 21041278-05A
21041278-07A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Gilbane Company
Work Order: 21041278
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **74084** Instrument ID: **ICP3** Method: **E12**

MBLK Sample ID: **MBLK-74084-74084** Units: **µg/sample** Analysis Date: **4/26/2021 01:27 PM**
Client ID: Run ID: **ICP3_210426A** SeqNo: **2449794** Prep Date: **4/23/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	ND	100								
Lead	ND	25								
Manganese	ND	100								

LCS Sample ID: **LCS-74084-74084** Units: **µg/sample** Analysis Date: **4/26/2021 01:31 PM**
Client ID: Run ID: **ICP3_210426A** SeqNo: **2449795** Prep Date: **4/23/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	392.1	100	450	0	87.1	75-125	0			
Lead	410.3	25	450	0	91.2	75-125	0			
Manganese	393.1	100	450	0	87.4	75-125	0			

LCSD Sample ID: **LCSD-74084-74084** Units: **µg/sample** Analysis Date: **4/26/2021 01:35 PM**
Client ID: Run ID: **ICP3_210426A** SeqNo: **2449796** Prep Date: **4/23/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	418.1	100	450	0	92.9	75-125	392.1	6.42	20	
Lead	440.4	25	450	0	97.9	75-125	410.3	7.08	20	
Manganese	416.5	100	450	0	92.6	75-125	393.1	5.79	20	

MS Sample ID: **21041053-02A MS** Units: **µg/sample** Analysis Date: **4/26/2021 01:50 PM**
Client ID: Run ID: **ICP3_210426A** SeqNo: **2449798** Prep Date: **4/23/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	699.3	100	450	302.2	88.2	75-125	0			
Lead	432	25	450	17.29	92.2	75-125	0			
Manganese	422.8	100	450	28.34	87.7	75-125	0			

MSD Sample ID: **21041053-02A MSD** Units: **µg/sample** Analysis Date: **4/26/2021 01:54 PM**
Client ID: Run ID: **ICP3_210426A** SeqNo: **2449799** Prep Date: **4/23/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	707.8	100	450	302.2	90.1	75-125	699.3	1.22	20	
Lead	446.5	25	450	17.29	95.4	75-125	432	3.3	20	
Manganese	433.8	100	450	28.34	90.1	75-125	422.8	2.56	20	

The following samples were analyzed in this batch:

21041278-02A 21041278-04A 21041278-06A
21041278-08A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Environmental

Date: 28-Apr-21

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
WorkOrder: **21041278**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
E	EPA Method
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SDL	Sample Detection Limit
SW	SW-846 Method

Units Reported	Description
µg/sample	
mg/sample	

ALS Environmental

Sample Receipt Checklist

Client Name: **GILBANE-WALNUTCREEK** Date/Time Received: **21-Apr-21 14:00**

Work Order: **21041278** Received by: **SNH**

Checklist completed by: Stephanie Harrington 22-Apr-21 Reviewed by: Rob Nieman 23-Apr-21

eSignature / Date / eSignature / Date

Matrices:

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☐	No ☑	
Temperature(s)/Thermometer(s):			
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

CHAIN-OF-CUSTODY RECORD

Gilbane Federal
[redacted]
1655 Grant Street, Suite 1200, Concord, CA 94520
[redacted]

21041278

COC # KT042021

Gilbane

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	Laboratory: ALS Laboratory Group, Cincinnati, OH	Event: Parcel E Phase 2 Air Monitoring
Project Number: J310000400	POC: [redacted]	
WBS Code: J310000400-016	Ship to: 4388 Glendale Milford Rd., Blue Ash, OH 45242	

Comments:

Equipment:

Code	Matrix
A	Air

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

						Analytical Test Method															
						CAAIR - Air PM10	E12 - Air Pb Mn Cu	N0500 - Air TSP													
	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	Q0424278-MSE01	A	04/15/2021	1522	KT	X										AMSE1	N2	0.00	0.00	1	VOLUME: 535.05
2	9894277-MSE01	A	04/15/2021	1522	KT		X	X								AMSE1	N2	0.00	0.00	1	VOLUME: 534.17
3	Q0424279-MSE02	A	04/15/2021	1530	KT	X										AMSE2	N2	0.00	0.00	1	VOLUME: 558.42
4	9894278-MSE02	A	04/15/2021	1530	KT		X	X								AMSE2	N2	0.00	0.00	1	VOLUME: 541.73
5	Q0424280-MSE01	A	04/20/2021	0756	KT	X										AMSE1	N1	0.00	0.00	1	VOLUME: 1713.37
6	9894279-MSE01	A	04/20/2021	0756	KT		X	X								AMSE1	N1	0.00	0.00	1	VOLUME: 1735.25
7	Q0424281-MSE02	A	04/20/2021	0746	KT	X										AMSE2	N1	0.00	0.00	1	VOLUME: 1737.35
8	9894280-MSE02	A	04/20/2021	0746	KT		X	X								AMSE2	N1	0.00	0.00	1	VOLUME: 1671.03
9																					
10																					

Turnaround Time: 5 days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[signature]	4/20/21	1400	FedEx	4/20/21	1400

Shipping Date / Carrier / Airbill Number

Shipping Date: 4/20/2021 / FedEx 7734 9713 7351

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

[signature] 4-21-21 1405

Fedex-Custody Seal

Laboratory Analysis Report

Job ID : 21041289

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:	Brett Womack	P.O.#. :	J310000400-015
	Client Address:	1655 Grant Street, Suite 1200	Date Received :	04/16/2021 15:50
	City, State, Zip:	Concord, California, 94520	Sample Collected By :	Kimberly Tom

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-041321	4/13/2021 15:42	Cassette	21041289.01
MSE02-041321	4/13/2021 15:46	Cassette	21041289.02
MSE01-041421	4/14/2021 15:30	Cassette	21041289.03
MSE02-041421	4/14/2021 15:38	Cassette	21041289.04

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Analyst:

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

Date 4/21/2021

Job ID : 21041289
Analytical Method: NIOSH 7400-I2-Aug1994

Client: Gilbane Project: HPNS Parcel E Phase II J310000400 Attn: Brett Womack

A&B Sample ID	Client Sample ID	Collected Date	Area/Person	Flow Rate L/m	Time On	Time Off	Total Time (min)	Volume (Liters)	Total Fields	Total Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
21041289.01	MSE01-041321	04/13/2021	Area	2			463	926	100	14.5	18.471	0.008		04/21/21	Habedi
21041289.02	MSE02-041321	04/13/2021	Area	2			482	964	100	11.0	14.013	0.006		04/21/21	Habedi
21041289.03	MSE01-041421	04/14/2021	Area	2			433	866	100	9.5	12.102	0.005		04/21/21	Habedi
21041289.04	MSE02-041421	04/14/2021	Area	2			455	910	100	10.5	13.376	0.006		04/21/21	Habedi

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 : **21041289**	Date Received : **04/16/2021**	Time Received : **3:50PM**
Client Name : **Gilbane**		
Temperature : **20.3°C**	Sample pH : **N/A**	
Thermometer ID : **102002320**	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 box with Custody Seal.

Received by : JMontemayor

Check in by/date : JMontemayor / 04/16/2021

Event ID: Air Monitoring

COC# KT041521ASB

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: 4/15/2021

Page: 1 of 1

* Job ID:21041289

Analysis: Asbestos — Preservative: None — Container Type: Filter

Flow Rate = 2 L/min

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Asbestos	Special Instructions/Comments Total Time (min)	
MSE01-041321	4/13/2021	1542	NA	NA	1	AA	X	463	01A
MSE02-041321	4/13/2021	1546	NA	NA	1	AA	X	482	02A
MSE01-041421	4/14/2021	1530	NA	NA	1	AA	X	433	03A
MSE02-041421	4/14/2021	1538	NA	NA	1	AA	X	455	04A

Sampled By: Kimberly Tor

Signature: [signature]

Special Instructions: None

Send Results to: [redacted]

Turnaround Time: Standard

Sampler: Kimberly Tor

Courier/Airbill No.: FedEx/ 7734 5599 0483

Relinquished By/Affiliation	Date:	Time:	Received By/ Affiliation:	Date:	Time:
Kimberly Tor/ Gilbane	4/15/21	1300	Fed Ex	4/15/21	1300
FedEx			[signature]	4/16/21	1550
			20.3 c	1020234	

30-Apr-2021

Brett Womack
Gilbane Company
2730 Shadelands Drive
Walnut Creek, CA 94598

Re: **HPNS Parcel E; J310000400-016** Work Order: **21041476**

Dear Brett,

ALS Environmental received 8 samples on 23-Apr-2021 10:15 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 12.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Rob Nieman

Electronically approved by: Rob Nieman

Rob Nieman
Project Manager

Report of Laboratory Analysis

ALS Environmental

Date: 30-Apr-21

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
Work Order: **21041476**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
21041476-01	Q0424282-MSE01	Air		4/21/2021 07:55	4/23/2021 10:15	☐
21041476-02	9894281-MSE01	Air		4/21/2021 07:55	4/23/2021 10:15	☐
21041476-03	Q0424283-MSE02	Air		4/21/2021 08:05	4/23/2021 10:15	☐
21041476-04	9894282-MSE02	Air		4/21/2021 08:05	4/23/2021 10:15	☐
21041476-05	Q0424284-MSE01	Air		4/22/2021 08:20	4/23/2021 10:15	☐
21041476-06	9894283-MSE01	Air		4/22/2021 08:20	4/23/2021 10:15	☐
21041476-07	Q0424285-MSE02	Air		4/22/2021 08:08	4/23/2021 10:15	☐
21041476-08	9894284-MSE02	Air		4/22/2021 08:08	4/23/2021 10:15	☐

ALS Environmental

Date: 30-Apr-21

Client:	Gilbane Company
Project:	HPNS Parcel E; J310000400-016
Work Order:	21041476

Case Narrative

The sample condition upon receipt was acceptable except where noted.

Results relate only to the items tested and are not blank corrected unless indicated.

ALS is an EPA recognized NLLAP laboratory for lead paint, soil, and dust wipe analyses under its AIHA-LAP accreditation.

All sampling information was provided by the client.

ALS Environmental

Date: *30-Apr-21*

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016

Work Order: 21041476

Analytical Results

Lab ID: 21041476-01A
Client Sample ID: Q0424282-MSE01

Collection Date: 4/21/2021 7:55:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1729030**	Analyst: **SRL**
Date Analyzed: 4/29/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**53**	**1.0**	**0.031**	

Lab ID: 21041476-02A
Client Sample ID: 9894281-MSE01

Collection Date: 4/21/2021 7:55:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1746990**	Analyst: **SRL**
Date Analyzed: 4/29/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Total suspended particulate	**95**	**1.0**	**0.054**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1746990**	Analyst: **AZ**
Date Analyzed: 4/30/2021 12:36		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**250**	**25**	**0.00014**	
Lead	ND	25	<0.000014	
Manganese	**30**	**25**	**0.000017**	

Lab ID: 21041476-03A
Client Sample ID: Q0424283-MSE02

Collection Date: 4/21/2021 8:05:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1746560**	Analyst: **SRL**
Date Analyzed: 4/29/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**69**	**1.0**	**0.040**	

Note:

Client: Gilbane Company **Work Order:** 21041476
Project: HPNS Parcel E; J310000400-016

Analytical Results

Lab ID: 21041476-04A **Collection Date:** 4/21/2021 8:05:00 AM
Client Sample ID: 9894282-MSE02 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1680020**	Analyst: **SRL**
Date Analyzed: 4/29/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**80**	**1.0**	**0.047**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1680020**	Analyst: **AZ**
Date Analyzed: 4/30/2021 12:54		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**210**	**25**	**0.00013**	
Lead	ND	25	<0.000015	
Manganese	ND	25	<0.000015	

Lab ID: 21041476-05A **Collection Date:** 4/22/2021 8:20:00 AM
Client Sample ID: Q0424284-MSE01 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1763010**	Analyst: **SRL**
Date Analyzed: 4/29/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**51**	**1.0**	**0.029**	

Lab ID: 21041476-06A **Collection Date:** 4/22/2021 8:20:00 AM
Client Sample ID: 9894283-MSE01 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1744250**	Analyst: **SRL**
Date Analyzed: 4/29/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**73**	**1.0**	**0.042**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1744250**	Analyst: **AZ**
Date Analyzed: 4/30/2021 12:58		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**170**	**25**	**0.00010**	
Lead	ND	25	<0.000014	
Manganese	ND	25	<0.000014	

Note:

ALS Environmental

Date: *30-Apr-21*

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016

Work Order: 21041476

Analytical Results

Lab ID: 21041476-07A
Client Sample ID: Q0424285-MSE02

Collection Date: 4/22/2021 8:08:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1774050**	Analyst: **SRL**
Date Analyzed: 4/29/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**50**	**1.0**	**0.028**	

Lab ID: 21041476-08A
Client Sample ID: 9894284-MSE02

Collection Date: 4/22/2021 8:08:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1704610**	Analyst: **SRL**
Date Analyzed: 4/29/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**65**	**1.0**	**0.038**	
METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1704610**	Analyst: **AZ**
Date Analyzed: 4/30/2021 13:02		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**200**	**25**	**0.00012**	
Lead	ND	25	<0.000015	
Manganese	ND	25	<0.000015	

Note:

QC BATCH REPORT

Batch ID: **R191324** Instrument ID: **BAL2** Method: **TSP**

DUP Sample ID: **21041476-02A DUP** Units: **mg/sample** Analysis Date: **4/29/2021**

Client ID: **9894281-MSE01** Run ID: **BAL2_210429A** SeqNo: **2453154** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total suspended particulate	96.36	1.0	0	0	0		95.02	1.4	20	

The following samples were analyzed in this batch:

21041476-02A 21041476-04A 21041476-06A
21041476-08A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Gilbane Company
Work Order: 21041476
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **R191325** Instrument ID: **BAL2** Method: **PM10**

DUP Sample ID: **21041476-07A DUP** Units: **mg/sample** Analysis Date: **4/29/2021**

Client ID: **Q0424285-MSE02** Run ID: **BAL2_210429B** SeqNo: **2453162** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Particulate as PM10	51.12	1.0	0	0	0		50.48	1.26	20	

The following samples were analyzed in this batch:

21041476-01A 21041476-03A 21041476-05A
21041476-07A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Gilbane Company
Work Order: 21041476
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **74222** Instrument ID: **ICP1** Method: **E12**

MBLK Sample ID: **MBLK-74222-74222** Units: **µg/sample** Analysis Date: **4/30/2021 12:24 PM**
Client ID: Run ID: **ICP1_210430A** SeqNo: **2454376** Prep Date: **4/30/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	ND	100								
Lead	ND	25								
Manganese	ND	100								

LCS Sample ID: **LCS-74222-74222** Units: **µg/sample** Analysis Date: **4/30/2021 12:28 PM**
Client ID: Run ID: **ICP1_210430A** SeqNo: **2454377** Prep Date: **4/30/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	411.8	100	450	0	91.5	75-125	0			
Lead	446.4	25	450	0	99.2	75-125	0			
Manganese	394.6	100	450	0	87.7	75-125	0			

LCSD Sample ID: **LCSD-74222-74222** Units: **µg/sample** Analysis Date: **4/30/2021 12:32 PM**
Client ID: Run ID: **ICP1_210430A** SeqNo: **2454378** Prep Date: **4/30/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	407.1	100	450	0	90.5	75-125	411.8	1.16	20	
Lead	446	25	450	0	99.1	75-125	446.4	0.0908	20	
Manganese	393.8	100	450	0	87.5	75-125	394.6	0.217	20	

MS Sample ID: **21041476-02A MS** Units: **µg/sample** Analysis Date: **4/30/2021 12:47 PM**
Client ID: **9894281-MSE01** Run ID: **ICP1_210430A** SeqNo: **2454380** Prep Date: **4/30/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	634.5	100	450	248.2	85.8	75-125	0			
Lead	458.1	25	450	17.84	97.8	75-125	0			
Manganese	423.3	100	450	30.48	87.3	75-125	0			

MSD Sample ID: **21041476-02A MSD** Units: **µg/sample** Analysis Date: **4/30/2021 12:51 PM**
Client ID: **9894281-MSE01** Run ID: **ICP1_210430A** SeqNo: **2454381** Prep Date: **4/30/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	623.2	100	450	248.2	83.4	75-125	634.5	1.79	20	
Lead	459	25	450	17.84	98	75-125	458.1	0.196	20	
Manganese	417.4	100	450	30.48	86	75-125	423.3	1.39	20	

The following samples were analyzed in this batch:

21041476-02A 21041476-04A 21041476-06A
21041476-08A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Environmental

Date: 30-Apr-21

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
WorkOrder: **21041476**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
E	EPA Method
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SDL	Sample Detection Limit
SW	SW-846 Method

Units Reported	Description
µg/sample	
mg/sample	

ALS Environmental

Sample Receipt Checklist

Client Name: **GILBANE-WALNUTCREEK** Date/Time Received: **23-Apr-21 10:15**

Work Order: **21041476** Received by: **RDN**

Checklist completed by: Stephanie Harrington 23-Apr-21 Reviewed by: Rob Nieman 27-Apr-21

eSignature / Date / eSignature / Date

Matrices:

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☑	No ☐	Not Present ☐
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☐	No ☑	
Temperature(s)/Thermometer(s):			
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

CHAIN-OF-CUSTODY RECORD

Gilbane Federal [redacted]
1655 Grant Street, Suite 1200, Concord, CA 94520 [redacted]

2104476

COC # KT042221

Gilbane

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	Laboratory: ALS Laboratory Group, Cincinnati, OH	Event: Parcel E Phase 2 Air Monitoring
Project Number: J310000400	POC: [redacted]	
WBS Code: J310000400-016	Ship to: 4388 Glendale Milford Rd., Blue Ash, OH 45242	

Comments:

Equipment:

Code	Matrix
A	Air

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

						Analytical Test Method														
						CAAIR - Air PM10	E12 - Air Pb Mn Cu	N0500 - Air TSP												
	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	Q0424282-MSE01 01	A	04/21/2021	0755	KT	X										AMSE1	N1	0.00	0.00	1	VOLUME: 1729.03
2	9894281-MSE01 02	A	04/21/2021	0755	KT		X	X								AMSE1	N1	0.00	0.00	1	VOLUME: 1746.99
3	Q0424283-MSE02 03	A	04/21/2021	0805	KT	X										AMSE2	N1	0.00	0.00	1	VOLUME: 1746.56
4	9894282-MSE02 04	A	04/21/2021	0805	KT		X	X								AMSE2	N1	0.00	0.00	1	VOLUME: 1680.02
5	Q0424284-MSE01 05	A	04/22/2021	0820	KT	X										AMSE1	N1	0.00	0.00	1	VOLUME: 1763.01
6	9894283-MSE01 06	A	04/22/2021	0820	KT		X	X								AMSE1	N1	0.00	0.00	1	VOLUME: 1744.25
7	Q0424285-MSE02 07	A	04/22/2021	0808	KT	X										AMSE2	N1	0.00	0.00	1	VOLUME: 1774.05
8	9894284-MSE02 08	A	04/22/2021	0808	KT		X	X								AMSE2	N1	0.00	0.00	1	VOLUME: 1704.61
9																					
10																					

Turnaround Time: 5 days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[signature]	4/22/21	1400	FedEx	4/22/21	1400
			[signature]	4/23/21	10:15
			✓ Custody Seal		

Shipping Date / Carrier / Airbill Number

Shipping Date: 4/22/2021 / FedEx 7735 2227 6573

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

Laboratory Analysis Report

Job ID : 21041601

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:	Brett Womack	P.O.#. :	J310000400-015
	Client Address:	1655 Grant Street, Suite 1200	Date Received :	04/21/2021 12:50
	City, State, Zip:	Concord, California, 94520	Sample Collected By :	Kimberly Tom

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-041521	4/15/2021 15:30	Cassette	21041601.01
MSE02-041521	4/15/2021 15:20	Cassette	21041601.02
MSE01-041921	4/19/2021 15:40	Cassette	21041601.03
MSE02-041921	4/19/2021 15:32	Cassette	21041601.04

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Analyst:

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

Date 4/27/2021

Job ID : 21041601
Analytical Method: NIOSH 7400-I2-Aug1994

Client: Gilbane Project: HPNS Parcel E Phase II J310000400 Attn: Brett Womack

A&B Sample ID	Client Sample ID	Collected Date	Area/Person	Flow Rate L/m	Time On	Time Off	Total Time (min)	Volume (Liters)	Total Fields	Total Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
21041601.01	MSE01-041521	04/15/2021	Area	2			455	910	100	11.5	14.650	0.006		04/27/21	Habedi
21041601.02	MSE02-041521	04/15/2021	Area	2			461	922	100	13.5	17.197	0.007		04/27/21	Habedi
21041601.03	MSE01-041921	04/19/2021	Area	2			441	882	100	12.5	15.924	0.007		04/27/21	Habedi
21041601.04	MSE02-041921	04/19/2021	Area	2			452	904	100	10.0	12.739	0.005		04/27/21	Habedi

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 : **21041601**	Date Received : **04/21/2021**	Time Received : **12:50PM**
Client Name : **Gilbane**		
Temperature : **17.8°C**	Sample pH : **na**	
Thermometer ID : **102002320**	pH Paper ID : **na**	
Perservative :		

	Check Points	Yes	No	N/A
1.	**Cooler seal present and signed.**	X		
2.	**Sample(s) in a cooler.**		X	
3.	**If yes, ice in cooler.**			X
4.	**Sample(s) received with chain-of-custody.**	X		
5.	**C-O-C signed and dated.**	X		
6.	**Sample(s) received with signed sample custody seal.**		X	
7.	**Sample containers arrived intact. (If no comment).**	X		
8.	**Matrix :** **Water** ☐ **Soil** ☐ **Liquid** ☐ **Sludge** ☐ **Solid** ☐ **Cassette** ☑ **Tube** ☐ **Bulk** ☐ **Badge** ☐ **Food** ☐ **Other** ☐			
9.	**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 wih custody seal. -AO 4/21/21

Received by : AOballe

Check in by/date : AOballe / 04/21/2021

Event ID: Air Monitoring

COC# KT042021ASB

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: 4/20/2021

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)
MSE01-041521 01A	4/15/2021	1530	NA	NA	1	AA	X		455
MSE02-041521 02A	4/15/2021	1520	NA	NA	1	AA	X		461
MSE01-041921 03A	4/19/2021	1540	NA	NA	1	AA	X		441
MSE02-041921 04A	4/19/2021	1532	NA	NA	1	AA	X		452

Job ID:21041601

Sampled By: Kimberly Tan

Signature:

Special Instructions: None

17.8° 102018320

Send Results to: [redacted]

Turnaround Time: Standard

Sampler: Kimberly Tan

Relinquished By/Affiliation	Date:	Time:	Received By/ Affiliation:	Date:	Time:
Kimberly Tan	4/20/21	1300	FedEx	4/20/21	1300
FedEx			A Amanda Uballe	4.21.21	1250

Courier/Airbill No.: FedEx/ 7734 9711 4085

11-May-2021

Brett Womack
Gilbane Company
2730 Shadelands Drive
Walnut Creek, CA 94598

Re: **HPNS Parcel E; J310000400-016** Work Order: **21041778**

Dear Brett,

ALS Environmental received 8 samples on 28-Apr-2021 10:30 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 11.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Rob Nieman

Electronically approved by: Rob Nieman

Rob Nieman
Project Manager

Report of Laboratory Analysis

ALS Environmental

Date: 11-May-21

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
Work Order: **21041778**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
21041778-01	Q0424286-MSE01	Air		4/22/2021 15:23	4/28/2021 10:30	☐
21041778-02	9894285-MSE01	Air		4/22/2021 15:23	4/28/2021 10:30	☐
21041778-03	Q0424287-MSE02	Air		4/22/2021 15:27	4/28/2021 10:30	☐
21041778-04	9894286-MSE02	Air		4/22/2021 15:27	4/28/2021 10:30	☐
21041778-05	Q0424288-MSE01	Air		4/27/2021 08:20	4/28/2021 10:30	☐
21041778-06	9894287-MSE01	Air		4/27/2021 08:20	4/28/2021 10:30	☐
21041778-07	Q0424289-MSE02	Air		4/27/2021 08:07	4/28/2021 10:30	☐
21041778-08	9894288-MSE02	Air		4/27/2021 08:07	4/28/2021 10:30	☐

ALS Environmental

Date: 11-May-21

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
Work Order: 21041778

Case Narrative

The sample condition upon receipt was acceptable except where noted.

Results relate only to the items tested and are not blank corrected unless indicated.

ALS is an EPA recognized NLLAP laboratory for lead paint, soil, and dust wipe analyses under its AIHA-LAP accreditation.

All sampling information was provided by the client.

ALS Environmental

Date: *11-May-21*

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016

Work Order: 21041778

Analytical Results

Lab ID: 21041778-01A
Client Sample ID: Q0424286-MSE01

Collection Date: 4/22/2021 3:23:00 PM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **459430**	Analyst: **SRL**
Date Analyzed: 5/4/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	ND	1.0	<0.0022	

Lab ID: 21041778-02A
Client Sample ID: 9894285-MSE01

Collection Date: 4/22/2021 3:23:00 PM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **465340**	Analyst: **SRL**
Date Analyzed: 5/4/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**8.6**	**1.0**	**0.019**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **465340**	Analyst: **AZ**
Date Analyzed: 5/6/2021 11:53		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**53**	**25**	**0.00011**	
Lead	ND	25	<0.000054	
Manganese	ND	25	<0.000054	

Lab ID: 21041778-03A
Client Sample ID: Q0424287-MSE02

Collection Date: 4/22/2021 3:27:00 PM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **490900**	Analyst: **SRL**
Date Analyzed: 5/4/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	ND	1.0	<0.0020	

Note:

Client: Gilbane Company **Work Order:** 21041778
Project: HPNS Parcel E; J310000400-016

Analytical Results

Lab ID: 21041778-04A **Collection Date:** 4/22/2021 3:27:00 PM
Client Sample ID: 9894286-MSE02 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **467150**	Analyst: **SRL**
Date Analyzed: 5/4/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**9.0**	**1.0**	**0.019**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **467150**	Analyst: **AZ**
Date Analyzed: 5/6/2021 12:05		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**58**	**25**	**0.00012**	
Lead	ND	25	<0.000054	
Manganese	ND	25	<0.000054	

Lab ID: 21041778-05A **Collection Date:** 4/27/2021 8:20:00 AM
Client Sample ID: Q0424288-MSE01 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1739070**	Analyst: **SRL**
Date Analyzed: 5/4/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**24**	**1.0**	**0.014**	

Lab ID: 21041778-06A **Collection Date:** 4/27/2021 8:20:00 AM
Client Sample ID: 9894287-MSE01 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1737420**	Analyst: **SRL**
Date Analyzed: 5/4/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**30**	**1.0**	**0.017**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1737420**	Analyst: **AZ**
Date Analyzed: 5/6/2021 12:09		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**210**	**25**	**0.00012**	
Lead	ND	25	<0.000014	
Manganese	ND	25	<0.000014	

Note:

ALS Environmental

Date: *11-May-21*

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016

Work Order: 21041778

Analytical Results

Lab ID: 21041778-07A
Client Sample ID: Q0424289-MSE02

Collection Date: 4/27/2021 8:07:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1749380**	Analyst: **SRL**
Date Analyzed: 5/4/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**20**	**1.0**	**0.011**	

Lab ID: 21041778-08A
Client Sample ID: 9894288-MSE02

Collection Date: 4/27/2021 8:07:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1676760**	Analyst: **SRL**
Date Analyzed: 5/4/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**26**	**1.0**	**0.015**	
METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1676760**	Analyst: **AZ**
Date Analyzed: 5/6/2021 12:13		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**150**	**25**	**0.000091**	
Lead	ND	25	<0.000015	
Manganese	ND	25	<0.000015	

Note:

QC BATCH REPORT

Batch ID: **R191694** Instrument ID: **BAL2** Method: **TSP**

DUP Sample ID: **21041778-02A DUP** Units: **mg/sample** Analysis Date: **5/4/2021**

Client ID: **9894285-MSE01** Run ID: **BAL2_210504A** SeqNo: **2463334** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total suspended particulate	8.66	1.0	0	0	0		8.61	0.579	20	

DUP Sample ID: **21041900-07A DUP** Units: **mg/sample** Analysis Date: **5/4/2021**

Client ID: Run ID: **BAL2_210504A** SeqNo: **2463350** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Particulate as PM10	16.68	1.0	0	0	0		16.29	2.37	20	

The following samples were analyzed in this batch:

21041778-01A	21041778-02A	21041778-03A
21041778-04A	21041778-05A	21041778-06A
21041778-07A	21041778-08A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Gilbane Company
Work Order: 21041778
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **74355** Instrument ID: **ICP1** Method: **E12**

MBLK Sample ID: **MBLK-74355-74355** Units: **µg/sample** Analysis Date: **5/6/2021 11:42 AM**
Client ID: Run ID: **ICP1_210506A** SeqNo: **2459757** Prep Date: **5/5/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	ND	100								
Lead	ND	25								
Manganese	ND	100								

LCS Sample ID: **LCS-74355-74355** Units: **µg/sample** Analysis Date: **5/6/2021 11:46 AM**
Client ID: Run ID: **ICP1_210506A** SeqNo: **2459758** Prep Date: **5/5/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	383.5	100	450	0	85.2	75-125	0			
Lead	429.9	25	450	0	95.5	75-125	0			
Manganese	390.9	100	450	0	86.9	75-125	0			

LCSD Sample ID: **LCSD-74355-74355** Units: **µg/sample** Analysis Date: **5/6/2021 11:49 AM**
Client ID: Run ID: **ICP1_210506A** SeqNo: **2459759** Prep Date: **5/5/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	401.4	100	450	0	89.2	75-125	383.5	4.56	20	
Lead	446.7	25	450	0	99.3	75-125	429.9	3.84	20	
Manganese	407.3	100	450	0	90.5	75-125	390.9	4.1	20	

MS Sample ID: **21041778-02A MS** Units: **µg/sample** Analysis Date: **5/6/2021 11:57 AM**
Client ID: **9894285-MSE01** Run ID: **ICP1_210506A** SeqNo: **2459761** Prep Date: **5/5/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	460.8	100	450	53.46	90.5	75-125	0			
Lead	482.4	25	450	4.376	106	75-125	0			
Manganese	414.9	100	450	5.823	90.9	75-125	0			

MSD Sample ID: **21041778-02A MSD** Units: **µg/sample** Analysis Date: **5/6/2021 12:01 PM**
Client ID: **9894285-MSE01** Run ID: **ICP1_210506A** SeqNo: **2459762** Prep Date: **5/5/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	462.6	100	450	53.46	90.9	75-125	460.8	0.39	20	
Lead	464.8	25	450	4.376	102	75-125	482.4	3.71	20	
Manganese	416.6	100	450	5.823	91.3	75-125	414.9	0.422	20	

The following samples were analyzed in this batch:

21041778-02A 21041778-04A 21041778-06A
21041778-08A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Environmental

Date: 11-May-21

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
WorkOrder: **21041778**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
E	EPA Method
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SDL	Sample Detection Limit
SW	SW-846 Method

Units Reported	Description
µg/sample	
mg/sample	

ALS Environmental

Sample Receipt Checklist

Client Name: **GILBANE-WALNUTCREEK** Date/Time Received: **28-Apr-21 10:30**

Work Order: **21041778** Received by: **RDN**

Checklist completed by: Rob Nieman 29-Apr-21 Reviewed by: Rob Nieman 30-Apr-21

eSignature | Date | eSignature | Date

Matrices:

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☐
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☐	No ☑	
Temperature(s)/Thermometer(s):			
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☐	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

CHAIN-OF-CUSTODY RECORD

Gilbane Federal
[redacted]
1655 Grant Street, Suite 1200, Concord, CA 94520
[redacted]

3104 1778

COC # KT042721

Gilbane

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	Laboratory: ALS Laboratory Group, Cincinnati, OH	Event: Parcel E Phase 2 Air Monitoring
Project Number: J310000400	POC: [redacted]	
WBS Code: J310000400-016	Ship to: 4388 Glendale Milford Rd., Blue Ash, OH 45242	

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	E12 - Air Pb Mn Cu	N0500 - Air TSP	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
							1	1	1						
1	Q0424286-MSE01	01	A	04/22/2021	1523	KT	X			AMSE1	N2	0.00	0.00	1	VOLUME: 459.43
2	9894285-MSE01	02	A	04/22/2021	1523	KT		X	X	AMSE1	N2	0.00	0.00	1	VOLUME: 465.34
3	Q0424287-MSE02	03	A	04/22/2021	1527	KT	X			AMSE2	N2	0.00	0.00	1	VOLUME: 490.90
4	9894286-MSE02	04	A	04/22/2021	1527	KT		X	X	AMSE2	N2	0.00	0.00	1	VOLUME: 467.15
5	Q0424288-MSE01	05	A	04/27/2021	0820	KT	X			AMSE1	N1	0.00	0.00	1	VOLUME: 1739.07
6	9894287-MSE01	06	A	04/27/2021	0820	KT		X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1737.42
7	Q0424289-MSE02	07	A	04/27/2021	0807	KT	X			AMSE2	N1	0.00	0.00	1	VOLUME: 1749.38
8	9894288-MSE02	08	A	04/27/2021	0807	KT		X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1676.76
9															
10															

Turnaround Time: 5 days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[signature]	4/27/21	1500	FedEx	4/27/21	1500
			[signature]	4/28/21	1030
			✓ Custody Seal		

Shipping Date / Carrier / Airbill Number

Shipping Date: 4/27/2021 / FedEx 7735 6311 6299

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

Laboratory Analysis Report

Job ID : 21041871

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:	Brett Womack	P.O.#. :	J310000400-0015
	Client Address:	1655 Grant Street, Suite 1200	Date Received :	04/23/2021 16:13
	City, State, Zip:	Concord, California, 94520	Sample Collected By :	Kimberly Tom

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01 - 042021	4/20/2021 15:43	Cassette	21041871.01
MSE02 - 042021	4/20/2021 15:24	Cassette	21041871.02
MSE01 - 042121	4/21/2021 15:34	Cassette	21041871.03
MSE02 - 042121	4/21/2021 15:36	Cassette	21041871.04

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Analyst:

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

Date 4/27/2021

Job ID : 21041871
Analytical Method: NIOSH 7400-I2-Aug1994

Client: Gilbane Project: HPNS Parcel E Phase II J310000400 Attn: Brett Womack

A&B Sample ID	Client Sample ID	Collected Date	Area/Person	Flow Rate L/m	Time On	Time Off	Total Time (min)	Volume (Liters)	Total Fields	Total Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
21041871.01	MSE01 - 042021	04/20/2021	Area	2			460	920	100	11.0	14.013	0.006		04/27/21	Habedi
21041871.02	MSE02 - 042021	04/20/2021	Area	2			454	908	100	12	15.287	0.006		04/27/21	Habedi
21041871.03	MSE01 - 042121	04/21/2021	Area	2			452	904	100	10.5	13.376	0.006		04/27/21	Habedi
21041871.04	MSE02 - 042121	04/21/2021	Area	2			466	932	100	9	11.465	0.005		04/27/21	Habedi

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 : **21041871**	Date Received : **04/23/2021**	Time Received : **4:13PM**
Client Name : **Gilbane**		
Temperature : **20.1°C**	Sample pH : **n/a**	
Thermometer ID : **102002320**	pH Paper ID : **n/a**	
Perservative :		

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

Comments : Include actions taken to resolve discrepancies/problem:

Received by : CHendrix

Check in by/date : VHernandez / 04/24/2021

Event ID: Air Monitoring

COC# KT042221ASB

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: 4/22/2021

Page: 1 of 1

Job ID:21041871

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)
MSE01-042021	4/20/2021	1543	NA	NA	1	AA	X		460 01A
MSE02-042021	4/20/2021	1524	NA	NA	1	AA	X		454 02A
MSE01-042121	4/21/2021	1534	NA	NA	1	AA	X		452 03A
MSE02-042121	4/21/2021	1536	NA	NA	1	AA	X		466 04A

Sampled By: Kimberly Tor

Signature:

Special Instructions: None

Send Results to: [redacted]

Turnaround Time: Standard

Sampler: Kimberly Tor

Courier/Airbill No.: FedEx/ 7735 2229 3245

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
Kimberly Tor / Gilbane Fedex	4/22/21 4/23/21	1400	FedEx Carley Benson	4/22/21 4/23/21	1400 1613

20.1°C 1020023201

ORIGIN ID:JCCA (925) 250-6097
KIMBERLY TOM
GILBANE
200 FISHER STREET

SAN FRANCISCO, CA 94124
UNITED STATES US

SHIP DATE: 22APR21
ACTWGT: 1.00 LB
CAD: 102700259/INET4340

BILL SENDER

TO **ALISHA HUGHES**
A & B LABS
10100 EAST FREEWAY, SUITE 100

HOUSTON TX 77029
(713) 453-6060 REF: J31000400.B.00.0508000
INV:
PO: DEPT:

56DJ3/F9A6/FE4A

FedEx Express

E

J211321033101uv

FRI - 23 APR 4:30P
STANDARD OVERNIGHT

TRK# 0201 **7735 2229 3245**

77029
IAH
TX-US

UH HBYA

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

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

11-May-2021

Brett Womack
Gilbane Company
2730 Shadelands Drive
Walnut Creek, CA 94598

Re: **HPNS Parcel E; J310000400-016** Work Order: **21041900**

Dear Brett,

ALS Environmental received 8 samples on 30-Apr-2021 09:41 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 11.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Rob Nieman

Electronically approved by: Rob Nieman

Rob Nieman
Project Manager

Report of Laboratory Analysis

ALS Environmental

Date: 11-May-21

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
Work Order: **21041900**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
21041900-01	Q0424290-MSE01	Air		4/28/2021 07:51	4/30/2021 09:41	☐
21041900-02	9894289-MSE01	Air		4/28/2021 07:51	4/30/2021 09:41	☐
21041900-03	Q0424291-MSE02	Air		4/28/2021 07:31	4/30/2021 09:41	☐
21041900-04	9894290-MSE02	Air		4/28/2021 07:31	4/30/2021 09:41	☐
21041900-05	Q0424292-MSE01	Air		4/29/2021 08:14	4/30/2021 09:41	☐
21041900-06	9894291-MSE01	Air		4/29/2021 08:14	4/30/2021 09:41	☐
21041900-07	Q0424293-MSE02	Air		4/29/2021 08:00	4/30/2021 09:41	☐
21041900-08	9894292-MSE02	Air		4/29/2021 08:00	4/30/2021 09:41	☐

ALS Environmental

Date: 11-May-21

Client:	Gilbane Company
Project:	HPNS Parcel E; J310000400-016
Work Order:	21041900

Case Narrative

The sample condition upon receipt was acceptable except where noted.

Results relate only to the items tested and are not blank corrected unless indicated.

ALS is an EPA recognized NLLAP laboratory for lead paint, soil, and dust wipe analyses under its AIHA-LAP accreditation.

All sampling information was provided by the client.

ALS Environmental

Date: *11-May-21*

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016

Work Order: 21041900

Analytical Results

Lab ID: 21041900-01A
Client Sample ID: Q0424290-MSE01

Collection Date: 4/28/2021 7:51:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1762730**	Analyst: **SRL**
Date Analyzed: 5/4/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**28**	**1.0**	**0.016**	

Lab ID: 21041900-02A
Client Sample ID: 9894289-MSE01

Collection Date: 4/28/2021 7:51:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1722950**	Analyst: **SRL**
Date Analyzed: 5/4/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Total suspended particulate	**59**	**1.0**	**0.034**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1722950**	Analyst: **AZ**
Date Analyzed: 5/6/2021 12:24		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**150**	**25**	**0.000088**	
Lead	ND	25	<0.000015	
Manganese	**32**	**25**	**0.000019**	

Lab ID: 21041900-03A
Client Sample ID: Q0424291-MSE02

Collection Date: 4/28/2021 7:31:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1716160**	Analyst: **SRL**
Date Analyzed: 5/4/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**38**	**1.0**	**0.022**	

Note:

Client: Gilbane Company **Work Order:** 21041900
Project: HPNS Parcel E; J310000400-016

Analytical Results

Lab ID: 21041900-04A **Collection Date:** 4/28/2021 7:31:00 AM
Client Sample ID: 9894290-MSE02 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1651250**	Analyst: **SRL**
Date Analyzed: 5/4/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Total suspended particulate	**40**	**1.0**	**0.024**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1651250**	Analyst: **AZ**
Date Analyzed: 5/6/2021 12:28		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**430**	**25**	**0.00026**	
Lead	ND	25	<0.000015	
Manganese	**70**	**25**	**0.000042**	

Lab ID: 21041900-05A **Collection Date:** 4/29/2021 8:14:00 AM
Client Sample ID: Q0424292-MSE01 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1715620**	Analyst: **SRL**
Date Analyzed: 5/4/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**36**	**1.0**	**0.021**	

Lab ID: 21041900-06A **Collection Date:** 4/29/2021 8:14:00 AM
Client Sample ID: 9894291-MSE01 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1797380**	Analyst: **SRL**
Date Analyzed: 5/4/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Total suspended particulate	**70**	**1.0**	**0.039**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1797380**	Analyst: **AZ**
Date Analyzed: 5/6/2021 12:32		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**230**	**25**	**0.00013**	
Lead	ND	25	<0.000014	
Manganese	**65**	**25**	**0.000036**	

Note:

Client: Gilbane Company **Work Order:** 21041900
Project: HPNS Parcel E; J310000400-016

Analytical Results

Lab ID: 21041900-07A **Collection Date:** 4/29/2021 8:00:00 AM
Client Sample ID: Q0424293-MSE02 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **1809820**	Analyst: **SRL**
Date Analyzed: 5/4/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**16**	**1.0**	**0.0090**	

Lab ID: 21041900-08A **Collection Date:** 4/29/2021 8:00:00 AM
Client Sample ID: 9894292-MSE02 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **1733710**	Analyst: **SRL**
Date Analyzed: 5/4/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Total suspended particulate	**41**	**1.0**	**0.024**	
METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **1733710**	Analyst: **AZ**
Date Analyzed: 5/6/2021 12:35		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**770**	**25**	**0.00044**	
Lead	ND	25	<0.000014	
Manganese	**29**	**25**	**0.000017**	

Note:

ALS Environmental

Date: 11-May-21

Client: Gilbane Company

QC BATCH REPORT

Work Order: 21041900

Project: HPNS Parcel E; J310000400-016

Batch ID: **R191694** Instrument ID: **BAL2** Method: **TSP**

DUP Sample ID: **21041778-02A DUP** Units: **mg/sample** Analysis Date: **5/4/2021**

Client ID: Run ID: **BAL2_210504A** SeqNo: **2463334** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total suspended particulate	8.66	1.0	0	0	0		8.61	0.579	20	

DUP Sample ID: **21041900-07A DUP** Units: **mg/sample** Analysis Date: **5/4/2021**

Client ID: **Q0424293-MSE02** Run ID: **BAL2_210504A** SeqNo: **2463350** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Particulate as PM10	16.68	1.0	0	0	0		16.29	2.37	20	

The following samples were analyzed in this batch:

21041900-01A	21041900-02A	21041900-03A
21041900-04A	21041900-05A	21041900-06A
21041900-07A	21041900-08A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Gilbane Company
Work Order: 21041900
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **74355** Instrument ID: **ICP1** Method: **E12**

MBLK Sample ID: **MBLK-74355-74355** Units: **µg/sample** Analysis Date: **5/6/2021 11:42 AM**
Client ID: Run ID: **ICP1_210506A** SeqNo: **2459757** Prep Date: **5/5/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	ND	100								
Lead	ND	25								
Manganese	ND	100								

LCS Sample ID: **LCS-74355-74355** Units: **µg/sample** Analysis Date: **5/6/2021 11:46 AM**
Client ID: Run ID: **ICP1_210506A** SeqNo: **2459758** Prep Date: **5/5/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	383.5	100	450	0	85.2	75-125	0			
Lead	429.9	25	450	0	95.5	75-125	0			
Manganese	390.9	100	450	0	86.9	75-125	0			

LCSD Sample ID: **LCSD-74355-74355** Units: **µg/sample** Analysis Date: **5/6/2021 11:49 AM**
Client ID: Run ID: **ICP1_210506A** SeqNo: **2459759** Prep Date: **5/5/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	401.4	100	450	0	89.2	75-125	383.5	4.56	20	
Lead	446.7	25	450	0	99.3	75-125	429.9	3.84	20	
Manganese	407.3	100	450	0	90.5	75-125	390.9	4.1	20	

MS Sample ID: **21041778-02A MS** Units: **µg/sample** Analysis Date: **5/6/2021 11:57 AM**
Client ID: Run ID: **ICP1_210506A** SeqNo: **2459761** Prep Date: **5/5/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	460.8	100	450	53.46	90.5	75-125	0			
Lead	482.4	25	450	4.376	106	75-125	0			
Manganese	414.9	100	450	5.823	90.9	75-125	0			

MSD Sample ID: **21041778-02A MSD** Units: **µg/sample** Analysis Date: **5/6/2021 12:01 PM**
Client ID: Run ID: **ICP1_210506A** SeqNo: **2459762** Prep Date: **5/5/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	462.6	100	450	53.46	90.9	75-125	460.8	0.39	20	
Lead	464.8	25	450	4.376	102	75-125	482.4	3.71	20	
Manganese	416.6	100	450	5.823	91.3	75-125	414.9	0.422	20	

The following samples were analyzed in this batch:

21041900-02A 21041900-04A 21041900-06A
21041900-08A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Environmental

Date: 11-May-21

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
WorkOrder: **21041900**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
E	EPA Method
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SDL	Sample Detection Limit
SW	SW-846 Method

Units Reported	Description
µg/sample	
mg/sample	

ALS Environmental

Sample Receipt Checklist

Client Name: **GILBANE-WALNUTCREEK** Date/Time Received: **30-Apr-21 09:41**

Work Order: **21041900** Received by: **SNH**

Checklist completed by: Stephanie Harrington (eSignature) 30-Apr-21 (Date) Reviewed by: Rob Nieman (eSignature) 04-May-21 (Date)

Matrices:

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☑	No ☐	Not Present ☐
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☐	No ☑	
Temperature(s)/Thermometer(s):			
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

CHAIN-OF-CUSTODY RECORD

Gilbane Federal
[redacted]
1655 Grant Street, Suite 1200, Concord, CA 94520
[redacted]

2104190

COC # KT042921

Gilbane

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	Laboratory: ALS Laboratory Group, Cincinnati, OH	Event: Parcel E Phase 2 Air Monitoring
Project Number: J310000400	POC: [redacted]	
WBS Code: J310000400-016	Ship to: 4388 Glendale Milford Rd., Blue Ash, OH 45242	

Comments:

Equipment:

Code	Matrix
A	Air

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

	Sample ID	Matrix	Date	Time	Samp Init.	CAAIR - Air PM10	E12 - Air Pb Mn Cu	N0500 - Air TSP	Location ID	Sample Type	Depth (ft bgs) Top	Depth (ft bgs) Bottom	Cooler	Comments
	Analytical Test Method					1	1	1						
1	Q0424290-MSE01	A	04/28/2021	0751	KT	X			AMSE1	N1	0.00	0.00	1	VOLUME: 1762.73
2	9894289-MSE01	A	04/28/2021	0751	KT		X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1722.95
3	Q0424291-MSE02	A	04/28/2021	0731	KT	X			AMSE2	N1	0.00	0.00	1	VOLUME: 1716.16
4	9894290-MSE02	A	04/28/2021	0731	KT		X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1651.25
5	Q0424292-MSE01	A	04/29/2021	0814	KT	X			AMSE1	N1	0.00	0.00	1	VOLUME: 1715.62
6	9894291-MSE01	A	04/29/2021	0814	KT		X	X	AMSE1	N1	0.00	0.00	1	VOLUME: 1797.38
7	Q0424293-MSE02	A	04/29/2021	0800	KT	X			AMSE2	N1	0.00	0.00	1	VOLUME: 1809.82
8	9894292-MSE02	A	04/29/2021	0800	KT		X	X	AMSE2	N1	0.00	0.00	1	VOLUME: 1733.71
9														
10														

Event: Parcel E Phase 2 Air Monitoring

Turnaround Time: 5 days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[signature]	4/29/21	1400	FedEx	4/29/21	1400
			[signature]	4-30-21	0941

Shipping Date / Carrier / Airbill Number

Shipping Date: 4/29/2021 / FedEx 7735 8759 5552

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

Fedex Custody Seal

Laboratory Analysis Report

Job ID : 21042143

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:	Brett Womack	P.O.#. :	J310000400-0015
	Client Address:	1655 Grant Street, Suite 1200	Date Received :	04/28/2021 16:00
	City, State, Zip:	Concord, California, 94520	Sample Collected By :	Kimberly Tom

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-042221	4/22/2021 15:22	Cassette	21042143.01
MSE02-042221	4/22/2021 15:19	Cassette	21042143.02
MSE01-042621	4/26/2021 15:42	Cassette	21042143.03
MSE02-042621	4/26/2021 15:50	Cassette	21042143.04

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Analyst:

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

Date 5/3/2021

Job ID : 21042143
Analytical Method: NIOSH 7400-I2-Aug1994

Client: Gilbane Project: HPNS Parcel E Phase II J310000400 Attn: Brett Womack

A&B Sample ID	Client Sample ID	Collected Date	Area/Person	Flow Rate L/m	Time On	Time Off	Total Time (min)	Volume (Liters)	Total Fields	Total Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
21042143.01	MSE01-042221	04/22/2021	Area	2			419	838	100	15.5	19.745	0.009		05/03/21	Habedi
21042143.02	MSE02-042221	04/22/2021	Area	2			427	854	100	12.5	15.924	0.007		05/03/21	Habedi
21042143.03	MSE01-042621	04/26/2021	Area	2			437	874	100	10.5	13.376	0.006		05/03/21	Habedi
21042143.04	MSE02-042621	04/26/2021	Area	2			463	926	100	13.5	17.197	0.007		05/03/21	Habedi

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 : **21042143**	Date Received : **04/28/2021**	Time Received : **4:00PM**
Client Name : **Gilbane**		
Temperature : **21.4°C**	Sample pH : **N/A**	
Thermometer ID : **102002320**	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:

C/S on box.

Received by : JMontemayor

Check in by/date : JMontemayor / 04/28/2021

Event ID: Air Monitoring

COC# KT042721ASB

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: 4/27/2021

Page: 1 of 1

Analysis:

*** Job ID:21042143**

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Asbestos	Preservative / Container Type	Flow Rate = 2 L/min Special Instructions/Comments Total Time (min)
MSE01-042221 01A	4/22/2021	1522	NA	NA	1	AA	X	None / Filter	419
MSE02-042221 02A	4/22/2021	1519	NA	NA	1	AA	X	None / Filter	427
MSE01-042621 03A	4/26/2021	1542	NA	NA	1	AA	X	None / Filter	437
MSE02-042621 04A	4/26/2021	1550	NA	NA	1	AA	X	None / Filter	463

Sampled By: K. Tan

Signature:

Special Instructions: None

Send Results to: [redacted]

Turnaround Time: Standard

Sampler: K. Tan

Courier/Airbill No.: FedEx/ 7735 6307 8560

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
Kimberly Tan / Gilbane	4/27/21	1500	FedEx	4/27/21	1500
FedEx				4-28-21	1609
			21.4°C	1028320	

Laboratory Analysis Report

Job ID : 21050040

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:	Brett Womack	P.O.#. :	J310000400-0015
	Client Address:	1655 Grant Street, Suite 1200	Date Received :	05/03/2021 14:20
	City, State, Zip:	Concord, California, 94520	Sample Collected By :	Kimberly Tom

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-042721	4/27/2021 15:54	Cassette	21050040.01
MSE02-042721	4/27/2021 15:42	Cassette	21050040.02
MSE01-042821	4/28/2021 15:37	Cassette	21050040.03
MSE02-042821	4/28/2021 15:12	Cassette	21050040.04

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Analyst:

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

Date 5/4/2021

Job ID : 21050040
Analytical Method: NIOSH 7400-I2-Aug1994

Client: Gilbane Project: HPNS Parcel E Phase II J310000400 Attn: Brett Womack

A&B Sample ID	Client Sample ID	Collected Date	Area/Person	Flow Rate L/m	Time On	Time Off	Total Time (min)	Volume (Liters)	Total Fields	Total Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
21050040.01	MSE01-042721	04/27/2021	Area	2			453	906	100	10.5	13.376	0.006		05/04/21	Habedi
21050040.02	MSE02-042721	04/27/2021	Area	2			455	910	100	8	10.191	0.004		05/04/21	Habedi
21050040.03	MSE01-042821	04/28/2021	Area	2			482	964	100	12	15.287	0.006		05/04/21	Habedi
21050040.04	MSE02-042821	04/28/2021	Area	2			438	876	100	9.0	11.465	0.005		05/04/21	Habedi

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 : **21050040**	Date Received : **05/03/2021**	Time Received : **2:20PM**
Client Name : **Gilbane**		
Temperature : **23.1°C**	Sample pH : **N/A**	
Thermometer ID : **102002320**	pH Paper ID : **N/A**	
Perservative :		

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

Comments : Include actions taken to resolve discrepancies/problem:

Received by : JMontemayor

Check in by/date : JMontemayor / 05/03/2021

Event ID: Air Monitoring

COC# KT042921ASB

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: 4/29/2021

Page: 1 of 1

* Job ID:21050040

Analysis: Asbestos — Preservative: None — Container Type: Filter

Flow Rate = 2 L/min

Sample ID		Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Asbestos	Special Instructions/Comments Total Time (min)
MSE01-042721	01A	4/27/2021	1554	NA	NA	1	AA	X	453
MSE02-042721	02A	4/27/2021	1542	NA	NA	1	AA	X	455
MSE01-042821	03A	4/28/2021	1537	NA	NA	1	AA	X	482
MSE02-042821	04A	4/28/2021	1512	NA	NA	1	AA	X	438

Sampled By: K. Tor

Signature: [signature]

Special Instructions: None

Send Results to: [redacted]

Turnaround Time: Standard

Sampler: Kimberly Tor

Courier/Airbill No.: FedEx/ 7735 8757 6958

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
Kimberly Tor/Gilbane	4/29/21	1400	Fed Ex	4/29/21	1400
FedEx			[signature]	5-3-21	1420

1025 / 1324 23.1°C

12-May-2021

Brett Womack
Gilbane Company
2730 Shadelands Drive
Walnut Creek, CA 94598

Re: **HPNS Parcel E; J310000400-016** Work Order: **21050206**

Dear Brett,

ALS Environmental received 4 samples on 05-May-2021 11:45 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 10.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Rob Nieman

Electronically approved by: Rob Nieman

Rob Nieman
Project Manager

Report of Laboratory Analysis

ALS Environmental

Date: 12-May-21

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
Work Order: **21050206**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
21050206-01	Q0424294-MSE01	Air		4/29/2021 13:41	5/5/2021 11:45	☐
21050206-02	9894293-MSE01	Air		4/29/2021 13:41	5/5/2021 11:45	☐
21050206-03	Q0424295-MSE02	Air		4/29/2021 13:56	5/5/2021 11:45	☐
21050206-04	9894294-MSE02	Air		4/29/2021 13:56	5/5/2021 11:45	☐

ALS Environmental

Date: 12-May-21

Client:	Gilbane Company
Project:	HPNS Parcel E; J310000400-016
Work Order:	21050206

Case Narrative

The sample condition upon receipt was acceptable except where noted.

Results relate only to the items tested and are not blank corrected unless indicated.

ALS is an EPA recognized NLLAP laboratory for lead paint, soil, and dust wipe analyses under its AIHA-LAP accreditation.

All sampling information was provided by the client.

ALS Environmental

Date: *12-May-21*

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016

Work Order: 21050206

Analytical Results

Lab ID: 21050206-01A
Client Sample ID: Q0424294-MSE01

Collection Date: 4/29/2021 1:41:00 PM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **384260**	Analyst: **SRL**
Date Analyzed: 5/11/2021		Reporting Limit		
	mg/sample	mg/sample	**mg/m3**	
Particulate as PM10	**3.1**	**1.0**	**0.0080**	

Lab ID: 21050206-02A
Client Sample ID: 9894293-MSE01

Collection Date: 4/29/2021 1:41:00 PM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **384860**	Analyst: **SRL**
Date Analyzed: 5/11/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**5.9**	**1.0**	**0.015**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **384860**	Analyst: **SRL**
Date Analyzed: 5/12/2021 12:08		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	**26**	**25**	**0.000067**	
Lead	ND	25	<0.000065	
Manganese	ND	25	<0.000065	

Lab ID: 21050206-03A
Client Sample ID: Q0424295-MSE02

Collection Date: 4/29/2021 1:56:00 PM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: **PM10**	Air Volume (L): **378600**	Analyst: **SRL**
Date Analyzed: 5/11/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	ND	1.0	<0.0026	

Note:

ALS Environmental

Date: *12-May-21*

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016

Work Order: 21050206

Analytical Results

Lab ID: 21050206-04A
Client Sample ID: 9894294-MSE02

Collection Date: 4/29/2021 1:56:00 PM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: **TSP**	Air Volume (L): **311200**	Analyst: **SRL**
Date Analyzed: 5/11/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	**2.7**	**1.0**	**0.0085**	

METALS BY EPA METHOD 12 MOD.		Method: **E12**	Air Volume (L): **311200**	Analyst: **SRL**
Date Analyzed: 5/12/2021 12:20		Reporting Limit		
	µg/sample	µg/sample	**mg/m3**	
Copper	ND	25	<0.000080	
Lead	ND	25	<0.000080	
Manganese	ND	25	<0.000080	

Note:

QC BATCH REPORT

Batch ID: **R191739** Instrument ID: **BAL2** Method: **PM10**

DUP Sample ID: **21050206-01A DUP** Units: **mg/sample** Analysis Date: **5/11/2021**

Client ID: **Q0424294-MSE01** Run ID: **BAL2_210511A** SeqNo: **2464217** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Particulate as PM10	3.03	1.0	0	0	0		3.08	1.64	20	

DUP Sample ID: **21050206-02a DUP** Units: **mg/sample** Analysis Date: **5/11/2021**

Client ID: **9894293-MSE01** Run ID: **BAL2_210511A** SeqNo: **2464232** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total suspended particulate	6.11	1.0	0	0	0		5.93	2.99	20	

The following samples were analyzed in this batch:

21050206-01A 21050206-02a 21050206-03A
21050206-04A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Gilbane Company
Work Order: 21050206
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **74495** Instrument ID: **ICP1** Method: **E12**

MBLK Sample ID: **MBLK-74495-74495** Units: **µg/sample** Analysis Date: **5/12/2021 11:57 AM**
Client ID: Run ID: **ICP1_210512A** SeqNo: **2464238** Prep Date: **5/11/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	ND	100								
Lead	ND	25								
Manganese	ND	100								

LCS Sample ID: **LCS-74495-74495** Units: **µg/sample** Analysis Date: **5/12/2021 12:01 PM**
Client ID: Run ID: **ICP1_210512A** SeqNo: **2464239** Prep Date: **5/11/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	420.3	100	450	0	93.4	75-125	0			
Lead	424.2	25	450	0	94.3	75-125	0			
Manganese	418.9	100	450	0	93.1	75-125	0			

LCSD Sample ID: **LCSD-74495-74495** Units: **µg/sample** Analysis Date: **5/12/2021 12:05 PM**
Client ID: Run ID: **ICP1_210512A** SeqNo: **2464240** Prep Date: **5/11/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	434.8	100	450	0	96.6	75-125	420.3	3.38	20	
Lead	439.5	25	450	0	97.7	75-125	424.2	3.53	20	
Manganese	435.2	100	450	0	96.7	75-125	418.9	3.81	20	

MS Sample ID: **21050206-02A MS** Units: **µg/sample** Analysis Date: **5/12/2021 12:12 PM**
Client ID: **9894293-MSE01** Run ID: **ICP1_210512A** SeqNo: **2464242** Prep Date: **5/11/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	439.3	100	450	25.95	91.9	75-125	0			
Lead	435.9	25	450	3.882	96	75-125	0			
Manganese	422.6	100	450	6.588	92.5	75-125	0			

MSD Sample ID: **21050206-02A MSD** Units: **µg/sample** Analysis Date: **5/12/2021 12:16 PM**
Client ID: **9894293-MSE01** Run ID: **ICP1_210512A** SeqNo: **2464243** Prep Date: **5/11/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	438.9	100	450	25.95	91.8	75-125	439.3	0.0922	20	
Lead	428	25	450	3.882	94.2	75-125	435.9	1.83	20	
Manganese	416.6	100	450	6.588	91.1	75-125	422.6	1.45	20	

The following samples were analyzed in this batch: 21050206-02A 21050206-04A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Environmental

Date: 12-May-21

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
WorkOrder: **21050206**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
E	EPA Method
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SDL	Sample Detection Limit
SW	SW-846 Method

Units Reported	Description
µg/sample	
mg/sample	

ALS Environmental

Sample Receipt Checklist

Client Name: **GILBANE-WALNUTCREEK** Date/Time Received: **05-May-21 11:45**

Work Order: **21050206** Received by: **RDN**

Checklist completed by: Jan Wilcox (eSignature) 06-May-21 (Date) Reviewed by: Rob Nieman (eSignature) 07-May-21 (Date)

Matrices: air

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☐	No ☑	
Temperature(s)/Thermometer(s):			
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

CHAIN-OF-CUSTODY RECORD

Gilbane Federal
[redacted]
1655 Grant Street, Suite 1200, Concord, CA 94520
[redacted]

Z1050206

COC # KT050421

Gilbane

Project Name: Hunters Point Shipyard, Parcel E RA Phase 2	Laboratory: ALS Laboratory Group, Cincinnati, OH	Event: Parcel E Phase 2 Air Monitoring
Project Number: J310000400	POC: [redacted]	
WBS Code: J310000400-016	Ship to: 4388 Glendale Milford Rd., Blue Ash, OH 45242	

Comments:

Equipment:

Code	Matrix
A	Air

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

Analytical Test Method: CAAIR - Air PM10; E12 - Air Pb Mn Cu; N0500 - Air TSP

Event: Parcel E Phase 2 Air Monitoring — 1 | 1 | 1

	Sample ID		Matrix	Date	Time	Samp Init.	CAAIR - Air PM10	E12 - Air Pb Mn Cu	N0500 - Air TSP	Location ID	Sample Type	Depth Top	Depth Bottom	Cooler	Comments
1	Q0424294-MSE01	01	A	04/29/2021	1341	KT	X			AMSE1	N2	0.00	0.00	1	VOLUME: 384.26
2	9894293-MSE01	02	A	04/29/2021	1341	KT		X	X	AMSE1	N2	0.00	0.00	1	VOLUME: 384.86
3	Q0424295-MSE02	03	A	04/29/2021	1356	KT	X			AMSE2	N2	0.00	0.00	1	VOLUME: 378.60
4	9894294-MSE02	04	A	04/29/2021	1356	KT		X	X	AMSE2	N2	0.00	0.00	1	VOLUME: 311.20
5															
6															
7															
8															
9															
10															

Turnaround Time: 5 days

Relinquished by: *(Signature)*	Date	Time	Received by: *(Signature)*	Date	Time
[signature]	5/4/21	1500	Fed Ex	5/4/21	1500
			[signature]	5/5/21	11:45
			✓ Custody Seal		

Shipping Date / Carrier / Airbill Number
Shipping Date: 5/4/2021 / 7736 2666 8828

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

Gilbane.Navy_COC_Field
May 04, 2021

Laboratory Analysis Report

Job ID : 21050430

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:	Brett Womack	P.O.#. :	J310000400-0015
	Client Address:	1655 Grant Street, Suite 1200	Date Received :	05/06/2021 12:30
	City, State, Zip:	Concord, California, 94520	Sample Collected By :	Kim Tom

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

Client Sample ID	Sample Collection Date & Time	Matrix	A&B Job Sample ID
MSE01-042921	4/29/2021 13:22	Cassette	21050430.01
MSE02-042921	4/29/2021 13:27	Cassette	21050430.02

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Analyst:

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

Date 5/11/2021

Job ID : 21050430
Analytical Method: NIOSH 7400-I2-Aug1994

Client: Gilbane | Project: HPNS Parcel E Phase II J310000400 | Attn: Brett Womack

A&B Sample ID	Client Sample ID	Collected Date	Area/Person	Flow Rate L/m	Time On	Time Off	Total Time (min)	Volume (Liters)	Total Fields	Total Fibers	F/mm2	Fiber/cc	8 Hour TWA	Analysis Date	Analyzed By
21050430.01	MSE01-042921	04/29/2021	Area	2			301	602	100	11.0	14.013	0.009		05/11/21	Habedi
21050430.02	MSE02-042921	04/29/2021	Area	2			324	648	100	9.0	11.465	0.007		05/11/21	Habedi

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 : **21050430**	Date Received : **05/06/2021**	Time Received : **12:30PM**
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:

C/S on box. JM 5-6-21

Received by : JMontemayor

Check in by/date : JMontemayor / 05/06/2021

Event ID: Air Monitoring

COC# KT050421ASB

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: 5/4/2021

Page: 1 of 1

* Job ID:21050430

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)
MSE01-042921	4/29/2021	1322	NA	NA	1	AA	X		301
MSE02-042921	4/29/2021	1327	NA	NA	1	AA	X		324

Sampled By: K. Tom

Signature:

Special Instructions: None

Send Results to: [redacted]

Turnaround Time: Standard

Sampler: K. Tom

Courier/Airbill No.: FedEx/ 7736 2700 3441

Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
Kimberly Tom/Gilbane	5/4/21	1500	FedEx	5/4/21	1500
FedEx	5-6-21	1230		5-6-21	1230

CLS OM 60X 20.2-0.1=20.1 C 1709029