



**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

March 1st, 2021 through March 31st, 2021

Approved for public release; distribution is unlimited

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March 1st, 2021 through March 31st, 2021

Prepared for:



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Acronyms and Abbreviations

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

1.0 Introduction

This Air Monitoring Summary Report (AMSR) was prepared by Gilbane Federal (Gilbane) as requested by the United States Department of the Navy (Navy) under Radiological Environmental Multiple Award Contract N62473-17-D-0005, Contract Task Order (CTO) N6247317F4332. Gilbane is performing air monitoring at Hunters Point Naval Shipyard (HPNS) in accordance with the Final Dust Monitoring and Control Plan (DMCP), included as Appendix E to *Final Remedial Action Work Plan, Parcel E Remedial Action Phase 2, Hunters Point Naval Shipyard, San Francisco, California* (RAWP; Gilbane, 2019). 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 March 1st, 2021 through March 31st, 2021 and compares the results with the established action levels presented in the DMCP (Appendix E of the RAWP [Gilbane, 2019]).

2.0 Monitoring Site Locations

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

Air monitoring was performed to estimate and assess the impact of field activities. The locations of air monitoring stations were determined based on the prevailing wind direction and were modified as needed for accessibility and worker safety considerations. Wind direction was monitored daily using a windsock and confirmed with the prevalent wind direction recorded for the Hunters Point Station (APTIM HPNS - KCASANFR1504) published at Weather Underground (www.wunderground.com). Upwind/downwind station designations were assigned based on the prevalent wind direction. Atmospheric parameters were checked daily at www.wunderground.com (see Attachment 1). Monitoring stations remained stationary while sampling was conducted. Each monitoring station included four different monitoring systems:

1. Asbestos
2. Particulate matter less than 10 microns in diameter (PM10)
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, 2016).

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, 2019]). 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 ug/m³.

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/m³ = micrograms per cubic meter

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

fiber/cm³ = fiber per cubic centimeter

HPNS = Hunters Point Naval Shipyard

mg/m³ = milligrams per cubic meter

PEL = permissible exposure limit

PM10 = particulate matter less than 10 microns in diameter

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 March 1st to March 31st, 2021, during which Gilbane was demolishing a well pad, flattening an asphalt pile, installing entrance area with drain rock, grading, removing debris from the shoreline, offloading trucks, and compacting soil in Parcel E. Samples were not collected during periods of site inactivity, rain events, and/or while site work was limited to non-earth moving tasks. Air samples were not collected on March 15th, 2021 as there were no earth moving activities.

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

Asbestos results from March 1st through March 31st, 2021 did not exceed the project-specific screening criteria presented in Table 4-1. The results are presented as Attachment 2.

PM10 results from March 1st through March 31st, 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 March 1st through March 31st, 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 March 1st through March 31st, 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. Overall, there were minimal quality control anomalies which did not affect data usability. No data quality issues were noted with the following exception:

- Samples collected on March 10th, 11th, 17th, and 18th and reported in sample delivery groups 21030851 and 21031181 were reported with PM10 results systematically greater than the corresponding TSP result at both the upwind and downwind stations. The laboratory reran a few PM10 samples to confirm, but the TSP samples could not be rerun because a strip of the filter is removed to analyze for the metals. The resulting corrective action for the anomalies is to replace parts of the HVAC and the balance. The lab's corrective action is provided as Attachment 8 (Nonconformance/Corrective Action Report).
- The affected results were qualified as estimated (J) due to the reporting anomaly using professional judgement.

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, 2014. Final Remedial Action Work Plan, Parcel E Remedial Action, Phase 2, Hunters Point Naval Shipyard, San Francisco, California. October

FIGURES

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Parcel E
Hunters Point Naval Shipyard
San Francisco, California

Figure 2-1
Air Monitoring Stations

ATTACHMENTS

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ATTACHMENT 1

AMBIENT PRESSURE AND TEMPERATURE MONITORING RESULTS

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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
3/1/2021	30.10	53.99	SW
3/2/2021	29.90	53.93	SW
3/3/2021	30.03	51.08	WSW
3/4/2021	30.30	54.67	WSW
3/8/2021	30.24	51.35	SSW
3/9/2021	30.05	49.07	S
3/10/2021	30.04	47.55	SSW
3/16/2021	30.16	48.46	S
3/17/2021	30.15	50.41	S
3/18/2021	30.17	52.74	WNW
3/19/2021	30.24	55.11	WNW
3/22/2021	30.18	53.09	NW
3/23/2021	30.13	58.81	N
3/24/2021	30.08	59.30	W
3/25/2021	29.90	53.71	W
3/26/2021	30.08	49.64	W
3/29/2021	30.04	52.53	SW
3/30/2021	30.10	61.72	SW
3/31/2021	30.10	64.28	S

Notes:

Data collected using wunderground.com from APTIM HPNS - KCASANFR1504.

°F = degree Fahrenheit

in Hg = inches of mercury

E = East

N = North

S = South

W = West

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)
MSE01-030121	03/01/21	1	462	924	10.0	0.005	No
MSE02-030121	03/01/21	2	442	884	10.5	0.006	No
MSE01-030221	03/02/21	1	424	848	13.0	0.008	No
MSE02-030221	03/02/21	2	452	904	9.5	0.005	No
MSE01-030321	03/03/21	1	456	912	15.5	0.008	No
MSE02-030321	03/03/21	2	442	884	11.0	0.006	No
MSE01-030421	03/04/21	1	384	768	10.5	0.007	No
MSE02-030421	03/04/21	2	402	804	9.5	0.006	No
MSE01-030821	03/08/21	1	421	842	9.0	0.005	No
MSE02-030821	03/08/21	2	438	876	10.5	0.006	No
MSE01-030921	03/09/21	1	366	732	10.5	0.007	No
MSE02-030921	03/09/21	2	392	784	8.5	0.005	No
MSE01-031021	03/10/21	1	401	802	7.0	0.004	No
MSE02-031021	03/10/21	2	393	786	8.5	0.005	No
MSE01-031621	03/16/21	1	340	680	12.5	0.009	No
MSE02-031621	03/16/21	2	442	884	9.5	0.005	No
MSE01-031721	03/17/21	1	486	972	10.5	0.005	No
MSE02-031721	03/17/21	2	504	1008	12.5	0.006	No
MSE01-031821	03/18/21	1	400	800	15.0	0.009	No
MSE02-031821	03/18/21	2	442	884	14.5	0.008	No
MSE01-031921	03/19/21	1	339	678	11.0	0.008	No
MSE02-031921	03/19/21	2	383	766	12.0	0.008	No
MSE01-032221	03/22/21	1	451	902	12.0	0.007	No
MSE02-032221	03/22/21	2	477	954	11.5	0.006	No
MSE01-032321	03/23/21	1	445	890	13.5	0.007	No
MSE02-032321	03/23/21	2	461	922	10.0	0.005	No
MSE01-032421	03/24/21	1	518	1036	12.5	0.006	No
MSE02-032421	03/24/21	2	549	1098	12.5	0.006	No
MSE01-032521	03/25/21	1	501	1002	10.0	0.005	No
MSE02-032521	03/25/21	2	519	1038	8.0	0.004	No
MSE01-032621	03/26/21	1	313	626	10.5	0.008	No
MSE02-032621	03/26/21	2	340	680	9.5	0.007	No
MSE01-032921	03/29/21	1	407	814	9.0	0.005	No
MSE02-032921	03/29/21	2	441	882	9.5	0.005	No
MSE01-033021	03/30/21	1	455	910	13.0	0.007	No
MSE02-033021	03/30/21	2	473	946	12.5	0.006	No
MSE01-033121	03/31/21	1	530	1060	19.0	0.009	No
MSE02-033121	03/31/21	2	556	1112	11.0	0.005	No

Notes:

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

Samples analyzed by A&B Labs

Sample locations are shown on Figure 2-1

min = minutes

L = liter

fibers/cm³ = fibers per cubic centimeter

ATTACHMENT 3
PM10 MONITORING RESULTS

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Sample, Date and Station Information			Sampler Run Information	PM10s							
Sample ID	Monitoring Station	Sample End Date ¹	Total Air Volume Monitored (m ³)	Concentration in Air (mg/m ³)	Validation Qualifier	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)
Q0374028-MSE01	1	3/2/21	1630.43	0.031							
Q0374029-MSE02	2	3/2/21	1637.06	0.026		-0.005	-5.0	5,000	No	50	No
Q0374030-MSE01	1	3/3/21	1606.27	0.029							
Q0374031-MSE02	2	3/3/21	1673.11	0.038		0.009	9.0	5,000	No	50	No
Q0374032-MSE01	1	3/4/21	1677.08	0.031							
Q0374033-MSE02 ⁴	2	3/4/21	570.07	0.052		0.021	21.0	5,000	No	50	No
Q0374034-MSE01	1	3/4/2021 ⁵	436.28	0.052							
Q0374035-MSE02	2	3/4/2021 ⁵	452.73	0.039		-0.013	-13.0	5,000	No	50	No
Q0374036-MSE01	1	3/9/21	1657.15	0.014							
Q0374037-MSE02	2	3/9/21	1663.28	0.050		0.036	36.0	5,000	No	50	No
Q0374038-MSE01	1	3/10/21	1581.52	0.048	J						
Q0374039-MSE02	2	3/10/21	1615.85	0.04	J	-0.008	-8.0	5,000	No	50	No
Q0374040-MSE01	1	3/11/21	779.36	0.058	J						
Q0374041-MSE02 ⁴	2	3/11/21	459.10	0.11	J	0.052	52.0	5,000	No	50	No
Q0374044-MSE01	1	3/17/21	1480.41	0.019	J						
Q0374045-MSE02	2	3/17/21	1493.87	0.002	J	-0.017	-17.0	5,000	No	50	No
Q0374043-MSE01	1	3/18/21	1557.59	0.037	J						
Q0374042-MSE02	2	3/18/21	1715.99	0.042		0.005	5.0	5,000	No	50	No
Q0424237-MSE01	1	3/19/21	1638.66	0.011							
Q0424236-MSE02	2	3/19/21	1484.06	0.0062		-0.005	-4.8	5,000	No	50	No
Q0424238-MSE01	1	3/20/21	382.89	0.025							
Q0424239-MSE02	2	3/20/21	305.38	0.033		0.008	8.0	5,000	No	50	No
Q0424241-MSE01	1	3/23/21	1630.52	0.012							
Q0424240-MSE02	2	3/23/21	1562.37	0.012		0.000	0.0	5,000	No	50	No
Q0424242-MSE01 ⁶	1	3/24/21	1658.89	0.017							
Q0424243-MSE02 ⁶	2	3/24/21	1669.17	0.006		0.011	11.0	5,000	No	50	No

Sample, Date and Station Information			Sampler Run Information	PM10s							
Sample ID	Monitoring Station	Sample End Date ¹	Total Air Volume Monitored (m ³)	Concentration in Air (mg/m ³)	Validation Qualifier	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)
Q0424244-MSE01	1	3/25/21	1595.64	0.021							
Q0424245-MSE02	2	3/25/21	1647.08	0.014		-0.007	-7.0	5,000	No	50	No
Q0424246-MSE01	1	3/26/21	1605.86	0.029							
Q0424247-MSE02	2	3/26/21	1619.90	0.022		-0.007	-7.0	5,000	No	50	No
Q0424248-MSE01	1	3/27/21	351.99	0.014							
Q0424249-MSE02	2	3/27/21	395.59	0.0096		-0.004	-4.4	5,000	No	50	No
Q0424250-MSE01	1	3/30/21	450.55	0.021							
Q0424251-MSE02	2	3/30/21	572.41	0.025		0.004	4.0	5,000	No	50	No
Q0424252-MSE01	1	3/31/21	1569.21	0.027							
Q0424253-MSE02	2	3/31/21	1675.09	0.019		-0.008	-8.0	5,000	No	50	No

Notes:

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

²Air sample was not collected on days with rain or when contaminated soil was not disturbed.

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

⁴Generator malfunction

⁵Sample collected in the afternoon

⁶Prevalent wind direction counter to normal conditions. Usual upwind and downwind stations reversed for this calculation.

Samples analyzed by ALS Environmental

Sample locations are shown on Figure 2-1

DTSC = Department of Toxic Substances Control

J = estimated value

m³ = cubic meters

mg = milligrams

mg/m³ = milligrams per cubic meter

PM₁₀-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)	Concentration in Air (mg/m ³)	Validation Qualifier	Delta between Downwind and Upwind (mg/m ³)	Basewide HPNS Level (mg/m ³)	Exceedance (Yes/No)
9764116-MSE01	1	3/2/21	1632.24	0.033				
9764117-MSE02	2	3/2/21	1661.30	0.038		0.005	0.5	No
9764118-MSE01	1	3/3/21	1599.71	0.036				
9764119-MSE02	2	3/3/21	1656.90	0.039		0.003	0.5	No
9764120-MSE01	1	3/4/21	1680.04	0.032				
9764121-MSE02 ³	2	3/4/21	612.31	0.040		0.008	0.5	No
9764122-MSE01	1	3/4/2021 ⁴	448.92	0.058				
9764123-MSE02	2	3/4/2021 ⁴	459.10	0.052		-0.006	0.5	No
9764124-MSE01	1	3/9/21	1639.76	0.014				
9764125-MSE02	2	3/9/21	1688.41	0.015		0.001	0.5	No
9764127-MSE01	1	3/10/21	1567.04	0.014	J			
9764126-MSE02	2	3/10/21	1629.90	0.0093	J	-0.005	0.5	No
9764128-MSE01	1	3/11/21	1572.23	0.0078	J			
9764129-MSE02 ³	2	3/11/21	461.02	0.0079	J	0.0001	0.5	No
9764130-MSE01	1	3/17/21	1479.96	0.017	J			
9764132-MSE02	2	3/17/21	1512.15	0.0056	J	-0.011	0.5	No
9894234-MSE01	1	3/18/21	1671.28	0.015	J			
9894233-MSE02	2	3/18/21	1751.80	0.0078		-0.007	0.5	No
9894235-MSE01	1	3/19/21	1631.84	0.014				
9894236-MSE02	2	3/19/21	1666.39	0.0098		-0.004	0.5	No
9894237-MSE01	1	3/20/21	383.77	0.044				
9894238-MSE02	2	3/20/21	349.80	0.049		0.005	0.5	No
9894239-MSE01	1	3/23/21	1596.06	0.034				
9894240-MSE02	2	3/23/21	1680.05	0.024		-0.010	0.5	No
9894241-MSE01	1	3/24/21	1651.77	0.028				
9894242-MSE02	2	3/24/21	1706.99	0.0078		-0.020	0.5	No
9894243-MSE01	1	3/25/21	1612.73	0.025				
9894244-MSE02	2	3/25/21	1695.12	0.016		-0.009	0.5	No
9894245-MSE01	1	3/26/21	1602.99	0.038				
9894246-MSE02	2	3/26/21	1663.46	0.028		-0.010	0.5	No
9894248-MSE01	1	3/27/21	356.26	0.035				
9894247-MSE02	2	3/27/21	410.87	0.032		-0.003	0.5	No
9894249-MSE01	1	3/30/21	571.13	0.031				
9894250-MSE02	2	3/30/21	583.39	0.032		0.001	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)	Concentration in Air (mg/m ³)	Validation Qualifier	Delta between Downwind and Upwind (mg/m ³)	Basewide HPNS Level (mg/m ³)	Exceedance (Yes/No)
9894251-MSE01	1	3/31/21	1618.47	0.041				
9894252-MSE02	2	3/31/21	1710.93	0.029		-0.012	0.5	No

Notes:

¹Sample "end" date indicates the date upon which sample collection ends.

²Air sample was not collected on days with rain or when contaminated soil was not disturbed.

³Generator malfunction

⁴Sample 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/m³ = milligrams per cubic meter

J = estimated value

m³ = 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)	Concentration in Air (mg/m ³)	Exceedance (Yes/No)	Concentration in Air (mg/m ³)	Exceedance (Yes/No)	Concentration in Air (mg/m ³)	Exceedance (Yes/No)
9764116-MSE01	1	3/2/21	1632.24	0.00026	No	<0.000015	No	0.000028	No
9764117-MSE02	2	3/2/21	1661.30	0.00045	No	<0.000015	No	0.000026	No
9764118-MSE01	1	3/3/21	1599.71	0.00022	No	<0.000016	No	0.000021	No
9764119-MSE02	2	3/3/21	1656.90	0.00025	No	<0.000015	No	0.000023	No
9764120-MSE01	1	3/4/21	1680.04	0.00012	No	<0.000015	No	0.000019	No
9764121-MSE02 ³	2	3/4/21	612.31	0.00040	No	<0.000041	No	<0.000041	No
9764122-MSE01	1	3/4/2021 ⁴	448.92	0.00022	No	<0.000056	No	<0.000056	No
9764123-MSE02	2	3/4/2021 ⁴	459.10	0.00028	No	<0.000054	No	<0.000054	No
9764124-MSE01	1	3/9/21	1639.76	0.00027	No	<0.000015	No	<0.000015	No
9764125-MSE02	2	3/9/21	1688.41	0.000066	No	<0.000015	No	<0.000015	No
9764127-MSE01	1	3/10/21	1567.04	0.000085	No	<0.000016	No	<0.000016	No
9764126-MSE02	2	3/10/21	1629.90	0.00018	No	<0.000015	No	<0.000015	No
9764128-MSE01	1	3/11/21	1572.23	0.00017	No	<0.000016	No	<0.000016	No
9764129-MSE02 ³	2	3/11/21	461.02	0.00020	No	<0.000054	No	<0.000054	No
9764130-MSE01	1	3/17/21	1479.96	0.00021	No	<0.000017	No	<0.000017	No
9764132-MSE02	2	3/17/21	1512.15	0.00011	No	<0.000017	No	<0.000017	No
9894234-MSE01	1	3/18/21	1671.28	0.00018	No	<0.000015	No	<0.000015	No
9894233-MSE02	2	3/18/21	1751.80	0.00023	No	<0.000014	No	<0.000014	No
9894235-MSE01	1	3/19/21	1631.84	0.00028	No	<0.000015	No	<0.000015	No
9894236-MSE02	2	3/19/21	1666.39	0.00011	No	<0.000015	No	<0.000015	No
9894237-MSE01	1	3/20/21	383.77	0.00019	No	<0.000065	No	<0.000065	No
9894238-MSE02	2	3/20/21	349.80	0.00014	No	<0.000071	No	<0.000071	No
9894239-MSE01	1	3/23/21	1596.06	0.00024	No	<0.000016	No	<0.000016	No
9894240-MSE02	2	3/23/21	1680.05	0.000042	No	<0.000015	No	<0.000015	No
9894241-MSE01	1	3/24/21	1651.77	0.00023	No	<0.000015	No	0.000021	No
9894242-MSE02	2	3/24/21	1706.99	0.000028	No	<0.000015	No	<0.000015	No
9894243-MSE01	1	3/25/21	1612.73	0.00014	No	<0.000016	No	<0.000016	No
9894244-MSE02	2	3/25/21	1695.12	0.000036	No	<0.000015	No	<0.000015	No
9894245-MSE01	1	3/26/21	1602.99	0.00026	No	<0.000016	No	<0.000016 UJ	No
9894246-MSE02	2	3/26/21	1663.46	0.000084 J	No	<0.000015	No	<0.000015 UJ	No
9894248-MSE01	1	3/27/21	356.26	0.00036	No	<0.000070	No	<0.000070 UJ	No
9894247-MSE02	2	3/27/21	410.87	0.00015	No	<0.000061	No	<0.000061 UJ	No
9894249-MSE01	1	3/30/21	571.13	0.00011	No	<0.000044	No	<0.000044 UJ	No
9894250-MSE02	2	3/30/21	583.39	0.000072	No	<0.000043	No	<0.000043 UJ	No
9894251-MSE01	1	3/31/21	1618.47	0.00044	No	<0.000015	No	0.000031	No
9894252-MSE02	2	3/31/21	1710.93	0.00028	No	0.000015	No	<0.000015	No

Notes:

¹Sample "end" date indicates the date upon which sample collection ends.

²Air sample was not collected on days with rain or when contaminated soil was not disturbed.

³Generator malfunction

⁴Sample collected in the afternoon

Samples analyzed by ALS Environmental

mg = milligrams

< = below detection limit

ug = micrograms

J = estimated value

m³ = cubic meters

UJ = not detected; associated detection limit estimated

ATTACHMENT 6
RADIOLOGICAL AIR MONITORING RESULTS

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AIR SAMPLE RESULTS - PUBLIC EXPOSURE MONITORING

Project Information									Effluent Air Concentration				Sampling Period				Color Codes					
Contract / Task Order Number: N62473-17-D-0005 / F4332			Project Title / Location: Parcel E RA HPNS, SF, CA			Gilbane Project Number: J310000400				Alpha	Beta	Air samples collected between March 1, 2021 and March 31, 2021				Value < MDC		Value < 0.1 x Effluent Conc				
Information effective as of: 5/4/2021									Radionuclide	Ra-226	Sr-90					< 72 hr decay time		Value > 0.1 x Effluent Conc				
									Effluent Conc (µCi/ml)	9.E-13	6.E-12					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-0115	Perimeter	MSC01	PE06	60	3/1/21 6:55	3/1/21 15:15	500	3.0E+07	C	3/9/21	1	cpm	0.100	4.800	0.3	10.2	4.2E-15	1.5E-13	0.5%	2.6%	DVT	BCS
AS-0116	Perimeter	MSC02	PE05	60	3/1/21 7:00	3/1/21 15:20	500	3.0E+07	C	3/9/21	1	cpm	0.150	4.900	0.4	10.5	6.3E-15	1.6E-13	0.7%	2.6%	DVT	BCS
AS-0117	Perimeter	MSC01	PE06	60	3/2/21 6:31	3/2/21 15:22	531	3.2E+07	C	3/9/21	1	cpm	0.150	4.100	0.4	8.2	6.0E-15	1.2E-13	0.7%	1.9%	DVT	BCS
AS-0118	Perimeter	MSC02	PE05	60	3/2/21 6:36	3/2/21 15:16	520	3.1E+07	C	3/9/21	1	cpm	0.200	4.550	0.6	9.5	8.1E-15	1.4E-13	0.9%	2.3%	DVT	BCS
AS-0119	Perimeter	MSC01	PE06	60	3/3/21 6:56	3/3/21 15:00	484	2.9E+07	C	3/9/21	1	cpm	0.100	4.450	0.3	9.2	4.4E-15	1.4E-13	0.5%	2.4%	DVT	BCS
AS-0120	Perimeter	MSC02	PE05	60	3/3/21 6:47	3/3/21 15:05	498	3.0E+07	C	3/9/21	1	cpm	0.300	4.350	0.8	8.9	1.3E-14	1.3E-13	1.4%	2.2%	DVT	BCS
AS-0121	Perimeter	MSC01	PE06	60	3/4/21 6:20	3/4/21 15:00	520	3.1E+07	C	3/9/21	1	cpm	0.100	5.400	0.3	11.9	4.1E-15	1.7E-13	0.5%	2.9%	DVT	BCS
AS-0122	Perimeter	MSC02	PE05	60	3/4/21 6:30	3/4/21 14:50	500	3.0E+07	C	3/9/21	1	cpm	0.200	4.550	0.6	9.5	8.4E-15	1.4E-13	0.9%	2.4%	DVT	BCS
AS-0123	Perimeter	MSC01	PE06	60	3/8/21 6:30	3/8/21 15:30	540	3.2E+07	C	3/18/21	1	cpm	0.000	3.900	0.0	7.7	0.0E+00	1.1E-13	0.0%	1.8%	DVT	BCS
AS-0124	Perimeter	MSC02	PE05	60	3/8/21 6:55	3/8/21 15:45	530	3.2E+07	C	3/18/21	1	cpm	0.200	4.850	0.6	10.4	8.0E-15	1.5E-13	0.9%	2.4%	DVT	BCS
AS-0125	Perimeter	MSC01	PE06	60	3/9/21 6:30	3/9/21 15:15	525	3.1E+07	C	3/18/21	1	cpm	0.200	4.600	0.6	9.7	8.0E-15	1.4E-13	0.9%	2.3%	DVT	BCS
AS-0126	Perimeter	MSC02	PE05	60	3/9/21 6:39	3/9/21 15:21	522	3.1E+07	C	3/18/21	1	cpm	0.150	3.400	0.4	6.3	6.1E-15	9.0E-14	0.7%	1.5%	DVT	BCS
AS-0127	Perimeter	MSC01	PE06	60	3/10/21 6:25	3/10/21 15:31	546	3.3E+07	C	3/18/21	1	cpm	0.200	3.700	0.6	7.1	7.7E-15	9.8E-14	0.9%	1.6%	DVT	BCS
AS-0128	Perimeter	MSC02	PE05	60	3/10/21 6:35	3/10/21 15:39	544	3.3E+07	C	3/18/21	1	cpm	0.000	5.250	0.0	11.5	0.0E+00	1.6E-13	0.0%	2.6%	DVT	BCS
AS-0129	Perimeter	MSC01	PE06	60	3/11/21 6:30	3/11/21 10:31	241	1.4E+07	C	3/18/21	1	cpm	0.200	4.500	0.6	9.4	1.8E-14	2.9E-13	1.9%	4.9%	DVT	BCS
AS-0130	Perimeter	MSC02	PE05	60	3/11/21 6:45	3/11/21 10:49	244	1.5E+07	C	3/18/21	1	cpm	0.100	3.350	0.3	6.1	8.6E-15	1.9E-13	1.0%	3.1%	DVT	BCS
AS-0131	Perimeter	MSC01	PE06	60	3/16/21 7:10	3/16/21 15:40	510	3.1E+07	C	3/22/21	1	cpm	0.150	3.450	0.4	6.4	6.2E-15	9.4E-14	0.7%	1.6%	DVT	BCS
AS-0132	Perimeter	MSC02	PE05	60	3/16/21 7:00	3/16/21 15:30	510	3.1E+07	C	3/22/21	1	cpm	0.050	3.900	0.1	7.7	2.1E-15	1.1E-13	0.2%	1.9%	DVT	BCS
AS-0133	Perimeter	MSC01	PE06	60	3/17/21 6:30	3/17/21 15:45	555	3.3E+07	C	3/22/21	1	cpm	0.200	4.750	0.6	10.1	7.6E-15	1.4E-13	0.8%	2.3%	DVT	BCS
AS-0134	Perimeter	MSC02	PE05	60	3/17/21 6:45	3/17/21 15:35	530	3.2E+07	C	3/22/21	1	cpm	0.050	4.450	0.1	9.2	2.0E-15	1.3E-13	0.2%	2.2%	DVT	BCS
AS-0135	Perimeter	MSC01	PE06	60	3/18/21 6:30	3/18/21 15:13	523	3.1E+07	C	3/22/21	1	cpm	0.200	5.100	0.6	11.1	8.1E-15	1.6E-13	0.9%	2.7%	DVT	BCS
AS-0136	Perimeter	MSC02	PE05	60	3/18/21 6:44	3/18/21 15:17	513	3.1E+07	C	3/22/21	1	cpm	0.050	4.050	0.1	8.1	2.1E-15	1.2E-13	0.2%	2.0%	DVT	BCS
AS-0137	Perimeter	MSC01	PE06	60	3/19/21 6:29	3/19/21 14:30	481	2.9E+07	C	3/30/21	1	cpm	0.050	4.000	0.1	8.0	2.2E-15	1.2E-13	0.2%	2.1%	DVT	BCS
AS-0138	Perimeter	MSC02	PE05	60	3/19/21 6:35	3/19/21 14:40	485	2.9E+07	C	3/30/21	1	cpm	0.050	3.400	0.1	6.3	2.2E-15	9.7E-14	0.2%	1.6%	DVT	BCS
AS-0139	Perimeter	MSC01	PE06	60	3/22/21 6:24	3/22/21 15:25	541	3.2E+07	C	3/30/21	1	cpm	0.200	3.900	0.6	7.7	7.8E-15	1.1E-13	0.9%	1.8%	DVT	BCS
AS-0140	Perimeter	MSC02	PE05	60	3/22/21 6:45	3/22/21 15:15	510	3.1E+07	C	3/30/21	1	cpm	0.150	4.500	0.4	9.4	6.2E-15	1.4E-13	0.7%	2.3%	DVT	BCS
AS-0141	Perimeter	MSC01	PE06	60	3/23/21 6:30	3/23/21 15:39	549	3.3E+07	C	3/30/21	1	cpm	0.100	5.450	0.3	12.1	3.8E-15	1.7E-13	0.4%	2.8%	DVT	BCS
AS-0142	Perimeter	MSC02	PE05	60	3/23/21 6:40	3/23/21 15:30	530	3.2E+07	C	3/30/21	1	cpm	0.050	3.700	0.1	7.1	2.0E-15	1.0E-13	0.2%	1.7%	DVT	BCS
AS-0143	Perimeter	MSC01	PE06	60	3/24/21 6:45	3/24/21 15:30	525	3.2E+07	C	3/30/21	1	cpm	0.100	4.400	0.3	9.1	4.0E-15	1.3E-13	0.4%	2.2%	DVT	BCS
AS-0144	Perimeter	MSC02	PE05	60	3/24/21 6:55	3/24/21 15:45	530	3.2E+07	C	3/30/21	1	cpm	0.100	3.550	0.3	6.7	4.0E-15	9.5E-14	0.4%	1.6%	DVT	BCS



AIR SAMPLE RESULTS - PUBLIC EXPOSURE MONITORING

Project Information									Effluent Air Concentration				Sampling Period				Color Codes					
Contract / Task Order Number: N62473-17-D-0005 / F4332			Project Title / Location: Parcel E RA HPNS, SF, CA			Gilbane Project Number: J310000400				Alpha	Beta	Air samples collected between March 1, 2021 and March 31, 2021		Value < MDC		Value < 0.1 x Effluent Conc						
Information effective as of: 5/4/2021									Radionuclide	Ra-226	Sr-90			< 72 hr decay time		Value > 0.1 x Effluent Conc						
									Effluent Conc (µCi/ml)	9.E-13	6.E-12			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-0145	Perimeter	MSC01	PE06	60	3/25/21 6:30	3/25/21 15:35	545	3.3E+07	C	3/30/21	1	cpm	0.200	3.500	0.6	6.5	7.7E-15	9.0E-14	0.9%	1.5%	DVT	BCS
AS-0146	Perimeter	MSC02	PE05	60	3/25/21 6:45	3/25/21 15:45	540	3.2E+07	C	3/30/21	1	cpm	0.200	3.550	0.6	6.7	7.8E-15	9.3E-14	0.9%	1.5%	DVT	BCS
AS-0147	Perimeter	MSC01	PE06	60	3/26/21 6:25	3/26/21 12:00	335	2.0E+07	C	3/30/21	1	cpm	0.200	3.950	0.6	7.8	1.3E-14	1.8E-13	1.4%	2.9%	DVT	BCS
AS-0148	Perimeter	MSC02	PE05	60	3/26/21 6:35	3/26/21 11:45	310	1.9E+07	C	3/30/21	1	cpm	0.150	3.400	0.4	6.3	1.0E-14	1.5E-13	1.1%	2.5%	DVT	BCS
AS-0149	Perimeter	MSC01	PE06	60	3/29/21 6:25	3/29/21 15:45	560	3.4E+07	C	4/5/21	1	cpm	0.100	4.150	0.3	8.4	3.8E-15	1.1E-13	0.4%	1.9%	DVT	BCS
AS-0150	Perimeter	MSC02	PE05	60	3/29/21 6:39	3/29/21 15:35	536	3.2E+07	C	4/5/21	1	cpm	0.250	3.850	0.7	7.5	9.8E-15	1.1E-13	1.1%	1.8%	DVT	BCS
AS-0151	Perimeter	MSC01	PE06	60	3/31/21 6:25	3/31/21 15:25	540	3.2E+07	C	4/5/21	1	cpm	0.250	5.800	0.7	13.1	9.8E-15	1.8E-13	1.1%	3.0%	DVT	BCS
AS-0152	Perimeter	MSC02	PE05	60	3/31/21 6:30	3/31/21 15:30	540	3.2E+07	C	4/5/21	1	cpm	0.350	5.150	1.0	11.2	1.4E-14	1.6E-13	1.5%	2.6%	DVT	BCS

ATTACHMENT 7
LABORATORY REPORTS

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12-Mar-2021

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

Re: **HPNS Parcel E-2; J310000400**

Work Order: **21030185**

Dear Brett,

ALS Environmental received 4 samples on 03-Mar-2021 11:05 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 GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 

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RIGHT SOLUTIONS RIGHT PARTNER

Client: Gilbane Company
Project: HPNS Parcel E-2; J310000400
Work Order: 21030185

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
21030185-01	Q0374028-MSE01	Air		3/2/2021 08:11	3/3/2021 11:05	<input type="checkbox"/>
21030185-02	9764116-MSE01	Air		3/2/2021 08:11	3/3/2021 11:05	<input type="checkbox"/>
21030185-03	Q0374029-MSE02	Air		3/2/2021 08:00	3/3/2021 11:05	<input type="checkbox"/>
21030185-04	9764117-MSE02	Air		3/2/2021 08:00	3/3/2021 11:05	<input type="checkbox"/>

Client: Gilbane Company
Project: HPNS Parcel E-2; J310000400
Work Order: 21030185

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-Mar-21

Client: Gilbane Company
Project: HPNS Parcel E-2; J310000400

Work Order: 21030185

Analytical Results

Lab ID: 21030185-01A
Client Sample ID: Q0374028-MSE01

Collection Date: 3/2/2021 8:11:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 1630430	Analyst: SRL
Date Analyzed: 3/10/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	51	1.0	0.031	

Lab ID: 21030185-02A
Client Sample ID: 9764116-MSE01

Collection Date: 3/2/2021 8:11:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 1632240	Analyst: SRL
Date Analyzed: 3/10/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	53	1.0	0.033	

METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 1632240	Analyst: AZ
Date Analyzed: 3/11/2021 13:48		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	430	25	0.00026	
Lead	ND	25	<0.000015	
Manganese	45	25	0.000028	

Lab ID: 21030185-03A
Client Sample ID: Q0374029-MSE02

Collection Date: 3/2/2021 8:00:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 1637060	Analyst: SRL
Date Analyzed: 3/10/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	43	1.0	0.026	

Note:

Client: Gilbane Company
Project: HPNS Parcel E-2; J310000400

Work Order: 21030185

Analytical Results

Lab ID: 21030185-04A
Client Sample ID: 9764117-MSE02

Collection Date: 3/2/2021 8:00:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP		Air Volume (L): 1661300	Analyst: SRL
Date Analyzed: 3/10/2021		Reporting Limit			
	mg/sample	mg/sample		mg/m3	
Total suspended particulate	63	1.0		0.038	
METALS BY EPA METHOD 12 MOD.		Method: E12		Air Volume (L): 1661300	Analyst: AZ
Date Analyzed: 3/11/2021 13:52		Reporting Limit			
	µg/sample	µg/sample		mg/m3	
Copper	750	25		0.00045	
Lead	ND	25		<0.000015	
Manganese	43	25		0.000026	

Note:

ALS Environmental

Date: 12-Mar-21

Client: Gilbane Company
Work Order: 21030185
Project: HPNS Parcel E-2; J310000400

QC BATCH REPORT

Batch ID: **R189534** Instrument ID **BAL2** Method: **TSP**

DUP		Sample ID: 21020836-06A DUP				Units: mg/sample		Analysis Date: 3/10/2021		
Client ID:		Run ID: BAL2_210310A			SeqNo: 2412414		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	36.75	1.0	0	0	0		36.88	0.353	20	

The following samples were analyzed in this batch: 21030185-02A 21030185-04A

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

Client: Gilbane Company
Work Order: 21030185
Project: HPNS Parcel E-2; J310000400

QC BATCH REPORT

Batch ID: **R189535** Instrument ID **BAL2** Method: **PM10**

DUP		Sample ID: 21030347-01A DUP				Units: mg/sample		Analysis Date: 3/10/2021		
Client ID:		Run ID: BAL2_210310B		SeqNo: 2412470		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	48.26	1.0	0	0	0		47.03	2.58	20	

The following samples were analyzed in this batch:

21030185-01A	21030185-03A
--------------	--------------

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

Client: Gilbane Company
 Work Order: 21030185
 Project: HPNS Parcel E-2; J310000400

QC BATCH REPORT

Batch ID: 73112 Instrument ID ICP1 Method: E12

MBLK		Sample ID: MBLK-73112-73112				Units: µg/sample		Analysis Date: 3/11/2021 01:20 PM		
Client ID:		Run ID: ICP1_210311A				SeqNo: 2413805		Prep Date: 3/10/2021		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-73112-73112				Units: µg/sample		Analysis Date: 3/11/2021 01:24 PM		
Client ID:		Run ID: ICP1_210311A				SeqNo: 2413806		Prep Date: 3/10/2021		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	450	100	450	0	100	75-125	0			
Lead	461.2	25	450	0	102	75-125	0			
Manganese	478.8	100	450	0	106	75-125	0			

LCSD		Sample ID: LCSD-73112-73112				Units: µg/sample		Analysis Date: 3/11/2021 01:36 PM		
Client ID:		Run ID: ICP1_210311A				SeqNo: 2413807		Prep Date: 3/10/2021		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	456.3	100	450	0	101	75-125	450	1.39	20	
Lead	465.8	25	450	0	104	75-125	461.2	0.971	20	
Manganese	474.8	100	450	0	106	75-125	478.8	0.849	20	

MS		Sample ID: 21030347-08A MS				Units: µg/sample		Analysis Date: 3/11/2021 02:12 PM		
Client ID:		Run ID: ICP1_210311A				SeqNo: 2413816		Prep Date: 3/10/2021		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	677.2	100	450	242.3	96.7	75-125	0			
Lead	479.7	25	450	2.945	106	75-125	0			
Manganese	489.6	100	450	15.24	105	75-125	0			

MSD		Sample ID: 21030347-08A MSD				Units: µg/sample		Analysis Date: 3/11/2021 02:24 PM		
Client ID:		Run ID: ICP1_210311A				SeqNo: 2413817		Prep Date: 3/10/2021		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	689	100	450	242.3	99.3	75-125	677.2	1.71	20	
Lead	487.4	25	450	2.945	108	75-125	479.7	1.58	20	
Manganese	489.2	100	450	15.24	105	75-125	489.6	0.092	20	

The following samples were analyzed in this batch: 21030185-02A 21030185-04A

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

Sample Receipt Checklist

Client Name: GILBANE-WALNUTCREEK

Date/Time Received: 03-Mar-21 11:05

Work Order: 21030185

Received by: JR

Checklist completed by Stephanie Harrington 04-Mar-21
eSignature Date

Reviewed by: Rob Nieman 05-Mar-21
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
 1655 Grant Street, Suite 1200, Concord, CA 94520

COC # KT-030221

21030185



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	Ship to: 4388 Glendale Milford Rd., Blue Ash, OH 45242	

Comments:	Analytical Test Method	CAAIR - Air PM10 E12 - Air Pb Mn Cu N0500 - Air TSP	Code	Matrix
			A	Air
Equipment:			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.									Location ID	Sample Type	Depth (ft bgs) Top - Bottom	Cooler	Comments	
1	Q0374028-MSE01	A	03/02/2021	0811	KT	X							AMSE1	N1	0.00	0.00	1	VOLUME: 1630.43
2	9764116-MSE01	A	03/02/2021	0811	KT		X	X					AMSE1	N1	0.00	0.00	1	VOLUME: 1632.24
3	Q0374029-MSE02	A	03/02/2021	0800	KT	X							AMSE2	N1	0.00	0.00	1	VOLUME: 1637.06
4	9764117-MSE02	A	03/02/2021	0800	KT		X	X					AMSE2	N1	0.00	0.00	1	VOLUME: 1661.30

Turnaround Time: 5 days

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Shipping Date / Carrier / Airbill Number
	3/2/21	1400		3/2/21	1400	Shipping Date: 3/2/2021 / FedEx 7730 4359 5480
FedEx				3/3/21	1105	
						Received by Laboratory: (Signature, Date, Time) & condition
						Custody Seal



12-Mar-2021

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

Re: **HPNS Parcel E-2; J310000400**

Work Order: **21030347**

Dear Brett,

ALS Environmental received 8 samples on 05-Mar-2021 11:08 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 GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Gilbane Company
Project: HPNS Parcel E-2; J310000400
Work Order: 21030347

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
21030347-01	Q0374030-MSE01	Air		3/3/2021 07:50	3/5/2021 11:08	<input type="checkbox"/>
21030347-02	9764118-MSE01	Air		3/3/2021 07:50	3/5/2021 11:08	<input type="checkbox"/>
21030347-03	Q03474031-MSE02	Air		3/3/2021 08:01	3/5/2021 11:08	<input type="checkbox"/>
21030347-04	9764119-MSE02	Air		3/3/2021 08:01	3/5/2021 11:08	<input type="checkbox"/>
21030347-05	Q0374032-MSE01	Air		3/4/2021 08:20	3/5/2021 11:08	<input type="checkbox"/>
21030347-06	9764120-MSE01	Air		3/4/2021 08:20	3/5/2021 11:08	<input type="checkbox"/>
21030347-07	Q0374033-MSE02	Air		3/4/2021 08:05	3/5/2021 11:08	<input type="checkbox"/>
21030347-08	9764121-MSE02	Air		3/4/2021 08:05	3/5/2021 11:08	<input type="checkbox"/>

Client: Gilbane Company
Project: HPNS Parcel E-2; J310000400
Work Order: 21030347

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.

Client: Gilbane Company
Project: HPNS Parcel E-2; J310000400

Work Order: 21030347

Analytical Results

Lab ID: 21030347-01A
Client Sample ID: Q0374030-MSE01

Collection Date: 3/3/2021 7:50:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J	Method: PM10		Air Volume (L): 1606270	Analyst: SRL
Date Analyzed: 3/10/2021	mg/sample	Reporting Limit mg/sample	mg/m3	
Particulate as PM10	47	1.0	0.029	

Lab ID: 21030347-02A
Client Sample ID: 9764118-MSE01

Collection Date: 3/3/2021 7:50:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B	Method: TSP		Air Volume (L): 1599710	Analyst: SRL
Date Analyzed: 3/10/2021	mg/sample	Reporting Limit mg/sample	mg/m3	
Total suspended particulate	57	1.0	0.036	

METALS BY EPA METHOD 12 MOD.	Method: E12		Air Volume (L): 1599710	Analyst: AZ
Date Analyzed: 3/11/2021 13:56	µg/sample	Reporting Limit µg/sample	mg/m3	
Copper	350	25	0.00022	
Lead	ND	25	<0.000016	
Manganese	34	25	0.000021	

Lab ID: 21030347-03A
Client Sample ID: Q03474031-MSE02

Collection Date: 3/3/2021 8:01:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J	Method: PM10		Air Volume (L): 1673110	Analyst: SRL
Date Analyzed: 3/10/2021	mg/sample	Reporting Limit mg/sample	mg/m3	
Particulate as PM10	63	1.0	0.038	

Note:

Client: Gilbane Company
Project: HPNS Parcel E-2; J310000400

Work Order: 21030347

Analytical Results

Lab ID: 21030347-04A
Client Sample ID: 9764119-MSE02

Collection Date: 3/3/2021 8:01:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 1656900	Analyst: SRL
Date Analyzed: 3/10/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	65	1.0	0.039	

METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 1656900	Analyst: AZ
Date Analyzed: 3/11/2021 14:00		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	420	25	0.00025	
Lead	ND	25	<0.000015	
Manganese	39	25	0.000023	

Lab ID: 21030347-05A
Client Sample ID: Q0374032-MSE01

Collection Date: 3/4/2021 8:20:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 1677080	Analyst: SRL
Date Analyzed: 3/10/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	52	1.0	0.031	

Lab ID: 21030347-06A
Client Sample ID: 9764120-MSE01

Collection Date: 3/4/2021 8:20:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 1680040	Analyst: SRL
Date Analyzed: 3/10/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	53	1.0	0.032	

METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 1680040	Analyst: AZ
Date Analyzed: 3/11/2021 14:04		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	200	25	0.00012	
Lead	ND	25	<0.000015	
Manganese	32	25	0.000019	

Note:

Client: Gilbane Company
Project: HPNS Parcel E-2; J310000400

Work Order: 21030347

Analytical Results

Lab ID: 21030347-07A
Client Sample ID: Q0374033-MSE02

Collection Date: 3/4/2021 8:05:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 570070	Analyst: SRL
Date Analyzed: 3/10/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	30	1.0	0.052	

Lab ID: 21030347-08A
Client Sample ID: 9764121-MSE02

Collection Date: 3/4/2021 8:05:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 612310	Analyst: SRL
Date Analyzed: 3/10/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	24	1.0	0.040	

METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 612310	Analyst: AZ
Date Analyzed: 3/11/2021 14:08		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	240	25	0.00040	
Lead	ND	25	<0.000041	
Manganese	ND	25	<0.000041	

Note:

ALS Environmental

Date: 12-Mar-21

Client: Gilbane Company
Work Order: 21030347
Project: HPNS Parcel E-2; J310000400

QC BATCH REPORT

Batch ID: R189534 Instrument ID: BAL2 Method: TSP

DUP		Sample ID: 21020836-06A DUP				Units: mg/sample		Analysis Date: 3/10/2021		
Client ID:		Run ID: BAL2_210310A			SeqNo: 2412414		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	36.75	1.0	0	0	0		36.88	0.353	20	

The following samples were analyzed in this batch:

21030347-02A	21030347-04A	21030347-06A
21030347-08A		

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

Client: Gilbane Company
Work Order: 21030347
Project: HPNS Parcel E-2; J310000400

QC BATCH REPORT

Batch ID: **R189535** Instrument ID: **BAL2** Method: **PM10**

DUP		Sample ID: 21030347-01A DUP				Units: mg/sample		Analysis Date: 3/10/2021		
Client ID: Q0374030-MSE01		Run ID: BAL2_210310B		SeqNo: 2412470		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	48.26	1.0	0	0	0		47.03	2.58	20	

The following samples were analyzed in this batch:

21030347-01A	21030347-03A	21030347-05A
21030347-07A		

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

Client: Gilbane Company
 Work Order: 21030347
 Project: HPNS Parcel E-2; J310000400

QC BATCH REPORT

Batch ID: 73112 Instrument ID: ICP1 Method: E12

MBLK		Sample ID: MBLK-73112-73112				Units: µg/sample		Analysis Date: 3/11/2021 01:20 PM			
Client ID:		Run ID: ICP1_210311A				SeqNo: 2413805		Prep Date: 3/10/2021		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-73112-73112				Units: µg/sample		Analysis Date: 3/11/2021 01:24 PM			
Client ID:		Run ID: ICP1_210311A				SeqNo: 2413806		Prep Date: 3/10/2021		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Copper	450	100	450	0	100	75-125	0				
Lead	461.2	25	450	0	102	75-125	0				
Manganese	478.8	100	450	0	106	75-125	0				

LCSD		Sample ID: LCSD-73112-73112				Units: µg/sample		Analysis Date: 3/11/2021 01:36 PM			
Client ID:		Run ID: ICP1_210311A				SeqNo: 2413807		Prep Date: 3/10/2021		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Copper	456.3	100	450	0	101	75-125	450	1.39	20		
Lead	465.8	25	450	0	104	75-125	461.2	0.971	20		
Manganese	474.8	100	450	0	106	75-125	478.8	0.849	20		

MS		Sample ID: 21030347-08A MS				Units: µg/sample		Analysis Date: 3/11/2021 02:12 PM			
Client ID: 9764121-MSE02		Run ID: ICP1_210311A				SeqNo: 2413816		Prep Date: 3/10/2021		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Copper	677.2	100	450	242.3	96.7	75-125	0				
Lead	479.7	25	450	2.945	106	75-125	0				
Manganese	489.6	100	450	15.24	105	75-125	0				

MSD		Sample ID: 21030347-08A MSD				Units: µg/sample		Analysis Date: 3/11/2021 02:24 PM			
Client ID: 9764121-MSE02		Run ID: ICP1_210311A				SeqNo: 2413817		Prep Date: 3/10/2021		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Copper	689	100	450	242.3	99.3	75-125	677.2	1.71	20		
Lead	487.4	25	450	2.945	108	75-125	479.7	1.58	20		
Manganese	489.2	100	450	15.24	105	75-125	489.6	0.092	20		

The following samples were analyzed in this batch:

21030347-02A	21030347-04A	21030347-06A
21030347-08A		

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

Client: Gilbane Company
Project: HPNS Parcel E-2; J310000400
WorkOrder: 21030347

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	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

<u>Acronym</u>	<u>Description</u>
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 Quantitation Limit
SDL	Sample Detection Limit
SW	SW-846 Method

<u>Units Reported</u>	<u>Description</u>
µg/sample	
mg/sample	

Sample Receipt Checklist

Client Name: **GILBANE-WALNUTCREEK**

Date/Time Received: **05-Mar-21 11:08**

Work Order: **21030347**

Received by: **SNH**

Checklist completed by: Stephanie Harrington 05-Mar-21
eSignature Date

Reviewed by: Rob Nieman 08-Mar-21
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:



17-Mar-2021

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

Re: **HPNS Parcel E-2; J310000400-016**

Work Order: **21030712**

Dear Brett,

ALS Environmental received 8 samples on 10-Mar-2021 11:15 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 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

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Environmental 

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RIGHT SOLUTIONS RIGHT PARTNER

Client: Gilbane Company
Project: HPNS Parcel E-2; J310000400-016
Work Order: 21030712

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
21030712-01	Q0374034-MSE01	Air		3/4/2021 14:30	3/10/2021 11:15	<input type="checkbox"/>
21030712-02	9764122-MSE01	Air		3/4/2021 14:30	3/10/2021 11:15	<input type="checkbox"/>
21030712-03	Q0374035-MSE02	Air		3/4/2021 14:40	3/10/2021 11:15	<input type="checkbox"/>
21030712-04	9764123-MSE02	Air		3/4/2021 14:40	3/10/2021 11:15	<input type="checkbox"/>
21030712-05	Q0374036-MSE01	Air		3/9/2021 09:30	3/10/2021 11:15	<input type="checkbox"/>
21030712-06	9764124-MSE01	Air		3/9/2021 09:30	3/10/2021 11:15	<input type="checkbox"/>
21030712-07	Q0374037-MSE02	Air		3/9/2021 09:02	3/10/2021 11:15	<input type="checkbox"/>
21030712-08	9764125-MSE02	Air		3/9/2021 09:02	3/10/2021 11:15	<input type="checkbox"/>

Client: Gilbane Company
Project: HPNS Parcel E-2; J310000400-016
Work Order: 21030712

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.

Client: Gilbane Company
Project: HPNS Parcel E-2; J310000400-016

Work Order: 21030712

Analytical Results

Lab ID: 21030712-01A
Client Sample ID: Q0374034-MSE01

Collection Date: 3/4/2021 2:30:00 PM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 436280	Analyst: SRL
Date Analyzed: 3/16/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	23	1.0	0.052	

Lab ID: 21030712-02A
Client Sample ID: 9764122-MSE01

Collection Date: 3/4/2021 2:30:00 PM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 448920	Analyst: SRL
Date Analyzed: 3/16/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	26	1.0	0.058	

METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 448920	Analyst: AZ
Date Analyzed: 3/17/2021 12:16		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	98	25	0.00022	
Lead	ND	25	<0.000056	
Manganese	ND	25	<0.000056	

Lab ID: 21030712-03A
Client Sample ID: Q0374035-MSE02

Collection Date: 3/4/2021 2:40:00 PM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 452730	Analyst: SRL
Date Analyzed: 3/16/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	18	1.0	0.039	

Note:

Client: Gilbane Company
Project: HPNS Parcel E-2; J310000400-016

Work Order: 21030712

Analytical Results

Lab ID: 21030712-04A
Client Sample ID: 9764123-MSE02

Collection Date: 3/4/2021 2:40:00 PM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 459100	Analyst: SRL
Date Analyzed: 3/16/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	24	1.0	0.052	
METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 459100	Analyst: AZ
Date Analyzed: 3/17/2021 12:27		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	130	25	0.00028	
Lead	ND	25	<0.000054	
Manganese	ND	25	<0.000054	

Lab ID: 21030712-05A
Client Sample ID: Q0374036-MSE01

Collection Date: 3/9/2021 9:30:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 1657150	Analyst: SRL
Date Analyzed: 3/16/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	23	1.0	0.014	

Lab ID: 21030712-06A
Client Sample ID: 9764124-MSE01

Collection Date: 3/9/2021 9:30:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 1639760	Analyst: SRL
Date Analyzed: 3/16/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	23	1.0	0.014	
METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 1639760	Analyst: AZ
Date Analyzed: 3/17/2021 12:31		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	440	25	0.00027	
Lead	ND	25	<0.000015	
Manganese	ND	25	<0.000015	

Note:

Client: Gilbane Company
Project: HPNS Parcel E-2; J310000400-016

Work Order: 21030712

Analytical Results

Lab ID: 21030712-07A
Client Sample ID: Q0374037-MSE02

Collection Date: 3/9/2021 9:02:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 1663280	Analyst: SRL
Date Analyzed: 3/16/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	83	1.0	0.050	

Lab ID: 21030712-08A
Client Sample ID: 9764125-MSE02

Collection Date: 3/9/2021 9:02:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 1688410	Analyst: SRL
Date Analyzed: 3/16/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	25	1.0	0.015	

METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 1688410	Analyst: AZ
Date Analyzed: 3/17/2021 12:35		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	110	25	0.000066	
Lead	ND	25	<0.000015	
Manganese	ND	25	<0.000015	

Note:

Client: Gilbane Company
Work Order: 21030712
Project: HPNS Parcel E-2; J310000400-016

QC BATCH REPORT

Batch ID: **R189781** Instrument ID: **BAL2** Method: **TSP**

DUP	Sample ID: 21030712-02A DUP				Units: mg/sample		Analysis Date: 3/16/2021			
Client ID: 9764122-MSE01	Run ID: BAL2_210316A			SeqNo: 2417713		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	26.7	1.0	0	0	0		26.1	2.27	20	

The following samples were analyzed in this batch:

21030712-02A	21030712-04A	21030712-06A
21030712-08A		

Client: Gilbane Company
 Work Order: 21030712
 Project: HPNS Parcel E-2; J310000400-016

QC BATCH REPORT

Batch ID: 73250 Instrument ID: ICP1 Method: E12

MBLK		Sample ID: MBLK-73250-73250				Units: µg/sample		Analysis Date: 3/17/2021 12:04 PM		
Client ID:		Run ID: ICP1_210317B		SeqNo: 2417960		Prep Date: 3/17/2021		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-73250-73250				Units: µg/sample		Analysis Date: 3/17/2021 12:08 PM		
Client ID:		Run ID: ICP1_210317B		SeqNo: 2417961		Prep Date: 3/17/2021		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	401.3	100	450	0	89.2	75-125	0			
Lead	436.8	25	450	0	97.1	75-125	0			
Manganese	416	100	450	0	92.4	75-125	0			

LCSD		Sample ID: LCSD-73250-73250				Units: µg/sample		Analysis Date: 3/17/2021 12:12 PM		
Client ID:		Run ID: ICP1_210317B		SeqNo: 2417962		Prep Date: 3/17/2021		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	396.4	100	450	0	88.1	75-125	401.3	1.23	20	
Lead	429.2	25	450	0	95.4	75-125	436.8	1.76	20	
Manganese	408.5	100	450	0	90.8	75-125	416	1.83	20	

MS		Sample ID: 21030712-02A MS				Units: µg/sample		Analysis Date: 3/17/2021 12:20 PM		
Client ID: 9764122-MSE01		Run ID: ICP1_210317B		SeqNo: 2417964		Prep Date: 3/17/2021		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	482.8	100	450	98.14	85.5	75-125	0			
Lead	428.1	25	450	2.358	94.6	75-125	0			
Manganese	406	100	450	13.52	87.2	75-125	0			

MSD		Sample ID: 21030712-02A MSD				Units: µg/sample		Analysis Date: 3/17/2021 12:23 PM		
Client ID: 9764122-MSE01		Run ID: ICP1_210317B		SeqNo: 2417965		Prep Date: 3/17/2021		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	463.5	100	450	98.14	81.2	75-125	482.8	4.09	20	
Lead	423.1	25	450	2.358	93.5	75-125	428.1	1.18	20	
Manganese	387.5	100	450	13.52	83.1	75-125	406	4.65	20	

The following samples were analyzed in this batch:

21030712-02A	21030712-04A	21030712-06A
21030712-08A		

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

Client: Gilbane Company
Project: HPNS Parcel E-2; J310000400-016
WorkOrder: 21030712

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	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

<u>Acronym</u>	<u>Description</u>
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 Quantitation Limit
SDL	Sample Detection Limit
SW	SW-846 Method

<u>Units Reported</u>	<u>Description</u>
µg/sample	
mg/sample	

Sample Receipt Checklist

Client Name: **GILBANE-WALNUTCREEK**

Date/Time Received: **10-Mar-21 11:15**

Work Order: **21030712**

Received by: **DNS**

Checklist completed by: Rob Nieman 12-Mar-21
eSignature Date

Reviewed by: Rob Nieman 12-Mar-21
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

21030712

COC # KT-030921



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		
WBS Code: J310000400-016	Ship to: 4388 Glendale Milford Rd., Blue Ash, OH 45242	

Comments:	Analytical Test Method	CAAIR - Air PM10	E12 - Air Pb Mn Cu	N0500 - Air TSP									Code	Matrix
													A	Air
Equipment:													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.									Location ID	Sample Type	Depth (ft bgs)		Cooler	Comments
															Top	Bottom		
1	Q0374034-MSE01	A	03/04/2021	1430	KT	X							AMSE1	N2	0.00	0.00	1	VOLUME: 436.28
2	9764122-MSE01	A	03/04/2021	1430	KT		X	X					AMSE1	N2	0.00	0.00	1	VOLUME: 448.92
3	Q0374035-MSE02	A	03/04/2021	1440	KT	X							AMSE2	N2	0.00	0.00	1	VOLUME: 452.73
4	9764123-MSE02	A	03/04/2021	1440	KT		X	X					AMSE2	N2	0.00	0.00	1	VOLUME: 459.10
5	Q0374036-MSE01	A	03/09/2021	0930	KT	X							AMSE1	N1	0.00	0.00	1	VOLUME: 1657.15
6	9764124-MSE01	A	03/09/2021	0930	KT		X	X					AMSE1	N1	0.00	0.00	1	VOLUME: 1639.76
7	Q0374037-MSE02	A	03/09/2021	0902	KT	X							AMSE2	N1	0.00	0.00	1	VOLUME: 1663.28
8	9764125-MSE02	A	03/09/2021	0902	KT		X	X					AMSE2	N1	0.00	0.00	1	VOLUME: 1688.41

Turnaround Time: 5 days

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Shipping Date / Carrier / Airbill Number
	3/9/21	1400		3/9/21	1400	Shipping Date: 3/9/2021 / FedEx 7731 1016 4804
				3/10/21	11:15	
						Received by Laboratory: (Signature, Date, Time) & condition

cust. seal on package



19-Mar-2021

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

Re: **HPNS Parcel E RA Phase 2; J310000400-016**

Work Order: **21030851**

Dear Brett,

ALS Environmental received 8 samples on 12-Mar-2021 09:51 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

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Environmental 

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RIGHT SOLUTIONS RIGHT PARTNER

Client: Gilbane Company
Project: HPNS Parcel E RA Phase 2; J310000400-016
Work Order: 21030851

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
21030851-01	Q0374038-MSE01	Air		3/10/2021 08:34	3/12/2021 09:51	<input type="checkbox"/>
21030851-02	9764127-MSE01	Air		3/10/2021 08:34	3/12/2021 09:51	<input type="checkbox"/>
21030851-03	Q0374039-MSE02	Air		3/10/2021 08:42	3/12/2021 09:51	<input type="checkbox"/>
21030851-04	9764126-MSE02	Air		3/10/2021 08:42	3/12/2021 09:51	<input type="checkbox"/>
21030851-05	Q0374040-MSE01	Air		3/11/2021 08:04	3/12/2021 09:51	<input type="checkbox"/>
21030851-06	9764128-MSE01	Air		3/11/2021 08:04	3/12/2021 09:51	<input type="checkbox"/>
21030851-07	Q0374041-MSE02	Air		3/11/2021 07:47	3/12/2021 09:51	<input type="checkbox"/>
21030851-08	9764129-MSE02	Air		3/11/2021 07:47	3/12/2021 09:51	<input type="checkbox"/>

Client: Gilbane Company
Project: HPNS Parcel E RA Phase 2; J310000400-016
Work Order: 21030851

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.

Client: Gilbane Company
Project: HPNS Parcel E RA Phase 2; J310000400-016

Work Order: 21030851

Analytical Results

Lab ID: 21030851-01A
Client Sample ID: Q0374038-MSE01

Collection Date: 3/10/2021 8:34:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 1581520	Analyst: SRL
Date Analyzed: 3/16/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	76	1.0	0.048	

Lab ID: 21030851-02A
Client Sample ID: 9764127-MSE01

Collection Date: 3/10/2021 8:34:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 1567040	Analyst: SRL
Date Analyzed: 3/16/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	21	1.0	0.014	

METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 1567040	Analyst: AZ
Date Analyzed: 3/17/2021 12:47		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	130	25	0.000085	
Lead	ND	25	<0.000016	
Manganese	ND	25	<0.000016	

Lab ID: 21030851-03A
Client Sample ID: Q0374039-MSE02

Collection Date: 3/10/2021 8:42:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 1615850	Analyst: SRL
Date Analyzed: 3/16/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	65	1.0	0.040	

Note:

Client: Gilbane Company
Project: HPNS Parcel E RA Phase 2; J310000400-016

Work Order: 21030851

Analytical Results

Lab ID: 21030851-04A
Client Sample ID: 9764126-MSE02

Collection Date: 3/10/2021 8:42:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 1629900	Analyst: SRL
Date Analyzed: 3/16/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	15	1.0	0.0093	

METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 1629900	Analyst: AZ
Date Analyzed: 3/17/2021 12:50		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	290	25	0.00018	
Lead	ND	25	<0.000015	
Manganese	ND	25	<0.000015	

Lab ID: 21030851-05A
Client Sample ID: Q0374040-MSE01

Collection Date: 3/11/2021 8:04:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 779360	Analyst: SRL
Date Analyzed: 3/16/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	45	1.0	0.058	

Lab ID: 21030851-06A
Client Sample ID: 9764128-MSE01

Collection Date: 3/11/2021 8:04:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 1572230	Analyst: SRL
Date Analyzed: 3/16/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	12	1.0	0.0078	

METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 1572230	Analyst: AZ
Date Analyzed: 3/17/2021 12:54		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	270	25	0.00017	
Lead	ND	25	<0.000016	
Manganese	ND	25	<0.000016	

Note:

Client: Gilbane Company
Project: HPNS Parcel E RA Phase 2; J310000400-016

Work Order: 21030851

Analytical Results

Lab ID: 21030851-07A
Client Sample ID: Q0374041-MSE02

Collection Date: 3/11/2021 7:47:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 459100	Analyst: SRL
Date Analyzed: 3/16/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	52	1.0	0.11	

Lab ID: 21030851-08A
Client Sample ID: 9764129-MSE02

Collection Date: 3/11/2021 7:47:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 461020	Analyst: SRL
Date Analyzed: 3/16/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	3.6	1.0	0.0079	

METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 461020	Analyst: AZ
Date Analyzed: 3/17/2021 12:58		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	90	25	0.00020	
Lead	ND	25	<0.000054	
Manganese	ND	25	<0.000054	

Note:

Client: Gilbane Company

QC BATCH REPORT

Work Order: 21030851

Project: HPNS Parcel E RA Phase 2; J310000400-016

Batch ID: **R189781** Instrument ID: **BAL2** Method: **TSP**

DUP	Sample ID: 21030712-02A DUP				Units: mg/sample		Analysis Date: 3/16/2021			
Client ID:	Run ID: BAL2_210316A			SeqNo: 2417713		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	26.7	1.0	0	0	0		26.1	2.27	20	

The following samples were analyzed in this batch:

21030851-02A	21030851-04A	21030851-06A
21030851-08A		

Client: Gilbane Company
 Work Order: 21030851
 Project: HPNS Parcel E RA Phase 2; J310000400-016

QC BATCH REPORT

Batch ID: **73250** Instrument ID: **ICP1** Method: **E12**

MBLK		Sample ID: MBLK-73250-73250				Units: µg/sample		Analysis Date: 3/17/2021 12:04 PM		
Client ID:		Run ID: ICP1_210317B		SeqNo: 2417960		Prep Date: 3/17/2021		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-73250-73250				Units: µg/sample		Analysis Date: 3/17/2021 12:08 PM		
Client ID:		Run ID: ICP1_210317B		SeqNo: 2417961		Prep Date: 3/17/2021		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	401.3	100	450	0	89.2	75-125	0			
Lead	436.8	25	450	0	97.1	75-125	0			
Manganese	416	100	450	0	92.4	75-125	0			

LCSD		Sample ID: LCSD-73250-73250				Units: µg/sample		Analysis Date: 3/17/2021 12:12 PM		
Client ID:		Run ID: ICP1_210317B		SeqNo: 2417962		Prep Date: 3/17/2021		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	396.4	100	450	0	88.1	75-125	401.3	1.23	20	
Lead	429.2	25	450	0	95.4	75-125	436.8	1.76	20	
Manganese	408.5	100	450	0	90.8	75-125	416	1.83	20	

MS		Sample ID: 21030712-02A MS				Units: µg/sample		Analysis Date: 3/17/2021 12:20 PM		
Client ID:		Run ID: ICP1_210317B		SeqNo: 2417964		Prep Date: 3/17/2021		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	482.8	100	450	98.14	85.5	75-125	0			
Lead	428.1	25	450	2.358	94.6	75-125	0			
Manganese	406	100	450	13.52	87.2	75-125	0			

MSD		Sample ID: 21030712-02A MSD				Units: µg/sample		Analysis Date: 3/17/2021 12:23 PM		
Client ID:		Run ID: ICP1_210317B		SeqNo: 2417965		Prep Date: 3/17/2021		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	463.5	100	450	98.14	81.2	75-125	482.8	4.09	20	
Lead	423.1	25	450	2.358	93.5	75-125	428.1	1.18	20	
Manganese	387.5	100	450	13.52	83.1	75-125	406	4.65	20	

The following samples were analyzed in this batch:

21030851-02A	21030851-04A	21030851-06A
21030851-08A		

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

Client: Gilbane Company
Project: HPNS Parcel E RA Phase 2; J310000400-016
WorkOrder: 21030851

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	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

<u>Acronym</u>	<u>Description</u>
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 Quantitation Limit
SDL	Sample Detection Limit
SW	SW-846 Method

<u>Units Reported</u>	<u>Description</u>
µg/sample	
mg/sample	

Sample Receipt Checklist

Client Name: GILBANE-WALNUTCREEK

Date/Time Received: 12-Mar-21 09:51

Work Order: 21030851

Received by: DNS

Checklist completed by: Jan Wilcox 12-Mar-21
eSignature Date

Reviewed by: Rob Nieman 16-Mar-21
eSignature Date

Matrices: air
Carrier name: FedEx

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

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

**CHAIN-OF-CUSTODY
RECORD**

Gilbane Federal



21036851

COC # KT031121AIRE



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: Please insert point of contact , insert laboratory phone number , insert email	
WBS Code: J310000400-016	Ship to:	

Comments:	Analytical Test Method	Code	Matrix
		A	Air
Equipment:	CAAIR - Air PM10 E12 - Air Pb Mn Cu N0500 - Air TSP	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.	X	X	X	X	X	X	X	X	X	Location ID	Sample Type	Depth (ft bgs)		Cooler	Comments
														AMSE1	N1	Top	Bottom		
1	Q0374038-MSE01	A	03/10/2021	0834	KT	X								AMSE1	N1	0.00	0.00	1	VOLUME: 1581.52
2	9764127-MSE01	A	03/10/2021	0834	KT		X	X						AMSE1	N1	0.00	0.00	1	VOLUME: 1567.04
3	Q0374039-MSE02	A	03/10/2021	0842	KT	X								AMSE2	N1	0.00	0.00	1	VOLUME: 1615.85
4	9764126-MSE02	A	03/10/2021	0842	KT		X	X						AMSE2	N1	0.00	0.00	1	VOLUME: 1629.90
5	Q0374040-MSE01	A	03/11/2021	0804	KT	X								AMSE1	N1	0.00	0.00	1	VOLUME: 779.36
6	9764128-MSE01	A	03/11/2021	0804	KT		X	X						AMSE1	N1	0.00	0.00	1	VOLUME: 1572.23
7	Q0374041-MSE02	A	03/11/2021	0747	KT	X								AMSE2	N1	0.00	0.00	1	VOLUME: 459.10
8	9764129-MSE02	A	03/11/2021	0747	KT		X	X						AMSE2	N1	0.00	0.00	1	VOLUME: 461.02

Turnaround Time: 5 days

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Shipping Date / Carrier / Airbill Number
	3/11/21	1400	FedEx	3/11/21	1400	Shipping Date: 3/11/2021 / FedEx 7731 3403 3800
				3/12/21	09:57	Received by Laboratory: (Signature, Date, Time) & condition

Felix custody seal



26-Mar-2021

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

Re: **HPNS Parcel E; J310000400-016**

Work Order: **21031181**

Dear Brett,

ALS Environmental received 8 samples on 19-Mar-2021 10:10 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 GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
Work Order: 21031181

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
21031181-01	Q0374044-MSE01	Air		3/17/2021 07:41	3/19/2021 10:10	<input type="checkbox"/>
21031181-02	9764130-MSE01	Air		3/17/2021 07:41	3/19/2021 10:10	<input type="checkbox"/>
21031181-03	Q0374045-MSE02	Air		3/17/2021 06:59	3/19/2021 10:10	<input type="checkbox"/>
21031181-04	9764132-MSE02	Air		3/17/2021 06:59	3/19/2021 10:10	<input type="checkbox"/>
21031181-05	Q0374043-MSE01	Air		3/18/2021 08:34	3/19/2021 10:10	<input type="checkbox"/>
21031181-06	9894234-MSE01	Air		3/18/2021 08:34	3/19/2021 10:10	<input type="checkbox"/>
21031181-07	Q0374042-MSE02	Air		3/18/2021 08:15	3/19/2021 10:10	<input type="checkbox"/>
21031181-08	9894233-MSE02	Air		3/18/2021 08:15	3/19/2021 10:10	<input type="checkbox"/>

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
Work Order: 21031181

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.

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

Work Order: 21031181

Analytical Results

Lab ID: 21031181-01A
Client Sample ID: Q0374044-MSE01

Collection Date: 3/17/2021 7:41:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 1480410	Analyst: SRL
Date Analyzed: 3/24/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	28	1.0	0.019	

Lab ID: 21031181-02A
Client Sample ID: 9764130-MSE01

Collection Date: 3/17/2021 7:41:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 1479960	Analyst: SRL
Date Analyzed: 3/24/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	25	1.0	0.017	

METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 1479960	Analyst: AZ
Date Analyzed: 3/24/2021 13:47		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	310	25	0.00021	
Lead	ND	25	<0.000017	
Manganese	ND	25	<0.000017	

Lab ID: 21031181-03A
Client Sample ID: Q0374045-MSE02

Collection Date: 3/17/2021 6:59:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 1493870	Analyst: SRL
Date Analyzed: 3/24/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	3.0	1.0	0.0020	

Note:

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

Work Order: 21031181

Analytical Results

Lab ID: 21031181-04A
Client Sample ID: 9764132-MSE02

Collection Date: 3/17/2021 6:59:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 1512150	Analyst: SRL
Date Analyzed: 3/24/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	8.5	1.0	0.0056	
METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 1512150	Analyst: AZ
Date Analyzed: 3/24/2021 13:59		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	170	25	0.00011	
Lead	ND	25	<0.000017	
Manganese	ND	25	<0.000017	

Lab ID: 21031181-05A
Client Sample ID: Q0374043-MSE01

Collection Date: 3/18/2021 8:34:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 1557590	Analyst: SRL
Date Analyzed: 3/24/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	58	1.0	0.037	

Lab ID: 21031181-06A
Client Sample ID: 9894234-MSE01

Collection Date: 3/18/2021 8:34:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 1671280	Analyst: SRL
Date Analyzed: 3/24/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	25	1.0	0.015	
METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 1671280	Analyst: AZ
Date Analyzed: 3/24/2021 14:10		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	300	25	0.00018	
Lead	ND	25	<0.000015	
Manganese	ND	25	<0.000015	

Note:

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

Work Order: 21031181

Analytical Results

Lab ID: 21031181-07A
Client Sample ID: Q0374042-MSE02

Collection Date: 3/18/2021 8:15:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 1715990	Analyst: SRL
Date Analyzed: 3/24/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	73	1.0	0.042	

Lab ID: 21031181-08A
Client Sample ID: 9894233-MSE02

Collection Date: 3/18/2021 8:15:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 1751800	Analyst: SRL
Date Analyzed: 3/24/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	14	1.0	0.0078	

METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 1751800	Analyst: AZ
Date Analyzed: 3/24/2021 14:14		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	400	25	0.00023	
Lead	ND	25	<0.000014	
Manganese	ND	25	<0.000014	

Note:

ALS Environmental

Date: 26-Mar-21

Client: Gilbane Company
Work Order: 21031181
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **R190108** Instrument ID: **BAL2** Method: **TSP**

DUP	Sample ID: 21031181-02A DUP				Units: mg/sample		Analysis Date: 3/24/2021			
Client ID: 9764130-MSE01	Run ID: BAL2_210324A			SeqNo: 2424736		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	26.62	1.0	0	0	0		25.19	5.52	20	

The following samples were analyzed in this batch:

21031181-02A	21031181-04A	21031181-06A
21031181-08A		

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

Client: Gilbane Company
Work Order: 21031181
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **R190109** Instrument ID: **BAL2** Method: **PM10**

DUP		Sample ID: 21031181-07A DUP				Units: mg/sample		Analysis Date: 3/24/2021		
Client ID: Q0374042-MSE02		Run ID: BAL2_210324B		SeqNo: 2424744		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	72.72	1.0	0	0	0		72.55	0.234	20	

The following samples were analyzed in this batch:

21031181-01A	21031181-03A	21031181-05A
21031181-07A		

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

Client: Gilbane Company
 Work Order: 21031181
 Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: 73384 Instrument ID: ICP1 Method: E12

MBLK		Sample ID: MBLK-73384-73384				Units: µg/sample		Analysis Date: 3/24/2021 01:36 PM		
Client ID:		Run ID: ICP1_210324A		SeqNo: 2422954		Prep Date: 3/24/2021		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-73384-73384				Units: µg/sample		Analysis Date: 3/24/2021 01:39 PM		
Client ID:		Run ID: ICP1_210324A		SeqNo: 2422955		Prep Date: 3/24/2021		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	420	100	450	0	93.3	75-125	0			
Lead	433.5	25	450	0	96.3	75-125	0			
Manganese	399.2	100	450	0	88.7	75-125	0			

LCSD		Sample ID: LCSD-73384-73384				Units: µg/sample		Analysis Date: 3/24/2021 01:43 PM		
Client ID:		Run ID: ICP1_210324A		SeqNo: 2422956		Prep Date: 3/24/2021		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	403	100	450	0	89.6	75-125	420	4.14	20	
Lead	418.4	25	450	0	93	75-125	433.5	3.56	20	
Manganese	391.1	100	450	0	86.9	75-125	399.2	2.05	20	

MS		Sample ID: 21031181-04A MS				Units: µg/sample		Analysis Date: 3/24/2021 02:02 PM		
Client ID: 9764132-MSE02		Run ID: ICP1_210324A		SeqNo: 2422959		Prep Date: 3/24/2021		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	548.6	100	450	169.7	84.2	75-125	0			
Lead	409.2	25	450	2.547	90.4	75-125	0			
Manganese	357.2	100	450	4.296	78.4	75-125	0			

MSD		Sample ID: 21031181-04A MSD				Units: µg/sample		Analysis Date: 3/24/2021 02:06 PM		
Client ID: 9764132-MSE02		Run ID: ICP1_210324A		SeqNo: 2422960		Prep Date: 3/24/2021		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	550.4	100	450	169.7	84.6	75-125	548.6	0.328	20	
Lead	406.1	25	450	2.547	89.7	75-125	409.2	0.762	20	
Manganese	364.1	100	450	4.296	80	75-125	357.2	1.91	20	

The following samples were analyzed in this batch:

21031181-02A	21031181-04A	21031181-06A
21031181-08A		

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

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
WorkOrder: 21031181

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	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

<u>Acronym</u>	<u>Description</u>
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 Quantitation Limit
SDL	Sample Detection Limit
SW	SW-846 Method

<u>Units Reported</u>	<u>Description</u>
µg/sample	
mg/sample	

Sample Receipt Checklist

Client Name: GILBANE-WALNUTCREEK

Date/Time Received: 19-Mar-21 10:10

Work Order: 21031181

Received by: SNH

Checklist completed by: Stephanie Harrington 19-Mar-21
eSignature Date

Reviewed by: Rob Nieman 23-Mar-21
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

COC # KT-031821



21031181

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		
WBS Code: J310000400-016	Ship to: 4388 Glendale Milford Rd., Blue Ash, OH 45242	

Comments:	Analytical Test Method	CAAIR - Air PM10	E12 - Air Pb Mn Cu	N0500 - Air TSP												Code	Matrix
																A	Air
Equipment:																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.									Location ID	Sample Type	Depth (ft bgs)		Cooler	Comments
															Top	Bottom		
1	Q0374044-MSE01	A	03/17/2021	0741	KT	X							AMSE1	N1	0.00	0.00	1	VOLUME: 1480.41
2	9764130-MSE01	A	03/17/2021	0741	KT		X	X					AMSE1	N1	0.00	0.00	1	VOLUME: 1479.96
3	Q0374045-MSE02	A	03/17/2021	0659	KT	X							AMSE2	N1	0.00	0.00	1	VOLUME: 1493.87
4	9764132-MSE02	A	03/17/2021	0659	KT		X	X					AMSE2	N1	0.00	0.00	1	VOLUME: 1512.15
5	Q0374043-MSE01	A	03/18/2021	0834	KT	X							AMSE1	N1	0.00	0.00	1	VOLUME: 1557.59
6	9894234-MSE01	A	03/18/2021	0834	KT		X	X					AMSE1	N1	0.00	0.00	1	VOLUME: 1671.28
7	Q0374042-MSE02	A	03/18/2021	0815	KT	X							AMSE2	N1	0.00	0.00	1	VOLUME: 1715.99
8	9894233-MSE02	A	03/18/2021	0815	KT		X	X					AMSE2	N1	0.00	0.00	1	VOLUME: 1751.80

Turnaround Time: 5 days

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Shipping Date / Carrier / Airbill Number
	3/18/21	1400		3/18/21	1400	Shipping Date: 3/18/2021 / FedEx 7731 9982 3635
				3/19/21	1010	Received by Laboratory: (Signature, Date, Time) & condition

fedex
custody seal



01-Apr-2021

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

Re: **HPNS Parcel E; J310000400-016**

Work Order: **21031380**

Dear Brett,

ALS Environmental received 12 samples on 24-Mar-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 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 GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
Work Order: 21031380

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
21031380-01	Q0424237-MSE01	Air		3/19/2021 08:45	3/24/2021 10:30	<input type="checkbox"/>
21031380-02	9894235-MSE01	Air		3/19/2021 08:45	3/24/2021 10:30	<input type="checkbox"/>
21031380-03	Q0424236-MSE02	Air		3/19/2021 08:18	3/24/2021 10:30	<input type="checkbox"/>
21031380-04	9894236-MSE02	Air		3/19/2021 08:18	3/24/2021 10:30	<input type="checkbox"/>
21031380-05	Q0424238-MSE01	Air		3/19/2021 14:28	3/24/2021 10:30	<input type="checkbox"/>
21031380-06	9894237-MSE01	Air		3/19/2021 14:28	3/24/2021 10:30	<input type="checkbox"/>
21031380-07	Q0424239-MSE02	Air		3/19/2021 14:45	3/24/2021 10:30	<input type="checkbox"/>
21031380-08	9894238-MSE02	Air		3/19/2021 14:45	3/24/2021 10:30	<input type="checkbox"/>
21031380-09	Q0424241-MSE01	Air		3/23/2021 08:00	3/24/2021 10:30	<input type="checkbox"/>
21031380-10	9894239-MSE01	Air		3/23/2021 08:00	3/24/2021 10:30	<input type="checkbox"/>
21031380-11	Q0424240-MSE02	Air		3/23/2021 07:30	3/24/2021 10:30	<input type="checkbox"/>
21031380-12	9894240-MSE02	Air		3/23/2021 07:30	3/24/2021 10:30	<input type="checkbox"/>

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
Work Order: 21031380

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.

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

Work Order: 21031380

Analytical Results

Lab ID: 21031380-01A
Client Sample ID: Q0424237-MSE01

Collection Date: 3/19/2021 8:45:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J	Method: PM10		Air Volume (L): 1638660	Analyst: SRL
Date Analyzed: 3/31/2021	mg/sample	Reporting Limit mg/sample	mg/m3	
Particulate as PM10	18	1.0	0.011	

Lab ID: 21031380-02A
Client Sample ID: 9894235-MSE01

Collection Date: 3/19/2021 8:45:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B	Method: TSP		Air Volume (L): 1631840	Analyst: SRL
Date Analyzed: 3/31/2021	mg/sample	Reporting Limit mg/sample	mg/m3	
Total suspended particulate	23	1.0	0.014	

METALS BY EPA METHOD 12 MOD.	Method: E12		Air Volume (L): 1631840	Analyst: AZ
Date Analyzed: 3/31/2021 17:30	µg/sample	Reporting Limit µg/sample	mg/m3	
Copper	460	25	0.00028	
Lead	ND	25	<0.000015	
Manganese	ND	25	<0.000015	

Lab ID: 21031380-03A
Client Sample ID: Q0424236-MSE02

Collection Date: 3/19/2021 8:18:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J	Method: PM10		Air Volume (L): 1484060	Analyst: SRL
Date Analyzed: 3/31/2021	mg/sample	Reporting Limit mg/sample	mg/m3	
Particulate as PM10	9.2	1.0	0.0062	

Note:

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

Work Order: 21031380

Analytical Results

Lab ID: 21031380-04A
Client Sample ID: 9894236-MSE02

Collection Date: 3/19/2021 8:18:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 1666390	Analyst: SRL
Date Analyzed: 3/31/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	16	1.0	0.0098	

METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 1666390	Analyst: AZ
Date Analyzed: 3/31/2021 17:41		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	190	25	0.00011	
Lead	ND	25	<0.000015	
Manganese	ND	25	<0.000015	

Lab ID: 21031380-05A
Client Sample ID: Q0424238-MSE01

Collection Date: 3/19/2021 2:28:00 PM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDX J		Method: PM10	Air Volume (L): 382890	Analyst: SRL
Date Analyzed: 3/31/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	9.4	1.0	0.025	

Lab ID: 21031380-06A
Client Sample ID: 9894237-MSE01

Collection Date: 3/19/2021 2:28:00 PM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 383770	Analyst: SRL
Date Analyzed: 3/31/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	17	1.0	0.044	

METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 383770	Analyst: AZ
Date Analyzed: 3/31/2021 17:45		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	73	25	0.00019	
Lead	ND	25	<0.000065	
Manganese	ND	25	<0.000065	

Note:

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

Work Order: 21031380

Analytical Results

Lab ID: 21031380-07A
Client Sample ID: Q0424239-MSE02

Collection Date: 3/19/2021 2:45:00 PM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 305380	Analyst: SRL
Date Analyzed: 3/31/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	10	1.0	0.033	

Lab ID: 21031380-08A
Client Sample ID: 9894238-MSE02

Collection Date: 3/19/2021 2:45:00 PM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 349800	Analyst: SRL
Date Analyzed: 3/31/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	17	1.0	0.049	

METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 349800	Analyst: AZ
Date Analyzed: 3/31/2021 17:57		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	50	25	0.00014	
Lead	ND	25	<0.000071	
Manganese	ND	25	<0.000071	

Lab ID: 21031380-09A
Client Sample ID: Q0424241-MSE01

Collection Date: 3/23/2021 8:00:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 1630520	Analyst: SRL
Date Analyzed: 3/31/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	20	1.0	0.012	

Note:

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

Work Order: 21031380

Analytical Results

Lab ID: 21031380-10A
Client Sample ID: 9894239-MSE01

Collection Date: 3/23/2021 8:00:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 1596060	Analyst: SRL
Date Analyzed: 3/31/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	54	1.0	0.034	

METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 1596060	Analyst: AZ
Date Analyzed: 3/31/2021 18:00		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	380	25	0.00024	
Lead	ND	25	<0.000016	
Manganese	ND	25	<0.000016	

Lab ID: 21031380-11A
Client Sample ID: Q0424240-MSE02

Collection Date: 3/23/2021 7:30:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 1562370	Analyst: SRL
Date Analyzed: 3/31/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	19	1.0	0.012	

Lab ID: 21031380-12A
Client Sample ID: 9894240-MSE02

Collection Date: 3/23/2021 7:30:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 1680050	Analyst: SRL
Date Analyzed: 3/31/2021		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): 1680050	Analyst: AZ
Date Analyzed: 3/31/2021 18:04		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: 21031380
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **R190246** Instrument ID: **BAL2** Method: **TSP**

DUP	Sample ID: 21031380-02A DUP				Units: mg/sample		Analysis Date: 3/31/2021			
Client ID: 9894235-MSE01	Run ID: BAL2_210331A			SeqNo: 2427652		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	22.95	1.0	0	0	0		23.09	0.608	20	

The following samples were analyzed in this batch:

21031380-02A	21031380-04A	21031380-06A
21031380-08A	21031380-10A	21031380-12A

Client: Gilbane Company
Work Order: 21031380
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **R190248** Instrument ID: **BAL2** Method: **PM10**

DUP		Sample ID: 21031380-11A DUP				Units: mg/sample		Analysis Date: 3/31/2021		
Client ID: Q0424240-MSE02		Run ID: BAL2_210331B		SeqNo: 2427735		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	18.84	1.0	0	0	0		18.73	0.586	20	

The following samples were analyzed in this batch:

21031380-01A	21031380-03A	21031380-05A
21031380-07A	21031380-09A	21031380-11A

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

Client: Gilbane Company
 Work Order: 21031380
 Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: 73549 Instrument ID: ICP1 Method: E12

MBLK		Sample ID: MBLK-73549-73549			Units: µg/sample			Analysis Date: 3/31/2021 05:18 PM		
Client ID:		Run ID: ICP1_210331B			SeqNo: 2428605		Prep Date: 3/31/2021		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-73549-73549			Units: µg/sample			Analysis Date: 3/31/2021 05:22 PM		
Client ID:		Run ID: ICP1_210331B			SeqNo: 2428606		Prep Date: 3/31/2021		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	390	100	450	0	86.7	75-125	0			
Lead	391.9	25	450	0	87.1	75-125	0			
Manganese	365	100	450	0	81.1	75-125	0			

LCSD		Sample ID: LCSD-73549-73549			Units: µg/sample			Analysis Date: 3/31/2021 05:26 PM		
Client ID:		Run ID: ICP1_210331B			SeqNo: 2428607		Prep Date: 3/31/2021		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	400.9	100	450	0	89.1	75-125	390	2.77	20	
Lead	397.5	25	450	0	88.3	75-125	391.9	1.43	20	
Manganese	379.4	100	450	0	84.3	75-125	365	3.88	20	

MS		Sample ID: 21031380-06A MS			Units: µg/sample			Analysis Date: 3/31/2021 05:49 PM		
Client ID: 9894237-MSE01		Run ID: ICP1_210331B			SeqNo: 2428611		Prep Date: 3/31/2021		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	463.5	100	450	73.35	86.7	75-125	0			
Lead	402.6	25	450	0	89.5	75-125	0			
Manganese	379.1	100	450	24.47	78.8	75-125	0			

MSD		Sample ID: 21031380-06A MSD			Units: µg/sample			Analysis Date: 3/31/2021 05:53 PM		
Client ID: 9894237-MSE01		Run ID: ICP1_210331B			SeqNo: 2428612		Prep Date: 3/31/2021		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	465.3	100	450	73.35	87.1	75-125	463.5	0.388	20	
Lead	405	25	450	0	90	75-125	402.6	0.613	20	
Manganese	375.2	100	450	24.47	77.9	75-125	379.1	1.04	20	

The following samples were analyzed in this batch:

21031380-02A	21031380-04A	21031380-06A
21031380-08A	21031380-10A	21031380-12A

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

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
WorkOrder: 21031380

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	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

<u>Acronym</u>	<u>Description</u>
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 Quantitation Limit
SDL	Sample Detection Limit
SW	SW-846 Method

<u>Units Reported</u>	<u>Description</u>
µg/sample	
mg/sample	

Sample Receipt Checklist

Client Name: **GILBANE-WALNUTCREEK**

Date/Time Received: **24-Mar-21 10:30**

Work Order: **21031380**

Received by: **RDN**

Checklist completed by: Stephanie Harrington 25-Mar-21
eSignature Date

Reviewed by: Rob Nieman 26-Mar-21
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

21031380

COC # KT-032321A



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		
WBS Code: J310000400-016	Ship to: 4388 Glendale Milford Rd., Blue Ash, OH 45242	

Comments:	Analytical Test Method	CAAIR - Air PM10	E12 - Air Pb Mn Cu	N0500 - Air TSP														Code Matrix
																		A Air
Equipment:																		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.										Location ID	Sample Type	Depth (ft bgs)		Cooler	Comments	
																Top	Bottom			
1	Q0424237-MSE01	01	A	03/19/2021	0845	KT	X								AMSE1	N1	0.00	0.00	1	VOLUME: 1638.66
2	9894235-MSE01	02	A	03/19/2021	0845	KT		X	X						AMSE1	N1	0.00	0.00	1	VOLUME: 1631.84
3	Q0424236-MSE02	03	A	03/19/2021	0818	KT	X								AMSE2	N1	0.00	0.00	1	VOLUME: 1484.06
4	9894236-MSE02	04	A	03/19/2021	0818	KT		X	X						AMSE2	N1	0.00	0.00	1	VOLUME: 1666.39
5	Q0424238-MSE01	05	A	03/19/2021	1428	KT	X								AMSE1	N1	0.00	0.00	1	VOLUME: 382.89
6	9894237-MSE01	06	A	03/19/2021	1428	KT		X	X						AMSE1	N1	0.00	0.00	1	VOLUME: 383.77
7	Q0424239-MSE02	07	A	03/19/2021	1445	KT	X								AMSE2	N1	0.00	0.00	1	VOLUME: 305.38
8	9894238-MSE02	08	A	03/19/2021	1445	KT		X	X						AMSE2	N1	0.00	0.00	1	VOLUME: 349.80
9	Q0424241-MSE01	09	A	03/23/2021	0800	KT	X								AMSE1	N1	0.00	0.00	1	VOLUME: 1630.52
10	9894239-MSE01	10	A	03/23/2021	0800	KT		X	X						AMSE1	N1	0.00	0.00	1	VOLUME: 1596.06
11	Q0424240-MSE02	11	A	03/23/2021	0730	KT	X								AMSE2	N1	0.00	0.00	1	VOLUME: 1562.37

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Shipping Date / Carrier / Airbill Number
	3/23/21	1400	FedEx	3/23/21	1400	Shipping Date: 3/23/2021/Fedex 773239479439
				3/24/21	1030	Received by Laboratory: (Signature, Date, Time) & condition
			✓ Custody Seals			

**CHAIN-OF-CUSTODY
RECORD**

Gilbane Federal

21031386

COC # KT-032321A



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: Stella Hanis 916-374-4414 Stella.Hanis@ALSGlobal.com	
WBS Code: J310000400-016	Ship to: 4388 Glendale Millford Rd., Blue Ash, OH 45242	

Comments:	Analytical Test Method	CAAIR - Air PM10	E12 - Air Pb Mn Cu	N0500 - Air TSP														Code Matrix
																		A Air
Equipment:																		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 Int.	KT	X	X						Location ID	Sample Type	Depth (ft bgs)		Cooler	Comments
															Top	Bottom		
12 9894240-MSE02	A	03/23/2021	0730	KT		X	X						AMSE2	N1	0.00	0.00	1	VOLUME: 1680.05
13																		
14																		
15																		
16																		
17																		
18																		

Turnaround Time: 5 days

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Shipping Date / Carrier / Airbill Number
	3/23/21	1400		3/23/21	1400	Shipping Date: 3/23/2021/Fedex 773239479439
				3/24/21	10:30	Received by Laboratory: (Signature, Date, Time) & condition



02-Apr-2021

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

Re: **HPNS Parcel E; J310000400-016**

Work Order: **21031526**

Dear Brett,

ALS Environmental received 8 samples on 26-Mar-2021 10:02 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 GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
Work Order: 21031526

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
21031526-01	Q0424242-MSE01	Air		3/24/2021 08:20	3/26/2021 10:02	<input type="checkbox"/>
21031526-02	9894241-MSE01	Air		3/24/2021 08:20	3/26/2021 10:02	<input type="checkbox"/>
21031526-03	Q0424243-MSE02	Air		3/24/2021 07:55	3/26/2021 10:02	<input type="checkbox"/>
21031526-04	9894242-MSE02	Air		3/24/2021 07:55	3/26/2021 10:02	<input type="checkbox"/>
21031526-05	Q0424244-MSE01	Air		3/25/2021 08:07	3/26/2021 10:02	<input type="checkbox"/>
21031526-06	9894243-MSE01	Air		3/25/2021 08:07	3/26/2021 10:02	<input type="checkbox"/>
21031526-07	Q0424245-MSE02	Air		3/25/2021 07:48	3/26/2021 10:02	<input type="checkbox"/>
21031526-08	9894244-MSE02	Air		3/25/2021 07:48	3/26/2021 10:02	<input type="checkbox"/>

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
Work Order: 21031526

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.

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

Work Order: 21031526

Analytical Results

Lab ID: 21031526-01A
Client Sample ID: Q0424242-MSE01

Collection Date: 3/24/2021 8:20:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 1658890	Analyst: SRL
Date Analyzed: 4/2/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	28	1.0	0.017	

Lab ID: 21031526-02A
Client Sample ID: 9894241-MSE01

Collection Date: 3/24/2021 8:20:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 1651770	Analyst: SRL
Date Analyzed: 4/2/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	47	1.0	0.028	

METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 1651770	Analyst: AZ
Date Analyzed: 4/2/2021 15:11		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	390	25	0.00023	
Lead	ND	25	<0.000015	
Manganese	34	25	0.000021	

Lab ID: 21031526-03A
Client Sample ID: Q0424243-MSE02

Collection Date: 3/24/2021 7:55:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 1669170	Analyst: SRL
Date Analyzed: 4/2/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	10	1.0	0.0060	

Note:

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

Work Order: 21031526

Analytical Results

Lab ID: 21031526-04A
Client Sample ID: 9894242-MSE02

Collection Date: 3/24/2021 7:55:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 1706990	Analyst: SRL
Date Analyzed: 4/2/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	13	1.0	0.0078	
METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 1706990	Analyst: AZ
Date Analyzed: 4/2/2021 15:15		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	47	25	0.000028	
Lead	ND	25	<0.000015	
Manganese	ND	25	<0.000015	

Lab ID: 21031526-05A
Client Sample ID: Q0424244-MSE01

Collection Date: 3/25/2021 8:07:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 1595640	Analyst: SRL
Date Analyzed: 4/2/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	33	1.0	0.021	

Lab ID: 21031526-06A
Client Sample ID: 9894243-MSE01

Collection Date: 3/25/2021 8:07:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 1612730	Analyst: SRL
Date Analyzed: 4/2/2021		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): 1612730	Analyst: AZ
Date Analyzed: 4/2/2021 15:27		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	220	25	0.00014	
Lead	ND	25	<0.000016	
Manganese	ND	25	<0.000016	

Note:

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

Work Order: 21031526

Analytical Results

Lab ID: 21031526-07A
Client Sample ID: Q0424245-MSE02

Collection Date: 3/25/2021 7:48:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 1647080	Analyst: SRL
Date Analyzed: 4/2/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	22	1.0	0.014	

Lab ID: 21031526-08A
Client Sample ID: 9894244-MSE02

Collection Date: 3/25/2021 7:48:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 1695120	Analyst: SRL
Date Analyzed: 4/2/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	27	1.0	0.016	

METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 1695120	Analyst: AZ
Date Analyzed: 4/2/2021 15:39		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	61	25	0.000036	
Lead	ND	25	<0.000015	
Manganese	ND	25	<0.000015	

Note:

ALS Environmental

Date: 02-Apr-21

Client: Gilbane Company
Work Order: 21031526
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **R190354** Instrument ID: **BAL2** Method: **TSP**

DUP	Sample ID: 21031526-02A dup				Units: mg/sample		Analysis Date: 4/2/2021			
Client ID: 9894241-MSE01	Run ID: BAL2_210402A			SeqNo: 2429907		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	48.71	1.0	0	0	0		46.86	3.87	20	

The following samples were analyzed in this batch:

21031526-02A	21031526-04A	21031526-06A
21031526-08A		

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

Client: Gilbane Company
Work Order: 21031526
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **R190356** Instrument ID: **BAL2** Method: **PM10**

DUP		Sample ID: 21031526-07A DUP				Units: mg/sample		Analysis Date: 4/2/2021		
Client ID: Q0424245-MSE02		Run ID: BAL2_210402B		SeqNo: 2429915		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	23.27	1.0	0	0	0		22.36	3.99	20	

The following samples were analyzed in this batch:

21031526-01A	21031526-03A	21031526-05A
21031526-07A		

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

Client: Gilbane Company
 Work Order: 21031526
 Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **73608** Instrument ID: **ICP1** Method: **E12**

MBLK		Sample ID: MBLK-73608-73608				Units: µg/sample		Analysis Date: 4/2/2021 02:59 PM		
Client ID:		Run ID: ICP1_210402A		SeqNo: 2430617		Prep Date: 4/2/2021		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-73608-73608				Units: µg/sample		Analysis Date: 4/2/2021 03:03 PM		
Client ID:		Run ID: ICP1_210402A		SeqNo: 2430618		Prep Date: 4/2/2021		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	367.2	100	450	0	81.6	75-125	0			
Lead	381.9	25	450	0	84.9	75-125	0			
Manganese	360.5	100	450	0	80.1	75-125	0			

LCSD		Sample ID: LCSD-73608-73608				Units: µg/sample		Analysis Date: 4/2/2021 03:07 PM		
Client ID:		Run ID: ICP1_210402A		SeqNo: 2430619		Prep Date: 4/2/2021		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	379.8	100	450	0	84.4	75-125	367.2	3.39	20	
Lead	390.3	25	450	0	86.7	75-125	381.9	2.17	20	
Manganese	378.6	100	450	0	84.1	75-125	360.5	4.88	20	

MS		Sample ID: 21031526-04A MS				Units: µg/sample		Analysis Date: 4/2/2021 03:19 PM		
Client ID: 9894242-MSE02		Run ID: ICP1_210402A		SeqNo: 2430622		Prep Date: 4/2/2021		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	429.3	100	450	47.12	84.9	75-125	0			
Lead	400	25	450	2.357	88.4	75-125	0			
Manganese	390.2	100	450	12.46	83.9	75-125	0			

MSD		Sample ID: 21031526-04A MSD				Units: µg/sample		Analysis Date: 4/2/2021 03:23 PM		
Client ID: 9894242-MSE02		Run ID: ICP1_210402A		SeqNo: 2430623		Prep Date: 4/2/2021		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Copper	422.6	100	450	47.12	83.4	75-125	429.3	1.58	20	
Lead	400.5	25	450	2.357	88.5	75-125	400	0.135	20	
Manganese	388.5	100	450	12.46	83.6	75-125	390.2	0.428	20	

The following samples were analyzed in this batch:

21031526-02A	21031526-04A	21031526-06A
21031526-08A		

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

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
WorkOrder: 21031526

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	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

<u>Acronym</u>	<u>Description</u>
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 Quantitation Limit
SDL	Sample Detection Limit
SW	SW-846 Method

<u>Units Reported</u>	<u>Description</u>
µg/sample	
mg/sample	

Sample Receipt Checklist

Client Name: GILBANE-WALNUTCREEK

Date/Time Received: 26-Mar-21 10:02

Work Order: 21031526

Received by: SNH

Checklist completed by: Stephanie Harrington 26-Mar-21
eSignature Date

Reviewed by: Rob Nieman 30-Mar-21
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

COC # KT-032521



21031526

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		
WBS Code: J310000400-016	Ship to: 4388 Glendale Milford Rd., Blue Ash, OH 45242	

Comments:	Analytical Test Method	CAAIR - Air PM10 E12 - Air Pb Mn Cu N0500 - Air TSP	Code	Matrix
			A	Air
Equipment:			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.								Location ID	Sample Type	Depth (ft bgs)		Cooler	Comments
														Top	Bottom		
1	Q0424242-MSE01	A	03/24/2021	0820	KT	X						AMSE1	N1	0.00	0.00	1	VOLUME: 1658.89
2	9894241-MSE01	A	03/24/2021	0820	KT		X	X				AMSE1	N1	0.00	0.00	1	VOLUME: 1651.77
3	Q0424243-MSE02	A	03/24/2021	0755	KT	X						AMSE2	N1	0.00	0.00	1	VOLUME: 1669.17
4	9894242-MSE02	A	03/24/2021	0755	KT		X	X				AMSE2	N1	0.00	0.00	1	VOLUME: 1706.99
5	Q0424244-MSE01	A	03/25/2021	0807	KT	X						AMSE1	N1	0.00	0.00	1	VOLUME: 1595.64
6	9894243-MSE01	A	03/25/2021	0807	KT		X	X				AMSE1	N1	0.00	0.00	1	VOLUME: 1612.73
7	Q0424245-MSE02	A	03/25/2021	0748	KT	X						AMSE2	N1	0.00	0.00	1	VOLUME: 1647.08
8	9894244-MSE02	A	03/25/2021	0748	KT		X	X				AMSE2	N1	0.00	0.00	1	VOLUME: 1695.12

Turnaround Time: 5 days

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Shipping Date / Carrier / Airbill Number
	3/25/21	1400		3/25/21	1400	Shipping Date: 3/25/2021 / FedEx 7732 6492 5878
				3/26/21	1000	Received by Laboratory: (Signature, Date, Time) & condition Custody Seal



08-Apr-2021

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

Re: **HPNS Parcel E; J310000400-016**

Work Order: **21031834**

Dear Brett,

ALS Environmental received 12 samples on 31-Mar-2021 04:00 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 13.

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

Sincerely,

A handwritten signature in black ink that reads 'Rob Nieman'.

Electronically approved by: Danielle Strasinger

Rob Nieman
Project Manager

Report of Laboratory Analysis

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
Work Order: 21031834

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
21031834-01	Q0424246-MSE01	Air		3/26/2021 08:00	3/31/2021 16:00	<input type="checkbox"/>
21031834-02	9894245-MSE01	Air		3/26/2021 08:00	3/31/2021 16:00	<input type="checkbox"/>
21031834-03	Q0424247-MSE02	Air		3/26/2021 07:32	3/31/2021 16:00	<input type="checkbox"/>
21031834-04	9894246-MSE02	Air		3/26/2021 07:32	3/31/2021 16:00	<input type="checkbox"/>
21031834-05	Q0424248-MSE01	Air		3/26/2021 13:10	3/31/2021 16:00	<input type="checkbox"/>
21031834-06	9894248-MSE01	Air		3/26/2021 13:10	3/31/2021 16:00	<input type="checkbox"/>
21031834-07	Q0424249-MSE02	Air		3/26/2021 13:25	3/31/2021 16:00	<input type="checkbox"/>
21031834-08	9894247-MSE02	Air		3/26/2021 13:25	3/31/2021 16:00	<input type="checkbox"/>
21031834-09	Q0424250-MSE01	Air		3/30/2021 07:36	3/31/2021 16:00	<input type="checkbox"/>
21031834-10	9894249-MSE01	Air		3/30/2021 07:36	3/31/2021 16:00	<input type="checkbox"/>
21031834-11	Q0424251-MSE02	Air		3/30/2021 07:20	3/31/2021 16:00	<input type="checkbox"/>
21031834-12	9894250-MSE02	Air		3/30/2021 07:20	3/31/2021 16:00	<input type="checkbox"/>

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
Work Order: 21031834

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.

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

Work Order: 21031834

Analytical Results

Lab ID: 21031834-01A
Client Sample ID: Q0424246-MSE01

Collection Date: 3/26/2021 8:00:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 1605860	Analyst: SRL
Date Analyzed: 4/7/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	46	1.0	0.029	

Lab ID: 21031834-02A
Client Sample ID: 9894245-MSE01

Collection Date: 3/26/2021 8:00:00 AM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 1602990	Analyst: SRL
Date Analyzed: 4/7/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	60	1.0	0.038	

METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 1602990	Analyst: AZ
Date Analyzed: 4/7/2021 17:14		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	420	25	0.00026	
Lead	ND	25	<0.000016	
Manganese	ND	25	<0.000016	

Lab ID: 21031834-03A
Client Sample ID: Q0424247-MSE02

Collection Date: 3/26/2021 7:32:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 1619900	Analyst: SRL
Date Analyzed: 4/7/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	36	1.0	0.022	

Note:

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

Work Order: 21031834

Analytical Results

Lab ID: 21031834-04A **Collection Date:** 3/26/2021 7:32:00 AM
Client Sample ID: 9894246-MSE02 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 1663460	Analyst: SRL
Date Analyzed: 4/7/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	46	1.0	0.028	
METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 1663460	Analyst: AZ
Date Analyzed: 4/7/2021 17:18		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	140	25	0.000084	
Lead	ND	25	<0.000015	
Manganese	ND	25	<0.000015	

Lab ID: 21031834-05A **Collection Date:** 3/26/2021 1:10:00 PM
Client Sample ID: Q0424248-MSE01 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 351990	Analyst: SRL
Date Analyzed: 4/7/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	4.8	1.0	0.014	

Lab ID: 21031834-06A **Collection Date:** 3/26/2021 1:10:00 PM
Client Sample ID: 9894248-MSE01 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 356260	Analyst: SRL
Date Analyzed: 4/7/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	12	1.0	0.035	
METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 356260	Analyst: AZ
Date Analyzed: 4/7/2021 17:30		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	130	25	0.00036	
Lead	ND	25	<0.000070	
Manganese	ND	25	<0.000070	

Note:

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

Work Order: 21031834

Analytical Results

Lab ID: 21031834-07A
Client Sample ID: Q0424249-MSE02

Collection Date: 3/26/2021 1:25:00 PM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 395590	Analyst: SRL
Date Analyzed: 4/7/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	3.8	1.0	0.0096	

Lab ID: 21031834-08A
Client Sample ID: 9894247-MSE02

Collection Date: 3/26/2021 1:25:00 PM
Matrix: AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 410870	Analyst: SRL
Date Analyzed: 4/7/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	13	1.0	0.032	

METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 410870	Analyst: AZ
Date Analyzed: 4/7/2021 17:34		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	62	25	0.00015	
Lead	ND	25	<0.000061	
Manganese	ND	25	<0.000061	

Lab ID: 21031834-09A
Client Sample ID: Q0424250-MSE01

Collection Date: 3/30/2021 7:36:00 AM
Matrix: AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 450550	Analyst: SRL
Date Analyzed: 4/7/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	9.4	1.0	0.021	

Note:

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

Work Order: 21031834

Analytical Results

Lab ID: 21031834-10A **Collection Date:** 3/30/2021 7:36:00 AM
Client Sample ID: 9894249-MSE01 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 571130	Analyst: SRL
Date Analyzed: 4/7/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	18	1.0	0.031	
METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 571130	Analyst: AZ
Date Analyzed: 4/7/2021 17:47		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	65	25	0.00011	
Lead	ND	25	<0.000044	
Manganese	ND	25	<0.000044	

Lab ID: 21031834-11A **Collection Date:** 3/30/2021 7:20:00 AM
Client Sample ID: Q0424251-MSE02 **Matrix:** AIR

Analyses

PM : PM10 40CFR 50 APPDIX J		Method: PM10	Air Volume (L): 572410	Analyst: SRL
Date Analyzed: 4/7/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Particulate as PM10	14	1.0	0.025	

Lab ID: 21031834-12A **Collection Date:** 3/30/2021 7:20:00 AM
Client Sample ID: 9894250-MSE02 **Matrix:** AIR

Analyses

TSP 40 CFR 50 APPDX B		Method: TSP	Air Volume (L): 583390	Analyst: SRL
Date Analyzed: 4/7/2021		Reporting Limit		
	mg/sample	mg/sample	mg/m3	
Total suspended particulate	19	1.0	0.032	
METALS BY EPA METHOD 12 MOD.		Method: E12	Air Volume (L): 583390	Analyst: AZ
Date Analyzed: 4/7/2021 17:51		Reporting Limit		
	µg/sample	µg/sample	mg/m3	
Copper	42	25	0.000072	
Lead	ND	25	<0.000043	
Manganese	ND	25	<0.000043	

Note:

Client: Gilbane Company
Work Order: 21031834
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **R190501** Instrument ID **BAL2** Method: **TSP**

DUP		Sample ID: 21031834-02A DUP				Units: mg/sample		Analysis Date: 4/7/2021		
Client ID: 9894245-MSE01		Run ID: BAL2_210407A				SeqNo: 2433792		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	60.35	1.0	0	0	0		60.2	0.249	20	

The following samples were analyzed in this batch:

21031834-02A	21031834-04A	21031834-06A
21031834-08A	21031834-10A	21031834-12A

Client: Gilbane Company
Work Order: 21031834
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **R190502** Instrument ID **BAL2** Method: **PM10**

DUP				Sample ID: 21031834-01A DUP			Units: mg/sample		Analysis Date: 4/7/2021		
Client ID: Q0424246-MSE01				Run ID: BAL2_210407B			SeqNo: 2433799		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	45.77	1.0	0	0	0		45.8	0.0655	20		

The following samples were analyzed in this batch:

21031834-01A	21031834-03A	21031834-05A
21031834-07A	21031834-09A	21031834-11A

Client: Gilbane Company
Work Order: 21031834
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **73710** Instrument ID **ICP3** Method: **E12**

MBLK				Sample ID: MBLK-73710-73710			Units: µg/sample		Analysis Date: 4/7/2021 05:02 PM		
Client ID:		Run ID: ICP3_210407B			SeqNo: 2434626		Prep Date: 4/7/2021		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-73710-73710			Units: µg/sample		Analysis Date: 4/7/2021 05:06 PM		
Client ID:		Run ID: ICP3_210407B			SeqNo: 2434627		Prep Date: 4/7/2021		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Copper	359.3	100	450	0	79.8	75-125	0				
Lead	373.6	25	450	0	83	75-125	0				
Manganese	352.4	100	450	0	78.3	75-125	0				

LCSD				Sample ID: LCSD-73710-73710			Units: µg/sample		Analysis Date: 4/7/2021 05:10 PM		
Client ID:		Run ID: ICP3_210407B			SeqNo: 2434628		Prep Date: 4/7/2021		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Copper	342.3	100	450	0	76.1	75-125	359.3	4.85	20		
Lead	363.5	25	450	0	80.8	75-125	373.6	2.76	20		

LCSD				Sample ID: LCSD-73710-73710			Units: µg/sample		Analysis Date: 4/8/2021 02:53 PM		
Client ID:		Run ID: ICP1_210408A			SeqNo: 2435111		Prep Date: 4/7/2021		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Manganese	460.4	100	450	0	102	75-125	352.4	26.6	20	R	

MS				Sample ID: 21031834-04A MS			Units: µg/sample		Analysis Date: 4/7/2021 05:22 PM		
Client ID: 9894246-MSE02		Run ID: ICP3_210407B			SeqNo: 2434631		Prep Date: 4/7/2021		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Copper	500	100	450	140.4	79.9	75-125	0				
Lead	376.2	25	450	3.99	82.7	75-125	0				
Manganese	352	100	450	6.008	76.9	75-125	0				

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

Client: Gilbane Company
Work Order: 21031834
Project: HPNS Parcel E; J310000400-016

QC BATCH REPORT

Batch ID: **73710** Instrument ID **ICP3** Method: **E12**

MSD				Sample ID: 21031834-04A MSD		Units: µg/sample		Analysis Date: 4/8/2021 02:56 PM			
Client ID: 9894246-MSE02			Run ID: ICP1_210408A			SeqNo: 2435112		Prep Date: 4/7/2021		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Copper	621	100	450	140.4	107	75-125	500	21.6	20	R	
Lead	454.5	25	450	3.99	100	75-125	376.2	18.9	20		
Manganese	495.4	100	450	6.008	109	75-125	352	33.9	20	R	

The following samples were analyzed in this batch:

21031834-02A	21031834-04A	21031834-06A
21031834-08A	21031834-10A	21031834-12A

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

Client: Gilbane Company
Project: HPNS Parcel E; J310000400-016
WorkOrder: 21031834

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	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

<u>Acronym</u>	<u>Description</u>
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 Quantitation Limit
SDL	Sample Detection Limit
SW	SW-846 Method

<u>Units Reported</u>	<u>Description</u>
µg/sample	
mg/sample	

Sample Receipt Checklist

Client Name: **GILBANE-WALNUTCREEK**

Date/Time Received: **31-Mar-21 16:00**

Work Order: **21031834**

Received by: **RDN**

Checklist completed by Stephanie Harrington 01-Apr-21
eSignature Date

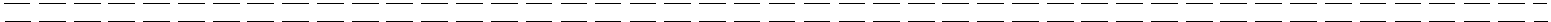
Reviewed by: Rob Nieman 02-Apr-21
eSignature Date

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

71031834

COC # KT-033021



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		
WBS Code: J310000400-016	Ship to: 4388 Glendale Milford Rd., Blue Ash, OH 45242	

Comments:	Analytical Test Method	Code	Matrix
		A	Air
Equipment:	CAAIR - Air PM10 E12 - Air Pb Mn Cu N0500 - Air TSP	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.	X	X	X	X	X	X	X	X	X	X	X	Location ID	Sample Type	Depth (ft bgs)		Cooler	Comments
																		Top	Bottom		
1	Q0424246-MSE01	01	A	03/26/2021	0800	KT	X									AMSE1	N1	0.00	0.00	1	VOLUME: 1605.86
2	9894245-MSE01	02	A	03/26/2021	0800	KT		X	X							AMSE1	N1	0.00	0.00	1	VOLUME: 1602.99
3	Q0424247-MSE02	03	A	03/26/2021	0732	KT	X									AMSE2	N1	0.00	0.00	1	VOLUME: 1619.90
4	9894246-MSE02	04	A	03/26/2021	0732	KT		X	X							AMSE2	N1	0.00	0.00	1	VOLUME: 1663.46
5	Q0424248-MSE01	05	A	03/26/2021	1310	KT	X									AMSE1	N1	0.00	0.00	1	VOLUME: 351.99
6	9894248-MSE01	06	A	03/26/2021	1310	KT		X	X							AMSE1	N1	0.00	0.00	1	VOLUME: 356.26
7	Q0424249-MSE02	07	A	03/26/2021	1325	KT	X									AMSE2	N1	0.00	0.00	1	VOLUME: 395.59
8	9894247-MSE02	08	A	03/26/2021	1325	KT		X	X							AMSE2	N1	0.00	0.00	1	VOLUME: 410.87
9	Q0424250-MSE01	09	A	03/30/2021	0736	KT	X									AMSE1	N1	0.00	0.00	1	VOLUME: 450.55
10	9894249-MSE01	10	A	03/30/2021	0736	KT		X	X							AMSE1	N1	0.00	0.00	1	VOLUME: 571.13
11	Q0424251-MSE02	11	A	03/30/2021	0720	KT	X									AMSE2	N1	0.00	0.00	1	VOLUME: 572.41

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Shipping Date / Carrier / Airbill Number
	3/30/21	1400		3/30/21	1400	Shipping Date: 3/30/2021/FedEx 773296313564
				3/31/21	16:00	
			✓ Custody Seal			Received by Laboratory: (Signature, Date, Time) & condition

**CHAIN-OF-CUSTODY
RECORD**

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

21031834

COC # KT-033021



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: Stella Hanis Stella.Hanis@ALSGlobal.com	
WBS Code: J310000400-016	Ship to: 4388 Glendale Milford Rd., Blue Ash, OH 45242	

Comments:	Analytical Test Method	Code	Matrix
		A	Air
Equipment:	CAAIR - Air PM10 E12 - Air Pb Mn Cu N0500 - Air TSP	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.	1	1	1							Location ID	Sample Type	Depth (ft bgs)		Cooler	Comments
																Top	Bottom		
12 9894250-MSE02 12	A	03/30/2021	0720	KT	X	X								AMSE2	N1	0.00	0.00	1	VOLUME: 583.39
13																			
14																			
15																			
16																			
17																			
18																			

Turnaround Time: 5 days

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Shipping Date / Carrier / Airbill Number
	3/30/21	1400		3/30/21	1400	Shipping Date: 3/30/2021/FedEx 773296313564
				3/31/21	16:00	Received by Laboratory: (Signature, Date, Time) & condition



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 GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

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

Work Order Sample Summary

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

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.

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	mg/sample	Reporting Limit 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	mg/sample	Reporting Limit 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	µg/sample	Reporting Limit 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	mg/sample	Reporting Limit mg/sample	mg/m3	
Particulate as PM10	31	1.0	0.019	

Note:

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

Work Order: 21040210

Analytical Results

Lab ID: 21040210-04A
Client Sample ID: 9894252-MSE02

Collection Date: 3/31/2021 7:30:00 AM
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
Client Sample ID: Q0424254-MSE01

Collection Date: 4/1/2021 7:58:00 AM
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
Client Sample ID: 9894253-MSE01

Collection Date: 4/1/2021 7:58:00 AM
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:

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:

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

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		

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		

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.

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

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	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

<u>Acronym</u>	<u>Description</u>
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 Quantitation Limit
SDL	Sample Detection Limit
SW	SW-846 Method

<u>Units Reported</u>	<u>Description</u>
µg/sample	
mg/sample	

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 06-Apr-21
eSignature Date

Reviewed by: Rob Nieman 09-Apr-21
eSignature Date

Matrices: air
Carrier name: FedEx

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

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

**CHAIN-OF-CUSTODY
RECORD**

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

21040210

COC # KT-040121



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		
WBS Code: J310000400-016	Ship to: 4388 Glendale Milford Rd., Blue Ash, OH 45242	

Comments:	Analytical Test Method	Code	Matrix
		A	Air
Equipment:	CAAIR - Air PM10 E12 - Air Pb Mn Cu N0500 - Air TSP	Code	Container/Preservative
		1	1x Envelope, None

Event: Parcel E Phase 2 Air Monitoring																	
Sample ID	Matrix	Date	Time	Samp Init.								Location ID	Sample Type	Depth (ft bgs) Top - Bottom	Cooler	Comments	
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	Shipping Date / Carrier / Airbill Number
	4/2/21	1000		4/2/21	1000	Shipping Date: 4/1/2021 7733 2047 2174
				4/5/21	1149	Received by Laboratory: (Signature, Date, Time) & condition

Laboratory Analysis Report

Job ID : 21030289



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 : 03/03/2021 13:30
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
MSE01-022521	2/25/2021 11:40	Cassette	21030289.01
MSE02-022521	2/25/2021 11:42	Cassette	21030289.02
MSE01-030121	3/1/2021 15:42	Cassette	21030289.03
MSE02-030121	3/1/2021 15:46	Cassette	21030289.04

A handwritten signature in black ink, appearing to read 'Senthilkumar Sevukan'.

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Analyst:

A handwritten signature in black ink, appearing to be the name of the analyst.

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3/8/2021



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

Date 3/8/2021

Job ID : 21030289
 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
21030289.01	MSE01-022521	02/25/2021	Area	2			290	580	100	8.5	10.828	0.007		03/08/21	Habedi
21030289.02	MSE02-022521	02/25/2021	Area	2			279	558	100	9	11.465	0.008		03/08/21	Habedi
21030289.03	MSE01-030121	03/01/2021	Area	2			462	924	100	10.0	12.739	0.005		03/08/21	Habedi
21030289.04	MSE02-030121	03/01/2021	Area	2			442	884	100	10.5	13.376	0.006		03/08/21	Habedi

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



Sample Condition Checklist

A&B JobID : 21030289	Date Received : 03/03/2021	Time Received : 1:30PM																										
Client Name : Gilbane																												
Temperature : 18.3°C	Sample pH : N/A																											
Thermometer ID : 102002320	pH Paper ID : N/A																											
Perservative :																												
Check Points																												
1.	Cooler seal present and signed.	X		N/A																								
2.	Sample(s) in a cooler.		X	N/A																								
3.	If yes, ice in cooler.			X																								
4.	Sample(s) received with chain-of-custody.	X		N/A																								
5.	C-O-C signed and dated.	X		N/A																								
6.	Sample(s) received with signed sample custody seal.		X	N/A																								
7.	Sample containers arrived intact. (If no comment).	X		N/A																								
8.	<table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Matrix</td> <td style="text-align: right;">Water</td> <td style="text-align: right;">Soil</td> <td style="text-align: right;">Liquid</td> <td style="text-align: right;">Sludge</td> <td style="text-align: right;">Solid</td> <td style="text-align: right;">Cassette</td> <td style="text-align: right;">Tube</td> <td style="text-align: right;">Bulk</td> <td style="text-align: right;">Badge</td> <td style="text-align: right;">Food</td> <td style="text-align: right;">Other</td> </tr> <tr> <td style="text-align: right;">:</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>	Matrix	Water	Soil	Liquid	Sludge	Solid	Cassette	Tube	Bulk	Badge	Food	Other	:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Matrix	Water	Soil	Liquid	Sludge	Solid	Cassette	Tube	Bulk	Badge	Food	Other																	
:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																	
9.	Sample(s) were received in appropriate container(s).	X		N/A																								
10.	Sample(s) were received with proper preservative			X																								
11.	All samples were logged or labeled.	X		N/A																								
12.	Sample ID labels match C-O-C ID's	X		N/A																								
13.	Bottle count on C-O-C matches bottles found.	X		N/A																								
14.	Sample volume is sufficient for analyses requested.	X		N/A																								
15.	Samples were received within the hold time.	X		N/A																								
16.	VOA vials completely filled.			X																								
17.	Sample accepted.	X		N/A																								
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 / 03/03/2021



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 Date: 3/2/21
 Address: 10100 East Fwy Ste. 100 Contact Name: [Redacted] Page: 1 of 1
 Houston TX 77029 Phone: [Redacted]

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Analysis:		Special Instructions/Comments
							Asbestos	Preservative:	
							None	Filter	
MSE01-022521	2/25/21	1140	NA	NA	1	AA	X		Flow rate = 2 L/min Total volume (min) 290 OA 279 OA 462 O3A 442 O4A
MSE02-022521	2/25/21	1142	↓	↓	↓	↓	X		
MSE01-030121	3/1/21	1542	↓	↓	↓	↓	X		
MSE02-030121	3/1/21	1546	↓	↓	↓	↓	X		

* Job ID: 21030289



Sampled By: Kimberly Lee
 Signature: [Signature]
 Special Instructions: None
 Send Results to: [Redacted]
 Turnaround Time: Standard

Sampler: Kimberly Lee
 Relinquished By/Affiliation: Kimberly Lee / Gilbane Date: 3/2/21 Time: 1400
 Courier/Airbill No.: FedEX / 7730 3818 9870
 Received By/ Affiliation: Fed Ex Carley Date: 3/2/21 Time: 1400
 Date: 3/3/21 Time: 1330

N.S

18.3° 10200 2520

Laboratory Analysis Report

Job ID : 21030517



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 : 03/05/2021 13:00
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
MSE01-030221	3/2/2021 15:21	Cassette	21030517.01
MSE02-030221	3/2/2021 15:34	Cassette	21030517.02
MSE01-030321	3/3/2021 15:24	Cassette	21030517.03
MSE02-030321	3/3/2021 15:32	Cassette	21030517.04

A handwritten signature in black ink, appearing to read 'Senthilkumar Sevukan'.

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Analyst:

A handwritten signature in black ink, appearing to read 'Kimberly Tom'.

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3/10/2021



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

Date 3/10/2021

Job ID : 21030517
 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
21030517.01	MSE01-030221	03/02/2021	Area	2			424	848	100	13	16.561	0.008		03/10/21	Habedi
21030517.02	MSE02-030221	03/02/2021	Area	2			452	904	100	9.5	12.102	0.005		03/10/21	Habedi
21030517.03	MSE01-030321	03/03/2021	Area	2			456	912	100	15.5	19.745	0.008		03/10/21	Habedi
21030517.04	MSE02-030321	03/03/2021	Area	2			442	884	100	11.0	14.013	0.006		03/10/21	Habedi

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



Sample Condition Checklist

A&B JobID : 21030517	Date Received : 03/05/2021	Time Received : 1:00PM
Client Name : Gilbane		
Temperature : 17.6°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.	<table style="width: 100%; border: none;"> <tr> <td style="width: 10%;">Matrix</td> <td style="width: 10%;">Water</td> <td style="width: 10%;">Soil</td> <td style="width: 10%;">Liquid</td> <td style="width: 10%;">Sludge</td> <td style="width: 10%;">Solid</td> <td style="width: 10%;">Cassette</td> <td style="width: 10%;">Tube</td> <td style="width: 10%;">Bulk</td> <td style="width: 10%;">Badge</td> <td style="width: 10%;">Food</td> <td style="width: 10%;">Other</td> </tr> <tr> <td>:</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>	Matrix	Water	Soil	Liquid	Sludge	Solid	Cassette	Tube	Bulk	Badge	Food	Other	:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Matrix	Water	Soil	Liquid	Sludge	Solid	Cassette	Tube	Bulk	Badge	Food	Other																	
:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																	
9.	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:

Custody seal on box. -ANA 3-5-21.

Received by : CHendrix

Check in by/date : CHendrix / 03/05/2021



Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II 1310000400
 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: [Redacted]
 Phone: [Redacted]

Date: 3/4/21
 Page: 1 of 1

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Analysis:		Special Instructions/Comments
							Asbestos	Preservative:	
							None	Filter	
MSE01-030221	3/2/21	1521	NA	NA	1	AA	X		Flow rate = 2L/min Total time (min) 424 452 456 442
MSE02-030221	3/2/21	1534	↓	↓	↓	↓	X		
MS001-030321	3/3/21	1524	↓	↓	↓	↓	X		
MS002-030321	3/3/21	1532	↓	↓	↓	↓	X		

* Job ID: 21030517



Sampled By: Kimberly [Signature]
 Signature: [Signature]
 Special Instructions: None
 Send Results to: [Redacted]
 Turnaround Time: Standard

Sampler: <u>Kimberly [Signature]</u>	Courier/Airbill No.: <u>FedEX/ 7730 5122 5108</u>				
Relinquished By/Affiliation:	Date:	Time:	Received By/ Affiliation:	Date:	Time:
<u>Kimberly [Signature] / Gilbane</u>	<u>3/4/21</u>	<u>1400</u>	<u>Fed Ex</u>	<u>3/4/21</u>	<u>1400</u>
<u>FedEx</u>	<u>3/5/21</u>	<u>1300</u>	<u>Carley</u>	<u>3/5/21</u>	<u>1300</u>

Laboratory Analysis Report

Job ID : 21030938



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 : 03/10/2021 14:00
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
MSE01-030421	3/4/2021 14:40	Cassette	21030938.01
MSE02-030421	3/4/2021 14:47	Cassette	21030938.02
MSE01-030821	3/8/2021 15:48	Cassette	21030938.03
MSE02-030821	3/8/2021 15:42	Cassette	21030938.04

A handwritten signature in black ink, appearing to read 'S. Sevukan'.

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Analyst:

A handwritten signature in black ink, appearing to read 'K. Tom'.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Results apply to the sample as received. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client. Any TWA calculations are based on client supplied data not lab observation.

3/19/2021



**ANALYSIS OF AIRBORNE FIBER SAMPLING
 SAMPLING PERFORMED BY CLIENT
 ANALYSIS CONDUCTED BY A & B ENVIRONMENTAL SERVICES, INC.
 AIHA Lab Accreditation # 101470 TDH PLM/PCM Lab License # 30080**

Date 3/19/2021

Job ID : 21030938
 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
21030938.01	MSE01-030421	03/04/2021	Area	2			384	768	100	10.5	13.376	0.007		03/19/21	Habedi
21030938.02	MSE02-030421	03/04/2021	Area	2			402	804	100	9.5	12.102	0.006		03/19/21	Habedi
21030938.03	MSE01-030821	03/08/2021	Area	2			421	842	100	9.0	11.465	0.005		03/19/21	Habedi
21030938.04	MSE02-030821	03/08/2021	Area	2			438	876	100	10.5	13.376	0.006		03/19/21	Habedi

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



Sample Condition Checklist

A&B JobID : 21030938	Date Received : 03/10/2021	Time Received : 2:00PM																										
Client Name : Gilbane																												
Temperature : 20.1°C	Sample pH : N/A																											
Thermometer ID : 102002320	pH Paper ID : N/A																											
Preservative :																												
Check Points																												
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.	<table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Matrix</td> <td style="text-align: right;">Water</td> <td style="text-align: right;">Soil</td> <td style="text-align: right;">Liquid</td> <td style="text-align: right;">Sludge</td> <td style="text-align: right;">Solid</td> <td style="text-align: right;">Cassette</td> <td style="text-align: right;">Tube</td> <td style="text-align: right;">Bulk</td> <td style="text-align: right;">Badge</td> <td style="text-align: right;">Food</td> <td style="text-align: right;">Other</td> </tr> <tr> <td style="text-align: right;">:</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>	Matrix	Water	Soil	Liquid	Sludge	Solid	Cassette	Tube	Bulk	Badge	Food	Other	:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Matrix	Water	Soil	Liquid	Sludge	Solid	Cassette	Tube	Bulk	Badge	Food	Other																	
:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																	
9.	Sample(s) were received in appropriate container(s).	X																										
10.	Sample(s) were received with proper preservative			X																								
11.	All samples were logged or labeled.	X																										
12.	Sample ID labels match C-O-C ID's	X																										
13.	Bottle count on C-O-C matches bottles found.	X																										
14.	Sample volume is sufficient for analyses requested.	X																										
15.	Samples were received within the hold time.	X																										
16.	VOA vials completely filled.			X																								
17.	Sample accepted.	X																										
18.	Has client been contacted about sub-out			X																								
Comments : Include actions taken to resolve discrepancies/problem:																												
No cooler was received, however samples are received in a box with a custody seal.																												

Received by : JMontemayor

Check in by/date : JMontemayor / 03/10/2021



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 Date: _____
 Address: 10100 East Fwy Ste. 100 Contact N: [Redacted] Page: 1 of 1
 Houston TX 77029 Phone: [Redacted]

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Analysis:			Special Instructions/Comments
							Asbestos	Preservative:	Container Type:	
							None	Filter		Total time (min)
MS601-030421	07A	3/4/21	1440	NA	NA	1	NA	X		384
MS602-030421	02A	3/4/21	1447	↓	↓	↓	↓	X		402
MS601-030821	03A	3/8/21	1548	↓	↓	↓	↓	X		421
MS602-030821	07A	3/8/21	1542	↓	↓	↓	↓	X		438

Flow rate = 2.4/min

[Handwritten signature]

Sampled By: Kimberly Z
 Signature: [Signature]
 Special Instructions: None
 Send Results to: [Redacted]
 Turnaround Time: Standard

Sampler: Kimberly Z
 Relinquished By/Affiliation: Kimberly Z / Gilbane / FedEx Date: 3/8/21 Time: 1400
 Received By/ Affiliation: Fed Ex Date: 3/11/21 Time: 1400
 Courier/Airbill No.: FedEX / 7730 7449 8279
 2010 100342

Laboratory Analysis Report

Job ID : 21031125



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, <http://www.ablabs.com>

Client Project Name :
HPNS Parcel E Phase II 1310000400

Report To : Client Name: Gilbane Total Number of Pages: 5
Attn: Brett Womack P.O.#. : J310000400-0015
Client Address: 1655 Grant Street, Suite 1200 Date Received : 03/12/2021 10:00
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
MSE01-030921	3/9/2021	Cassette	21031125.01
MSE02-030921	3/9/2021	Cassette	21031125.02
MSE01-031021	3/10/2021	Cassette	21031125.03
MSE02-031021	3/10/2021	Cassette	21031125.04

Alisha Hughes

Released By: Alisha Hughes

Title: Project Manager

Analyst:

[Signature]

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ab-q210-0321



Laboratory Report: Case Narrative

A&B Job ID: 21031125

Date: 04/20/21

Client Name: Gilbane

Attn: Brett Womack

Project Name: HPNS Parcel E Phase II 1310000400

Date Received: 03/12/21

Collected By: Kimberly Tom

REVISED REPORT -

The attached report was revised to update the collection dates for each sample per client email. The following changes were made.

Please revise the date collected on SDG 21031125 to match the date collected shown on the COC:

MES01-030921 ---> 03/09/21

MES02-030921 ---> 03/09/21

MES01-031021 ---> 03/10/21

MES02-031021 ---> 03/10/21

A handwritten signature in black ink that reads "Alisha Hughes".

Released By: Alisha Hughes

Title: Project Manager



**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 4/20/2021

Job ID : 21031125
 Analytical Method: NIOSH 7400-I2-Aug1994

Client: Gilbane			Project: HPNS Parcel E Phase II 1310000400										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
21031125.01	MSE01-030921	03/09/2021	Area	2.0			366	732	100	10.5	13.376	0.007		03/25/21	Habedi
21031125.02	MSE02-030921	03/09/2021	Area	2.0			392	784	100	8.5	10.828	0.005		03/25/21	Habedi
21031125.03	MSE01-031021	03/10/2021	Area	2.0			401	802	100	7	8.917	0.004		03/25/21	Habedi
21031125.04	MSE02-031021	03/10/2021	Area	2.0			393	786	100	8.5	10.828	0.005		03/25/21	Habedi

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



Sample Condition Checklist

A&B JobID : 21031125	Date Received : 03/12/2021	Time Received : 10:00AM																										
Client Name : Gilbane																												
Temperature : 19.2°C	Sample pH : n/a																											
Thermometer ID : 102002320	pH Paper ID : n/a																											
Perservative :																												
Check Points																												
1.	Cooler seal present and signed.	X		N/A																								
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.	<table style="width: 100%; border: none;"> <tr> <td style="width: 10%;">Matrix</td> <td style="width: 10%;">Water</td> <td style="width: 10%;">Soil</td> <td style="width: 10%;">Liquid</td> <td style="width: 10%;">Sludge</td> <td style="width: 10%;">Solid</td> <td style="width: 10%;">Cassette</td> <td style="width: 10%;">Tube</td> <td style="width: 10%;">Bulk</td> <td style="width: 10%;">Badge</td> <td style="width: 10%;">Food</td> <td style="width: 10%;">Other</td> </tr> <tr> <td>:</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>	Matrix	Water	Soil	Liquid	Sludge	Solid	Cassette	Tube	Bulk	Badge	Food	Other	:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Matrix	Water	Soil	Liquid	Sludge	Solid	Cassette	Tube	Bulk	Badge	Food	Other																	
:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																	
9.	Sample(s) were received in appropriate container(s).	X																										
10.	Sample(s) were received with proper preservative			X																								
11.	All samples were logged or labeled.	X																										
12.	Sample ID labels match C-O-C ID's	X																										
13.	Bottle count on C-O-C matches bottles found.	X																										
14.	Sample volume is sufficient for analyses requested.	X																										
15.	Samples were received within the hold time.	X																										
16.	VOA vials completely filled.			X																								
17.	Sample accepted.	X																										
18.	Has client been contacted about sub-out			X																								
Comments : Include actions taken to resolve discrepancies/problem:																												
No cooler was received, however samples are received in a box with a custody seal.																												

Received by : AOballe

Check in by/date : JMontemayor / 03/12/2021

ab-s005-0321



Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II 1310000400
 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

Date: 3/11/2021
 Page: 1 of 1

Contact: [Redacted]
 Phone: [Redacted]

Analysis:

*** Job ID: 21031125**



Asbestos
 Preservative: None
 Container Type: Filter

Flow Rate = 2 L/min
 Special Instructions/Comments
 Total Time (min)

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Asbestos	Preservative	Container Type	Flow Rate	Special Instructions/Comments	Total Time (min)
MSE01-030921	3/9/2021	1520	NA	NA	1	AA	X			2		366
MSE02-030921	3/9/2021	1534	NA	NA	1	AA	X			2		392
MSE01-031021	3/10/2021	1521	NA	NA	1	AA	X			2		401
MSE02-031021	3/10/2021	1528	NA	NA	1	AA	X			2		393

AB

Sampled By: [Signature]
 Signature: [Signature]
 Special Instructions: None
19.2-c 102002320

Relinquished By/Affiliation: Kimberly To/Gilbane
 Date: 3/11/21
 Time: 1400

Received By/Affiliation: FedEx
 Date: 3/11/21
 Time: 1400

Send Results to: [Redacted]
 Turnaround Time: Standard

Courier/Airbill No.: FedEx/ 7731 3412 3992
 Received By/Affiliation: Amanda
 Date: 3-12-21
 Time: 10AM

Laboratory Analysis Report

Job ID : 21031698



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 : 03/19/2021 10:08
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
MSE01-031621	3/16/2021	Cassette	21031698.01
MSE02-031621	3/16/2021	Cassette	21031698.02
MSE01-031721	3/17/2021	Cassette	21031698.03
MSE02-031721	3/17/2021	Cassette	21031698.04

Alisha Hughes

Released By: Alisha Hughes

Title: Project Manager

Analyst:

[Signature]

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3/23/2021



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

Date 3/23/2021

Job ID : 21031698
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
21031698.01	MSE01-031621	03/16/2021	Area	2			340	680	100	12.5	15.924	0.009		03/23/21	Habedi
21031698.02	MSE02-031621	03/16/2021	Area	2			442	884	100	9.5	12.102	0.005		03/23/21	Habedi
21031698.03	MSE01-031721	03/17/2021	Area	2			486	972	100	10.5	13.376	0.005		03/23/21	Habedi
21031698.04	MSE02-031721	03/17/2021	Area	2			504	1008	100	12.5	15.924	0.006		03/23/21	Habedi

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



Sample Condition Checklist

A&B JobID : 21031698	Date Received : 03/19/2021	Time Received : 10:08AM		
Client Name : Gilbane				
Temperature : 20.1°C	Sample pH : n/a			
Thermometer ID : 102002320	pH Paper ID : n/a			
Perservative :				
Check Points				
1.	Cooler seal present and signed.	Yes	No	N/A
2.	Sample(s) in a cooler.		X	
3.	If yes, ice in cooler.			X
4.	Sample(s) received with chain-of-custody.	X		
5.	C-O-C signed and dated.	X		
6.	Sample(s) received with signed sample custody seal.		X	
7.	Sample containers arrived intact. (If no comment).	X		
8.	Matrix Water Soil Liquid Sludge Solid Cassette Tube Bulk Badge Food Other : <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
9.	Sample(s) were received in appropriate container(s).	X		
10.	Sample(s) were received with proper preservative			X
11.	All samples were logged or labeled.	X		
12.	Sample ID labels match C-O-C ID's	X		
13.	Bottle count on C-O-C matches bottles found.	X		
14.	Sample volume is sufficient for analyses requested.	X		
15.	Samples were received within the hold time.	X		
16.	VOA vials completely filled.			X
17.	Sample accepted.	X		
18.	Has client been contacted about sub-out			X
Comments : Include actions taken to resolve discrepancies/problem:				
Received in box with C.S. CH 03/19/21. No cooler was received, however samples were received in a box with a custody seal.				

Received by : CHendrix

Check in by/date : CHendrix / 03/19/2021

ab-s005-0321



Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II J310000400 Laboratory Name: A&B Labs Date: 3/18/2021
 Project Manager: Brett Womack (925)250-8027 Address: 10100 East Fwy Ste. 100 Contact Name: Alisha Hughes Page: 1 of 1
 Site Location: Hunters Point, San Francisco, CA 94124 Houston TX 77029 Phone: 713-453-6060

01A
02A
03A
04A

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Analysis:		Special Instructions/Comments Total Time (min)
							Asbestos	Flow Rate = 2 L/min	
MSE01-031621	3/16/2021	1530	NA	NA	1	AA	X		340
MSE02-031621	3/16/2021	1512	NA	NA	1	AA	X		442
MSE01-031721	3/17/2021	1555	NA	NA	1	AA	X		486
MSE02-031721	3/17/2021	1542	NA	NA	1	AA	X		504

Sampled By: Kimberly Lee Sampler: Kimberly Lee Courier/Airbill No.: FedEx/ 7732 0024 1392
 Signature: [Signature] Relinquished By/Affiliation: Kimberly Lee / Gilbane Date: 3/18/21 Time: 1400 Received By/ Affiliation: FedEx Date: 3-19-21 Time: 1400
 Special Instructions: None FedEx 1008
 Send Results to: kcarlyon@gilbaneco.com
ktom@gilbaneco.com
 Turnaround Time: Standard

20-1-C 102MCS
NC/CS

Laboratory Analysis Report

Job ID : 21031996



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 J3J10000400

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 : 03/24/2021 12:00
	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
MSE01-031821	3/18/2021 15:38	Cassette	21031996.01
MSE02-031821	3/18/2021 15:42	Cassette	21031996.02
MSE01-031921	3/19/2021 14:30	Cassette	21031996.03
MSE02-031921	3/19/2021 14:40	Cassette	21031996.04
MSE01-032221	3/22/2021 15:49	Cassette	21031996.05
MSE02-032221	3/22/2021 15:42	Cassette	21031996.06

A handwritten signature in black ink, appearing to read 'S. Sevukan'.

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Analyst:

A handwritten signature in black ink, appearing to read 'Kimberly Tom'.

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3/29/2021



**ANALYSIS OF AIRBORNE FIBER SAMPLING
SAMPLING PERFORMED BY CLIENT
ANALYSIS CONDUCTED BY A & B ENVIRONMENTAL SERVICES, INC.
AIHA Lab Accreditation # 101470 TDH PLM/PCM Lab License # 30080**

Date 3/29/2021

Job ID : 21031996
Analytical Method: NIOSH 7400-I2-Aug1994

Client: Gilbane			Project: HPNS Parcel E Phase II J3J10000400										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
21031996.01	MSE01-031821	03/18/2021	Area	2			400	800	100	15.0	19.108	0.009		03/29/21	Habedi
21031996.02	MSE02-031821	03/18/2021	Area	2			442	884	100	14.5	18.471	0.008		03/29/21	Habedi
21031996.03	MSE01-031921	03/19/2021	Area	2			339	678	100	11.0	14.013	0.008		03/29/21	Habedi
21031996.04	MSE02-031921	03/19/2021	Area	2			383	766	100	12.0	15.287	0.008		03/29/21	Habedi
21031996.05	MSE01-032221	03/22/2021	Area	2			451	902	100	12	15.287	0.007		03/29/21	Habedi
21031996.06	MSE02-032221	03/22/2021	Area	2			477	954	100	11.5	14.650	0.006		03/29/21	Habedi

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



Sample Condition Checklist

A&B JobID : 21031996		Date Received : 03/24/2021		Time Received : 12:00PM								
Client Name : Gilbane												
Temperature : 20.7°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
:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	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 3-24-21												

Received by : JMontemayor

Check in by/date : JMontemayor / 03/24/2021

ab-s005-0321



Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II J310000400 Laboratory Name: A&B Labs Date: 3/23/2021
 Project Manager: [Redacted] Address: 10100 East Fwy Ste. 100 Contact: [Redacted] Page: 1 of 1
 Site Location: Hunters Point, San Francisco, CA 94124 Houston TX 77029 Phone: [Redacted]

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Analysis:		Flow Rate = 2 L/min	Special Instructions/Comments Total Time (min)
							Asbestos	Preservative:		
MSE01-031821	3/18/2021	1538	NA	NA	1	AA	X	None		400 01A
MSE02-031821	3/18/2021	1542	NA	NA	1	AA	X	None		442 02A
MSE01-031921	3/19/2021	1430	NA	NA	1	AA	X	Filter		339 03A
MSE02-031921	3/19/2021	1440	NA	NA	1	AA	X			383 04A
MSE01-032221	3/22/2021	1549	NA	NA	1	AA	X			451 05A
MSE02-032221	3/22/2021	1542	NA	NA	1	AA	X			477 06A

* Job ID:21031996



Sampled By: Kimberly To Sampler: Kimberly To Courier/Airbill No.: FedEx/ 7732 0024 1392

Signature: [Signature] Relinquished By/Affiliation: Kimberly To / Gilbane Date: 3/23/21 Time: 1400 Received By/ Affiliation: FedEx Date: 3/23/21 Time: 1400

Special Instructions: None

Send Results to: [Redacted]

Turnaround Time: Standard

20.76 1000/1392

Laboratory Analysis Report

Job ID : 21032263



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 : 03/26/2021 13:28
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
MSE01-032321	3/23/2021 15:22	Cassette	21032263.01
MSE02-032321	3/23/2021 15:26	Cassette	21032263.02
MSE01-032421	3/24/2021 17:02	Cassette	21032263.03
MSE02-032421	3/24/2021 17:09	Cassette	21032263.04

A handwritten signature in black ink, appearing to read 'Senthilkumar Sevukan'.

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Analyst:

A handwritten signature in black ink, appearing to be the name of the analyst.

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3/30/2021



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

Date 3/30/2021

Job ID : 21032263
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
21032263.01	MSE01-032321	03/23/2021	Area	2			445	890	100	13.5	17.197	0.007		03/30/21	Habedi
21032263.02	MSE02-032321	03/23/2021	Area	2			461	922	100	10.0	12.739	0.005		03/30/21	Habedi
21032263.03	MSE01-032421	03/24/2021	Area	2			518	1036	100	12.5	15.924	0.006		03/30/21	Habedi
21032263.04	MSE02-032421	03/24/2021	Area	2			549	1098	100	12.5	15.924	0.006		03/30/21	Habedi

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



Sample Condition Checklist

A&B JobID : 21032263	Date Received : 03/26/2021	Time Received : 1:28PM																									
Client Name : Gilbane																											
Temperature : 20.1°C	Sample pH : n/a																										
Thermometer ID : 102002320	pH Paper ID : n/a																										
Perservative :																											
Check Points																											
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.	<table style="width: 100%; border: none;"> <tr> <td style="width: 10%;">Matrix</td> <td style="width: 10%;">Water</td> <td style="width: 10%;">Soil</td> <td style="width: 10%;">Liquid</td> <td style="width: 10%;">Sludge</td> <td style="width: 10%;">Solid</td> <td style="width: 10%;">Cassette</td> <td style="width: 10%;">Tube</td> <td style="width: 10%;">Bulk</td> <td style="width: 10%;">Badge</td> <td style="width: 10%;">Food</td> <td style="width: 10%;">Other</td> </tr> <tr> <td>:</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>	Matrix	Water	Soil	Liquid	Sludge	Solid	Cassette	Tube	Bulk	Badge	Food	Other	:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Matrix	Water	Soil	Liquid	Sludge	Solid	Cassette	Tube	Bulk	Badge	Food	Other																
:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																
9.	Sample(s) were received in appropriate container(s).	X																									
10.	Sample(s) were received with proper preservative		X																								
11.	All samples were logged or labeled.	X																									
12.	Sample ID labels match C-O-C ID's	X																									
13.	Bottle count on C-O-C matches bottles found.	X																									
14.	Sample volume is sufficient for analyses requested.	X																									
15.	Samples were received within the hold time.	X																									
16.	VOA vials completely filled.		X																								
17.	Sample accepted.	X																									
18.	Has client been contacted about sub-out		X																								
Comments : Include actions taken to resolve discrepancies/problem:																											
Received in box with C/S. CH 03/26/21																											

Received by : AOballe

Check in by/date : CHendrix / 03/26/2021

ab-s005-0321



Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II J310000400 Laboratory Name: A&B Labs Date: 3/25/2021
 Project Manager: [Redacted] Address: 10100 East Fwy Ste. 100 Contact Name: [Redacted] Page: 1 of 1
 Site Location: Hunters Point, San Francisco, CA 94124 Houston TX 77029

O1A
O2A
O3A
O4A

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Analysis:		Flow Rate = 2 L/min	Special Instructions/Comments Total Time (min)
							Asbestos	Preservative: None Container Type: Filter		
MSE01-032321	3/23/2021	1522	NA	NA	1	AA	X			445
MSE02-032321	3/23/2021	1526	NA	NA	1	AA	X			461
MSE01-032421	3/24/2021	1702	NA	NA	1	AA	X			518
MSE02-032421	3/24/2021	1709	NA	NA	1	AA	X			549

[Handwritten mark]

Sampled By: *Kimberly [Signature]*
 Signature: *[Signature]*
 Special Instructions: *None*
 Send Results to: [Redacted]
 Turnaround Time: Standard

Sampler: *Kimberly [Signature]* Courier/Airbill No.: FedEx/ 7732 6492 5878
 Relinquished By/Affiliation: *Kimberly [Signature] Gilbane* Date: *3/25/21* Time: *1700* Received By/ Affiliation: *Fed Ex* Date: *3/25/21* Time: *1700*
Fedex *Amanda* *3-26-21 1328*

SHIP DATE: 25MAR21
ACTWGT: 1.00 LB
CAD: 102700259INNET4340

ORIGIN ID: JCCA (925) 250-8097
KIMBERLY TOM
GILBANE
200 FISHER STREET

BILL SENDER

SAN FRANCISCO, CA 94124
UNITED STATES US

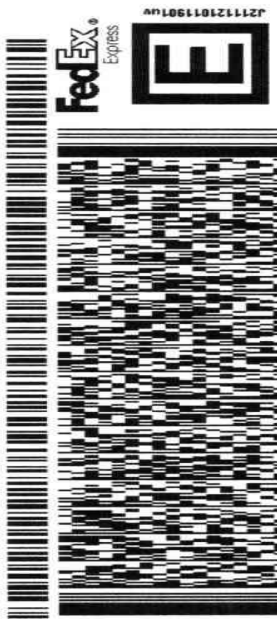
TO ALISHA HUGHES
A & B LABS
10100 EAST FREEWAY, SUITE 100

56DUJ3/AC39/FE4A

HOUSTON TX 77029

REF: 610000400 E 00 05060000

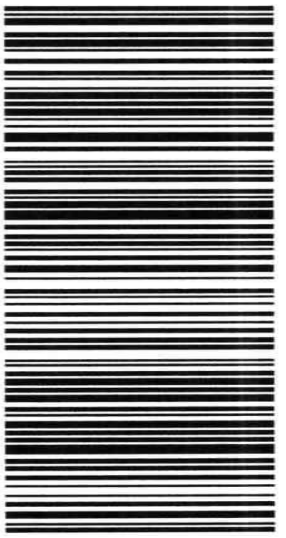
INV [REDACTED]
PO DEPT



FRI - 26 MAR 4:30P
STANDARD OVERNIGHT

TRK# 7732 6488 2334
0201

77029
IAH
TX-US
AB HBYA



After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
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Laboratory Analysis Report

Job ID : 21040031



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 : 04/01/2021 09:57
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
MSE01-032521	3/25/2021 16:33	Cassette	21040031.01
MSE02-032521	3/25/2021 16:36	Cassette	21040031.02
MSE01-032621	3/26/2021 13:10	Cassette	21040031.03
MSE02-032621	3/26/2021 13:20	Cassette	21040031.04
MSE01-032921	3/29/2021 15:36	Cassette	21040031.05
MSE02-032921	3/29/2021 15:32	Cassette	21040031.06

A handwritten signature in black ink, appearing to read 'S. Sevukan'.

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Analyst:

A handwritten signature in black ink, appearing to read 'K. Tom'.

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4/7/2021



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

Date 4/7/2021

Job ID : 21040031
 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
21040031.01	MSE01-032521	03/25/2021	Area	2			501	1002	100	10.0	12.739	0.005		04/06/21	Habedi
21040031.02	MSE02-032521	03/25/2021	Area	2			519	1038	100	8.0	10.191	0.004		04/06/21	Habedi
21040031.03	MSE01-032621	03/26/2021	Area	2			313	626	100	10.5	13.376	0.008		04/06/21	Habedi
21040031.04	MSE02-032621	03/26/2021	Area	2			340	680	100	9.5	12.102	0.007		04/06/21	Habedi
21040031.05	MSE01-032921	03/29/2021	Area	2			407	814	100	9.0	11.465	0.005		04/06/21	Habedi
21040031.06	MSE02-032921	03/29/2021	Area	2			441	882	100	9.5	12.102	0.005		04/06/21	Habedi

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



Sample Condition Checklist

A&B JobID : 21040031	Date Received : 04/01/2021	Time Received : 9:57AM																										
Client Name : Gilbane																												
Temperature : 19.7°C	Sample pH : na																											
Thermometer ID : 102002320	pH Paper ID : na																											
Perservative :																												
Check Points																												
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.	<table style="width: 100%; border: none;"> <tr> <td style="text-align: right;">Matrix</td> <td style="text-align: right;">Water</td> <td style="text-align: right;">Soil</td> <td style="text-align: right;">Liquid</td> <td style="text-align: right;">Sludge</td> <td style="text-align: right;">Solid</td> <td style="text-align: right;">Cassette</td> <td style="text-align: right;">Tube</td> <td style="text-align: right;">Bulk</td> <td style="text-align: right;">Badge</td> <td style="text-align: right;">Food</td> <td style="text-align: right;">Other</td> </tr> <tr> <td style="text-align: right;">:</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>	Matrix	Water	Soil	Liquid	Sludge	Solid	Cassette	Tube	Bulk	Badge	Food	Other	:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
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9.	Sample(s) were received in appropriate container(s).	X																										
10.	Sample(s) were received with proper preservative			X																								
11.	All samples were logged or labeled.	X																										
12.	Sample ID labels match C-O-C ID's		X																									
13.	Bottle count on C-O-C matches bottles found.	X																										
14.	Sample volume is sufficient for analyses requested.	X																										
15.	Samples were received within the hold time.	X																										
16.	VOA vials completely filled.			X																								
17.	Sample accepted.	X																										
18.	Has client been contacted about sub-out			X																								
Comments : Include actions taken to resolve discrepancies/problem:																												
Received in box with C/S. SX I.D does not match 'MSE02' labeled according to time. -AO 4.1.21																												

Received by : AOballe

Check in by/date : AOballe / 04/01/2021

ab-s005-0321



Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II 1310000400 Laboratory Name: A&B Labs Date: 3/30/2021
 Project Manager: [Redacted] Address: 10100 East Fwy Ste. 100 Contact Name: [Redacted] Page: 1 of 1
 Site Location: Hunters Point, San Francisco, CA 94124 Houston TX 77029

Job ID: 21040031



Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Asbestos	Preservative:	None	Container Type:	Filter	Flow Rate = 2 L/min	Special Instructions/Comments	Total Time (min)
MSE01-032521	3/25/2021	1633	NA	NA	1	AA	X							501
MSE02-032521	3/25/2021	1636	NA	NA	1	AA	X							519
MSE01-032621	3/26/2021	1310	NA	NA	1	AA	X							313
MSE02-032621	3/26/2021	1320	NA	NA	1	AA	X							340
MSE01-032921	3/29/2021	1536	NA	NA	1	AA	X							407
MSE02-032921	3/29/2021	1532	NA	NA	1	AA	X							441

[Handwritten signature]

Sampled By: [Signature] Relinquished By/Affiliation: Kimberly Ton/Gilbane Date: 3/30/21 Time: 1400
 Signature: [Signature] Date: 3/30/21 Time: 1400
 Special Instructions: None Received By/ Affiliation: FedEx
197 c 11200230
 Send Results to: [Redacted] Amanda Doakle 4.1.21 957
 Turnaround Time: Standard

ORIGIN ID: JCCA
KIMBERLY TOM
GILBANE
200 FISHER STREET

(925) 250-6097

SHIP DATE: 30MAR21
ACTWGT: 1.00 LB
CAD: 102700259/INET/4340

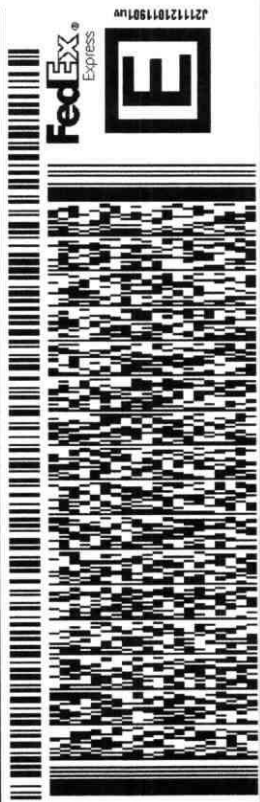
BILL SENDER
SAN FRANCISCO CA 94124
UNITED STATES US

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

HOUSTON TX 77029

REF: J610000400 B 00 09080000

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



WED - 31 MAR 4:30P
STANDARD OVERNIGHT

TRK# 7732 9627 1152
0201

UH HBYA
TX-US
77029
IAH



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Laboratory Analysis Report

Job ID : 21040169



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 : 04/05/2021 10:30
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
MSE01-033021	3/30/2021 15:12	Cassette	21040169.01
MSE02-033021	3/30/2021 15:16	Cassette	21040169.02
MSE01-033121	3/31/2021 16:52	Cassette	21040169.03
MSE02-033121	3/31/2021 16:58	Cassette	21040169.04

A handwritten signature in black ink, appearing to read 'S. C. W. K.' with a horizontal line underneath.

Released By: Senthilkumar Sevukan

Title: Vice President Operations

Analyst:

A handwritten signature in black ink, appearing to read 'K. A. S.' with a horizontal line underneath.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Results apply to the sample as received. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client. Any TWA calculations are based on client supplied data not lab observation.

ab-q210-0321

4/9/2021



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

Date 4/9/2021

Job ID : 21040169
 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
21040169.01	MSE01-033021	03/30/2021	Area	2			455	910	100	13.0	16.561	0.007		04/09/21	Habedi
21040169.02	MSE02-033021	03/30/2021	Area	2			473	946	100	12.5	15.924	0.006		04/09/21	Habedi
21040169.03	MSE01-033121	03/31/2021	Area	2			530	1060	100	19.0	24.204	0.009		04/09/21	Habedi
21040169.04	MSE02-033121	03/31/2021	Area	2			556	1112	100	11.0	14.013	0.005		04/09/21	Habedi

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



Sample Condition Checklist

A&B JobID : 21040169	Date Received : 04/05/2021	Time Received : 10:30AM																										
Client Name : Gilbane																												
Temperature : 20.4°C	Sample pH : NA																											
Thermometer ID : 102002320	pH Paper ID : NA																											
Preservative :																												
Check Points																												
1.	Cooler seal present and signed.	X		N/A																								
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.	<table style="width: 100%; border: none;"> <tr> <td style="width: 10%;">Matrix</td> <td style="width: 10%;">Water</td> <td style="width: 10%;">Soil</td> <td style="width: 10%;">Liquid</td> <td style="width: 10%;">Sludge</td> <td style="width: 10%;">Solid</td> <td style="width: 10%;">Cassette</td> <td style="width: 10%;">Tube</td> <td style="width: 10%;">Bulk</td> <td style="width: 10%;">Badge</td> <td style="width: 10%;">Food</td> <td style="width: 10%;">Other</td> </tr> <tr> <td>:</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>	Matrix	Water	Soil	Liquid	Sludge	Solid	Cassette	Tube	Bulk	Badge	Food	Other	:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
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13.	Bottle count on C-O-C matches bottles found.	X																										
14.	Sample volume is sufficient for analyses requested.	X																										
15.	Samples were received within the hold time.	X																										
16.	VOA vials completely filled.			X																								
17.	Sample accepted.	X																										
18.	Has client been contacted about sub-out			X																								
Comments : Include actions taken to resolve discrepancies/problem:																												
Received in box with C/S -AO 4.5.21																												

Received by : AOballe

Check in by/date : AOballe / 04/05/2021

ab-s005-0321



Chain-Of-Custody

Project Name and Number: HPNS Parcel E Phase II J1310000400
 Laboratory Name: A&B Labs
 Date: 4/1/2021
 Project Manager: [Redacted]
 Address: 10100 East Fwy Ste. 100
 Contact Name: [Redacted]
 Page: 1 of 1
 Site Location: Hunters Point, San Francisco, CA 94124
 Houston TX 77029

Sample ID	Date	Time	Sample Depth (top)	Sample Depth (bottom)	No. of Containers	Sample Matrix	Flow Rate = 2 L/min
MSE01-033021	01A	3/30/2021	1512	NA	1	Asbestos	455
MSE02-033021	02A	3/30/2021	1516	NA	1	Asbestos	473
MSE01-033121	03A	3/31/2021	1652	NA	1	Asbestos	530
MSE02-033121	04A	3/31/2021	1658	NA	1	Asbestos	556

Job ID: 21040169

Sampled By: Embury Z
 Signature: [Signature]
 Special Instructions: None
 2041c 102002320
 Send Results to: [Redacted]
 Turnaround Time: Standard

Sampler: Embury Z
 Relinquished By/Affiliation: Embury Z / Gilbane
 Date: 4/26/2021
 Time: 10:00
 Received By/ Affiliation: Ed G
 Date: 7/6/21
 Time: 10:00

Courier/Arrbill No.: FedEx/ 7733 2405 1181
 Federax
 Amcircle
 Date: 4/5/21
 Time: 10:30

ORIGIN ID: JJC:CA (9/25) 946-3135
KIMBERLY TOM
GILBANE
GILBANE TRAILER
FISHER AVE @ SPEAR AVE BLDG 241
SAN FRANCISCO, CA 94124
UNITED STATES US

SHIP DATE: 31MAR21
ACTWGT: 1.00 LB
CAD: 102700259INET14340
BILL SENDER

TO ALISHA HUGHES
ABLABS
10100 EAST FWY, STE.100

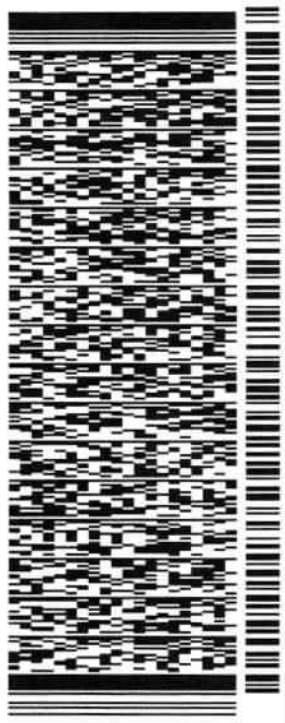
HOLLISTON TX 77029

REF: J310000400 B001904000

PO: J310000400

DEPT:

56D.J25EF2/FE4A



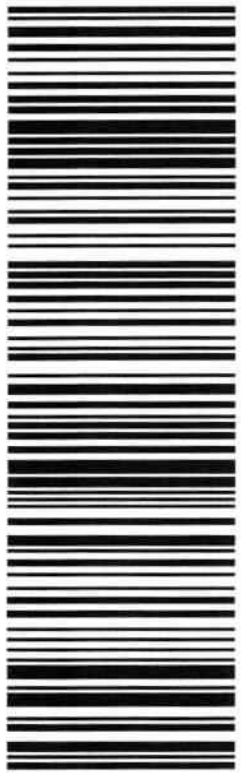
J211321833101uv

TRK# 7733 2405 1181
0201

THU - 01 APR 4:30P
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ATTACHMENT 8
NONCONFORMANCE/CORRECTIVE ACTION REPORT

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CAR USA# **595**
ALS LABORATORY GROUP
NONCONFORMANCE/CORRECTIVE ACTION REPORT (NC/CAR)

(SIDE 1)

IH ENV Asbestos Submitted by: Tracey Earle
(Print name)
 Work Order (s): 21030347, 21030712, 21031181, 21030851 Method: 40CFR50 Appendices B and J
 Samples: _____ Matrix/Media: Air Filters
 Date Initiated: 4/28/21 Date of Occurrence: 3/12/21 (earliest occurrence)

DESCRIBE NONCONFORMANCE (PROBLEM):

Our client, Gilbane, contacted Stella, their ALS Project Manager, because their PM10 analyses was systematically higher than the TSP for all sample pairs. They had performed troubleshooting of their field systems with the help of the manufacture of their equipment and found no issues. They requested that the lab investigate to see if there were any anomalies on our end.

REVIEWER/MANAGER COMMENTS:

CORRECTIVE ACTION REQUIRED? YES NO If yes, go to side 2 of this form.

Signature:  Date: 05/04/21

QA REVIEW AND APPROVAL

QA COMMENTS: _____

THE AFFECTED ANALYTICAL DATA ARE:

- USABLE
- USABLE (FLAGGED) *SEE COMMENT
- NOT USABLE *SEE COMMENT

CORRECTIVE ACTION REQUIRED? YES NO

Reviewed by QA: Tracey Earle

DATE: 5-4-21

