RAMBOLL

ENVIRONMENT
& HEALTH

MEMORANDUM

To: Carey Upton, Chief Operations Officer, SMMUSD

From: Ramboll US Corporation

Subject: **2018 Post-BMP and Post-Encapsulation Verification PCB Sampling for Malibu High School and Juan Cabrillo Elementary School**

December 7, 2018

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This memorandum summarizes sampling activities related to polychlorinated biphenyls (PCBs) that were conducted during fall 2018 by Ramboll US Corporation (Ramboll) on behalf of the Santa Monica-Malibu Unified School District (SMMUSD or District), at Malibu High School (MHS) and Juan Cabrillo Elementary School (JCES). The sampling activities described herein include:

- Air and surface wipe sampling for PCBs to evaluate the efficacy of annual best management practices (BMP) cleaning (post-BMP samples) in pre-1981 buildings that have not been demolished or fully renovated with window, door, and floor modernization projects; and
- Surface wipe sampling for PCBs to evaluate the efficacy of remaining surfaces encapsulated during the 2015 summer break (post-encapsulation verification samples).

In summary, based on the information presented in this memorandum as well as our other reports regarding our indoor investigations at MHS and JCES from 2014 through 2018, Ramboll concludes the following:

- BMP cleaning in unrenovated pre-1981 buildings remains effective as exposure data at MHS and JCES shows PCB levels are below USEPA benchmarks for schools (i.e., <1 microgram per 100 square centimeters, or <1 µg/100 cm^2 for surface wipes and age-appropriate USEPA Exposure Levels for Evaluation of PCBs in Indoor School Air for air samples[1]); thus demonstrating that these schools continue to be protective of public health and meet the Toxic Substances Control Act (TSCA) standard for no unreasonable risk as previously concluded by USEPA ("USEPA's 2014 Approval Letter"[2]). Since these results are consistent with the results from

[1] USEPA. 2017. Exposure Levels for Evaluation of PCBs in Indoor School Air. January 19. Available online: https://www.epa.gov/pcbs/exposure-levels-evaluating-polychlorinated-biphenyls-pcbs-indoor-school-air

[2] USEPA. 2014. Letter from Jared Blumenfeld/USEPA to Sandra Lyon/SMMUSD. October 31. Available online: http://www.smmusd.org/PublicNotices/EnvDocs/EPAtoSL_103114.pdf

previous post-BMP sampling conducted by Ramboll, Ramboll recommends that the District continue to implement BMP cleaning in unrenovated pre-1981 buildings at the same frequency.

- Encapsulation continues to be an effective method for managing substrates previously in contact with PCBs ≥50 parts per million (ppm), as PCB concentrations on encapsulated surfaces are below the USEPA benchmark of <1 µg/100 cm^2 for surface wipes as required by USEPA's November 2015 Approval Letter.[3]

INTRODUCTION

During 2017 and 2018, the District has demolished Buildings A, B/C and E at MHS, and has conducted modernization projects for windows, doors, and floors in Buildings F and I at MHS, and in portions of Building G at MHS and Building F at JCES.[4] MHS Buildings D and J, the remaining portions of Building G at MHS and Building F at JCES, and Buildings A, B, C, D, and E at JCES are the only pre-1981 buildings at that have not been either demolished or fully renovated with modernization projects, as summarized in Table 1.[5]

The sampling described in this memorandum was conducted and completed in accordance with the July *2014 Site-Specific PCB-Related Building Materials Management, Characterization and Remediation Plan for the Library and Building E Rooms 1, 5, and 8 at Malibu High School* ("MHS Specific Plan")[6], as supplemented by the *Supplemental Removal Information for the Library, Building E - Rooms 1, 5, and 8 and Building G - Room 506 at Malibu High School* ("Supplement")[7], and as approved by USEPA Region IX ("USEPA's 2014 Approval Letter" and "USEPA's November 2015 Approval Letter"). The sampling and analysis methods were the same as those documented in previous Ramboll reports regarding sampling at MHS and JCES, including the following:

- December 2014: PCB Inspection and Sampling Report for Malibu High School and Juan Cabrillo Elementary School ("2014 Summer Sampling Report")[8],
- March 2015: 2014/2015 Winter Break PCB Sampling Report for Malibu High School and Juan Cabrillo Elementary School ("2014/2015 Winter Sampling Report")[9],
- October 2015: Conclusion of PCB Sampling Pilot Study and 2015 PCB Removal Activities Report for Malibu High school and Juan Cabrillo Elementary School[10],

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[3] USEPA. 2015 Letter from Jeff Scott/USEPA to Sandra Lyon/SMMUSD. November 2. Available online: http://www.smmusd.org/publicnotices/MalibuSupplementalApproval.pdf

[4] Telephone conversation with Carey Upton, SMMUSD. October 2018.

[5] Ibid.

[6] ENVIRON (now Ramboll). 2014. Site-Specific PCB-Related Building Materials Management, Characterization and Remediation Plan for the Library and Building E Rooms 1, 5, and 8 at Malibu High School. July 3. Available online: http://www.smmusd.org/PublicNotices/PCBRemediationPlan070314.pdf

[7] ENVIRON (now Ramboll). 2014. Supplemental Removal Information for the Library, Building E - Rooms 1, 5, and 8 and Building G - Room 506 at Malibu High School. September 26. Available online: http://smmusd.org/PublicNotices/MHSSuppRemovalSSP092614.pdf

[8] ENVIRON (now Ramboll). 2014. PCB Inspection and Sampling Report for Malibu High School and Juan Cabrillo Elementary School. December. Available online: http://www.smmusd.org/PublicNotices/EnvDocs/PCBInspectionSamplingReport.pdf & http://www.smmusd.org/publicnotices/EnvDocs/AppendixR-MHS-JCESReports.pdf

[9] ENVIRON (now Ramboll). 2015. 2014/2015 Winter Break PCB Sampling Report for Malibu High School and Juan Cabrillo Elementary School. March. Available online: http://www.smmusd.org/PublicNotices/EnvDocs/ENVIRONWinter1415Sampling.pdf & http://www.smmusd.org/publicnotices/EnvDocs/AppendixE-Winter1415Sampling.pdf

[10] Ramboll Environ (now Ramboll). 2015. Conclusion of PCB Sampling Pilot Study and 2015 PCB Removal Activities Report for Malibu High school and Juan Cabrillo Elementary School. October. Available online: http://www.smmusd.org/publicnotices/EnvDocs/Summer15SMM-PCBSampReport.pdf

- December 2016: Post-BMP, Post-Encapsulation Verification, and PCB Remediation Activity PCB Sampling for Malibu High School and Juan Cabrillo Elementary School ("2016 Summer Sampling Report")[11], and
- November 2017: 2017 Post-BMP and Post-Encapsulation Verification PCB Sampling for Malibu High School and Juan Cabrillo Elementary School.[12]

PCB SAMPLING METHODOLOGY

Objectives

There were two objectives for the fall 2018 PCB sampling event:

1. Conduct additional post-BMP sampling in accordance with USEPA's November 2015 Approval Letter. A representative subset of regularly occupied rooms in pre-1981 buildings (including both renovated and unrenovated buildings) were randomly selected for post-BMP sampling. In addition, post-BMP air and surface wipe sampling was performed in the rooms where caulk with PCBs ≥50 ppm was removed during the 2015 summer break and encapsulation was used on adjacent porous substrates in accordance with USEPA's November 2015 Approval Letter.
2. Conduct post-encapsulation verification surface wipe sampling in the rooms where caulk with PCBs ≥ 50 ppm was removed and PCB remediation wastes remain in accordance with USEPA's November 2015 Approval Letter. The four rooms included in this portion of the 2018 fall sampling were MHS Building G (500, Angel Shark) Room 505 and 506, and MHS Building J (700, Old Gymnasium) Rooms 704/704 Hallway and 705.[13]

Methods

Methods, sampling techniques, and benchmarks evaluated in the fall 2018 PCB sampling event are the same as those used in previous reports. Total PCBs in air samples were conservatively compared to USEPA's age-specific Exposure Levels for Evaluating PCBs in Indoor School Air.[14] The health-protective USEPA Exposure Levels for Evaluating PCBs in Indoor School Air are summarized below:

USEPA Exposure Levels for Evaluating PCBs in Indoor School Air

Age	1-<2 yr	2-<3 yr	3-<6 yr	6-<12 yr Elementary School	12-<15 yr Middle School	15-<19 yr High School	19+ yr Faculty/ Adult
ng/m^3	100	100	200	300	500	600	500

Total PCBs in surface wipe samples collected at the schools were compared to 1 µg/100 cm^2, the value conservatively being used by USEPA Region IX as a surface wipe benchmark for schools. Samples

[11] Ramboll Environ (now Ramboll). 2016. 2016 Post-BMP, Post-Encapsulation Verification, and PCB Remediation Activity PCB Sampling for Malibu High School and Juan Cabrillo Elementary School. December. Available online: http://www.smmusd.org/publicnotices/Summer2016PCBSampling2.pdf & http://www.smmusd.org/publicnotices/Summ2016PCBSampleAppend2.pdf

[12] Ramboll. 2017. 2017 Post-BMP and Post-Encapsulation Verification PCB Sampling for Malibu High School and Juan Cabrillo Elementary School. Available online: http://fip.smmusd.org/PCBReport/PCBSamplingLetter.pdf

[13] Post-encapsulation verification sampling was not conducted in the following buildings, as according to SMMUSD personnel, these buildings were demolished or renovated during Summer 2017 or Summer 2018 and encapsulated areas were removed: Building A (800, Great White Shark) Library; Building E (000, Blue Shark) Room 1 and 3; and Building I (400, Leopard Shark) Room 401. In addition, post-encapsulation verification sampling for the four rooms with encapsulated surfaces at JCES (Building F Rooms 18, 19, 22 and 23) was not conducted because the District renovated those rooms during Summer 2016.

[14] According to USEPA, the exposure levels were rounded to the nearest hundred ng/m^3.

were evaluated in accordance with Appendix D of the MHS Specific Plan, which was approved by USEPA Region IX in USEPA's 2014 Approval Letter.

Post-encapsulation verification surface wipe samples were compared to the cleanup goal of less than (<) 1 µg/100 cm^2 specified in USEPA's 2014 Approval Letter.

SUMMARY OF POST-BMP AND POST-ENCAPSULATION FINDINGS

Post-BMP Sampling

As indicated in Table 2, all of the post-BMP air samples (including two duplicates) were below the laboratory reporting limit.[15] Therefore, PCB concentrations in air were determined to be less than the applicable USEPA Exposure Levels for Evaluating PCBs in Indoor School Air. A summary of sampling results is included in Attachment A, and laboratory reports are included in Attachment B.

As indicated in Table 3, all of the post-BMP surface wipe samples (including duplicates and replicates) were below the laboratory reporting limit for PCBs (non-detected) except for four surface wipe samples. These samples were detected between 0.12 µg/100 cm^2 and 0.24 µg/100 cm^2, less than one-fourth of the USEPA Region IX surface wipe benchmark for schools of 1 µg/100 cm^2 specified as the evaluation criteria in USEPA's November 2015 Approval Letter. Therefore, PCB concentrations in surface wipes were below USEPA's Region IX surface wipe benchmark for schools of 1 µg/100 cm^2. A summary of sampling results is included in Attachment A, and laboratory reports are included in Attachment B.

Post-Encapsulation Verification Sampling

The four rooms included in this portion of the 2018 fall sampling were MHS Building G (500, Angel Shark) Room 505 and 506, and MHS Building J (700, Old Gymnasium) Room 704/704 Hallway and 705. As indicated in Table 3, all of the surface wipe results (including duplicates and replicates) from these four rooms were below the laboratory reporting limit (non-detected) for PCBs except for two surface wipe samples; these samples were detected at 0.13 µg/100 cm^2 and 0.54 µg/100 cm^2, less than the USEPA Region IX surface wipe benchmark for schools of 1 µg/100 cm^2 specified as the evaluation criteria in USEPA's November 2015 Approval Letter. Therefore, all surface samples collected for post-encapsulation verification were below USEPA's Region IX specified criteria of 1 µg/100 cm^2. A summary of sampling results is included in Attachment A, and laboratory reports are included in Attachment B.

Post-encapsulation verification sampling was not conducted in the following buildings, as these buildings were demolished or renovated during Summer 2017 and Summer 2018: Building A (800, Great White Shark) Library; Building E (000, Blue Shark) Room 1 and 3; and Building I (400, Leopard Shark) Room 401, as described in Table 1.[16] In addition, post-encapsulation verification sampling for the four rooms with encapsulation at JCES (Building F Rooms 18, 19, 22 and 23) was not conducted because the District renovated those rooms during Summer 2016.[17] Ramboll understands that the

[15] The laboratory reporting limit for the samples ranges from 26 ng/m^3 to 34 ng/m^3. Samples 092218-MHS-B200-R207-A4 and 092218-AFB were compromised during the extraction process portion of the laboratory analysis and were unable to be analyzed. Based on results in similar rooms in Building D (100/200, Mako Shark), it is not expected that 092218-MHS-B200-R207-A4 would have resulted in a detected value. Additionally, PCBs were not detected in the field blank collected on September 21, 2018 (092118-AFB). Therefore, it can be expected that 092218-AFB would have also been below the laboratory detection limit.

[16] Telephone conversation with Carey Upton, SMMUSD. October 2018.

[17] Ramboll Environ (now Ramboll). 2016. 2016 Post-BMP, Post-Encapsulation Verification, and PCB Remediation Activity PCB Sampling for Malibu High School and Juan Cabrillo Elementary School. December. Available online: http://www.smmusd.org/publicnotices/Summer2016PCBSampling2.pdf & http://www.smmusd.org/publicnotices/Summ2016PCBSampleAppend2.pdf

demolition and renovation work is being documented by another District contractor, Alta Environmental, and that those reports are posted to the District's website when they are completed.[18]

QUALITY CONTROL

Data Quality

Ramboll maintains a QA/QC standard for all of its work products. Duplicate samples were collected to evaluate data precision. Two duplicate air samples (approximately 13% of the 15 post-BMP primary samples) and six duplicate surface wipe samples (approximately 12% of the 52 post-BMP and post-encapsulation primary samples) were collected. Replicate samples were collected to evaluate the collection efficacy of the surface wipe sampling. Six replicate surface wipe samples (approximately 12% of the 52 post-BMP and post-encapsulation primary samples) were collected.

Field blank samples were used to assess the potential presence of contaminants arising from field sampling procedures. One field blank air sample and one field blank surface wipe sample were collected for each day of sampling, for a total of two field blank air samples and two field blank surface wipe samples. The air field blank sample collected on September 22, 2018 (092218-AFB) was compromised during the extraction process portion of the laboratory analysis and was unable to be analyzed. The air field blank sample collected on September 21, 2018 (092118-AFB) was not detected. Therefore, it can be expected that 092218-AFB would have also been below the laboratory detection limit. All of the surface wipe field blanks were reported as non-detect above the laboratory reporting limit for PCBs.

Additionally, ambient air samples were collected to evaluate the concentrations of PCBs in the outdoor air around MHS and JCES. One ambient air sample was collected during each 24-hour sampling event. Over the course of the fall 2018 sampling event, two ambient air samples were collected, both of which were not detected above the PCB laboratory reporting limit,[19] indicating that PCB concentrations in ambient air in the immediate vicinity of the two campuses are relatively low.

Data Validation

Ramboll performed data validation for all air and surface wipe samples collected during the Fall 2018 sampling event at MHS and JCES, following the procedures described in the USEPA *Contract Laboratory Program National Functional Guidelines*.[20] Non-detect results evaluated as part of this data set were qualified "U". No qualifiers were applied as a result of QC nonconformances and no data were rejected as a result of the data validation process. The data validation report is presented in Attachment C.

CONCLUSIONS

The work described in this report was performed in consultation with USEPA Region IX to comply with USEPA's policies and regulations on PCBs under TSCA at MHS and JCES. Based on the information presented in this as well as our other reports regarding our indoor investigations at MHS and JCES, Ramboll concludes the following:

- Exposure Data Show PCB Levels are Below USEPA Exposure Levels

[18] Environmental reports for Facility Improvement Projects are available at: http://fip.smmusd.org/sites-malibu.html.

[19] The laboratory reporting limit for the ambient air samples ranged from 26 ng/m^3 to 34 ng/m^3.

[20] USEPA. 2017. National Functional Guidelines for Superfund Organic Methods Data Review. January. Available online: https://www.epa.gov/sites/production/files/2017-01/documents/national_functional_guidelines_for_organic_superfund_methods_data_review_013072017.pdf

The results from the fall 2018 sampling event at MHS and JCES presented in this report demonstrate that conditions in the schools continue to be protective of public health and meet the TSCA standard for no unreasonable risk as described in USEPA's 2014 Approval Letter:

- All air samples collected during the fall 2018 sampling event were below the laboratory reporting limit and below relevant USEPA Exposure Levels for Evaluating PCBs in Indoor School Air.
- All surface wipe samples collected during the fall 2018 sampling event were below USEPA's Region IX surface wipe benchmark for schools of 1 µg/100 cm^2.

Conclusion: Given that the results of the fall 2018 sampling event demonstrate that exposures in all of the regularly occupied rooms that were sampled continue to be below the USEPA benchmarks with the District's implementation of BMPs, Ramboll concludes that conditions at MHS and JCES continue to be protective of public health and meet the TSCA standard for no unreasonable risk as previously concluded by USEPA with the District's use of BMPs.

- Encapsulation continues to be an Effective Method for Managing Substrates Previously in Contact with PCBs ≥50 ppm

  The results from the post-encapsulation verification sampling at MHS demonstrate that conditions in rooms with encapsulated building materials continue to be protective of public health and meet the TSCA standard for no unreasonable risk as described in USEPA's 2014 Approval Letter:

  - All post-encapsulation verification surface wipe samples collected during the fall 2018 sampling event were below USEPA's Region IX surface wipe benchmark for schools of 1 µg/100 cm^2.

  Conclusion: Given that the results of the post-encapsulation verification sampling demonstrate that exposures in all rooms containing encapsulated building materials continue to be below the USEPA benchmark, Ramboll concludes that conditions at MHS continue to be protective of public health and meet the TSCA standard for no unreasonable risk.

TABLES

Table 1. Construction Years for MHS and JCES Buildings
Malibu High School and Juan Cabrillo Elementary School
Malibu, California

School	Building	Year Constructed	Known Past or Planned Renovations
MHS	A (800, Great White Shark)	1963	Demolished in 2017; Plan to replace with a new two-story Classroom/Library/Administration Building by 2020.
MHS	B/C (900, Whale Shark)	1963	Demolished in 2017; Plan to replace with a new two-story Classroom/Library/Administration Building by 2020.
MHS	D (100 & 200, Mako Shark)	1963	Some windows & doors replaced and/or retrofitted in 1993; Plan to replace or retrofit all pre-1979 windows & doors by 2020[b]; Plan to upgrade and install HVAC by 2021.
MHS	E (000, Blue Shark)	1963	Demolished in 2017; Plan to replace building with new 12-classroom building by 2020.
MHS	F (300, Thresher Shark)	1963	Some windows & doors replaced and/or retrofitted in 1993; Repaced/Retrofited all pre-1979 windows & doors in 2017; Plan to upgrade and install HVAC by 2021.
MHS	G (500, Angel Shark)	1963	Some windows & doors replaced and/or retrofitted in 1993; Repaced/Retrofited all pre-1979 windows & exterior doors in 2017; Plan to replace/retrofit interior doors by 2020[b]; Plan to upgrade and install HVAC by 2021.
MHS	H (Cafeteria/Auditorium)	1963	Bulding renovated into Theater in 1993; Plan to replace or retrofit all pre-1979 windows & doors by 2020[b]; Plan to upgrade and install HVAC by 2021.
MHS	I (400, Leopard Shark)	1963	Some windows & doors replaced and/or retrofitted in 1993; Repaced/Retrofited all pre-1979 windows & doors in 2017; Plan to upgrade and install HVAC by 2021.
MHS	J (700, Old Gymnasium)	1963	Plan to replace or retrofit all pre-1979 windows & doors by 2020[b]; Plan to upgrade and install HVAC by 2021.
MHS	K (600, Hammerhead Shark)	2002	None
MHS	Relocatables Next to Building G (500, Angel Shark)	1998	Renovated into temporary offices in 2017; Plan to remove by 2020.
MHS	New Gymnasium	2002	Plan to upgrade and install HVAC by 2021.
MHS	Malibu Boys and Girls Teen Center[a]	2000	None
MHS	Swimming Pool and Equipment Building	1975	Building was repaired in 1994
MHS	City of Malibu Office by the Pool[a]	1997	None
JCES	A	1958	Windows & some doors retrofitted in 1993; Other doors to be replaced by 2020[b]; Plan to upgrade and install HVAC by 2021.
JCES	B	1955	Windows & some doors retrofitted in 1993; Other doors to be replaced by 2020[b]; Plan to upgrade and install HVAC by 2021.
JCES	C	1957	Windows & some doors retrofitted in 1993; Other doors to be replaced by 2020[b]; Plan to upgrade and install HVAC by 2021.
JCES	D	1958	Windows & some doors retrofitted in 1993; Other doors to be replaced by 2020[b]; Plan to upgrade and install HVAC by 2021.
JCES	E	1965	Windows & some doors retrofitted in 1993; Other doors to be replaced by 2020[b]; Plan to upgrade and install HVAC by 2021.
JCES	F	1961/1965	All pre-1979 windows, that had not been previously retrofitted, were replaced in 2016; Some pre-1979 doors/frames were replaced in 2016; the remaining identified pre-1979 doors/frames are scheduled to be replaced by 2020[b]; Plan to upgrade and install HVAC by 2021.
JCES	G	1995	Plan to upgrade and install HVAC by 2021.
JCES	Building at Rear of Playground (Rooms 24 & 25)	1999	None
JCES	Building Next to Kindergarten Yard (Cottages- Buildings H & I)	1992	None

Notes:
1. Blue highlighted buildings were constructed pre-1981 that have not yet undergone renovations to replace doors, windows, and floors. Buildings not highlighted were constructed post-1981.
2. Orange highlighted buildings were constructed pre-1981 and have undergone renovations to replace doors, windows, and floors.
3. Green highlighted buildings were constructed pre-1981 and were demolished in 2017.
[a] Building is not owned by SMMUSD.
[b] Due to changed circumstances resulting from a new bond measure that appeared on the November 2016 Election Day ballot in Malibu, California, the District is requesting an extension of the December 31, 2019 deadline in its Motion to the Court in anticipation that the remaining buildings subject to window and door replacement will be completely demolished and rebuilt within the next several years.

Abbreviations:
JCES = Juan Cabrillo Elementary School
MHS = Malibu High School
SMMUSD = Santa Monica-Malibu Unified School District
HVAC = heating ventilation and air conditioning

References:
1. Atkins, formerly PBS&J. 2011. *Santa Monica-Malibu Unified School District Malibu Middle and High School Campus Improvement Project Environmental Impact Report.* Volume 1: Draft EIR. July.
2. Telephone conversation with Carey Upton, SMMUSD. October 2018.

Table 2. Summary of Post-BMP Air Sample Results for MHS and JCES Buildings as Compared to USEPA Exposure Levels for Evaluating PCBs in Indoor School Air

Malibu High School and Juan Cabrillo Elementary School

Malibu, California

School	Number of Samples[1]	Below Reporting Limit[2] (RL)	Above RL to 200 ng/m^3 [3]	Above 200 ng/m^3
Post-BMP				
MHS	12	12	None	None
JCES	4	4	None	None

Note:

1. Sample counts include primary samples and duplicate samples. Field blanks and outdoor samples are not included.
2. The laboratory RL for the samples ranges from 26 ng/m^3 to 30 ng/m^3.
3. No concentrations were greater than the lowest USEPA's Exposure Levels for Evaluating PCBs in Indoor School Air of 200, 300, 500, 600, and 500 ng/m^3 for age three to less than six years old, elementary school (six to less than 12 years old), middle school, high school, and faculty/adults, respectively (USEPA, 2016).

Abbreviations:

BMP = Best Management Practices
JCES = Juan Cabrillo Elementary School
MHS = Malibu High School
ng/m^3 = nanogram per cubic meter
PCB = polychlorinated biphenyl
RL = reporting limit
USEPA = United States Environmental Protection Agency

References:

USEPA. 2017. Exposure Levels for Evaluation of PCBs in Indoor School Air. January 19. Available online: https://www.epa.gov/pcbs/exposure-levels-evaluating-polychlorinated-biphenyls-pcbs-indoor-school-air

Table 3. Summary of Post-BMP and Post-Encapsulation Verification Surface Wipe Sample Results for MHS and JCES Buildings as Compared to the USEPA Region IX Benchmark

Malibu High School and Juan Cabrillo Elementary School

Malibu, California

School	Number of Samples[1]	Below Reporting Limit[2] (RL)	Above RL and Below 1 µg/100 cm^2 [3]	Above 1 µg/100 cm^2
Post-BMP				
MHS	44	40	4 (max: 0.24 µg/100 cm^2)	None
JCES	11	11	None	None
Post-Encapsulation Verification[3]				
MHS	9	7	2 (max: 0.54 µg/100 cm^2)	None

Note:

1. Sample counts include primary samples, duplicates, and replicates. Field blanks are not included.
1. The laboratory RL for the surface wipe samples is 0.1 µg/100 cm^2
2. USEPA Region IX benchmark for surface wipe samples is 1 µg/100 cm^2.
3. Post-encapsulation verification sampling was not performed in the following buildings, as these buildings were demolished or renovated during Summer 2017 and Summer 2018 and encapsulated areas removed: Building A (800, Great White Shark) Library, Building E (000, Blue Shark) Room 1 and 3, Building I (400, Leopard Shark) Room 401. In addition, post-encapsulation verification sampling for the four rooms at JCES (Building F Rooms 18, 19, 22 and 23) was not performed because the District renovated those rooms during Summer 2016.[1]

Abbreviations:

BMP = Best Management Practices

JCES = Juan Cabrillo Elementary School

MHS = Malibu High School

RL = reporting limit

USEPA = United States Environmental Protection Agency

µg/100 cm^2 = microgram per 100 square centimeter

Reference:

1. Telephone conversation with Carey Upton, SMMUSD. October 2018.

ATTACHMENT A
TABLES FOR 2018 AIR AND SURFACE WIPE PCB SAMPLING AT MHS AND JCES

Table A-1. Summary of Post-BMP Air Sampling Results for 2018 Sampling
Malibu High School and Juan Cabrillo Elementary School
Malibu, California

Building	Room Placard ID	Floor Plan Room ID	Room Description	Sampling Date[a]	Sample ID	Total PCBs (ng/m^3)
MHS						
D (100/200, Mako Shark)	102	102	Classroom	9/22/2018	092218-MHS-B100-R102-A1	ND (<28)
	105	105	Classroom		092218-MHS-B100-R105-A2	ND (<26)
	201	201	Classroom		092218-MHS-B200-R201-A3	ND (<28)
	207	207	Classroom		092218-MHS-B200-R207-A4	--[b]
F (300, Thresher Shark)	303	110	Music Room		092218-MHS-B300-R303-A5	ND (<27)
			Music Room (Duplicate)		092218-MHS-B300-R303-A6	ND (<27)
G (500, Angel Shark)	505	404N	Art Classroom		092218-MHS-B500-R505-A7	ND (<28)
	506	403	Wood shop		092218-MHS-B500-R506-A8	ND (<28)
H (Cafeteria/Auditorium)	Kitchen	119	Kitchen	9/21/2018	092118-MHS-BH-RKIT-A1	ND (<28)
	Auditorium	101	Auditorium		092118-MHS-BH-RAUD-A2	ND (<29)
J (700, Old Gymnasium)	704/704 Hallway	117/115A	Faculty Office/Hallway		092118-MHS-B700-R704-A3	ND (<28)
	705	115	Office		092118-MHS-B700-R705-A4	ND (<28)
	Gym	101	Gymnasium		092118-MHS-B700-RGYM-A5	ND (<28)
JCES						
A	Main Office	100L, 100E	Main Office	9/21/2018	092118-JCES-BA-R100L-A6	ND (<27)
B	R3	3	1st grade classroom		092118-JCES-BB-R3-A7	ND (<29)
			1st grade classroom (Duplicate)		092118-JCES-BB-R3-A8	ND (<30)
C	R9	9	2nd/3rd grade classroom		092118-JCES-BC-R9-A9	ND (<27)
Field Blanks and Ambient				9/21/2018	092118-AOD	ND (<27)
					092118-AFB	NA
				9/22/2018	092218-AOD	ND (<34)
					092218-AFB	--[b]

Notes:
1. Analytical reports 34-1827058 and 34-1827061 were provided by the laboratory, ALS Environmental. Samples were analyzed by USEPA method TO-10A.
2. If no Aroclors were detected above the laboratory reporting limit, total PCBs are shown as less than (<) the highest method reporting limit.
3. Duplicate samples were collected adjacent to the primary sample.
4. Example of sample ID:

092218 – MHS – B200 – R201 – A1
- 092218: Date
- MHS: School ID (MHS: Malibu JCES: Cabrillo)
- B200: (B)uilding
- R201: (R)oom ID
- A1: (A)ir Sample Code

[a] Air samples were collected over a 24-hour period with the lights on, windows and doors closed, and ventilation off. Start date is given.
[b] Samples 092218-MHS-B200-R207-A4 and 092218-AFB were compromised in the laboratory extraction process and were unable to be analyzed.

Abbreviations:
ng/m^3 = nanograms per cubic meter
BMP = Best Management Practice
FB = field blank
JCES = Juan Cabrillo Elementary School
MHS = Malibu High School
NA = not applicable
ND = compound was analyzed for but not detected above the laboratory reporting limit
OD = outdoor
PCB = polychlorinated biphenyl
TO = toxic organic
USEPA = United States Environmental Protection Agency

Table A-2. Summary of Post-BMP Surface Wipe Sampling Results for 2018 Sampling
Malibu High School and Juan Cabrillo Elementary School
Malibu, California

Building	Room Placard ID	Floor Plan Room ID	Room Description	Suggested Sample Location	Surface Description	Sampling Date	Sample ID	Total PCB Surface Wipe Concentration (µg/100 cm^2)
MHS								
D (100/200, Mako Shark)	102	102	Classroom	Floor	vinyl floor tile	9/22/2018	092218-MHS-B100-R102-W1	ND (<0.10)
				Bookshelf	laminate		092218-MHS-B100-R102-W2	ND (<0.10)
				Desk	laminate		092218-MHS-B100-R102-W3	ND (<0.10)
				Desk (duplicate)	laminate		092218-MHS-B100-R102-W4	ND (<0.10)
	105	105	Classroom	Desk	laminate	9/22/2018	092218-MHS-B100-R105-W1	ND (<0.10)
				Floor	vinyl floor tile		092218-MHS-B100-R105-W2	ND (<0.10)
				Bookshelf	wood		092218-MHS-B100-R105-W3	ND (<0.10)
				Bookshelf (replicate)	wood		092218-MHS-B100-R105-W4	ND (<0.10)
	201	201	Classroom	Desk	laminate	9/22/2018	092218-MHS-B200-R201-W1	ND (<0.10)
				Floor	vinyl floor tile		092218-MHS-B200-R201-W2	ND (<0.10)
				Table	laminate		092218-MHS-B200-R201-W3	ND (<0.10)
	207	207	Classroom	Floor	vinyl floor tile	9/22/2018	092218-MHS-B200-R207-W1	ND (<0.10)
				Bookshelf	wood		092218-MHS-B200-R207-W2	ND (<0.10)
				Desk	laminate		092218-MHS-B200-R207-W3	ND (<0.10)
				Desk (replicate)	laminate		092218-MHS-B200-R207-W4	ND (<0.10)
F (300, Thresher Shark)	303	110	Music Room	Wall (near light switch)	plaster	9/22/2018	092218-MHS-B300-R303-W1	ND (<0.10)
				Floor	vinyl floor tile	9/23/2018	092318-MHS-B300-R303-W2	ND (<0.10)
				Podium	metal	9/22/2018	092218-MHS-B300-R303-W3	ND (<0.10)
				Podium (replicate)	metal		092218-MHS-B300-R303-W4	ND (<0.10)
G (500, Angel Shark)	505	404N	Art Classroom	Countertop (sink adjacent)	laminate	9/22/2018	092218-MHS-B500-R505-W1	0.12
				Table	laminate		092218-MHS-B500-R505-W2	ND (<0.10)
				Counter top	laminate		092218-MHS-B500-R505-W3	ND (<0.10)
	506	403	Wood shop	Student desk	laminate	9/22/2018	092218-MHS-B500-R506-W1	0.24
				Workbench	wood		092218-MHS-B500-R506-W2	ND (<0.10)
				Machinery table	metal		092218-MHS-B500-R506-W3	0.12
H (Cafeteria/Auditorium)	Kitchen	119	Kitchen	Table	metal	9/23/2018	092318-MHS-BH-RKIT-W1	ND (<0.10)
				Wall (near light switch)	plaster		092318-MHS-BH-RKIT-W2	ND (<0.10)
				Table	metal		092318-MHS-BH-RKIT-W3	ND (<0.10)
				Table (duplicate)	metal		092318-MHS-BH-RKIT-W4	ND (<0.10)
	Auditorium	101	Auditorium	Ledge	wood	9/23/2018	092318-MHS-BH-RAUD-W1	ND (<0.10)
				Seat Arm Rest	plastic		092318-MHS-BH-RAUD-W2	ND (<0.10)
				Wall (near light switch)	wood		092318-MHS-BH-RAUD-W3	ND (<0.10)
J (700, Old Gymnasium)	704/704 Hallway	117/115A	Faculty Office/Hallway	Floor	vinyl floor tile	9/23/2018	092318-MHS-B700-R704-W1	0.12
				File cabinet	metal		092318-MHS-B700-R704-W2	ND (<0.10)
				Desk	laminate		092318-MHS-B700-R704-W3	ND (<0.10)
				Desk (duplicate)	laminate		092318-MHS-B700-R704-W4	ND (<0.10)
	705	115	Office	Floor	vinyl floor tile	9/23/2018	092318-MHS-B700-R705-W1	ND (<0.10)
				Desk	laminate		092318-MHS-B700-R705-W2	ND (<0.10)
				Cabinet	plastic		092318-MHS-B700-R705-W3	ND (<0.10)
				Cabinet (replicate)	plastic		092318-MHS-B700-R705-W4	ND (<0.10)
	Gym	101	Gymnasium	Floor	hardwood	9/23/2018	092318-MHS-B700-RGYM-W1	ND (<0.10)
				Wall (near light switch)	plaster		092318-MHS-B700-RGYM-W2	ND (<0.10)
				Bleachers	plastic		092318-MHS-B700-RGYM-W3	ND (<0.10)
				Bleachers (duplicate)	plastic		092318-MHS-B700-RGYM-W4	ND (<0.10)

Table A-2. Summary of Post-BMP Surface Wipe Sampling Results for 2018 Sampling
Malibu High School and Juan Cabrillo Elementary School
Malibu, California

Building	Room Placard ID	Floor Plan Room ID	Room Description	Suggested Sample Location	Surface Description	Sampling Date	Sample ID	Total PCB Surface Wipe Concentration (µg/100 cm^2)
JCES								
A	Main Office	100L, 100E	Main Office	Bookshelf	painted wood	9/22/2018	092218-JCES-BA-R100L-W1	ND (<0.10)
				Counter top (sink adjacent)	laminate		092218-JCES-BA-R100L-W2	ND (<0.10)
				Table	wood		092218-JCES-BA-R100L-W3	ND (<0.10)
B	R3	3	1st grade classroom	Counter top (sink adjacent)	laminate	9/22/2018	092218-JCES-BB-R3-W1	ND (<0.10)
				Counter top (sink adjacent) (replicate)	laminate		092218-JCES-BB-R3-W2	ND (<0.10)
				Student desk	wood		092218-JCES-BB-R3-W3	ND (<0.10)
				Bookshelf	wood		092218-JCES-BB-R3-W4	ND (<0.10)
C	R9	9	2nd/3rd grade classroom	Counter top (sink adjacent)	laminate	9/22/2018	092218-JCES-BC-R9-W1	ND (<0.10)
				Teacher desk	wood		092218-JCES-BC-R9-W2	ND (<0.10)
				Student desk	wood		092218-JCES-BC-R9-W3	ND (<0.10)
				Student desk (duplicate)	wood		092218-JCES-BC-R9-W4	ND (<0.10)
Field Blanks						9/22/2018	092218-WFB-HEX	ND (<0.10)
						9/23/2018	092318-WFB-HEX	ND (<0.10)

Notes:
1. Analytical reports (18091636 and 18091640) were provided by the laboratory, ALS Environmental. Samples were analyzed by USEPA method SW 8082. Sample area was 100 cm^2.
2. If no Aroclors were detected above the laboratory reporting limit, total PCBs are shown as less than (<) the highest method reporting limit.
3. Duplicate samples were collected adjacent to the primary sample. Replicate samples were collected in the same location as the primary sample, after the primary sample was collected.
4. Example of sample ID:

091118 – MHS – B200 – R201 – W1

- 091118: Date
- MHS: School ID (MHS: Malibu JCES: Cabrillo)
- B200: (B)uilding
- R201: (R)oom ID
- W1: (W)ipe Sample Code

Abbreviations:
µg/100 cm^2 = micrograms per 100 square centimeters
cm^2 = square centimeters
BMP = Best Management Practice
FB = field blank
HEX = hexane
JCES = Juan Cabrillo Elementary School
MHS = Malibu High School
ND = testing result not detected above the reporting limit
PCB = polychlorinated biphenyl
SW = solid waste
USEPA = United States Environmental Protection Agency

Table A-3. Summary of Post-Encapsulation Verification Surface Wipe Sampling Results for 2018 Sampling
Malibu High School and Juan Cabrillo Elementary School
Malibu, California

Building	Room Placard ID	Floor Plan Room ID	Room Description	Sample Location	Surface Description	Sampling Date	Sample ID	Total PCB Surface Wipe Concentration (µg/100 cm^2)
MHS								
G (500, Angel Shark)	505	404N	Art Classroom	Wall	encapsulated wood	9/23/2018	092318-MHS-B500-R505-PEW1	ND (<0.10)
				Wall (duplicate)	encapsulated wood		092318-MHS-B500-R505-PEW2	ND (<0.10)
	506	403	Wood shop	Wall	encapsulated wood	9/22/2018	092218-MHS-B500-R506-PEW1	0.13
				Wall	encapsulated wood		092218-MHS-B500-R506-PEW2	0.54
J (700, Old Gymnasium)	704/704 Hallway	117/115A	Faculty Office/Hallway	Window sill	encapsulated brick	9/23/2018	092318-MHS-B700-R704-PEW1	ND (<0.10)
				Window sill	encapsulated brick		092318-MHS-B700-R704-PEW2	ND (<0.10)
				Wall	encapsulated plaster		092318-MHS-B700-R704-PEW3	ND (<0.10)
	705	115	Office	Window sill	painted encapsulated ceramic tile	9/23/2018	092318-MHS-B700-R705-PEW1	ND (<0.10)
				Window sill (replicate)	painted encapsulated ceramic tile		092318-MHS-B700-R705-PEW2	ND (<0.10)
Field Blanks						9/22/2018	092218-WFB-HEX	ND (<0.10)
						9/23/2018	092318-WFB-HEX	ND (<0.10)

Notes:
1. Analytical reports (18091636 and 18091640) were provided by the laboratory, ALS Environmental. Samples were analyzed by USEPA method SW 8082. Sample area was 100 cm^2.
2. If no Aroclors were detected above the laboratory reporting limit, total PCBs are shown as less than (<) the highest method reporting limit.
3. Duplicate samples were collected adjacent to the primary sample. Replicate samples were collected in the same location as the primary sample, after the primary sample was collected.
4. Example of sample ID:

09222018 – MHS – B500 – R505 – PEW1

Date; School ID (MHS: Malibu JCES: Cabrillo); (B)uilding; (R)oom ID; (W)ipe Sample Code

Abbreviations:
µg/100 cm^2 = micrograms per 100 square centimeters
cm^2 = square centimeters
BMP = Best Management Practice
FB = field blank
HEX = hexane
JCES = Juan Cabrillo Elementary School
MHS = Malibu High School
NA = not applicable
ND = testing result not detected above the reporting limit
PCB = polychlorinated biphenyl
PE = post-encapsulation
SW = solid waste
USEPA = United States Environmental Protection Agency

ATTACHMENT B
LABORATORY ANALYTICAL REPORTS

LABORATORY REPORT #1827058 (AIR)
SAMPLE DATE: SEPTEMBER 21, 2018

JCES Building A
JCES Building B
JCES Building C

ANALYTICAL REPORT

Report Date: October 04, 2018

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E-mail: rebeccacase@ramboll.com

Workorder: **34-1827058**
Project ID: SMMUSD 092118
Purchase Order: 1690009987
Project Manager Paul E. Pope

Client Sample ID	Lab ID	Collect Date	Receive Date	Sampling Site
092118-JCES-BA-R100L-A6	1827058001	09/21/18	09/25/18	Malibu, CA
092118-JCES-BB-R3-A7	1827058002	09/21/18	09/25/18	Malibu, CA
092118-JCES-BB-R3-A8	1827058003	09/21/18	09/25/18	Malibu, CA
092118-JCES-BC-R9-A9	1827058004	09/21/18	09/25/18	Malibu, CA

ANALYTICAL REPORT

Workorder: 34-1827058
Client: Ramboll Environ International
Project Manager: Paul E. Pope

Analytical Results

Sample ID: **092118-JCES-BA-R100L-A6** | Sampling Site: Malibu, CA | Collected: 09/21/2018
Lab ID: 1827058001 | Media: PUF Tube | Received: 09/25/2018
Matrix: Air | Sampling Parameter: Air Volume 7304.5 L

Analysis Method - EPA TO-10A, PCBs

Preparation:	EPA 3540 Soxhlet Ext., EPA TO-10A	**Weight/Volume**	**Analysis:**	EPA TO-10A, PCBs Air	**Instrument ID:** GCE03
Batch:	ENVX/27363 (HBN: 223615)	**Initial:** 1 filter	**Batch:**	EGC/7459 (HBN: 223908)	**Percent Solid:** NA
Prepared:	09/27/2018	**Final:** 10 mL	**Analyzed:**	10/02/2018 00:00	**Report Basis:** Wet

Analyte	Result (ug/sample)	RL (ug/sample)	Dilution	Qual
Aroclor 1221	ND	0.20	1	
Aroclor 1232	ND	0.10	1	
Aroclor 1016	ND	0.10	1	
Aroclor 1242	ND	0.10	1	
Aroclor 1248	ND	0.10	1	
Aroclor 1254	ND	0.10	1	
Aroclor 1260	ND	0.10	1	
Aroclor 1262	ND	0.10	1	
Aroclor 1268	ND	0.10	1	

Sample ID: **092118-JCES-BB-R3-A7** | Sampling Site: Malibu, CA | Collected: 09/21/2018
Lab ID: 1827058002 | Media: PUF Tube | Received: 09/25/2018
Matrix: Air | Sampling Parameter: Air Volume 6988.2 L

Analysis Method - EPA TO-10A, PCBs

Preparation:	EPA 3540 Soxhlet Ext., EPA TO-10A	**Weight/Volume**	**Analysis:**	EPA TO-10A, PCBs Air	**Instrument ID:** GCE03
Batch:	ENVX/27363 (HBN: 223615)	**Initial:** 1 filter	**Batch:**	EGC/7459 (HBN: 223908)	**Percent Solid:** NA
Prepared:	09/27/2018	**Final:** 10 mL	**Analyzed:**	10/02/2018 00:00	**Report Basis:** Wet

Analyte	Result (ug/sample)	RL (ug/sample)	Dilution	Qual
Aroclor 1221	ND	0.20	1	
Aroclor 1232	ND	0.10	1	
Aroclor 1016	ND	0.10	1	
Aroclor 1242	ND	0.10	1	
Aroclor 1248	ND	0.10	1	
Aroclor 1254	ND	0.10	1	
Aroclor 1260	ND	0.10	1	
Aroclor 1262	ND	0.10	1	
Aroclor 1268	ND	0.10	1	

ANALYTICAL REPORT

Workorder: 34-1827058
Client: Ramboll Environ International
Project Manager: Paul E. Pope

Analytical Results

Sample ID: **092118-JCES-BB-R3-A8** | Sampling Site: Malibu, CA | Collected: 09/21/2018
Lab ID: 1827058003 | Media: PUF Tube | Received: 09/25/2018
Matrix: Air | Sampling Parameter: Air Volume 6698.3 L

Analysis Method - EPA TO-10A, PCBs

Preparation:	EPA 3540 Soxhlet Ext., EPA TO-10A	**Weight/Volume**	**Analysis:**	EPA TO-10A, PCBs Air	**Instrument ID:** GCE03
Batch:	ENVX/27363 (HBN: 223615)	**Initial:** 1 filter	**Batch:**	EGC/7459 (HBN: 223908)	**Percent Solid:** NA
Prepared:	09/27/2018	**Final:** 10 mL	**Analyzed:**	10/02/2018 00:00	**Report Basis:** Wet

Analyte	Result (ug/sample)	RL (ug/sample)	Dilution	Qual
Aroclor 1221	ND	0.20	1	
Aroclor 1232	ND	0.10	1	
Aroclor 1016	ND	0.10	1	
Aroclor 1242	ND	0.10	1	
Aroclor 1248	ND	0.10	1	
Aroclor 1254	ND	0.10	1	
Aroclor 1260	ND	0.10	1	
Aroclor 1262	ND	0.10	1	
Aroclor 1268	ND	0.10	1	

Sample ID: **092118-JCES-BC-R9-A9** | Sampling Site: Malibu, CA | Collected: 09/21/2018
Lab ID: 1827058004 | Media: PUF Tube | Received: 09/25/2018
Matrix: Air | Sampling Parameter: Air Volume 7397.9 L

Analysis Method - EPA TO-10A, PCBs

Preparation:	EPA 3540 Soxhlet Ext., EPA TO-10A	**Weight/Volume**	**Analysis:**	EPA TO-10A, PCBs Air	**Instrument ID:** GCE03
Batch:	ENVX/27363 (HBN: 223615)	**Initial:** 1 filter	**Batch:**	EGC/7459 (HBN: 223908)	**Percent Solid:** NA
Prepared:	09/27/2018	**Final:** 10 mL	**Analyzed:**	10/02/2018 00:00	**Report Basis:** Wet

Analyte	Result (ug/sample)	RL (ug/sample)	Dilution	Qual
Aroclor 1221	ND	0.20	1	
Aroclor 1232	ND	0.10	1	
Aroclor 1016	ND	0.10	1	
Aroclor 1242	ND	0.10	1	
Aroclor 1248	ND	0.10	1	
Aroclor 1254	ND	0.10	1	
Aroclor 1260	ND	0.10	1	
Aroclor 1262	ND	0.10	1	
Aroclor 1268	ND	0.10	1	

Comments

Quality Control: **EPA TO-10A, PCBs - (HBN: 223908)**

LCS/LCSD recoveries for AR1242 and AR1260 were outside of Historical /Performance limits but inside 8082 limits.

ANALYTICAL REPORT

Workorder: 34-1827058
Client: Ramboll Environ International
Project Manager: Paul E. Pope

Report Authorization (/S/ is an electronic signature that complies with 21 CFR Part 11)

Method	Analyst	Peer Review
EPA TO-10A, PCBs	/S/ Mila V. Potekhin 10/03/2018 15:51	/S/ Nadjla Borges 10/04/2018 16:27

Laboratory Contact Information

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General Lab Comments

The results provided in this report relate only to the items tested.
Samples were received in acceptable condition unless otherwise noted.
Samples have not been blank corrected unless otherwise noted.
This test report shall not be reproduced, except in full, without written approval of ALS.

ALS provides professional analytical services for all samples submitted. ALS is not in a position to interpret the data and assumes no responsibility for the quality of the samples submitted.

All quality control samples processed with the samples in this report yielded acceptable results unless otherwise noted.

ALS is accredited for specific fields of testing (scopes) in the following testing sectors. The quality system implemented at ALS conforms to accreditation requirements and is applied to all analytical testing performed by ALS. The following table lists testing sector, accreditation body, accreditation number and website. Please contact these accrediting bodies or your ALS project manager for the current scope of accreditation that applies to your analytical testing.

Testing Sector	Accreditation Body	Certificate Number	Website
Environmental	PJLA (DoD ELAP)		
	Utah (TNI)		
	Nevada		
	Oklahoma		
	Iowa		

ANALYTICAL REPORT

Workorder: 34-1827058
Client: Ramboll Environ International
Project Manager: Paul E. Pope

Result Symbol Definitions

MDL = Method Detection Limit, a statistical estimate of method/media/instrument sensitivity.
RL = Reporting Limit, a verified value of method/media/instrument sensitivity.
CRDL = Contract Required Detection Limit
Reg. Limit = Regulatory Limit.
ND = Not Detected, testing result not detected above the MDL or RL.
< This testing result is less than the numerical value.
** No result could be reported, see sample comments for details.

Qualifier Symbol Definitions

U = Qualifier indicates that the analyte was not detected above the MDL.
J = Qualifier Indicates that the analyte value is between the MDL and the RL. It is also used to indicate an estimated value for tentatively identified compounds in mass spectrometry where a 1:1 response is assumed.
B = Qualifier indicates that the analyte was detected in the blank.
E = Qualifier indicates that the analyte result exceeds calibration range.
P = Qualifier indicates that the RPD between the two columns is greater than 40%.

LABORATORY REPORT #1827061 (AIR)
SAMPLE DATE: SEPTEMBER 21-22, 2018

MHS Building D (100/200, Mako Shark)
MHS Building F (300, Thresher Shark)
MHS Building G (500, Angel Shark)
MHS Building H (Cafeteria/Auditorium)
MHS Building J (700, Old Gymnasium)

ANALYTICAL REPORT

Report Date: October 08, 2018

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Workorder: **34-1827061**
Project ID: SMMUSD 092118
Purchase Order: 1690009988
Project Manager Paul E. Pope

Client Sample ID	Lab ID	Collect Date	Receive Date	Sampling Site
092118-MHS-BH-RKIT-A1	1827061001	09/21/18	09/25/18	Malibu, CA
092118-MHS-BH-RAUD-A2	1827061002	09/21/18	09/25/18	Malibu, CA
092118-MHS-B700-R704-A3	1827061003	09/21/18	09/25/18	Malibu, CA
092118-MHS-B700-R705-A4	1827061004	09/21/18	09/25/18	Malibu, CA
092118-MHS-B700-RGYM-A5	1827061005	09/21/18	09/25/18	Malibu, CA
092118-AOD	1827061006	09/21/18	09/25/18	Malibu, CA
092118-AFB	1827061007	09/21/18	09/25/18	Malibu, CA
092218-MHS-B100-R102-A1	1827061008	09/22/18	09/25/18	Malibu, CA
092218-MHS-B100-R105-A2	1827061009	09/22/18	09/25/18	Malibu, CA
092218-MHS-B200-R201-A3	1827061010	09/22/18	09/25/18	Malibu, CA
092218-MHS-B200-R207-A4	1827061011	09/22/18	09/25/18	Malibu, CA
092218-MHS-B300-R303-A5	1827061012	09/22/18	09/25/18	Malibu, CA
092218-MHS-B300-R303-A6	1827061013	09/22/18	09/25/18	Malibu, CA
092218-MHS-B500-R505-A7	1827061014	09/22/18	09/25/18	Malibu, CA
092218-MHS-B500-R506-A8	1827061015	09/22/18	09/25/18	Malibu, CA
092218-AOD	1827061016	09/22/18	09/25/18	Malibu, CA
092218-AFB	1827061017	09/22/18	09/25/18	Malibu, CA

ANALYTICAL REPORT

Workorder: 34-1827061
Client: Ramboll Environ International
Project Manager: Paul E. Pope

Analytical Results

Sample ID: **092118-MHS-BH-RKIT-A1** | Sampling Site: Malibu, CA | Collected: 09/21/2018
Lab ID: 1827061001 | Media: PUF Tube | Received: 09/25/2018
Matrix: Air | Sampling Parameter: Air Volume 7236.3 L

Analysis Method - EPA TO-10A, PCBs

Preparation:	EPA 3540 Soxhlet Ext., EPA TO-10A	**Weight/Volume**	**Analysis:**	EPA TO-10A, PCBs Air	**Instrument ID:** GCE03
Batch:	ENVX/27369 (HBN: 223673)	**Initial:** 1 filter	**Batch:**	EGC/7463 (HBN: 223941)	**Percent Solid:** NA
Prepared:	09/28/2018	**Final:** 10 mL	**Analyzed:**	10/03/2018 00:00	**Report Basis:** Wet

Analyte	Result (ug/sample)	RL (ug/sample)	Dilution	Qual
Aroclor 1221	ND	0.20	1	
Aroclor 1232	ND	0.10	1	
Aroclor 1016	ND	0.10	1	
Aroclor 1242	ND	0.10	1	
Aroclor 1248	ND	0.10	1	
Aroclor 1254	ND	0.10	1	
Aroclor 1260	ND	0.10	1	
Aroclor 1262	ND	0.10	1	
Aroclor 1268	ND	0.10	1	

Sample ID: **092118-MHS-BH-RAUD-A2** | Sampling Site: Malibu, CA | Collected: 09/21/2018
Lab ID: 1827061002 | Media: PUF Tube | Received: 09/25/2018
Matrix: Air | Sampling Parameter: Air Volume 6951.7 L

Analysis Method - EPA TO-10A, PCBs

Preparation:	EPA 3540 Soxhlet Ext., EPA TO-10A	**Weight/Volume**	**Analysis:**	EPA TO-10A, PCBs Air	**Instrument ID:** GCE03
Batch:	ENVX/27369 (HBN: 223673)	**Initial:** 1 filter	**Batch:**	EGC/7463 (HBN: 223941)	**Percent Solid:** NA
Prepared:	09/28/2018	**Final:** 10 mL	**Analyzed:**	10/03/2018 00:00	**Report Basis:** Wet

Analyte	Result (ug/sample)	RL (ug/sample)	Dilution	Qual
Aroclor 1221	ND	0.20	1	
Aroclor 1232	ND	0.10	1	
Aroclor 1016	ND	0.10	1	
Aroclor 1242	ND	0.10	1	
Aroclor 1248	ND	0.10	1	
Aroclor 1254	ND	0.10	1	
Aroclor 1260	ND	0.10	1	
Aroclor 1262	ND	0.10	1	
Aroclor 1268	ND	0.10	1	

ANALYTICAL REPORT

Workorder: 34-1827061
Client: Ramboll Environ International
Project Manager: Paul E. Pope

Analytical Results

Sample ID: **092118-MHS-B700-R704-A3** | Sampling Site: Malibu, CA | Collected: 09/21/2018
Lab ID: 1827061003 | Media: PUF Tube | Received: 09/25/2018
Matrix: Air | Sampling Parameter: Air Volume 7241.3 L

Analysis Method - EPA TO-10A, PCBs

Preparation:	EPA 3540 Soxhlet Ext., EPA TO-10A	**Weight/Volume**	**Analysis:**	EPA TO-10A, PCBs Air	**Instrument ID:** GCE03
Batch:	ENVX/27369 (HBN: 223673)	**Initial:** 1 filter	**Batch:**	EGC/7463 (HBN: 223941)	**Percent Solid:** NA
Prepared:	09/28/2018	**Final:** 10 mL	**Analyzed:**	10/03/2018 00:00	**Report Basis:** Wet

Analyte	Result (ug/sample)	RL (ug/sample)	Dilution	Qual
Aroclor 1221	ND	0.20	1	
Aroclor 1232	ND	0.10	1	
Aroclor 1016	ND	0.10	1	
Aroclor 1242	ND	0.10	1	
Aroclor 1248	ND	0.10	1	
Aroclor 1254	ND	0.10	1	
Aroclor 1260	ND	0.10	1	
Aroclor 1262	ND	0.10	1	
Aroclor 1268	ND	0.10	1	

Sample ID: **092118-MHS-B700-R705-A4** | Sampling Site: Malibu, CA | Collected: 09/21/2018
Lab ID: 1827061004 | Media: PUF Tube | Received: 09/25/2018
Matrix: Air | Sampling Parameter: Air Volume 7239.7 L

Analysis Method - EPA TO-10A, PCBs

Preparation:	EPA 3540 Soxhlet Ext., EPA TO-10A	**Weight/Volume**	**Analysis:**	EPA TO-10A, PCBs Air	**Instrument ID:** GCE03
Batch:	ENVX/27369 (HBN: 223673)	**Initial:** 1 filter	**Batch:**	EGC/7463 (HBN: 223941)	**Percent Solid:** NA
Prepared:	09/28/2018	**Final:** 10 mL	**Analyzed:**	10/03/2018 00:00	**Report Basis:** Wet

Analyte	Result (ug/sample)	RL (ug/sample)	Dilution	Qual
Aroclor 1221	ND	0.20	1	
Aroclor 1232	ND	0.10	1	
Aroclor 1016	ND	0.10	1	
Aroclor 1242	ND	0.10	1	
Aroclor 1248	ND	0.10	1	
Aroclor 1254	ND	0.10	1	
Aroclor 1260	ND	0.10	1	
Aroclor 1262	ND	0.10	1	
Aroclor 1268	ND	0.10	1	

ANALYTICAL REPORT

Workorder: 34-1827061
Client: Ramboll Environ International
Project Manager: Paul E. Pope

Analytical Results

Sample ID: **092118-MHS-B700-RGYM-A5** | Sampling Site: Malibu, CA | Collected: 09/21/2018
Lab ID: 1827061005 | Media: PUF Tube | Received: 09/25/2018
Matrix: Air | Sampling Parameter: Air Volume 7270.2 L

Analysis Method - EPA TO-10A, PCBs

Preparation:	EPA 3540 Soxhlet Ext., EPA TO-10A	**Weight/Volume**	**Analysis:**	EPA TO-10A, PCBs Air	**Instrument ID:** GCE03
Batch:	ENVX/27369 (HBN: 223673)	**Initial:** 1 filter	**Batch:**	EGC/7463 (HBN: 223941)	**Percent Solid:** NA
Prepared:	09/28/2018	**Final:** 10 mL	**Analyzed:**	10/03/2018 00:00	**Report Basis:** Wet

Analyte	Result (ug/sample)	RL (ug/sample)	Dilution	Qual
Aroclor 1221	ND	0.20	1	
Aroclor 1232	ND	0.10	1	
Aroclor 1016	ND	0.10	1	
Aroclor 1242	ND	0.10	1	
Aroclor 1248	ND	0.10	1	
Aroclor 1254	ND	0.10	1	
Aroclor 1260	ND	0.10	1	
Aroclor 1262	ND	0.10	1	
Aroclor 1268	ND	0.10	1	

Sample ID: **092118-AOD** | Sampling Site: Malibu, CA | Collected: 09/21/2018
Lab ID: 1827061006 | Media: PUF Tube | Received: 09/25/2018
Matrix: Air | Sampling Parameter: Air Volume 7449.6 L

Analysis Method - EPA TO-10A, PCBs

Preparation:	EPA 3540 Soxhlet Ext., EPA TO-10A	**Weight/Volume**	**Analysis:**	EPA TO-10A, PCBs Air	**Instrument ID:** GCE03
Batch:	ENVX/27369 (HBN: 223673)	**Initial:** 1 filter	**Batch:**	EGC/7463 (HBN: 223941)	**Percent Solid:** NA
Prepared:	09/28/2018	**Final:** 10 mL	**Analyzed:**	10/03/2018 00:00	**Report Basis:** Wet

Analyte	Result (ug/sample)	RL (ug/sample)	Dilution	Qual
Aroclor 1221	ND	0.20	1	
Aroclor 1232	ND	0.10	1	
Aroclor 1016	ND	0.10	1	
Aroclor 1242	ND	0.10	1	
Aroclor 1248	ND	0.10	1	
Aroclor 1254	ND	0.10	1	
Aroclor 1260	ND	0.10	1	
Aroclor 1262	ND	0.10	1	
Aroclor 1268	ND	0.10	1	

ANALYTICAL REPORT

Workorder: 34-1827061
Client: Ramboll Environ International
Project Manager: Paul E. Pope

Analytical Results

Sample ID: **092118-AFB** | Sampling Site: Malibu, CA | Collected: 09/21/2018
Lab ID: 1827061007 | Media: PUF Tube | Received: 09/25/2018
Matrix: Air | Sampling Parameter: NA

Analysis Method - EPA TO-10A, PCBs

Preparation:	EPA 3540 Soxhlet Ext., EPA TO-10A	**Weight/Volume**	**Analysis:**	EPA TO-10A, PCBs Air	**Instrument ID:** GCE03
Batch:	ENVX/27369 (HBN: 223673)	**Initial:** 1 filter	**Batch:**	EGC/7463 (HBN: 223941)	**Percent Solid:** NA
Prepared:	09/28/2018	**Final:** 10 mL	**Analyzed:**	10/03/2018 00:00	**Report Basis:** Wet

Analyte	Result (ug/sample)	RL (ug/sample)	Dilution	Qual
Aroclor 1221	ND	0.20	1	
Aroclor 1232	ND	0.10	1	
Aroclor 1016	ND	0.10	1	
Aroclor 1242	ND	0.10	1	
Aroclor 1248	ND	0.10	1	
Aroclor 1254	ND	0.10	1	
Aroclor 1260	ND	0.10	1	
Aroclor 1262	ND	0.10	1	
Aroclor 1268	ND	0.10	1	

Sample ID: **092218-MHS-B100-R102-A1** | Sampling Site: Malibu, CA | Collected: 09/22/2018
Lab ID: 1827061008 | Media: PUF Tube | Received: 09/25/2018
Matrix: Air | Sampling Parameter: Air Volume 7191.8 L

Analysis Method - EPA TO-10A, PCBs

Preparation:	EPA 3540 Soxhlet Ext., EPA TO-10A	**Weight/Volume**	**Analysis:**	EPA TO-10A, PCBs Air	**Instrument ID:** GCE03
Batch:	ENVX/27369 (HBN: 223673)	**Initial:** 1 filter	**Batch:**	EGC/7463 (HBN: 223941)	**Percent Solid:** NA
Prepared:	09/28/2018	**Final:** 10 mL	**Analyzed:**	10/03/2018 00:00	**Report Basis:** Wet

Analyte	Result (ug/sample)	RL (ug/sample)	Dilution	Qual
Aroclor 1221	ND	0.20	1	
Aroclor 1232	ND	0.10	1	
Aroclor 1016	ND	0.10	1	
Aroclor 1242	ND	0.10	1	
Aroclor 1248	ND	0.10	1	
Aroclor 1254	ND	0.10	1	
Aroclor 1260	ND	0.10	1	
Aroclor 1262	ND	0.10	1	
Aroclor 1268	ND	0.10	1	

ANALYTICAL REPORT

Workorder: 34-1827061
Client: Ramboll Environ International
Project Manager: Paul E. Pope

Analytical Results

Sample ID: **092218-MHS-B100-R105-A2** | Sampling Site: Malibu, CA | Collected: 09/22/2018
Lab ID: 1827061009 | Media: PUF Tube | Received: 09/25/2018
Matrix: Air | Sampling Parameter: Air Volume 7650.2 L

Analysis Method - EPA TO-10A, PCBs

Preparation:	EPA 3540 Soxhlet Ext., EPA TO-10A	**Weight/Volume**	**Analysis:**	EPA TO-10A, PCBs Air	**Instrument ID:** GCE03
Batch:	ENVX/27369 (HBN: 223673)	**Initial:** 1 filter	**Batch:**	EGC/7463 (HBN: 223941)	**Percent Solid:** NA
Prepared:	09/28/2018	**Final:** 10 mL	**Analyzed:**	10/03/2018 00:00	**Report Basis:** Wet

Analyte	Result (ug/sample)	RL (ug/sample)	Dilution	Qual
Aroclor 1221	ND	0.20	1	
Aroclor 1232	ND	0.10	1	
Aroclor 1016	ND	0.10	1	
Aroclor 1242	ND	0.10	1	
Aroclor 1248	ND	0.10	1	
Aroclor 1254	ND	0.10	1	
Aroclor 1260	ND	0.10	1	
Aroclor 1262	ND	0.10	1	
Aroclor 1268	ND	0.10	1	

Sample ID: **092218-MHS-B200-R201-A3** | Sampling Site: Malibu, CA | Collected: 09/22/2018
Lab ID: 1827061010 | Media: PUF Tube | Received: 09/25/2018
Matrix: Air | Sampling Parameter: Air Volume 7211.1 L

Analysis Method - EPA TO-10A, PCBs

Preparation:	EPA 3540 Soxhlet Ext., EPA TO-10A	**Weight/Volume**	**Analysis:**	EPA TO-10A, PCBs Air	**Instrument ID:** GCE03
Batch:	ENVX/27369 (HBN: 223673)	**Initial:** 1 filter	**Batch:**	EGC/7463 (HBN: 223941)	**Percent Solid:** NA
Prepared:	09/28/2018	**Final:** 10 mL	**Analyzed:**	10/03/2018 00:00	**Report Basis:** Wet

Analyte	Result (ug/sample)	RL (ug/sample)	Dilution	Qual
Aroclor 1221	ND	0.20	1	
Aroclor 1232	ND	0.10	1	
Aroclor 1016	ND	0.10	1	
Aroclor 1242	ND	0.10	1	
Aroclor 1248	ND	0.10	1	
Aroclor 1254	ND	0.10	1	
Aroclor 1260	ND	0.10	1	
Aroclor 1262	ND	0.10	1	
Aroclor 1268	ND	0.10	1	

ANALYTICAL REPORT

Workorder: 34-1827061
Client: Ramboll Environ International
Project Manager: Paul E. Pope

Analytical Results

Sample ID: **092218-MHS-B300-R303-A5** | Sampling Site: Malibu, CA | Collected: 09/22/2018
Lab ID: 1827061012 | Media: PUF Tube | Received: 09/25/2018
Matrix: Air | Sampling Parameter: Air Volume 7285.6 L

Analysis Method - EPA TO-10A, PCBs

Preparation:	EPA 3540 Soxhlet Ext., EPA TO-10A	**Weight/Volume**	**Analysis:**	EPA TO-10A, PCBs Air	**Instrument ID:** GCE03
Batch:	ENVX/27369 (HBN: 223673)	**Initial:** 1 filter	**Batch:**	EGC/7463 (HBN: 223941)	**Percent Solid:** NA
Prepared:	09/28/2018	**Final:** 10 mL	**Analyzed:**	10/03/2018 00:00	**Report Basis:** Wet

Analyte	Result (ug/sample)	RL (ug/sample)	Dilution	Qual
Aroclor 1221	ND	0.20	1	
Aroclor 1232	ND	0.10	1	
Aroclor 1016	ND	0.10	1	
Aroclor 1242	ND	0.10	1	
Aroclor 1248	ND	0.10	1	
Aroclor 1254	ND	0.10	1	
Aroclor 1260	ND	0.10	1	
Aroclor 1262	ND	0.10	1	
Aroclor 1268	ND	0.10	1	

Sample ID: **092218-MHS-B300-R303-A6** | Sampling Site: Malibu, CA | Collected: 09/22/2018
Lab ID: 1827061013 | Media: PUF Tube | Received: 09/25/2018
Matrix: Air | Sampling Parameter: Air Volume 7396.1 L

Analysis Method - EPA TO-10A, PCBs

Preparation:	EPA 3540 Soxhlet Ext., EPA TO-10A	**Weight/Volume**	**Analysis:**	EPA TO-10A, PCBs Air	**Instrument ID:** GCE03
Batch:	ENVX/27369 (HBN: 223673)	**Initial:** 1 filter	**Batch:**	EGC/7463 (HBN: 223941)	**Percent Solid:** NA
Prepared:	09/28/2018	**Final:** 10 mL	**Analyzed:**	10/03/2018 00:00	**Report Basis:** Wet

Analyte	Result (ug/sample)	RL (ug/sample)	Dilution	Qual
Aroclor 1221	ND	0.20	1	
Aroclor 1232	ND	0.10	1	
Aroclor 1016	ND	0.10	1	
Aroclor 1242	ND	0.10	1	
Aroclor 1248	ND	0.10	1	
Aroclor 1254	ND	0.10	1	
Aroclor 1260	ND	0.10	1	
Aroclor 1262	ND	0.10	1	
Aroclor 1268	ND	0.10	1	

ANALYTICAL REPORT

Workorder: 34-1827061
Client: Ramboll Environ International
Project Manager: Paul E. Pope

Analytical Results

Sample ID: **092218-MHS-B500-R505-A7** | Sampling Site: Malibu, CA | Collected: 09/22/2018
Lab ID: 1827061014 | Media: PUF Tube | Received: 09/25/2018
Matrix: Air | Sampling Parameter: Air Volume 7242.2 L

Analysis Method - EPA TO-10A, PCBs

Preparation:	EPA 3540 Soxhlet Ext., EPA TO-10A	**Weight/Volume**	**Analysis:**	EPA TO-10A, PCBs Air	**Instrument ID:** GCE03
Batch:	ENVX/27369 (HBN: 223673)	**Initial:** 1 filter	**Batch:**	EGC/7463 (HBN: 223941)	**Percent Solid:** NA
Prepared:	09/28/2018	**Final:** 10 mL	**Analyzed:**	10/03/2018 00:00	**Report Basis:** Wet

Analyte	Result (ug/sample)	RL (ug/sample)	Dilution	Qual
Aroclor 1221	ND	0.20	1	
Aroclor 1232	ND	0.10	1	
Aroclor 1016	ND	0.10	1	
Aroclor 1242	ND	0.10	1	
Aroclor 1248	ND	0.10	1	
Aroclor 1254	ND	0.10	1	
Aroclor 1260	ND	0.10	1	
Aroclor 1262	ND	0.10	1	
Aroclor 1268	ND	0.10	1	

Sample ID: **092218-MHS-B500-R506-A8** | Sampling Site: Malibu, CA | Collected: 09/22/2018
Lab ID: 1827061015 | Media: PUF Tube | Received: 09/25/2018
Matrix: Air | Sampling Parameter: Air Volume 7171.9 L

Analysis Method - EPA TO-10A, PCBs

Preparation:	EPA 3540 Soxhlet Ext., EPA TO-10A	**Weight/Volume**	**Analysis:**	EPA TO-10A, PCBs Air	**Instrument ID:** GCE03
Batch:	ENVX/27369 (HBN: 223673)	**Initial:** 1 filter	**Batch:**	EGC/7463 (HBN: 223941)	**Percent Solid:** NA
Prepared:	09/28/2018	**Final:** 10 mL	**Analyzed:**	10/03/2018 00:00	**Report Basis:** Wet

Analyte	Result (ug/sample)	RL (ug/sample)	Dilution	Qual
Aroclor 1221	ND	0.20	1	
Aroclor 1232	ND	0.10	1	
Aroclor 1016	ND	0.10	1	
Aroclor 1242	ND	0.10	1	
Aroclor 1248	ND	0.10	1	
Aroclor 1254	ND	0.10	1	
Aroclor 1260	ND	0.10	1	
Aroclor 1262	ND	0.10	1	
Aroclor 1268	ND	0.10	1	

ANALYTICAL REPORT

Workorder: 34-1827061
Client: Ramboll Environ International
Project Manager: Paul E. Pope

Analytical Results

Sample ID:	**092218-AOD**	Sampling Site:	Malibu, CA	Collected:	09/22/2018
Lab ID:	1827061016	Media:	PUF Tube	Received:	09/25/2018
Matrix:	Air	Sampling Parameter:	Air Volume 5903.1 L		

Analysis Method - EPA TO-10A, PCBs

Preparation:	EPA 3540 Soxhlet Ext., EPA TO-10A	**Weight/Volume**	**Analysis:**	EPA TO-10A, PCBs Air	**Instrument ID:** GCE03
Batch:	ENVX/27369 (HBN: 223673)	**Initial:** 1 filter	**Batch:**	EGC/7463 (HBN: 223941)	**Percent Solid:** NA
Prepared:	09/28/2018	**Final:** 10 mL	**Analyzed:**	10/03/2018 00:00	**Report Basis:** Wet

Analyte	Result (ug/sample)	RL (ug/sample)	Dilution	Qual
Aroclor 1221	ND	0.20	1	
Aroclor 1232	ND	0.10	1	
Aroclor 1016	ND	0.10	1	
Aroclor 1242	ND	0.10	1	
Aroclor 1248	ND	0.10	1	
Aroclor 1254	ND	0.10	1	
Aroclor 1260	ND	0.10	1	
Aroclor 1262	ND	0.10	1	
Aroclor 1268	ND	0.10	1	

Comments

Quality Control: **EPA TO-10A, PCBs - (HBN: 223941)**

Samples 011 and 017 were lost during the extraction process. NC/CAR #1617 was issued.

Recoveries for AR1260 were outside of Historical Performance limits QC but inside 8082 method limits.

Report Authorization (/S/ is an electronic signature that complies with 21 CFR Part 11)

Method	Analyst	Peer Review
EPA TO-10A, PCBs	/S/ Mila V. Potekhin 10/08/2018 14:52	/S/ Nadjla Borges 10/08/2018 16:48

Laboratory Contact Information

ALS Environmental
960 W Levoy Drive
Salt Lake City, Utah 84123

Phone: (801) 266-7700
Email: alslt.lab@ALSGlobal.com
Web: www.alsslc.com

ANALYTICAL REPORT

Workorder: 34-1827061
Client: Ramboll Environ International
Project Manager: Paul E. Pope

General Lab Comments

The results provided in this report relate only to the items tested.
Samples were received in acceptable condition unless otherwise noted.
Samples have not been blank corrected unless otherwise noted.
This test report shall not be reproduced, except in full, without written approval of ALS.

ALS provides professional analytical services for all samples submitted. ALS is not in a position to interpret the data and assumes no responsibility for the quality of the samples submitted.

All quality control samples processed with the samples in this report yielded acceptable results unless otherwise noted.

ALS is accredited for specific fields of testing (scopes) in the following testing sectors. The quality system implemented at ALS conforms to accreditation requirements and is applied to all analytical testing performed by ALS. The following table lists testing sector, accreditation body, accreditation number and website. Please contact these accrediting bodies or your ALS project manager for the current scope of accreditation that applies to your analytical testing.

Testing Sector	Accreditation Body	Certificate Number	Website
Environmental	PJLA (DoD ELAP)		
	Utah (TNI)		
	Nevada		
	Oklahoma		
	Iowa		

Result Symbol Definitions

MDL = Method Detection Limit, a statistical estimate of method/media/instrument sensitivity.
RL = Reporting Limit, a verified value of method/media/instrument sensitivity.
CRDL = Contract Required Detection Limit
Reg. Limit = Regulatory Limit.
ND = Not Detected, testing result not detected above the MDL or RL.
< This testing result is less than the numerical value.
** No result could be reported, see sample comments for details.

Qualifier Symbol Definitions

U = Qualifier indicates that the analyte was not detected above the MDL.
J = Qualifier Indicates that the analyte value is between the MDL and the RL. It is also used to indicate an estimated value for tentatively identified compounds in mass spectrometry where a 1:1 response is assumed.
B = Qualifier indicates that the analyte was detected in the blank.
E = Qualifier indicates that the analyte result exceeds calibration range.
P = Qualifier indicates that the RPD between the two columns is greater than 40%.

LABORATORY REPORT #18091636 (SURFACE WIPE)
SAMPLE DATE: SEPTEMBER 22-23, 2018

JCES Building A
JCES Building B
JCES Building C

30-Sep-2018

Rebecca Case
Ramboll Environ US Corporation
18100 VonKarman Ave.
Suite 600
Irvine, CA 92612

Re: **1690009987** Work Order: **18091636**

Dear Rebecca,

ALS Environmental received 13 samples on 25-Sep-2018 09:30 AM for the analyses presented in the following report.

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

Sample results are compliant with industry accepted practices and Quality Control results achieved 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 Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 21.

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

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

ALS Group, USA

Date: 30-Sep-18

Client: Ramboll Environ US Corporation
Project: 1690009987
Work Order: **18091636**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
18091636-01	092218-WFB-HEX	Wipe		9/22/2018 11:55	9/25/2018 09:30	☐
18091636-02	092318-WFB-HEX	Wipe		9/23/2018 17:47	9/25/2018 09:30	☐
18091636-03	092218-JCES-BA-R100L-W1	Wipe		9/22/2018 10:46	9/25/2018 09:30	☐
18091636-04	092218-JCES-BA-R100L-W2	Wipe		9/22/2018 10:50	9/25/2018 09:30	☐
18091636-05	092218-JCES-BA-R100L-W3	Wipe		9/22/2018 10:52	9/25/2018 09:30	☐
18091636-06	092218-JCES-BB-R3-W1	Wipe		9/22/2018 10:57	9/25/2018 09:30	☐
18091636-07	092218-JCES-BB-R3-W2	Wipe		9/22/2018 11:00	9/25/2018 09:30	☐
18091636-08	092218-JCES-BB-R3-W3	Wipe		9/22/2018 11:02	9/25/2018 09:30	☐
18091636-09	092218-JCES-BB-R3-W4	Wipe		9/22/2018 11:04	9/25/2018 09:30	☐
18091636-10	092218-JCES-BC-R9-W1	Wipe		9/22/2018 11:08	9/25/2018 09:30	☐
18091636-11	092218-JCES-BC-R9-W2	Wipe		9/22/2018 11:10	9/25/2018 09:30	☐
18091636-12	092218-JCES-BC-R9-W3	Wipe		9/22/2018 11:11	9/25/2018 09:30	☐
18091636-13	092218-JCES-BC-R9-W4	Wipe		9/22/2018 11:13	9/25/2018 09:30	☐

ALS Group, USA

Date: 30-Sep-18

Client: Ramboll Environ US Corporation
Project: 1690009987
Work Order: 18091636

Case Narrative

Samples for the above noted Work Order were received on 09/25/2018. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting. A copy of the laboratory's scope of accreditation is available upon request.

With the following exceptions, all sample analyses achieved analytical criteria.

ALS Group, USA

Date: 30-Sep-18

Client: Ramboll Environ US Corporation
Project: 1690009987
WorkOrder: **18091636**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
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
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
µg/wipe	Micrograms per Wipe

ALS Group, USA

Date: *30-Sep-18*

Client: Ramboll Environ US Corporation
Project: 1690009987
Sample ID: 092218-WFB-HEX
Collection Date: 9/22/2018 11:55 AM

Work Order: 18091636
Lab ID: 18091636-01
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/27/2018 09:25 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/27/2018 09:25 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/27/2018 09:25 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/27/2018 09:25 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/27/2018 09:25 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/27/2018 09:25 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/27/2018 09:25 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/27/2018 09:25 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/27/2018 09:25 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/27/2018 09:25 PM
Surr: Decachlorobiphenyl	*121*		*50-150*	*%REC*	1	9/27/2018 09:25 PM
Surr: Tetrachloro-m-xylene	*109*		*50-150*	*%REC*	1	9/27/2018 09:25 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *30-Sep-18*

Client: Ramboll Environ US Corporation
Project: 1690009987
Sample ID: 092318-WFB-HEX
Collection Date: 9/23/2018 05:47 PM

Work Order: 18091636
Lab ID: 18091636-02
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/27/2018 09:40 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/27/2018 09:40 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/27/2018 09:40 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/27/2018 09:40 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/27/2018 09:40 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/27/2018 09:40 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/27/2018 09:40 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/27/2018 09:40 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/27/2018 09:40 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/27/2018 09:40 PM
Surr: Decachlorobiphenyl	*117*		*50-150*	*%REC*	1	9/27/2018 09:40 PM
Surr: Tetrachloro-m-xylene	*111*		*50-150*	*%REC*	1	9/27/2018 09:40 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *30-Sep-18*

Client: Ramboll Environ US Corporation
Project: 1690009987
Sample ID: 092218-JCES-BA-R100L-W1
Collection Date: 9/22/2018 10:46 AM

Work Order: 18091636
Lab ID: 18091636-03
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/27/2018 09:54 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/27/2018 09:54 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/27/2018 09:54 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/27/2018 09:54 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/27/2018 09:54 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/27/2018 09:54 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/27/2018 09:54 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/27/2018 09:54 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/27/2018 09:54 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/27/2018 09:54 PM
Surr: Decachlorobiphenyl	*116*		*50-150*	*%REC*	1	9/27/2018 09:54 PM
Surr: Tetrachloro-m-xylene	*113*		*50-150*	*%REC*	1	9/27/2018 09:54 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *30-Sep-18*

Client: Ramboll Environ US Corporation
Project: 1690009987
Sample ID: 092218-JCES-BA-R100L-W2
Collection Date: 9/22/2018 10:50 AM

Work Order: 18091636
Lab ID: 18091636-04
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/27/2018 10:08 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/27/2018 10:08 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/27/2018 10:08 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/27/2018 10:08 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/27/2018 10:08 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/27/2018 10:08 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/27/2018 10:08 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/27/2018 10:08 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/27/2018 10:08 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/27/2018 10:08 PM
Surr: Decachlorobiphenyl	*111*		*50-150*	*%REC*	1	9/27/2018 10:08 PM
Surr: Tetrachloro-m-xylene	*105*		*50-150*	*%REC*	1	9/27/2018 10:08 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *30-Sep-18*

Client: Ramboll Environ US Corporation
Project: 1690009987
Sample ID: 092218-JCES-BA-R100L-W3
Collection Date: 9/22/2018 10:52 AM

Work Order: 18091636
Lab ID: 18091636-05
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/27/2018 10:23 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/27/2018 10:23 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/27/2018 10:23 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/27/2018 10:23 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/27/2018 10:23 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/27/2018 10:23 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/27/2018 10:23 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/27/2018 10:23 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/27/2018 10:23 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/27/2018 10:23 PM
Surr: Decachlorobiphenyl	*117*		*50-150*	*%REC*	1	9/27/2018 10:23 PM
Surr: Tetrachloro-m-xylene	*114*		*50-150*	*%REC*	1	9/27/2018 10:23 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *30-Sep-18*

Client: Ramboll Environ US Corporation
Project: 1690009987
Sample ID: 092218-JCES-BB-R3-W1
Collection Date: 9/22/2018 10:57 AM

Work Order: 18091636
Lab ID: 18091636-06
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/27/2018 10:37 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/27/2018 10:37 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/27/2018 10:37 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/27/2018 10:37 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/27/2018 10:37 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/27/2018 10:37 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/27/2018 10:37 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/27/2018 10:37 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/27/2018 10:37 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/27/2018 10:37 PM
Surr: Decachlorobiphenyl	*119*		*50-150*	*%REC*	1	9/27/2018 10:37 PM
Surr: Tetrachloro-m-xylene	*114*		*50-150*	*%REC*	1	9/27/2018 10:37 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *30-Sep-18*

Client: Ramboll Environ US Corporation
Project: 1690009987
Sample ID: 092218-JCES-BB-R3-W2
Collection Date: 9/22/2018 11:00 AM

Work Order: 18091636
Lab ID: 18091636-07
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/27/2018 10:51 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/27/2018 10:51 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/27/2018 10:51 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/27/2018 10:51 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/27/2018 10:51 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/27/2018 10:51 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/27/2018 10:51 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/27/2018 10:51 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/27/2018 10:51 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/27/2018 10:51 PM
Surr: Decachlorobiphenyl	*112*		*50-150*	*%REC*	1	9/27/2018 10:51 PM
Surr: Tetrachloro-m-xylene	*114*		*50-150*	*%REC*	1	9/27/2018 10:51 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *30-Sep-18*

Client: Ramboll Environ US Corporation
Project: 1690009987
Sample ID: 092218-JCES-BB-R3-W3
Collection Date: 9/22/2018 11:02 AM

Work Order: 18091636
Lab ID: 18091636-08
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/27/2018 11:20 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/27/2018 11:20 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/27/2018 11:20 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/27/2018 11:20 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/27/2018 11:20 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/27/2018 11:20 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/27/2018 11:20 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/27/2018 11:20 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/27/2018 11:20 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/27/2018 11:20 PM
Surr: Decachlorobiphenyl	*118*		*50-150*	*%REC*	1	9/27/2018 11:20 PM
Surr: Tetrachloro-m-xylene	*122*		*50-150*	*%REC*	1	9/27/2018 11:20 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *30-Sep-18*

Client: Ramboll Environ US Corporation
Project: 1690009987
Sample ID: 092218-JCES-BB-R3-W4
Collection Date: 9/22/2018 11:04 AM

Work Order: 18091636
Lab ID: 18091636-09
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/27/2018 11:35 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/27/2018 11:35 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/27/2018 11:35 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/27/2018 11:35 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/27/2018 11:35 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/27/2018 11:35 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/27/2018 11:35 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/27/2018 11:35 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/27/2018 11:35 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/27/2018 11:35 PM
Surr: Decachlorobiphenyl	*118*		*50-150*	*%REC*	1	9/27/2018 11:35 PM
Surr: Tetrachloro-m-xylene	*116*		*50-150*	*%REC*	1	9/27/2018 11:35 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *30-Sep-18*

Client: Ramboll Environ US Corporation
Project: 1690009987
Sample ID: 092218-JCES-BC-R9-W1
Collection Date: 9/22/2018 11:08 AM

Work Order: 18091636
Lab ID: 18091636-10
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/27/2018 11:49 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/27/2018 11:49 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/27/2018 11:49 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/27/2018 11:49 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/27/2018 11:49 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/27/2018 11:49 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/27/2018 11:49 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/27/2018 11:49 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/27/2018 11:49 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/27/2018 11:49 PM
Surr: Decachlorobiphenyl	*116*		*50-150*	*%REC*	1	9/27/2018 11:49 PM
Surr: Tetrachloro-m-xylene	*111*		*50-150*	*%REC*	1	9/27/2018 11:49 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *30-Sep-18*

Client: Ramboll Environ US Corporation
Project: 1690009987
Sample ID: 092218-JCES-BC-R9-W2
Collection Date: 9/22/2018 11:10 AM

Work Order: 18091636
Lab ID: 18091636-11
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 12:03 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 12:03 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 12:03 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 12:03 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 12:03 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 12:03 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 12:03 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 12:03 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 12:03 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 12:03 AM
Surr: Decachlorobiphenyl	*118*		*50-150*	*%REC*	1	9/28/2018 12:03 AM
Surr: Tetrachloro-m-xylene	*114*		*50-150*	*%REC*	1	9/28/2018 12:03 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *30-Sep-18*

Client: Ramboll Environ US Corporation
Project: 1690009987
Sample ID: 092218-JCES-BC-R9-W3
Collection Date: 9/22/2018 11:11 AM

Work Order: 18091636
Lab ID: 18091636-12
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 12:18 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 12:18 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 12:18 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 12:18 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 12:18 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 12:18 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 12:18 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 12:18 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 12:18 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 12:18 AM
Surr: Decachlorobiphenyl	*117*		*50-150*	*%REC*	1	9/28/2018 12:18 AM
Surr: Tetrachloro-m-xylene	*118*		*50-150*	*%REC*	1	9/28/2018 12:18 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: *30-Sep-18*

Client: Ramboll Environ US Corporation
Project: 1690009987
Sample ID: 092218-JCES-BC-R9-W4
Collection Date: 9/22/2018 11:13 AM

Work Order: 18091636
Lab ID: 18091636-13
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 12:32 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 12:32 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 12:32 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 12:32 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 12:32 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 12:32 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 12:32 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 12:32 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 12:32 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 12:32 AM
Surr: Decachlorobiphenyl	*120*		*50-150*	*%REC*	1	9/28/2018 12:32 AM
Surr: Tetrachloro-m-xylene	*118*		*50-150*	*%REC*	1	9/28/2018 12:32 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 30-Sep-18

Client: Ramboll Environ US Corporation

Work Order: 18091636

Project: 1690009987

QC BATCH REPORT

Batch ID: **125315** Instrument ID **GC14** Method: **SW8082**

MBLK Sample ID: **MBLK-125315-125315** Units: **µg/wipe** Analysis Date: **9/27/2018 08:42 PM**

Client ID: Run ID: **GC14_180927A** SeqNo: **5287915** Prep Date: **9/27/2018** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	ND	0.10								
Aroclor 1221	ND	0.10								
Aroclor 1232	ND	0.10								
Aroclor 1242	ND	0.10								
Aroclor 1248	ND	0.10								
Aroclor 1254	ND	0.10								
Aroclor 1260	ND	0.10								
Aroclor 1262	ND	0.10								
Aroclor 1268	ND	0.10								
PCBs, Total	ND	0.10								
Surr: Decachlorobiphenyl	*0.1107*	0	*0.1*	0	*111*	*50-150*	0			
Surr: Tetrachloro-m-xylene	*0.09896*	0	*0.1*	0	*99*	*50-150*	0			

LCS Sample ID: **LCS-125315-125315** Units: **µg/wipe** Analysis Date: **9/27/2018 08:57 PM**

Client ID: Run ID: **GC14_180927A** SeqNo: **5287917** Prep Date: **9/27/2018** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	1.096	0.10	1	0	110	50-150	0			
Aroclor 1260	1.055	0.10	1	0	105	50-150	0			
Surr: Decachlorobiphenyl	*0.1396*	0	*0.1*	0	*140*	*50-150*	0			
Surr: Tetrachloro-m-xylene	*0.1178*	0	*0.1*	0	*118*	*50-150*	0			

LCSD Sample ID: **LCSD-125315-125315** Units: **µg/wipe** Analysis Date: **9/27/2018 09:11 PM**

Client ID: Run ID: **GC14_180927A** SeqNo: **5287919** Prep Date: **9/27/2018** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	1.143	0.10	1	0	114	50-150	1.096	4.2	35	
Aroclor 1260	1.078	0.10	1	0	108	50-150	1.055	2.19	35	
Surr: Decachlorobiphenyl	*0.1396*	0	*0.1*	0	*140*	*50-150*	0.1396	*0.0215*	*35*	
Surr: Tetrachloro-m-xylene	*0.1303*	0	*0.1*	0	*130*	*50-150*	0.1178	*10*	*35*	

The following samples were analyzed in this batch:

18091636-01A	18091636-02A	18091636-03A
18091636-04A	18091636-05A	18091636-06A
18091636-07A	18091636-08A	18091636-09A
18091636-10A	18091636-11A	18091636-12A
18091636-13A		

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

☐ ALS Environmental
10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

Chain of Custody Form

Page 1 of 2

☑ ALS Environmental
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

ALS Project Manager: | ALS Work Order #: 1809163G

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	SMMUSD	A	EPA 8082 for Aroclors
Work Order		Project Number	1690009987	B	N/A
Company Name	Ramboll	Bill To Company	Ramboll	C	N/A
Send Report To	Rebecca Case	Invoice Attn.	Rebecca Case	D	N/A
Address	12200 Ford Road Suite 265	Address	12200 Ford Road Suite 265	E	N/A
				F	N/A
City/State/Zip	Dallas, Texas 75234	City/State/Zip	Dallas, Texas 75234	G	N/A
Phone	469.872.7210	Phone	469.872.7210	H	N/A
Fax		Fax		I	N/A
e-Mail Address	rebeccacase@ramboll.com			J	N/A

No.	Sample Description	Date	Time	cm²	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	[redacted] 092218-WFB-HEX	9/22/2018	11:55	100	Surface Dust	8	1	PCBs										
2	[redacted] 092318-WFB-HEX	9/23/2018	17:47	100	Surface Dust	8	1	PCBs										
3	092218 - JCES - BA - R100L - W1	9/22/2018	10:46	100	Surface Dust	8	1	PCBs										
4	092218 - JCES - BA - R100L - W2	9/22/2018	10:50	100	Surface Dust	8	1	PCBs										
5	092218 - JCES - BA - R100L - W3	9/22/2018	10:52	100	Surface Dust	8	1	PCBs										
6	092218 - JCES - BB - R3 - W1	9/22/2018	10:57	100	Surface Dust	8	1	PCBs										
7	092218 - JCES - BB - R3 - W2	9/22/2018	11:00	100	Surface Dust	8	1	PCBs										
8	092218 - JCES - BB - R3 - W3	9/22/2018	11:02	100	Surface Dust	8	1	PCBs										
9	092218 - JCES - BB - R3 - W4	9/22/2018	11:04	100	Surface Dust	8	1	PCBs										
10	092218 - JCES - BC - R9 - W1	9/22/2018	11:08	100	Surface Dust	8	1	PCBs										

Sampler(s): Please Print & Sign

Shipment Method: FedEx

Required Turnaround Time: (Check Box) ☑ Other Standard ☐ 10 Wk Days ☐ 5 Wk Days ☐ 3 Wk Days ☐ 2 Wk Days ☐ 24 Hour

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Andrew Lenbeck Eders	9/24	16:30	FedEx 1630	9/24	
FED EX	9/25/18	0930			
Logged by (Laboratory): DFS	9/26/18	0815	Checked by (Laboratory):		

Received by (Laboratory):

Notes: Follow instructions provided by Rebecca Case below.
STANDARD TURN AROUND TIME

ALS Cooler ID	Cooler Temp
SR2	4.6°C

QC Package: (Check Box Below)
☐ Level II: Standard QC ☐ Level III: Raw Data
☐ TRRP LRC ☐ TRRP Level IV
☑ Level IV: SW846 Methods/CLP like
☐ Other:

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS.

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Houston, Texas 77099
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Chain of Custody Form

Page 2 of 2

☑ ALS Environmental
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

ALS Project Manager: | ALS Work Order #: 1809 1636

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	SMMUSD	A	EPA 8082 for Aroclors
Work Order		Project Number	1690009987	B	N/A
Company Name	Ramboll	Bill To Company	Ramboll	C	N/A
Send Report To	Rebecca Case	Invoice Attn.	Rebecca Case	D	N/A
Address	12200 Ford Road Suite 265	Address	12200 Ford Road Suite 265	E	N/A
				F	N/A
City/State/Zip	Dallas, Texas 75234	City/State/Zip	Dallas, Texas 75234	G	N/A
Phone	469.872.7210	Phone	469.872.7210	H	N/A
Fax		Fax		I	N/A
e-Mail Address	rebeccacase@ramboll.com			J	N/A

No.	Sample Description	Date	Time	cm²	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
11	092218 - JCES - B~~A~~C - R9 - W2	9/22/2018	11:10	100	Surface Dust	8	1	PCBs										
12	092218 - JCES - B~~A~~C - R9 - W3	9/22/2018	11:11	100	Surface Dust	8	1	PCBs										
13	092218 - JCES - B~~A~~C - R9 - W4	9/22/2018	11:13	100	Surface Dust	8	1	PCBs										
14																		
15																		
16																		
17																		
18																		
19																		
20																		

Sampler(s): Please Print & Sign

Shipment Method: FedEx

Required Turnaround Time: (Check Box) ☐ 10 Wk Days ☐ 5 Wk Days ☐ 3 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☑ Other Standard

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
See Pg. 1					
Relinquished by: FED EX	Date: 9/25/18	Time: 0930	Received by (Laboratory):	Date:	Time:
Logged by (Laboratory): DES	Date: 9/26/18	Time: 0815	Checked by (Laboratory):		

Notes: Follow instructions provided by Rebecca Case below.
STANDARD TURN AROUND TIME

ALS Cooler ID	Cooler Temp
BR2	4.6 c

QC Package: (Check Box Below)
☐ Level II: Standard QC ☐ Level III: Raw Data
☐ TRRP LRC ☐ TRRP Level IV
☑ Level IV: SW846 Methods/CLP like
☐ Other:

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS.

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Sample Receipt Checklist

Client Name: **ENVIRONINT - CA** Date/Time Received: **25-Sep-18 09:30**

Work Order: **18091636** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 26-Sep-18 (Date) Reviewed by: Chad Whelton (eSignature) 27-Sep-18 (Date)

Matrices: Wipe
Carrier name: FedEx

	Yes	No	Not Present
Shipping container/cooler in good condition?	☑	☐	☐
Custody seals intact on shipping container/cooler?	☐	☐	☑
Custody seals intact on sample bottles?	☐	☐	☑
Chain of custody present?	☑	☐	
Chain of custody signed when relinquished and received?	☑	☐	
Chain of custody agrees with sample labels?	☑	☐	
Samples in proper container/bottle?	☑	☐	
Sample containers intact?	☑	☐	
Sufficient sample volume for indicated test?	☑	☐	
All samples received within holding time?	☑	☐	
Container/Temp Blank temperature in compliance?	☑	☐	
Sample(s) received on ice?	☑	☐	

Temperature(s)/Thermometer(s): 4.6/4.6 c SR2

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: 9/26/2018 8:20:15 AM

	Yes	No		
Water - VOA vials have zero headspace?	☐	☐	No VOA vials submitted	☑
Water - pH acceptable upon receipt?	☐	☐	N/A	☑
pH adjusted?	☐	☐	N/A	☑

pH adjusted by: -

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

LABORATORY REPORT #18091640 (SURFACE WIPE)
SAMPLE DATE: SEPTEMBER 22-23, 2018

MHS Building D (100/200, Mako Shark)
MHS Building F (300, Thresher Shark)
MHS Building G (500, Angel Shark)
MHS Building H (Cafeteria/Auditorium)
MHS Building J (700, Old Gymnasium)

02-Oct-2018

Rebecca Case
Ramboll Environ US Corporation
18100 VonKarman Ave.
Suite 600
Irvine, CA 92612

Re: **1690009988** Work Order: **18091640**

Dear Rebecca, Revision: **1**

ALS Environmental received 53 samples on 25-Sep-2018 09:30 AM for the analyses presented in the following report.

This is a REVISED REPORT. The Case Narrative provides information discussing the reason for issuing a revised report.

Sample results are compliant with industry accepted practices and Quality Control results achieved 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 Environmental. Samples will be disposed in 60 days unless storage arrangements are made.

The total number of pages in this report revision is 71.

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

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

Electronically approved by: Chad Whelton

Chad Whelton
Project Manager

ALS Group, USA

Date: 02-Oct-18

Client: Ramboll Environ US Corporation
Project: 1690009988
Work Order: **18091640**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
18091640-01	092218-MHS-B100-R102-W1	Wipe		9/22/2018 12:24	9/25/2018 09:30	☐
18091640-02	092218-MHS-B100-R102-W2	Wipe		9/22/2018 12:26	9/25/2018 09:30	☐
18091640-03	092218-MHS-B100-R102-W3	Wipe		9/22/2018 12:27	9/25/2018 09:30	☐
18091640-04	092218-MHS-B100-R102-W4	Wipe		9/22/2018 12:29	9/25/2018 09:30	☐
18091640-05	092218-MHS-B100-R105-W1	Wipe		9/22/2018 11:59	9/25/2018 09:30	☐
18091640-06	092218-MHS-B100-R105-W2	Wipe		9/22/2018 12:01	9/25/2018 09:30	☐
18091640-07	092218-MHS-B100-R105-W3	Wipe		9/22/2018 12:02	9/25/2018 09:30	☐
18091640-08	092218-MHS-B100-R105-W4	Wipe		9/22/2018 12:03	9/25/2018 09:30	☐
18091640-09	092218-MHS-B200-R201-W1	Wipe		9/22/2018 12:07	9/25/2018 09:30	☐
18091640-10	092218-MHS-B200-R201-W2	Wipe		9/22/2018 12:09	9/25/2018 09:30	☐
18091640-11	092218-MHS-B200-R201-W3	Wipe		9/22/2018 12:10	9/25/2018 09:30	☐
18091640-12	092218-MHS-B200-R207-W1	Wipe		9/22/2018 12:14	9/25/2018 09:30	☐
18091640-13	092218-MHS-B200-R207-W2	Wipe		9/22/2018 12:16	9/25/2018 09:30	☐
18091640-14	092218-MHS-B200-R207-W3	Wipe		9/22/2018 12:16	9/25/2018 09:30	☐
18091640-15	092218-MHS-B200-R207-W4	Wipe		9/22/2018 12:18	9/25/2018 09:30	☐
18091640-16	092218-MHS-B300-R303-W1	Wipe		9/22/2018 11:50	9/25/2018 09:30	☐
18091640-17	092318-MHS-B300-R303-W2	Wipe		9/23/2018 14:56	9/25/2018 09:30	☐
18091640-18	092218-MHS-B300-R303-W3	Wipe		9/22/2018 11:52	9/25/2018 09:30	☐
18091640-19	092218-MHS-B300-R303-W4	Wipe		9/22/2018 11:55	9/25/2018 09:30	☐
18091640-20	092218-MHS-B500-R505-W1	Wipe		9/22/2018 11:35	9/25/2018 09:30	☐
18091640-21	092218-MHS-B500-R505-W2	Wipe		9/22/2018 11:38	9/25/2018 09:30	☐
18091640-22	092218-MHS-B500-R505-W3	Wipe		9/22/2018 11:39	9/25/2018 09:30	☐
18091640-23	092218-MHS-B500-R506-W1	Wipe		9/22/2018 11:23	9/25/2018 09:30	☐
18091640-24	092218-MHS-B500-R506-W2	Wipe		9/22/2018 11:24	9/25/2018 09:30	☐
18091640-25	092218-MHS-B500-R506-W3	Wipe		9/22/2018 11:25	9/25/2018 09:30	☐
18091640-26	092318-MHS-BH-RKIT-W1	Wipe		9/23/2018 15:31	9/25/2018 09:30	☐
18091640-27	092318-MHS-BH-RKIT-W2	Wipe		9/23/2018 15:32	9/25/2018 09:30	☐
18091640-28	092318-MHS-BH-RKIT-W3	Wipe		9/23/2018 15:33	9/25/2018 09:30	☐
18091640-29	092318-MHS-BH-RKIT-W4	Wipe		9/23/2018 15:34	9/25/2018 09:30	☐
18091640-30	092318-MHS-BH-RAUD-W1	Wipe		9/23/2018 15:44	9/25/2018 09:30	☐
18091640-31	092318-MHS-BH-RAUD-W2	Wipe		9/23/2018 15:45	9/25/2018 09:30	☐
18091640-32	092318-MHS-BH-RAUD-W3	Wipe		9/23/2018 15:48	9/25/2018 09:30	☐
18091640-33	092318-MHS-B700-R704-W1	Wipe		9/23/2018 16:04	9/25/2018 09:30	☐
18091640-34	092318-MHS-B700-R704-W2	Wipe		9/23/2018 16:05	9/25/2018 09:30	☐
18091640-35	092318-MHS-B700-R704-W3	Wipe		9/23/2018 16:07	9/25/2018 09:30	☐
18091640-36	092318-MHS-B700-R704-W4	Wipe		9/23/2018 16:08	9/25/2018 09:30	☐
18091640-37	092318-MHS-B700-R705-W1	Wipe		9/23/2018 16:18	9/25/2018 09:30	☐
18091640-38	092318-MHS-B700-R705-W2	Wipe		9/23/2018 16:20	9/25/2018 09:30	☐
18091640-39	092318-MHS-B700-R705-W3	Wipe		9/23/2018 16:22	9/25/2018 09:30	☐

Revision: 1

Client: Ramboll Environ US Corporation
Project: 1690009988
Work Order: **18091640**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
18091640-40	092318-MHS-B700-R705-W4	Wipe		9/23/2018 16:26	9/25/2018 09:30	☐
18091640-41	092318-MHS-B700-RGYM-W1	Wipe		9/23/2018 16:54	9/25/2018 09:30	☐
18091640-42	092318-MHS-B700-RGYM-W2	Wipe		9/23/2018 16:48	9/25/2018 09:30	☐
18091640-43	092318-MHS-B700-RGYM-W3	Wipe		9/23/2018 16:50	9/25/2018 09:30	☐
18091640-44	092318-MHS-B700-RGYM-W4	Wipe		9/23/2018 16:52	9/25/2018 09:30	☐
18091640-45	092318-MHS-B500-R505-PEW1	Wipe		9/23/2018 14:45	9/25/2018 09:30	☐
18091640-46	092318-MHS-B500-R505-PEW2	Wipe		9/23/2018 14:47	9/25/2018 09:30	☐
18091640-47	092218-MHS-B500-R506-PEW1	Wipe		9/22/2018 11:27	9/25/2018 09:30	☐
18091640-48	092218-MHS-B500-R506-PEW2	Wipe		9/22/2018 11:29	9/25/2018 09:30	☐
18091640-49	092318-MHS-B700-R704-PEW1	Wipe		9/23/2018 16:10	9/25/2018 09:30	☐
18091640-50	092318-MHS-B700-R704-PEW2	Wipe		9/23/2018 16:15	9/25/2018 09:30	☐
18091640-51	092318-MHS-B700-R704-PEW3	Wipe		9/23/2018 16:17	9/25/2018 09:30	☐
18091640-52	092318-MHS-B700-R705-PEW1	Wipe		9/23/2018 16:28	9/25/2018 09:30	☐
18091640-53	092318-MHS-B700-R705-PEW2	Wipe		9/23/2018 16:30	9/25/2018 09:30	☐

ALS Group, USA

Date: 02-Oct-18

Client: Ramboll Environ US Corporation
Project: 1690009988
Work Order: 18091640

Case Narrative

Samples for the above noted Work Order were received on 09/25/2018. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting. A copy of the laboratory's scope of accreditation is available upon request.

With the following exceptions, all sample analyses achieved analytical criteria.

Revised report issued 10/2/18 due to client requested sample ID changes. 092218-MHS-B500-R505-PEW1 was changed to 092318-MHS-B500-R505-PEW1, and 092218-MHS-B500-R505-PEW2 was changed to 092318-MHS-B500-R505-PEW2. Collection dates were also updated from 9/22/18 to 9/23/18. No data has been changed.

ALS Group, USA

Date: 02-Oct-18

Client: Ramboll Environ US Corporation
Project: 1690009988
WorkOrder: **18091640**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
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
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
µg/wipe	Micrograms per Wipe

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B100-R102-W1
Collection Date: 9/22/2018 12:24 PM

Work Order: 18091640
Lab ID: 18091640-01
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 12:46 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 12:46 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 12:46 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 12:46 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 12:46 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 12:46 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 12:46 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 12:46 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 12:46 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 12:46 AM
Surr: Decachlorobiphenyl	*116*		*50-150*	*%REC*	1	9/28/2018 12:46 AM
Surr: Tetrachloro-m-xylene	*112*		*50-150*	*%REC*	1	9/28/2018 12:46 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B100-R102-W2
Collection Date: 9/22/2018 12:26 PM

Work Order: 18091640
Lab ID: 18091640-02
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 01:01 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 01:01 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 01:01 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 01:01 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 01:01 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 01:01 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 01:01 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 01:01 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 01:01 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 01:01 AM
Surr: Decachlorobiphenyl	*119*		*50-150*	*%REC*	1	9/28/2018 01:01 AM
Surr: Tetrachloro-m-xylene	*109*		*50-150*	*%REC*	1	9/28/2018 01:01 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B100-R102-W3
Collection Date: 9/22/2018 12:27 PM

Work Order: 18091640
Lab ID: 18091640-03
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 01:15 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 01:15 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 01:15 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 01:15 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 01:15 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 01:15 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 01:15 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 01:15 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 01:15 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 01:15 AM
Surr: Decachlorobiphenyl	*117*		*50-150*	*%REC*	1	9/28/2018 01:15 AM
Surr: Tetrachloro-m-xylene	*106*		*50-150*	*%REC*	1	9/28/2018 01:15 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B100-R102-W4
Collection Date: 9/22/2018 12:29 PM

Work Order: 18091640
Lab ID: 18091640-04
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 01:29 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 01:29 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 01:29 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 01:29 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 01:29 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 01:29 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 01:29 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 01:29 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 01:29 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 01:29 AM
Surr: Decachlorobiphenyl	*116*		*50-150*	*%REC*	1	9/28/2018 01:29 AM
Surr: Tetrachloro-m-xylene	*106*		*50-150*	*%REC*	1	9/28/2018 01:29 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B100-R105-W1
Collection Date: 9/22/2018 11:59 AM

Work Order: 18091640
Lab ID: 18091640-05
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 01:58 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 01:58 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 01:58 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 01:58 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 01:58 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 01:58 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 01:58 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 01:58 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 01:58 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 01:58 AM
Surr: Decachlorobiphenyl	*121*		*50-150*	*%REC*	1	9/28/2018 01:58 AM
Surr: Tetrachloro-m-xylene	*111*		*50-150*	*%REC*	1	9/28/2018 01:58 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B100-R105-W2
Collection Date: 9/22/2018 12:01 PM

Work Order: 18091640
Lab ID: 18091640-06
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 02:12 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 02:12 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 02:12 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 02:12 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 02:12 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 02:12 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 02:12 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 02:12 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 02:12 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 02:12 AM
Surr: Decachlorobiphenyl	*120*		*50-150*	*%REC*	1	9/28/2018 02:12 AM
Surr: Tetrachloro-m-xylene	*113*		*50-150*	*%REC*	1	9/28/2018 02:12 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B100-R105-W3
Collection Date: 9/22/2018 12:02 PM

Work Order: 18091640
Lab ID: 18091640-07
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 02:27 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 02:27 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 02:27 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 02:27 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 02:27 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 02:27 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 02:27 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 02:27 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 02:27 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 02:27 AM
Surr: Decachlorobiphenyl	*119*		*50-150*	*%REC*	1	9/28/2018 02:27 AM
Surr: Tetrachloro-m-xylene	*112*		*50-150*	*%REC*	1	9/28/2018 02:27 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B100-R105-W4
Collection Date: 9/22/2018 12:03 PM

Work Order: 18091640
Lab ID: 18091640-08
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 03:24 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 03:24 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 03:24 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 03:24 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 03:24 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 03:24 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 03:24 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 03:24 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 03:24 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 03:24 AM
Surr: Decachlorobiphenyl	*118*		*50-150*	*%REC*	1	9/28/2018 03:24 AM
Surr: Tetrachloro-m-xylene	*112*		*50-150*	*%REC*	1	9/28/2018 03:24 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B200-R201-W1
Collection Date: 9/22/2018 12:07 PM

Work Order: 18091640
Lab ID: 18091640-09
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 03:38 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 03:38 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 03:38 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 03:38 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 03:38 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 03:38 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 03:38 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 03:38 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 03:38 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 03:38 AM
Surr: Decachlorobiphenyl	*126*		*50-150*	*%REC*	1	9/28/2018 03:38 AM
Surr: Tetrachloro-m-xylene	*116*		*50-150*	*%REC*	1	9/28/2018 03:38 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B200-R201-W2
Collection Date: 9/22/2018 12:09 PM

Work Order: 18091640
Lab ID: 18091640-10
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 03:53 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 03:53 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 03:53 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 03:53 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 03:53 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 03:53 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 03:53 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 03:53 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 03:53 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 03:53 AM
Surr: Decachlorobiphenyl	*120*		*50-150*	*%REC*	1	9/28/2018 03:53 AM
Surr: Tetrachloro-m-xylene	*120*		*50-150*	*%REC*	1	9/28/2018 03:53 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B200-R201-W3
Collection Date: 9/22/2018 12:10 PM

Work Order: 18091640
Lab ID: 18091640-11
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 04:07 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 04:07 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 04:07 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 04:07 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 04:07 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 04:07 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 04:07 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 04:07 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 04:07 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 04:07 AM
Surr: Decachlorobiphenyl	*133*		*50-150*	*%REC*	1	9/28/2018 04:07 AM
Surr: Tetrachloro-m-xylene	*119*		*50-150*	*%REC*	1	9/28/2018 04:07 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B200-R207-W1
Collection Date: 9/22/2018 12:14 PM

Work Order: 18091640
Lab ID: 18091640-12
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 04:36 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 04:36 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 04:36 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 04:36 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 04:36 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 04:36 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 04:36 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 04:36 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 04:36 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 04:36 AM
Surr: Decachlorobiphenyl	*129*		*50-150*	*%REC*	1	9/28/2018 04:36 AM
Surr: Tetrachloro-m-xylene	*111*		*50-150*	*%REC*	1	9/28/2018 04:36 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B200-R207-W2
Collection Date: 9/22/2018 12:16 PM

Work Order: 18091640
Lab ID: 18091640-13
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 04:50 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 04:50 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 04:50 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 04:50 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 04:50 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 04:50 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 04:50 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 04:50 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 04:50 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 04:50 AM
Surr: Decachlorobiphenyl	*125*		*50-150*	*%REC*	1	9/28/2018 04:50 AM
Surr: Tetrachloro-m-xylene	*109*		*50-150*	*%REC*	1	9/28/2018 04:50 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B200-R207-W3
Collection Date: 9/22/2018 12:16 PM

Work Order: 18091640
Lab ID: 18091640-14
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 05:05 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 05:05 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 05:05 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 05:05 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 05:05 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 05:05 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 05:05 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 05:05 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 05:05 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 05:05 AM
Surr: Decachlorobiphenyl	*121*		*50-150*	*%REC*	1	9/28/2018 05:05 AM
Surr: Tetrachloro-m-xylene	*107*		*50-150*	*%REC*	1	9/28/2018 05:05 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B200-R207-W4
Collection Date: 9/22/2018 12:18 PM

Work Order: 18091640
Lab ID: 18091640-15
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 05:19 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 05:19 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 05:19 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 05:19 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 05:19 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 05:19 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 05:19 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 05:19 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 05:19 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 05:19 AM
Surr: Decachlorobiphenyl	*116*		*50-150*	*%REC*	1	9/28/2018 05:19 AM
Surr: Tetrachloro-m-xylene	*102*		*50-150*	*%REC*	1	9/28/2018 05:19 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B300-R303-W1
Collection Date: 9/22/2018 11:50 AM

Work Order: 18091640
Lab ID: 18091640-16
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 05:33 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 05:33 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 05:33 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 05:33 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 05:33 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 05:33 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 05:33 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 05:33 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 05:33 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 05:33 AM
Surr: Decachlorobiphenyl	*117*		*50-150*	*%REC*	1	9/28/2018 05:33 AM
Surr: Tetrachloro-m-xylene	*104*		*50-150*	*%REC*	1	9/28/2018 05:33 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-B300-R303-W2
Collection Date: 9/23/2018 02:56 PM

Work Order: 18091640
Lab ID: 18091640-17
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 05:48 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 05:48 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 05:48 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 05:48 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 05:48 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 05:48 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 05:48 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 05:48 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 05:48 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 05:48 AM
Surr: Decachlorobiphenyl	*118*		*50-150*	*%REC*	1	9/28/2018 05:48 AM
Surr: Tetrachloro-m-xylene	*110*		*50-150*	*%REC*	1	9/28/2018 05:48 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B300-R303-W3
Collection Date: 9/22/2018 11:52 AM

Work Order: 18091640
Lab ID: 18091640-18
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 06:02 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 06:02 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 06:02 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 06:02 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 06:02 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 06:02 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 06:02 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 06:02 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 06:02 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 06:02 AM
Surr: Decachlorobiphenyl	*124*		*50-150*	*%REC*	1	9/28/2018 06:02 AM
Surr: Tetrachloro-m-xylene	*104*		*50-150*	*%REC*	1	9/28/2018 06:02 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B300-R303-W4
Collection Date: 9/22/2018 11:55 AM

Work Order: 18091640
Lab ID: 18091640-19
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 06:16 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 06:16 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 06:16 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 06:16 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 06:16 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 06:16 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 06:16 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 06:16 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 06:16 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 06:16 AM
Surr: Decachlorobiphenyl	*126*		*50-150*	*%REC*	1	9/28/2018 06:16 AM
Surr: Tetrachloro-m-xylene	*109*		*50-150*	*%REC*	1	9/28/2018 06:16 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B500-R505-W1
Collection Date: 9/22/2018 11:35 AM

Work Order: 18091640
Lab ID: 18091640-20
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 06:31 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 06:31 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 06:31 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 06:31 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 06:31 AM
Aroclor 1254	**0.12**		**0.10**	**µg/wipe**	1	9/28/2018 06:31 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 06:31 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 06:31 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 06:31 AM
PCBs, Total	**0.12**		**0.10**	**µg/wipe**	1	9/28/2018 06:31 AM
Surr: Decachlorobiphenyl	*125*		*50-150*	*%REC*	1	9/28/2018 06:31 AM
Surr: Tetrachloro-m-xylene	*108*		*50-150*	*%REC*	1	9/28/2018 06:31 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B500-R505-W2
Collection Date: 9/22/2018 11:38 AM

Work Order: 18091640
Lab ID: 18091640-21
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 06:45 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 06:45 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 06:45 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 06:45 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 06:45 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 06:45 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 06:45 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 06:45 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 06:45 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 06:45 AM
Surr: Decachlorobiphenyl	*127*		*50-150*	*%REC*	1	9/28/2018 06:45 AM
Surr: Tetrachloro-m-xylene	*109*		*50-150*	*%REC*	1	9/28/2018 06:45 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B500-R505-W3
Collection Date: 9/22/2018 11:39 AM

Work Order: 18091640
Lab ID: 18091640-22
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 07:14 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 07:14 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 07:14 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 07:14 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 07:14 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 07:14 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 07:14 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 07:14 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 07:14 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 07:14 AM
Surr: Decachlorobiphenyl	*123*		*50-150*	*%REC*	1	9/28/2018 07:14 AM
Surr: Tetrachloro-m-xylene	*105*		*50-150*	*%REC*	1	9/28/2018 07:14 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B500-R506-W1
Collection Date: 9/22/2018 11:23 AM

Work Order: 18091640
Lab ID: 18091640-23
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 07:28 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 07:28 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 07:28 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 07:28 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 07:28 AM
Aroclor 1254	**0.24**		**0.10**	**µg/wipe**	1	9/28/2018 07:28 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 07:28 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 07:28 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 07:28 AM
PCBs, Total	**0.24**		**0.10**	**µg/wipe**	1	9/28/2018 07:28 AM
Surr: Decachlorobiphenyl	*123*		*50-150*	*%REC*	1	9/28/2018 07:28 AM
Surr: Tetrachloro-m-xylene	*108*		*50-150*	*%REC*	1	9/28/2018 07:28 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B500-R506-W2
Collection Date: 9/22/2018 11:24 AM

Work Order: 18091640
Lab ID: 18091640-24
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 07:43 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 07:43 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 07:43 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 07:43 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 07:43 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 07:43 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 07:43 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 07:43 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 07:43 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 07:43 AM
Surr: Decachlorobiphenyl	*125*		*50-150*	*%REC*	1	9/28/2018 07:43 AM
Surr: Tetrachloro-m-xylene	*117*		*50-150*	*%REC*	1	9/28/2018 07:43 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B500-R506-W3
Collection Date: 9/22/2018 11:25 AM

Work Order: 18091640
Lab ID: 18091640-25
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 07:57 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 07:57 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 07:57 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 07:57 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 07:57 AM
Aroclor 1254	**0.12**		**0.10**	**µg/wipe**	1	9/28/2018 07:57 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 07:57 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 07:57 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 07:57 AM
PCBs, Total	**0.12**		**0.10**	**µg/wipe**	1	9/28/2018 07:57 AM
Surr: Decachlorobiphenyl	*121*		*50-150*	*%REC*	1	9/28/2018 07:57 AM
Surr: Tetrachloro-m-xylene	*110*		*50-150*	*%REC*	1	9/28/2018 07:57 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-BH-RKIT-W1
Collection Date: 9/23/2018 03:31 PM

Work Order: 18091640
Lab ID: 18091640-26
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 08:11 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 08:11 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 08:11 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 08:11 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 08:11 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 08:11 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 08:11 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 08:11 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 08:11 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 08:11 AM
Surr: Decachlorobiphenyl	*115*		*50-150*	*%REC*	1	9/28/2018 08:11 AM
Surr: Tetrachloro-m-xylene	*108*		*50-150*	*%REC*	1	9/28/2018 08:11 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-BH-RKIT-W2
Collection Date: 9/23/2018 03:32 PM

Work Order: 18091640
Lab ID: 18091640-27
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 08:26 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 08:26 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 08:26 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 08:26 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 08:26 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 08:26 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 08:26 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 08:26 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 08:26 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 08:26 AM
Surr: Decachlorobiphenyl	*123*		*50-150*	*%REC*	1	9/28/2018 08:26 AM
Surr: Tetrachloro-m-xylene	*110*		*50-150*	*%REC*	1	9/28/2018 08:26 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-BH-RKIT-W3
Collection Date: 9/23/2018 03:33 PM

Work Order: 18091640
Lab ID: 18091640-28
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 09:23 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 09:23 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 09:23 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 09:23 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 09:23 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 09:23 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 09:23 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 09:23 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 09:23 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 09:23 AM
Surr: Decachlorobiphenyl	*122*		*50-150*	*%REC*	1	9/28/2018 09:23 AM
Surr: Tetrachloro-m-xylene	*113*		*50-150*	*%REC*	1	9/28/2018 09:23 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-BH-RKIT-W4
Collection Date: 9/23/2018 03:34 PM

Work Order: 18091640
Lab ID: 18091640-29
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 09:52 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 09:52 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 09:52 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 09:52 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 09:52 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 09:52 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 09:52 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 09:52 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 09:52 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 09:52 AM
Surr: Decachlorobiphenyl	*116*		*50-150*	*%REC*	1	9/28/2018 09:52 AM
Surr: Tetrachloro-m-xylene	*108*		*50-150*	*%REC*	1	9/28/2018 09:52 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-BH-RAUD-W1
Collection Date: 9/23/2018 03:44 PM

Work Order: 18091640
Lab ID: 18091640-30
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 10:06 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 10:06 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 10:06 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 10:06 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 10:06 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 10:06 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 10:06 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 10:06 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 10:06 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 10:06 AM
Surr: Decachlorobiphenyl	*112*		*50-150*	*%REC*	1	9/28/2018 10:06 AM
Surr: Tetrachloro-m-xylene	*104*		*50-150*	*%REC*	1	9/28/2018 10:06 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-BH-RAUD-W2
Collection Date: 9/23/2018 03:45 PM

Work Order: 18091640
Lab ID: 18091640-31
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 10:21 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 10:21 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 10:21 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 10:21 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 10:21 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 10:21 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 10:21 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 10:21 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 10:21 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 10:21 AM
Surr: Decachlorobiphenyl	*117*		*50-150*	*%REC*	1	9/28/2018 10:21 AM
Surr: Tetrachloro-m-xylene	*108*		*50-150*	*%REC*	1	9/28/2018 10:21 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-BH-RAUD-W3
Collection Date: 9/23/2018 03:48 PM

Work Order: 18091640
Lab ID: 18091640-32
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 10:35 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 10:35 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 10:35 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 10:35 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 10:35 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 10:35 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 10:35 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 10:35 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 10:35 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 10:35 AM
Surr: Decachlorobiphenyl	*115*		*50-150*	*%REC*	1	9/28/2018 10:35 AM
Surr: Tetrachloro-m-xylene	*105*		*50-150*	*%REC*	1	9/28/2018 10:35 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-B700-R704-W1
Collection Date: 9/23/2018 04:04 PM

Work Order: 18091640
Lab ID: 18091640-33
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 10:56 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 10:56 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 10:56 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 10:56 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 10:56 AM
Aroclor 1254	**0.12**		**0.10**	**µg/wipe**	1	9/28/2018 10:56 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 10:56 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 10:56 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 10:56 AM
PCBs, Total	**0.12**		**0.10**	**µg/wipe**	1	9/28/2018 10:56 AM
Surr: Decachlorobiphenyl	*111*		*50-150*	*%REC*	1	9/28/2018 10:56 AM
Surr: Tetrachloro-m-xylene	*93.9*		*50-150*	*%REC*	1	9/28/2018 10:56 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-B700-R704-W2
Collection Date: 9/23/2018 04:05 PM

Work Order: 18091640
Lab ID: 18091640-34
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 11:10 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 11:10 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 11:10 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 11:10 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 11:10 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 11:10 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 11:10 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 11:10 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 11:10 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 11:10 AM
Surr: Decachlorobiphenyl	*109*		*50-150*	*%REC*	1	9/28/2018 11:10 AM
Surr: Tetrachloro-m-xylene	*99.8*		*50-150*	*%REC*	1	9/28/2018 11:10 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-B700-R704-W3
Collection Date: 9/23/2018 04:07 PM

Work Order: 18091640
Lab ID: 18091640-35
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 11:24 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 11:24 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 11:24 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 11:24 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 11:24 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 11:24 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 11:24 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 11:24 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 11:24 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 11:24 AM
Surr: Decachlorobiphenyl	*111*		*50-150*	*%REC*	1	9/28/2018 11:24 AM
Surr: Tetrachloro-m-xylene	*101*		*50-150*	*%REC*	1	9/28/2018 11:24 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-B700-R704-W4
Collection Date: 9/23/2018 04:08 PM

Work Order: 18091640
Lab ID: 18091640-36
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 11:39 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 11:39 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 11:39 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 11:39 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 11:39 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 11:39 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 11:39 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 11:39 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 11:39 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 11:39 AM
Surr: Decachlorobiphenyl	*113*		*50-150*	*%REC*	1	9/28/2018 11:39 AM
Surr: Tetrachloro-m-xylene	*102*		*50-150*	*%REC*	1	9/28/2018 11:39 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-B700-R705-W1
Collection Date: 9/23/2018 04:18 PM

Work Order: 18091640
Lab ID: 18091640-37
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 11:53 AM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 11:53 AM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 11:53 AM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 11:53 AM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 11:53 AM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 11:53 AM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 11:53 AM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 11:53 AM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 11:53 AM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 11:53 AM
Surr: Decachlorobiphenyl	*117*		*50-150*	*%REC*	1	9/28/2018 11:53 AM
Surr: Tetrachloro-m-xylene	*102*		*50-150*	*%REC*	1	9/28/2018 11:53 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-B700-R705-W2
Collection Date: 9/23/2018 04:20 PM

Work Order: 18091640
Lab ID: 18091640-38
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 12:07 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 12:07 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 12:07 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 12:07 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 12:07 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 12:07 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 12:07 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 12:07 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 12:07 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 12:07 PM
Surr: Decachlorobiphenyl	*114*		*50-150*	*%REC*	1	9/28/2018 12:07 PM
Surr: Tetrachloro-m-xylene	*99.9*		*50-150*	*%REC*	1	9/28/2018 12:07 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-B700-R705-W3
Collection Date: 9/23/2018 04:22 PM

Work Order: 18091640
Lab ID: 18091640-39
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 12:36 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 12:36 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 12:36 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 12:36 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 12:36 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 12:36 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 12:36 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 12:36 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 12:36 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 12:36 PM
Surr: Decachlorobiphenyl	*116*		*50-150*	*%REC*	1	9/28/2018 12:36 PM
Surr: Tetrachloro-m-xylene	*104*		*50-150*	*%REC*	1	9/28/2018 12:36 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-B700-R705-W4
Collection Date: 9/23/2018 04:26 PM

Work Order: 18091640
Lab ID: 18091640-40
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 12:51 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 12:51 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 12:51 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 12:51 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 12:51 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 12:51 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 12:51 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 12:51 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 12:51 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 12:51 PM
Surr: Decachlorobiphenyl	*116*		*50-150*	*%REC*	1	9/28/2018 12:51 PM
Surr: Tetrachloro-m-xylene	*104*		*50-150*	*%REC*	1	9/28/2018 12:51 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-B700-RGYM-W1
Collection Date: 9/23/2018 04:54 PM

Work Order: 18091640
Lab ID: 18091640-41
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 01:05 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 01:05 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 01:05 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 01:05 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 01:05 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 01:05 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 01:05 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 01:05 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 01:05 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 01:05 PM
Surr: Decachlorobiphenyl	*117*		*50-150*	*%REC*	1	9/28/2018 01:05 PM
Surr: Tetrachloro-m-xylene	*99.2*		*50-150*	*%REC*	1	9/28/2018 01:05 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-B700-RGYM-W2
Collection Date: 9/23/2018 04:48 PM

Work Order: 18091640
Lab ID: 18091640-42
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 01:19 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 01:19 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 01:19 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 01:19 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 01:19 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 01:19 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 01:19 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 01:19 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 01:19 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 01:19 PM
Surr: Decachlorobiphenyl	*114*		*50-150*	*%REC*	1	9/28/2018 01:19 PM
Surr: Tetrachloro-m-xylene	*104*		*50-150*	*%REC*	1	9/28/2018 01:19 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-B700-RGYM-W3
Collection Date: 9/23/2018 04:50 PM

Work Order: 18091640
Lab ID: 18091640-43
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 01:34 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 01:34 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 01:34 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 01:34 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 01:34 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 01:34 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 01:34 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 01:34 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 01:34 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 01:34 PM
Surr: Decachlorobiphenyl	*118*		*50-150*	*%REC*	1	9/28/2018 01:34 PM
Surr: Tetrachloro-m-xylene	*103*		*50-150*	*%REC*	1	9/28/2018 01:34 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-B700-RGYM-W4
Collection Date: 9/23/2018 04:52 PM

Work Order: 18091640
Lab ID: 18091640-44
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 01:48 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 01:48 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 01:48 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 01:48 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 01:48 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 01:48 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 01:48 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 01:48 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 01:48 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 01:48 PM
Surr: Decachlorobiphenyl	*115*		*50-150*	*%REC*	1	9/28/2018 01:48 PM
Surr: Tetrachloro-m-xylene	*107*		*50-150*	*%REC*	1	9/28/2018 01:48 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-B500-R505-PEW1
Collection Date: 9/23/2018 02:45 PM

Work Order: 18091640
Lab ID: 18091640-45
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 02:02 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 02:02 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 02:02 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 02:02 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 02:02 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 02:02 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 02:02 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 02:02 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 02:02 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 02:02 PM
Surr: Decachlorobiphenyl	*117*		*50-150*	*%REC*	1	9/28/2018 02:02 PM
Surr: Tetrachloro-m-xylene	*110*		*50-150*	*%REC*	1	9/28/2018 02:02 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-B500-R505-PEW2
Collection Date: 9/23/2018 02:47 PM

Work Order: 18091640
Lab ID: 18091640-46
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 02:17 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 02:17 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 02:17 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 02:17 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 02:17 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 02:17 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 02:17 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 02:17 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 02:17 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 02:17 PM
Surr: Decachlorobiphenyl	*116*		*50-150*	*%REC*	1	9/28/2018 02:17 PM
Surr: Tetrachloro-m-xylene	*110*		*50-150*	*%REC*	1	9/28/2018 02:17 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B500-R506-PEW1
Collection Date: 9/22/2018 11:27 AM

Work Order: 18091640
Lab ID: 18091640-47
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 02:31 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 02:31 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 02:31 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 02:31 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 02:31 PM
Aroclor 1254	**0.13**		**0.10**	**µg/wipe**	1	9/28/2018 02:31 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 02:31 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 02:31 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 02:31 PM
PCBs, Total	**0.13**		**0.10**	**µg/wipe**	1	9/28/2018 02:31 PM
Surr: Decachlorobiphenyl	*116*		*50-150*	*%REC*	1	9/28/2018 02:31 PM
Surr: Tetrachloro-m-xylene	*108*		*50-150*	*%REC*	1	9/28/2018 02:31 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092218-MHS-B500-R506-PEW2
Collection Date: 9/22/2018 11:29 AM

Work Order: 18091640
Lab ID: 18091640-48
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 03:43 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 03:43 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 03:43 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 03:43 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 03:43 PM
Aroclor 1254	**0.54**		**0.10**	**µg/wipe**	1	9/28/2018 03:43 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 03:43 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 03:43 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 03:43 PM
PCBs, Total	**0.54**		**0.10**	**µg/wipe**	1	9/28/2018 03:43 PM
Surr: Decachlorobiphenyl	*118*		*50-150*	*%REC*	1	9/28/2018 03:43 PM
Surr: Tetrachloro-m-xylene	*116*		*50-150*	*%REC*	1	9/28/2018 03:43 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-B700-R704-PEW1
Collection Date: 9/23/2018 04:10 PM

Work Order: 18091640
Lab ID: 18091640-49
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 03:57 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 03:57 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 03:57 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 03:57 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 03:57 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 03:57 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 03:57 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 03:57 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 03:57 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 03:57 PM
Surr: Decachlorobiphenyl	*116*		*50-150*	*%REC*	1	9/28/2018 03:57 PM
Surr: Tetrachloro-m-xylene	*103*		*50-150*	*%REC*	1	9/28/2018 03:57 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-B700-R704-PEW2
Collection Date: 9/23/2018 04:15 PM

Work Order: 18091640
Lab ID: 18091640-50
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 04:11 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 04:11 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 04:11 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 04:11 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 04:11 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 04:11 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 04:11 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 04:11 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 04:11 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 04:11 PM
Surr: Decachlorobiphenyl	*116*		*50-150*	*%REC*	1	9/28/2018 04:11 PM
Surr: Tetrachloro-m-xylene	*105*		*50-150*	*%REC*	1	9/28/2018 04:11 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-B700-R704-PEW3
Collection Date: 9/23/2018 04:17 PM

Work Order: 18091640
Lab ID: 18091640-51
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 04:26 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 04:26 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 04:26 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 04:26 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 04:26 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 04:26 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 04:26 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 04:26 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 04:26 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 04:26 PM
Surr: Decachlorobiphenyl	*117*		*50-150*	*%REC*	1	9/28/2018 04:26 PM
Surr: Tetrachloro-m-xylene	*107*		*50-150*	*%REC*	1	9/28/2018 04:26 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-B700-R705-PEW1
Collection Date: 9/23/2018 04:28 PM

Work Order: 18091640
Lab ID: 18091640-52
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 04:40 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 04:40 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 04:40 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 04:40 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 04:40 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 04:40 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 04:40 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 04:40 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 04:40 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 04:40 PM
Surr: Decachlorobiphenyl	*113*		*50-150*	*%REC*	1	9/28/2018 04:40 PM
Surr: Tetrachloro-m-xylene	*104*		*50-150*	*%REC*	1	9/28/2018 04:40 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: *02-Oct-18*

Client: Ramboll Environ US Corporation
Project: 1690009988
Sample ID: 092318-MHS-B700-R705-PEW2
Collection Date: 9/23/2018 04:30 PM

Work Order: 18091640
Lab ID: 18091640-53
Matrix: WIPE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			**SW8082**	Prep: EPA/600/R-07 9/27/18 18:01		Analyst: **KB**
Aroclor 1016	ND		0.10	µg/wipe	1	9/28/2018 04:55 PM
Aroclor 1221	ND		0.10	µg/wipe	1	9/28/2018 04:55 PM
Aroclor 1232	ND		0.10	µg/wipe	1	9/28/2018 04:55 PM
Aroclor 1242	ND		0.10	µg/wipe	1	9/28/2018 04:55 PM
Aroclor 1248	ND		0.10	µg/wipe	1	9/28/2018 04:55 PM
Aroclor 1254	ND		0.10	µg/wipe	1	9/28/2018 04:55 PM
Aroclor 1260	ND		0.10	µg/wipe	1	9/28/2018 04:55 PM
Aroclor 1262	ND		0.10	µg/wipe	1	9/28/2018 04:55 PM
Aroclor 1268	ND		0.10	µg/wipe	1	9/28/2018 04:55 PM
PCBs, Total	ND		0.10	µg/wipe	1	9/28/2018 04:55 PM
Surr: Decachlorobiphenyl	*140*		*50-150*	*%REC*	1	9/28/2018 04:55 PM
Surr: Tetrachloro-m-xylene	*98.8*		*50-150*	*%REC*	1	9/28/2018 04:55 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Revision: 1

ALS Group, USA

Date: 02-Oct-18

Client: Ramboll Environ US Corporation

Work Order: 18091640

Project: 1690009988

QC BATCH REPORT

Batch ID: **125315** Instrument ID **GC14** Method: **SW8082**

MBLK Sample ID: **MBLK-125315-125315** Units: **µg/wipe** Analysis Date: **9/27/2018 08:42 PM**

Client ID: Run ID: **GC14_180927A** SeqNo: **5287915** Prep Date: **9/27/2018** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	ND	0.10								
Aroclor 1221	ND	0.10								
Aroclor 1232	ND	0.10								
Aroclor 1242	ND	0.10								
Aroclor 1248	ND	0.10								
Aroclor 1254	ND	0.10								
Aroclor 1260	ND	0.10								
Aroclor 1262	ND	0.10								
Aroclor 1268	ND	0.10								
PCBs, Total	ND	0.10								
Surr: Decachlorobiphenyl	*0.1107*	0	*0.1*	0	*111*	*50-150*	0			
Surr: Tetrachloro-m-xylene	*0.09896*	0	*0.1*	0	*99*	*50-150*	0			

LCS Sample ID: **LCS-125315-125315** Units: **µg/wipe** Analysis Date: **9/27/2018 08:57 PM**

Client ID: Run ID: **GC14_180927A** SeqNo: **5287917** Prep Date: **9/27/2018** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	1.096	0.10	1	0	110	50-150	0			
Aroclor 1260	1.055	0.10	1	0	105	50-150	0			
Surr: Decachlorobiphenyl	*0.1396*	0	*0.1*	0	*140*	*50-150*	0			
Surr: Tetrachloro-m-xylene	*0.1178*	0	*0.1*	0	*118*	*50-150*	0			

LCSD Sample ID: **LCSD-125315-125315** Units: **µg/wipe** Analysis Date: **9/27/2018 09:11 PM**

Client ID: Run ID: **GC14_180927A** SeqNo: **5287919** Prep Date: **9/27/2018** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	1.143	0.10	1	0	114	50-150	1.096	4.2	35	
Aroclor 1260	1.078	0.10	1	0	108	50-150	1.055	2.19	35	
Surr: Decachlorobiphenyl	*0.1396*	0	*0.1*	0	*140*	*50-150*	0.1396	*0.0215*	*35*	
Surr: Tetrachloro-m-xylene	*0.1303*	0	*0.1*	0	*130*	*50-150*	0.1178	*10*	*35*	

The following samples were analyzed in this batch:

18091640-01A	18091640-02A	18091640-03A
18091640-04A	18091640-05A	18091640-06A
18091640-07A		

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

Revision: 1

Client: Ramboll Environ US Corporation
Work Order: 18091640
Project: 1690009988

QC BATCH REPORT

Batch ID: **125316** Instrument ID **GC14** Method: **SW8082**

MBLK Sample ID: **MBLK-125316-125316** Units: **µg/wipe** Analysis Date: **9/28/2018 02:41 AM**
Client ID: Run ID: **GC14_180927A** SeqNo: **5287963** Prep Date: **9/27/2018** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	ND	0.10								
Aroclor 1221	ND	0.10								
Aroclor 1232	ND	0.10								
Aroclor 1242	ND	0.10								
Aroclor 1248	ND	0.10								
Aroclor 1254	ND	0.10								
Aroclor 1260	ND	0.10								
Aroclor 1262	ND	0.10								
Aroclor 1268	ND	0.10								
PCBs, Total	ND	0.10								
Surr: Decachlorobiphenyl	*0.1305*	0	*0.1*	0	*131*	*50-150*	0			
Surr: Tetrachloro-m-xylene	*0.1191*	0	*0.1*	0	*119*	*50-150*	0			

LCS Sample ID: **LCS-125316-125316** Units: **µg/wipe** Analysis Date: **9/28/2018 02:55 AM**
Client ID: Run ID: **GC14_180927A** SeqNo: **5287965** Prep Date: **9/27/2018** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	1.107	0.10	1	0	111	50-150	0			
Aroclor 1260	1.043	0.10	1	0	104	50-150	0			
Surr: Decachlorobiphenyl	*0.1351*	0	*0.1*	0	*135*	*50-150*	0			
Surr: Tetrachloro-m-xylene	*0.121*	0	*0.1*	0	*121*	*50-150*	0			

LCSD Sample ID: **LCSD-125316-125316** Units: **µg/wipe** Analysis Date: **9/28/2018 03:10 AM**
Client ID: Run ID: **GC14_180927A** SeqNo: **5287967** Prep Date: **9/27/2018** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	1.1	0.10	1	0	110	50-150	1.107	0.583	35	
Aroclor 1260	1.005	0.10	1	0	100	50-150	1.043	3.77	35	
Surr: Decachlorobiphenyl	*0.1289*	0	*0.1*	0	*129*	*50-150*	0.1351	*4.72*	*35*	
Surr: Tetrachloro-m-xylene	*0.1284*	0	*0.1*	0	*128*	*50-150*	0.121	*5.92*	*35*	

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

Revision: 1

Client: Ramboll Environ US Corporation
Work Order: 18091640
Project: 1690009988

QC BATCH REPORT

Batch ID: **125316** Instrument ID **GC14** Method: **SW8082**

The following samples were analyzed in this batch:

18091640-08A	18091640-09A	18091640-10A
18091640-11A	18091640-12A	18091640-13A
18091640-14A	18091640-15A	18091640-16A
18091640-17A	18091640-18A	18091640-19A
18091640-20A	18091640-21A	18091640-22A
18091640-23A	18091640-24A	18091640-25A
18091640-26A	18091640-27A	

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

Revision: 1

Client: Ramboll Environ US Corporation
Work Order: 18091640
Project: 1690009988

QC BATCH REPORT

Batch ID: **125317** Instrument ID **GC14** Method: **SW8082**

MBLK Sample ID: **MBLK-125317-125317** Units: **µg/wipe** Analysis Date: **9/28/2018 08:40 AM**

Client ID: Run ID: **GC14_180927A** SeqNo: **5288014** Prep Date: **9/27/2018** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	ND	0.10								
Aroclor 1221	ND	0.10								
Aroclor 1232	ND	0.10								
Aroclor 1242	ND	0.10								
Aroclor 1248	ND	0.10								
Aroclor 1254	ND	0.10								
Aroclor 1260	ND	0.10								
Aroclor 1262	ND	0.10								
Aroclor 1268	ND	0.10								
PCBs, Total	ND	0.10								
Surr: Decachlorobiphenyl	*0.127*	0	*0.1*	0	*127*	*50-150*	0			
Surr: Tetrachloro-m-xylene	*0.1053*	0	*0.1*	0	*105*	*50-150*	0			

LCS Sample ID: **LCS-125317-125317** Units: **µg/wipe** Analysis Date: **9/28/2018 08:54 AM**

Client ID: Run ID: **GC14_180927A** SeqNo: **5288017** Prep Date: **9/27/2018** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	1.045	0.10	1	0	105	50-150	0			
Aroclor 1260	1.068	0.10	1	0	107	50-150	0			
Surr: Decachlorobiphenyl	*0.1474*	0	*0.1*	0	*147*	*50-150*	0			
Surr: Tetrachloro-m-xylene	*0.1293*	0	*0.1*	0	*129*	*50-150*	0			

LCSD Sample ID: **LCSD-125317-125317** Units: **µg/wipe** Analysis Date: **9/28/2018 09:09 AM**

Client ID: Run ID: **GC14_180927A** SeqNo: **5288020** Prep Date: **9/27/2018** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	1.076	0.10	1	0	108	50-150	1.045	2.88	35	
Aroclor 1260	0.9955	0.10	1	0	99.6	50-150	1.068	7.06	35	
Surr: Decachlorobiphenyl	*0.1418*	0	*0.1*	0	*142*	*50-150*	0.1474	*3.91*	*35*	
Surr: Tetrachloro-m-xylene	*0.1348*	0	*0.1*	0	*135*	*50-150*	0.1293	*4.2*	*35*	

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

Revision: 1

Client: Ramboll Environ US Corporation
Work Order: 18091640
Project: 1690009988

QC BATCH REPORT

Batch ID: **125317** Instrument ID **GC14** Method: **SW8082**

The following samples were analyzed in this batch:

18091640-28A	18091640-29A	18091640-30A
18091640-31A	18091640-32A	18091640-33A
18091640-34A	18091640-35A	18091640-36A
18091640-37A	18091640-38A	18091640-39A
18091640-40A	18091640-41A	18091640-42A
18091640-43A	18091640-44A	18091640-45A
18091640-46A	18091640-47A	

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

Revision: 1

Client: Ramboll Environ US Corporation
Work Order: 18091640
Project: 1690009988

QC BATCH REPORT

Batch ID: **125318** Instrument ID **GC14** Method: **SW8082**

MBLK Sample ID: **MBLK-125318-125318** Units: **µg/wipe** Analysis Date: **9/28/2018 02:45 PM**

Client ID: Run ID: **GC14_180927A** SeqNo: **5289213** Prep Date: **9/27/2018** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	ND	0.10								
Aroclor 1221	ND	0.10								
Aroclor 1232	ND	0.10								
Aroclor 1242	ND	0.10								
Aroclor 1248	ND	0.10								
Aroclor 1254	ND	0.10								
Aroclor 1260	ND	0.10								
Aroclor 1262	ND	0.10								
Aroclor 1268	ND	0.10								
PCBs, Total	ND	0.10								
Surr: Decachlorobiphenyl	*0.1156*	0	*0.1*	0	*116*	*50-150*	0			
Surr: Tetrachloro-m-xylene	*0.1048*	0	*0.1*	0	*105*	*50-150*	0			

LCS Sample ID: **LCS-125318-125318** Units: **µg/wipe** Analysis Date: **9/28/2018 03:14 PM**

Client ID: Run ID: **GC14_180927A** SeqNo: **5289214** Prep Date: **9/27/2018** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	1.077	0.10	1	0	108	50-150	0			
Aroclor 1260	1.058	0.10	1	0	106	50-150	0			
Surr: Decachlorobiphenyl	*0.1361*	0	*0.1*	0	*136*	*50-150*	0			
Surr: Tetrachloro-m-xylene	*0.1273*	0	*0.1*	0	*127*	*50-150*	0			

LCSD Sample ID: **LCSD-125318-125318** Units: **µg/wipe** Analysis Date: **9/28/2018 03:28 PM**

Client ID: Run ID: **GC14_180927A** SeqNo: **5289215** Prep Date: **9/27/2018** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	1.088	0.10	1	0	109	50-150	1.077	1.06	35	
Aroclor 1260	1.052	0.10	1	0	105	50-150	1.058	0.608	35	
Surr: Decachlorobiphenyl	*0.1359*	0	*0.1*	0	*136*	*50-150*	0.1361	*0.206*	*35*	
Surr: Tetrachloro-m-xylene	*0.1277*	0	*0.1*	0	*128*	*50-150*	0.1273	*0.306*	*35*	

The following samples were analyzed in this batch:

18091640-48A	18091640-49A	18091640-50A
18091640-51A	18091640-52A	18091640-53A

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

Revision: 1

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(Tel) 616.399.6070
(Fax) 616.399.6185

ALS Project Manager:

ALS Work Order #: 1809 1640

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	SMMUSD	A	EPA 8082 for Aroclors
Work Order		Project Number	1690009988	B	N/A
Company Name	Ramboll	Bill To Company	Ramboll	C	N/A
Send Report To	Rebecca Case	Invoice Attn.	Rebecca Case	D	N/A
Address	12200 Ford Road Suite 265	Address	12200 Ford Road Suite 265	E	N/A
				F	N/A
City/State/Zip	Dallas, Texas 75234	City/State/Zip	Dallas, Texas 75234	G	N/A
Phone	469.872.7210	Phone	469.872.7210	H	N/A
Fax		Fax		I	N/A
e-Mail Address	rebeccacase@ramboll.com			J	N/A

No.	Sample Description	Date	Time	cm²	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	092218 - MHS - B100 - R102 - W1	9/22/2018	12:24	100	Surface Dust	8	1	PCBs										
2	092218 - MHS - B100 - R102 - W2	9/22/2018	12:26	100	Surface Dust	8	1	PCBs										
3	092218 - MHS - B100 - R102 - W3	9/22/2018	12:27	100	Surface Dust	8	1	PCBs										
4	092218 - MHS - B100 - R102 - W4	9/22/2018	12:29	100	Surface Dust	8	1	PCBs										
5	092218 - MHS - B100 - R105 - W1	9/22/2018	11:59	100	Surface Dust	8	1	PCBs										
6	092218 - MHS - B100 - R105 - W2	9/22/2018	12:01	100	Surface Dust	8	1	PCBs										
7	092218 - MHS - B100 - R105 - W3	9/22/2018	12:02	100	Surface Dust	8	1	PCBs										
8	092218 - MHS - B100 - R105 - W4	9/22/2018	12:03	100	Surface Dust	8	1	PCBs										
9	092218 - MHS - B200 - R201 - W1	9/22/2018	12:07	100	Surface Dust	8	1	PCBs										
10	092218 - MHS - B200 - R201 - W2	9/22/2018	12:09	100	Surface Dust	8	1	PCBs										

Sampler(s): Please Print & Sign

Shipment Method: FedEx

Required Turnaround Time: (Check Box) ☐ 10 Wk Days ☐ 5 Wk Days ☐ 3 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☑ Other Standard

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Andrew Lambert-Edge	9/24	16:30	FedEx	9/24	1630
FED EX	9/25/18	0930	(Laboratory)		
Logged by (Laboratory): DFS	9/26/18	0830	Checked by (Laboratory):		

Notes: Follow instructions provided by Rebecca Case below.
STANDARD TURN AROUND TIME

ALS Cooler ID	Cooler Temp
SR2	4.0°C

QC Package: (Check Box Below)
☐ Level II: Standard QC ☐ Level III: Raw Data
☐ TRRP LRC ☐ TRRP Level IV
☑ Level IV: SW846 Methods/CLP like
☐ Other:

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS.

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ALS Project Manager: | ALS Work Order #: 18091640

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	SMMUSD	A	EPA 8082 for Aroclors
Work Order		Project Number	1690009988	B	N/A
Company Name	Ramboll	Bill To Company	Ramboll	C	N/A
Send Report To	Rebecca Case	Invoice Attn.	Rebecca Case	D	N/A
Address	12200 Ford Road Suite 265	Address	12200 Ford Road Suite 265	E	N/A
				F	N/A
City/State/Zip	Dallas, Texas 75234	City/State/Zip	Dallas, Texas 75234	G	N/A
Phone	469.872.7210	Phone	469.872.7210	H	N/A
Fax		Fax		I	N/A
e-Mail Address	rebeccacase@ramboll.com			J	N/A

No.	Sample Description	Date	Time	cm²	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
11	092218 - MHS - B200 - R201 - W3	9/22/2018	12:10	100	Surface Dust	8	1	PCBs										
12	092218 - MHS - B200 - R207 - W1	9/22/2018	12:14	100	Surface Dust	8	1	PCBs										
13	092218 - MHS - B200 - R207 - W2	9/22/2018	12:16	100	Surface Dust	8	1	PCBs										
14	092218 - MHS - B200 - R207 - W3	9/22/2018	12:16	100	Surface Dust	8	1	PCBs										
15	092218 - MHS - B200 - R207 - W4	9/22/2018	12:18	100	Surface Dust	8	1	PCBs										
16	092218 - MHS - B300 - R303 - W1	9/22/2018	11:50	100	Surface Dust	8	1	PCBs										
17	092218 - MHS - B300 - R303 - W2	9/22/2018	11:56	100	Surface Dust	8	1	PCBs										
18	092218 - MHS - B300 - R303 - W3	9/22/2018	11:52	100	Surface Dust	8	1	PCBs										
19	092218 - MHS - B300 - R303 - W4	9/22/2018	11:55	100	Surface Dust	8	1	PCBs										
20	092218 - MHS - B500 - R505 - W1	9/22/2018	11:35	100	Surface Dust	8	1	PCBs										

Sampler(s): Please Print & Sign

Shipment Method: FedEx

Required Turnaround Time: (Check Box) ☐ 10 Wk Days ☐ 5 Wk Days ☐ 3 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☑ Other Standard

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
See Pg. 1			FED EX		
FED EX	9/25/18	0930	[illegible]		
Logged by (Laboratory): DFS	9/26/18	0830	Checked by (Laboratory): (1)		

Notes: Follow instructions provided by Rebecca Case below.
STANDARD TURN AROUND TIME

ALS Cooler ID	Cooler Temp
SR2	4.0 c

QC Package: (Check Box Below)
☐ Level II: Standard QC ☐ Level III: Raw Data
☐ TRRP LRC ☐ TRRP Level IV
☑ Level IV: SW846 Methods/CLP like
☐ Other:

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

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ALS Project Manager:

ALS Work Order #: 18091640

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	SMMUSD	A	EPA 8082 for Aroclors
Work Order		Project Number	1690009988	B	N/A
Company Name	Ramboll	Bill To Company	Ramboll	C	N/A
Send Report To	Rebecca Case	Invoice Attn.	Rebecca Case	D	N/A
Address	12200 Ford Road Suite 265	Address	12200 Ford Road Suite 265	E	N/A
				F	N/A
City/State/Zip	Dallas, Texas 75234	City/State/Zip	Dallas, Texas 75234	G	N/A
Phone	469.872.7210	Phone	469.872.7210	H	N/A
Fax		Fax		I	N/A
e-Mail Address	rebeccacase@ramboll.com			J	N/A

No.	Sample Description	Date	Time	cm²	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
21	092218 - MHS - B500 - R505 - W2	9/22/2018	11:38	100	Surface Dust	8	1	PCBs										
22	092218 - MHS - B500 - R505 - W3	9/22/2018	11:39	100	Surface Dust	8	1	PCBs										
23	092218 - MHS - B500 - R506 - W1	9/22/2018	11:23	100	Surface Dust	8	1	PCBs										
24	092218 - MHS - B500 - R506 - W2	9/22/2018	11:24	100	Surface Dust	8	1	PCBs										
25	092218 - MHS - B500 - R506 - W3	9/22/2018	11:25	100	Surface Dust	8	1	PCBs										
26	092318 - MHS - BH - RKIT - W1	9/23/2018	15:31	100	Surface Dust	8	1	PCBs										
27	092318 - MHS - BH - RKIT - W2	9/23/2018	15:32	100	Surface Dust	8	1	PCBs										
28	092318 - MHS - BH - RKIT - W3	9/23/2018	15:33	100	Surface Dust	8	1	PCBs										
29	092318 - MHS - BH - RKIT - W4	9/23/2018	15:34	100	Surface Dust	8	1	PCBs										
30	092318 - MHS - BH - RAUD - W1	9/23/2018	15:44	100	Surface Dust	8	1	PCBs										

Sampler(s): Please Print & Sign

Shipment Method: FedEx

Required Turnaround Time: (Check Box) ☐ 10 Wk Days ☐ 5 Wk Days ☐ 3 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☑ Other Standard

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
See Pg. 1			FED EX		
FED EX	9/25/18	0950	[signature]		
Logged by (Laboratory): DFS	9/26/18	0830	Checked by (Laboratory): [signature]		

Notes: Follow instructions provided by Rebecca Case below.
STANDARD TURN AROUND TIME

ALS Cooler ID	Cooler Temp
SR2	4.0 c

QC Package: (Check Box Below)
☐ Level II: Standard QC ☐ Level III: Raw Data
☐ TRRP LRC ☐ TRRP Level IV
☑ Level IV: SW846 Methods/CLP like
☐ Other:

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

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ALS Project Manager: | ALS Work Order #: 1809164A

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	SMMUSD	A	EPA 8082 for Aroclors
Work Order		Project Number	1690009988	B	N/A
Company Name	Ramboll	Bill To Company	Ramboll	C	N/A
Send Report To	Rebecca Case	Invoice Attn.	Rebecca Case	D	N/A
Address	12200 Ford Road Suite 265	Address	12200 Ford Road Suite 265	E	N/A
				F	N/A
City/State/Zip	Dallas, Texas 75234	City/State/Zip	Dallas, Texas 75234	G	N/A
Phone	469.872.7210	Phone	469.872.7210	H	N/A
Fax		Fax		I	N/A
e-Mail Address	rebeccacase@ramboll.com			J	N/A

No.	Sample Description	Date	Time	cm²	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
31	092318 - MHS - BH - RAUD - W2	9/23/2018	15:45	100	Surface Dust	8	1	PCBs										
32	092318 - MHS - BH - RAUD - W3	9/23/2018	15:48	100	Surface Dust	8	1	PCBs										
33	092318 - MHS - B700 - R704 - W1	9/23/2018	16:04	100	Surface Dust	8	1	PCBs										
34	092318 - MHS - B700 - R704 - W2	9/23/2018	16:05	100	Surface Dust	8	1	PCBs										
35	092318 - MHS - B700 - R704 - W3	9/23/2018	16:07	100	Surface Dust	8	1	PCBs										
36	092318 - MHS - B700 - R704 - W4	9/23/2018	16:08	100	Surface Dust	8	1	PCBs										
37	092318 - MHS - B700 - R705 - W1	9/23/2018	16:18	100	Surface Dust	8	1	PCBs										
38	092318 - MHS - B700 - R705 - W2	9/23/2018	16:20	100	Surface Dust	8	1	PCBs										
39	092318 - MHS - B700 - R705 - W3	9/23/2018	16:22	100	Surface Dust	8	1	PCBs										
40	092318 - MHS - B700 - R705 - W4	9/23/2018	16:26	100	Surface Dust	8	1	PCBs										

Sampler(s): Please Print & Sign

Shipment Method: FedEx

Required Turnaround Time: (Check Box) ☐ 10 Wk Days ☐ 5 Wk Days ☐ 3 Wk Days ☐ 2 Wk Days ☑ Other Standard ~~24 hr~~

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
See Pg. 1			FED EX		
Relinquished by: FED EX	Date: 9/25/18	Time: 0930	Received by (Laboratory):	Date:	Time:
Logged by (Laboratory): DFS	Date: 9/26/18	Time: 0830	Checked by (Laboratory):		

Notes: Follow instructions provided by Rebecca Case below.
STANDARD TURN AROUND TIME

ALS Cooler ID	Cooler Temp	QC Package: (Check Box Below)	
SR2	4.0°C	☐ Level II: Standard QC	☐ Level III: Raw Data
		☐ TRRP LRC	☐ TRRP Level IV
		☑ Level IV: SW846 Methods/CLP like	
		☐ Other:	

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

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ALS Project Manager: | ALS Work Order #: 1809164A

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	SMMUSD	A	EPA 8082 for Aroclors
Work Order		Project Number	1690009988	B	N/A
Company Name	Ramboll	Bill To Company	Ramboll	C	N/A
Send Report To	Rebecca Case	Invoice Attn.	Rebecca Case	D	N/A
Address	12200 Ford Road Suite 265	Address	12200 Ford Road Suite 265	E	N/A
				F	N/A
City/State/Zip	Dallas, Texas 75234	City/State/Zip	Dallas, Texas 75234	G	N/A
Phone	469.872.7210	Phone	469.872.7210	H	N/A
Fax		Fax		I	N/A
e-Mail Address	rebeccacase@ramboll.com			J	N/A

No.	Sample Description	Date	Time	cm²	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
41	092318 - MHS - B700 - RGYM - W1	9/23/2018	16:54	100	Surface Dust	8	1	PCBs										
42	092318 - MHS - B700 - RGYM - W2	9/23/2018	16:48	100	Surface Dust	8	1	PCBs										
43	092318 - MHS - B700 - RGYM - W3	9/23/2018	16:50	100	Surface Dust	8	1	PCBs										
44	092318 - MHS - B700 - RGYM - W4	9/23/2018	16:52	100	Surface Dust	8	1	PCBs										
45	092218 - MHS - B500 - R505 - PEW1	9/22/2018	14:45	100	Surface Dust	8	1	PCBs										
46	092218 - MHS - B500 - R505 - PEW2	9/22/2018	14:47	100	Surface Dust	8	1	PCBs										
47	092218 - MHS - B500 - R506 - PEW1	9/22/2018	11:27	100	Surface Dust	8	1	PCBs										
48	092218 - MHS - B500 - R506 - PEW2	9/22/2018	11:29	100	Surface Dust	8	1	PCBs										
49	092318 - MHS - B700 - R704 - PEW1	9/23/2018	16:10	100	Surface Dust	8	1	PCBs										
50	092318 - MHS - B700 - R704 - PEW2	9/23/2018	16:15	100	Surface Dust	8	1	PCBs										

Sampler(s): Please Print & Sign

Shipment Method: FedEx

Required Turnaround Time: (Check Box) ☑ Other Standard ☐ 10 Wk Days ☐ 5 Wk Days ☐ 3 Wk Days ☐ 2 Wk Days ☐ 24 Hour

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
See Pg. 1			FED EX		
Relinquished by: FED EX	Date: 9/25/18	Time: 0930	Received by (Laboratory):	Date:	Time:
Logged by (Laboratory): DFS	Date: 9/26/18	Time: 0830	Checked by (Laboratory):		

Notes: Follow instructions provided by Rebecca Case below.
STANDARD TURN AROUND TIME

ALS Cooler ID	Cooler Temp
902	4.0

QC Package: (Check Box Below)
☐ Level II: Standard QC ☐ Level III: Raw Data
☐ TRRP LRC ☐ TRRP Level IV
☑ Level IV: SW846 Methods/CLP like
☐ Other:

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

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ALS Project Manager: | ALS Work Order #: 1809164 0

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	SMMUSD	A	EPA 8082 for Aroclors
Work Order		Project Number	1690009988	B	N/A
Company Name	Ramboll	Bill To Company	Ramboll	C	N/A
Send Report To	Rebecca Case	Invoice Attn.	Rebecca Case	D	N/A
Address	12200 Ford Road Suite 265	Address	12200 Ford Road Suite 265	E	N/A
				F	N/A
City/State/Zip	Dallas, Texas 75234	City/State/Zip	Dallas, Texas 75234	G	N/A
Phone	469.872.7210	Phone	469.872.7210	H	N/A
Fax		Fax		I	N/A
e-Mail Address	rebeccacase@ramboll.com			J	N/A

No.	Sample Description	Date	Time	cm²	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
51	092318 - MHS - B700 - R704 - PEW3	9/23/2018	16:17	100	Surface Dust	8	1	PCBs										
52	092318 - MHS - B700 - R705 - PEW1	9/23/2018	16:28	100	Surface Dust	8	1	PCBs										
53	092318 - MHS - B700 - R705 - PEW2	9/23/2018	16:30	100	Surface Dust	8	1	PCBs										
54																		
55																		
56																		
57																		
58																		
59																		
60																		

Sampler(s): Please Print & Sign

Shipment Method: FedEx

Required Turnaround Time: (Check Box) ☐ 10 Wk Days ☐ 5 Wk Days ☐ 3 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☑ Other Standard

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
See Pg. 1			FED EX		
FED EX	9/25/18	0930	[signature]		
Logged by (Laboratory): DFS	9/26/18	0830	Checked by (Laboratory): [signature]		

Notes: Follow instructions provided by Rebecca Case below.
STANDARD TURN AROUND TIME

ALS Cooler ID	Cooler Temp
SR2	4.0°C

QC Package: (Check Box Below)
☐ Level II: Standard QC ☐ Level III: Raw Data
☐ TRRP LRC ☐ TRRP Level IV
☑ Level IV: SW846 Methods/CLP like
☐ Other:

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS.

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Sample Receipt Checklist

Client Name: **ENVIRONINT - CA** Date/Time Received: **25-Sep-18 09:30**

Work Order: **18091640** Received by: **DS**

Checklist completed by Diane Shaw (eSignature) 26-Sep-18 (Date) Reviewed by: Chad Whelton (eSignature) 27-Sep-18 (Date)

Matrices: Wipe
Carrier name: FedEx

	Yes	No	Not Present
Shipping container/cooler in good condition?	☑	☐	☐
Custody seals intact on shipping container/cooler?	☐	☐	☑
Custody seals intact on sample bottles?	☐	☐	☑
Chain of custody present?	☑	☐	
Chain of custody signed when relinquished and received?	☑	☐	
Chain of custody agrees with sample labels?	☑	☐	
Samples in proper container/bottle?	☑	☐	
Sample containers intact?	☑	☐	
Sufficient sample volume for indicated test?	☑	☐	
All samples received within holding time?	☑	☐	
Container/Temp Blank temperature in compliance?	☑	☐	
Sample(s) received on ice?	☑	☐	

Temperature(s)/Thermometer(s): 4.0/4.0 c SR2

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: 9/26/2018 9:26:02 AM

	Yes	No		
Water - VOA vials have zero headspace?	☐	☐	No VOA vials submitted	☑
Water - pH acceptable upon receipt?	☐	☐	N/A	☑
pH adjusted?	☐	☐	N/A	☑

pH adjusted by: -

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

Revision: 1

ATTACHMENT C
DATA VALIDATION REPORT

Attachment C:

Data Validation Report for Analytical Data from Air and Surface Wipe Sampling Collected for Malibu High School and Juan Cabrillo Elementary School During Fall 2018

Ramboll US Corporation (Ramboll) has prepared this data validation report to assess the validity and usability of laboratory analytical data generated from air and surface wipe samples collected on September 21, 22, and 23, 2018, at Malibu High School (MHS) and Juan Cabrillo Elementary School (JCES). The results for the following samples were evaluated as part of this review:

Field Sample ID	Sample Type	Lab Sample ID	Matrix
092118-JCES-BA-R100L-A6	FS	1827058001	Air
092118-JCES-BB-R3-A7	FS	1827058002	Air
092118-JCES-BB-R3-A8	FD	1827058003	Air
092118-JCES-BC-R9-A9	FS	1827058004	Air
092118-MHS-BH-RKIT-A1	FS	1827061001	Air
092118-MHS-BH-RAUD-A2	FS	1827061002	Air
092118-MHS-B700-R704-A3	FS	1827061003	Air
092118-MHS-B700-R705-A4	FS	1827061004	Air
092118-MHS-B700-RGYM-A5	FS	1827061005	Air
092118-AOD	FS	1827061006	Air
092118-AFB	FB	1827061007	Air
092218-MHS-B100-R102-A1	FS	1827061008	Air
092218-MHS-B100-R105-A2	FS	1827061009	Air
092218-MHS-B200-R201-A3	FS	1827061010	Air
092218-MHS-B300-R303-A5	FS	1827061012	Air
092218-MHS-B300-R303-A6	FD	1827061013	Air
092218-MHS-B500-R505-A7	FS	1827061014	Air
092218-MHS-B500-R506-A8	FS	1827061015	Air
092218-AOD	FS	1827061016	Air
092218-WFB-HEX	FB	18091636-01	Wipe
092318-WFB-HEX	FB	18091636-02	Wipe

Field Sample ID	Sample Type	Lab Sample ID	Matrix
092218-JCES-BA-R100L-W1	FS	18091636-03	Wipe
092218-JCES-BA-R100L-W2	FS	18091636-04	Wipe
092218-JCES-BA-R100L-W3	FS	18091636-05	Wipe
092218-JCES-BB-R3-W1	FS	18091636-06	Wipe
092218-JCES-BB-R3-W2	FR	18091636-07	Wipe
092218-JCES-BB-R3-W3	FS	18091636-08	Wipe
092218-JCES-BB-R3-W4	FS	18091636-09	Wipe
092218-JCES-BC-R9-W1	FS	18091636-10	Wipe
092218-JCES-BC-R9-W2	FS	18091636-11	Wipe
092218-JCES-BC-R9-W3	FS	18091636-12	Wipe
092218-JCES-BC-R9-W4	FD	18091636-13	Wipe
092218-MHS-B100-R102-W1	FS	18091640-01	Wipe
092218-MHS-B100-R102-W2	FS	18091640-02	Wipe
092218-MHS-B100-R102-W3	FS	18091640-03	Wipe
092218-MHS-B100-R102-W4	FD	18091640-04	Wipe
092218-MHS-B100-R105-W1	FS	18091640-05	Wipe
092218-MHS-B100-R105-W2	FS	18091640-06	Wipe
092218-MHS-B100-R105-W3	FS	18091640-07	Wipe
092218-MHS-B100-R105-W4	FR	18091640-08	Wipe
092218-MHS-B200-R201-W1	FS	18091640-09	Wipe
092218-MHS-B200-R201-W2	FS	18091640-10	Wipe
092218-MHS-B200-R201-W3	FS	18091640-11	Wipe
092218-MHS-B200-R207-W1	FS	18091640-12	Wipe
092218-MHS-B200-R207-W2	FS	18091640-13	Wipe
092218-MHS-B200-R207-W3	FS	18091640-14	Wipe
092218-MHS-B200-R207-W4	FR	18091640-15	Wipe
092218-MHS-B300-R303-W1	FS	18091640-16	Wipe

Field Sample ID	Sample Type	Lab Sample ID	Matrix
092318-MHS-B300-R303-W2	FS	18091640-17	Wipe
092218-MHS-B300-R303-W3	FS	18091640-18	Wipe
092218-MHS-B300-R303-W4	FR	18091640-19	Wipe
092218-MHS-B500-R505-W1	FS	18091640-20	Wipe
092218-MHS-B500-R505-W2	FS	18091640-21	Wipe
092218-MHS-B500-R505-W3	FS	18091640-22	Wipe
092218-MHS-B500-R506-W1	FS	18091640-23	Wipe
092218-MHS-B500-R506-W2	FS	18091640-24	Wipe
092218-MHS-B500-R506-W3	FS	18091640-25	Wipe
092318-MHS-BH-RKIT-W1	FS	18091640-26	Wipe
092318-MHS-BH-RKIT-W2	FS	18091640-27	Wipe
092318-MHS-BH-RKIT-W3	FS	18091640-28	Wipe
092318-MHS-BH-RKIT-W4	FD	18091640-29	Wipe
092318-MHS-BH-RAUD-W1	FS	18091640-30	Wipe
092318-MHS-BH-RAUD-W2	FS	18091640-31	Wipe
092318-MHS-BH-RAUD-W3	FS	18091640-32	Wipe
092318-MHS-B700-R704-W1	FS	18091640-33	Wipe
092318-MHS-B700-R704-W2	FS	18091640-34	Wipe
092318-MHS-B700-R704-W3	FS	18091640-35	Wipe
092318-MHS-B700-R704-W4	FD	18091640-36	Wipe
092318-MHS-B700-R705-W1	FS	18091640-37	Wipe
092318-MHS-B700-R705-W2	FS	18091640-38	Wipe
092318-MHS-B700-R705-W3	FS	18091640-39	Wipe
092318-MHS-B700-R705-W4	FR	18091640-40	Wipe
092318-MHS-B700-RGYM-W1	FS	18091640-41	Wipe
092318-MHS-B700-RGYM-W2	FS	18091640-42	Wipe
092318-MHS-B700-RGYM-W3	FS	18091640-43	Wipe

Field Sample ID	Sample Type	Lab Sample ID	Matrix
092318-MHS-B700-RGYM-W4	FD	18091640-44	Wipe
092318-MHS-B500-R505-PEW1	FS	18091640-45	Wipe
092318-MHS-B500-R505-PEW2	FD	18091640-46	Wipe
092218-MHS-B500-R506-PEW1	FS	18091640-47	Wipe
092218-MHS-B500-R506-PEW2	FS	18091640-48	Wipe
092318-MHS-B700-R704-PEW1	FS	18091640-49	Wipe
092318-MHS-B700-R704-PEW2	FS	18091640-50	Wipe
092318-MHS-B700-R704-PEW3	FS	18091640-51	Wipe
092318-MHS-B700-R705-PEW1	FS	18091640-52	Wipe
092318-MHS-B700-R705-PEW2	FR	18091640-53	Wipe

Notes:
FB = Field Blank
FD = Field Duplicate
FR = Field Replicate
FS = Field Sample

Air samples were analyzed for polychlorinated biphenyls (PCBs) by United States Environmental Protection Agency (USEPA) Method TO-10A. Surface wipe samples were analyzed for PCBs by USEPA Method SW8082.

ALS Environmental (ALS) located in Salt Lake City, Utah performed the analyses for the air samples. Data results were reported in data packages 1827058 and 1827061. The analysis for the surface wipe samples was performed at the ALS laboratory located in Holland, Michigan. Data results were reported in data packages 18091636 and 18091640.

The data were evaluated for general conformance with project objectives specified in the *Site-Specific PCB-Related Building Materials Management, Characterization and Remediation Plan for the Library and Building E Rooms 1, 5, and 8 at Malibu High School* (ENVIRON 2014). Ramboll's validation was based on procedures published in the *National Functional Guidelines for Organic Data Review* (USEPA 2017). The guidelines provide the criteria to review laboratory and field quality control information and apply the appropriate data qualifiers to the laboratory data. The quality control (QC) information reviewed by Ramboll included chain-of-custody (COC) forms, holding times, reporting limits, blanks, laboratory control samples/laboratory control sample duplicates (LCS/LCSD), surrogates, field replicates, and field duplicates.

The *National Functional Guidelines* (USEPA 2017) define the following data validation flags to assign during the data validation process:

Data Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

Non-detect results evaluated as part of this data set were qualified "U". No qualifiers were applied as a result of QC nonconformances and no data were rejected as a result of the data validation process. The following sections summarize the data review performed as part of data validation.

Sample Receipt and Technical Holding Times

The samples were received at the laboratory under chain-of-custody procedure within the required temperature criteria. All samples were analyzed within the method required holding times. Two air samples, 092218-MHS-B200-R207-A4 and 092218-AFB, were collected on September 22, 2018 and submitted to ALS with the samples reported in data package 1827061. The samples were lost during the extraction process and no analytical results were reported for the two samples. The locations were not resampled.

Blanks

Method blanks were reviewed for any detections. No analytes were detected in any of the method blanks associated with the air and wipe samples. Two air field blank samples, 092118-AFB and 092218-AFB, and two surface wipe field blank samples, 092218-WFB-HEX and 092318-WFB-HEX, were collected as part of this data set. 092218-AFB was compromised during the laboratory extraction process. PCBs were not detected in any of the remaining field blanks. The compromised field blank sample does not affect the evaluation of data quality because no PCBs were detected in any of the associated field samples.

LCS/LCSD

LCS and LCSD (when analyzed) summaries were reviewed for each preparation batch. All LCS and LCSD recoveries were within the laboratory control limits, with the following exceptions. The recoveries for Aroclor-1260 were above the laboratory control limit of 104.5% in the LCS/LCSDs associated with the air samples. In addition, the recovery for Aroclor-1242 was above the control limit in the LCSD for air samples collected on September 21, 2018 and reported in data package 1827058. The associated results were non-detect; therefore, the data are not affected by a high bias. No data were qualified.

Field Duplicates and Replicates

Two air field duplicates were collected with this data set. Sample 092118-JCES-BB-R3-A8 is a field duplicate of 092118-JCES-BB-R3-A7, and 092218-MHS-B300-R303-A6 is a field duplicate of 092218-MHS-B300-R303-A5. PCBs were not detected in any of the primary or field duplicate samples.

Six surface wipe field duplicates and replicates were collected with this data set, as listed in the table below. PCBs were not detected in any of the primary, field duplicate, or field replicate samples.

Primary Sample ID	Field Duplicate/Replicate Sample ID
092218-JCES-BB-R3-W1	092218-JCES-BB-R3-W2
092218-JCES-BC-R9-W3	092218-JCES-BC-R9-W4
092218-MHS-B100-R102-W3	092218-MHS-B100-R102-W4
092218-MHS-B100-R105-W3	092218-MHS-B100-R105-W4
092218-MHS-B200-R207-W3	092218-MHS-B200-R207-W4
092218-MHS-B300-R303-W3	092218-MHS-B300-R303-W4
092318-MHS-BH-RKIT-W3	092318-MHS-BH-RKIT-W4
092318-MHS-B700-R704-W3	092318-MHS-B700-R704-W4
092318-MHS-B700-R705-W3	092318-MHS-B700-R705-W4
092318-MHS-B700-RGYM-W3	092318-MHS-B700-RGYM-W4
092318-MHS-B500-R505-PEW1	092318-MHS-B500-R505-PEW2
092318-MHS-B700-R705-PEW1	092318-MHS-B700-R705-PEW2

Surrogates

Surrogates were evaluated for all samples. All surrogate recoveries were within the laboratory control limits.

Reporting Limits

Results were reported to the laboratory reporting limits (RLs). Samples were not diluted for analysis. Concentrations were not reported below the laboratory RL.

Summary

Based on Ramboll's evaluation, the analytical data included in this data set are usable. Non-detect results are qualified "U" to indicate that the analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

REFERENCES

ENVIRON. 2014. *Site-Specific PCB-Related Building Materials Management, Characterization and Remediation Plan for the Library and Building E Rooms 1, 5, and 8 at Malibu High School*. July 3. Available online: http://www.smmusd.org/PublicNotices/PCBRemediationPlan070314.pdf.

United States Environmental Protection Agency (USEPA). 2017. *National Functional Guidelines for Organic Superfund Data Review*. OSWER 9355.0-136. EPA-540-R-2017-002. January.