FULCRUM environmental consulting

March 23, 2017

Monroe School District
Attn: Devlin Piplic, Director of Facilities
200 East Fremont
Monroe, Washington 98272

RE: Air and Wipe Sampling in Select Areas – March 2017 – Update
Sky Valley Educational Center, 351 Short Columbia Street, Monroe, Washington

Dear Devlin:

On Monday, March 6, 2017 and Monday, March 13, 2017, Fulcrum Environmental Consulting, Inc. (Fulcrum) completed a sampling event at Sky Valley Educational Center for the presence of polychlorinated biphenyls (PCBs) in air and on non-porous surfaces. The purpose of the sampling event was to evaluate seven areas that were found during the previous event to have detectable levels of PCBs. In addition, Fulcrum collected samples from four other locations, each an electrical room, which had not been previously evaluated. See Attachment A for site photographs.

Background

In summer 2016, PCB-containing caulk and light fixtures were remediated at Sky Valley Educational Center in the Administration, Annex, Gymnasium, Classroom Pod/Library, and the Technology buildings. Following remediation samples were collected and analyzed to evaluate post remediation site conditions. In December 2016 the 1st quarter PCB sampling event was completed, which included collection of 50 air samples and 10 wipe samples. Seven samples and one field blank were identified with PCBs, including samples collected from Room F in the Annex Building; the Gathering Place – East, Small Gym, Girls Locker room, Girls Locker room Storage, and Electrical room of the Small Gym, and the CTE room of the Gym Building. All of the samples with detectable PCBs occurred sequentially and at the end of the sampling process. As a results, the consultant concluded, following a review of the results and sampling media handling practices, that the sampling media was contaminated during the handling process and recommended that retesting be completed.

Scope of Work

Fulcrum's scope of work consisted of the collection of air samples and wipe samples from select locations at Sky Valley Educational Center for the presence of PCBs and consisted of the following tasks:

- Collected 20 air samples for PCBs in air, 17 samples during the initial event and three samples during the second event, with each sample consisting of approximately 2,000 liters of air collected during a period of about 6.8 hours.
- Submitted collected air samples and two blank samples, during two events, for analysis by U.S. Environmental Protection Agency (EPA) Method TO-10a for PCB content.

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- Collected eight wipe samples from non-porous surfaces with laboratory provided hexane wipe media, each sample representing a 100 square centimeter (cm^2) area.
- Submitted collected wipe samples and two blanks for analysis by EPA Method 8082 for PCB content.
- Prepared this single summary letter report with the associated laboratory results and revised sample figures.

Fulcrum's services were provided to Monroe School District in evaluation of the Sky Valley Educational Center located at 351 Short Columbia Street in Monroe, Washington. The sampling and analysis plan including the selection of sample locations was directed by the District. Fulcrum did not evaluate or review past investigation testing within the building beyond developing a basic level of knowledge. Fulcrum's assessment did not include evaluation of non-readily accessible areas such as sealed wall cavities, beneath wall or floor coverings, etc. except those specifically identified in this report. Results are specific to the time and day of inspection and may not reflect conditions at other times.

Sampling Event

Fulcrum's sampling event was completed in conformance with the Quality Assurance Project Plan (QAPP) prepared for the project.[1] See Attachment B for project figures.

All samples collected during the project were submitted to ALS Global in Cincinnati, Ohio (ALS-Cincinnati) for analysis. ALS-Cincinnati has been the project laboratory for much of the prior work within the building. ALS-Cincinnati also provided all sampling media used during the project. All samples submitted to ALS-Cincinnati were submitted under chain-of-custody and delivered by commercial carrier in an insulated cooler with reusable freezer packets. See Attachment C for ALS-Cincinnati laboratory results and chain-of-custody for the initial event and Attachment D for the second event. .

As specified in the QAPP, Fulcrum additionally collected and shipped under chain-of-custody by commercial carrier in an insulated cooler with reusable freezer packets, seven collocated air samples to the U.S. Environmental Protection Agency's Manchester Environmental Laboratory in Port Orchard, Washington for analysis. See Attachment E for a chain-of-custody for the samples delivered to Manchester Environmental Laboratory. Results for sample delivered to Manchester Environmental Laboratory are for comparative purposes and have not been received as of the date of this letter.

Air Sampling

Air sampling was completed as described in EPA Method TO-10a.[2] Sampling utilized a polyurethane foam (PUF) sample media in a borosilicate glass cassette. Air is pulled through the PUF filter by an air pump which is connected by clear Tygon-type tubing.

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[1] Fulcrum, *Quality Assurance Project Plan, Polychlorinated Biphenyl Sampling in Air and Non-Porous Surfaces for Monroe School District*, Sky Valley Educational Center, Revision 2.0, Issued March 6, 2017.
[2] U.S. Environmental Protection Agency, *Determination of Pesticides and Polychlorinated Biphenyls in Ambient Air Using Low Volume Polyurethane Foam (PUF) Sampling Followed by Gas Chromatographic/Multi-Detector Detection (GC/MD)*, January 1999.

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Flow calibration was measured both before and after sample collection by a TSI 4046 primary calibrator. The primary calibrator was factory calibrated in January 2017. Samples were collected at a rate of 5 liters per minute (LPM) and ranged from 2,050 to 2,100 liters (L) of total sampling volume.

Wipe Sampling

All wipe samples were collected with laboratory provided hexane saturated cotton gauze, stored in 2-ounce borosilicate glass jars. Wipe samples were preferentially collected from either staining on a transformer(s) present within the area or from the area of the underlying flooring with the most dust accumulation. See Attachment A for site photographs.

Each wipe was collected from the substrate surface within a disposable paper template that measured 10 centimeters (cm) by 10 cm, for a total area of 100 square cm (cm^2). Each individual wipe was returned to the sampling jar immediately following sample collection.

Sampling Discrepancies

The following sampling discrepancies occurred during the initial sampling event:

- During collection of sample 030617-07 in the CTE Room, an exterior window was observed to be open. It was unclear how long the window had been opened. As a result, following discovery of the open window, sample collection continued, the sample was returned to ALS-Cincinnati, but analysis was not requested.

- During collection of sample 030617-09 in the CTE Electrical Room the sample glass cassette fell from the sampling tube onto the ground and broke. As a result, the sample was returned to ALS-Cincinnati; however, sampling analysis could not be completed.

- In addition to the broken cassette, the collocated air sampling was stopped in the CTE Electrical Room after it was discovered that the door to the CTE Electrical Room had been left open. As a result, air exchange between the CTE Room and CTE Electrical Room was not collected under conditions that would be typical of the spaces.

The following sampling discrepancies occurred during the second sampling event:

- No discrepancies were identified during the second sampling event.

Laboratory Results

ALS-Cincinnati completed analysis of samples collected during this project. A complete laboratory report for the initial event is included in Attachment C and a laboratory report for the second event is included in Attachment D.

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Table 1: Air Sample Results

Sample	Location	Sample Volume (L)	Result
030617-01	Room F, Annex Building	2,100	< 0.048 ng/m^3
030617-02	Storage in Girls Locker Room	2,100	< 0.048 ng/m^3
030617-03	Girls Locker Room	2,100	< 0.048 ng/m^3
030617-04	Small Gym	2,100	< 0.048 ng/m^3
030617-05	Small Gym Electrical Room	2,100	< 0.048 ng/m^3
030617-06	Gathering Room	2,100	< 0.048 ng/m^3
030617-07	CTE	2,100	HOLD / SAMPLE NOT ANALYZED
030617-08	Large Gym Electrical Room	2,050	< 0.048 ng/m^3
030617-09	CTE Electrical Room	2,100	COLLOCATED SAMPLE DAMAGED / SAMPLE NOT ANALYZED
030617-10	West Pod Mezzanine	2,050	< 0.048 ng/m^3
030617-21	Field Blank	-	< 0.048 ng/m^3
030617-22	Lab Blank	-	< 0.048 ng/m^3
031317-01	CTE	2,100	< 0.048 ng/m^3
031317-02	CTE Electrical Room	2,100	< 0.048 ng/m^3
031317-03	Field Blank	-	< 0.048 ng/m^3
031317-04	Lab Blank	-	< 0.048 ng/m^3
EPA Regulatory Standard			**100 ng/m^3**

Laboratory analysis did not identify any airborne PCBs within the samples collected and analyzed during this event. All method reporting limits were significantly below the EPA regulatory threshold for PCBs in air of 100 nanograms per cubic meter (ng/m^3) of air.

Table 2: Wipe Sample Results

Sample	Location	Component & Substrate	Result
030617-11	Small Gym Electrical Room	Metal Transformer Body Side	< 0.10 µg/sample
030617-12	Small Gym Electrical Room	Metal Transformer Body Top	< 0.10 µg/sample
030617-13	Large Gym Electrical Room	Metal Transformer Body Side	< 0.10 µg/sample
030617-14	Large Gym Electrical Room	Concrete Floor	*Aroclor 1260 at 5.2 µg/100 cm^2*
030617-15	CTE Electrical Room	Metal Transformer Body Side	< 0.10 µg/sample
030617-16	CTE Electrical Room	Concrete Floor	*Aroclor 1260 at 8.5 µg/100 cm^2*
030617-17	West Pod Mezzanine	Wood Floor	< 0.10 µg/sample
030617-18	West Pod Mezzanine	Metal Transformer Body Side	< 0.10 µg/sample
030617-19	Field Blank	-	< 0.10 µg/sample
030617-20	Lab Blank	-	< 0.10 µg/sample
EPA Regulatory Standard			**10 µg/100 cm^2**

Aroclor 1260 were present in samples from the concrete floors in the Large Gym Electrical Room and the CTE Electrical Room. Both wipe samples were reported with total PCB concentrations below the EPA threshold of 10 micrograms (µg) per 100 cm^2.

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Conclusions & Recommendations

Laboratory analysis did not identify any PCB concentration above the method reporting limit in any of the air samples.

Based on the results of this sampling event, Room F in the Annex Building, the Girls Locker Room Storage, Small Gym, Small Gym Electrical Room, Gathering Room, Large Gym Electrical Room, CTE, and CTE Electrical Room; and the West Pod Mezzanine can be returned to typical use.

Laboratory analysis identified low concentrations of Aroclor 1260 on the concrete floors in the Large Gym Electrical Room and the CTE Electrical Room. While remediation is not required based on the PCB concentrations present, Fulcrum recommends that the District consider implementation of best management practices where practicable and feasible and with the overall goal of reducing the presence of detectable PCBs within the building.

As such, Fulcrum recommends that the floor surfaces within each of the electrical rooms be cleaned of free dust by trained District staff or a qualified remediation contractor. Furthermore, given the difficulty of cleaning the porous concrete surface, Fulcrum recommends application of an approved paint/sealer to the concrete floors. Given the potential for unpleasant odors associated with the paint/sealer, Fulcrum recommends that application occur as build use and school schedules permit.

If you have any questions, please contact me at 509.574.0839.

Sincerely,

Ryan K. Mathews, CIH, CHMM
Principal

THE AMERICAN BOARD OF INDUSTRIAL HYGIENE INCORPORATED
CERTIFICATION NUMBER
9916 CP
EXPIRES
12-1-2021
PENNSYLVANIA · 1960
RYAN K. MATHEWS, CIH

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Attachment A

Site Photographs

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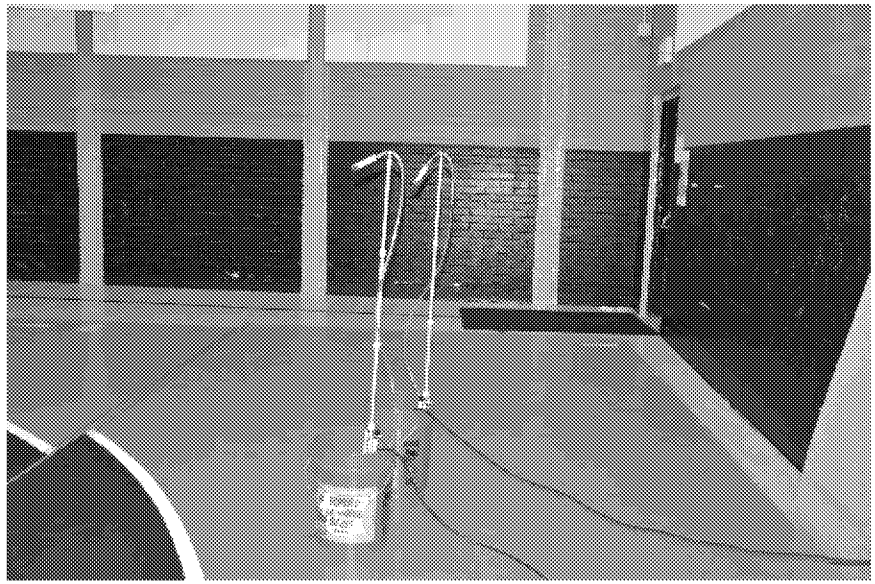
Sky Valley Education Center located at 351 Short Columbia Street in Monroe, Washington

View of the West Pod Mezzanine.

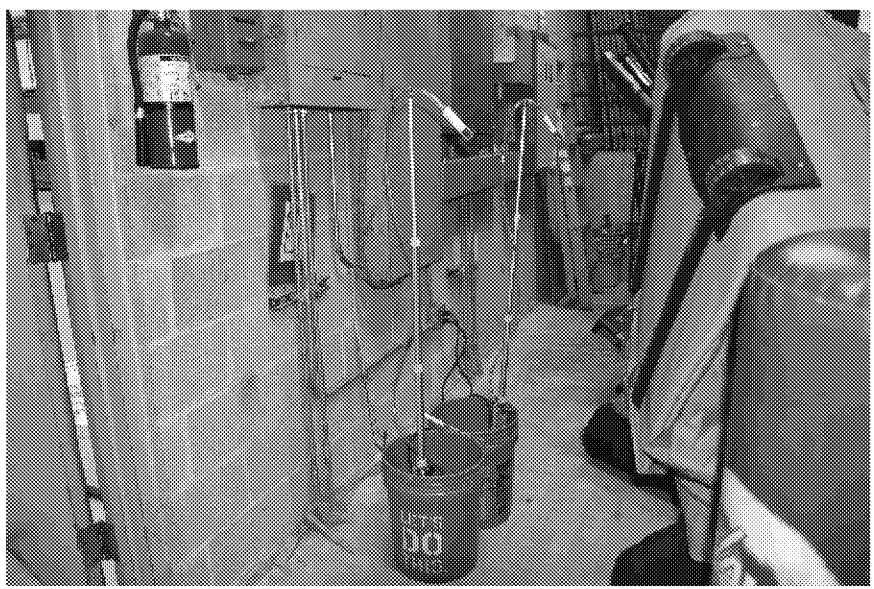
030617-01: Room F, located in the Annex.

030617-02: Girl's Locker Room Storage Room, located in Girl's Locker Room.

030617-03: Girl's Locker Room.



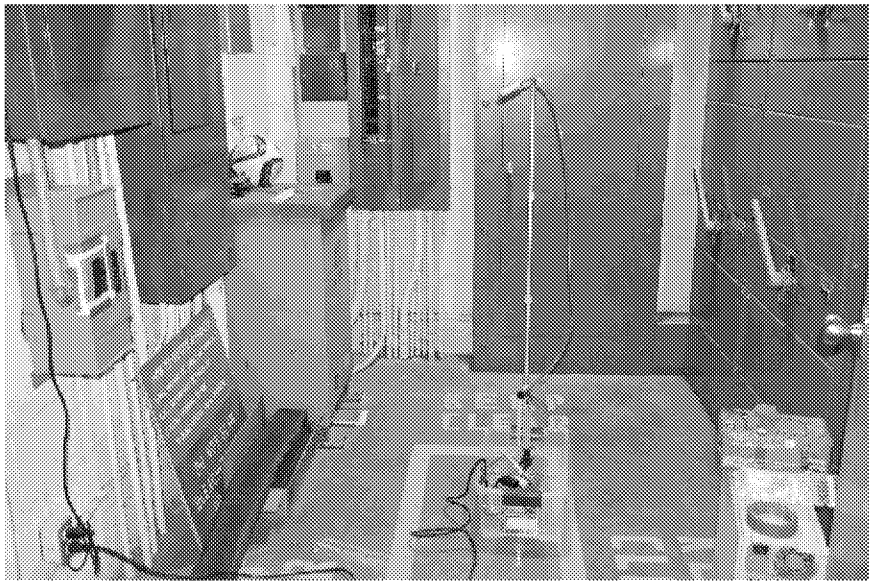
030617-04: Small Gym.



030617-05: Small Gym Electrical Room.

030617-06: Gathering Room.

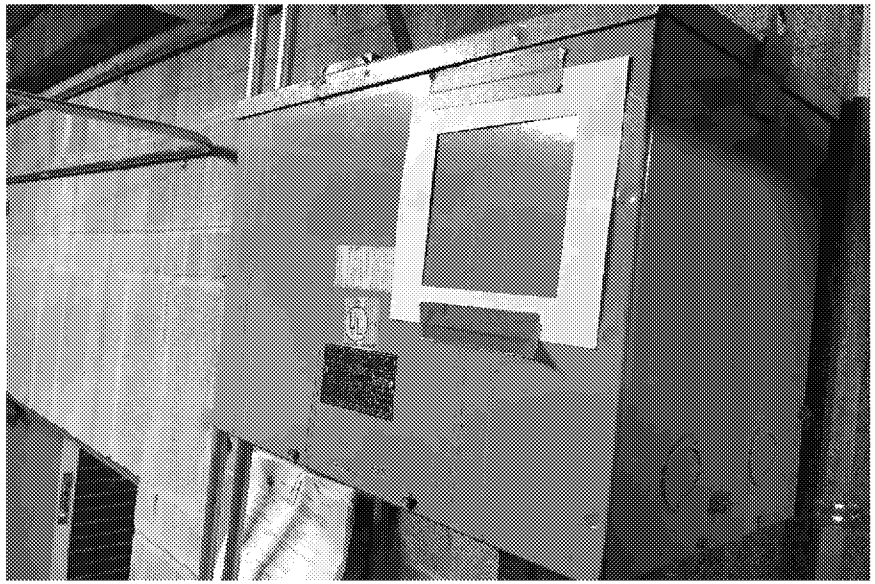
030617-07: CTE Classroom.



030617-08: Large Gym – Electrical Room.

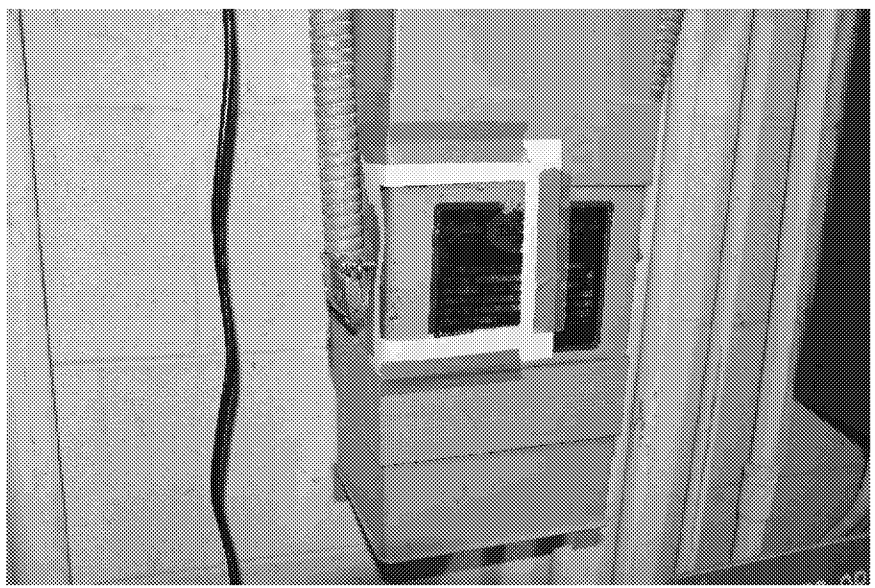
030617-09: CTE Classroom – Electrical Room.

030617-10: West Pod – Mezzanine.

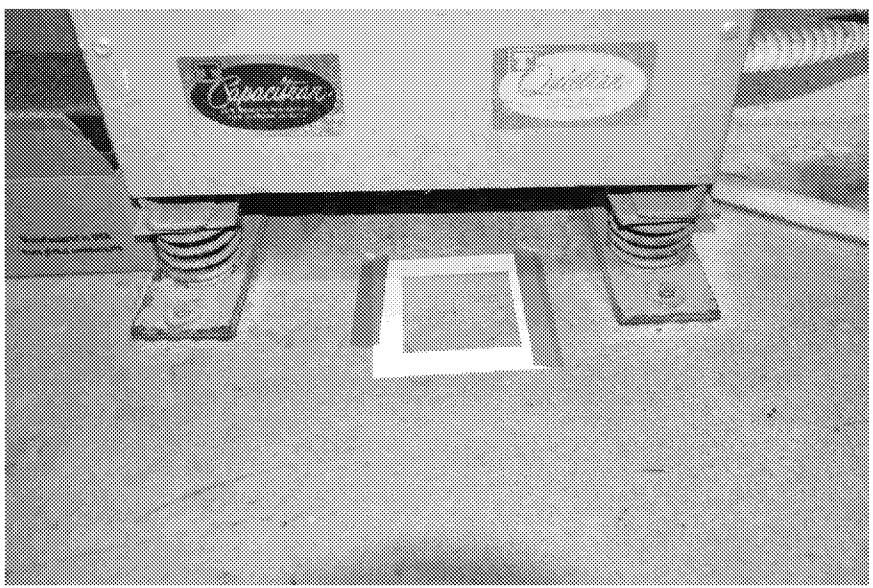


030617-11: Small Gym – Electrical Closet. Sample taken from side of transformer in an area where streaking was observed.

030617-12: Small Gym – Electrical Closet. Sample taken directly below transformer on electrical box.

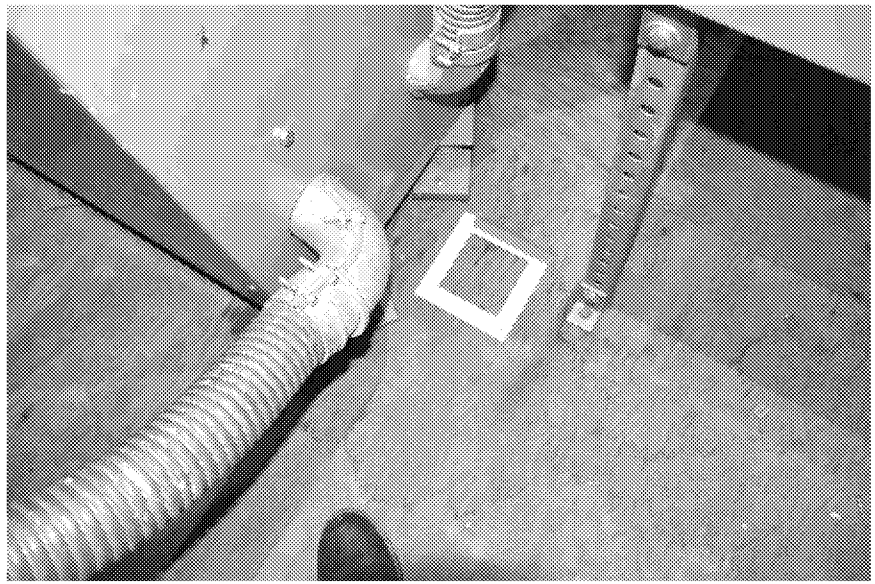


030617-13: Large Gym – Electrical Closet. Sample taken from side of transformer in an area with discoloration.



030617-14: Large Gym – Electrical Closet. Sample taken directly beneath the transformer on the concrete floor. No staining was observed.

030617-15 & 030617-16: CTE Classroom – Electrical Room. Samples collected from the side of the transformer and directly below transformer on concrete floor.

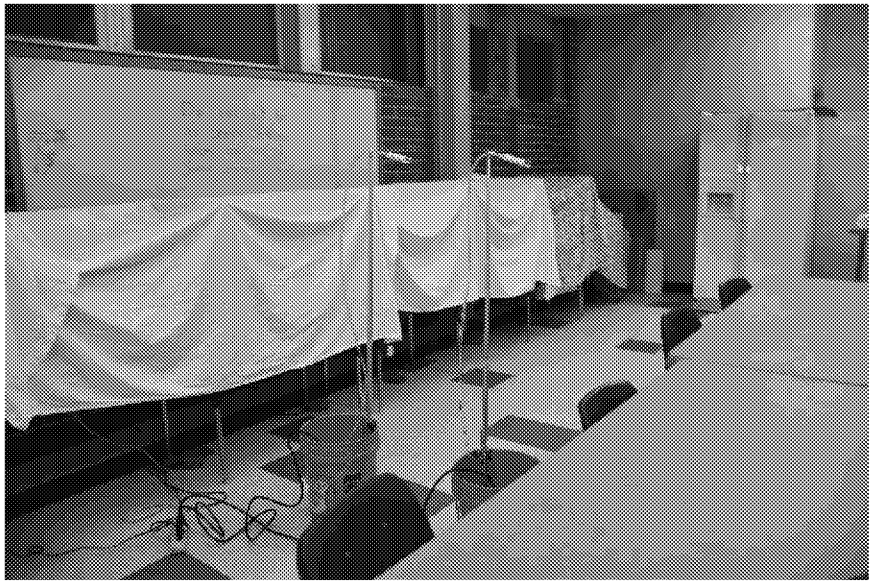


030617-17: West Pod – Mezzanine. Sample collected on the wood flooring directly below the transformer. Slight staining was observed.

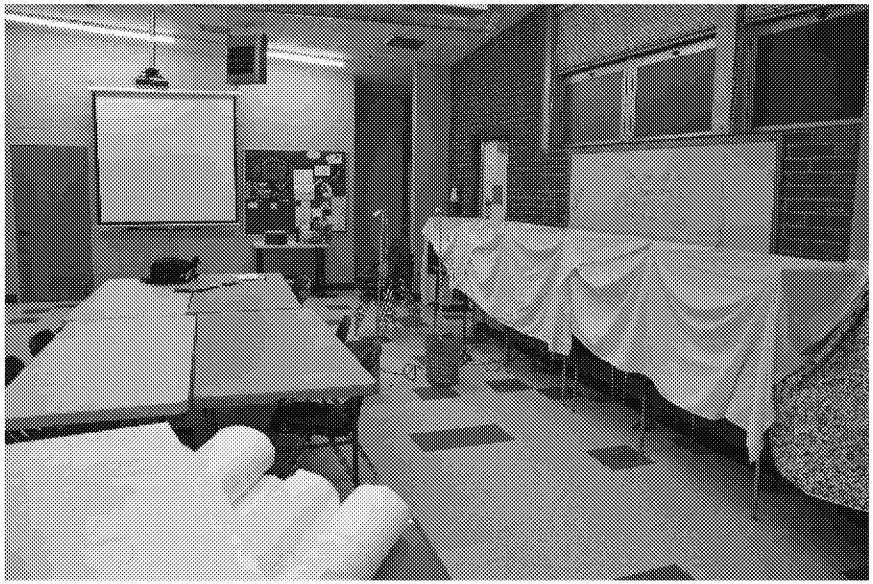
030617-18: West Pod – Mezzanine. Sample taken from side of transformer. No staining or streaking was observed.

View of the Annex portion of the campus; where Room F is located.

General construction on the exterior of the campus buildings.



031317-01: CTE Classroom. All windows and doorways remained closed during the sampling process.



031317-01: CTE Classroom. Duplicates were collected and sent to an additional laboratory for quality assurance purposes.

031317-02: CTE Classroom – Electrical Room.

Attachment B

Sample Figures

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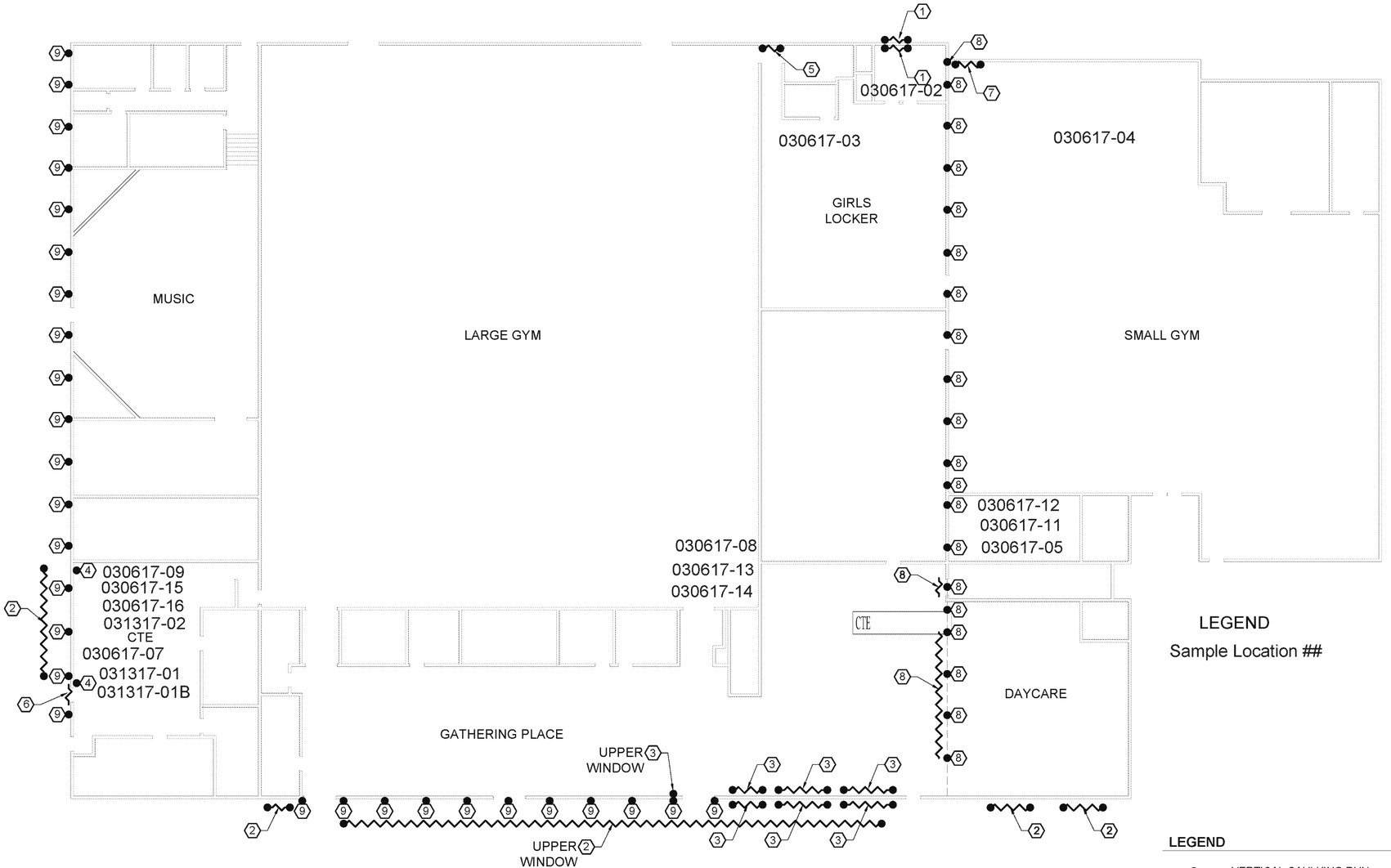

Drawing does not indicate electrical room

GYM BUILDING

NOT TO SCALE

Sample	Location	Air/Wipe	Result
030617-02	Storage in Girls Locker Room	Air	No PCBs Present
030617-03	Girls Locker Room	Air	No PCBs Present
030617-04	Small Gym	Air	No PCBs Present
030617-05	Small Gym Electrical Room	Air	No PCBs Present
030617-06	Gathering Room	Air	No PCBs Present
030617-07	CTE	Air	HOLD / NOT ANALYZED
030617-08	Large Gym Electrical Room	Air	No PCBs Present
030617-09	CTE Electrical Room	Air	SAMPLE DAMAGED / NOT ANALYZED
030617-11	Small Gym Electrical Room	Wipe	No PCBs Present
030617-12	Small Gym Electrical Room	Wipe	No PCBs Present
030617-13	Large Gym Electrical Room	Wipe	No PCBs Present
030617-14	Large Gym Electrical Room	Wipe	Aroclor 1260 at 5.2 ug/100 cm2
030617-15	CTE Electrical Room	Wipe	No PCBs Present
030617-16	CTE Electrical Room	Wipe	Aroclor 1260 at 8.5 ug/100 cm2
031317-01	CTE	Air	No PCBs Present
031317-02	CTE Electrical Room	Air	No PCBs Present

Figure provided by Monroe School District

LEGEND

Sample Location ##

LEGEND

- VERTICAL CAULKING RUN
- HORIZONTAL CAULKING RUNS

GENERAL NOTES

1. ALL ABATEMENT RELATED ACTIVITIES AT THIS PROJECT SITE SHALL COMPLY WITH DIVISION 01 AND 02 AND SPECIFICALLY SECTION 028400 PCB ACTIVITIES. CONTRACTOR TO VERIFY ALL ITEMS SHOWN, LOCATIONS AND QUANTITIES OF MATERIALS TO BE REMOVED, AND DIMENSIONS PRIOR TO REMOVAL. ANY DEVIATIONS FROM THE SPECIFICATION THAT ARE DISCOVERED BY THE CONTRACTOR SHALL BE REPORTED TO THE OWNERS REPRESENTATIVE PRIOR TO REMOVAL. THE DRAWINGS ARE FOR DIAGRAMMATIC PURPOSES ONLY. GENERAL LOCATIONS OF PCB-CONTAINING MATERIALS ARE DEPICTED DIAGRAMMATICALLY ON THE DRAWINGS. THE REMAINING MATERIAL LOCATIONS ARE DESCRIBED TEXTUALLY ON THESE DRAWINGS. QUANTITIES OF HAZARDOUS MATERIALS LISTED ON THIS SHEET ARE CONSIDERED ACCURATE TO WITHIN +/- 10%. THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND PERMITS FOR THE REMOVAL AND DISPOSAL OF THE QUANTITIES OF HAZARDOUS MATERIALS PROVIDED PLUS AN ADDITIONAL 10%. THE CONTRACTOR WILL BE COMPENSATED FOR QUANTITIES WHICH ARE GREATER THAN 110% OF THE TOTAL AND THE OWNER WILL DEDUCT FROM THE CONTRACT SUM QUANTITIES THAT ARE 90% OR LESS OF THE TOTAL.
2. REMOVAL OF HAZARDOUS MATERIALS MAY COMPROMISE THE SECURITY OF THE SITE. THE CONTRACTOR IS FULLY RESPONSIBLE FOR MAINTAINING SITE SECURITY AND PUBLIC SAFETY THROUGHOUT THE PROJECT. SEE SPECIFICATIONS REGARDING SECURITY AND PUBLIC SAFETY.
3. ABATEMENT CONTRACTOR TO COORDINATE ALL ACTIVITIES WITH ALL OTHER ONSITE WORK INCLUDING, BUT NOT LIMITED TO: SCHEDULE, ACCESS, STAGING, ETC. ABATEMENT CONTRACTOR TO REPORT LOCATIONS AND QUANTITIES OF ALL HAZARDOUS MATERIALS TO BE REMOVED, TO THE OWNERS REPRESENTATIVE PRIOR TO ABATEMENT/DEMOLITION.
4. THE CONTRACTOR SHALL REMOVE ALL ACCESSIBLE CAULKING IN ALL AREAS WITHOUT PERFORMING DEMOLITION OF BUILDING COMPONENTS.

KEY NOTES

1. REMOVE APPROX. 20 LF OF PCB-CONTAINING CAULKING LOCATED ON THE EXTERIOR AND INTERIOR METAL WINDOW FRAME ON THE GIRLS LOCKER ROOM NORTH PERIMETER WINDOW AS SHOWN.
2. REMOVE APPROX. 300 LF OF PCB-CONTAINING CAULKING ON THE EXTERIOR METAL WINDOW FRAMES ON ALL WINDOWS AT THE SOUTH AND WEST ELEVATIONS OF THE LARGE GYM BUILDING AS SHOWN. THIS INCLUDES CAULKING THAT EXISTS AROUND EACH WINDOW INFILL PANEL METAL FRAME TRANSITION ON THE WEST ELEVATION. THESE INFILL PANELS ARE CEMENT ASBESTOS BOARD.
3. REMOVE APPROX. 40 LF OF PCB-CONTAINING CAULKING LOCATED ON INTERIOR SIDE OF THE THREE LOWER WINDOWS AND THE UPPER WINDOW BANK EAST VERTICAL IN THE GATHERING PLACE AS SHOWN.
4. REMOVE APPROX. 10 LF OF PCB-CONTAINING OF CAULK ON INTERIOR WINDOW FRAME VERTICALS IN THE CTE ROOM AS SHOWN.
5. REMOVE APPROX. 18 LF OF PCB-CONTAINING OF CAULK ON INTERIOR SIDE OF NORTH EXTERIOR GIRLS LOCKER ENTRY DOOR AS SHOWN.
6. REMOVE APPROX. 18 LF OF PCB-CONTAINING OF CAULK ON EXTERIOR SIDE OF NORTH CTE ENTRY DOOR AS SHOWN.
7. REMOVE APPROX. 18 LF OF PCB-CONTAINING OF CAULK ON THE INTERIOR SIDE OF THE NORTHWEST PERIMETER ENTRY DOOR FRAME OF THE SMALL GYM AS SHOWN.
8. REMOVE APPROX. 500 LF OF PCB-CONTAINING CAULKING LOCATED ON ALL VERTICAL STRUCTURAL METAL COLUMN TRANSITIONS THROUGHOUT THE EAST ELEVATION OF THE LARGE GYM AS SHOWN. THIS INCLUDES THE REMOVAL OF ALL CAULKING ON THE INTERIOR DEMISING WALL METAL BEAMS (VERTICAL AND HORIZONTAL) BETWEEN THE DAYCARE AND THE GATHERING PLACE/CAFETERIA AS SHOWN. THE CAULKING IS HEAVILY PAINTED THROUGHOUT THE WORK SCOPE AREA.
9. REMOVE APPROX. 780 LF OF PCB-CONTAINING CAULKING LOCATED ON ALL EXTERIOR VERTICAL STRUCTURAL METAL COLUMN TRANSITIONS THROUGHOUT THE LOWER WEST AND SOUTH ELEVATIONS OF THE LARGE GYM BUILDING AS SHOWN.

NOT TO SCALE

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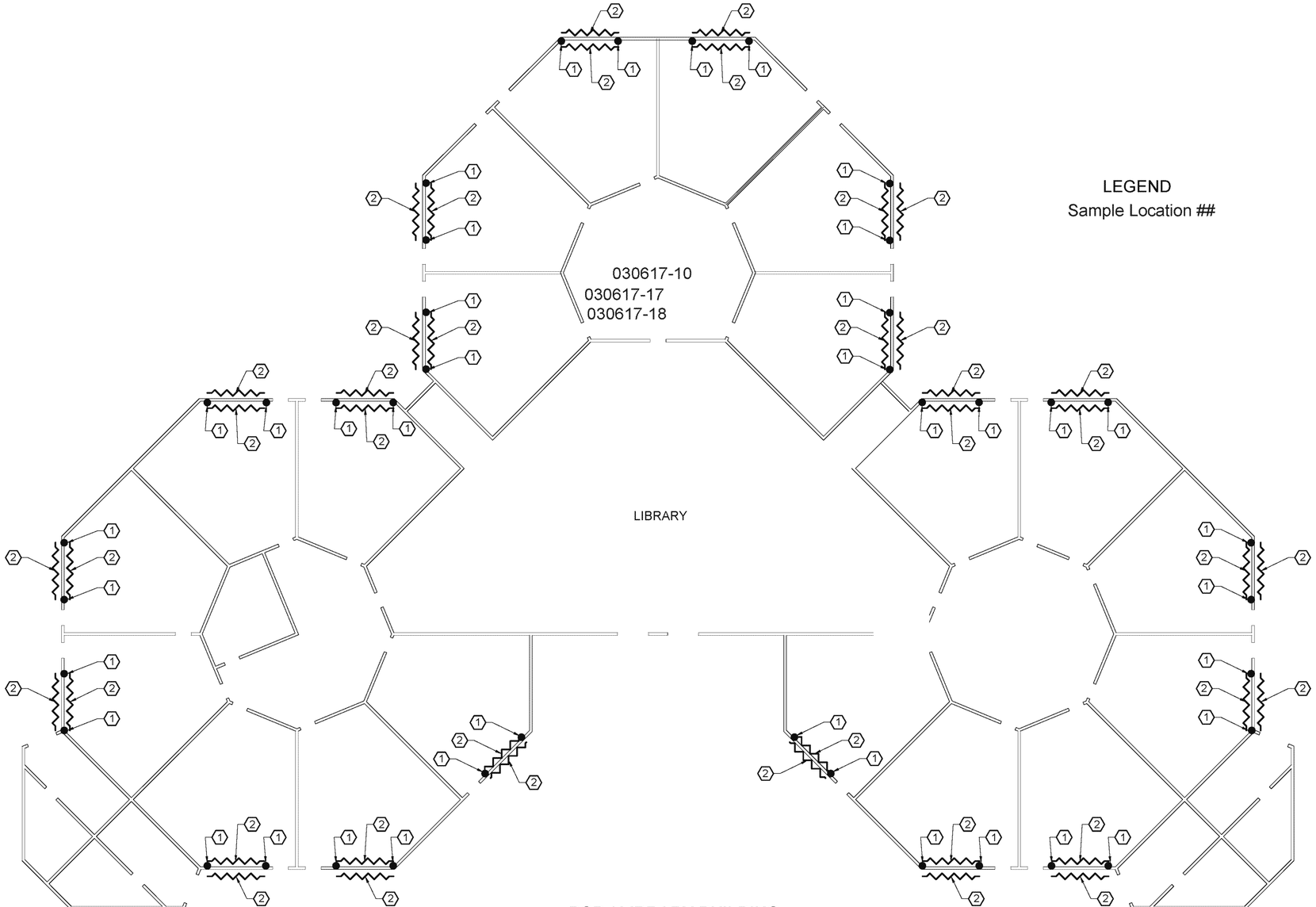
MONROE SCHOOL DISTRICT

GYM BUILDING CAULKING ABATEMENT PLAN

SKY VALLEY EDUCATIONAL CENTER

SKY VALLEY EDUCATIONAL CENTER
351 SHORT COLUMBIA STREET
MONROE, WASHINGTON

PROJECT:	41373.000
DRAWN:	JHD
CHECKED:	GM
DATE:	JUNE 2016
DWG NO.	HM1
SHEET NO.	1 OF 5



POD / LIBRARY BUILDING

NOT TO SCALE

Sample	Location	Air/Wipe	Result
030617-10	West Pod Mezzanine	Air	No PCBs Present
030617-17	West Pod Mezzanine	Wipe	No PCBs Present
030617-18	West Pod Mezzanine	Wipe	No PCBs Present

GENERAL NOTES

1. ALL ABATEMENT RELATED ACTIVITIES AT THIS PROJECT SITE SHALL COMPLY WITH DIVISION 01 AND 02 AND SPECIFICALLY SECTION 028400 PCB ACTIVITIES. CONTRACTOR TO VERIFY ALL ITEMS SHOWN, LOCATIONS AND QUANTITIES OF MATERIALS TO BE REMOVED, AND DIMENSIONS PRIOR TO REMOVAL. ANY DEVIATIONS FROM THE SPECIFICATION THAT ARE DISCOVERED BY THE CONTRACTOR SHALL BE REPORTED TO THE OWNERS REPRESENTATIVE PRIOR TO REMOVAL. THE DRAWINGS ARE FOR DIAGRAMMATIC PURPOSES ONLY. GENERAL LOCATIONS OF PCB-CONTAINING MATERIALS ARE DEPICTED DIAGRAMMATICALLY ON THE DRAWINGS. THE REMAINING MATERIAL LOCATIONS ARE DESCRIBED TEXTUALLY ON THESE DRAWINGS. QUANTITIES OF HAZARDOUS MATERIALS LISTED ON THIS SHEET ARE CONSIDERED ACCURATE TO WITHIN +/- 10%. THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND PERMITS FOR THE REMOVAL AND DISPOSAL OF THE QUANTITIES OF HAZARDOUS MATERIALS PROVIDED PLUS AN ADDITIONAL 10%. THE CONTRACTOR WILL BE COMPENSATED FOR QUANTITIES WHICH ARE GREATER THAN 110% OF THE TOTAL AND THE OWNER WILL DEDUCT FROM THE CONTRACT SUM QUANTITIES THAT ARE 90% OR LESS OF THE TOTAL.

2. REMOVAL OF HAZARDOUS MATERIALS MAY COMPROMISE THE SECURITY OF THE SITE. THE CONTRACTOR IS FULLY RESPONSIBLE FOR MAINTAINING SITE SECURITY AND PUBLIC SAFETY THROUGHOUT THE PROJECT. SEE SPECIFICATIONS REGARDING SECURITY AND PUBLIC SAFETY.

3. ABATEMENT CONTRACTOR TO COORDINATE ALL ACTIVITIES WITH ALL OTHER ONSITE WORK INCLUDING, BUT NOT LIMITED TO: SCHEDULE, ACCESS, STAGING, ETC. ABATEMENT CONTRACTOR TO REPORT LOCATIONS AND QUANTITIES OF ALL HAZARDOUS MATERIALS TO BE REMOVED, TO THE OWNERS REPRESENTATIVE PRIOR TO ABATEMENT/DEMOLITION.

4. THE CONTRACTOR SHALL REMOVE ALL ACCESSIBLE CAULKING IN ALL AREAS WITHOUT PERFORMING DEMOLITION OF BUILDING COMPONENTS.

KEY NOTES

1. REMOVE APPROX. 500 LF OF PCB-CONTAINING CAULKING LOCATED ON INTERIOR PERIMETER METAL WINDOW FRAME TO BRICK TRANSITION VERTICALS IN EACH OF CLASSROOMS 1-20 AS SHOWN.

2. REMOVE APPROX. 1,400 LF OF PCB-CONTAINING CAULKING ON THE INTERIOR AND EXTERIOR SIDES OF THE CEMENT ASBESTOS BOARD (CAB) WINDOW INFILL PANELS. THE CAULKING FILLS THE GAP BETWEEN THE METAL WINDOW FRAME AND CAB TRANSITION IN EACH OF CLASSROOMS 1-20 AS SHOWN.

LEGEND

- ● VERTICAL CAULKING RUN
- HORIZONTAL CAULKING RUN
- ## SAMPLE LOCATION

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NOT TO SCALE

Figure provided by Monroe School District

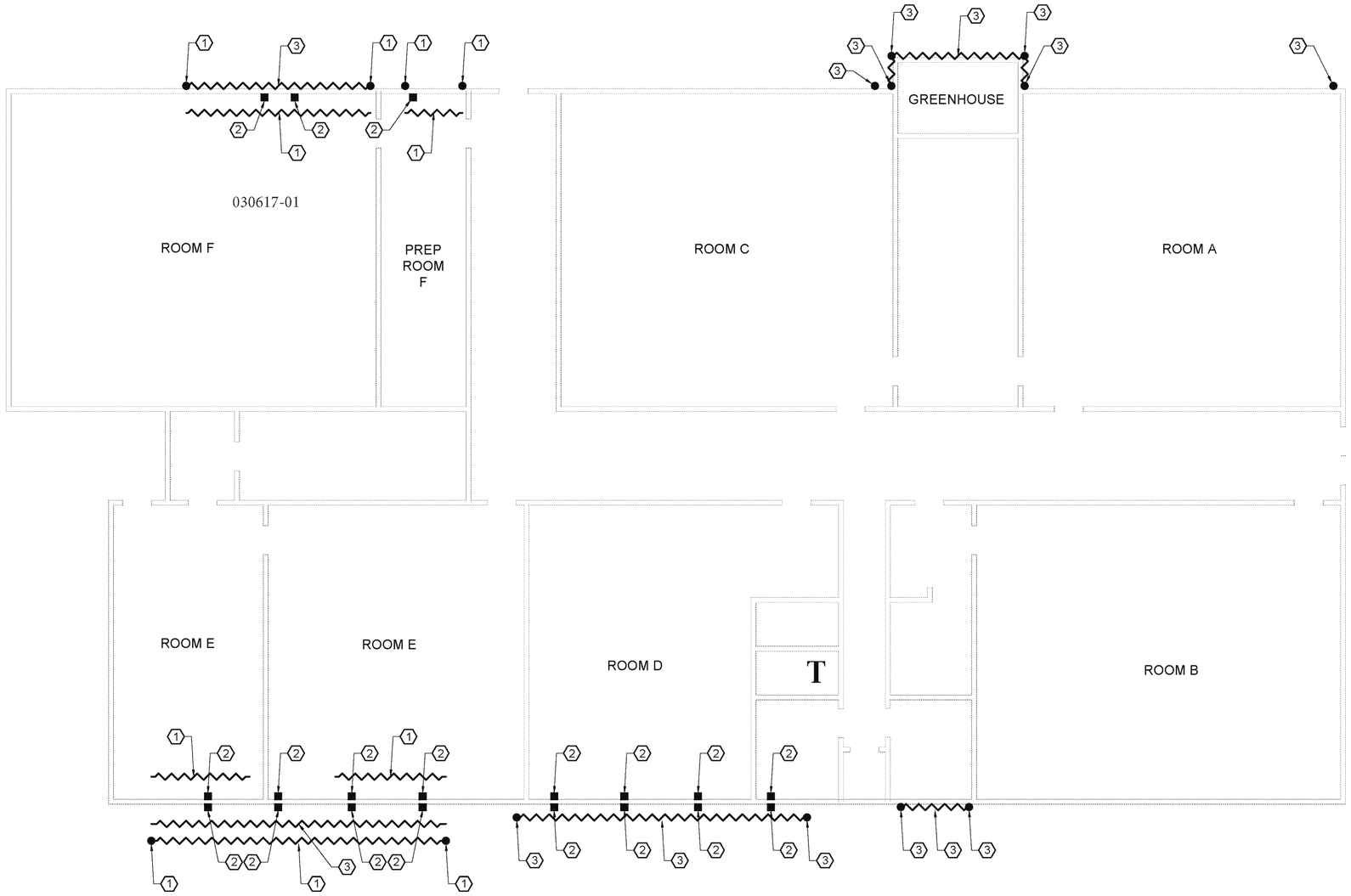
MONROE SCHOOL DISTRICT

POD/LIBRBAY BUILDING CAULKING ABATEMENT PLAN

SKY VALLEY EDUCATIONAL CENTER

SKY VALLEY EDUCATIONAL CENTER
351 SHORT COLUMBIA STREET
MONROE, WASHINGTON

PROJECT:	41373.000
DRAWN:	JHD
CHECKED:	GM
DATE:	JUNE 2016
DWG NO.	HM2
SHEET NO.	2 OF 5



ANNEX BUILDING

NOT TO SCALE

LEGEND

Sample Location ##

Sample	Location	Air/Wipe	Result
030617-01	Room F, Annex Building	Air	No PCBs Present

GENERAL NOTES

1. ALL ABATEMENT RELATED ACTIVITIES AT THIS PROJECT SITE SHALL COMPLY WITH DIVISION 01 AND 02 AND SPECIFICALLY SECTION 028400 PCB ACTIVITIES. CONTRACTOR TO VERIFY ALL ITEMS SHOWN, LOCATIONS AND QUANTITIES OF MATERIALS TO BE REMOVED, AND DIMENSIONS PRIOR TO REMOVAL. ANY DEVIATIONS FROM THE SPECIFICATION THAT ARE DISCOVERED BY THE CONTRACTOR SHALL BE REPORTED TO THE OWNERS REPRESENTATIVE PRIOR TO REMOVAL. THE DRAWINGS ARE FOR DIAGRAMMATIC PURPOSES ONLY. GENERAL LOCATIONS OF PCB-CONTAINING MATERIALS ARE DEPICTED DIAGRAMMATICALLY ON THE DRAWINGS. THE REMAINING MATERIAL LOCATIONS ARE DESCRIBED TEXTUALLY ON THESE DRAWINGS. QUANTITIES OF HAZARDOUS MATERIALS LISTED ON THIS SHEET ARE CONSIDERED ACCURATE TO WITHIN +/- 10%. THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND PERMITS FOR THE REMOVAL AND DISPOSAL OF THE QUANTITIES OF HAZARDOUS MATERIALS PROVIDED PLUS AN ADDITIONAL 10%. THE CONTRACTOR WILL BE COMPENSATED FOR QUANTITIES WHICH ARE GREATER THAN 110% OF THE TOTAL AND THE OWNER WILL DEDUCT FROM THE CONTRACT SUM QUANTITIES THAT ARE 90% OR LESS OF THE TOTAL.
2. REMOVAL OF HAZARDOUS MATERIALS MAY COMPROMISE THE SECURITY OF THE SITE. THE CONTRACTOR IS FULLY RESPONSIBLE FOR MAINTAINING SITE SECURITY AND PUBLIC SAFETY THROUGHOUT THE PROJECT. SEE SPECIFICATIONS REGARDING SECURITY AND PUBLIC SAFETY.
3. ABATEMENT CONTRACTOR TO COORDINATE ALL ACTIVITIES WITH ALL OTHER ONSITE WORK INCLUDING, BUT NOT LIMITED TO: SCHEDULE, ACCESS, STAGING, ETC. ABATEMENT CONTRACTOR TO REPORT LOCATIONS AND QUANTITIES OF ALL HAZARDOUS MATERIALS TO BE REMOVED, TO THE OWNERS REPRESENTATIVE PRIOR TO ABATEMENT/DEMOLITION.
4. THE CONTRACTOR SHALL REMOVE ALL ACCESSIBLE CAULKING IN ALL AREAS WITHOUT PERFORMING DEMOLITION OF BUILDING COMPONENTS.

KEY NOTES

1. REMOVE APPROX. 200 LF OF PCB-CONTAINING CAULKING LOCATED ON INTERIOR PERIMETER METAL WINDOW FRAME TRANSITIONS. THIS INCLUDES REMOVAL OF CAULKING WHICH EXISTS ON EXTERIOR METAL WINDOW FRAME TRANSITIONS ON THE NORTH AND SOUTH BUILDING ELEVATION WINDOWS AS SHOWN.
2. REMOVE APPROX. 80 LF OF PCB-CONTAINING CAULKING ON WOOD CEILING/SOFFIT BEAMS AT PERIMETER WALL/CEILING TRANSITIONS IN ROOMS E, F AND PREP ROOM F AS SHOWN.
3. REMOVE APPROX. 300 LF OF PCB AND ASBESTOS-CONTAINING TAN CAULKING LOCATED ON VARIOUS VERTICAL AND HORIZONTAL METAL WINDOW FRAME TRANSITIONS ON THE NORTH AND SOUTH ELEVATIONS OF THE ANNEX BUILDING AS SHOWN.

LEGEND

- ● VERTICAL CAULKING RUN
- ■ CAULKING ON BEAM
- 〰 HORIZONTAL CAULKING RUN

MONROE SCHOOL DISTRICT

ANNEX BUILDING CAULKING ABATEMENT PLAN

SKY VALLEY EDUCATIONAL CENTER

SKY VALLEY EDUCATIONAL CENTER
351 SHORT COLUMBIA STREET
MONROE, WASHINGTON

PROJECT:	41373.000
DRAWN:	JHD
CHECKED:	GM
DATE:	JUNE 2016
DWG NO.	HM4
SHEET NO.	4 OF 5

NOT TO SCALE

FULCRUM environmental consulting

FULCRUM
environmental consulting

Attachment C

ALS Global Cincinnati Laboratory Report
Initial Sampling Event – March 6, 2017

P. 509.574.0839 F. 509.575.8453
406 North 2nd Street
Yakima, Washington 98901
efulcrum.net

09-Mar-2017

Ryan Mathews
Fulcrum Environmental Consulting
406 N. 2nd Street
Yakima, WA 98901

Tel: (509) 574-0839
Fax:

Re: Sky Valley Edu Center; PN 17-2070 Work Order: **1703194**

Dear Ryan,

ALS Environmental received 22 samples on 07-Mar-2017 for the analyses presented in the following report.

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

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

The total number of pages in this report is 17.

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

Sincerely,

Rob Nieman

Electronically approved by: Rob Nieman

Rob Nieman
Project Manager

ALS Environmental

Date: 09-Mar-17

Client: Fulcrum Environmental Consulting
Project: Sky Valley Edu Center; PN 17-2070
Work Order: **1703194**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1703194-01	030617-01	Air		3/6/2017	3/7/2017	☐
1703194-02	030617-02	Air		3/6/2017	3/7/2017	☐
1703194-03	030617-03	Air		3/6/2017	3/7/2017	☐
1703194-04	030617-04	Air		3/6/2017	3/7/2017	☐
1703194-05	030617-05	Air		3/6/2017	3/7/2017	☐
1703194-06	030617-06	Air		3/6/2017	3/7/2017	☐
1703194-07	030617-07	Air		3/6/2017	3/7/2017	☑
1703194-08	030617-08	Air		3/6/2017	3/7/2017	☐
1703194-09	030617-09	Air		3/6/2017	3/7/2017	☑
1703194-10	030617-10	Air		3/6/2017	3/7/2017	☐
1703194-11	030617-11	Wipe		3/6/2017	3/7/2017	☐
1703194-12	030617-12	Wipe		3/6/2017	3/7/2017	☐
1703194-13	030617-13	Wipe		3/6/2017	3/7/2017	☐
1703194-14	030617-14	Wipe		3/6/2017	3/7/2017	☐
1703194-15	030617-15	Wipe		3/6/2017	3/7/2017	☐
1703194-16	030617-16	Wipe		3/6/2017	3/7/2017	☐
1703194-17	030617-17	Wipe		3/6/2017	3/7/2017	☐
1703194-18	030617-18	Wipe		3/6/2017	3/7/2017	☐
1703194-19	030617-19	Wipe		3/6/2017	3/7/2017	☐
1703194-20	030617-20	Wipe		3/6/2017	3/7/2017	☐
1703194-21	030617-21	Air		3/6/2017	3/7/2017	☐
1703194-22	030617-22	Air		3/6/2017	3/7/2017	☐

ED_004522_00089807-00019

ALS Environmental

Date: *09-Mar-17*

Client: Fulcrum Environmental Consulting
Project: Sky Valley Edu Center; PN 17-2070

Work Order: 1703194

Analytical Results

Lab ID: 1703194-01A
Collection Date: 3/6/2017
Client Sample ID: 030617-01
Matrix: AIR

Analyses

PCBS BY EPA TO-10 Method: **ETO10A** Air Volume (L): **2100** Analyst: **JEA**

Date Analyzed: 3/8/2017 17:24

	µg/sample	Reporting Limit µg/sample	mg/m3
Aroclor 1016	ND	0.10	<0.000048
Aroclor 1221	ND	0.10	<0.000048
Aroclor 1232	ND	0.10	<0.000048
Aroclor 1242	ND	0.10	<0.000048
Aroclor 1248	ND	0.10	<0.000048
Aroclor 1254	ND	0.10	<0.000048
Aroclor 1260	ND	0.10	<0.000048
Aroclor 1262	ND	0.10	<0.000048
Aroclor 1268	ND	0.10	<0.000048

Lab ID: 1703194-02A
Collection Date: 3/6/2017
Client Sample ID: 030617-02
Matrix: AIR

Analyses

PCBS BY EPA TO-10 Method: **ETO10A** Air Volume (L): **2100** Analyst: **JEA**

Date Analyzed: 3/8/2017 17:38

	µg/sample	Reporting Limit µg/sample	mg/m3
Aroclor 1016	ND	0.10	<0.000048
Aroclor 1221	ND	0.10	<0.000048
Aroclor 1232	ND	0.10	<0.000048
Aroclor 1242	ND	0.10	<0.000048
Aroclor 1248	ND	0.10	<0.000048
Aroclor 1254	ND	0.10	<0.000048
Aroclor 1260	ND	0.10	<0.000048
Aroclor 1262	ND	0.10	<0.000048
Aroclor 1268	ND	0.10	<0.000048

Note:

ALS Environmental

Date: *09-Mar-17*

Client: Fulcrum Environmental Consulting
Project: Sky Valley Edu Center; PN 17-2070

Work Order: 1703194

Analytical Results

Lab ID: 1703194-03A
Client Sample ID: 030617-03

Collection Date: 3/6/2017
Matrix: AIR

Analyses

PCBS BY EPA TO-10 Method: **ETO10A** Air Volume (L): **2100** Analyst: **JEA**

Date Analyzed: 3/8/2017 17:52

	µg/sample	Reporting Limit µg/sample	mg/m3
Aroclor 1016	ND	0.10	<0.000048
Aroclor 1221	ND	0.10	<0.000048
Aroclor 1232	ND	0.10	<0.000048
Aroclor 1242	ND	0.10	<0.000048
Aroclor 1248	ND	0.10	<0.000048
Aroclor 1254	ND	0.10	<0.000048
Aroclor 1260	ND	0.10	<0.000048
Aroclor 1262	ND	0.10	<0.000048
Aroclor 1268	ND	0.10	<0.000048

Lab ID: 1703194-04A
Client Sample ID: 030617-04

Collection Date: 3/6/2017
Matrix: AIR

Analyses

PCBS BY EPA TO-10 Method: **ETO10A** Air Volume (L): **2100** Analyst: **JEA**

Date Analyzed: 3/8/2017 18:06

	µg/sample	Reporting Limit µg/sample	mg/m3
Aroclor 1016	ND	0.10	<0.000048
Aroclor 1221	ND	0.10	<0.000048
Aroclor 1232	ND	0.10	<0.000048
Aroclor 1242	ND	0.10	<0.000048
Aroclor 1248	ND	0.10	<0.000048
Aroclor 1254	ND	0.10	<0.000048
Aroclor 1260	ND	0.10	<0.000048
Aroclor 1262	ND	0.10	<0.000048
Aroclor 1268	ND	0.10	<0.000048

Note:

ALS Environmental

Date: *09-Mar-17*

Client: Fulcrum Environmental Consulting
Project: Sky Valley Edu Center; PN 17-2070

Work Order: 1703194

Analytical Results

Lab ID: 1703194-05A
Client Sample ID: 030617-05

Collection Date: 3/6/2017
Matrix: AIR

Analyses

PCBS BY EPA TO-10 Method: **ETO10A** Air Volume (L): **2100** Analyst: **JEA**

Date Analyzed: 3/8/2017 18:21

	µg/sample	Reporting Limit µg/sample	mg/m3
Aroclor 1016	ND	0.10	<0.000048
Aroclor 1221	ND	0.10	<0.000048
Aroclor 1232	ND	0.10	<0.000048
Aroclor 1242	ND	0.10	<0.000048
Aroclor 1248	ND	0.10	<0.000048
Aroclor 1254	ND	0.10	<0.000048
Aroclor 1260	ND	0.10	<0.000048
Aroclor 1262	ND	0.10	<0.000048
Aroclor 1268	ND	0.10	<0.000048

Lab ID: 1703194-06A
Client Sample ID: 030617-06

Collection Date: 3/6/2017
Matrix: AIR

Analyses

PCBS BY EPA TO-10 Method: **ETO10A** Air Volume (L): **2100** Analyst: **JEA**

Date Analyzed: 3/8/2017 18:35

	µg/sample	Reporting Limit µg/sample	mg/m3
Aroclor 1016	ND	0.10	<0.000048
Aroclor 1221	ND	0.10	<0.000048
Aroclor 1232	ND	0.10	<0.000048
Aroclor 1242	ND	0.10	<0.000048
Aroclor 1248	ND	0.10	<0.000048
Aroclor 1254	ND	0.10	<0.000048
Aroclor 1260	ND	0.10	<0.000048
Aroclor 1262	ND	0.10	<0.000048
Aroclor 1268	ND	0.10	<0.000048

Note:

ALS Environmental

Date: *09-Mar-17*

Client: Fulcrum Environmental Consulting
Project: Sky Valley Edu Center; PN 17-2070

Work Order: 1703194

Analytical Results

Lab ID: 1703194-08A
Client Sample ID: 030617-08

Collection Date: 3/6/2017
Matrix: AIR

Analyses

PCBS BY EPA TO-10 Method: **ETO10A** Air Volume (L): **2050** Analyst: **JEA**

Date Analyzed: 3/8/2017 19:03

	µg/sample	Reporting Limit µg/sample	mg/m3
Aroclor 1016	ND	0.10	<0.000049
Aroclor 1221	ND	0.10	<0.000049
Aroclor 1232	ND	0.10	<0.000049
Aroclor 1242	ND	0.10	<0.000049
Aroclor 1248	ND	0.10	<0.000049
Aroclor 1254	ND	0.10	<0.000049
Aroclor 1260	ND	0.10	<0.000049
Aroclor 1262	ND	0.10	<0.000049
Aroclor 1268	ND	0.10	<0.000049

Lab ID: 1703194-10A
Client Sample ID: 030617-10

Collection Date: 3/6/2017
Matrix: AIR

Analyses

PCBS BY EPA TO-10 Method: **ETO10A** Air Volume (L): **2050** Analyst: **JEA**

Date Analyzed: 3/8/2017 19:32

	µg/sample	Reporting Limit µg/sample	mg/m3
Aroclor 1016	ND	0.10	<0.000049
Aroclor 1221	ND	0.10	<0.000049
Aroclor 1232	ND	0.10	<0.000049
Aroclor 1242	ND	0.10	<0.000049
Aroclor 1248	ND	0.10	<0.000049
Aroclor 1254	ND	0.10	<0.000049
Aroclor 1260	ND	0.10	<0.000049
Aroclor 1262	ND	0.10	<0.000049
Aroclor 1268	ND	0.10	<0.000049

Note:

ALS Environmental

Date: *09-Mar-17*

Client: Fulcrum Environmental Consulting
Project: Sky Valley Edu Center; PN 17-2070

Work Order: 1703194

Analytical Results

Lab ID: 1703194-21A
Client Sample ID: 030617-21

Collection Date: 3/6/2017
Matrix: AIR

Analyses

PCBS BY EPA TO-10 Method: **ETO10A** Air Volume (L): **0** Analyst: **JEA**

Date Analyzed: 3/8/2017 19:46

	µg/sample	Reporting Limit µg/sample	mg/m3
Aroclor 1016	ND	0.10	NA
Aroclor 1221	ND	0.10	NA
Aroclor 1232	ND	0.10	NA
Aroclor 1242	ND	0.10	NA
Aroclor 1248	ND	0.10	NA
Aroclor 1254	ND	0.10	NA
Aroclor 1260	ND	0.10	NA
Aroclor 1262	ND	0.10	NA
Aroclor 1268	ND	0.10	NA

Lab ID: 1703194-22A
Client Sample ID: 030617-22

Collection Date: 3/6/2017
Matrix: AIR

Analyses

PCBS BY EPA TO-10 Method: **ETO10A** Air Volume (L): **0** Analyst: **JEA**

Date Analyzed: 3/8/2017 20:00

	µg/sample	Reporting Limit µg/sample	mg/m3
Aroclor 1016	ND	0.10	NA
Aroclor 1221	ND	0.10	NA
Aroclor 1232	ND	0.10	NA
Aroclor 1242	ND	0.10	NA
Aroclor 1248	ND	0.10	NA
Aroclor 1254	ND	0.10	NA
Aroclor 1260	ND	0.10	NA
Aroclor 1262	ND	0.10	NA
Aroclor 1268	ND	0.10	NA

Note:

ALS Environmental

Date: *09-Mar-17*

Client: Fulcrum Environmental Consulting
Project: Sky Valley Edu Center; PN 17-2070

Work Order: 1703194

Analytical Results

Lab ID: 1703194-11A
Client Sample ID: 030617-11

Collection Date: 3/6/2017
Matrix: WIPE

Analyses

PCBS WIPE Method: **SW8082** Area **100 cm2** Analyst: **JEA**

Date Analyzed: 3/7/2017 16:29

	µg/sample	Reporting Limit µg/sample	ug/100cm2
Aroclor 1016	ND	1.0	<1.0
Aroclor 1221	ND	1.0	<1.0
Aroclor 1232	ND	1.0	<1.0
Aroclor 1242	ND	1.0	<1.0
Aroclor 1248	ND	1.0	<1.0
Aroclor 1254	ND	1.0	<1.0
Aroclor 1260	ND	1.0	<1.0
Aroclor 1262	ND	1.0	<1.0
Aroclor 1268	ND	1.0	<1.0

Lab ID: 1703194-12A
Client Sample ID: 030617-12

Collection Date: 3/6/2017
Matrix: WIPE

Analyses

PCBS WIPE Method: **SW8082** Area **100 cm2** Analyst: **JEA**

Date Analyzed: 3/7/2017 16:43

	µg/sample	Reporting Limit µg/sample	ug/100cm2
Aroclor 1016	ND	1.0	<1.0
Aroclor 1221	ND	1.0	<1.0
Aroclor 1232	ND	1.0	<1.0
Aroclor 1242	ND	1.0	<1.0
Aroclor 1248	ND	1.0	<1.0
Aroclor 1254	ND	1.0	<1.0
Aroclor 1260	ND	1.0	<1.0
Aroclor 1262	ND	1.0	<1.0
Aroclor 1268	ND	1.0	<1.0

Note:

ALS Environmental

Date: *09-Mar-17*

Client: Fulcrum Environmental Consulting
Project: Sky Valley Edu Center; PN 17-2070

Work Order: 1703194

Analytical Results

Lab ID: 1703194-13A
Client Sample ID: 030617-13

Collection Date: 3/6/2017
Matrix: WIPE

Analyses

PCBS WIPE Method: **SW8082** Area **100 cm2** Analyst: **JEA**

Date Analyzed: 3/7/2017 16:57

	µg/sample	Reporting Limit µg/sample	ug/100cm2
Aroclor 1016	ND	1.0	<1.0
Aroclor 1221	ND	1.0	<1.0
Aroclor 1232	ND	1.0	<1.0
Aroclor 1242	ND	1.0	<1.0
Aroclor 1248	ND	1.0	<1.0
Aroclor 1254	ND	1.0	<1.0
Aroclor 1260	ND	1.0	<1.0
Aroclor 1262	ND	1.0	<1.0
Aroclor 1268	ND	1.0	<1.0

Lab ID: 1703194-14A
Client Sample ID: 030617-14

Collection Date: 3/6/2017
Matrix: WIPE

Analyses

PCBS WIPE Method: **SW8082** Area **100 cm2** Analyst: **JEA**

Date Analyzed: 3/7/2017 17:12

	µg/sample	Reporting Limit µg/sample	ug/100cm2
Aroclor 1016	ND	1.0	<1.0
Aroclor 1221	ND	1.0	<1.0
Aroclor 1232	ND	1.0	<1.0
Aroclor 1242	ND	1.0	<1.0
Aroclor 1248	ND	1.0	<1.0
Aroclor 1254	ND	1.0	<1.0
Aroclor 1260	**5.2**	**1.0**	**5.2**
Aroclor 1262	ND	1.0	<1.0
Aroclor 1268	ND	1.0	<1.0

Note:

ALS Environmental

Date: *09-Mar-17*

Client: Fulcrum Environmental Consulting
Project: Sky Valley Edu Center; PN 17-2070

Work Order: 1703194

Analytical Results

Lab ID: 1703194-15A
Client Sample ID: 030617-15

Collection Date: 3/6/2017
Matrix: WIPE

Analyses

PCBS WIPE Method: **SW8082** Area **100 cm2** Analyst: **JEA**
Date Analyzed: 3/7/2017 17:26

	µg/sample	Reporting Limit µg/sample	ug/100cm2
Aroclor 1016	ND	1.0	<1.0
Aroclor 1221	ND	1.0	<1.0
Aroclor 1232	ND	1.0	<1.0
Aroclor 1242	ND	1.0	<1.0
Aroclor 1248	ND	1.0	<1.0
Aroclor 1254	ND	1.0	<1.0
Aroclor 1260	ND	1.0	<1.0
Aroclor 1262	ND	1.0	<1.0
Aroclor 1268	ND	1.0	<1.0

Lab ID: 1703194-16A
Client Sample ID: 030617-16

Collection Date: 3/6/2017
Matrix: WIPE

Analyses

PCBS WIPE Method: **SW8082** Area **100 cm2** Analyst: **JEA**
Date Analyzed: 3/7/2017 17:40

	µg/sample	Reporting Limit µg/sample	ug/100cm2
Aroclor 1016	ND	1.0	<1.0
Aroclor 1221	ND	1.0	<1.0
Aroclor 1232	ND	1.0	<1.0
Aroclor 1242	ND	1.0	<1.0
Aroclor 1248	ND	1.0	<1.0
Aroclor 1254	ND	1.0	<1.0
Aroclor 1260	**8.5**	**1.0**	**8.5**
Aroclor 1262	ND	1.0	<1.0
Aroclor 1268	ND	1.0	<1.0

Note:

ALS Environmental

Date: *09-Mar-17*

Client: Fulcrum Environmental Consulting
Project: Sky Valley Edu Center; PN 17-2070

Work Order: 1703194

Analytical Results

Lab ID: 1703194-17A
Client Sample ID: 030617-17

Collection Date: 3/6/2017
Matrix: WIPE

Analyses

PCBS WIPE Method: **SW8082** Area **100 cm2** Analyst: **JEA**

Date Analyzed: 3/7/2017 17:54

	µg/sample	Reporting Limit µg/sample	ug/100cm2
Aroclor 1016	ND	1.0	<1.0
Aroclor 1221	ND	1.0	<1.0
Aroclor 1232	ND	1.0	<1.0
Aroclor 1242	ND	1.0	<1.0
Aroclor 1248	ND	1.0	<1.0
Aroclor 1254	ND	1.0	<1.0
Aroclor 1260	ND	1.0	<1.0
Aroclor 1262	ND	1.0	<1.0
Aroclor 1268	ND	1.0	<1.0

Lab ID: 1703194-18A
Client Sample ID: 030617-18

Collection Date: 3/6/2017
Matrix: WIPE

Analyses

PCBS WIPE Method: **SW8082** Area **100 cm2** Analyst: **JEA**

Date Analyzed: 3/7/2017 18:09

	µg/sample	Reporting Limit µg/sample	ug/100cm2
Aroclor 1016	ND	1.0	<1.0
Aroclor 1221	ND	1.0	<1.0
Aroclor 1232	ND	1.0	<1.0
Aroclor 1242	ND	1.0	<1.0
Aroclor 1248	ND	1.0	<1.0
Aroclor 1254	ND	1.0	<1.0
Aroclor 1260	ND	1.0	<1.0
Aroclor 1262	ND	1.0	<1.0
Aroclor 1268	ND	1.0	<1.0

Note:

ALS Environmental

Date: *09-Mar-17*

Client: Fulcrum Environmental Consulting
Project: Sky Valley Edu Center; PN 17-2070

Work Order: 1703194

Analytical Results

Lab ID: 1703194-19A
Collection Date: 3/6/2017
Client Sample ID: 030617-19
Matrix: WIPE

Analyses

PCBS WIPE Method: **SW8082** Area **0 cm2** Analyst: **JEA**
Date Analyzed: 3/7/2017 18:23

	µg/sample	Reporting Limit µg/sample	ug/100cm2
Aroclor 1016	ND	1.0	NA
Aroclor 1221	ND	1.0	NA
Aroclor 1232	ND	1.0	NA
Aroclor 1242	ND	1.0	NA
Aroclor 1248	ND	1.0	NA
Aroclor 1254	ND	1.0	NA
Aroclor 1260	ND	1.0	NA
Aroclor 1262	ND	1.0	NA
Aroclor 1268	ND	1.0	NA

Lab ID: 1703194-20A
Collection Date: 3/6/2017
Client Sample ID: 030617-20
Matrix: WIPE

Analyses

PCBS WIPE Method: **SW8082** Area **0 cm2** Analyst: **JEA**
Date Analyzed: 3/7/2017 18:37

	µg/sample	Reporting Limit µg/sample	ug/100cm2
Aroclor 1016	ND	1.0	NA
Aroclor 1221	ND	1.0	NA
Aroclor 1232	ND	1.0	NA
Aroclor 1242	ND	1.0	NA
Aroclor 1248	ND	1.0	NA
Aroclor 1254	ND	1.0	NA
Aroclor 1260	ND	1.0	NA
Aroclor 1262	ND	1.0	NA
Aroclor 1268	ND	1.0	NA

Note:

ALS Environmental

Date: *09-Mar-17*

Client: Fulcrum Environmental Consulting
Project: Sky Valley Edu Center; PN 17-2070
Work Order: 1703194

Analytical Comments

Method	Type:	SampID	SeqNo	Analysis	Comments
Batch **41723**					
	Analysis	1703194-01A	1458967	PCBs by EPA TO-10	Surrogate failed due to sample interference.

ED_004522_00089807-00030

ALS Environmental

Date: 09-Mar-17

Client: Fulcrum Environmental Consulting
Work Order: 1703194
Project: Sky Valley Edu Center; PN 17-2070

QC BATCH REPORT

Batch ID: **41721** Instrument ID: **GC3** Method: **SW8082**

MBLK Sample ID: **MBLK-41721-41721** Units: **µg/sample** Analysis Date: **3/7/2017 03:46 PM**
Client ID: Run ID: **GC3_170307A** SeqNo: **1458140** Prep Date: **3/7/2017** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	ND	1.0								
Aroclor 1221	ND	1.0								
Aroclor 1232	ND	1.0								
Aroclor 1242	ND	1.0								
Aroclor 1248	ND	1.0								
Aroclor 1254	ND	1.0								
Aroclor 1260	ND	1.0								
Aroclor 1262	ND	1.0								
Aroclor 1268	ND	1.0								
Surr: Decachlorobiphenyl	0.448	0	*0.5*	0	*89.6*	*14.6-145*	0			
Surr: Tetrachloro-m-xylene	0.424	0	*0.5*	0	*84.8*	*24.4-141*	0			

LCS Sample ID: **LCS-41721-41721** Units: **µg/sample** Analysis Date: **3/7/2017 04:00 PM**
Client ID: Run ID: **GC3_170307A** SeqNo: **1458141** Prep Date: **3/7/2017** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1260	16.62	1.0	20	0	83.1	38.1-135	0			
Surr: Decachlorobiphenyl	0.823	0	*1*	0	*82.3*	*14.6-145*	0			
Surr: Tetrachloro-m-xylene	0.794	0	*1*	0	*79.4*	*24.4-141*	0			

LCSD Sample ID: **LCSD-41721-41721** Units: **µg/sample** Analysis Date: **3/7/2017 04:15 PM**
Client ID: Run ID: **GC3_170307A** SeqNo: **1458142** Prep Date: **3/7/2017** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1260	12.46	1.0	20	0	62.3	38.1-135	16.62	28.6	20	R
Surr: Decachlorobiphenyl	0.654	0	*1*	0	*65.4*	*14.6-145*	0.823	*22.9*		
Surr: Tetrachloro-m-xylene	0.589	0	*1*	0	*58.9*	*24.4-141*	0.794	*29.6*		

The following samples were analyzed in this batch:

1703194-11A	1703194-12A	1703194-13A
1703194-14A	1703194-15A	1703194-16A
1703194-17A	1703194-18A	1703194-19A
1703194-20A		

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

Client: Fulcrum Environmental Consulting
Work Order: 1703194
Project: Sky Valley Edu Center; PN 17-2070

QC BATCH REPORT

Batch ID: **41723** Instrument ID: **GC3** Method: **ETO10A**

MBLK Sample ID: **MBLK-41723-41723** Units: **µg/sample** Analysis Date: **3/8/2017 04:55 PM**
Client ID: Run ID: **GC3_170308A** SeqNo: **1458965** Prep Date: **3/7/2017** 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								
Surr: Decachlorobiphenyl	0.0404	0	*0.05*	0	*80.8*	*41.6-116*	0			
Surr: Tetrachloro-m-xylene	0.0394	0	*0.05*	0	*78.8*	*45.7-110*	0			

LCS Sample ID: **LCS-41723-41723** Units: **µg/sample** Analysis Date: **3/8/2017 05:09 PM**
Client ID: Run ID: **GC3_170308A** SeqNo: **1458966** Prep Date: **3/7/2017** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1260	0.9674	0.10	1	0	96.7	50.3-120	0			
Surr: Decachlorobiphenyl	0.0372	0	*0.05*	0	*74.4*	*35.7-104*	0			
Surr: Tetrachloro-m-xylene	0.044	0	*0.05*	0	*88*	*45.7-110*	0			

The following samples were analyzed in this batch:

1703194-01A	1703194-02A	1703194-03A
1703194-04A	1703194-05A	1703194-06A
1703194-07A	1703194-08A	1703194-09A
1703194-10A	1703194-21A	1703194-22A

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

Client: Fulcrum Environmental Consulting
Project: Sky Valley Edu Center; PN 17-2070
WorkOrder: **1703194**

QUALIFIERS, ACRONYMS, UNITS

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

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

Units Reported	Description
µg/sample	

ALS Environmental

Sample Receipt Checklist

Client Name: **FULCRUM-YAKIMA** Date/Time Received: **07-Mar-17 00:00**

Work Order: **1703194** Received by: **RDN**

Checklist completed by: ChrisGibson (eSignature) 07-Mar-17 (Date) Reviewed by: ChrisGibson (eSignature) 07-Mar-17 (Date)

Matrices:

Carrier name: UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	4.0		
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☐	N/A ☐
pH adjusted by:	-		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

Ship To: ALS Environmental
4388 Glendale Milford Rd.
Cincinnati, Ohio 45242
Phone: (513) 733-5336
Fax: (513) 733-5347

Field Chain-of-Custody Record

39147

1703194

REGULAR Status ☐ | RUSH Status ☒ | RESULTS REQUIRED BY: (Date) Thursday 3/9/2017
CONTACT ALS ENVIRONMENTAL PRIOR TO SENDING SAMPLES

CH VAP: ☐ YES ☐ NO | BUSTR: ☐ YES ☐ NO

Date: 3/6/2017 | Purchase Order No.:
Company Name: Fulcrum Environmental | Project No.: 17-2070
Address: 406 N 2nd St | Sampling Site: Sky Valley Edu Center
Yakima (City) WA (State) 98901 (Zip)
Person to Contact: Ryan Mathews + Levi Wyatt | Billing Address (if different):
Email Address: rmathews@fulcrum.net, lewyatt@fulcrum.net
Telephone ( ): 509-574-0839
Alternate Contact:

ANALYSIS REQUESTED: TO-10a

	ALS Lab ID	Sample ID / Description	Date	Time	Preservation Key #	Sample Type / Matrix Key Abbr.	# of Sample Containers	TO-10a
01	030617-01	Room F-A / Annex Bld Room F	3/6/17					X
02	030617-02	Girl Stg-A / Storage Room Girls Locker Rm	↓					X
03	030617-03	Girl LR-A / Girls Locker Room						X
04	030617-04	Sm Gym-A / Small Gym						X
05	030617-05	Elec Sm Gym A / Electrical Rm @ Small Gym						X
06	030617-06	Gathering Rm A / Gathering Room						X
07	030617-07	CTE-A / CTE Classroom						X
08	030617-08	Large Gym Electrical Room / Large Gym						X
09	030617-09	CTE Elec / Electrical Room @ CTE						X
10	030617-10	Pod Mezz / West Pod Mezzanine	↓					X

Notes: 5 Liters/min for total of 420 mins
Air samples total volume 2100 L

PLEASE HOLD 030617-07 CTE-A & 030617-09 CTE Elec

Preservation Key: 1 - HCl 2 - HNO_3 3 - H_2SO_4 4 - $NaOH$ 5 - $Na_2S_2O_3$ 6 - NaHSO 7 - NaOH/ZnAcetate 8 - Other 9 - 4°C

Matrix Key: A - Air B - Bulk S - Soil W - Water

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

Relinquished By: (Signature)	Time / Date	Received By: (Signature)	Time / Date
[signature]	400 3/6/17	[signature]	9:57 3/7/17
Relinquished By: (Signature)	Time / Date	Received By: (Signature)	Time / Date
Relinquished By: (Signature)	Time / Date	Received By: (Signature)	Time / Date

ALS LAB USE ONLY
COOLER TEMP. 4.0 °C | pH ADJUSTMENTS:
COOLING METHOD: NONE COOLER WET ICE DRY ICE ICE PACK
DELIVERY METHOD: CLIENT DROP BOX FEDEX UPS STD MAIL PRTY MAIL ALS COURIER OTHER
CUSTODY SEALS: NONE COOLER PACKAGE SAMPLER
EQUIP RETURNED:

Ship To: ALS Environmental
4388 Glendale Milford Rd.
Cincinnati, Ohio 45242
Phone: (513) 733-5336
Fax: (513) 733-5347

Field Chain-of-Custody Record

Page 2 of 3

39148

1703194

☐ REGULAR Status ☒ RUSH Status RESULTS REQUIRED BY: (Date) Thursday 3/9/2017
CONTACT ALS ENVIRONMENTAL PRIOR TO SENDING SAMPLES

OH VAP: ☐ YES ☐ NO BUSTR: ☐ YES ☐ NO

Date: 3/6/2017 Purchase Order No.:

Company Name: Falcrom Environmental Project No.: 17-2070

Address: 406 N 2nd St Sampling Site: Sky Valley Edu Center

Yakima (City) WA (State) 98901 (Zip)

Person to Contact: Ryan Mathews & Levi Wyatt Billing Address (If different):

Email Address: rmathews@falcrom.net
lwyatt@falcrom.net

Telephone ( ): 509-574-0839

Alternate Contact:

ALS Lab ID	Sample ID / Description	Date	Time	Preservation Key #	Sample Type / Matrix Key Abbr.	# of Sample Containers	EPA 3050B-6020
030617-11	Elec Sm Gym / metal transformer side	3/6/17					X
030617-12	Elec Sm Gym / metal transformer top						X
030617-13	~~Gregga~~ Elec Lrg Gym / metal transformer side						X
030617-14	Elec Lrg Gym / concrete floor						X
030617-15	CTE Elec Rm / metal transformer						X
030617-16	CTE Elec Rm / concrete floor						X
030617-17	West Pod Meze / wood floor						X
030617-18	West Pod Meze / metal transformer side						X
030617-19	Field Blank						X
030617-20	Lab Blank						X

Notes:
wipe samples 10 x 10 template
100 cm² total area

Preservation Key: 1 - HCl 2 - HNO_3 3 - H_2SO_4 4 - NaOH 5 - $Na_2S_2O_3$ 6 - $NaHSO_4$ 7 - NaOH/ZnAc salts 8 - Other 9 - 4°C

Matrix Key: A - Air B - Bulk S - Soil W - Water

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

Relinquished By: (Signature)	Time / Date	Received By: (Signature)	Time / Date
[signature]	9:00 3/6/17	[signature]	9:57 3/7/17
Relinquished By: (Signature)	Time / Date	Received By: (Signature)	Time / Date
Relinquished By: (Signature)	Time / Date	Received By: (Signature)	Time / Date

ALS LAB USE ONLY

COOLER TEMP: °C pH ADJUSTMENTS:

COOLING METHOD: NONE COOLER WET ICE DRY ICE ICE PACK

DELIVERY METHOD: CLIENT DROP BOX FEDEX UPS STD MAIL PRTY MAIL ALS COURIER OTHER

CUSTODY SEALS: NONE COOLER PACKAGE SAMPLES

EQUIP. RETURNED:

Ship To: ALS Environmental
4388 Glendale Milford Rd.
Cincinnati, Ohio 45242
Phone: (513) 733-5336
Fax: (513) 733-5347

Field Chain-of-Custody Record

39149

1703194

☐ REGULAR Status ☒ RUSH Status RESULTS REQUIRED BY: (Date) Thurs 3/9/17
CONTACT ALS ENVIRONMENTAL PRIOR TO SENDING SAMPLES

OH VAP: ☐ YES ☐ NO BUSTR: ☐ YES ☐ NO

Date: 3/6/2017 Purchase Order No.:
Company Name: folkrum Project No.: 17-2070
Address: 406 N 2nd St Sampling Site: Sky Valley Edu Center
Yakima (City) WA (State) 98901 (Zip)
Person to Contact: Ryan Matheus Billing Address (if different):
Email Address: rmatheuse@folkrum.net
Telephone ( ): 509 574 0829
Alternate Contact: Levi Wyatt lwyatte@folkrum.net

	ALS Lab ID	Sample ID / Description	Date	Time	Preservation Key #	Sample Type / Matrix Key Abbr.	# of Sample Containers	ANALYSIS REQUESTED: TD - 10a
>1	0306017-21	Field Blank	3/6/17	[illegible]				X
>2	0306017-22	Lab Blank						X

Notes:

Preservation Key: 1 - HCl 2 - HNO_3 3 - H_2SO_4 4 - NaOH 5 - $Na_2S_2O_3$ 6 - $NaHSO_4$ 7 - NaOH/ZnAcetate 8 - Other 9 - 4°C

Matrix Key: A - Air B - Bulk S - Soil W - Water

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

Relinquished By: (Signature)	Time / Date	Received By: (Signature)	Time / Date
		[signature]	957 3/7/17
Relinquished By: (Signature)	Time / Date	Received By: (Signature)	Time / Date
Relinquished By: (Signature)	Time / Date	Received By: (Signature)	Time / Date

ALS LAB USE ONLY:
COOLER TEMP: °C pH ADJUSTMENTS:
COOLING METHOD: NONE COOLER WET ICE DRY ICE ICE PACK
DELIVERY METHOD: CLIENT DROP BOX FEDEX UPS STD MAIL PRTY MAIL ALS COURIER OTHER
CUSTODY SEALS: NONE COOLER PACKAGE SAMPLER
EQUIP RETURNED:

FULCRUM
environmental consulting

Attachment D

ALS Global Cincinnati Laboratory Report
Second Sampling Event – March 13, 2017

P. 509.574.0839 F. 509.575.8453
406 North 2nd Street
Yakima, Washington 98901
efulcrum.net

16-Mar-2017

Ryan Mathews
Fulcrum Environmental Consulting
406 N. 2nd Street
Yakima, WA 98901

Tel: (509) 574-0839
Fax:

Re: Sky Valley Edu Center; PN 17-2070 Work Order: **1703442**

Dear Ryan,

ALS Environmental received 4 samples on 14-Mar-2017 for the analyses presented in the following report.

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

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

The total number of pages in this report is 10.

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

Sincerely,

Shawn Smythe

Electronically approved by: Shawn Smythe

Shawn Smythe
Project Manager

ALS Environmental

Date: 16-Mar-17

Client: Fulcrum Environmental Consulting
Project: Sky Valley Edu Center; PN 17-2070
Work Order: **1703442**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1703442-01	CTE	Air		3/13/2017 13:39	3/14/2017	☐
1703442-02	CTE Electrical Room	Air		3/13/2017 13:42	3/14/2017	☐
1703442-03	Field Blank	Air		3/13/2017	3/14/2017	☐
1703442-04	Lab Blank	Air		3/13/2017	3/14/2017	☐

ED_004522_00089807-00040

Client: Fulcrum Environmental Consulting
Project: Sky Valley Edu Center; PN 17-2070
Work Order: 1703442

Case Narrative

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

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

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

ED_004522_00089807-00041

ALS Environmental

Date: *16-Mar-17*

Client: Fulcrum Environmental Consulting
Project: Sky Valley Edu Center; PN 17-2070
Sample ID: CTE
Collection Date: 3/13/2017 01:39 PM

Work Order: 1703442
Lab ID: 1703442-01
Matrix: AIR

Analytical Results

Analyses

PCBS BY EPA TO-10 Method: **ETO10A** Air Volume (L): **2100** Analyst: **JEA**

Date Analyzed: 3/15/2017

	µg/sample	Reporting Limit µg/sample	mg/m3
Aroclor 1016	ND	0.10	<0.000048
Aroclor 1221	ND	0.10	<0.000048
Aroclor 1232	ND	0.10	<0.000048
Aroclor 1242	ND	0.10	<0.000048
Aroclor 1248	ND	0.10	<0.000048
Aroclor 1254	ND	0.10	<0.000048
Aroclor 1260	ND	0.10	<0.000048
Aroclor 1262	ND	0.10	<0.000048
Aroclor 1268	ND	0.10	<0.000048

Note:

ALS Environmental

Date: *16-Mar-17*

Client: Fulcrum Environmental Consulting
Project: Sky Valley Edu Center; PN 17-2070
Sample ID: CTE Electrical Room
Collection Date: 3/13/2017 01:42 PM

Work Order: 1703442
Lab ID: 1703442-02
Matrix: AIR

Analytical Results

Analyses

PCBS BY EPA TO-10 Method: **ETO10A** Air Volume (L): **2100** Analyst: **JEA**

Date Analyzed: 3/15/2017

	µg/sample	Reporting Limit µg/sample	mg/m3
Aroclor 1016	ND	0.10	<0.000048
Aroclor 1221	ND	0.10	<0.000048
Aroclor 1232	ND	0.10	<0.000048
Aroclor 1242	ND	0.10	<0.000048
Aroclor 1248	ND	0.10	<0.000048
Aroclor 1254	ND	0.10	<0.000048
Aroclor 1260	ND	0.10	<0.000048
Aroclor 1262	ND	0.10	<0.000048
Aroclor 1268	ND	0.10	<0.000048

Note:

ALS Environmental

Date: *16-Mar-17*

Client: Fulcrum Environmental Consulting
Project: Sky Valley Edu Center; PN 17-2070
Sample ID: Field Blank
Collection Date: 3/13/2017

Work Order: 1703442
Lab ID: 1703442-03
Matrix: AIR

Analytical Results

Analyses

PCBS BY EPA TO-10 Method: **ETO10A** Air Volume (L): **0** Analyst: **JEA**

Date Analyzed: 3/15/2017

	µg/sample	Reporting Limit µg/sample	mg/m3
Aroclor 1016	ND	0.10	NA
Aroclor 1221	ND	0.10	NA
Aroclor 1232	ND	0.10	NA
Aroclor 1242	ND	0.10	NA
Aroclor 1248	ND	0.10	NA
Aroclor 1254	ND	0.10	NA
Aroclor 1260	ND	0.10	NA
Aroclor 1262	ND	0.10	NA
Aroclor 1268	ND	0.10	NA

Note:

ALS Environmental

Date: *16-Mar-17*

Client: Fulcrum Environmental Consulting
Project: Sky Valley Edu Center; PN 17-2070
Sample ID: Lab Blank
Collection Date: 3/13/2017

Work Order: 1703442
Lab ID: 1703442-04
Matrix: AIR

Analytical Results

Analyses

PCBS BY EPA TO-10 Method: **ETO10A** Air Volume (L): **0** Analyst: **JEA**

Date Analyzed: 3/15/2017

	µg/sample	Reporting Limit µg/sample	mg/m3
Aroclor 1016	ND	0.10	NA
Aroclor 1221	ND	0.10	NA
Aroclor 1232	ND	0.10	NA
Aroclor 1242	ND	0.10	NA
Aroclor 1248	ND	0.10	NA
Aroclor 1254	ND	0.10	NA
Aroclor 1260	ND	0.10	NA
Aroclor 1262	ND	0.10	NA
Aroclor 1268	ND	0.10	NA

Note:

ALS Environmental

Date: 16-Mar-17

Client: Fulcrum Environmental Consulting
Work Order: 1703442
Project: Sky Valley Edu Center; PN 17-2070

QC BATCH REPORT

Batch ID: **41848** Instrument ID: **GC3** Method: **ETO10A**

MBLK Sample ID: **MBLK-41848-41848** Units: **µg/sample** Analysis Date: **3/15/2017**
Client ID: Run ID: **GC3_170315A** SeqNo: **1462114** Prep Date: **3/14/2017** 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								
Surr: Decachlorobiphenyl	0.0457	0	*0.05*	0	*91.4*	*53.3-125*	0			
Surr: Tetrachloro-m-xylene	0.0434	0	*0.05*	0	*86.8*	*27.5-129*	0			

LCS Sample ID: **LCS-41848-41848** Units: **µg/sample** Analysis Date: **3/15/2017**
Client ID: Run ID: **GC3_170315A** SeqNo: **1462115** Prep Date: **3/14/2017** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1260	1.099	0.10	1	0	110	50.3-120	0			
Surr: Decachlorobiphenyl	0.0571	0	*0.05*	0	*114*	*53.3-125*	0			
Surr: Tetrachloro-m-xylene	0.0571	0	*0.05*	0	*114*	*27.5-129*	0			

The following samples were analyzed in this batch:

1703442-01A	1703442-02A	1703442-03A
1703442-04A		

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

Client: Fulcrum Environmental Consulting
Project: Sky Valley Edu Center; PN 17-2070
WorkOrder: **1703442**

QUALIFIERS, ACRONYMS, UNITS

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

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

Units Reported	Description
µg/sample	

ALS Environmental

Sample Receipt Checklist

Client Name: **FULCRUM-YAKIMA** Date/Time Received: **14-Mar-17 00:00**

Work Order: **1703442** Received by: **SNH**

Checklist completed by: Erin Peterson (eSignature) 14-Mar-17 (Date) Reviewed by: Shawn Smyth (eSignature) 16-Mar-17 (Date)

Matrices:

Carrier name: UPS

	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?	☑	☐	

Temperature(s)/Thermometer(s): 6.0

Cooler(s)/Kit(s):

	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:

Ship To: ALS Environmental
4388 Glendale Milford Rd.
Cincinnati, Ohio 45242
Phone: (513) 733-5336
Fax: (513) 733-5347

Field Chain-of-Custody Record

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☐ REGULAR Status ☒ RUSH Status RESULTS REQUIRED BY: (Date) 3/16/17
CONTACT ALS ENVIRONMENTAL PRIOR TO SENDING SAMPLES!

OH VAP: ☐ YES ☐ NO BUSTR: ☐ YES ☐ NO

Date: 3/13/2017 Purchase Order No.:
Company Name: Fulcrum Environmental Project No.: 172070
Address: 406 N 2nd St Sampling Site: Sky Valley Edu Center
Yakima (City) WA (State) 98901 (Zip) Monroe, WA
Person to Contact: Ryan Mathews Billing Address (if different):
Email Address: rmathews@efulcrum.net
Telephone ( ): 509 574 0839
Alternate Contact: Levi Wyatt lwyatt@fulcrum.net

ANALYSIS REQUESTED: TO-10A

ALS Lab ID	Sample ID / Description	Date	Time	Preservation Key #	Sample Type / Matrix Key Abbr.	# of Sample Containers	TO-10A
031317-01	CTE 01	3/13/17	6:39/1:39 2400				X
031317-02	CTE Electrical Room 02	3/13/17	6:42/1:42 2400				X
031317-03	Field Blank 03	3/13/17					X
031317-04	Lab Blank 04	3/13/7					X

Notes:

Preservation Key: 1 - HCl 2 - HNO_3 3 - H_2SO_4 4 - NaOH 5 - $Na_2S_2O_3$ 6 - $NaHSO_4$ 7 - NaOH/ZnAcetate 8 - Other 9 - 4°C

Matrix Key: A - Air B - Bulk S - Soil W - Water

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

Relinquished By: (Signature)	Time / Date	Received By: (Signature)	Time / Date
	3/13/17		3/14/17 3:18
Relinquished By: (Signature)	Time / Date	Received By: (Signature)	Time / Date
Relinquished By: (Signature)	Time / Date	Received By: (Signature)	Time / Date

ALS LAB USE ONLY
COOLER TEMP: 6.0 °C pH ADJUSTMENTS:
COOLING METHOD: NONE COOLER WET ICE DRY ICE ICE PACK
DELIVERY METHOD: CLIENT DROP BOX FEDEX UPS STD MAIL PRTY MAIL ALS COURIER OTHER
CUSTODY SEALS: NONE COOLER PACKAGE SAMPLES
EQUIP RETURNED:

Attachment E

Chain-of-Custody for Samples Delivered to EPA

P. 509.574.0839 F. 509.575.8453
406 North 2nd Street
Yakima, Washington 98901
efulcrum.net

Chain of Custody Record

FULCRUM environmental consulting

Air Sample Collection Form

Monroe School District March 6, 2017 Field Staff: Levi Wyatt Calibrator: TSI 4000 series

Sample No.	Location	Start Time	End Time	Start Flow(L/min)[1]	End Flow(L/min)	Total Volume (L)
030617-01:Room F-B	Annex Bld – Room F	8:25 a.m.	3:25 p.m.	5.0	5.0	2100
030617-02: Girl Stg-B	Storage Room - Girls Locker	7:50 a.m.	2:50 p.m.	5.0	5.0	2100
030617-03: Girl LR-B	Girls Locker Room	7:35 a.m.	2:35 p.m.	5.0	5.0	2100
030617-04: Sm Gym-B	Small Gym	7:11 a.m.	2:11 p.m.	5.0	5.0	2100
030617-05: Elec Sm Gym-B	Electrical Room at Small Gym	7:20 a.m.	2:20 p.m.	5.0	5.0	2100
030617-06: Gathering Rm-B	Gathering Room	6:55 a.m.	1:55 p.m.	5.0	5.0	2100
030617-07:CTE-B	CTE	8:01 a.m.	11:01 a.m.	5.0		900

1 L/min = Liters per minute

Relevant Notes: Sample 030617-07 was discovered at 11:01 to have fallen off of sampling apparatus; therefore final volume was derived from discovery of broken sample media.

Relinquished: _____ Date/Time: 3/7/2017 4:10 pm

Received: _____ Date/Time: _____

Chain of Custody Record

FULCRUM environmental consulting

Air Sample Collection Form

Monroe School District March 13, 2017 Field Staff: Levi Wyatt Calibrator: TSI 4000 series

Sample No.	Location	Start Time	End Time	Start Flow(L/min)[1]	End Flow(L/min)	Total Volume (L)
031317-01B: CTE	CTE	6:39 a.m.	1:39 p.m.	5.0	5.0	2100

1 L/min = Liters per minute

Relevant Notes:

Relinquished: Date/Time: 3/13/2017

Received: Date/Time: