



SOURCE BULK SAMPLING IN VARNISH COATINGS

Buildings G
Malibu High School
30215 Morning View Drive
Malibu, California 90265

Prepared for:

Santa Monica-Malibu Unified School District
Facilities Improvements Projects
2828 4th Street
Santa Ana, California 90405

Project No.: SMSD-17-7279

Reported Date: February 20, 2018

Alta Environmental
3777 Long Beach Boulevard Annex Building
Long Beach CA 90807 United States of America
T (562) 495 5777 F (562) 495 5877
Toll-free (US only) 800 777-0605 altaenviron.com

EXECUTIVE SUMMARY

On behalf of the Santa Monica-Malibu Unified School District (District), Alta Environmental (Alta) has prepared this report summarizing the bulk sampling activities completed on the wood varnish coatings located on interior surfaces of Building G at Malibu High School located at 30215 Morning View Drive, Malibu, California 90265. The bulk sampling activities were conducted to determine the potential presence of polychlorinated biphenyl compounds (PCBs) to characterize materials for off-site waste disposal.

Alta performed an inspection of the varnished wall paneling and prepared an inventory for sampling. Materials which appeared to have been applied in a similar manner, had similar characteristics such as color, and texture, were defined as homogeneous materials.

Alta collected a minimum of three representative random samples of each homogeneous material. The following homogeneous materials were identified:

- Lighter colored wood varnish coating applied on unpainted plywood walls observed in wood storage areas in Rooms 505B, 505C, 506A, 506B, 506C, 506D, 506E;
- Darker colored wood varnish coating applied on unpainted plywood walls observed in classroom 506 (exposed);
- White paint covering darker colored wood varnish observed in Classrooms 500, 500A, 501, 501A, 502A, 501B, 503, 504, 504B, 505.

Based on the source sampling results and in consultation with the District, the sampled building materials are categorized as follows

- Two samples representative of the lighter colored wood varnish were reported with PCBs concentrations above 50 parts per million (ppm); the lighter colored wood coating is defined as PCB Bulk Product Waste.
- All other source samples were reported as non-detected or below 50 ppm; The darker colored wood varnish including the areas painted white are defined as Excluded PCB Product.

Removal of the PCB Bulk Product Waste should be conducted using proper engineering controls including, but not limited to, the following: Containment, worker training, worker protection etc. PCB waste should be characterized, packaged, labelled and disposed as required by TSCA 40 CFR 762 and California hazardous waste regulation set forth in Title 22, Division 4.5 of the California Code of Regulations.

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REPORTED: February 20, 2018

PROJECT NO.: SMSD-17-7279

CLIENT: Santa Monica-Malibu Unified School District
Facility Improvements Projects
2828 4th Street
Santa Monica, California 90405

ATTENTION: Mr. Roger Banuelos

REF: Source Bulk Sampling in Wood Varnish
Building G
Malibu High School
30215 Morning View Drive
Malibu, California 90265

1 INTRODUCTION/BACKGROUND

The United States Environmental Protection Agency (USEPA) believes that there was a potentially widespread use of PCB-containing building materials in schools and other buildings built or renovated between 1950 and 1979. Historically, PCBs were used as a primary source as a plasticizing agent in caulking and glazing materials, as additives to paints and floor finishes, as a sealant for heating systems and plumbing, and as insulators in ballast and other electrical equipment. The manufacture and use of PCBs were banned in the United States in 1976, and PCB compounds were phased out between 1978 and 1979.

Based on information provided by the District, the affected building was constructed prior to 1980, which indicates a potential to contain PCBs; Building G was constructed in 1963.

The District has recently completed a project to remove and replace window and some doors from Building G. The window and door caulking were assumed to contain PCBs (above 50 ppm) for that project based on historical data found on similar buildings on site. The project also included the removal of porous materials including plaster, stucco, and wood. The District conducted delineation sampling to determine if PCBs had migrated into the adjacent porous surfaces.

During delineation sampling, it was discovered that a different source other than the previously identified door and window caulking was likely present (a result of less than 1 ppm was not achieved in Room 506E, at a typical distance from the component, approximately 12 inches). On February 27, 2017, the District collected a sample of the lighter colored varnish material in Room 506E and confirmed that the varnish was a source of PCBs. At this time, it was determined that the varnish would be handled in the coming summer 2018.

In preparation for the summer 2018 work, the District conducted additional sampling of the wood varnish to further evaluate if the source varnish may also be present in other areas of the building. The District contracted Alta for the survey and sampling. The additional source sampling was conducted on November 2, 2017.

Based on the results of the November 2, 2017, additional sampling, in an effort to further evaluate the darker colored varnish was conducted on November 27, 2017. This additional sampling was completed in areas which appeared to have been enclosed/encased behind cabinets, posting boards etc. in Classroom 506. These areas appeared be lighter in color (this difference was assumed to be related to it not being exposed to light, air, wear and contact). Alta collected side by side samples of the dark and light colored varnish in these areas.

2 PURPOSE OF INSPECTION AND SAMPLING

The wood varnish included in this report was evaluated for PCBs only. A survey of asbestos-containing materials (ACMs) and lead-based paint (LBP) has been completed for this building. The results and findings for ACM and LBP are included in a separate document.

The objective of the sampling was to obtain samples from a sufficient number of locations to:

- Serve as a representative indication of the variety of potentially PCB-impacted materials
- Draw conclusions of the potential presence of PCB-impact materials
- Determine if a site-specific remediation work plan is required to address materials with ≥ 50 parts per million (ppm) PCBs prior to undertaking the demolition and disposal of building materials; and Categorize each type of building material for off-site disposal related solely to its PCB content. In general, PCB-impacted materials can be sorted and classified into the following categories:
 - PCB Bulk Product Waste (≥ 50 ppm). According to Environmental Protection Agency (EPA) Memorandum, "PCB Bulk Product Waste Reinterpretation," dated October 24, 2012, building materials "coated or serviced" with PCB bulk product waste (e.g., caulk, paint, mastic, sealants) at the time of designation for disposal are to be managed as a PCB bulk product waste. The reinterpretation document allows for disposal of both PCB Bulk Product Waste and PCB Remediation Waste together as a single waste stream (PCB Bulk Product Waste).
 - Excluded PCB Product-all materials containing < 50 ppm.

3 SCOPE OF SERVICES

The District retained Alta for the source bulk sampling (Alta proposal dated, October 17, 2017).

The sampling was completed in accordance with the *USEPA Region I Standard Operation Procedures for Sampling Porous Surfaces for Polychlorinated Biphenyl* (USEPA 2011).

Alta's source bulk sampling were completed as follows:

1. A screwdriver, razor blade, chisel, or similar tool was used to collect the samples.
2. Samples were labelled, packaged, and documented on a chain of custody for shipping to the laboratory.
3. Samples were shipped to the laboratory in a chilled ice chest.
4. Sampled areas were patched using a non-PCBs sealant. The patch area is temporary, intended only to provide a barrier to the exposed sampled substrates.
5. Each sample location was documented using digital photographs.
6. Equipment and tools were decontaminated using a two-step decontamination process. First, all used tools were cleaned using scrub brushes and detergent with de-ionized water base solution. Second, each piece was rinsed using de-ionized water. After the two-step decontamination procedures, the equipment was placed on top of clean paper towels (or equivalent material) and set to dry individually. Each piece of equipment was inspected by Alta for evidence of residual dust and debris.
7. Waste was packaged on site inside one one-gallon bucket and labeled for disposal at a later date.

4 METHODOLOGY

The Actual Detection Limit (DL) used by the laboratory for this project was 0.5 ppm. In some cases, the DL was raised above 1ppm due to matrix interferences, but in those cases, the DL did not exceed ≥ 50 ppm, which is currently being used as approved by the USEPA to defined PCB Bulk Product Waste.

All samples were analyzed in accordance with EPA Method 8082A with Soxhlet Extraction US EPA Method 3540C for Aroclors.

Sample extraction and analysis was completed by a California State Environmental Laboratory Accreditation Program (ELAP) accredited laboratory.

5 RESULTS

Table 1.0
Summary of Sampling and Results

Sample Description	Material Location	Sample Numbers	Results (ppm) (Aroclor 1254)
Wood Varnish Wall (dark colored-unpainted plywood)	Classroom 506	1102-01 1102-02 1112-03 1127-1 1127-2 1127-6 1127-8	13.5 9.34 13.4 Non Detected 17.7 3.85 2.85
Wood Varnish Wall (light colored-unpainted plywood)	506E 506A 506B 506D 505B 505C 506B (Wood storage rooms)	14-0227 1102-04 1102-05 1112-06 1102-12 1102-13 1127-4 1127-5	81.5 38.3 20.4 18.8 23.4 55.4 22.6 10.0
Wood Varnish Wall with white paint (dk colored varnish)	Classroom 504 and 505	1102-07 1102-08 1102-09	31.4 17.4 21.8
Wood Varnish Wall (dark colored-unpainted plywood)	<i>504B</i> <i>505A</i> <i>500</i> <i>(Above ceiling line. Bottom of wall is painted white)</i>	<i>1102-10</i> <i>1102-11</i> <i>1102-16</i>	<i>13.6</i> <i>15.8</i> <i>5.19</i>
Wood Varnish Wall with white paint (dk colored varnish)	501 502 502A 501B	1102-14 1102-15 1102-17 1102-18	11.6 4.03 12.4 13.2

The results listed in the above Table 1 provides a summary compilation of the results. The information included in this table should be used in conjunction with the sample inventory list, and laboratory results found in Appendices A and B.

These materials are further defined in Appendix A of this report.

Refer to Appendix B for laboratory analysis reports and relevant sample analysis information.

6 QUALITY CONTROL

A total of 25 primary samples were collected and analyzed by the laboratory. In addition to the primary samples, two side by side duplicate samples were collected. Additionally, two split-duplicate samples were collected; the samples were homogenized and split into two identical samples. The split samples were assigned a unique sample number.

All primary samples, one duplicate and one split duplicate were analyzed by Enviro-Chem, located at 1214 East Lexington Avenue, Pomona, California (ELAP ID #1555). One duplicate and one split duplicate were analyzed by Eurofins/Calscience, located at 7440 Lincoln Way, Garden Grove, California (ELAP ID #2944).

All primary samples, duplicate, and split duplicates were placed in an appropriate sample container provided by the laboratory. Samples were labeled, packaged in a cooler, and kept cool with ice during shipment.

Results of duplicate, and split duplicate samples were consistent as compared to the primary samples.

The laboratories reported all quality control (QC) data associated with the sample analysis, the recovery and precision within the acceptable limits of the laboratory.

7 CONCLUSIONS

The source bulk sampling was limited to wood varnish coatings applied on wood walls in Building G.

Based on the source sampling results and in consultation with the District, the sampled building materials are categorized as follows:

- PCB Bulk Product Waste-Lighter colored wood varnish in storage rooms 505B, 505C, 506A, 506B, 506C, 506D, 506E; and
- Excluded PCB Product-Darker colored wood varnish including the areas painted white in rooms 500, 500A, 501, 501A, 502A, 501B, 503, 504, 504B, 505, and 506.

Removal of the PCB Bulk Product Waste associated with flooring materials should be conducted using proper engineering controls including, but not limited to containment, worker training, worker protection etc. PCB waste should be characterized, packaged, labeled and disposed as required by TSCA 40 CFR 762 and California hazardous waste regulation set forth in Title 22, Division 4.5 of the California Code of Regulations.

8 RECOMMENDATIONS

Asbestos-containing materials and lead-based paints have previously been identified at the site and are described in a separate report. Removal of ACMs and LBP is subject to local, state and federal requirements. A survey record and abatement plan has been prepared for this site to be used for the removal and waste disposal of ACM and LBP.

9 ASSUMPTIONS AND LIMITATIONS

The results are intended for use by the District and its contractors to characterize generated waste building materials for disposal, based in part on the reported PCB content during the demolition of the building components.

This report was prepared exclusively for use by Santa Monica-Malibu Unified School District, and may not be relied upon by any other person or entity without Alta's express written permission. The information, conclusions and recommendations described in this report apply to conditions existing at certain locations when services were performed and are intended only for the specific purposes, locations, time frames and project parameters indicated. Alta cannot be responsible for the impact of any changes in environmental standards, practices or regulations after the performance of services.

In performing our professional services, we have applied engineering and scientific judgment and used a level of effort consistent with the current standard of practice for similar types of studies.

As applicable, Alta has relied in good faith upon representations and information furnished by individuals with respect to operations and existing property conditions, to the extent that they have not been contradicted by data obtained from other sources. Accordingly, Alta accepts no responsibility for any deficiencies, omissions, misrepresentations, or fraudulent acts of persons interviewed.

Alta will not accept any liability for loss, injury claim, or damage arising directly or indirectly from any use or reliance on this report. Alta makes no warranty, expressed or implied.

This report is issued with the understanding that the client, the property owner, or its representative is responsible for ensuring that the information, conclusions, and recommendations contained herein are brought to the attention of the appropriate regulatory agencies, as required.

Material quantities are in some cases listed within this document. These quantities are not intended to be used for removal bidding purposes. Nor is this document intended as a contract manual. Work methods and sequence, coordination of participants, applicable codes, engineering controls, required submittals, and notifications should in all cases be addressed in a separate and independent bidding and contract document. If you have any questions, please do not hesitate to contact the undersigned at (562) 495-5777. We appreciate the opportunity to be of service to Santa Monica-Malibu Unified School District.

10 SIGNATORY

Respectfully submitted by:

Alta Environmental



Cesar Ruvalcaba
Project Manager

Respectfully submitted by:

Alta Environmental



David Schack
Vice President, Building Sciences

Appendix A

Sample Inventories

CLIENT: Santa Monica-Malibu Unified School District
PROJECT NO: SMSD-17-7279
PROJECT: Malibu High School Building G
Date: February 27 (0227), November 2 (1102), and November 27, 2017 (1127)

Building Name	Sample Number	Component ID	Sample Description	Sample Location	Photograph Number	Total PCBs (mg/kg) (Aroclor 1254)	Time
G	14-0227	Wall	Wood Varnish Wall (light colored-unpainted plywood)	506E, north wall, center	14-0227	81.50	1940
G	1102-01	Wall	Wood Varnish Wall (dark colored-unpainted plywood)	Room 506, north wall, 12' east of northwest corner	1102-01	13.5	1607
G	1102-02	Wall	Wood Varnish Wall (dark colored-unpainted plywood)	Room 506, west wall, 18' south of northwest corner, 4' up	1102-02	9.34	1615
G	1102-03	Wall	Wood Varnish Wall (dark colored-unpainted plywood)	Room 506 east wall, 18' north of southeast corner, 4' up	1102-03	13.4	1620
G	1102-04	Wall	Wood Varnish Wall (light colored-unpainted plywood)	Room 506A, south wall center, 4' up	1102-04	28.3	1622
G	1102-05	Wall	Wood Varnish Wall (light colored-unpainted plywood)	Room 506B, south wall, west corner, 4' up	1102-05	20.4	1630
G	1102-06	Wall	Wood Varnish Wall (light colored-unpainted plywood)	Room 506D East wall, north end, 4' up wall	1102-06	18.8	1638

CLIENT: Santa Monica-Malibu Unified School District
PROJECT NO: SMSD-17-7279
PROJECT: Malibu High School Building G
Date: February 27 (0227), November 2 (1102), and November 27, 2017 (1127)

Building Name	Sample Number	Component ID	Sample Description	Sample Location	Photograph Number	Total PCBs (mg/kg) (Aroclor 1254)	Time
G	1102-07	Wall	Wood Varnish Wall with white paint (dk colored varnish)	Room 505, northwest corner, 8' up wall	1102-07	31.4	1705
G	1102-08	Wall	Wood Varnish Wall with white paint (dk colored varnish)	Room 505, south wall, southeast corner, 8' up wall	1102-08	17.4	1706
G	1102-09	Wall	Wood Varnish Wall with white paint (dk colored varnish)	Room 504, east wall, north end, 8' up	1102-09	21.8	1709
G	1102-10	Wall	Wood Varnish Wall (dark colored-unpainted plywood)	Room 504B, east wall south end, 8' up	1102-10	13.6	1722
G	1102-11	Wall	Wood Varnish Wall (dark colored-unpainted plywood)	Room 505A, east wall south end above drop ceiling	1102-11	15.8	1728
G	1102-12	Wall	Wood Varnish Wall (light colored-unpainted plywood)	Room 505B, north wall center, 4' up	1102-12	23.4	1733
G	1102-13	Wall	Wood Varnish Wall (light colored-unpainted plywood)	Room 505C, south wall center, 4' up	1102-13	55.4	1741
G	1102-14	Wall	Wood Varnish Wall with white paint (dk colored varnish)	Room 501, north wall east corner above drop ceiling	1102-14	11.6	1755

CLIENT: Santa Monica-Malibu Unified School District
PROJECT NO: SMSD-17-7279
PROJECT: Malibu High School Building G
Date: February 27 (0227), November 2 (1102), and November 27, 2017 (1127)

Building Name	Sample Number	Component ID	Sample Description	Sample Location	Photograph Number	Total PCBs (mg/kg) (Aroclor 1254)	Time
G	1102-15	Wall	Wood Varnish Wall with white paint (dk colored varnish)	Room 502, south wall, east end, 5' up wall	1102-15	4.03	1815
G	1102-16	Wall	Wood Varnish Wall (dark colored-unpainted plywood)	Room 500, east wall, south end above drop ceiling	1102-16	5.19	1820
G	1102-17	Wall	Wood Varnish Wall with white paint (dk colored varnish)	Room 502A, west wall, north end, above drop ceiling	1102-17	12.4	1822
G	1102-18	Wall	Wood Varnish Wall with white paint (dk colored varnish)	Room 501B, north wall, center above drop ceiling	1102-18	13.2	1835
G	1102-19	Wall	Wood Varnish Wall with white paint (dk colored varnish)	Split Duplicate sample of 1102-18	1102-19	16.2	1855
G	1102-20	Wall	Wood Varnish Wall with white paint (dk colored varnish)	Side by side duplicate of 1102-15)	1102-20	5.03	1925
G	1127-1	Wall	Varnish, light colored (appears to have been behind cabinet)	506 northeast, 5' up	1127-1	ND	1630
G	1127-2	Wall	Wood Varnish Wall (dark colored-unpainted plywood)	506, northeast, 7' up	1127-2	17.7	1635

CLIENT: Santa Monica-Malibu Unified School District
PROJECT NO: SMSD-17-7279
PROJECT: Malibu High School Building G
Date: February 27 (0227), November 2 (1102), and November 27, 2017 (1127)

Building Name	Sample Number	Component ID	Sample Description	Sample Location	Photograph Number	Total PCBs (mg/kg) (Aroclor 1254)	Time
G	1127-3	Wall	Wood Varnish Wall (dark colored-unpainted plywood)	Split duplicate of 1127-02	1127-3	37	1635
G	1127-4	Wall	Varnish, light colored (appears to have been behind cabinet)	506B, north wall center, 5' up	1127-4	22.6	1650
G	1127-5	Wall	Wood Varnish Wall (dark colored-unpainted plywood)	506B, north wall center, 4' up	1127-5	10	1700
G	1127-6	Wall	Varnish, light colored (appears to have been behind cabinet)	506, west wall, 12' south of north corner, 4' up	1127-6	3.85	1730
G	1127-7	Wall	Varnish, light colored (appears to have been behind cabinet)	Side by side duplicate of 1127-6	1127-7	11	1730
G	1127-8	Wall	Wood Varnish Wall (dark colored-unpainted plywood)	506, West wall, 10' south of north corner, 4' up	1127-8	2.85	1750

Appendix B

Laboratory Reports

Date: March 7, 2017

Mr. Cesar Ruvalcaba
Alta Environmental
3777 Long Beach Blvd, Annex Building
Long Beach, CA 90807
Tel: (562) 495-5777 Email: Cesar.Ruvalcaba@altaenviron.com


Project: **Malibu FIG+D Additional Step-Out Sampling for PCBs**
Lab I.D.: **170301-10 through -27**


Dear Mr. Ruvalcaba:

The **analytical results** for the solid samples, received by our laboratory on March 1, 2017, are attached. The samples were received intact, and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,


Curtis Desilets
Vice President/Program Manager


Andy Wang
Laboratory Manager

LABORATORY REPORT

CUSTOMER: **Alta Environmental**
3777 Long Beach Blvd, Annex Building, Long Beach, CA 90807
Tel: (562) 495-5777 Email: Cesar.Ruvalcaba@altaenvirom.com

PROJECT: **Malibu FIG+D Additional Step-Out Sampling for PCBs**

DATE SAMPLED: 02/27/17 DATE RECEIVED: 03/01/17
MATRIX: SOLID DATE EXTRACTED: 03/06/17
REPORT TO: MR. CESAR RUVALCABA DATE ANALYZED: 03/06&07/17
DATE REPORTED: 03/07/17

PCBs ANALYSIS

METHOD: EPA 3540C/8082

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	PCB- 1016	PCB- 1221	PCB- 1232	PCB- 1242	PCB- 1248	PCB- 1254	PCB- 1260	TOTAL PCBs*	DF
01-0227	170301-10	ND	ND	ND	ND	ND	4.29	ND	4.29	1
02-0227	170301-11	ND	ND	ND	ND	ND	ND	ND	ND	1
03-0227	170301-12	ND	ND	ND	ND	ND	ND	ND	ND	1
04-0227	170301-13	ND	ND	ND	ND	ND	ND	ND	ND	1
05-0227	170301-14	ND	ND	ND	ND	ND	19.8	ND	19.8	1
06-0227	170301-15	ND	ND	ND	ND	ND	ND	ND	ND	1
07-0227	170301-16	ND	ND	ND	ND	ND	2.56	ND	2.56	1
08-0227	170301-17	ND	ND	ND	ND	ND	ND	ND	ND	1
09-0227	170301-18	ND	ND	ND	ND	ND	ND	ND	ND	1
10-0227	170301-19	ND	ND	ND	ND	ND	ND	ND	ND	1
11-0227	170301-20	ND	ND	ND	ND	ND	ND	ND	ND	1
12-0227	170301-21	ND	ND	ND	ND	ND	ND	ND	ND	1
13-0227	170301-22	ND	ND	ND	ND	ND	ND	ND	ND	1
14-0227	170301-23	ND	ND	ND	ND	ND	81.5	ND	81.5	8
15-0227	170301-24	ND	ND	ND	ND	ND	ND	ND	ND	1
16-0227	170301-25	ND	ND	ND	ND	ND	ND	ND	ND	1
17-0227	170301-26	ND	ND	ND	ND	ND	ND	ND	ND	1
18-0227	170301-27	ND	ND	ND	ND	ND	10.9	ND	10.9	1
Method Blank		ND	ND	ND	ND	ND	ND	ND	ND	1

PQL 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5

COMMENTS

DF = Dilution Factor

PQL = Practical Quantitation Limit


Actual Detection Limit = DF X PQL

ND = Non-Detected Or Below the Actual Detection Limit

* = Sum of the PCB 1016, 1221, 1232, 1242, 1248, 1254 and 1260

*** = The concentration exceeds the TTLC Limit of 50, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

^ = Actual detection limit raised due to limited sample

Data Reviewed and Approved by: 

CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905 Fax (909)590-5907

EPA 8082 QA/QC Report

Matrix: **Soil/Solid/Sludge**Date Analyzed: **3/6-7/2017**Unit: **mg/Kg(PPM)****Matrix Spike (MS)/Matrix Spike Duplicate (MSD)****Spiked Sample Lab I.D.:** **170306-LCS1/2**

Analyte	S.R.	spk conc	MS	%REC	MSD	%REC	%RPD	ACP %RPD	ACP %REC
PCB (1016+1260)	0.000	0.100	0.088	88%	0.088	88%	0%	0-20%	70-130

Lab Control Spike (LCS) Recovery:

Analyte	spk conc	LCS	% REC	ACP %REC
PCB (1016+1260)	0.100	0.088	88%	75-125

Surrogate Recovery	ACP%	ACP%	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	170301-8	170301-9	170301-10	170301-11	170301-12	170301-13
Tetra-chloro-meta-xylene	50-150	101%	116%	122%	115%	137%	113%	100%
Decachlorobipneyl	50-150	79%	77%	84%	116%	84%	118%	85%

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.	170301-14	170301-15	170301-16	170301-17	170301-18	170301-19	170301-20	170301-21
Tetra-chloro-meta-xylene	102%	142%	145%	123%	134%	122%	112%	106%
Decachlorobipneyl	96%	98%	102%	79%	128%	107%	85%	67%

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.	170301-22	170301-23	170301-24	170301-25	170301-26	170301-27
Tetra-chloro-meta-xylene	97%	109%	103%	105%	120%	107%
Decachlorobipneyl	69%	76%	79%	80%	108%	76%

S.R. = Sample Result

* = Surrogate fail due to matrix interference (If Marked)

spk conc = Spike Concentration

Note: LCS, MS, MSD are in control therefore results are in control.

%REC = Percent Recovery

ACP %RPD = Acceptable Percent RPD Range

ACP %REC = Acceptable Percent Recovery Range

Analyzed and Reviewed By: 

Final Reviewer: _____

Enviro-Chem, Inc. Laboratories
 1214 E. Lexington Avenue,
 Pomona, CA 91766
 Tel: (909) 590-5905 Fax: (909) 590-5907
CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
☐ Same Day
☐ 24 Hours
☐ 48 Hours
☐ 72 Hours
☐ 1 Week (Standard)
 Other:

SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required										COMMENTS
01-0227	170301-10	02/27/17	1650hrs	Bulk	1	22.7°C	Ice	X										
02-0227	-11				1			X										
03-0227	-12				1			X										
04-0227	-13				1			X										
05-0227	-14		1736hr		1			X										
06-0227	-15				1			X										
07-0227	-16		1805		1			X										
08-0227	-17				1			X										
09-0227	-18				1			X										
10-0227	-19		1835		1			X										
11-0227	-20				1			X										
12-0227	-21		1523		1			X										
13-0227	-22				1			X										
14-0227	-23		1940	Paint	1			X										
15-0227	-24		1955	Bulk	1			X										

Company Name: Alta Environmental

Project Contact: Cesar Ruvalcaba

Sampler's Signature: 

Address: 3777 Long Beach Blvd., Annex Bldg.

Tel: 562-495-5777

Project Name/ID: Malibu FIG+D additional step-out Sampling for PCBs

City/State/Zip: Long Beach, California 90807

Fax:

Relinquished by:  2/28/17 0830hrs

Received by: 

Date & Time: 3/1/17 950

Instructions for Sample Storage After Analysis:

Relinquished by:

Received by: 

Date & Time: 3/1/17 1100

☐ Dispose of ☐ Return to Client ☒ Store (30 Days)

Relinquished by:

Received by:

Date & Time:

☐ Other:

CHAIN OF CUSTODY RECORD

Date: 2/27/17

CA-DHS ELAP CERTIFICATE #1555

Other:

[illegible]

Date:

CHAIN OF CUSTODY RECORD

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: November 8, 2017

Mr. Cesar Ruvalcaba
Alta Environmental
3777 Long Beach Blvd, Annex Building
Long Beach, CA 90807
Tel: (562) 495-5777 Email: Cesar.Ruvalcaba@altaenviron.com

Project: **Malibu High Bldg. G**
Lab I.D.: **171103-23 through -42**

Dear Mr. Ruvalcaba:

The **analytical results** for the solid samples, received by our laboratory on November 3, 2017, are attached. The samples were received intact, and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,



Curtis Desilets
Vice President/Program Manager



Andy Wang
Laboratory Manager

LABORATORY REPORT

CUSTOMER: **Alta Environmental**
3777 Long Beach Blvd, Annex Building, Long Beach, CA 90807
Tel: (562) 495-5777 Email: Cesar.Ruvalcaba@altaenviron.com
PROJECT: **Malibu High Bldg. G**

DATE SAMPLED: 11/02/17
MATRIX: SOLID
REPORT TO: MR. CESAR RUVALCABA

DATE RECEIVED: 11/03/17
DATE EXTRACTED: 11/06-07/17
DATE ANALYZED: 11/07/17
DATE REPORTED: 11/08/17

PCBs ANALYSIS

METHOD: EPA 3540C/8082

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	PCB-1254	PCB-1260	TOTAL PCBs*	DF
1102-01	171103-23	ND	ND	ND	ND	ND	13.5	ND	13.5	2
1102-02	171103-24	ND	ND	ND	ND	ND	9.34	ND	9.34	2
1102-03	171103-25	ND	ND	ND	ND	ND	13.4	ND	13.4	4
1102-04	171103-26	ND	ND	ND	ND	ND	38.3	ND	38.3	8
1102-05	171103-27	ND	ND	ND	ND	ND	20.4	ND	20.4	4
1102-06	171103-28	ND	ND	ND	ND	ND	18.8	ND	18.8	8
1102-07	171103-29	ND	ND	ND	ND	ND	31.4	ND	31.4	2
1102-08	171103-30	ND	ND	ND	ND	ND	17.4	ND	17.4	2
1102-09	171103-31	ND	ND	ND	ND	ND	21.8	ND	21.8	2
1102-10	171103-32	ND	ND	ND	ND	ND	13.6	ND	13.6	4
1102-11	171103-33	ND	ND	ND	ND	ND	15.8	ND	15.8	2
1102-12	171103-34	ND	ND	ND	ND	ND	23.4	ND	23.4	4
1102-13	171103-35	ND	ND	ND	ND	ND	55.4 ***	ND	55.4 ***	4
1102-14	171103-36	ND	ND	ND	ND	ND	11.6	ND	11.6	4
1102-15	171103-37	ND	ND	ND	ND	ND	4.03	ND	4.03	1
1102-16	171103-38	ND	ND	ND	ND	ND	5.19	ND	5.19	2
1102-17	171103-39	ND	ND	ND	ND	ND	12.4	ND	12.4	2
1102-18	171103-40	ND	ND	ND	ND	ND	13.2	ND	13.2	2
1102-19	171103-41	ND	ND	ND	ND	ND	16.2	ND	16.2	1
1102-20	171103-42	ND	ND	ND	ND	ND	5.03	ND	5.03	1
Method Blank		ND	ND	ND	ND	ND	ND	ND	ND	1

PQL 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5

COMMENTS

DF = Dilution Factor

PQL = Practical Quantitation Limit

Actual Detection Limit = DF X PQL

ND = Non-Detected Or Below the Actual Detection Limit

* = Sum of the PCB 1016, 1221, 1232, 1242, 1248, 1254 and 1260

*** = The concentration exceeds the TTLC Limit of 50, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

Data Reviewed and Approved by: 
CAL-DHS ELAP CERTIFICATE No.: 1555

Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905 Fax (909)590-5907

EPA 8082 QA/QC Report

Matrix: **Soil/Solid/Sludge**Date Analyzed: 11/7/2017Unit: mg/Kg(PPM)**Matrix Spike (MS)/Matrix Spike Duplicate (MSD)****Siked Sample Lab I.D.:** **171107-LCS1/2**

Analyte	S.R.	spk conc	MS	%REC	MSD	%REC	%RPD	ACP %RPD	ACP %REC
PCB (1016+1260)	0.000	0.100	0.088	88%	0.086	86%	2%	0-20%	70-130

Lab Control Spike (LCS) Recovery:

Analyte	spk conc	LCS	% REC	ACP %REC
PCB (1016+1260)	0.100	0.114	114%	75-125

Surrogate Recovery	ACP%	ACP%	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	171103-23	171103-24	171103-25	171103-26	171103-27	171103-28
Tetra-chloro-meta-xylene	50-150	127%	131%	98%	120%	129%	110%	136%
Decachlorobipneyl	50-150	89%	78%	83%	80%	103%	73%	94%

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.	171103-29	171103-30	171103-31	171103-32	171103-33	171103-34	171103-35	171103-36
Tetra-chloro-meta-xylene	135%	113%	118%	110%	136%	140%	116%	134%
Decachlorobipneyl	107%	85%	86%	73%	84%	99%	75%	122%

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.	171103-37	171103-38	171103-39	171103-40	171103-41	171103-42
Tetra-chloro-meta-xylene	110%	121%	132%	148%	115%	117%
Decachlorobipneyl	95%	128%	112%	114%	82%	88%

S.R. = Sample Result

* = Surrogate fail due to matrix interference (If Marked)

spk conc = Spike Concentration

Note: LCS, MS, MSD are in control therefore results are in control.

%REC = Percent Recovery

ACP %RPD = Acceptable Percent RPD Range

ACP %REC = Acceptable Percent Recovery Range

Analyzed and Reviewed By: Final Reviewer: 

Re: Malibu Shop Building G

Curtis B. Desilets <curt.envirocheminc@gmail.com>

Mon, Nov 6, 2017 at 8:55 AM

To: Cesar Ruvalcaba <Cesar.Ruvalcaba@altaenviron.com>

Cc: Jessica Lin <envirocheminc@gmail.com>, "JH (Enviro-chem)" <jh04envirocheminc@gmail.com>

okay, no problem. Jessica, please note.....

On Mon, Nov 6, 2017 at 8:22 AM, Cesar Ruvalcaba <Cesar.Ruvalcaba@altaenviron.com> wrote:

Bulk Samples submitted last Friday 11/3/17, please provide RUSH analysis. 3 days is preferred if feasible.

Thanks,

Cesar Ruvalcaba

PROJECT MANAGER



Expertise to Reduce Your Environmental and Safety Risks

3777 Long Beach Blvd, Annex Building, Long Beach, CA 90807

o. 562.495.5777 | c. 310-951-9485 | f. 562.495.5877

Cesar.Ruvalcaba@altaenviron.com | www.altaenviron.com

2017 Compliance Calendar **download here.**

OSHA Alert: New Worker Health & Safety Requirement for silica. **Read More Here.**



Alta Environmental is the premier environmental services consultancy serving the needs of municipal, industrial, and construction clients throughout the Western United States. For more information about our air and water environmental compliance, subsurface remediation, building sciences and occupational safety capabilities, please click here for our website.

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Enviro-Chem, Inc. Laboratories
 1214 E. Lexington Avenue,
 Pomona, CA 91766
 Tel: (909) 590-5905 Fax: (909) 590-5907
CA-DHS ELAP CERTIFICATE #1555

Turnaround Time
☐ Same Day
☐ 24 Hours
☒ 48 Hours
☐ 72 Hours
☐ 1 Week (Standard)
 Other:

SAMPLE ID				LAB ID		SAMPLING DATE TIME		MATRIX	No. OF CONTAINERS	TEMPERATURE	PRESERVATION	Analysis Required										COMMENTS
1502-01				171103-23		11-02-17 1607		Bulk	1		ICE	X										Varnish on wood
02				- 24		1615			1			X										
03				- 25		1620			1			X										
04				- 26		1622			1			X										
05				- 27		1630			1			X										
06				- 28		1638			1			X										
07				- 29		1705			1			X										w/white paint
08				- 30		1706			1			X										
09				- 31		1709			1			X										
10				- 32		1722			1			X										
11				- 33		1728			1			X										
12				- 34		1733			1			X										
13				- 35		1741			1			X										
14				- 36		1755			1			X										w/white paint
15				- 37		1815			1			X										

Company Name: Alta Environmental

Address: 3777 Long Beach Blvd

City/State/Zip: Long Beach

Project Contact: Cesar Ruakala

Tel: _____

Fax: _____

Sampler's Signature: [Signature]

Project Name/ID: Malibu Bldg 4

Relinquished by: [Signature]

Relinquished by: [Signature]

Relinquished by: _____

Received by: [Signature]

Received by: [Signature]

Received by: [Signature]

Date & Time: _____

Date & Time: 11/3/17

Date & Time: 11-30

Instructions for Sample Storage After Analysis:

☐ Dispose of ☐ Return to Client ☐ Store (30 Days)

☐ Other: _____

CHAIN OF CUSTODY RECORD

Date: 11-03-17

WHITE WITH SAMPLE • YELLOW TO CLIENT

Page 1 of 2

CA-DHS ELAP CERTIFICATE #1555

Other:

Page 2 of 2

Enviro - Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

Date: December 6, 2017

Mr. Cesar Ruvalcaba
Alta Environmental
3777 Long Beach Blvd, Annex Building
Long Beach, CA 90807
Tel: (562) 495-5777 Email: Cesar.Ruvalcaba@altaenviron.com

Project: **Malibu H.S. - Bldg. G**
Lab I.D.: **171129-31 through -36**

Dear Mr. Ruvalcaba:

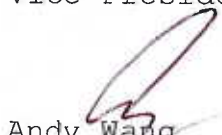
The **analytical results** for the solid samples, received by our laboratory on November 29, 2017, are attached. The samples were received intact, and accompanying chain of custody.

Enviro-Chem appreciates the opportunity to provide you and your company this and other services. Please do not hesitate to call us if you have any questions.

Sincerely,



Curtis Desilets
Vice President/Program Manager



Andy Wang
Laboratory Manager

LABORATORY REPORT

CUSTOMER: Alta Environmental

3777 Long Beach Blvd, Annex Building, Long Beach, CA 90807

Tel: (562) 495-5777 Email: Cesar.Ruvalcaba@altaenviron.com

PROJECT: Malibu H.S. - Bldg. G

DATE SAMPLED: 11/27/17

MATRIX: SOLID

REPORT TO: MR. CESAR RUVALCABA

DATE RECEIVED: 11/29/17

DATE EXTRACTED: 11/29-30/17

DATE ANALYZED: 11/30/17

DATE REPORTED: 12/06/17

PCBs ANALYSIS

METHOD: EPA 3540C/8082

UNIT: mg/Kg = MILLIGRAM PER KILOGRAM = PPM

SAMPLE I.D.	LAB I.D.	PCB- 1016	PCB- 1221	PCB- 1232	PCB- 1242	PCB- 1248	PCB- 1254	PCB- 1260	TOTAL PCBs*	DF
1127-1	171129-31	ND	ND	ND	ND	ND	ND	ND	ND	4^
1127-2	171129-32	ND	ND	ND	ND	ND	17.7	ND	17.7	4
1127-4	171129-33	ND	ND	ND	ND	ND	22.6	ND	22.6	4
1127-5	171129-34	ND	ND	ND	ND	ND	10.0	ND	10.0	4
1127-6	171129-35	ND	ND	ND	ND	ND	3.85	ND	3.85	2
1127-8	171129-36	ND	ND	ND	ND	ND	2.85	ND	2.85	1
Method Blank		ND	ND	ND	ND	ND	ND	ND	ND	1
PQL		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	

COMMENTS

DF = Dilution Factor

PQL = Practical Quantitation Limit

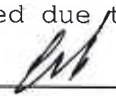
Actual Detection Limit = DF X PQL

ND = Non-Detected Or Below the Actual Detection Limit

* = Sum of the PCB 1016, 1221, 1232, 1242, 1248, 1254 and 1260

*** = The concentration exceeds the TTLC Limit of 50, and the sample is defined as hazardous waste as per CCR-TITLE 22 (if marked)

^ = Actual detection limit raised due to matrix interference

Data Reviewed and Approved by: 

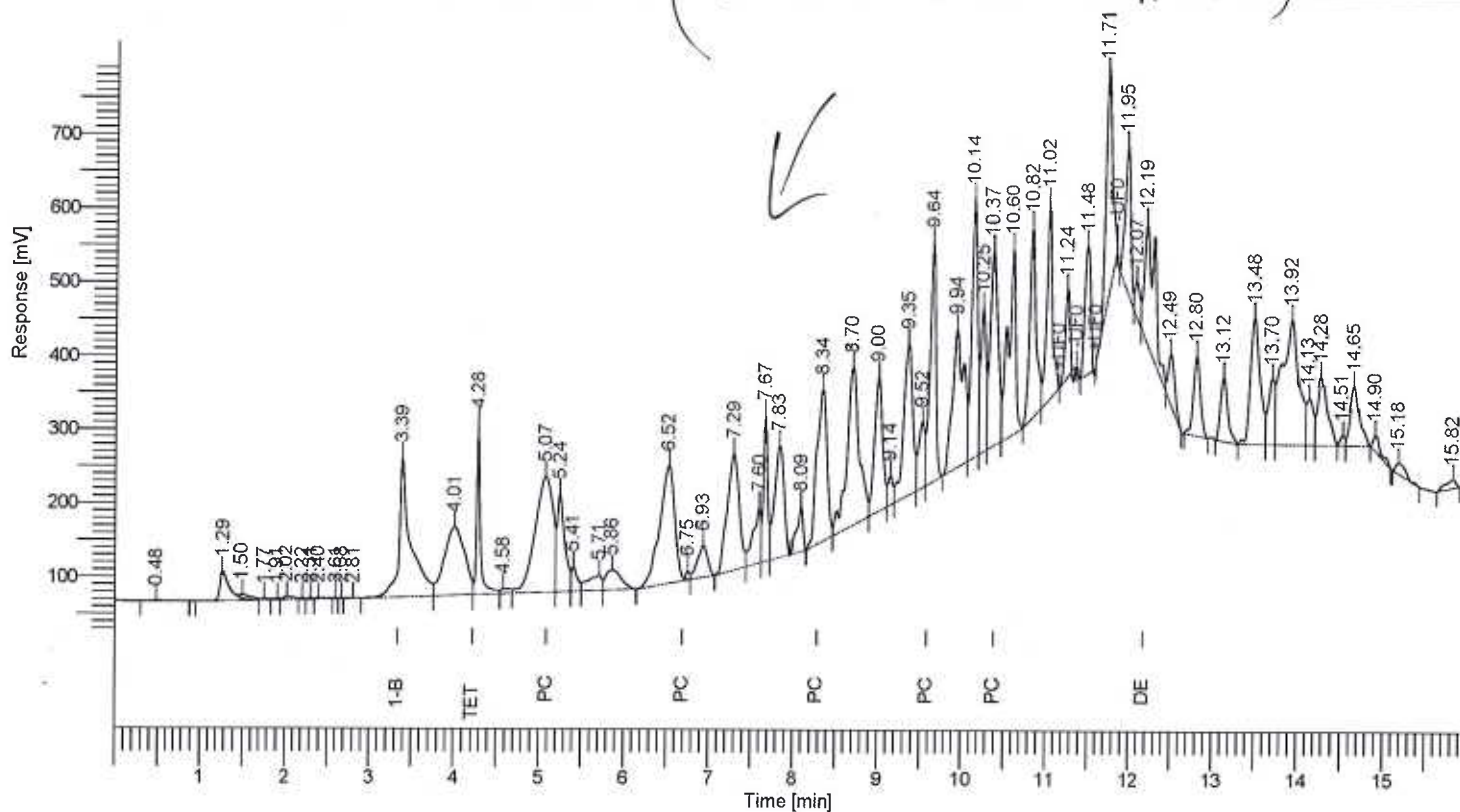
CAL-DHS ELAP CERTIFICATE No.: 1555

Software Version : 6.3.2.0646
 Sample Name : 171129-31 0.1/2 Alta
 Instrument Name : GC-E
 Rack/Vial : 0/37
 Sample Amount : 1.000000
 Cycle : 8

Date : 12/1/2017 1:28:03 PM
 Data Acquisition Time : 11/30/2017 2:52:32 PM
 Channel : B
 Operator : tcprocess
 Dilution Factor : 1.000000

Result File : D:\GC DATA\GC-E\02017\171129\171129\B021.rst
 Sequence File : D:\GC DATA\GC-E\02017\171129\171129\B021.seq

(MATRIX INTERFERENCE = 1127.1)



PCB Results

Peak #	Component Name	Time [min]	Area [uV*sec]	Height [uV]	Adjusted Amount
13	1-Bromo-2-Nitrobenzene	3.39	1837480.52	189391.04	-----
15	Tetra chloro-meta-xylene	4.28	743638.24	221621.49	70.756
	PCB (1016+1260)	9.64	5956219.61	926725.26	1.198
49	Decachlorobiphenyl	12.19	1468677.30	160591.64	87.226
			10006015.67	1498329.44	159.180

Enviro-Chem, Inc.

1214 E. Lexington Avenue, Pomona, CA 91766

Tel (909)590-5905 Fax (909)590-5907

EPA 8082 QA/QC Report

Matrix: **Soil/Solid/Sludge**Date Analyzed: **11/30/2017**Unit: **mg/Kg(PPM)**

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

Spiked Sample Lab I.D.: **171130-LCS1/2**

Analyte	S.R.	spk conc	MS	%REC	MSD	%REC	%RPD	ACP %RPD	ACP %REC
PCB (1016+1260)	0.000	0.100	0.085	85%	0.089	89%	5%	0-20%	70-130

Lab Control Spike (LCS) Recovery:

Analyte	spk conc	LCS	% REC	ACP %REC
PCB (1016+1260)	0.100	0.108	108%	75-125

Surrogate Recovery	ACP%	ACP%	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.		MB	171117-70	171117-71	171129-29	171129-30	171129-31	171129-32
Tetra-chloro-meta-xylene	50-150	123%	127%	122%	120%	138%	71%	116%
Decachlorobipneyl	50-150	96%	99%	110%	87%	104%	87%	82%

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.	171129-33	171129-34	171129-35	171129-36				
Tetra-chloro-meta-xylene	114%	120%	106%	143%				
Decachlorobipneyl	95%	79%	96%	93%				

Surrogate Recovery	%REC	%REC	%REC	%REC	%REC	%REC
Sample I.D.						
Tetra-chloro-meta-xylene						
Decachlorobipneyl						

S.R. = Sample Result

* = Surrogate fail due to matrix interference (If Marked)

spk conc = Spike Concentration

Note: LCS, MS, MSD are in control therefore results are in control.

%REC = Percent Recovery

ACP %RPD = Acceptable Percent RPD Range

ACP %REC = Acceptable Percent Recovery Range

Analyzed and Reviewed By: 

Final Reviewer: _____

CA-DHS ELAP CERTIFICATE #1555

Other:

Page 1 of 1

SPECIAL EXTRACTIVE

Misc./PO#

Ma. Ciba H.S.
Bldg G

$\text{EPA} \cdot \text{Methanol}$
 $\text{EPA} \cdot \text{PCD}$

407



Supplemental Report 1

The original report has been revised/corrected.

**WORK ORDER NUMBER: 17-11-2046***The difference is service*

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For**Client:** Alta Environmental**Client Project Name:** SMSD-17-7279**Attention:** Cesar Ruvalcaba
3777 Long Beach Blvd., Annex Building
Long Beach, CA 90802-3335*Vikas Patel*Approved for release on 02/20/2018 by:
Vikas Patel
Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Contents

Client Project Name: SMSD-17-7279

Work Order Number: 17-11-2046

1	Work Order Narrative.	3
2	Sample Summary.	4
3	Detections Summary.	5
4	Client Sample Data.	6
	4.1 EPA 8082 PCB Aroclors (Solid).	6
5	Quality Control Sample Data.	8
	5.1 LCS/LCSD.	8
6	Sample Analysis Summary.	9
7	Glossary of Terms and Qualifiers.	10
8	Chain-of-Custody/Sample Receipt Form.	11

Work Order Narrative

Work Order: 17-11-2046

Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 11/28/17. They were assigned to Work Order 17-11-2046.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.



Calscience

Sample Summary

Client:	Alta Environmental	Work Order:	17-11-2046
	3777 Long Beach Blvd., Annex Building	Project Name:	SMSD-17-7279
	Long Beach, CA 90802-3335	PO Number:	
		Date/Time Received:	11/28/17 13:30
		Number of Containers:	2

Attn: Cesar Ruvalcaba

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
1127-3	17-11-2046-1	11/27/17 16:38	1	Solid
1127-7	17-11-2046-2	11/27/17 17:31	1	Solid


Return to Contents



Calscience

Detections Summary

Client: Alta Environmental
3777 Long Beach Blvd., Annex Building
Long Beach, CA 90802-3335

Work Order: 17-11-2046
Project Name: SMSD-17-7279
Received: 11/28/17

Attn: Cesar Ruvalcaba

Page 1 of 1

Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
1127-3 (17-11-2046-1) Aroclor-1254	37		4.0	mg/kg	EPA 8082	EPA 3540C
1127-7 (17-11-2046-2) Aroclor-1254	11		2.8	mg/kg	EPA 8082	EPA 3540C

Subcontracted analyses, if any, are not included in this summary.

Return to Contents

* MDL is shown



Calscience

Analytical Report

Alta Environmental
3777 Long Beach Blvd., Annex Building
Long Beach, CA 90802-3335

Date Received: 11/28/17
Work Order: 17-11-2046
Preparation: EPA 3540C
Method: EPA 8082
Units: mg/kg

Project: SMSD-17-7279

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
1127-3	17-11-2046-1-A	11/27/17 16:38	Solid	GC 31	12/01/17	12/04/17 13:42	171201L11

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	4.0	1.00	
Aroclor-1221	ND	4.0	1.00	
Aroclor-1232	ND	4.0	1.00	
Aroclor-1242	ND	4.0	1.00	
Aroclor-1248	ND	4.0	1.00	
Aroclor-1254	37	4.0	1.00	
Aroclor-1260	ND	4.0	1.00	
Aroclor-1262	ND	4.0	1.00	
Aroclor-1268	ND	4.0	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	89	24-168	
2,4,5,6-Tetrachloro-m-Xylene	90	25-145	

1127-7	17-11-2046-2-A	11/27/17 17:31	Solid	GC 31	12/01/17	12/04/17 14:01	171201L11
--------	----------------	----------------	-------	-------	----------	----------------	-----------

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	2.8	1.00	
Aroclor-1221	ND	2.8	1.00	
Aroclor-1232	ND	2.8	1.00	
Aroclor-1242	ND	2.8	1.00	
Aroclor-1248	ND	2.8	1.00	
Aroclor-1254	11	2.8	1.00	
Aroclor-1260	ND	2.8	1.00	
Aroclor-1262	ND	2.8	1.00	
Aroclor-1268	ND	2.8	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	91	24-168	
2,4,5,6-Tetrachloro-m-Xylene	89	25-145	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Alta Environmental
3777 Long Beach Blvd., Annex Building
Long Beach, CA 90802-3335

Date Received: 11/28/17
Work Order: 17-11-2046
Preparation: EPA 3540C
Method: EPA 8082
Units: mg/kg

Project: SMSD-17-7279

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-535-4470	N/A	Solid	GC 31	12/01/17	12/04/17 12:07	171201L11

Parameter	Result	RL	DF	Qualifiers
Aroclor-1016	ND	0.050	1.00	
Aroclor-1221	ND	0.050	1.00	
Aroclor-1232	ND	0.050	1.00	
Aroclor-1242	ND	0.050	1.00	
Aroclor-1248	ND	0.050	1.00	
Aroclor-1254	ND	0.050	1.00	
Aroclor-1260	ND	0.050	1.00	
Aroclor-1262	ND	0.050	1.00	
Aroclor-1268	ND	0.050	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Decachlorobiphenyl	93	24-168	
2,4,5,6-Tetrachloro-m-Xylene	93	25-145	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



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Quality Control - LCS/LCSD

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-535-4470	LCS	Solid	GC 31	12/01/17	12/04/17 13:04	171201L11
099-12-535-4470	LCSD	Solid	GC 31	12/01/17	12/04/17 13:23	171201L11

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Aroclor-1016	0.1000	0.1155	116	0.1150	115	50-135	0	0-20	
Aroclor-1260	0.1000	0.09200	92	0.09200	92	50-135	0	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

Sample Analysis Summary Report

Work Order: 17-11-2046

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<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 8082	EPA 3540C	1028	GC 31	1


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Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

Glossary of Terms and Qualifiers

Work Order: 17-11-2046

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<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: Alta

DATE: 11/28/2017

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: -0.4°C); Temperature (w/o CF): 2.0 °C (w/ CF): 1.6 °C; ☒ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 1091

CUSTODY SEAL:

Cooler ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 1091

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/A

Checked by: 1090

SAMPLE CONDITION:

	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

(Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☐ VOAh ☐ VOAna₂ ☐ 100PJ ☐ 100PJna₂ ☐ 125AGB ☐ 125AGBh ☐ 125AGBp ☐ 125PB ☐ 125PBznna (pH__9)

☐ 250AGB ☐ 250CGB ☐ 250CGBs (pH__2) ☐ 250PB ☐ 250PBn (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH__2) ☐ 500PB

☐ 1AGB ☐ 1AGBna₂ ☐ 1AGBs (pH__2) ☐ 1AGBs (O&G) ☐ 1PB ☐ 1PBna (pH__12) ☐ _____ ☐ _____ ☐ _____

Solid: ☒ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 1080

s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 8046

Appendix C

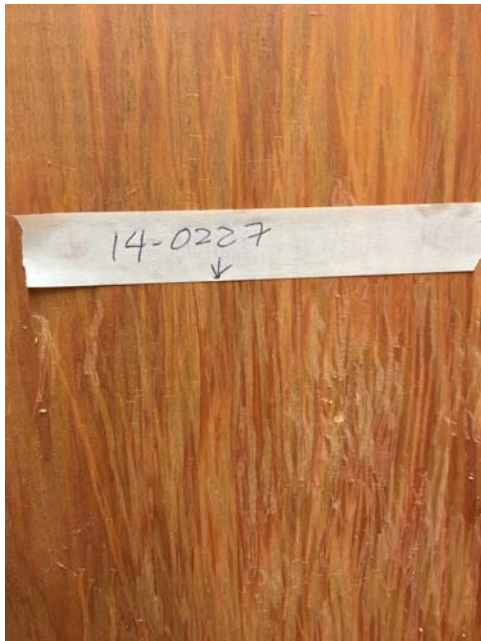
Sample Location Maps

Appendix D

Photographs

MHS-Building G, Varnish Sampling

14-0227

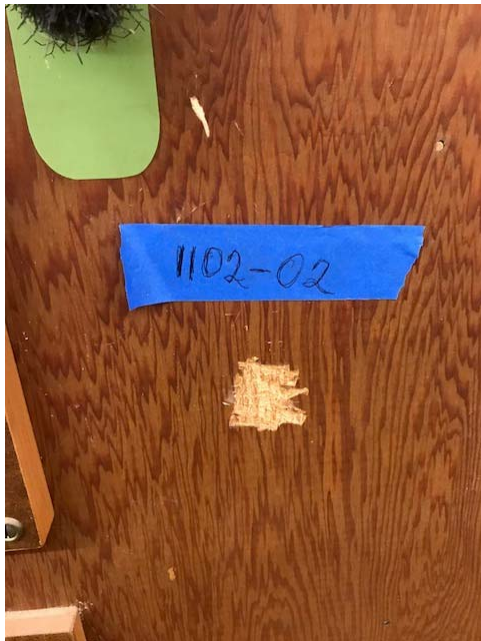


1102-01



MHS-Building G, Varnish Sampling

1102-02



1102-03



MHS-Building G, Varnish Sampling

1102-04



1102-05



MHS-Building G, Varnish Sampling

1102-06



1102-07



MHS-Building G, Varnish Sampling

1102-08



1102-09



MHS-Building G, Varnish Sampling

1102-10



1102-11



MHS-Building G, Varnish Sampling

1102-12



1102-13



MHS-Building G, Varnish Sampling

1102-14



1102-15



MHS-Building G, Varnish Sampling

1102-16



1102-17



MHS-Building G, Varnish Sampling

1102-20



1127-1

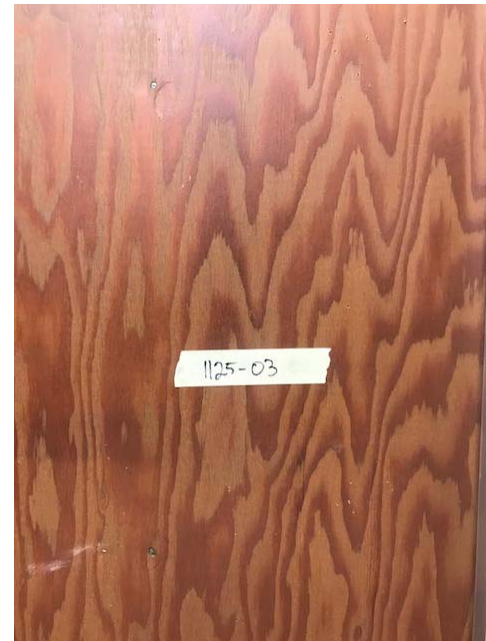


MHS-Building G, Varnish Sampling

1127-2



1127-3



MHS-Building G, Varnish Sampling

1127-4



1125-5



MHS-Building G, Varnish Sampling

1127-6



1127-8

