

# Investigation Report

**Confirmation Sampling of Reported Soil Remediation Area  
Adjacent to Building A - Lincoln Middle School,  
1501 California Avenue, Santa Monica, California 90403**

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**November 15, 2016**

*Prepared For*



*Santa Monica – Malibu Unified School District  
2828 4<sup>th</sup> Street, Santa Monica, CA 90405*

*Prepared By*



*10801 National Boulevard, Suite 415, Los Angeles, CA 90064*

*Philip Chang, Ph.D. and Charles G. Lee, Ph.D., P.G.*

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**TABLE OF CONTENTS**

EXECUTIVE SUMMARY .....	1
1. INTRODUCTION .....	2
1.1 SCOPE OF KES INVESTIGATION .....	2
1.2 PREVIOUS INVESTIGATIONS .....	2
1.3 SITE DESCRIPTION .....	2
2. SAMPLING AND TESTING .....	3
3. RESULTS .....	3
4. DISCUSSION .....	4
5. CONCLUSIONS .....	6
6. DATA SUMMARY TABLES .....	6

**FIGURES**

**Figure 1.** Site Vicinity Map

**Figure 2.** Site Layout and Boring Locations

**ATTACHMENTS**

**Attachment A.** Photographs

**Attachment B.** Laboratory Analytical Reports

## Professional Certification

**Investigation Report  
Confirmation Sampling of Reported Soil Remediation Area  
Adjacent to Building A – Lincoln Middle School,  
1501 California Avenue, Santa Monica, California 90403**

This document was prepared by:


  
Signature

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November 9, 2016

Date

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November 15, 2016

Date

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November 17, 2016

Date

### Statement of Limitations

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This document 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.

## Executive Summary

On behalf of Santa Monica – Malibu Unified School District (SMMUSD), Kroner Environmental Services, Inc. (KES) has conducted a soil sampling confirmation investigation adjacent to Building A at Lincoln Middle School, 1501 California Avenue in the city of Santa Monica, California. Soil sampling was conducted by KES in the area shown on Figures 1 and 2. This area was previously the subject of a soil investigation and associated human risk screening evaluation which was reported by Levine Fricke Recon, Inc. (LFR) in *Preliminary Environmental Assessment, Lincoln Middle School, Replacement of Classroom Building C, Modernization and Site Improvement Project, 1501 California Avenue, Santa Monica, California* dated July 28, 2009 (PEA).

As reported in the PEA, soil samples were collected and analyzed for Title 22 metals, organochlorine pesticides and polychlorinated biphenyls (PCBs). An area of polychlorinated biphenyl (PCB) affected soil adjacent to Building A was found to exceed the California Department of Toxic Substances Control (DTSC) action level for future unrestricted, i.e. residential, use applicable to school sites. The soil in the area was reported to have been subsequently removed and replaced with clean backfill. Construction records indicate that soil from the area delineated in the PEA was removed and disposed off-site.

On October 12, 2016, soil samples were collected by KES from this location and analyzed for Title 22 metals, pesticides and PCB. The analytical data was then compared to the current California Office of Environmental Health Hazard Assessment Soil Screening numbers (CHHSL) and U.S. Environmental Protection Agency (EPA) Regional Screening Level (RSL) for residential use. The findings of the KES investigation are summarized below.

- No PCBs were detectable at the laboratory Practical Quantitation Limit in any of the soil samples collected from the 0.5 foot and 1.0 foot depths. Since no PCBs were detected, analysis of the samples collected at deeper depths was not performed.
- With the exception of arsenic which was detected at 8.38 milligrams per kilogram (mg/kg), no other Title 22 metals were detected in concentrations which exceed the RSL for residential use. The concentration of arsenic is below the screening level of 12 mg/kg proposed by DTSC (Chernoff, Bosan and Oudiz) in 2008; the proposed screening level was based upon a statistical analysis of data from southern California school sites.
- All detectable concentrations of organochlorine pesticides in the soil samples collected for this investigation were found to be at least two orders of magnitude below the CHSSL and applicable RSL for residential use and are therefore considered to be *de minimus* and not actionable.
- The soil in the current study area is entirely covered with concrete or asphalt pavement which prevents any exposure to stormwater, wind or erosion. The pavement also provides a barrier preventing human exposure to the underlying soil matrix.
- Based on the findings listed above, KES concludes that soils beneath the existing pavement in the current study area would pose no risk to Lincoln Middle School students, staff or visitors. KES recommends no further action.

# 1. Introduction

## 1.1 Scope of KES Investigation

Kroner Environmental Services, Inc. (KES) has conducted a soil sampling confirmation investigation at Lincoln Middle School located at 1501 California Avenue in the city of Santa Monica, California. Soil sampling was conducted by KES in the area adjacent to Building A as shown on Figures 1 and 2. The purpose of the KES investigation is to determine if this area contains concentrations of Title 22 metals, pesticides or polychlorinated biphenyls (PCBs) which exceed current California Office of Environmental Health Hazard Assessment Soil Screening numbers (CHHSL) or U.S. Environmental Protection Agency (EPA) Regional Screening Levels (RSLs) for residential use. This investigation shall also evaluate the risk level associated with any detected metals, pesticides or PCBs. Finally, a recommendation regarding any future action shall be developed based on KES evaluation of site conditions, available documents, and analytical data. The scope of this soil investigation is limited to a 275 square foot area adjacent to Building A that was the subject of previous investigations as described in the sections below.

## 1.2 Previous Investigations

The KES study area was previously the subject of a soil investigation and associated human risk screening evaluation which was reported by Levine Fricke Recon, Inc. (LFR) in *Preliminary Environmental Assessment, Lincoln Middle School, Replacement of Classroom Building C, Modernization and Site Improvement Project, 1501 California Avenue, Santa Monica, California* dated July 28, 2009 (PEA). The PEA was prepared to satisfy typical California Department of Toxic Substances Control (DTSC) requirements for the environmental assessment of Lincoln Middle School such that it can be redeveloped with new school facilities.

As reported in the PEA, soil samples were collected and analyzed for Title 22 metals, organochlorine pesticides and PCBs. An area of PCB affected soil adjacent to Building A was found to exceed the DTSC action level for future unrestricted, i.e. residential, use applicable to school sites; the DTSC action levels were referred to as California Human Health Screening Levels (CHHSLs). Since then, DTSC CHHSLs have been replaced with EPA RSLs.

The soil in the area was reported to have been subsequently removed and replaced with clean backfill in accordance with the September 9, 2009 Remedial Action Work Plan prepared by LFR (RAW). Construction records indicate that soil from the area delineated in the PEA was removed and disposed off-site. The previous investigations indicate that the PCB affected soil area was at one time used as a landscape planter.

## 1.3 Site Description

Lincoln Middle School is located at 1501 California Avenue in the city of Santa Monica, California. The perimeter of the campus is adjacent to 16th Street, California Avenue, 14th Street and Washington Avenue on the northeast, southeast, southwest and northwest sides, respectively, all of which are within a multi-family residential vicinity as shown on Figure 1. The school is currently developed with classroom buildings, a parking lot and playing fields. The study area, shown on Figures 1 and 2, consists of the north-northwest side of the Building A where an approximately 275 square foot rectangular concrete landscape planter was once located. Based on KES evaluation of RAW, the dimensions of the soil remediation area were approximately 10 feet by 27 feet.

## 2. Sampling and Testing

Prior to field sampling activities, KES gathered and reviewed available information on subsurface utilities in order to verify the location of buried utilities and adjust proposed sample locations if needed in order to avoid hitting utilities during boring. KES reviewed the PEA, RAW, Composite Utility Plan C4.1, Electrical Power Site Plan E.100, and Fire Alarm Site Plan E.400 prior to marking the proposed boring locations and contacting Underground Service Alert (DigAlert) to obtain utility clearances.

KES reviewed available SMMUSD plans which showed the presence of a number of subsurface utilities, including sewer, stormdrain, water, fire protection water, gas and electric lines in the investigation area. Southwest Geophysics, Inc. (SWG) conducted a survey of the planned sampling area and the sampling locations were adjusted to avoid obstructions. Soil samples were ultimately collected from the approximate locations shown on Figure 2.

A total of thirteen borings, identified B-1 through B-13, were advanced. All borings required coring through either asphalt or concrete pavement. Six of the boring locations were sampled using direct-push technology and seven by hand-auger method. The hand-auger method was used in locations where underground utilities may potentially be damaged by using more aggressive boring methods. The borings were backfilled with either concrete or asphalt to match the pre-existing pavement after samples were collected. Photographs of the paved areas and boring logs are provided in Attachment A of this report.

Samples were collected on October 12, 2016 at depths of 0.5, 1.0, 2.0 and 3.0 feet (ft.) below ground surface (bgs) as shown on Figure 2. One equipment / rinsate blank consisting of distilled water and also one trip blank supplied by the laboratory were utilized during the sampling event for quality assurance / quality control (QA/QC) purposes. Sample collection and analyses were performed in accordance with the KES *Work Plan and Health and Safety Plan Confirmation Sampling of the Reported Soil Remediation Area Lincoln Middle School* dated October 11, 2016 using sample bottles provided by the analytical laboratory.

The samples were delivered to American Scientific Laboratory, LLC, a California certified analytical laboratory, under strict chain-of-custody procedures and at a temperature between 0 and 4 degrees C. The same analyses which were performed for the PEA were requested for the current investigation, i.e., Title 22 metals (EPA 6010B/7410A), polychlorinated biphenyls (PCBs) (EPA 8082A) and organochlorine pesticides (EPA 8081B). The QA/QC samples were analyzed for PCBs. Analyses were performed on the samples taken from the 0.5 and 1.0 ft. bgs. The remaining deeper samples were archived for later analysis in the event that contaminants exceeding applicable screening levels were found in the shallow samples. The laboratory analytical reports are provided in Attachment B of this report.

## 3. Results

Soil samples were analyzed for PCBs, Title 22 metals and organochlorine pesticides as described in Section 2 of this report. Tables 1 and 2 summarizing the analytical results are provided in Section 6 of this report.

## PCBs

No PCBs were detectable at the laboratory Practical Quantitation Limit in any of the soil samples analyzed for this investigation. Since no PCBs were detected, analyses of the samples collected at deeper depths were not performed.

## Metals

Arsenic was detected in all of the samples analyzed. The concentration ranged from 3.47 mg/kg (B-8-1) to 8.38 mg/kg (B-9-0.5). No other Title 22 metals were detected in concentrations which exceed the RSL or CHHSL for residential use.

## Organochlorine Pesticides

Gamma- and alpha-chlordane were detected in ten of the 0.5 foot soil samples and five of the 1.0 foot samples. The maximum concentrations detected were 25.3 micrograms per kilogram (ug/kg) gamma-chlordane and 33.4 ug/kg alpha-chlordane from sample B-10-0.5. DDT was detected in one of the 0.5 foot samples (B-9-0.5) and in four of the 1.0 foot samples; the maximum concentration detected was 13.1 ug/kg found in sample B-10-1. No other organochlorine pesticides were detected at the laboratory Practical Quantitation Limit and no concentrations were above RSL or CHHSL for residential use.

# 4. Discussion

## Screening Levels

The U.S. EPA and state of California have published risk-based screening levels for various compounds found in soil associated with residential use. The screening levels are not binding performance levels but rather are guidance tools or target goals which can be used to quantify estimates of potential health risks. The screening levels are thus considered to be concentrations of compounds which are safe for exposure based on inhalation, ingestion and dermal absorption criteria in a residential setting. Residential-use soil exposure applies to a population that lives and is exposed to the soil for an extended period upwards of thirty years. Children, faculty, staff, visitors and workers who will either attend or work at the Lincoln Middle School are not anticipated to incur prolonged exposure thus, a determination that the soil is safe for residential-use would indicate that the soil will not adversely affect the health of future students and faculty.

CHHSLs are defined by the state of California to be concentrations of chemicals in soil or soil-gas below thresholds of concern or risk to human health – specifically, an excess lifetime cancer risk of one in a million and a hazard quotient of 1.0 for non-cancer health effects. California Office of Environmental Health Hazard Assessment, Table 1 – Soil Screening Numbers for Nonvolatile Chemicals Based on Total Exposure to Contaminated Soil: Inhalation, Ingestion and Dermal Absorption was used for this soil investigation and the screening levels for the constituents analyzed are listed under the CHHSL column of the data summary table provided in this report. U.S. EPA Regional Screening Level Resident Soil Table May 2016 concentrations of constituents are also provided in the data summary tables for reference purposes. Not all of the constituents have specified screening levels. The screening levels presented under column EPA RSL are the more stringent of either the Carcinogenic Target Risk = 1E-06 or the Noncancer Child Hazard Index = 1 screening levels.

## PCBs

No PCBs were detectable at the laboratory Practical Quantitation Limit (33.0 ug/kg to 67.0 ug/kg) in any of the samples analyzed for this soil investigation. Soil sampling performed in 2009 and reported in the PEA and RAW indicated that the PCB Aroclor-1254 was detected at concentrations ranging between 50.5 ug/kg - 5,400 ug/kg in samples collected at the 0.5 ft. bgs. Since no PCBs were detected in the current soil investigation and a pavement barrier would result in zero exposure to the subject soil, the magnitude of cancer and non-cancer health hazard risk associated with PCBs is estimated to be zero.

## Metals

None of the Title 22 metals except for arsenic were detected in concentrations that exceeded the EPA RSL or CHSSL. Arsenic was detected in all of the samples analyzed during this soil investigation. The maximum arsenic concentration was found to be 8.38 mg/kg in sample B-9-0.5. The EPA risk-based RSL for arsenic is 0.77 mg/kg and the corresponding CHHSL is 0.07 mg/kg. The CHHSL for arsenic applies to arsenic concentrations that occur as a result of human activity. It cannot be determined if the detected arsenic is from human activity, naturally occurring background or both. Furthermore, it is widely acknowledged that the concentration of naturally occurring arsenic may typically be 100-times above the published risk-based screening number.

As a result of the high ambient concentrations of arsenic and uncertainty in distinguishing between natural and anthropogenic forms, the DTSC proposed that an appropriate screening level for arsenic should be 12 mg/kg and that this would include both naturally occurring plus anthropogenic arsenic. The DTSC proposal was based on a statistical analysis of data from southern California school sites and the 12 mg/kg concentration represents an upper bound for typically observed arsenic in soils. The DTSC analysis and proposal are reported in *Determination of a Southern California Regional Background Arsenic Concentration in Soil* by G. Chernoff, W. Bosan and D. Oudiz, 2008.

Based on the proposed screening level of 12 mg/kg, the arsenic concentrations detected during this investigation are typical for school sites in southern California and are not considered significant. Since all the other metals were below their respective EPA RSL and CHHSL and a pavement barrier would result in zero exposure to the subject soil, the magnitude of cancer and non-cancer health hazard risk associated with metals is estimated to be zero.

## Organochlorine Pesticides

Organochlorine pesticides are persistent in the environment as a result of wide use of these compounds as a termiticide from the 1940s through the 1980s. The detected concentrations of chlordane ranged from non-detect at the laboratory Practical Quantitation Limit to 184 ug/kg in B-10-0.5. The corresponding RSL and CHHSL for residential soil total chlordane are 2,000 ug/kg and 430 ug/kg, respectively. The risk from the total chlordane concentration measured during this soil investigation is therefore less than the one in one million cancer risk target threshold and is considered to be *de minimus*.

For DDT in residential soil, the EPA RSL is 2,000 ug/kg and the CHHSL is 1,600 ug/kg. The maximum concentration of DDT was found to be 13.1 ug/kg (B-10-1) and approximately two



orders of magnitude below the screening level criteria. The risk from this compound is therefore less than the one in one million cancer risk target threshold and is considered to be *de minimus*.

Since all the other organochlorine pesticides were either non-detect or did not have a specified screening level, and a pavement barrier would result in zero exposure to the subject soil, the magnitude of cancer and non-cancer health hazard risk associated with other organochlorine pesticides is estimated to be zero.

## 5. Conclusions

- No PCBs were detectable at the laboratory Practical Quantitation Limit in any of the soil samples collected from the 0.5 ft. and 1.0 ft. depths. Since no PCBs were detected, analysis of the samples collected at deeper depths was not performed.
- With the exception of arsenic which was detected at 8.38 milligrams per kilogram (mg/kg), no other Title 22 metals were detected in concentrations which exceed the RSL for residential use. The concentration of arsenic is below the screening level of 12 mg/kg proposed by DTSC (Chernoff, Bosan and Oudiz) in 2008; the proposed screening level was based upon a statistical analysis of data from southern California school sites.
- All detectable concentrations of organochlorine pesticides in the soil samples collected for this investigation were found to be at least two orders of magnitude below the CHSSL and applicable RSL for residential use and are therefore considered to be *de minimus* and not actionable.
- The soil in the current study area is entirely covered with concrete or asphalt pavement which prevents any exposure to stormwater, wind or erosion. The pavement also provides a barrier preventing human exposure to the underlying soil matrix.
- Based on the findings listed above, KES concludes that soils beneath the existing pavement in the current study area would pose no risk to Lincoln Middle School students, staff or visitors. KES recommends no further action.

## 6. Data Summary Tables

Data summary tables which show the concentrations of detected soil constituents are provided on the following page. Also included are the EPA RSLs and CSSHLs.

Table 1 - Data Summary; Sample Date: October 12, 2016; Sample Depth: 0.5 foot bgs

Parameter	B-1	B-2	B-3	B-4	B-5	B-6	B-7	B-8	B-9	B-10	B-11	B-12	B-13	EPA RSL	CHHSL
<b>PCBs (ug/kg)</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	350	89
<b>OCPs (ug/kg)</b>															
gamma-chlordane	--	--	12.2	10.7	11.1	5.15	--	18.6	15.2	25.3	8.14	5.30	6.59	ns	ns
alpha-chlordane	--	--	17.5	14.8	19.2	9.48	--	19.1	18.2	33.4	10.5	6.14	9.58	ns	ns
4,4'-DDT	--	--	--	--	--	--	--	--	6.32	--	--	--	--	2000	1600
total chlordane	--	--	102	--	100	--	--	118	105	184	--	--	--	2000	430
others	--	--	--	--	--	--	--	--	--	--	--	--	--	various	various
<b>Metals (mg/l)</b>															
Antimony	--	--	0.614	--	--	--	--	--	--	--	--	--	--	31	30
Arsenic	6.30	6.07	5.31	4.65	5.92	4.75	4.63	5.60	8.38	4.42	4.42	3.86	5.62	0.77	0.07*
Barium	161	171	136	125	154	135	180	129	165	135.0	143	129	157	16000	5200
Beryllium	0.691	0.700	0.507	--	0.544	--	0.576	0.501	0.576	--	0.500	--	0.551	160	16
Cadmium	1.76	1.72	1.42	1.21	1.54	1.64	1.71	1.35	1.67	1.20	1.39	1.31	1.59	78	1.7
Chromium (total)	43.2	43.1	37.1	32.4	40.8	36.7	39.8	32.4	38.5	27.5	31.5	32.9	36.1	ns	ns
Cobalt	11.8	12.3	9.28	8.37	10.0	10.3	10.7	8.99	15.2	8.76	9.46	8.19	10.2	23	660
Copper	26.0	26.1	25.2	22.0	27.9	43.5	25.8	24.4	30.4	20.1	23.8	21.5	30.5	3100	3000
Lead	8.00	7.60	10.1	8.61	10.9	19.1	12.6	15.8	21.9	18.6	12.0	11.8	20.3	ns	80
Mercury	--	--	--	--	--	--	0.0540	--	--	--	--	--	--	23	18
Molybdenum	--	--	0.620	--	0.976	--	--	--	--	--	0.533	--	--	390	380
Nickel	28.8	29.5	24.2	21.2	25.8	25.0	25.9	22.0	25.5	18.5	21.5	21.1	25.5	860.0	1600
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	390	380.0
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	390	380
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	0.78	5
Vanadium	61.6	62.0	49.8	44.8	53.7	50.3	54.5	45.7	54.9	38.7	46.3	43.8	52.8	390	530
Zinc	68.3	69.5	67.0	57.2	70.0	88.0	81.5	72.4	82.9	80.3	70.8	68	89.5	23000	2300

PCBs = polychlorinated biphenyls; OCPs = organochlorine pesticides; -- = Not Detected at the laboratory Practical Quantitation Limit; ns = Not Specified

\* As a result of naturally occurring high concentrations of arsenic which typically exceed CHHSL, DTSC has proposed a screening level of 12 mg/kg

Table 2 - Data Summary; Sample Date: October 12, 2016; Sample Depth: 1.0 foot bgs



Parameter	B-1	B-2	B-3	B-4	B-5	B-6	B-7	B-8	B-9	B-10	B-11	B-12	B-13	EPA RSL	CHHSL
<b>PCBs (ug/kg)</b>	--	--	--	--	--	--	--	--	--	--	--	--	--	350	89
<b>OCPs (ug/kg)</b>															
gamma-chlordane	--	--	--	--	--	--	--	--	15.4	13.2	4.17	16.40	22.1	ns	ns
alpha-chlordane	--	--	--	--	--	--	--	--	22.8	17.2	7.80	24.3	28.4	ns	sn
4,4'-DDT	--	--	--	--	--	--	--	--	8.63	13.1	4.69	--	4.66	2000	1600
total chlordane	--	--	--	--	--	--	--	--	101	109	--	122	164	2000	430
others	--	--	--	--	--	--	--	--	--	--	--	--	--	various	various
<b>Metals (mg/l)</b>															
Antimony	--	--	--	--	0.775	--	--	--	--	0.690	--	--	--	31	30
Arsenic	7.85	7.81	6.65	4.34	6.00	5.18	3.88	3.47	4.98	7.94	5.01	7.15	6.71	0.77	0.07*
Barium	159	152	147	172	188	204	201	172	182	197	190	177	164	16000	5200
Beryllium	0.719	0.711	0.621	0.579	0.621	0.693	0.609	0.533	0.585	0.611	0.577	0.644	0.535	160	16
Cadmium	1.74	1.53	1.49	1.45	1.70	1.76	1.78	1.43	1.70	1.83	1.66	1.82	1.53	78	1.7
Chromium	51.3	47.6	45.3	38.3	43.7	44.1	42.5	33.4	44.9	45.5	42.0	43.2	37.3	ns	ns
Cobalt	12.0	12.1	10.4	11.2	11.8	12.8	12.2	9.65	11.4	11.9	11.1	10.8	10.3	23	660
Copper	32.5	33.2	31.6	20.9	28.9	24.5	24.9	23.2	32.2	29.9	26.3	31.8	25.7	3100	3000
Lead	8.48	8.27	8.07	6.59	17.0	7.68	7.05	5.99	13.8	32.8	27.6	17.1	18.7	ns	80
Mercury	--	0.0505	--	--	--	--	0.0540	--	0.996	--	--	--	--	23	18
Molybdenum	--	0.580	--	--	--	--	--	--	1.03	--	--	--	--	390	380
Nickel	33.7	33.6	30.4	26.3	28.1	30.4	28.1	23.1	26.5	29.1	26.6	28.6	24.9	860.0	1600
Selenium	--	--	--	--	--	--	--	--	--	--	--	--	--	390	380.0
Silver	--	--	--	--	--	--	--	--	--	--	--	--	--	390	380
Thallium	--	--	--	--	--	--	--	--	--	--	--	--	--	0.78	5
Vanadium	67.1	61.8	58.9	52.7	56.9	59.8	53.9	45.9	54.2	56.8	52.5	54.8	50.7	390	530
Zinc	74.6	71.6	70.7	66.6	82.3	78.8	79.2	66.1	89.1	123	106	112	89.7	23000	2300

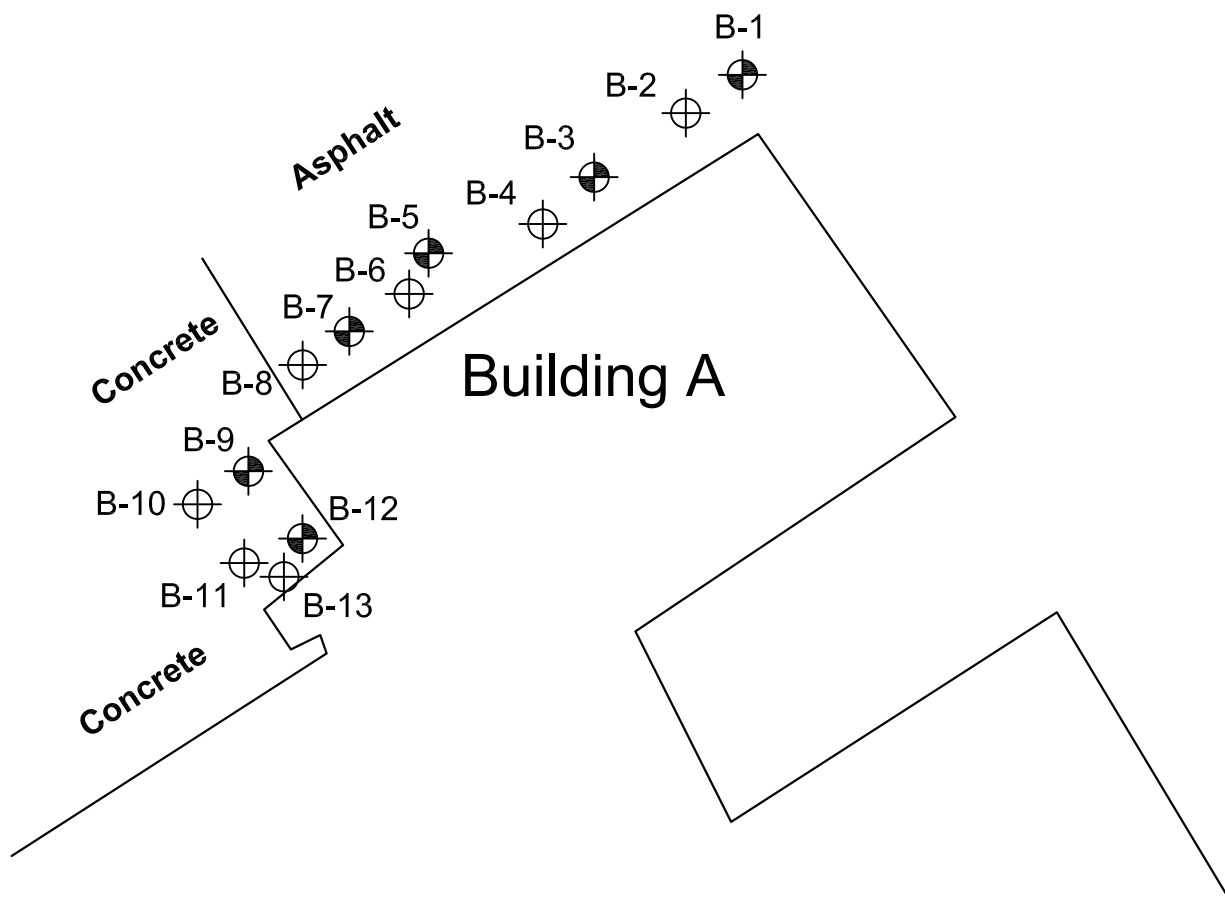
PCBs = polychlorinated biphenyls; OCPs = organochlorine pesticides; -- = Not Detected at the laboratory Practical Quantitation Limit; ns = Not Specified

\* As a result of naturally occurring high concentrations of arsenic which typically exceed CHHSL, DTSC has proposed a screening level of 12 mg/kg



## LEGEND:

-  Samples at 0.5, 1 and 2 ft. depths
-  Samples at 0.5, 1, 2 and 3 ft. depths



0 10 20  
APPROX. SCALE

## **ATTACHMENTS**

## **Attachment A**

### **Site Photographs**





**Photo 1 – Pre-Existing Condition (September 2016)**



**Photo 2 – Pre-Existing Condition (September 2016)**



**Photo 3 – Geophysical Survey to locate Underground Utilities**



**Photo 4 – Drilling and Sample Collection**





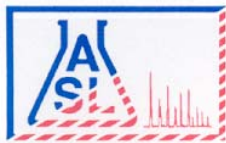
**Photo 5 – Hand Auger Sample Collection**



**Photo 6 – Site Restoration**

## **Attachment B**

### Laboratory Analytical Reports



**AMERICAN SCIENTIFIC LABORATORIES, LLC**  
*Environmental Testing Services*

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

**Ordered By**

Kroner Environmental Svcs, Inc.  
10801 National Blvd. #415  
Los Angeles, CA 90064-

**Number of Pages** 32

**Date Received** 10/12/2016

**Date Reported** 10/26/2016

**Telephone** (310) 474-1500

**Attn** Charles Lee

Job Number	Ordered	Client
68664	10/12/2016	KRONER

**Project ID:** 1118  
**Project Name:** SMMUSD PCB Investigation  
**Site:** 1501 California Ave.  
Santa Monica, CA

Enclosed are the results of analyses on 28 samples analyzed as specified on attached chain of custody.

Wendy Lu  
Organics Supervisor

American Scientific Laboratories, LLC (ASL) accepts sample materials from clients for analysis with the assumption that all of the information provided to ASL verbally or in writing by our clients (and/or their agents), regarding samples being submitted to ASL, is complete and accurate. ASL accepts all samples subject to the following conditions:

- 1) ASL is not responsible for verifying any client-provided information regarding any samples submitted to the laboratory.
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Page 1 Of 5

COC# **Nº 76203** GLOBAL ID \_\_\_\_\_ E REPORT: ☒ PDF ☐ EDF ☐ EDD ASL JOB# **68664**

Company: <b>Kroner Environmental Services</b>					Report To: <b>Charles Lee</b>		ANALYSIS REQUESTED									
Address: <b>#415 LA 10801 National Blvd, CA</b>					Project Name: <b>SMUSD PCB Investigation</b>		Address: <b>Kroner</b>		<div style="writing-mode: vertical-rl; transform: rotate(180deg);"> PcBs 8082A  CAN Metals  Organochlorine 8081B </div>							
Site name: <b>Lincoln Middle School</b>					Site Address: <b>SANTA MONICA, CA 1501 California Ave.</b>		Invoice To: <b>Kroner</b>									
Telephone: <b>323-450-6290</b>							Address: <b>As above</b>									
Fax:																
Special Instruction: <b>See remarks</b>					Project ID: <b>1118</b>											
E-mail: <b>clee@kronerenvironmental.com</b>					Project Manager: <b>Charles Lee</b>		P.O.#: <b>1118</b>									

ITEM	LAB USE ONLY		SAMPLE DESCRIPTION				Container(s)		Matrix	Preservation											Remarks
	Lab ID	Sample ID	Date	Time	#	Type															
1	350406	Equip Blank #1	10/12/16	12:50	5	Glass	Water			X											
		Trap Blanks		7:00	1	Glass	Water			X											
2	350407	B-1-0.5		1:10	1	Glass	Soil			X	X	X									
16	350544	B-1-1		1:15	1	Glass	Soil			X	X	X							<del>HOLD</del>		
		B-1-2		1:20	1	Glass	Soil			X	X	X							HOLD		
		B-1-3		1:25	1	Glass	Soil			X	X	X							HOLD		
3	350408	B-2-0.5		9:15	1	Plastic	Soil			X	X	X									
17	350545	B-2-1		9:20	1	Plastic	Soil			X	X	X							<del>HOLD</del>		
		B-2-2		9:25	1	Plastic	Soil			X	X	X							HOLD		
4	350409	B-3-0.5		9:30	1	Plastic	Soil			X	X	X							RUN <del>HOLD</del>		

Collected By: <b>Charles Lee</b>	Date: <b>10/12/16</b>	Time: <b>2:00</b>	Relinquished By:	Date:	Time:	TAT
Relinquished By: <b>Charles Lee</b>	Date: <b>10/12/16</b>	Time: <b>4:50</b>	Received For Laboratory:	Date: <b>10/12/16</b>	Time: <b>4:50</b>	<input type="checkbox"/> Normal
Received By:	Date:	Time:	Condition of Sample:			<input type="checkbox"/> Rush



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Page 2 Of 5

COC# **Nº 75744** GLOBAL ID \_\_\_\_\_ E REPORT: ☒ PDF ☐ EDF ☐ EDD ASL JOB# **68664**

Company: <b>Kroner Environmental Services</b>							Report To: <b>Charles Lee</b>			ANALYSIS REQUESTED									
Address: <b>10801 National Blvd #415</b>				Project Name: <b>Smmsud PCB Investigation</b>			Address: <b>Kroner</b>			<div style="display: flex; flex-direction: column; align-items: center;"> <div>Pesticides</div> <div>8081B</div> <div>PCBs 8082A</div> <div>CAM metals</div> <div>Cyanochlorine</div> </div>									
Los Angeles, CA				Site Address: <b>1501 California Ave, Monica</b>			Invoice To: <b>Kroner</b>												
Telephone: <b>323-450-6290</b>							Address: <b>Kroner</b>												
Fax: <b>323-450-6290</b>																			
Special Instruction: <b>See remarks</b>				Project ID: <b>1118</b>															
E-mail: <b>clee@kronerenvironmental.com</b>				Project Manager: <b>Charles Lee</b>			P.O.#: <b>1118</b>												

ITEM	LAB USE ONLY		SAMPLE DESCRIPTION				Container(s)		Matrix	Preservation										Remarks
	Lab ID	Sample ID	Date	Time	#	Type														
18	350546	B-3-1	10/12/16	9:30	1	Plastic	Soil			X	X	X								<del>HOLD</del>
		B-3-2		9:35	1	plastic				X	X	X								HOLD
		B-3-3		9:40	1	plastic				X	X	X								HOLD
5	350410	B-4-0.5		1:00	1	Glass				X	X	X								
19	350547	B-4-1		1:05		Glass				X	X	X								<del>HOLD</del>
		B-4-2		1:10		Glass				X	X	X								HOLD
6	350411	B-5-0.5		9:45	1	Plastic				X	X	X								
20	350548	B-5-1		9:45	1	plastic				X	X	X								<del>HOLD</del>
		B-5-2		9:50	1	plastic				X	X	X								HOLD
		B-5-3		9:55	1	plastic				X	X	X								HOLD

Collected By: <b>Charles Lee</b>	Date: <b>10/12/16</b>	Time: <b>2:00</b>	Relinquished By:	Date: _____	Time: _____	TAT
Relinquished By: <b>Charles Lee</b>	Date: <b>10/12/16</b>	Time: <b>4:50</b>	Received For Laboratory:	Date: <b>10/12/16</b>	Time: <b>4:50</b>	<input type="checkbox"/> Normal
Received By:	Date:	Time:	Condition of Sample:			<input type="checkbox"/> Rush





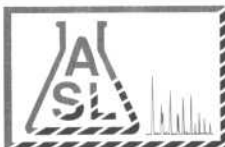
AMERICAN SCIENTIFIC LABORATORIES, LLC  
Environmental Testing Services

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Page 3 Of 5

COC# **Nº 75745** GLOBAL ID \_\_\_\_\_ E REPORT: ☒ XPDF ☐ EDF ☐ EDD ASL JOB# **68664**

Company: <b>Kroner Environmental Services</b>							Report To: <b>Charles Lee</b>			ANALYSIS REQUESTED												
Address: <b>10801 National Blvd, #415</b>							Project Name: <b>SMMUSD PCB Investigation</b>			Address: <b>Kroner</b>			<div style="display: flex; flex-direction: column; align-items: center;"> <div>PCBs 8082A</div> <div>CAM metals</div> <div>Pesticides 8082A</div> <div>Organochlorine 8082A</div> </div>									
Site Name: <b>Lincoln Middle School</b>							Site Address: <b>Santa Monica 1501 California Ave, Monica</b>			Invoice To: <b>Kroner</b>												
Telephone: <b>323-450-6290</b>										Address: <b>Kroner</b>												
Special Instruction: <b>See remarks</b>							Project ID: <b>1118</b>															
E-mail: <b>cleec@kronerenvironmental.com</b>							Project Manager: <b>Charles Lee</b>			P.O.#: <b>1118</b>												
ITEM	LAB USE ONLY		SAMPLE DESCRIPTION				Container(s)		Matrix	Preservation										Remarks		
	Lab ID	Sample ID	Date	Time	#	Type																
7	350412	B-6-0.5	10/12/16	12:38	1	Glass	Soil			X	X	X										
21	350549	B-6-1		12:40	1	Glass				X	X	X								HOLD		
		B-6-2		12:45	1	Glass				X	X	X								HOLD		
8	350413	B-7-0.5		12:10	1	Glass				X	X	X										
22	350550	B-7-1		12:15	1	Glass				X	X	X								HOLD		
		B-7-2		12:20	1	Glass				X	X	X								HOLD		
		B-7-3		12:25	1	Glass				X	X	X								HOLD		
9	350414	B-8-0.5		11:45	1	Glass				X	X	X										
23	350551	B-8-1		11:50	1	Glass				X	X	X								HOLD		
		B-8-2		11:55	1	Glass				X	X	X								HOLD		
Collected By: <b>Charles Lee</b> Date <b>10/12/16</b> Time <b>2:00</b>							Relinquished By: _____ Date _____ Time _____							TAT								
Relinquished By: <b>Charles Lee</b> Date <b>10/12/16</b> Time <b>4:50</b>							Received For Laboratory <b>[Signature]</b> Date <b>10/12/16</b> Time <b>4:50</b>							<input type="checkbox"/> Normal								
Received By: _____ Date _____ Time _____							Condition of Sample: _____							<input type="checkbox"/> Rush								



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Page 4 Of 5

COC# **N° 75746** GLOBAL ID \_\_\_\_\_ E REPORT: ☒ PDF ☐ EDF ☐ EDD ASL JOB# **68664**

Company: <b>Kroner Environmental Services</b>							Report To: <b>Charles Lee</b>			ANALYSIS REQUESTED												
Address: <b>10801 National Blvd, # 415</b>							Project Name: <b>Simmsd PCB Investigation</b>			Address: <b>Kroner</b>			<div style="display: flex; flex-direction: column; align-items: center;"> <div>PCBs 808LA</div> <div>CAM metals</div> <div>pesticides 808LA</div> <div>organochlorine 808LA</div> </div>									
Site Name: <b>Lincoln Middle School</b>							Site Address: <b>1501 California Ave. Santa Monica</b>			Invoice To: <b>Kroner</b>												
Telephone: <b>323-450-6290</b>										Address: <b>Kroner</b>												
Special Instruction: <b>See Remarks</b>							Project ID: <b>1118</b>															
E-mail: <b>clea@kronerenvironmental.com</b>							Project Manager: <b>Charles Lee</b>			P.O.#: <b>1118</b>												
ITEM	LAB USE ONLY		SAMPLE DESCRIPTION				Container(s)		Matrix	Preservation									Remarks			
	Lab ID	Sample ID	Date	Time	#	Type																
10	350415	B-9-0.5	10/12/16	11:10	1	Glass	Soil			X	X	X										
24	350552	B-9-1	↓	11:15	1	Glass	↓			X	X	X							<del>HOLD</del>			
		B-9-2		11:20	1	Glass				X	X	X								HOLD		
		B-9-3		11:25	1	Glass				X	X	X								HOLD		
11	350416	B-10-0.5		11:20	1	Glass				X	X	X										
25	350553	B-10-1	↓	11:25	1	Glass	↓			X	X	X							<del>HOLD</del>			
		B-10-2		11:30	1	Glass				X	X	X								HOLD		
12	350417	B-11-0.5		11:30		plastic				X	X	X								RUN <del>HOLD</del>		
26	350554	B-11-1	↓	11:35		Plastic	↓			X	X	X							<del>HOLD</del>			
		B-11-2		11:40		Plastic				X	X	X								HOLD		
Collected By: <b>Charles Lee</b>							Date: <b>10/12/16</b> Time: <b>2:00</b>		Relinquished By: _____							Date: _____ Time: _____		TAT				
Relinquished By: <b>Charles Lee</b>							Date: <b>10/12/16</b> Time: <b>4:50</b>		Received For Laboratory <b>[Signature]</b>							Date: <b>10/12/16</b> Time: <b>4:50</b>		<input type="checkbox"/> Normal				
Received By: _____							Date: _____ Time: _____		Condition of Sample: _____											<input type="checkbox"/> Rush		



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Page 5 Of 5

COC# **Nº 75735** GLOBAL ID \_\_\_\_\_ E REPORT: ☒ PDF ☐ EDF ☐ EDD ASL JOB# **68664**

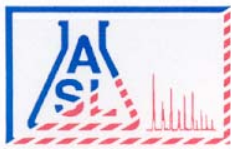
Company: <u>Kroner Environmental Services, Inc.</u>		Report To: <u>Charles Lee</u>		ANALYSIS REQUESTED											
Address: <u>10801 National Blvd, #445</u>		Project Name: <u>SMMUSD PCB Investigation</u>		Address: <u>Kroner</u>											
		Site Address: <u>1501 California Ave. Santa Monica</u>		Invoice To: <u>Kroner</u>											
Telephone: Fax: <u>323-450-6290</u>				Address: <u>Kroner</u>											
Special Instruction: <u>see remarks</u>		Project ID: <u>1118</u>													
E-mail: <u>clee@kronerenvironmental.com</u>		Project Manager: <u>Charles Lee</u>		P.O.#: <u>1118</u>											

I T E M	LAB USE ONLY		SAMPLE DESCRIPTION				Container(s)		Matrix	Preservation				Remarks
	Lab ID	Sample ID	Date	Time	#	Type								
13	350418	B-12-0.5	10/12/16	10:35	1	Plastic			Soil		X	X	X	
27	350555	B-12-1		10:40	1						X	X	X	<del>HOLD</del>
		B-12-2		10:45	1						X	X	X	HOLD
		B-12-3		10:50	1						X	X	X	HOLD
14	350419	B-13-0.5		10:55	1						X	X	X	
28	350556	B-13-1		11:00	1						X	X	X	<del>HOLD</del>
		B-13-2		11:05	1						X	X	X	HOLD
15	350420	Equip Blank #2		2:00	1	Glass			water		X	X	X	

Collected By: <u>Charles Lee</u>	Date <u>10/12/16</u> Time <u>2:00</u>	Relinquished By: _____	Date _____ Time _____	TAT
Relinquished By: <u>Charles Lee</u>	Date <u>10/12/16</u> Time <u>4:50</u>	Received For Laboratory <u>[Signature]</u>	Date <u>10/12/16</u> Time <u>4:50</u>	<input type="checkbox"/> Normal
Received By: _____	Date _____ Time _____	Condition of Sample: _____		<input type="checkbox"/> Rush

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# AMERICAN SCIENTIFIC LABORATORIES, LLC

## Environmental Testing Services

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

### ANALYTICAL RESULTS

**Ordered By****Site**

Kroner Environmental Svcs, Inc.  
10801 National Blvd. #415  
Los Angeles, CA 90064-

1501 California Ave.  
Santa Monica, CA

Telephone: (310)474-1500

Attn: Charles Lee

Page: 2

Project ID: 1118

Project Name: SMMUSD PCB Investigation

ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

QC Batch No: 101316-1

Our Lab I.D.		350407	350408	350409	350410	350411
Client Sample I.D.		B-1-0.5	B-2-0.5	B-3-0.5	B-4-0.5	B-5-0.5
Date Sampled		10/12/2016	10/12/2016	10/12/2016	10/12/2016	10/12/2016
Date Prepared		10/13/2016	10/13/2016	10/13/2016	10/13/2016	10/13/2016
Preparation Method						
Date Analyzed		10/13/2016	10/13/2016	10/13/2016	10/13/2016	10/13/2016
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor		1	1	1	1	1
Analytes	PQL	Results	Results	Results	Results	Results
<b>AA Metals</b>						
Mercury	0.0500	ND	ND	ND	ND	ND
<b>ICP Metals</b>						
Antimony	0.500	ND	ND	0.614	ND	ND
Arsenic	0.250	6.30	6.07	5.31	4.65	5.92
Barium	0.500	161	171	136	125	154
Beryllium	0.500	0.691	0.700	0.507	ND	0.544
Cadmium	0.500	1.76	1.72	1.42	1.21	1.54
Chromium	0.500	43.2	43.1	37.1	32.4	40.8
Cobalt	0.500	11.8	12.3	9.28	8.37	10.0
Copper	0.500	26.0	26.1	25.2	22.0	27.9
Lead	0.250	8.00	7.60	10.1	8.61	10.9
Molybdenum	0.500	ND	ND	0.620	ND	0.976
Nickel	0.500	28.8	29.5	24.2	21.2	25.8
Selenium	0.500	ND	ND	ND	ND	ND
Silver	0.500	ND	ND	ND	ND	ND
Thallium	0.500	ND	ND	ND	ND	ND
Vanadium	0.500	61.6	62.0	49.8	44.8	53.7
Zinc	0.500	68.3	69.5	67.0	57.2	70.0

### QUALITY CONTROL REPORT

QC Batch No: 101316-1

Analytes	LCS % REC	LCS/LCSD % Limit							
<b>AA Metals</b>									
Mercury	100	80-120							
<b>ICP Metals</b>									
Antimony	91	80-120							
Arsenic	91	80-120							



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## Environmental Testing Services

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### ANALYTICAL RESULTS

Page: 3

Project ID: 1118

Project Name: SMMUSD PCB Investigation

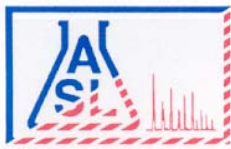
ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

### QUALITY CONTROL REPORT

QC Batch No: 101316-1

Analytes	LCS % REC	LCS/LCSD % Limit								
ICP Metals										
Barium	94	80-120								
Beryllium	100	80-120								
Cadmium	91	80-120								
Chromium	94	80-120								
Cobalt	93	80-120								
Copper	96	80-120								
Lead	94	80-120								
Molybdenum	91	80-120								
Nickel	93	80-120								
Selenium	91	80-120								
Silver	95	80-120								
Thallium	93	80-120								
Vanadium	95	80-120								
Zinc	90	80-120								



# AMERICAN SCIENTIFIC LABORATORIES, LLC

## Environmental Testing Services

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### ANALYTICAL RESULTS

**Ordered By****Site**

Kroner Environmental Svcs, Inc.  
10801 National Blvd. #415  
Los Angeles, CA 90064-

1501 California Ave.  
Santa Monica, CA

Telephone: (310)474-1500

Attn: Charles Lee

Page: 4

Project ID: 1118

Project Name: SMMUSD PCB Investigation

ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

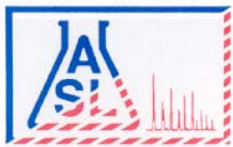
QC Batch No: 101316-1

Our Lab I.D.		350412	350413	350414	350415	350416
Client Sample I.D.		B-6-0.5	B-7-0.5	B-8-0.5	B-9-0.5	B-10-0.5
Date Sampled		10/12/2016	10/12/2016	10/12/2016	10/12/2016	10/12/2016
Date Prepared		10/13/2016	10/13/2016	10/13/2016	10/13/2016	10/13/2016
Preparation Method						
Date Analyzed		10/13/2016	10/13/2016	10/13/2016	10/13/2016	10/13/2016
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor		1	1	1	1	1
Analytes	PQL	Results	Results	Results	Results	Results
<b>AA Metals</b>						
Mercury	0.0500	ND	0.0540	ND	ND	ND
<b>ICP Metals</b>						
Antimony	0.500	ND	ND	ND	ND	ND
Arsenic	0.250	4.75	4.63	5.60	8.38	4.42
Barium	0.500	135	180	129	165	135
Beryllium	0.500	ND	0.576	0.501	0.576	ND
Cadmium	0.500	1.64	1.71	1.35	1.67	1.20
Chromium	0.500	36.7	39.8	32.4	38.5	27.5
Cobalt	0.500	10.3	10.7	8.99	15.2	8.76
Copper	0.500	43.5	25.8	24.4	30.4	20.1
Lead	0.250	19.1	12.6	15.8	21.9	18.6
Molybdenum	0.500	ND	ND	ND	ND	ND
Nickel	0.500	25.0	25.9	22.0	25.5	18.5
Selenium	0.500	ND	ND	ND	ND	ND
Silver	0.500	ND	ND	ND	ND	ND
Thallium	0.500	ND	ND	ND	ND	ND
Vanadium	0.500	50.3	54.5	45.7	54.9	38.7
Zinc	0.500	88.0	81.5	72.4	82.9	80.3

### QUALITY CONTROL REPORT

QC Batch No: 101316-1

Analytes	LCS % REC	LCS/LCSD % Limit							
<b>AA Metals</b>									
Mercury	100	80-120							
<b>ICP Metals</b>									
Antimony	91	80-120							
Arsenic	91	80-120							



# AMERICAN SCIENTIFIC LABORATORIES, LLC

## Environmental Testing Services

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### ANALYTICAL RESULTS

Page: 5

Project ID: 1118

Project Name: SMMUSD PCB Investigation

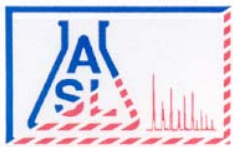
ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

### QUALITY CONTROL REPORT

QC Batch No: 101316-1

Analytes	LCS % REC	LCS/LCSD % Limit								
ICP Metals										
Barium	94	80-120								
Beryllium	100	80-120								
Cadmium	91	80-120								
Chromium	94	80-120								
Cobalt	93	80-120								
Copper	96	80-120								
Lead	94	80-120								
Molybdenum	91	80-120								
Nickel	93	80-120								
Selenium	91	80-120								
Silver	95	80-120								
Thallium	93	80-120								
Vanadium	95	80-120								
Zinc	90	80-120								



# AMERICAN SCIENTIFIC LABORATORIES, LLC

## Environmental Testing Services

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### ANALYTICAL RESULTS

**Ordered By****Site**

Kroner Environmental Svcs, Inc.  
10801 National Blvd. #415  
Los Angeles, CA 90064-

1501 California Ave.  
Santa Monica, CA

Telephone: (310)474-1500

Attn: Charles Lee

Page: 6

Project ID: 1118

Project Name: SMMUSD PCB Investigation

ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

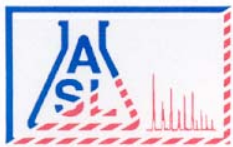
QC Batch No: 101316-1

Our Lab I.D.		350417	350418	350419		
Client Sample I.D.		B-11-0.5	B-12-0.5	B-13-0.5		
Date Sampled		10/12/2016	10/12/2016	10/12/2016		
Date Prepared		10/13/2016	10/13/2016	10/13/2016		
Preparation Method						
Date Analyzed		10/13/2016	10/13/2016	10/13/2016		
Matrix		Soil	Soil	Soil		
Units		mg/Kg	mg/Kg	mg/Kg		
Dilution Factor		1	1	1		
Analytes	PQL	Results	Results	Results		
<b>AA Metals</b>						
Mercury	0.0500	ND	ND	ND		
<b>ICP Metals</b>						
Antimony	0.500	ND	ND	ND		
Arsenic	0.250	4.42	3.86	5.62		
Barium	0.500	143	129	157		
Beryllium	0.500	0.500	ND	0.551		
Cadmium	0.500	1.39	1.31	1.59		
Chromium	0.500	31.5	32.9	36.1		
Cobalt	0.500	9.46	8.19	10.2		
Copper	0.500	23.8	21.5	30.5		
Lead	0.250	12.0	11.8	20.3		
Molybdenum	0.500	0.533	ND	ND		
Nickel	0.500	21.5	21.1	25.5		
Selenium	0.500	ND	ND	ND		
Silver	0.500	ND	ND	ND		
Thallium	0.500	ND	ND	ND		
Vanadium	0.500	46.3	43.8	52.8		
Zinc	0.500	70.8	68.0	89.5		

### QUALITY CONTROL REPORT

QC Batch No: 101316-1

Analytes	LCS % REC	LCS/LCSD % Limit							
<b>AA Metals</b>									
Mercury	100	80-120							
<b>ICP Metals</b>									
Antimony	91	80-120							
Arsenic	91	80-120							



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**ANALYTICAL RESULTS**

Page: **7**

Project ID: 1118  
Project Name: SMMUSD PCB Investigation

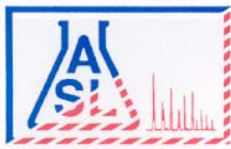
ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

**QUALITY CONTROL REPORT**

**QC Batch No: 101316-1**

Analytes	LCS % REC	LCS/LCSD % Limit								
<b>ICP Metals</b>										
Barium	94	80-120								
Beryllium	100	80-120								
Cadmium	91	80-120								
Chromium	94	80-120								
Cobalt	93	80-120								
Copper	96	80-120								
Lead	94	80-120								
Molybdenum	91	80-120								
Nickel	93	80-120								
Selenium	91	80-120								
Silver	95	80-120								
Thallium	93	80-120								
Vanadium	95	80-120								
Zinc	90	80-120								



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### ANALYTICAL RESULTS

**Ordered By****Site**

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10801 National Blvd. #415  
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1501 California Ave.  
Santa Monica, CA

Telephone: (310)474-1500

Attn: Charles Lee

Page: 8

Project ID: 1118

Project Name: SMMUSD PCB Investigation

ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

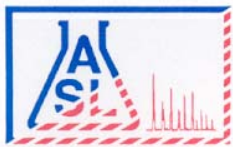
QC Batch No: 101916-1

Our Lab I.D.		350544	350545	350546	350547	350548
Client Sample I.D.		B-1-1	B-2-1	B-3-1	B-4-1	B-5-1
Date Sampled		10/12/2016	10/12/2016	10/12/2016	10/12/2016	10/12/2016
Date Prepared		10/19/2016	10/19/2016	10/19/2016	10/19/2016	10/19/2016
Preparation Method						
Date Analyzed		10/20/2016	10/20/2016	10/20/2016	10/20/2016	10/20/2016
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor		1	1	1	1	1
Analytes	PQL	Results	Results	Results	Results	Results
<b>AA Metals</b>						
Mercury	0.0500	ND	0.0505	ND	ND	ND
<b>ICP Metals</b>						
Antimony	0.500	ND	ND	ND	ND	0.775
Arsenic	0.250	7.85	7.81	6.65	4.34	6.00
Barium	0.500	159	152	147	172	188
Beryllium	0.500	0.719	0.711	0.621	0.579	0.621
Cadmium	0.500	1.74	1.53	1.49	1.45	1.70
Chromium	0.500	51.3	47.6	45.3	38.3	43.7
Cobalt	0.500	12.0	12.1	10.4	11.2	11.8
Copper	0.500	32.5	33.2	31.6	20.9	28.9
Lead	0.250	8.48	8.27	8.07	6.59	17.0
Molybdenum	0.500	ND	0.580	ND	ND	ND
Nickel	0.500	33.7	33.6	30.4	26.3	28.1
Selenium	0.500	ND	ND	ND	ND	ND
Silver	0.500	ND	ND	ND	ND	ND
Thallium	0.500	ND	ND	ND	ND	ND
Vanadium	0.500	67.1	61.8	58.9	52.7	56.9
Zinc	0.500	74.6	71.6	70.7	66.6	82.3

### QUALITY CONTROL REPORT

QC Batch No: 101916-1

Analytes	LCS % REC	LCS/LCSD % Limit							
<b>AA Metals</b>									
Mercury	111	80-120							
<b>ICP Metals</b>									
Antimony	98	80-120							
Arsenic	97	80-120							



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**ANALYTICAL RESULTS**

Page: **9**

Project ID: 1118  
Project Name: SMMUSD PCB Investigation

ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

**QUALITY CONTROL REPORT**

**QC Batch No: 101916-1**

Analytes	LCS % REC	LCS/LCSD % Limit								
<b>ICP Metals</b>										
Barium	102	80-120								
Beryllium	107	80-120								
Cadmium	100	80-120								
Chromium	103	80-120								
Cobalt	100	80-120								
Copper	101	80-120								
Lead	102	80-120								
Molybdenum	98	80-120								
Nickel	101	80-120								
Selenium	99	80-120								
Silver	101	80-120								
Thallium	101	80-120								
Vanadium	99	80-120								
Zinc	99	80-120								





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## Environmental Testing Services

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### ANALYTICAL RESULTS

**Ordered By****Site**

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10801 National Blvd. #415  
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1501 California Ave.  
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Telephone: (310)474-1500

Attn: Charles Lee

Page: 10

Project ID: 1118

Project Name: SMMUSD PCB Investigation

ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

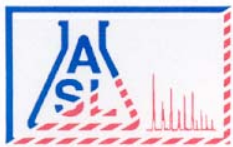
QC Batch No: 101916-1

Our Lab I.D.		350549	350550	350551	350552	350553
Client Sample I.D.		B-6-1	B-7-1	B-8-1	B-9-1	B-10-1
Date Sampled		10/12/2016	10/12/2016	10/12/2016	10/12/2016	10/12/2016
Date Prepared		10/19/2016	10/19/2016	10/19/2016	10/19/2016	10/19/2016
Preparation Method						
Date Analyzed		10/20/2016	10/20/2016	10/20/2016	10/20/2016	10/20/2016
Matrix		Soil	Soil	Soil	Soil	Soil
Units		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor		1	1	1	1	1
Analytes	PQL	Results	Results	Results	Results	Results
<b>AA Metals</b>						
Mercury	0.0500	ND	ND	ND	0.0996	ND
<b>ICP Metals</b>						
Antimony	0.500	ND	ND	ND	ND	0.690
Arsenic	0.250	5.18	3.88	3.47	4.98	7.94
Barium	0.500	204	201	172	182	197
Beryllium	0.500	0.693	0.609	0.533	0.585	0.611
Cadmium	0.500	1.76	1.78	1.43	1.70	1.83
Chromium	0.500	44.1	42.5	33.4	44.9	45.5
Cobalt	0.500	12.8	12.2	9.65	11.4	11.9
Copper	0.500	24.5	24.9	23.2	32.2	29.9
Lead	0.250	7.68	7.05	5.99	13.8	32.8
Molybdenum	0.500	ND	ND	ND	1.03	ND
Nickel	0.500	30.4	28.1	23.1	26.5	29.1
Selenium	0.500	ND	ND	ND	ND	ND
Silver	0.500	ND	ND	ND	ND	ND
Thallium	0.500	ND	ND	ND	ND	ND
Vanadium	0.500	59.8	53.9	45.9	54.2	56.8
Zinc	0.500	78.8	79.2	66.1	89.1	123

### QUALITY CONTROL REPORT

QC Batch No: 101916-1

Analytes	LCS % REC	LCS/LCSD % Limit							
<b>AA Metals</b>									
Mercury	111	80-120							
<b>ICP Metals</b>									
Antimony	98	80-120							
Arsenic	97	80-120							



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## Environmental Testing Services

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### ANALYTICAL RESULTS

Page: 11

Project ID: 1118

Project Name: SMMUSD PCB Investigation

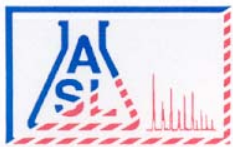
ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

### QUALITY CONTROL REPORT

QC Batch No: 101916-1

Analytes	LCS % REC	LCS/LCSD % Limit								
ICP Metals										
Barium	102	80-120								
Beryllium	107	80-120								
Cadmium	100	80-120								
Chromium	103	80-120								
Cobalt	100	80-120								
Copper	101	80-120								
Lead	102	80-120								
Molybdenum	98	80-120								
Nickel	101	80-120								
Selenium	99	80-120								
Silver	101	80-120								
Thallium	101	80-120								
Vanadium	99	80-120								
Zinc	99	80-120								



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## Environmental Testing Services

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### ANALYTICAL RESULTS

**Ordered By****Site**

Kroner Environmental Svcs, Inc.  
10801 National Blvd. #415  
Los Angeles, CA 90064-

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Santa Monica, CA

Telephone: (310)474-1500

Attn: Charles Lee

Page: 12

Project ID: 1118

Project Name: SMMUSD PCB Investigation

ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

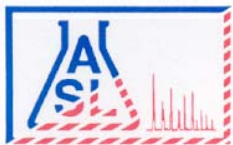
QC Batch No: 101916-1

Our Lab I.D.		350554	350555	350556		
Client Sample I.D.		B-11-1	B-12-1	B-13-1		
Date Sampled		10/12/2016	10/12/2016	10/12/2016		
Date Prepared		10/19/2016	10/19/2016	10/19/2016		
Preparation Method						
Date Analyzed		10/20/2016	10/20/2016	10/20/2016		
Matrix		Soil	Soil	Soil		
Units		mg/Kg	mg/Kg	mg/Kg		
Dilution Factor		1	1	1		
Analytes	PQL	Results	Results	Results		
<b>AA Metals</b>						
Mercury	0.0500	ND	ND	ND		
<b>ICP Metals</b>						
Antimony	0.500	ND	ND	ND		
Arsenic	0.250	5.01	7.15	6.71		
Barium	0.500	190	177	164		
Beryllium	0.500	0.577	0.644	0.535		
Cadmium	0.500	1.66	1.82	1.53		
Chromium	0.500	42.0	43.2	37.3		
Cobalt	0.500	11.1	10.8	10.3		
Copper	0.500	26.3	31.8	25.7		
Lead	0.250	27.6	17.1	18.7		
Molybdenum	0.500	ND	ND	ND		
Nickel	0.500	26.6	28.6	24.9		
Selenium	0.500	ND	ND	ND		
Silver	0.500	ND	ND	ND		
Thallium	0.500	ND	ND	ND		
Vanadium	0.500	52.5	54.8	50.7		
Zinc	0.500	106	112	89.7		

### QUALITY CONTROL REPORT

QC Batch No: 101916-1

Analytes	LCS % REC	LCS/LCSD % Limit							
<b>AA Metals</b>									
Mercury	111	80-120							
<b>ICP Metals</b>									
Antimony	98	80-120							
Arsenic	97	80-120							



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## Environmental Testing Services

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### ANALYTICAL RESULTS

Page: 13

Project ID: 1118

Project Name: SMMUSD PCB Investigation

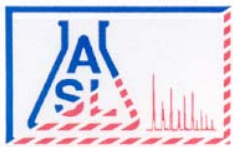
ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 6010B/7471A, CCR Title 22 Metals (TTLC)

### QUALITY CONTROL REPORT

QC Batch No: 101916-1

Analytes	LCS % REC	LCS/LCSD % Limit								
ICP Metals										
Barium	102	80-120								
Beryllium	107	80-120								
Cadmium	100	80-120								
Chromium	103	80-120								
Cobalt	100	80-120								
Copper	101	80-120								
Lead	102	80-120								
Molybdenum	98	80-120								
Nickel	101	80-120								
Selenium	99	80-120								
Silver	101	80-120								
Thallium	101	80-120								
Vanadium	99	80-120								
Zinc	99	80-120								



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## Environmental Testing Services

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### ANALYTICAL RESULTS

**Ordered By****Site**

Kroner Environmental Svcs, Inc.  
10801 National Blvd. #415  
Los Angeles, CA 90064-

1501 California Ave.  
Santa Monica, CA

Telephone: (310)474-1500

Attn: Charles Lee

Page: 14

Project ID: 1118

Project Name: SMMUSD PCB Investigation

ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 8081A, Organochlorine Pesticides

QC Batch No: 101416-1

Our Lab I.D.		350407	350408	350409	350410	350411
Client Sample I.D.		B-1-0.5	B-2-0.5	B-3-0.5	B-4-0.5	B-5-0.5
Date Sampled		10/12/2016	10/12/2016	10/12/2016	10/12/2016	10/12/2016
Date Prepared		10/14/2016	10/14/2016	10/14/2016	10/14/2016	10/14/2016
Preparation Method						
Date Analyzed		10/14/2016	10/14/2016	10/14/2016	10/14/2016	10/14/2016
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	PQL	Results	Results	Results	Results	Results
Aldrin	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	2.00	ND	ND	12.2	10.7	11.1
alpha-Chlordane	2.00	ND	ND	17.5	14.8	19.2
4,4'-DDD (DDD)	4.00	ND	ND	ND	ND	ND
4,4'-DDE (DDE)	4.00	ND	ND	ND	ND	ND
4,4'-DDT (DDT)	4.00	ND	ND	ND	ND	ND
delta-Hexachlorocyclohexane (Delta-BHC)	2.00	ND	ND	ND	ND	ND
Dieldrin	4.00	ND	ND	ND	ND	ND
Endosulfan 1	2.00	ND	ND	ND	ND	ND
Endosulfan 11	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	4.00	ND	ND	ND	ND	ND
Endrin	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	4.00	ND	ND	ND	ND	ND
Endrin ketone	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	2.00	ND	ND	ND	ND	ND
Heptachlor	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	2.00	ND	ND	ND	ND	ND
Methoxychlor	4.00	ND	ND	ND	ND	ND
Toxaphene	170	ND	ND	ND	ND	ND
Chlordane, Total	100	ND	ND	102	ND	100

Our Lab I.D.		350407	350408	350409	350410	350411
Surrogates	% Rec.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	97	67	60	89	74



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### ANALYTICAL RESULTS

Page: 15

Project ID: 1118

Project Name: SMMUSD PCB Investigation

ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

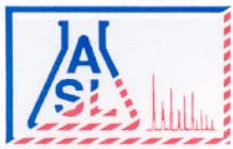
Method: 8081A, Organochlorine Pesticides

### QUALITY CONTROL REPORT

QC Batch No: 101416-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	100	114	13.1	42-122	<30					
4,4'-DDT (DDT)	125	147	16.2	25-160	<30					
Dieldrin	115	130	12.2	36-146	<30					
Endrin	112	130	14.9	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	100	123	20.6	32-127	<30					
Heptachlor	105	107	1.9	34-111	<30					





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## Environmental Testing Services

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### ANALYTICAL RESULTS

**Ordered By****Site**

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Santa Monica, CA

Telephone: (310)474-1500

Attn: Charles Lee

Page: 16

Project ID: 1118

Project Name: SMMUSD PCB Investigation

ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 8081A, Organochlorine Pesticides

QC Batch No: 101416-1

Our Lab I.D.		350412	350413	350414	350415	350416
Client Sample I.D.		B-6-0.5	B-7-0.5	B-8-0.5	B-9-0.5	B-10-0.5
Date Sampled		10/12/2016	10/12/2016	10/12/2016	10/12/2016	10/12/2016
Date Prepared		10/14/2016	10/14/2016	10/14/2016	10/14/2016	10/14/2016
Preparation Method						
Date Analyzed		10/14/2016	10/14/2016	10/14/2016	10/14/2016	10/14/2016
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	PQL	Results	Results	Results	Results	Results
Aldrin	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	2.00	5.15	ND	18.6	15.2	25.3
alpha-Chlordane	2.00	9.48	ND	19.1	18.2	33.4
4,4'-DDD (DDD)	4.00	ND	ND	ND	ND	ND
4,4'-DDE (DDE)	4.00	ND	ND	ND	ND	ND
4,4'-DDT (DDT)	4.00	ND	ND	ND	6.32	ND
delta-Hexachlorocyclohexane (Delta-BHC)	2.00	ND	ND	ND	ND	ND
Dieldrin	4.00	ND	ND	ND	ND	ND
Endosulfan 1	2.00	ND	ND	ND	ND	ND
Endosulfan 11	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	4.00	ND	ND	ND	ND	ND
Endrin	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	4.00	ND	ND	ND	ND	ND
Endrin ketone	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	2.00	ND	ND	ND	ND	ND
Heptachlor	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	2.00	ND	ND	ND	ND	ND
Methoxychlor	4.00	ND	ND	ND	ND	ND
Toxaphene	170	ND	ND	ND	ND	ND
Chlordane, Total	100	ND	ND	118	105	184

Our Lab I.D.		350412	350413	350414	350415	350416
Surrogates	% Rec.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	69	56	95	96	57



# AMERICAN SCIENTIFIC LABORATORIES, LLC

## *Environmental Testing Services*

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

### ANALYTICAL RESULTS

Page: 17

Project ID: 1118

Project Name: SMMUSD PCB Investigation

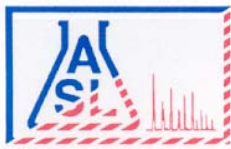
ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 8081A, Organochlorine Pesticides

### QUALITY CONTROL REPORT

QC Batch No: 101416-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	100	114	13.1	42-122	<30					
4,4'-DDT (DDT)	125	147	16.2	25-160	<30					
Dieldrin	115	130	12.2	36-146	<30					
Endrin	112	130	14.9	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	100	123	20.6	32-127	<30					
Heptachlor	105	107	1.9	34-111	<30					



# AMERICAN SCIENTIFIC LABORATORIES, LLC

## Environmental Testing Services

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

### ANALYTICAL RESULTS

**Ordered By****Site**

Kroner Environmental Svcs, Inc.  
10801 National Blvd. #415  
Los Angeles, CA 90064-

1501 California Ave.  
Santa Monica, CA

Telephone: (310)474-1500

Attn: Charles Lee

Page: 18

Project ID: 1118

Project Name: SMMUSD PCB Investigation

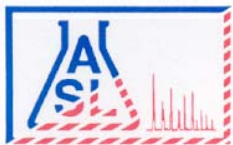
ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 8081A, Organochlorine Pesticides

QC Batch No: 101416-1

Our Lab I.D.		350417	350418	350419		
Client Sample I.D.		B-11-0.5	B-12-0.5	B-13-0.5		
Date Sampled		10/12/2016	10/12/2016	10/12/2016		
Date Prepared		10/14/2016	10/14/2016	10/14/2016		
Preparation Method						
Date Analyzed		10/14/2016	10/14/2016	10/14/2016		
Matrix		Soil	Soil	Soil		
Units		ug/kg	ug/kg	ug/kg		
Dilution Factor		1	1	1		
Analytes	PQL	Results	Results	Results		
Aldrin	2.00	ND	ND	ND		
alpha-Hexachlorocyclohexane (Alpha-BHC)	2.00	ND	ND	ND		
Beta-Hexachlorocyclohexane (Beta-BHC)	2.00	ND	ND	ND		
Gamma-Chlordane	2.00	8.14	5.30	6.59		
alpha-Chlordane	2.00	10.5	6.14	9.58		
4,4'-DDD (DDD)	4.00	ND	ND	ND		
4,4'-DDE (DDE)	4.00	ND	ND	ND		
4,4'-DDT (DDT)	4.00	ND	ND	ND		
delta-Hexachlorocyclohexane (Delta-BHC)	2.00	ND	ND	ND		
Dieldrin	4.00	ND	ND	ND		
Endosulfan 1	2.00	ND	ND	ND		
Endosulfan 11	4.00	ND	ND	ND		
Endosulfan sulfate	4.00	ND	ND	ND		
Endrin	4.00	ND	ND	ND		
Endrin aldehyde	4.00	ND	ND	ND		
Endrin ketone	4.00	ND	ND	ND		
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	2.00	ND	ND	ND		
Heptachlor	2.00	ND	ND	ND		
Heptachlor epoxide	2.00	ND	ND	ND		
Methoxychlor	4.00	ND	ND	ND		
Toxaphene	170	ND	ND	ND		
Chlordane, Total	100	ND	ND	ND		

Our Lab I.D.		350417	350418	350419		
Surrogates	% Rec.Limit	% Rec.	% Rec.	% Rec.		
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	77	72	70		



# AMERICAN SCIENTIFIC LABORATORIES, LLC

## *Environmental Testing Services*

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

### ANALYTICAL RESULTS

Page: 19

Project ID: 1118

Project Name: SMMUSD PCB Investigation

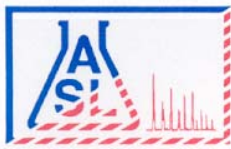
ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 8081A, Organochlorine Pesticides

### QUALITY CONTROL REPORT

QC Batch No: 101416-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	100	114	13.1	42-122	<30					
4,4'-DDT (DDT)	125	147	16.2	25-160	<30					
Dieldrin	115	130	12.2	36-146	<30					
Endrin	112	130	14.9	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	100	123	20.6	32-127	<30					
Heptachlor	105	107	1.9	34-111	<30					



# AMERICAN SCIENTIFIC LABORATORIES, LLC

## Environmental Testing Services

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

### ANALYTICAL RESULTS

**Ordered By****Site**

Kroner Environmental Svcs, Inc.  
10801 National Blvd. #415  
Los Angeles, CA 90064-

1501 California Ave.  
Santa Monica, CA

Telephone: (310)474-1500

Attn: Charles Lee

Page: 20

Project ID: 1118

Project Name: SMMUSD PCB Investigation

ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 8081A, Organochlorine Pesticides

QC Batch No: 102016-1

Our Lab I.D.		350544	350545	350546	350547	350548
Client Sample I.D.		B-1-1	B-2-1	B-3-1	B-4-1	B-5-1
Date Sampled		10/12/2016	10/12/2016	10/12/2016	10/12/2016	10/12/2016
Date Prepared		10/20/2016	10/20/2016	10/20/2016	10/20/2016	10/20/2016
Preparation Method						
Date Analyzed		10/20/2016	10/20/2016	10/20/2016	10/20/2016	10/20/2016
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	PQL	Results	Results	Results	Results	Results
Aldrin	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	2.00	ND	ND	ND	ND	ND
alpha-Chlordane	2.00	ND	ND	ND	ND	ND
4,4'-DDD (DDD)	4.00	ND	ND	ND	ND	ND
4,4'-DDE (DDE)	4.00	ND	ND	ND	ND	ND
4,4'-DDT (DDT)	4.00	ND	ND	ND	ND	ND
delta-Hexachlorocyclohexane (Delta-BHC)	2.00	ND	ND	ND	ND	ND
Dieldrin	4.00	ND	ND	ND	ND	ND
Endosulfan 1	2.00	ND	ND	ND	ND	ND
Endosulfan 11	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	4.00	ND	ND	ND	ND	ND
Endrin	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	4.00	ND	ND	ND	ND	ND
Endrin ketone	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	2.00	ND	ND	ND	ND	ND
Heptachlor	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	2.00	ND	ND	ND	ND	ND
Methoxychlor	4.00	ND	ND	ND	ND	ND
Toxaphene	170	ND	ND	ND	ND	ND
Chlordane, Total	100	ND	ND	ND	ND	ND

Our Lab I.D.		350544	350545	350546	350547	350548
Surrogates	% Rec.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	108	85	76	89	96



# AMERICAN SCIENTIFIC LABORATORIES, LLC

## Environmental Testing Services

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### ANALYTICAL RESULTS

Page: 21

Project ID: 1118

Project Name: SMMUSD PCB Investigation

ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

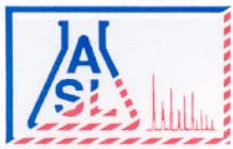
Method: 8081A, Organochlorine Pesticides

### QUALITY CONTROL REPORT

QC Batch No: 102016-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	119	115	3.4	42-122	<30					
4,4'-DDT (DDT)	118	123	4.1	25-160	<30					
Dieldrin	115	121	5.1	36-146	<30					
Endrin	114	130	13.1	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	110	123	11.2	32-127	<30					
Heptachlor	109	107	1.9	34-111	<30					





# AMERICAN SCIENTIFIC LABORATORIES, LLC

## Environmental Testing Services

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

### ANALYTICAL RESULTS

**Ordered By****Site**

Kroner Environmental Svcs, Inc.  
10801 National Blvd. #415  
Los Angeles, CA 90064-

1501 California Ave.  
Santa Monica, CA

Telephone: (310)474-1500

Attn: Charles Lee

Page: 22

Project ID: 1118

Project Name: SMMUSD PCB Investigation

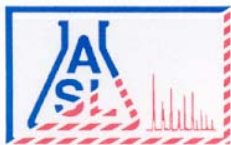
ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 8081A, Organochlorine Pesticides

QC Batch No: 102016-1

Our Lab I.D.		350549	350550	350551	350552	350553
Client Sample I.D.		B-6-1	B-7-1	B-8-1	B-9-1	B-10-1
Date Sampled		10/12/2016	10/12/2016	10/12/2016	10/12/2016	10/12/2016
Date Prepared		10/20/2016	10/20/2016	10/20/2016	10/20/2016	10/20/2016
Preparation Method						
Date Analyzed		10/20/2016	10/20/2016	10/20/2016	10/20/2016	10/20/2016
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	PQL	Results	Results	Results	Results	Results
Aldrin	2.00	ND	ND	ND	ND	ND
alpha-Hexachlorocyclohexane (Alpha-BHC)	2.00	ND	ND	ND	ND	ND
Beta-Hexachlorocyclohexane (Beta-BHC)	2.00	ND	ND	ND	ND	ND
Gamma-Chlordane	2.00	ND	ND	ND	15.4	13.2
alpha-Chlordane	2.00	ND	ND	ND	22.8	17.2
4,4'-DDD (DDD)	4.00	ND	ND	ND	ND	ND
4,4'-DDE (DDE)	4.00	ND	ND	ND	ND	ND
4,4'-DDT (DDT)	4.00	ND	ND	ND	8.63	13.1
delta-Hexachlorocyclohexane (Delta-BHC)	2.00	ND	ND	ND	ND	ND
Dieldrin	4.00	ND	ND	ND	ND	ND
Endosulfan 1	2.00	ND	ND	ND	ND	ND
Endosulfan 11	4.00	ND	ND	ND	ND	ND
Endosulfan sulfate	4.00	ND	ND	ND	ND	ND
Endrin	4.00	ND	ND	ND	ND	ND
Endrin aldehyde	4.00	ND	ND	ND	ND	ND
Endrin ketone	4.00	ND	ND	ND	ND	ND
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	2.00	ND	ND	ND	ND	ND
Heptachlor	2.00	ND	ND	ND	ND	ND
Heptachlor epoxide	2.00	ND	ND	ND	ND	ND
Methoxychlor	4.00	ND	ND	ND	ND	ND
Toxaphene	170	ND	ND	ND	ND	ND
Chlordane, Total	100	ND	ND	ND	101	109

Our Lab I.D.		350549	350550	350551	350552	350553
Surrogates	% Rec.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	90	74	84	71	74



# AMERICAN SCIENTIFIC LABORATORIES, LLC

## *Environmental Testing Services*

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

### ANALYTICAL RESULTS

Page: **23**

Project ID: 1118

Project Name: SMMUSD PCB Investigation

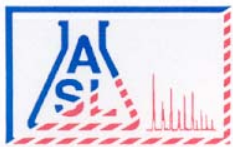
ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 8081A, Organochlorine Pesticides

### QUALITY CONTROL REPORT

QC Batch No: 102016-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	119	115	3.4	42-122	<30					
4,4'-DDT (DDT)	118	123	4.1	25-160	<30					
Dieldrin	115	121	5.1	36-146	<30					
Endrin	114	130	13.1	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	110	123	11.2	32-127	<30					
Heptachlor	109	107	1.9	34-111	<30					



# AMERICAN SCIENTIFIC LABORATORIES, LLC

## Environmental Testing Services

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

### ANALYTICAL RESULTS

**Ordered By****Site**

Kroner Environmental Svcs, Inc.  
10801 National Blvd. #415  
Los Angeles, CA 90064-

1501 California Ave.  
Santa Monica, CA

Telephone: (310)474-1500

Attn: Charles Lee

Page: 24

Project ID: 1118

Project Name: SMMUSD PCB Investigation

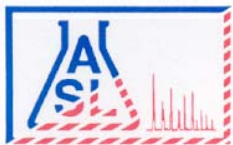
ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 8081A, Organochlorine Pesticides

QC Batch No: 102016-1

Our Lab I.D.		350554	350555	350556		
Client Sample I.D.		B-11-1	B-12-1	B-13-1		
Date Sampled		10/12/2016	10/12/2016	10/12/2016		
Date Prepared		10/20/2016	10/20/2016	10/20/2016		
Preparation Method						
Date Analyzed		10/20/2016	10/20/2016	10/20/2016		
Matrix		Soil	Soil	Soil		
Units		ug/kg	ug/kg	ug/kg		
Dilution Factor		1	1	1		
Analytes	PQL	Results	Results	Results		
Aldrin	2.00	ND	ND	ND		
alpha-Hexachlorocyclohexane (Alpha-BHC)	2.00	ND	ND	ND		
Beta-Hexachlorocyclohexane (Beta-BHC)	2.00	ND	ND	ND		
Gamma-Chlordane	2.00	4.17	16.4	22.1		
alpha-Chlordane	2.00	7.80	24.3	28.4		
4,4'-DDD (DDD)	4.00	ND	ND	ND		
4,4'-DDE (DDE)	4.00	ND	ND	ND		
4,4'-DDT (DDT)	4.00	4.69	ND	4.66		
delta-Hexachlorocyclohexane (Delta-BHC)	2.00	ND	ND	ND		
Dieldrin	4.00	ND	ND	ND		
Endosulfan 1	2.00	ND	ND	ND		
Endosulfan 11	4.00	ND	ND	ND		
Endosulfan sulfate	4.00	ND	ND	ND		
Endrin	4.00	ND	ND	ND		
Endrin aldehyde	4.00	ND	ND	ND		
Endrin ketone	4.00	ND	ND	ND		
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	2.00	ND	ND	ND		
Heptachlor	2.00	ND	ND	ND		
Heptachlor epoxide	2.00	ND	ND	ND		
Methoxychlor	4.00	ND	ND	ND		
Toxaphene	170	ND	ND	ND		
Chlordane, Total	100	ND	122	164		

Our Lab I.D.		350554	350555	350556		
Surrogates	% Rec.Limit	% Rec.	% Rec.	% Rec.		
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	78	80	95		



# AMERICAN SCIENTIFIC LABORATORIES, LLC

## *Environmental Testing Services*

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

### ANALYTICAL RESULTS

Page: 25

Project ID: 1118

Project Name: SMMUSD PCB Investigation

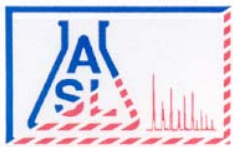
ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 8081A, Organochlorine Pesticides

### QUALITY CONTROL REPORT

QC Batch No: 102016-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aldrin	119	115	3.4	42-122	<30					
4,4'-DDT (DDT)	118	123	4.1	25-160	<30					
Dieldrin	115	121	5.1	36-146	<30					
Endrin	114	130	13.1	30-147	<30					
gamma-Hexachlorocyclohexane (Gamma-BHC, Lindane)	110	123	11.2	32-127	<30					
Heptachlor	109	107	1.9	34-111	<30					



# AMERICAN SCIENTIFIC LABORATORIES, LLC

## Environmental Testing Services

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

### ANALYTICAL RESULTS

**Ordered By****Site**

Kroner Environmental Svcs, Inc.  
10801 National Blvd. #415  
Los Angeles, CA 90064-

1501 California Ave.  
Santa Monica, CA

Telephone: (310)474-1500

Attn: Charles Lee

Page: 26

Project ID: 1118

Project Name: SMMUSD PCB Investigation

ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

**QC Batch No: 101416-1**

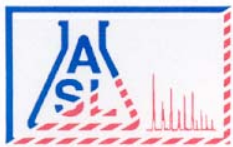
Our Lab I.D.		350407	350408	350409	350410	350411
Client Sample I.D.		B-1-0.5	B-2-0.5	B-3-0.5	B-4-0.5	B-5-0.5
Date Sampled		10/12/2016	10/12/2016	10/12/2016	10/12/2016	10/12/2016
Date Prepared		10/14/2016	10/14/2016	10/14/2016	10/14/2016	10/14/2016
Preparation Method						
Date Analyzed		10/14/2016	10/14/2016	10/14/2016	10/14/2016	10/14/2016
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	PQL	Results	Results	Results	Results	Results
Aroclor-1016 (PCB-1016)	33.0	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	67.0	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	33.0	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	33.0	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	33.0	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	33.0	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	33.0	ND	ND	ND	ND	ND

Our Lab I.D.		350407	350408	350409	350410	350411
Surrogates	% Rec.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	97	67	60	89	74

### QUALITY CONTROL REPORT

**QC Batch No: 101416-1**

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aroclor-1260 (PCB-1260)	88	98	10.8	39-150	<30					



# AMERICAN SCIENTIFIC LABORATORIES, LLC

## Environmental Testing Services

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

### ANALYTICAL RESULTS

#### Ordered By

#### Site

Kroner Environmental Svcs, Inc.  
10801 National Blvd. #415  
Los Angeles, CA 90064-

1501 California Ave.  
Santa Monica, CA

Telephone: (310)474-1500

Attn: Charles Lee

Page: 27

Project ID: 1118

Project Name: SMMUSD PCB Investigation

ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

#### QC Batch No: 101416-1

Our Lab I.D.		350412	350413	350414	350415	350416
Client Sample I.D.		B-6-0.5	B-7-0.5	B-8-0.5	B-9-0.5	B-10-0.5
Date Sampled		10/12/2016	10/12/2016	10/12/2016	10/12/2016	10/12/2016
Date Prepared		10/14/2016	10/14/2016	10/14/2016	10/14/2016	10/14/2016
Preparation Method						
Date Analyzed		10/14/2016	10/14/2016	10/14/2016	10/14/2016	10/14/2016
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	PQL	Results	Results	Results	Results	Results
Aroclor-1016 (PCB-1016)	33.0	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	67.0	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	33.0	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	33.0	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	33.0	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	33.0	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	33.0	ND	ND	ND	ND	ND

Our Lab I.D.		350412	350413	350414	350415	350416
Surrogates	% Rec.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	69	56	95	96	57

### QUALITY CONTROL REPORT

#### QC Batch No: 101416-1

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aroclor-1260 (PCB-1260)	88	98	10.8	39-150	<30					





# AMERICAN SCIENTIFIC LABORATORIES, LLC

## Environmental Testing Services

2520 N. San Fernando Rd., Los Angeles, CA 90065 Tel: (323) 223-9700 Fax: (323) 223-9500

### ANALYTICAL RESULTS

**Ordered By****Site**

Kroner Environmental Svcs, Inc.  
10801 National Blvd. #415  
Los Angeles, CA 90064-

1501 California Ave.  
Santa Monica, CA

Telephone: (310)474-1500

Attn: Charles Lee

Page: 28

Project ID: 1118

Project Name: SMMUSD PCB Investigation

ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

**QC Batch No: 101416-1**

Our Lab I.D.		350417	350418	350419		
Client Sample I.D.		B-11-0.5	B-12-0.5	B-13-0.5		
Date Sampled		10/12/2016	10/12/2016	10/12/2016		
Date Prepared		10/14/2016	10/14/2016	10/14/2016		
Preparation Method						
Date Analyzed		10/14/2016	10/14/2016	10/14/2016		
Matrix		Soil	Soil	Soil		
Units		ug/kg	ug/kg	ug/kg		
Dilution Factor		1	1	1		
Analytes	PQL	Results	Results	Results		
Aroclor-1016 (PCB-1016)	33.0	ND	ND	ND		
Aroclor-1221 (PCB-1221)	67.0	ND	ND	ND		
Aroclor-1232 (PCB-1232)	33.0	ND	ND	ND		
Aroclor-1242 (PCB-1242)	33.0	ND	ND	ND		
Aroclor-1248 (PCB-1248)	33.0	ND	ND	ND		
Aroclor-1254 (PCB-1254)	33.0	ND	ND	ND		
Aroclor-1260 (PCB-1260)	33.0	ND	ND	ND		

Our Lab I.D.		350417	350418	350419		
Surrogates	% Rec.Limit	% Rec.	% Rec.	% Rec.		
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	77	72	70		

### QUALITY CONTROL REPORT

**QC Batch No: 101416-1**

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aroclor-1260 (PCB-1260)	88	98	10.8	39-150	<30					



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ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

**QC Batch No: 102016-1**

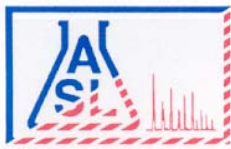
Our Lab I.D.		350544	350545	350546	350547	350548
Client Sample I.D.		B-1-1	B-2-1	B-3-1	B-4-1	B-5-1
Date Sampled		10/12/2016	10/12/2016	10/12/2016	10/12/2016	10/12/2016
Date Prepared		10/20/2016	10/20/2016	10/20/2016	10/20/2016	10/20/2016
Preparation Method						
Date Analyzed		10/20/2016	10/20/2016	10/20/2016	10/20/2016	10/20/2016
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	PQL	Results	Results	Results	Results	Results
Aroclor-1016 (PCB-1016)	33.0	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	67.0	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	33.0	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	33.0	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	33.0	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	33.0	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	33.0	ND	ND	ND	ND	ND

Our Lab I.D.		350544	350545	350546	350547	350548
Surrogates	% Rec.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	108	85	76	89	96

### QUALITY CONTROL REPORT

**QC Batch No: 102016-1**

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aroclor-1260 (PCB-1260)	108	116	7.1	39-150	<30					



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Project ID: 1118

Project Name: SMMUSD PCB Investigation

ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

**QC Batch No: 102016-1**

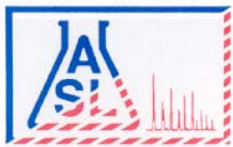
Our Lab I.D.		350549	350550	350551	350552	350553
Client Sample I.D.		B-6-1	B-7-1	B-8-1	B-9-1	B-10-1
Date Sampled		10/12/2016	10/12/2016	10/12/2016	10/12/2016	10/12/2016
Date Prepared		10/20/2016	10/20/2016	10/20/2016	10/20/2016	10/20/2016
Preparation Method						
Date Analyzed		10/20/2016	10/20/2016	10/20/2016	10/20/2016	10/20/2016
Matrix		Soil	Soil	Soil	Soil	Soil
Units		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dilution Factor		1	1	1	1	1
Analytes	PQL	Results	Results	Results	Results	Results
Aroclor-1016 (PCB-1016)	33.0	ND	ND	ND	ND	ND
Aroclor-1221 (PCB-1221)	67.0	ND	ND	ND	ND	ND
Aroclor-1232 (PCB-1232)	33.0	ND	ND	ND	ND	ND
Aroclor-1242 (PCB-1242)	33.0	ND	ND	ND	ND	ND
Aroclor-1248 (PCB-1248)	33.0	ND	ND	ND	ND	ND
Aroclor-1254 (PCB-1254)	33.0	ND	ND	ND	ND	ND
Aroclor-1260 (PCB-1260)	33.0	ND	ND	ND	ND	ND

Our Lab I.D.		350549	350550	350551	350552	350553
Surrogates	% Rec.Limit	% Rec.	% Rec.	% Rec.	% Rec.	% Rec.
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	90	74	84	71	74

### QUALITY CONTROL REPORT

**QC Batch No: 102016-1**

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aroclor-1260 (PCB-1260)	108	116	7.1	39-150	<30					



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Page: 31

Project ID: 1118

Project Name: SMMUSD PCB Investigation

ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

**QC Batch No: 102016-1**

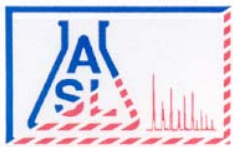
Our Lab I.D.		350554	350555	350556		
Client Sample I.D.		B-11-1	B-12-1	B-13-1		
Date Sampled		10/12/2016	10/12/2016	10/12/2016		
Date Prepared		10/20/2016	10/20/2016	10/20/2016		
Preparation Method						
Date Analyzed		10/20/2016	10/20/2016	10/20/2016		
Matrix		Soil	Soil	Soil		
Units		ug/kg	ug/kg	ug/kg		
Dilution Factor		1	1	1		
Analytes	PQL	Results	Results	Results		
Aroclor-1016 (PCB-1016)	33.0	ND	ND	ND		
Aroclor-1221 (PCB-1221)	67.0	ND	ND	ND		
Aroclor-1232 (PCB-1232)	33.0	ND	ND	ND		
Aroclor-1242 (PCB-1242)	33.0	ND	ND	ND		
Aroclor-1248 (PCB-1248)	33.0	ND	ND	ND		
Aroclor-1254 (PCB-1254)	33.0	ND	ND	ND		
Aroclor-1260 (PCB-1260)	33.0	ND	ND	ND		

Our Lab I.D.		350554	350555	350556		
Surrogates	% Rec.Limit	% Rec.	% Rec.	% Rec.		
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	78	80	95		

### QUALITY CONTROL REPORT

**QC Batch No: 102016-1**

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aroclor-1260 (PCB-1260)	108	116	7.1	39-150	<30					



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Page: 32

Project ID: 1118

Project Name: SMMUSD PCB Investigation

ASL Job Number	Submitted	Client
68664	10/12/2016	KRONER

Method: 8082, Polychlorinated Biphenyls(PCBs) by Gas Chromatography

**QC Batch No: 101416-1**

Our Lab I.D.		350406	350420			
Client Sample I.D.		Equip Blank #1	Equip Blank #2			
Date Sampled		10/12/2016	10/12/2016			
Date Prepared		10/14/2016	10/14/2016			
Preparation Method						
Date Analyzed		10/14/2016	10/14/2016			
Matrix		Water	Water			
Units		ug/L	ug/L			
Dilution Factor		1	1			
Analytes	PQL	Results	Results			
Aroclor-1016 (PCB-1016)	0.650	ND	ND			
Aroclor-1221 (PCB-1221)	1.00	ND	ND			
Aroclor-1232 (PCB-1232)	0.650	ND	ND			
Aroclor-1242 (PCB-1242)	0.650	ND	ND			
Aroclor-1248 (PCB-1248)	0.650	ND	ND			
Aroclor-1254 (PCB-1254)	0.650	ND	ND			
Aroclor-1260 (PCB-1260)	0.650	ND	ND			

Our Lab I.D.		350406	350420			
Surrogates	% Rec.Limit	% Rec.	% Rec.			
Surrogate Percent Recovery						
Decachlorobiphenyl	43-169	72	70			

### QUALITY CONTROL REPORT

**QC Batch No: 101416-1**

Analytes	LCS % REC	LCS DUP % REC	LCS RPD % REC	LCS/LCSD % Limit	LCS RPD % Limit					
Aroclor-1260 (PCB-1260)	100	97	3.0	39-150	<30					