

Appendix C. Site Photographs

Appendix

This page intentionally left blank.



Client Name: Riverside Unified School District
Site Location: Eastside Expansion
Project No.: RIV-21.0

Photo No: 1
Date: 8/28/2018

Description:

View of northern portion of the site looking southeast.



Photo No: 2
Date: 8/28/2018

Description:

View of western portion of the site looking southwest.





Client Name: Riverside Unified School District
Site Location: Eastside Expansion
Project No.: RIV-21.0

Photo No: 3	Date: 8/28/2018
-----------------------	---------------------------

Description:

View of southern portion of the site looking southeast.



Photo No: 4	Date: 8/28/2018
-----------------------	---------------------------

Description:

View of basketball courts looking north.



Appendix D. Phase I Addendum

Appendix

This page intentionally left blank.

January 2019 | Phase I Environmental Site Assessment Addendum

Eastside School: Site D Lincoln Park

for Riverside Unified School District

Prepared for:

Riverside Unified School District

Contact: Ana Gonzalez, Director, Planning and
3070 Washington Street
Riverside, California 92504

Prepared by:

PlaceWorks

Denise Clendening, Ph.D., Associate Principal
2850 Inland Empire Blvd, Suite B
Ontario, California 91764
909.989.4449
info@PlaceWorks.com
www.PlaceWorks.com



Table of Contents

Section	Page
Executive Summary	1
1. Introduction	3
1.1 SCOPE OF WORK	3
2. Sampling Activities and Results	5
2.1 UTILITY CLEARANCE.....	5
2.2 SOIL SAMPLING	5
2.2.1 Sampling Methods and Procedures.....	5
2.3 QUALITY CONTROL SAMPLING PROCEDURES	6
2.4 DECONTAMINATION PROCEDURES AND WASTE MANAGEMENT	6
2.5 RESULTS.....	6
2.5.1 Soil Description.....	6
2.5.2 Pesticides	7
2.5.3 Lead.....	7
2.5.4 CAM-17 Metals	8
3. Human Health Screening Evaluation	11
3.1 LEAD SCREENING	11
3.2 PESTICIDE SCREENING	12
3.3 CAM-17 METALS SCREENING	13
3.4 UNCERTAINTY ANALYSIS	13
4. Quality Assurance/Quality Control Implementation	15
4.1 DATA VALIDATION	16
4.2 ACCURACY	16
4.3 PRECISION.....	17
4.4 SENSITIVITY	17
4.5 COMPLETENESS	17
4.6 DATA VALIDATION CHART	17
5. Health and Safety Procedures	19
6. Conclusions and Recommendations	21
7. References	23

Table of Contents

List of Tables

Table

Table 1	Sampling and Analysis Program
Table 2	Summary Table of Organochlorine Pesticides in Soil
Table 3	Summary Table of Lead in Soil
Table 4	Summary Table of CAM-17 Metals in Soil

List of Figures

Figure

Figure 1	Regional Location
Figure 2	Local Area
Figure 3	Project Subareas
Figure 4	Site D Aerial Photograph
Figure 5	Sampling Locations

List of Appendices

Appendix A.	Laboratory Reports
Appendix B.	LeadSpread Results

Executive Summary

PlaceWorks has performed a Phase I Environmental Site Assessment (Phase I) Addendum on behalf of the Riverside Unified School District for proposed Eastside School Site D: Lincoln Park located in the City of Riverside, Riverside County California (Figures 1-3). The Phase I was performed in general conformance with the scope and limitations of the ASTM E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process and also followed Department of Toxic Substances Control (DTSC) guidelines for Phase I evaluations for school sites. The Phase I concluded that there were no Recognized Environmental Conditions (RECs), no historical Recognized Environmental Conditions (HRECs), and no Controlled Recognized Environmental Conditions (CRECs). A Phase I Addendum to assess for potential lead-based paint and organochlorine pesticides (OCPs) from termiticides was recommended in the Phase I following DTSC guidance documents for existing and proposed school sites due to the current and former structures located on the site.

The proposed school site (site) would consist of the possible demolition of the existing Lincoln High School (Site A), which currently located at the 4341 Victoria Avenue address, and acquiring the nine parcels that bound Lincoln High School to the west (Site B), the sixteen parcels across Park Avenue (Site C North and Site C South), and Lincoln Park (Site D). This Phase I report covers information about Lincoln Park, which PlaceWorks has labeled Site D, which is associated with the address 4261 Park Avenue. Site D is rectangular in shape and is associated with the APN 211-231-001. Figure 4 is an aerial photograph showing the current site conditions.

Sampling was conducted in Site D following *DTSC's Interim Guidance for Evaluating School Sites with Potential Soil Contamination as a result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers* dated June 2006 to assess the project site for potential lead-based paint and termiticides due to the historic and current structures located on the site. Structures had been located on the site dating back to 1895 prior to the development of the site as a park.

The sampling program and results are summarized below:

- A total of 80 soil samples plus 14 duplicates were collected. Samples were collected from 40 locations from 0 to 0.5 feet below ground surface (bgs) and from 2.5 to 3.0 feet bgs. Sample locations were selected based on surface covering, location of historic structures, low lying areas and proximity to driplines.
- Five composite soil samples and one composite duplicate soil sample plus six discrete samples and one discrete duplicate sample were analyzed for organochlorine pesticides by a State certified laboratory using United States Environmental Protection Agency (EPA) Method 8081A to evaluate the possible impact to soil from termiticides that may have been used on the site to protect former

Executive Summary

and current structures. Samples were analyzed from both the soil surfaces to 0.5 and from 2.5 feet bgs.

- Forty-six soil samples plus four duplicates were collected at surface to 0.5 feet to 2.5' and analyzed discretely for lead by EPA Method 6010B to evaluate the possible impact to soil from lead-based paint from former and current building materials.
- Seven soil samples plus one duplicate that were collected from the surface to 0.5 feet or from 2.5' were analyzed discretely for CAM-17 Metals by EPA Method 6010B to evaluate the possible impacts to soil from historic structures.
- Three OCPs (4,4'-DDD, 4,4'-DDE, and dieldrin) were detected in some of the soil samples analyzed for OCPs. Pesticide concentrations were below their respective EPA Region 9 Residential Regional Screening Levels (RSLs) and DTSC's modified Screening Levels. Composite sample B-21, B-22, B-26 at 0.5' bgs had a concentration of dieldrin of 0.011 milligrams per kilogram (mg/kg), which is the EPA Region 9 Regional Screening Level (EPA RSL) for dieldrin adjusted for a 3:1 composite (0.011 mg/kg).
- Lead was detected in all 46 soil samples plus the four duplicate samples above laboratory detection limits. Lead concentrations ranged from 3.77 mg/kg to 168 mg/kg at 0.5' bgs. The DTSC screening level for lead is 80 mg/kg. Samples tested at 2.5' bgs had concentrations that ranged from 3.89 mg/kg to 4.97 mg/kg. All lead concentrations at 2.5' bgs were below DTSC's lead screening level of 80 mg/kg.
- Statistical analysis using EPA's ProUCL software program was used to analyze the lead data which calculated that the 95% Upper Confidence Limit (UCL) lead concentration at the site was 64.4 mg/kg, below the DTSC lead screening level.
- Eleven CAM-17 Metals were detected in the soil samples analyzed. Barium, chromium, cobalt, copper, lead, nickel, vanadium, and zinc were reported above laboratory screening limits in all eight samples, including duplicates. Arsenic and cadmium were detected in two samples and silver was found above laboratory screening limits in one sample.
- Risk estimates were calculated for the site using both the PEA screening level assessment method. The risk estimates show that the levels at the site do not pose a human health risk to the students or to the staff using an unrestricted residential land use scenario.

The results of the Phase I Addendum support the following conclusions and recommendations:

Per California Education Code Section 17213.1, Section 3, and the results of the Phase I Addendum, PlaceWorks conclude that further investigation of the site is not necessary.

1. Introduction

This document presents a Phase I Addendum Report for the Riverside Unified School District Eastside School Site D: Lincoln Park located at 4261 Park Avenue, Riverside, Riverside County, California. Figure 1 shows the regional location of the existing school site and Figure 2 shows the local vicinity. Figure 3 shows the subareas for the proposed project. Figure 4 shows the project boundary to the northwest of the existing Lincoln High School campus. This Phase I Addendum was prepared by PlaceWorks on behalf of Riverside Unified School District pursuant to the California Education Code which requires that all new school projects to obtain a “No Further Action” (NFA) determination from the California Environmental Protection Agency Department of Toxic Substances Control (DTSC) prior to proceeding with property acquisition and/or construction of a school.

The approximately 3.26-acre project site, Lincoln Park – Site D, is in a mixed residential and commercial neighborhood. Site D is bounded by 13th Street, Howard Avenue, 12th Street, and Park Avenue and is associated with the address 4261 Park Avenue. The Assessor Parcel Number [APN] for Site D is APN 211-231-001. The proposed school site (site) would consist of the possible demolition of the existing Lincoln High School (Site A), which currently located at the 4341 Victoria Avenue address, and acquiring the nine parcels that bound Lincoln High School to the west (Site B), the sixteen parcels across Park Avenue (Site C1 and Site C2), and Lincoln Park (Site D). This Phase I and Phase I Addendum report covers information about Lincoln Park, which PlaceWorks has labeled Site D, which is associated with the address 4261 Park Avenue.

Sampling was conducted using the DTSC’s *Interim Guidance for Evaluating School Sites with Potential Soil Contamination as a result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers* (June 2006). The soil sampling was conducted on August 28, 2018. This report summarizes the lead and OCP testing results.

Based on the information obtained during the Phase I, the following additional investigation was conducted in this Phase I Addendum:

- Potential impacts to soil from lead-based paint and termiticides were investigated. Soil samples were collected in accessible areas and analyzed for lead by EPA Method 6010B and organochlorine pesticides by EPA Method 8081A.

1.1 SCOPE OF WORK

The scope of work implemented to prepare this Phase I Addendum included:

- Developing sampling and analysis plans to further assess site conditions;

1. Introduction

- Implementing field and laboratory data collection and evaluation to further assess environmental conditions at the site; and
- Preparing this Phase I Addendum report.

A sampling and analyses program was conducted to evaluate the potential presence of lead and organochlorine pesticides in shallow soils due to the potential for lead-based paint and termiticides from historic buildings. The investigation was conducted on August 28, 2018. The scope for the field and laboratory investigation is discussed in Section 2. The field and laboratory program included:

- A total of 80 soil samples plus 14 duplicates were collected. Samples were collected from 40 locations from 0 to 0.5 feet below ground surface (bgs) and from 2.5 to 3.0 feet bgs. Sample locations were selected based on surface covering, location of historic structures, low lying areas and proximity to driplines.
- Five composite soil samples and one composite duplicate soil sample plus six discrete samples and one discrete duplicate sample were analyzed for organochlorine pesticides by a State certified laboratory using United States Environmental Protection Agency (EPA) Method 8081A to evaluate the possible impact to soil from termiticides that may have been used on the site to protect former and current structures. Samples were analyzed from both the soil surfaces to 0.5 and from 2.5 feet bgs.
- Forty-six soil samples plus four duplicates were collected at surface to 0.5 feet to 2.5' and analyzed discretely for lead by EPA Method 6010B to evaluate the possible impact to soil from lead-based paint from former and current building materials.
- Seven soil samples plus one duplicate that were collected from the surface to 0.5 feet or from 2.5' were analyzed discretely for CAM-17 Metals by EPA Method 6010B to evaluate the possible impacts to soil from historic structures.
- Three OCPs (4,4'-DDD, 4,4'-DDE, and dieldrin) were detected in some of the soil samples analyzed for OCPs. Pesticide concentrations were below their respective EPA Region 9 Residential Regional Screening Levels (RSLs) and DTSC's modified Screening Levels. Composite sample B-21, B-22, B-26 at 0.5' bgs had a concentration of dieldrin of 0.011 mg/kg, which is the EPA Region 9 Regional Screening Level (EPA RSL) for dieldrin adjusted for a 3:1 composite (0.011 mg/kg).
- Lead was detected in all 46 soil samples plus the four duplicate samples above laboratory detection limits. Lead concentrations ranged from 3.77 milligrams per kilogram (mg/kg) to 168 mg/kg at 0.5' bgs. The DTSC screening level for lead is 80 mg/kg. Samples tested at 2.5' bgs had concentrations that ranged from 3.89 mg/kg to 4.97 mg/kg. All lead concentrations at 2.5' bgs were below DTSC's lead screening level of 80 mg/kg.

2. Sampling Activities and Results

This section describes methods and results of the soil sampling activities conducted at the site on August 28, 2018. The soil sampling was implemented at the site by the project geologist.

2.1 UTILITY CLEARANCE

Prior to commencement of field activities, USA was notified of our intent to conduct subsurface investigations at least 48 hours prior to initiation of intrusive field tasks. USA contacted all utility owners of record within the site vicinity and notified them of our intention to conduct subsurface investigations in proximity to buried utilities. All utility owners of record, or their designated agents, were expected to clearly mark the position of their utilities on the ground surface throughout the area designated for investigation. The City of Riverside was notified prior to the investigation and provided access for sampling at the site.

2.2 SOIL SAMPLING

Based on the information from the Phase I, the approximate 3.26 acre parcel, Site D Lincoln Park, had been utilized by eleven residential dwelling buildings, four horse stables, and one cow shed by 1895. By 1950s the site was used as Lincoln Park, with the southeast corner developed with a Community Settlement and the earlier structures no longer present. In 1965 the site is occupied by the park and only one structure, which is used as a recreational center for the community.

A total of 80 soil samples (plus 14 duplicates and one equipment blank) were collected on August 28, 2018 from 40 locations to characterize soil from the surface to 0.5 feet and from 2.5 feet bgs. Low lying unpaved areas were selected to assess the structures. Seven soil samples plus one duplicate were collected from the project site surface or from 2.5 feet and analyzed discretely for CAM-17 Metals by a State certified laboratory using United States Environmental Protection Agency (EPA) Method 6010B to evaluate the possible impact to soil from past usage of the site. Forty soil samples and four duplicates collected at surface to 0.5 feet plus six samples from 2.5' were collected and analyzed discretely for lead by a State certified laboratory using EPA Method 6010B to evaluate the possible impact to soil from lead-based paint in building materials. Five composite soil samples, one composite duplicate sample, six discrete soil samples, and one discrete duplicate sample were analyzed for organochlorine pesticides by EPA Method 8081A to evaluate the possible impact to soil from termiticides that may have been used on site to protect former and current structures. Samples were analyzed from both surfaces to 0.5 and 2.5 feet bgs. Table 1 is a summary table of the sampling and analysis program and Figure 5 shows the sample locations.

2.2.1 Sampling Methods and Procedures

Soil samples were collected from surface to 0.5 feet and from 2.5 feet below ground surface using a hand auger. The hand auger was advanced from the surface to 0.5 feet and to 2.5 feet below ground surface. Soil

2. Site Description

from the sample interval was emptied from the hand auger barrel into certified pre-cleaned glass jars from the laboratory and sealed. Each sample was labeled with the sample number, sample depth, and the date and time sampled. Samples were immediately placed in an ice-filled cooler and listed on a Chain-of-custody (COC) form.

Observations pertaining to the soil type were described by a field geologist in accordance with the Unified Soil Classification System (USCS). Any observation pertaining to potential soil contamination was recorded.

2.3 QUALITY CONTROL SAMPLING PROCEDURES

Field quality control samples associated with the sampling program included duplicates, equipment blanks, and soil matrix spike/matrix spike duplicate (MS/MSD) samples, in accordance with the DTSC PEA Guidance Manual (DTSC 2015).

2.4 DECONTAMINATION PROCEDURES AND WASTE MANAGEMENT

All equipment that came into contact with the soil was decontaminated consistently to assure the quality of samples collected. Decontamination was conducted prior to and after each use of a piece of equipment. All sampling devices used were decontaminated using the following procedures:

- Non-phosphate detergent and distilled water wash, using a brush;
- Initial deionized/distilled water rinse; and
- Final deionized/distilled water rinse.

Soil cuttings were immediately backfilled into the original boring and decontamination water was disposed of in accordance to the Office of Emergency and Remedial Response (OERR) Directive 9345.3-02 (1991). Used personal protection equipment (PPE) were double bagged and placed in a municipal refuse dumpster.

2.5 RESULTS

Organochlorine pesticide concentrations from soil are summarized in Table 2, analyzed by EPA Method 8081A. Lead concentrations in surface soil are summarized in Table 3, analyzed by EPA Method 6010B. CAM-17 Metals concentrations in soil samples are summarized in Table 4. All laboratory data is included in Appendix A.

2.5.1 Soil Description

The fill soil encountered and collected during the investigation consisted of medium stiff brown silt with sand and included occasional metal and wood debris. The fill soil was concentrated on the eastern side of the site and extended a maximum of two feet below the ground surface. Samples were collected in both the native and in the fill material. The native soils encountered and collected during the investigation consisted of

2. Site Description

medium stiff strong brown to dark brown to reddish brown silt with sand and medium dense reddish brown silty sand. No odors or staining were observed by the field geologist. Groundwater was not encountered.

2.5.2 Pesticides

Three OCPs (4,4'-DDD, 4,4'-DDE, and dieldrin) were detected in the samples analyzed for OCPs. Most of the concentrations were below their respective EPA Region 9 Residential Regional Screening Levels (RSLs) and DTSC Modified Screening Levels. Table 2 provides a summary of the OCP results.

- 4,4'-DDD was detected above laboratory screening limits in one sample B-7 at 0.5' bgs at a concentration of 0.0025 mg/kg. The EPA RSL for 4,4'-DDD is 2.3 mg/kg, significantly greater than the reported concentration in sample B-7.
- 4,4'-DDE was detected in a discrete sample B-7 at 0.5' at 0.015 mg/kg a concentration below the EPA RSL of 2 mg/kg. 4,4'-DDE was also reported in discrete sample B-9 at 0.5' bgs at 0.0083 mg/kg, which is below the EPA RSL. Sample B-30 and B-30 DUP at 0.5' bgs had concentrations of 4,4'-DDE at 0.046 mg/kg and 0.065 mg/kg respectively, which is again below the EPA RSL.
- 4,4'-DDE was detected in three 4:1 composite samples taken at 0.5' bgs. Composite B-20, B-25, B-32, B-38 had a concentration of 0.0025 mg/kg, Composite B-20 DUP, B-25 DUP, B-32 DUP, B-38 DUP had a concentration of 0.011 mg/kg, and Composite B-27, B-28, B-29, B-34 had a concentration of 0.0075 mg/kg. The EPA RSL for 4,4'-DDE adjusted for a 4:1 composite is 0.50 mg/kg. All 4:1 composite samples that had 4,4'-DDE detected were not above the EPA RSL.
- 4,4'-DDE was also detected in 3:1 composite sample B-21, B-22, B-26 at 0.5' bgs at 0.014 mg/kg. This concentration is below the EPA RSL for 4,4'-DDE adjusted for a 3:1 composite sample, which is 0.66 mg/kg.
- Composite B-21, B-22, B-26 at 0.5' bgs had a concentration of dieldrin at 0.011 mg/kg, which is the same concentration as the EPA RSL for dieldrin adjusted for a 3:1 composite (0.011 mg/kg).
- Dieldrin was detected in 4:1 Composite Sample B-27, B-28, B-29, B-34 at 0.5' bgs at 0.0074 mg/kg. This is below the EPA RSL for dieldrin adjusted for a 4:1 composite sample, which is 0.0085 mg/kg. The level of dieldrin drops below laboratory screening limits at 2.5' bgs for Composite Sample B-27, B-28, B-29, B-34.

None of the concentrations of the OCPs exceeded EPA or DTSC health-based screening levels for residential exposure.

2.5.3 Lead

Lead was detected in all 46 soil samples plus the four duplicate samples analyzed above laboratory detection limits. Lead concentrations at 0.5' ranged from 3.77 mg/kg to 168 mg/kg. Six discrete soil samples have concentrations of lead above DTSC SL for lead, which is 80 mg/kg. Discrete sample B-6 at 0.5' had the

2. Site Description

highest level of lead at 168 mg/kg. The lead concentration in the deeper sample, B-6 at 2.5', had a lead concentration of 4.97 mg/kg, below the DTSC SL of 80 mg/kg.

The next highest concentration of lead was in sample B-10 at 0.5' at 149 mg/kg, and at 2.5' the level of lead concentrations was 4.37 mg/kg. Sample B-12 at 0.5' has a concentration of lead at 122 mg/kg, and the soil sample from the same location collected from 2.5' had a lower lead concentration of 3.89 mg/kg. Samples B-11, B-14 and B-35 at 0.5', had lead concentrations slightly above the DTSC screening level of 80 mg/kg. Table 3 provides a summary of the lead concentrations detected in soil at the site.

The 95% upper confidence limit (UCL) was calculated using ProUCL 5.1 software provided by the EPA (EPA 2016). The UCL was calculated for lead using all distributions in the software. The calculated 95% UCL for the site that was recommended for use was 64.4 mg/kg, below DTSC's screening level for lead.

2.5.4 CAM-17 Metals

Eleven CAM-17 Metals were detected in the soil samples analyzed. Barium, chromium, cobalt, copper, lead, nickel, vanadium, and zinc were reported above laboratory screening limits in all eight samples, including duplicates. Arsenic and cadmium were detected in two samples and silver was detected above laboratory screening limits in one sample.

- Barium ranged in concentration from a minimum of 76.4 mg/kg to a maximum of 124 mg/kg. None of the samples exceeded the EPA RSL for barium, which is 15,000 mg/kg.
- Chromium ranged in concentration from a minimum of 17.6 mg/kg to a maximum of 40.2 mg/kg. None of the samples exceeded the DTSC SL for chromium, which is 36,000 mg/kg.
- Cobalt ranged in concentration from a minimum of 4.79 mg/kg to a maximum of 8.04 mg/kg. None of the samples exceeded the EPA RSL for cobalt, which is 23 mg/kg.
- Copper ranged in concentration from a minimum of 8.97 mg/kg to a maximum of 41.2 mg/kg. None of the samples exceeded the EPA RSL for copper which is 3,100 mg/kg.
- Lead ranged in concentration from a minimum of 2.69 mg/kg to a maximum of 41.6 mg/kg. None of the samples exceeded the DTSC SL for lead, which is 80 mg/kg.
- Nickel ranged in concentration from a minimum of 7.24 mg/kg to a maximum of 11.8 mg/kg. None of the samples exceeded the DTSC SL for nickel, which is 490 mg/kg.
- Vanadium ranged in concentration from a minimum of 37 mg/kg to a maximum of 58 mg/kg. None of the samples exceeded the EPA RSL for vanadium, which is 390 mg/kg.
- Zinc ranged in concentration from a minimum of 34.5 mg/kg to a maximum of 206 mg/kg. None of the samples exceeded the EPA RSL for Zinc, which is 23,000 mg/kg.

2. Site Description

- Arsenic was reported above laboratory screening limits in two discrete samples at 0.5' bgs. B-7 had an arsenic concentration of 1.08 mg/kg and B-9 had an arsenic concentration of 1.97 mg/kg. Both concentrations are below DTSC SL for arsenic of 12 mg/kg.
- Cadmium was reported above laboratory screening limits in two discrete samples at 0.5' bgs. B-9 had a cadmium concentration of 0.554 mg/kg and B-30 DUP had a cadmium concentration of 0.669 mg/kg. Both concentrations are below the DTSC SL for cadmium of 5.2 mg/kg.
- Silver was reported above laboratory screening limits in one discrete sample at 0.5' bgs. B-30 DUP had a silver concentration of 2.19 mg/kg. This concentration is well below the DTSC SL for silver of 390 mg/kg.

Table 4 summarizes the results of the CAM-17 Metals analysis for the site.

2. Site Description

This page intentionally left blank.

3. Human Health Screening Evaluation

3.1 LEAD SCREENING

Lead was detected in all 46 soil samples and the four duplicate samples above laboratory reporting limits (Table 3). Lead concentrations at 0.5' ranged 3.77 mg/kg to 168 mg/kg. Six discrete soil samples have concentrations of lead above DTSC SL for lead, which is 80 mg/kg. Six samples at 0.5' above the DTSC screening level of 80 mg/kg. Lead concentrations at the site at 2.5' bgs are below the DTSC SLs and levels of concern and are within typical background concentrations. The 95% upper confidence limit (UCL) was calculated using ProUCL 5.1 software provided by the EPA (EPA 2016). The calculated 95% UCL for the site was 64.4 mg/kg, below DTSC's screening level for lead.

For the screening for lead concentrations on existing and proposed school sites, the highest detected concentration of lead is compared to the screening value of 80 mg/kg derived from the DTSC Lead Spread 8 model. The screening value is based on exposures to children using statewide and regional air concentrations of lead. This screening value is considered appropriate for former residential and uncontaminated commercial properties where lead from lead-based paint is the only potential contaminant on the site.

DTSC's Lead Risk Assessment Spreadsheet, Version 8 (DTSC 2011) was used to estimate blood lead concentrations resulting from exposure to lead at the site using the lead concentrations in soil. The 95% upper confidence limit (UCL) lead concentration of 64.4 mg/kg was used in the risk assessment model (Table 3).

CalEPA's Office of Environmental Health Hazard Assessment (OEHHA) developed a new toxicity evaluation of lead replacing the 10 micrograms per deciliter ($\mu\text{g}/\text{dL}$) threshold blood concentration with a source-specific "benchmark change" of 1 $\mu\text{g}/\text{dL}$. One $\mu\text{g}/\text{dL}$ is the estimated incremental increase in children's blood lead that would reduce IQ by up to 1 point. Because the target blood lead level of concern was updated to the more recent health-protective criterion of 1 $\mu\text{g}/\text{dL}$, DTSC's Human and Ecological Risk Office considers the 90th percentile of the distribution appropriate for use in calculating a lead soil PRG. LeadSpread 8 evaluates a source-specific exposure to lead in soil assuming the following exposure routes: ingestion, dermal contact, and dust inhalation.

The risk-based soil concentration developed in LeadSpread 8, based on the OEHHA incremental blood lead criterion, is meant to be implemented as an estimate of the Exposure Point Concentration (EPC) usually based on the 95 percent confidence limit (UCL) on the arithmetic mean, not as a 'not to exceed' soil concentration (DTSC 2011).

DTSC' Lead Spread Model Version 8.0 was used to estimate blood lead levels for children using the following DTSC's default exposure parameters:

3. Human Health Screening Evaluation

EXPOSURE PARAMETERS		
	units	children
Days per week	days/wk	7
Geometric Standard Deviation		1.6
Blood lead level of concern (ug/dl)		1
Skin area, residential	cm ²	2900
Soil adherence	ug/cm ²	200
Dermal uptake constant	(ug/dl)/(ug/day)	0.0001
Soil ingestion	mg/day	100
Soil ingestion, pica	mg/day	200
Ingestion constant	(ug/dl)/(ug/day)	0.16
Bioavailability	unitless	0.44
Breathing rate	m ³ /day	6.8
Inhalation constant	(ug/dl)/(ug/day)	0.192

The increase in estimated blood lead level using the 95% UCL concentration for the 90th Percentile was 0.8 µg/dL, below the health-protective criterion of 1 µg/dL. The estimate is conservative and assumes a residential exposure scenario with a child located on the site 7 days per week. Appendix B contains the LeadSpread results.

3.2 PESTICIDE SCREENING

The maximum concentrations of the pesticides detected in samples collected during the Phase I Addendum were compared to EPA Region IX Regional Screening Level (RSL) for residential land use (EPA Region IX November 2018) or DTSC Screening Level (SL) if available (DTSC June 2018). RSLs are updated on a regular basis on EPA Regions IX’s website. RSLs are developed using risk assessment guidance from the EPA Superfund program. RSLs are risk-based concentrations derived from standardized equations combining exposure information assumptions with EPA toxicity data. RSLs are considered to be protective for humans (including sensitive groups) over a lifetime.

A summary table is provided below showing the highest reported pesticide concentration at the site and the corresponding residential RSL or SL.

Compound	Maximum Concentration mg/kg	Residential Land Use RSL mg/kg	Residential Land Use RSL Adjusted for Number of Samples mg/kg	Ratio Maximum Concentration to RSL
4,4'-DDD	0.0025	1.9	1.9	0.0013
4,4'-DDE	0.065	2	2	0.032
Dieldrin	0.011	0.034	0.01133	0.97
Total Risk				1.0E-06

3. Site History and Background Information

Because there are multiple chemicals detected at the site, the cumulative risk for the site is calculated by summing the individual risk from each chemical

$$\text{Cumulative Risk} = (\text{conc}_x/\text{RSL}_x + \text{conc}_y/\text{RSL}_y + \text{conc}_z/\text{RSL}_z) \times 10^{-6}$$

The estimated carcinogenic risk using the maximum concentrations reported at the site is 1.0×10^{-6} , at the DTSC level of concern of one in a million increased cancer risk and at the low end of the EPA Risk Management range of 1×10^{-4} to 1×10^{-6} . The calculation is very conservative, health protective, assuming that the user of the site would only be exposed to the highest reported concentrations reported at the site for 30 years, 24 hours per day for 350 days per year.

3.3 CAM-17 METALS SCREENING

None of the soil samples were found to have concentrations above the regional screening levels for the associated CAM-17 Metals. The concentrations of CAM-17 Metals that were found at the site during soil sampling activities were all within acceptable background ranges for Southern California (Kearney, 1996).

3.4 UNCERTAINTY ANALYSIS

The data collected are subject to uncertainty associated with sampling and analysis. In the risk analysis it was assumed that samples collected were representative of conditions to which various populations may be exposed. However, the collected samples may not be completely representative due to biases in sampling and to random variability of samples. In general, sampling was biased toward areas of known and suspected elevated chemical concentrations, which will lead to an overestimation of risk when these results are assumed to represent a larger area. The placement of soil borings was in part, purposely biased to detect and characterize potential hot spots of soil based on historical site use. This type of sampling approach is likely to overestimate the chemical concentrations to which a receptor would be exposed and the potential health impact to the receptors evaluated.

Samples were analyzed using California State Certified Laboratory procedures and were subjected to limited review, to obtain data suitable for decision-making. However, it should be understood that sample analysis is subject to uncertainties associated with precision, accuracy and detection of chemicals at low concentrations.

3. Human Health Screening Evaluation

This page intentionally left blank.

4. Quality Assurance/Quality Control Implementation

The Quality Assurance/Quality Control (QA/QC) Program was implemented in accordance with the DTSC PEA Guidance Manual (DTSC 1999). The primary quality control features of the QA/QC program include the collection and analysis of field quality control samples and the data validation. All proper chain of custody procedures were followed and the chain of custody is included in Appendix A.

Quality control samples collected in the field included equipment rinseate blanks as described in Section 3. The data for these quality control samples were reviewed as part of the data validation process, along with results from laboratory quality control analyses. Data validation was performed in compliance with DTSC's PEA Guidance Manual, using protocols consistent with the USEPA National Functional Guidelines (DTSC 1999). Each sample was analyzed for the specified suite of analyses presented in Section 3. Data from each of the analyses were evaluated with respect to the quality control criteria listed below. Data for the project as a whole were evaluated in terms of completeness.

- Holding times;
- Field blanks;
- Laboratory method and calibration blanks;
- Initial and continuing calibrations;
- System monitoring compounds (surrogates - organic analyses only);
- Laboratory control samples (LCS) and LCS duplicate samples (LCSD) - as applicable;
- Matrix spikes (MS)/Matrix spike duplicates (MSD); and
- Compound identification and quantitation.

Data quality for the project is good, and the data collected are of acceptable quality for use in the screening evaluation.

Data validation qualifier flags have been added to those data that did not meet acceptance criteria defined in School Quality Assurance Project Plans. Results of the validation indicate that all samples collected and analyzed are useful in characterizing the site and assessing the human health and ecological risks for the site. No detectable concentrations were qualified as rejected (R) or were considered to be unusable based on the validation evaluation. Data qualified as estimated (J/UJ) exhibited some bias during analysis and should be

4. Quality Assurance/Quality Control Implementation

considered as an approximate measure of the respective analyte concentration. Qualified data are presented along with the data results in the analytical summary tables provided in this report.

Field activities were observed to be conducted in a manner consistent with the QA/QC procedures presented in the DTSC PEA Guidance Manual (DTSC 1999). No findings were identified that significantly affect the quality of the samples collected or the resulting data evaluation.

4.1 DATA VALIDATION

Data validation was performed for all samples submitted as part of PlaceWorks evaluation of soil. A & R Laboratories located in Ontario was the lead laboratory for the project and performed the required analyses.

Validation was performed in accordance with the general guidance provided in the USEPA Functional Guidelines for Evaluating Inorganic Analyses (USEPA 1994) and in accordance with the professional judgment of the validation team. Validation was performed to assess analytical performance in terms of the DQOs accuracy, precision, sensitivity, and completeness. Comparability and representativeness DQOs for the samples collected are addressed by the correct implementation of the procedures defined in the sampling and analysis plan.

A summary of the validation program, in terms of the DQOs listed above, is provided in the following sections. Data qualifiers assigned to results, if required, were as follows:

J - Result is estimated due to failure to meet one of the DQO criteria associated with the sample result or associated sample batch. Results reported at concentrations below standard laboratory reporting limits, but above method detection limits, were flagged “J” by the laboratory, or “B” in the case of metals. These data are validated as J/estimated because they are below the reliable quantitation limits determined by the laboratory.

U - Result is qualified as not-detected at the reported value. This qualifier is used when results from blank analyses indicate that detections in associated samples may be biased high due to potential contaminant conditions in the field or laboratory.

UJ - Result is qualified as not-detected at the reported value, and the value is determined to be estimated. This qualifier commonly results when quality control failures are associated with analytes that are not detected, or when detections are qualified “U” due to blank contamination combined with a “J” qualifier resulting from another QC problem.

R - Result is rejected due to severe QC failure, or due to multiple lesser QC problems that are determined to be additive.

4.2 ACCURACY

Accuracy was evaluated by assessing the results of holding times, field and laboratory blanks, initial and continuing calibrations, surrogate spike recoveries (organic analyses), LCS recoveries, MS analyses, and interference check samples (metals by inductively coupled plasma).

4. Quality Assurance/Quality Control Implementation

Holding times were met for all analyses. Frequency and control criteria for initial and continuing calibration verifications were met. The method blank data showed non-detectable levels for all constituents. LCS analysis was performed at required frequencies and all recoveries were within acceptable limits. Surrogate recoveries for all samples were within acceptable control limits. MS and MSD were performed at the required frequencies. All recoveries were within acceptable limits.

4.3 PRECISION

Precision was evaluated by assessing the results between MS and MSD analyses, LCS and LCSD analyses, between laboratory duplicate analyses. The precision DQO was generally satisfied for the samples collected during the project. Precision was evaluated as the relative percent difference (RPD) between control sample results. RPD criteria reported by the laboratory were used to assess precision. RPDs were within the appropriate control limits.

4.4 SENSITIVITY

Sensitivity was addressed by ensuring that the reporting limits provided by the laboratories met those as requested in the workplans and task orders provided to the laboratory. Data were qualified in cases where results were reported at concentrations below standard laboratory reporting limits, but above the method detection limits that may have been required to meet the sensitivity requirements for the project. Such results were flagged by the laboratory as either J or B qualified data. These data retain a J/estimated qualifier due to potential decreased reliability at low concentration levels.

4.5 COMPLETENESS

Completeness is an evaluation of the overall sampling program with respect to data generated that is usable versus data that may have been rejected. No data was rejected during the data validation process for this project. The completeness objectives (minimum 90 percent) for this project are therefore considered to be satisfied for all analyses.

4.6 DATA VALIDATION CHART

The following table is a summary of pertinent quality indicators that were verified during the data validation process.

4. Quality Assurance/Quality Control Implementation

ACCEPTABILITY		
QUALITY INDICATOR	SOIL	
	EPA Method 6010B	EPA Method 8081A
	Target Analyte: Lead	Target Analyte: DDE
Completeness of Laboratory Reports (e.g., laboratory, client, and sample identifications; ELAP certification number, project name, sample matrix, sample collection, preservation, preparation, extraction, analysis dates; analytical methods; analytes; reporting units and limits; dilution factors; report page numbering system; designated title and signatures)	Y See discussion Section 4	Y See discussion Section 4
Reporting Limit (RL)	Y 0.5 mg/kg	Y 0.002 mg/kg
Chain of Custody	Y	Y
Sample Containers and Conditions	Y	Y
Holding Time (<28 days)	Y	Y
Sample Preservation	Y	Y
Equipment Rinsate Blanks	Y	Y
Field Duplicates	Y	Y
Field QC Samples – Others	NA	NA
Surrogate Recoveries	NA	NA
Method Blanks	Y	Y
LCS % Recovery	Y	Y
MS/MSD % Recovery	See discussion Section 4	See discussion Section 4
MS/MSD % RPD	See discussion Section 4	See discussion Section 4
Laboratory Duplicates	See discussion Section 4	See discussion Section 4
Laboratory QC Samples – Others	NA	NA
Compound Identification	Y	Y
Compound Quantitation	Y	Y
Dilution Factors	Y	Y
Data Qualifiers	Y	Y
Confirmation of Positive Samples	NA	NA
Observations of Significance	NA	NA
Case Narrative	Y	Y
Instrument Tuning	NA	NA
Initial Calibration	Lab	Lab
Calibration Verification	Lab	Lab
Interference Check Standard	NA	NA
Others	NA	NA

5. Health and Safety Procedures

PlaceWorks followed a site-specific HASP pursuant to Health and Safety Code 1910.120. The plan addressed the following:

- Identification and description of potentially hazardous substances that may be encountered during field operations;
- PPE and clothing for site activities; and
- Measures that need to be implemented in the event of an emergency.

PlaceWorks field personnel reviewed the HASP prior to commencing fieldwork. Prior to initiation of field activities each day, a site safety briefing was conducted to identify potential physical and chemical hazards and measures to be taken in event of an emergency. All on-site personnel were required to sign the site safety briefing form.

During field activities, all personnel within the exclusion zone wore appropriate level D PPE. No incidents or emergency actions related to site sampling occurred during the field program.

5. Health and Safety Procedures

This page intentionally left blank.

6. Conclusions and Recommendations

This document presents a Phase I Addendum Report for the Riverside Unified School District Eastside School Expansion Project: Site D Lincoln Park, Riverside, Riverside County, California. Figure 1 shows the regional location of the site and Figure 2 shows the local Vicinity. Figure 3 shows the subareas for the proposed school site expansion including Site D, Lincoln Park. Figure 4 is an aerial photograph showing the boundaries of the school site. This Phase I Addendum was prepared by PlaceWorks on behalf of Riverside Unified School District pursuant to the California Education Code which requires that all new school projects to obtain a “No Further Action” (NFA) determination from the California Environmental Protection Agency Department of Toxic Substances Control (DTSC) prior to proceeding with property acquisition and/or construction of a school.

The District is seeking DTSC approval for the proposed expansion of the Lincoln High School campus. The District is seeking to acquire Lincoln Park, associated with the [APN] 211-231-001.

Sampling was conducted using the DTSC’s *Interim Guidance for Evaluating School Sites with Potential Soil Contamination as a result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers* (June 2006). The soil sampling was conducted on August 28, 2018 on the 3.66 acre park site. This report summarizes the lead and OCP testing results.

The sampling program and results are summarized below:

- A total of 80 soil samples plus 14 duplicates were collected. Samples were collected from 40 locations from 0 to 0.5 feet below ground surface (bgs) and from 2.5 to 3.0 feet bgs. Sample locations were selected based on surface covering, location of historic structures, low lying areas and proximity to driplines.
- Five composite soil samples and one composite duplicate soil sample plus six discrete samples and one discrete duplicate sample were analyzed for organochlorine pesticides by a State certified laboratory using United States Environmental Protection Agency (EPA) Method 8081A to evaluate the possible impact to soil from termiticides that may have been used on the site to protect former and current structures. Samples were analyzed from both the soil surfaces to 0.5 and from 2.5 feet bgs.
- Forty-six soil samples plus four duplicates were collected at surface to 0.5 feet to 2.5’ and analyzed discretely for lead by EPA Method 6010B to evaluate the possible impact to soil from lead-based paint from former and current building materials.

6. Conclusions and Recommendations

- Seven soil samples plus one duplicate that were collected from the surface to 0.5 feet or from 2.5' were analyzed discretely for CAM-17 Metals by EPA Method 6010B to evaluate the possible impacts to soil from historic structures.
- Three OCPs (4,4'-DDD, 4,4'-DDE, and dieldrin) were detected in some of the soil samples analyzed for OCPs. Pesticide concentrations were below their respective EPA Region 9 Residential Regional Screening Levels (RSLs) and DTSC's modified Screening Levels. Composite sample B-21, B-22, B-26 at 0.5' bgs had a concentration of dieldrin of 0.011 mg/kg, which is the EPA Region 9 Regional Screening Level (EPA RSL) for dieldrin adjusted for a 3:1 composite (0.011 mg/kg).
- Lead was detected in all 46 soil samples plus the four duplicate samples above laboratory detection limits. Lead concentrations ranged from 3.77 milligrams per kilogram (mg/kg) to 168 mg/kg at 0.5' bgs. The DTSC screening level for lead is 80 mg/kg. Samples tested at 2.5' bgs had concentrations that ranged from 3.89 mg/kg to 4.97 mg/kg. All lead concentrations at 2.5' bgs were below DTSC's lead screening level of 80 mg/kg.
- Statistical analysis using EPA's ProUCL software program was used to analyze the lead data which calculated that the 95% Upper Confidence Limit (UCL) lead concentration at the site was 64.4 mg/kg, below the DTSC lead screening level.
- Eleven CAM-17 Metals were detected in the soil samples analyzed. Barium, chromium, cobalt, copper, lead, nickel, vanadium, and zinc were reported above laboratory screening limits in all eight samples, including duplicates. Arsenic and cadmium were detected in two samples and silver was found above laboratory screening limits in one sample.
- Risk estimates were calculated for the site using both the PEA screening level assessment method. The risk estimates show that the levels at the site do not pose a human health risk to the students or to the staff using an unrestricted residential land use scenario.

The results of the Phase I Addendum support the following conclusions and recommendations:

Per California Education Code Section 17213.1, Section 3, and the results of the Phase I Addendum, PlaceWorks conclude that further investigation of the site is not necessary.

7. References

1. American Society for Testing and Materials (ASTM) Practice for ESAs: Phase I Assessments Process (ASTM Standard E 1527-13), November 2013.
2. California Department of Toxic Substances Control (DTSC), 2001. Phase I Environmental Site Assessment Advisory: School Property Evaluations, Revised September 5, 2001.
3. California Department of Toxic Substances Control (DTSC), 2006. Guidance for Evaluating School Sites with Potential Soil Contamination as a result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers dated June 2006 .
4. California Department of Toxic Substances Control (DTSC), 2011. User's Guide to Leadsread 8 and Recommendation for Evaluation of Lead Exposures in Adults. Human and Ecological Risk Office. September 2011.
5. California Department of Toxic Substances Control (DTSC), 2015, Preliminary Endangerment Assessment Guidance Manual, January 1994, Interim Final – Revised October 2015.
6. California Department of Toxic Substances Control (DTSC), 2018. Human Health Risk Assessment (HHRA) Note Number 3, DTSC –modified Screening Levels (DTSC-SLs). June 2018.
7. Kearney Foundation Special Report, 1996. Background Concentrations of Trace and Major Elements in California Soils. Kearney Foundation of Soil Science Division of Agriculture and Natural Resources University of California. March 1996.
8. PlaceWorks, 2018. Phase I Environmental Site Eastside School: Site D Lincoln Park for Riverside Unified School District. September 2018.
9. USEPA, 1991. Office of Emergency and Remedial Response (OERR) Directive 9345.3-02. Management of Investigation-Derived Wastes During Site Inspections. May.
10. USEPA, 1994. Office of Solid Waste and Emergency Response. Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses. Publication 9240.1-26.
11. USEPA, 2018. Pacific Southwest, Region 9. Regional Screening Levels. Updated November 2018. <https://semspub.epa.gov/work/03/2229085.pdf>

7. References

This page intentionally left blank.

Tables

This page intentionally left blank.

TABLE 1
SAMPLING AND ANALYSIS PROGRAM
Eastside School Site D: Lincoln Park
Riverside Unified School District
Riverside, California

Sample Number	Depth (feet bgs)	Date	Rationale	EPA 8081A OCPs	EPA 6010B/7471A CAM 17 Metals	EPA 6010B Lead
B-1	0.5'	8/28/2018	Structures			D
	2.5'					
B-2	0.5'	8/28/2018	Structures			D
	2.5'					
B-3	0.5'	8/28/2018	Structures			D
	2.5'					
B-4	0.5'	8/28/2018	Structures			D
	2.5'					
B-5	0.5'	8/28/2018	Structures			D
	2.5'					
B-6	0.5'	8/28/2018	Structures			D
	2.5'					D
B-7	0.5'	8/28/2018	Structures	D	D	
	2.5'			D	D	
B-8	0.5'	8/28/2018	Structures			D
	2.5'					
B-9	0.5'	8/28/2018	Structures		D	
	2.5'				D	
B-10	0.5'	8/28/2018	Structures			D
	2.5'					D
B-11	0.5'	8/28/2018	Structures			D
	2.5'					
B-12	0.5'	8/28/2018	Structures			D
	2.5'					D
B-13	0.5'	8/28/2018	Structures			D
	2.5'					
B-14	0.5'	8/28/2018	Structures			D
	2.5'					
B-15	0.5'	8/28/2018	Structures			D
	2.5'					
B-16	0.5'	8/28/2018	Structures			D
	2.5'					
B-17	0.5'	8/28/2018	Structures			D
	2.5'					
B-18	0.5'	8/28/2018	Structures			D
	2.5'					
B-19	0.5'	8/28/2018	Structures			D
	2.5'					
B-19 DUP	0.5'	8/28/2018	Structures			DUP
	2.5'					
B-20	0.5'	8/28/2018	Structures	Composite B-20, B-25, B-32, B-38		D
	2.5'					
B-20 DUP	0.5'	8/28/2018	Structures	Composite B-20 DUP, B-25 DUP, B-32 DUP, B-38 DUP		
	2.5'					
B-21	0.5'	8/28/2018	Structures	Composite B-21, B-22, B-26		D
	2.5'					
B-22	0.5'	8/28/2018	Structures	Composite B-21, B-22, B-26		D
	2.5'					
B-23	0.5'	8/28/2018	Structures			D
	2.5'					
B-24	0.5'	8/28/2018	Structures			D
	2.5'					
B-25	0.5'	8/28/2018	Structures	Composite B-20, B-25, B-32, B-38	D	
	2.5'					
B-25 DUP	0.5'	8/28/2018	Structures	Composite B-20 DUP, B-25 DUP, B-32 DUP, B-38 DUP		
	2.5'					
B-26	0.5'	8/28/2018	Structures	Composite B-21, B-22, B-26		D
	2.5'					

TABLE 1
SAMPLING AND ANALYSIS PROGRAM
Eastside School Site D: Lincoln Park
Riverside Unified School District
Riverside, California

Sample Number	Depth (feet bgs)	Date	Rationale	EPA 8081A OCPs	EPA 6010B/7471A CAM 17 Metals	EPA 6010B Lead
B-27	0.5'	8/28/2018	Structures	Composite B-27, B-28, B-29, B-34		D
	2.5'					
B-28	0.5'	8/28/2018	Structures	Composite B-27, B-28, B-29, B-34		D
	2.5'					
B-29	0.5'	8/28/2018	Structures	Composite B-27, B-28, B-29, B-34		D
	2.5'					
B-30	0.5'	8/28/2018	Structures	D	D	
	2.5'			D	D	
B-30 DUP	0.5'	8/28/2018	Structures	D	DUP	
	2.5'					
B-31	0.5'	8/28/2018	Structures			D
	2.5'					
B-32	0.5'	8/28/2018	Structures	Composite B-20, B-25, B-32, B-38		D
	2.5'					
B-32 DUP	0.5'	8/28/2018	Structures	Composite B-20 DUP, B-25 DUP, B-32 DUP, B-38 DUP		D
	2.5'					
B-33	0.5'	8/28/2018	Structures	Composite B-33, B-35, B-39, B-40		D
	2.5'					
B-33 DUP	0.5'	8/28/2018	Structures			DUP
	2.5'					
B-34	0.5'	8/28/2018	Structures	Composite B-27, B-28, B-29, B-34		D
	2.5'					
B-35	0.5'	8/28/2018	Structures	Composite B-33, B-35, B-39, B-40		D
	2.5'					
B-36	0.5'	8/28/2018	Structures			D
	2.5'					
B-37	0.5'	8/28/2018	Structures			D
	2.5'					
B-38	0.5'	8/28/2018	Structures	Composite B-20, B-25, B-32, B-38		D
	2.5'					
B-38 DUP	0.5'	8/28/2018	Structures	Composite B-20 DUP, B-25 DUP, B-32 DUP, B-38 DUP		
	2.5'					
B-39	0.5'	8/28/2018	Structures	Composite B-33, B-35, B-39, B-40		D
	2.5'					
B-40	0.5'	8/28/2018	Structures	Composite B-33, B-35, B-39, B-40		D
	2.5'					
Total				3 4:1 C, 1 3:1 C, 1 4:1 C DUP, 3 D, 1 D DUP	7 D, 1 DUP	46 D, 4 DUP

Note:
OCPs = organochlorine pesticides
TPH = total petroleum hydrocarbons
D=Discrete
C= Composite
DUP= Duplicate Sample

TABLE 2
SUMMARY TABLE OF ORGANOCHLORINE PESTICIDES IN SOIL
Eastside School Site D: Lincoln Park
Riverside Unified School District
Riverside, California

Sample Number	Depth (feet bgs)	Sample Date	Concentration (milligrams per kilogram [mg/kg])		
			4,4'-DDD	4,4'-DDE	Dieldrin
B-7	0.5'	8/28/2018	0.0025	0.015	<0.0020
	2.5'	8/28/2018	<0.0020	<0.0020	<0.0020
B-9	0.5'	8/28/2018	<0.0020	0.0083	<0.0020
	2.5'	8/28/2018	<0.0020	<0.0020	<0.0020
Composite B-20, B-25, B-32, B-38	0.5'	8/28/2018	<0.0020	0.0025	<0.0020
Composite B-20 DUP, B-25 DUP, B-32 DUP, B-38 DUP	0.5'	8/28/2018	<0.0020	0.011	<0.0020
Composite B-21, B-22, B-26	0.5'	8/28/2018	<0.0020	0.014	0.011
Composite B-27, B-28, B-29, B-34	0.5'	8/28/2018	<0.0020	0.0075	0.0074
	2.5'	8/28/2018	<0.0020	<0.0020	<0.0020
B-30	0.5'	8/28/2018	<0.0020	0.046	<0.0020
	2.5'	8/28/2018	<0.0020	<0.0020	<0.0020
B-30 DUP	0.5'	8/28/2018	<0.0020	0.065	<0.0020
Composite B-33, B-35, B-39, B-40	0.5'	8/28/2018	<0.0020	<0.0020	<0.0020
Equipment Blank			Concentration micrograms per liter (µg/l)		
EB082818		8/28/2018	<0.050	<0.050	<0.020
Minimum Concentration Detected			0.0025	0.0025	0.0074
Maximum Concentration Detected			0.0025	0.065	0.011
EPA Region 9 Regional Screening Levels			1.9	2	0.034
EPA Region 9 Regional Screening Levels for 3:1 Composites			0.766	0.666	0.01133
EPA Region 9 Regional Screening Levels for 4:1 Composites			0.575	0.5	0.0085

Notes:

< - Non detect at the established method detection limit.

Samples analyzed by EPA Method 8081A

EPA Region 9 Regional Screening Level November 2018 Residential soil in mg/kg; DTSC SLs 2018 residential soil mg/kg

The complete laboratory analytical reports are included in Appendix D.

Highlighted cell indicates concentration above agency screening levels

DTSC SL= Department of Toxic Substances Control Screening levels

TABLE 3
SUMMARY TABLE OF LEAD IN SOIL
Eastside School Site D: Lincoln Park
Riverside Unified School District
Riverside, California

Sample Number	Sample Depth	Concentration (milligrams per kilogram [mg/kg])	
		Sample Date	Lead
B-1	0.5'	8/28/2018	65
B-2	0.5'	8/28/2018	34.3
B-3	0.5'	8/28/2018	18.6
B-4	0.5'	8/28/2018	47.2
B-5	0.5'	8/28/2018	73.8
B-6	0.5'	8/28/2018	168
	2.5'		4.97
B-7	0.5'	8/28/2018	28.6
	2.5'		3.34
B-8	0.5'	8/28/2018	71.5
B-9	0.5'	8/28/2018	41.6
	2.5'		4.4
B-10	0.5'	8/28/2018	149
	2.5'		4.37
B-11	0.5'	8/28/2018	86.4
B-12	0.5'	8/28/2018	122
	2.5'		3.89
B-13	0.5'	8/28/2018	31.5
B-14	0.5'	8/28/2018	81
B-15	0.5'	8/28/2018	67.4
B-16	0.5'	8/28/2018	52.8
B-17	0.5'	8/28/2018	3.77
B-18	0.5'	8/28/2018	25.2
B-19	0.5'	8/28/2018	35.4
B-19 DUP	0.5'	8/28/2018	28
B-20	0.5'	8/28/2018	53.1
B-21	0.5'	8/28/2018	38.9
B-22	0.5'	8/28/2018	51.8
B-23	0.5'	8/28/2018	44.4
B-24	0.5'	8/28/2018	29
B-25	0.5'	8/28/2018	28.8
B-26	0.5'	8/28/2018	40.1
B-27	0.5'	8/28/2018	22.3
B-28	0.5'	8/28/2018	29.3
B-29	0.5'	8/28/2018	20.2
B-30	0.5'	8/28/2018	19
	2.5'		2.69
B-30 DUP	0.5'	8/28/2018	34.1
B-31	0.5'	8/28/2018	35.4
B-32	0.5'	8/28/2018	22.6
B-32 DUP	0.5'	8/28/2018	18.8
B-33	0.5'	8/28/2018	40.1
B-33 DUP	0.5'	8/28/2018	36
B-34	0.5'	8/28/2018	34.6
B-35	0.5'	8/28/2018	86.9
B-36	0.5'	8/28/2018	34.2
B-37	0.5'	8/28/2018	37.6
B-38	0.5'	8/28/2018	33
B-39	0.5'	8/28/2018	30.4
B-40	0.5'	8/28/2018	77.6
Number of Samples			50
Number of Detects			50
Minimum			2.69
Maximum			168
95% UCL			64.4
DTSC SLs			80

Notes:

Samples Analyzed by EPA Method 6010B

The complete laboratory analytical reports are included in Appendix D.

95% UCL = 95% Upper confidence limit calculated using EPA ProUCL 5.1

Highlighted cell indicates concentration above agency screening level

DTSC SLs= Department of Toxic Substances Control Screening Levels

TABLE 4
SUMMARY TABLE OF CAM-17 METALS IN SOIL
Eastside School Site D: Lincoln Park
Riverside Unified School District
Riverside, California

Sample Number	Sample Depth	Sample Date	Concentration (milligrams per kilogram [mg/kg])										Vanadium	Zinc
			Arsenic	Barium	Cadmium	Chromium	Cobalt	Copper	Lead	Nickel	Sliver			
B-7	0.5'	8/28/2018	1.08	81.4	<0.500	17.6	4.79	14.4	28.6	7.37	<1.00	37	77	
	2.5'		<1.00	94.2	<0.500	23.8	7.03	10.6	3.34	10.4	<1.00	51.8	38.7	
B-9	0.5'	8/28/2018	1.97	110	0.554	20.4	5.78	15	41.6	8.72	<1.00	44.1	95.5	
	2.5'		<1.00	120	<0.500	25.9	8.04	12.1	4.4	11.8	<1.00	58	39.6	
B-25	0.5'	8/28/2018	<1.00	124	<0.500	20.1	5.86	13.6	28.8	7.24	<1.00	44.7	93.2	
B-30	0.5'	8/28/2018	<1.00	76.4	<0.500	25.3	5.37	22	19	7.8	<1.00	40.1	110	
	2.5'		<1.00	83.1	<0.500	20.8	6.14	8.97	2.69	8.94	<1.00	46.1	34.5	
B-30 DUP	0.5'	8/28/2018	<1.00	108	0.669	40.2	5.54	41.2	34.1	8.61	2.19	43.2	206	
Equipment Blank			Concentration micrograms per liter (µg/l)											
EB082818			<0.0200	<0.0100	<0.00500	<0.0100	<0.00500	0.0394	<0.0200	<0.0100	0.0707	<0.0100	0.228	
Minimum Concentration Detected			1.08	76.4	0.554	17.6	4.79	8.97	2.69	7.24	2.19	37	34.5	
Maximum Concentration			1.97	124	0.669	40.2	8.04	41.2	41.6	11.8	2.19	58	206	
DTSC SL			12						80		390*			
EPA Region 9 RSLs				15000	71	120000	23	3100		1500		390	23000	

Notes:

< - Non detect at the established method detection limit.

Samples analyzed by EPA Method 6010 B

The complete laboratory analytical reports are included in Appendix D.

EPA Region 9 RSLs = Environmental Protection Agency Region 9 Regional Screening Levels

DTSC SL=Department of Toxic Substances Control Screening Levels

*Non-cancer endpoint screening level

TABLE 2
SUMMARY TABLE OF ORGANOCHLORINE PESTICIDES IN SOIL
Eastside School Site D: Lincoln Park
Riverside Unified School District
Riverside, California

Sample Number	Depth (feet bgs)	Sample Date	Concentration (milligrams per kilogram [mg/kg])		
			4,4'-DDD	4,4'-DDE	Dieldrin
B-7	0.5'	8/28/2018	0.0025	0.015	<0.0020
	2.5'	8/28/2018	<0.0020	<0.0020	<0.0020
B-9	0.5'	8/28/2018	<0.0020	0.0083	<0.0020
	2.5'	8/28/2018	<0.0020	<0.0020	<0.0020
Composite B-20, B-25, B-32, B-38	0.5'	8/28/2018	<0.0020	0.0025	<0.0020
Composite B-20 DUP, B-25 DUP, B-32 DUP, B-38 DUP	0.5'	8/28/2018	<0.0020	0.011	<0.0020
Composite B-21, B-22, B-26	0.5'	8/28/2018	<0.0020	0.014	0.011
Composite B-27, B-28, B-29, B-34	0.5'	8/28/2018	<0.0020	0.0075	0.0074
	2.5'	8/28/2018	<0.0020	<0.0020	<0.0020
B-30	0.5'	8/28/2018	<0.0020	0.046	<0.0020
	2.5'	8/28/2018	<0.0020	<0.0020	<0.0020
B-30 DUP	0.5'	8/28/2018	<0.0020	0.065	<0.0020
Composite B-33, B-35, B-39, B-40	0.5'	8/28/2018	<0.0020	<0.0020	<0.0020
Equipment Blank			Concentration micrograms per liter (µg/l)		
EB082818		8/28/2018	<0.050	<0.050	<0.020
Minimum Concentration Detected			0.0025	0.0025	0.0074
Maximum Concentration Detected			0.0025	0.065	0.011
EPA Region 9 Regional Screening Levels			1.9	2	0.034
EPA Region 9 Regional Screening Levels for 3:1 Composites			0.766	0.666	0.01133
EPA Region 9 Regional Screening Levels for 4:1 Composites			0.575	0.5	0.0085

Notes:

< - Non detect at the established method detection limit.

Samples analyzed by EPA Method 8081A

EPA Region 9 Regional Screening Level November 2018 Residential soil in mg/kg; DTSC SLs 2018 residential soil mg/kg

The complete laboratory analytical reports are included in Appendix D.

Highlighted cell indicates concentration above agency screening levels

DTSC SL= Department of Toxic Substances Control Screening levels

TABLE 3
SUMMARY TABLE OF LEAD IN SOIL
Eastside School Site D: Lincoln Park
Riverside Unified School District
Riverside, California

Sample Number	Sample Depth	Concentration (milligrams per kilogram [mg/kg])	
		Sample Date	Lead
B-1	0.5'	8/28/2018	65
B-2	0.5'	8/28/2018	34.3
B-3	0.5'	8/28/2018	18.6
B-4	0.5'	8/28/2018	47.2
B-5	0.5'	8/28/2018	73.8
B-6	0.5'	8/28/2018	168
	2.5'		4.97
B-7	0.5'	8/28/2018	28.6
	2.5'		3.34
B-8	0.5'	8/28/2018	71.5
B-9	0.5'	8/28/2018	41.6
	2.5'		4.4
B-10	0.5'	8/28/2018	149
	2.5'		4.37
B-11	0.5'	8/28/2018	86.4
B-12	0.5'	8/28/2018	122
	2.5'		3.89
B-13	0.5'	8/28/2018	31.5
B-14	0.5'	8/28/2018	81
B-15	0.5'	8/28/2018	67.4
B-16	0.5'	8/28/2018	52.8
B-17	0.5'	8/28/2018	3.77
B-18	0.5'	8/28/2018	25.2
B-19	0.5'	8/28/2018	35.4
B-19 DUP	0.5'	8/28/2018	28
B-20	0.5'	8/28/2018	53.1
B-21	0.5'	8/28/2018	38.9
B-22	0.5'	8/28/2018	51.8
B-23	0.5'	8/28/2018	44.4
B-24	0.5'	8/28/2018	29
B-25	0.5'	8/28/2018	28.8
B-26	0.5'	8/28/2018	40.1
B-27	0.5'	8/28/2018	22.3
B-28	0.5'	8/28/2018	29.3
B-29	0.5'	8/28/2018	20.2
B-30	0.5'	8/28/2018	19
	2.5'		2.69
B-30 DUP	0.5'	8/28/2018	34.1
B-31	0.5'	8/28/2018	35.4
B-32	0.5'	8/28/2018	22.6
B-32 DUP	0.5'	8/28/2018	18.8
B-33	0.5'	8/28/2018	40.1
B-33 DUP	0.5'	8/28/2018	36
B-34	0.5'	8/28/2018	34.6
B-35	0.5'	8/28/2018	86.9
B-36	0.5'	8/28/2018	34.2
B-37	0.5'	8/28/2018	37.6
B-38	0.5'	8/28/2018	33
B-39	0.5'	8/28/2018	30.4
B-40	0.5'	8/28/2018	77.6
Number of Samples			50
Number of Detects			50
Minimum			2.69
Maximum			168
95% UCL			64.4
DTSC SLs			80

Notes:

Samples Analyzed by EPA Method 6010B

The complete laboratory analytical reports are included in Appendix D.

95% UCL = 95% Upper confidence limit calculated using EPA ProUCL 5.1

Highlighted cell indicates concentration above agency screening level

DTSC SLs= Department of Toxic Substances Control Screening Levels

TABLE 4
SUMMARY TABLE OF CAM-17 METALS IN SOIL
Eastside School Site D: Lincoln Park
Riverside Unified School District
Riverside, California

Sample Number	Sample Depth	Sample Date	Concentration (milligrams per kilogram [mg/kg])										Vanadium	Zinc
			Arsenic	Barium	Cadmium	Chromium	Cobalt	Copper	Lead	Nickel	Sliver			
B-7	0.5'	8/28/2018	1.08	81.4	<0.500	17.6	4.79	14.4	28.6	7.37	<1.00	37	77	
	2.5'		<1.00	94.2	<0.500	23.8	7.03	10.6	3.34	10.4	<1.00	51.8	38.7	
B-9	0.5'	8/28/2018	1.97	110	0.554	20.4	5.78	15	41.6	8.72	<1.00	44.1	95.5	
	2.5'		<1.00	120	<0.500	25.9	8.04	12.1	4.4	11.8	<1.00	58	39.6	
B-25	0.5'	8/28/2018	<1.00	124	<0.500	20.1	5.86	13.6	28.8	7.24	<1.00	44.7	93.2	
B-30	0.5'	8/28/2018	<1.00	76.4	<0.500	25.3	5.37	22	19	7.8	<1.00	40.1	110	
	2.5'		<1.00	83.1	<0.500	20.8	6.14	8.97	2.69	8.94	<1.00	46.1	34.5	
B-30 DUP	0.5'	8/28/2018	<1.00	108	0.669	40.2	5.54	41.2	34.1	8.61	2.19	43.2	206	
Equipment Blank			Concentration micrograms per liter (µg/l)											
EB082818			<0.0200	<0.0100	<0.00500	<0.0100	<0.00500	0.0394	<0.0200	<0.0100	0.0707	<0.0100	0.228	
Minimum Concentration Detected			1.08	76.4	0.554	17.6	4.79	8.97	2.69	7.24	2.19	37	34.5	
Maximum Concentration			1.97	124	0.669	40.2	8.04	41.2	41.6	11.8	2.19	58	206	
DTSC SL			12						80		390*			
EPA Region 9 RSLs				15000	71	120000	23	3100		1500		390	23000	

Notes:

< - Non detect at the established method detection limit.

Samples analyzed by EPA Method 6010 B

The complete laboratory analytical reports are included in Appendix D.

EPA Region 9 RSLs = Environmental Protection Agency Region 9 Regional Screening Levels

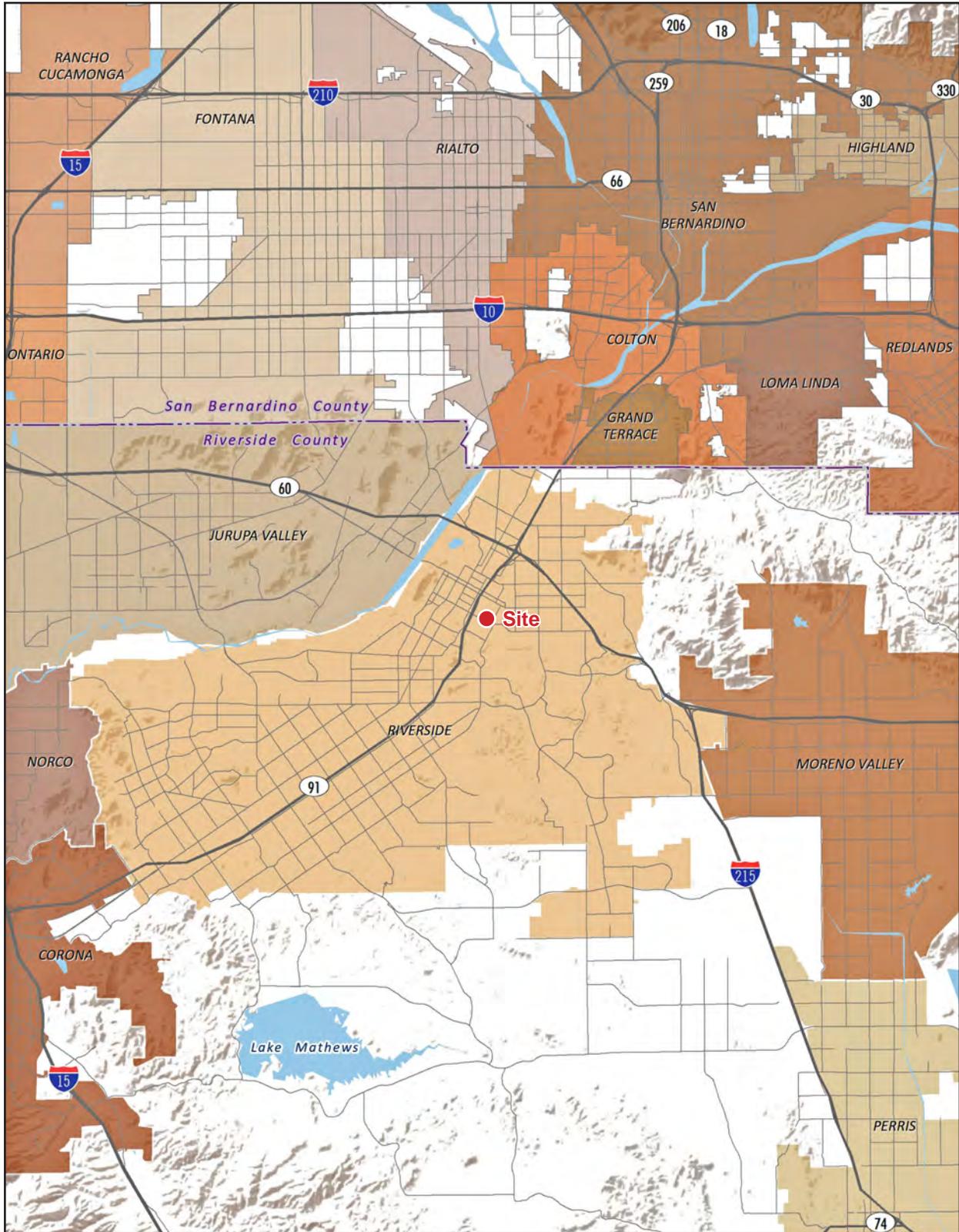
DTSC SL=Department of Toxic Substances Control Screening Levels

*Non-cancer endpoint screening level

Figures

This page intentionally left blank.

Figure 1 - Regional Location



Note: Unincorporated county areas are shown in white.



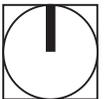
Source: ESRI, 2018

Figure 2 - Local Area



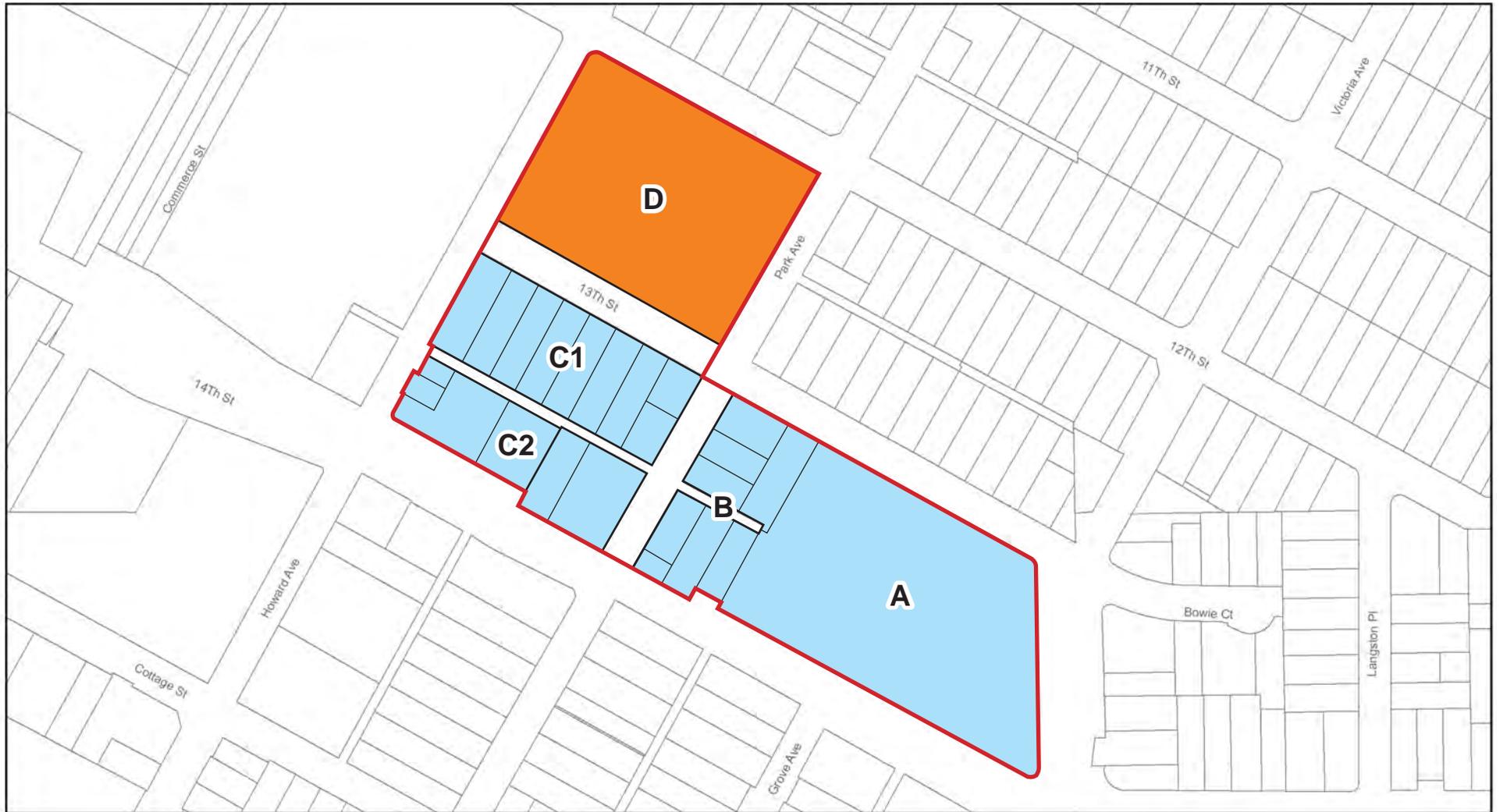
— Project Boundary

0 1,000
Scale (Feet)



Source: ESRI, 2018

Figure 3 - Project Subareas



— Project Boundary

0 250
Scale (Feet)

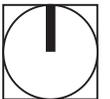
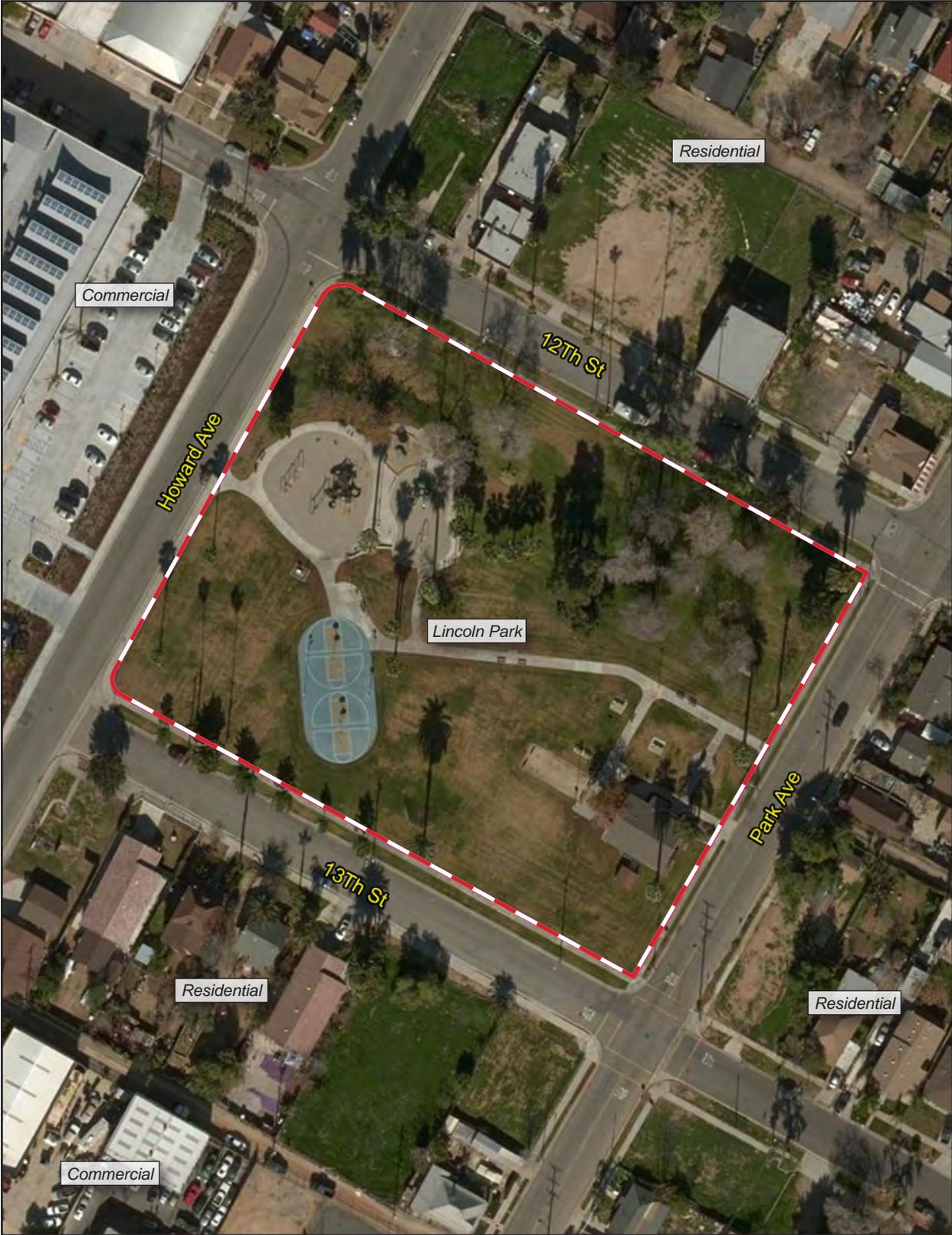


Figure 4 - Site D Aerial Photograph



— Site D Project Boundary

0 125
Scale (Feet)



Source: ESRI, 2018

Figure 5 - Sampling Locations



— Project Boundary ● B-1 Proposed Sampling Locations (40) 0 100
Scale (Feet)

Source: ESRI, 2018



Appendix A. Laboratory Reports

Appendix

This page intentionally left blank.



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CASE NARRATIVE

Authorized Signature Name / Title (print)

Ken Zheng, President

Signature / Date

Ken Zheng, President
09/04/2018 17:28:15

Laboratory Job No. (Certificate of Analysis No.)

1808-00216

Project Name / No.

LINCOLN PARK, RIVERSIDE CA R1V-21.0

Dates Sampled (from/to)

08/28/18 To 08/28/18

Dates Received (from/to)

08/28/18 To 08/28/18

Dates Reported (from/to)

09/04/18 To 9/4/2018

Chains of Custody Received

Yes

Comments:

Subcontracting

Organic Analyses

No analyses sub-contracted

Inorganic Analyses

No analyses sub-contracted

Other Analyses

No analyses sub-contracted

Sample Condition(s)

All samples intact

Positive Results (Organic Compounds)

Sample	Analyte	Result	Qual	Units	RL	Sample	Analyte	Result	Qual	Units	RL
B-9@0.5'	4,4'-DDE	0.0083		mg/Kg	0.0020	B-7@0.5'	4,4'-DDD	0.0025		mg/Kg	0.0020
B-7@0.5'	4,4'-DDE	0.015		mg/Kg	0.0020	B-30@0.5'	4,4'-DDE	0.046		mg/Kg	0.0020
B-30DUP@0.5'	4,4'-DDE	0.065		mg/Kg	0.0020	COMPOSITE:B-27,B-28,B-29,B-34	4,4'-DDE	0.0075		mg/Kg	0.0020
COMPOSITE:B-27,B-28,B-29,B-34	Dieldrin	0.0074		mg/Kg	0.0020	COMPOSITE:B-21, B-22, B-26@0	4,4'-DDE	0.014		mg/Kg	0.0020
COMPOSITE:B-21, B-22, B-26@0	Dieldrin	0.011		mg/Kg	0.0020	COMPOSITE:B-20, B-25, B-32, B-	4,4'-DDE	0.0025		mg/Kg	0.0020
COMPOSITE:B-20DUP, B-25DUP,	4,4'-DDE	0.011		mg/Kg	0.0020						



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 001 B-29@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18 @	7:18
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	20.2		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 002 B-34@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18 @	7:25
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	34.6		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 003 B-28@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18 @	7:33
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	29.3		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 004 B-27@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18 @	7:33
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	22.3		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 005 B-35@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18 @	7:42
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	86.9		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 006 B-40@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18 @	7:47
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	77.6		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 007 B-17@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18 @ 7:57	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	3.77		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 008 B-22@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18 @ 7:55	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	51.8		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 009 B-14@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18 @ 8:11	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	81.0		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 010 B-10@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18 @ 8:08	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	149		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 011 B-5@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18 @ 8:18	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	73.8		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 012 B-4@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18 @ 8:24	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	47.2		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 013 B-13@0.5'							Date & Time Sampled: 08/28/18 @ 8:26	
Sample Matrix: Soil								
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	31.5		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 014 B-9@0.5'							Date & Time Sampled: 08/28/18 @ 8:39	
Sample Matrix: Soil								
[Metals Title 22 no Hg]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Antimony	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Arsenic	1.97		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Barium	110		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Beryllium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Cadmium	0.554		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Chromium	20.4		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Cobalt	5.78		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Copper	15.0		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Lead	41.6		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Molybdenum	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Nickel	8.72		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Selenium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Silver	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Thallium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Vanadium	44.1		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Zinc	95.5		mg/Kg	EPA 6010B	1.0	5.00	08/29/18	TLB
[Mercury]								
Mercury Digestion	Complete			EPA 7471A	1.0		09/04/18	JEN
Mercury	<0.20		mg/Kg	EPA 7471A	1.0	0.20	09/04/18	JEN
[Pesticides]								
Ultrasonic Extraction	Complete			EPA 3550	1.0		08/29/18	AR
Aldrin	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
alpha-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
beta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 014 B-9@0.5' Sample Matrix: Soilcontinued							Date & Time Sampled: 08/28/18 @ 8:39	
delta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
gamma-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Chlordane	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
4,4'-DDD	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDE	0.0083		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDT	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Dieldrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan I	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Endosulfan II	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan Sulfate	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin Aldehyde	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin ketone	<0.100		mg/Kg	EPA 8081A	1.0	0.100	08/30/18	AR
Heptachlor	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Heptachlor Epoxide	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Methoxychlor	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
Toxaphene	<0.020		mg/Kg	EPA 8081A	1.0	0.020	08/30/18	AR
[Surrogates]								
Tetrachloro-m-xylene	105		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Decachlorobiphenyl	109		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Sample: 015 B-9@2.5 Sample Matrix: Soil							Date & Time Sampled: 08/28/18 @ 8:43	
[Metals Title 22 no Hg]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Antimony	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Arsenic	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Barium	120		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Beryllium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Cadmium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Chromium	25.9		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 015 B-9@2.5							Date & Time Sampled: 08/28/18 @ 8:43	
Sample Matrix: Soil								
.....continued								
Cobalt	8.04		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Copper	12.1		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Lead	4.40		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Molybdenum	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Nickel	11.8		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Selenium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Silver	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Thallium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Vanadium	58.0		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Zinc	39.6		mg/Kg	EPA 6010B	1.0	5.00	08/29/18	TLB
[Mercury]								
Mercury Digestion	Complete			EPA 7471A	1.0		09/04/18	JEN
Mercury	<0.20		mg/Kg	EPA 7471A	1.0	0.20	09/04/18	JEN
[Pesticides]								
Ultrasonic Extraction	Complete			EPA 3550	1.0		08/29/18	AR
Aldrin	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
alpha-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
beta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
delta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
gamma-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Chlordane	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
4,4'-DDD	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDE	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDT	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Dieldrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan I	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Endosulfan II	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan Sulfate	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin Aldehyde	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin ketone	<0.100		mg/Kg	EPA 8081A	1.0	0.100	08/30/18	AR

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 015 B-9@2.5 Sample Matrix: Soilcontinued							Date & Time Sampled: 08/28/18 @ 8:43	
Heptachlor	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Heptachlor Epoxide	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Methoxychlor	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
Toxaphene	<0.020		mg/Kg	EPA 8081A	1.0	0.020	08/30/18	AR
[Surrogates]								
Tetrachloro-m-xylene	90		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Decachlorobiphenyl	103		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Sample: 016 B-16@0.5' Sample Matrix: Soil							Date & Time Sampled: 08/28/18 @ 8:49	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	52.8		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 017 B-21@0.5' Sample Matrix: Soil							Date & Time Sampled: 08/28/18 @ 8:50	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	38.9		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 018 B-26@0.5' Sample Matrix: Soil							Date & Time Sampled: 08/28/18 @ 8:49	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	40.1		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 019 B-33@0.5' Sample Matrix: Soil							Date & Time Sampled: 08/28/18 @ 9:13	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	40.1		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 020 B-33DUP0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18 @	9:14
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	36.0		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 021 B-39@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18 @	9:20
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	30.4		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 022 B-38@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18 @	9:27
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	33.0		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 023 B-32@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18 @	9:32
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	22.6		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 024 B-32DUP@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18 @	9:33
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	18.8		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 025 B-25@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18 @	9:38
[Metals Title 22 no Hg]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Antimony	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Arsenic	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 025 B-25@0.5' Sample Matrix: Soilcontinued							Date & Time Sampled: 08/28/18 @ 9:38	
Barium	124		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Beryllium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Cadmium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Chromium	20.1		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Cobalt	5.86		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Copper	13.6		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Lead	28.8		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Molybdenum	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Nickel	7.24		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Selenium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Silver	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Thallium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Vanadium	44.7		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Zinc	93.2		mg/Kg	EPA 6010B	1.0	5.00	08/29/18	TLB
[Mercury]								
Mercury Digestion	Complete			EPA 7471A	1.0		09/04/18	JEN
Mercury	<0.20		mg/Kg	EPA 7471A	1.0	0.20	09/04/18	JEN
Sample: 026 B-20@0.5' Sample Matrix: Soil							Date & Time Sampled: 08/28/18 @ 9:48	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	53.1		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 027 B-15@0.5' Sample Matrix: Soil							Date & Time Sampled: 08/28/18 @ 9:55	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	67.4		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 028 B-12@0.5' Sample Matrix: Soil							Date & Time Sampled: 08/28/18 @ 10:00	

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 028 B-12@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18	@ 10:00
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	122		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 029 B-3@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18	@ 10:16
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	18.6		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 030 B-8@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18	@ 10:12
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	71.5		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 031 B-2@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18	@ 10:19
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	34.3		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 032 B-7@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18	@ 10:25
[Metals Title 22 no Hg]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Antimony	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Arsenic	1.08		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Barium	81.4		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Beryllium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Cadmium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Chromium	17.6		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Cobalt	4.79		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 032 B-7@0.5'							Date & Time Sampled: 08/28/18 @ 10:25	
Sample Matrix: Soil								
.....continued								
Copper	14.4		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Lead	28.6		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Molybdenum	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Nickel	7.37		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Selenium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Silver	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Thallium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Vanadium	37.0		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Zinc	77.0		mg/Kg	EPA 6010B	1.0	5.00	08/29/18	TLB
[Mercury]								
Mercury Digestion	Complete			EPA 7471A	1.0		09/04/18	JEN
Mercury	<0.20		mg/Kg	EPA 7471A	1.0	0.20	09/04/18	JEN
[Pesticides]								
Ultrasonic Extraction	Complete			EPA 3550	1.0		08/29/18	AR
Aldrin	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
alpha-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
beta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
delta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
gamma-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Chlordane	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
4,4'-DDD	0.0025		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDE	0.015		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDT	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Dieldrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan I	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Endosulfan II	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan Sulfate	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin Aldehyde	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin ketone	<0.100		mg/Kg	EPA 8081A	1.0	0.100	08/30/18	AR
Heptachlor	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 032 B-7@0.5' Sample Matrix: Soilcontinued							Date & Time Sampled: 08/28/18 @ 10:25	
Heptachlor Epoxide	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Methoxychlor	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
Toxaphene	<0.020		mg/Kg	EPA 8081A	1.0	0.020	08/30/18	AR
[Surrogates]								
Tetrachloro-m-xylene	117		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Decachlorobiphenyl	130		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Sample: 033 B-7@2.5' Sample Matrix: Soil							Date & Time Sampled: 08/28/18 @ 10:29	
[Metals Title 22 no Hg]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Antimony	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Arsenic	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Barium	94.2		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Beryllium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Cadmium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Chromium	23.8		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Cobalt	7.03		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Copper	10.6		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Lead	3.34		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Molybdenum	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Nickel	10.4		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Selenium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Silver	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Thallium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Vanadium	51.8		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Zinc	38.7		mg/Kg	EPA 6010B	1.0	5.00	08/29/18	TLB
[Mercury]								
Mercury Digestion	Complete			EPA 7471A	1.0		09/04/18	JEN
Mercury	<0.20		mg/Kg	EPA 7471A	1.0	0.20	09/04/18	JEN
[Pesticides]								

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C
 ONTARIO, CA 91761
 951-779-0310 FAX 951-779-0344
 www.arlaboratories.com office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
 FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

Date Reported 09/04/18
 Date Received 08/28/18
 Invoice No. 83397
 Cust # P135
 Permit Number
 Customer P.O. R1V-21.0

PLACEWORKS
 DENISE CLENDENING
 2850 INLAND EMPIRE BLVD.
 SUITE B
 ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 033 B-7@2.5' Sample Matrix: Soilcontinued							Date & Time Sampled: 08/28/18 @ 10:29	
Ultrasonic Extraction	Complete			EPA 3550	1.0		08/29/18	AR
Aldrin	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
alpha-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
beta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
delta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
gamma-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Chlordane	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
4,4'-DDD	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDE	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDT	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Dieldrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan I	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Endosulfan II	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan Sulfate	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin Aldehyde	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin ketone	<0.100		mg/Kg	EPA 8081A	1.0	0.100	08/30/18	AR
Heptachlor	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Heptachlor Epoxide	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Methoxychlor	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
Toxaphene	<0.020		mg/Kg	EPA 8081A	1.0	0.020	08/30/18	AR
[Surrogates]								
Tetrachloro-m-xylene	109		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Decachlorobiphenyl	111		%REC	EPA 8081A/8082		50-150	08/30/18	AR

Sample: 034 B-6@0.5' Sample Matrix: Soil							Date & Time Sampled: 08/28/18 @ 10:42	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	168		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 035 B-11@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18	@ 10:55
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	86.4		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 036 B-1@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18	@ 11:03
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	65.0		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 037 B18@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18	@ 11:12
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	25.2		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 038 B-23@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18	@ 11:10
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	44.4		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 039 B-30@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18	@ 11:17
[Metals Title 22 no Hg]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Antimony	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Arsenic	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Barium	76.4		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Beryllium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Cadmium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Chromium	25.3		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Cobalt	5.37		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 039 B-30@0.5'							Date & Time Sampled: 08/28/18 @ 11:17	
Sample Matrix: Soil								
.....continued								
Copper	22.0		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Lead	19.0		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Molybdenum	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Nickel	7.80		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Selenium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Silver	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Thallium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Vanadium	40.1		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Zinc	110		mg/Kg	EPA 6010B	1.0	5.00	08/29/18	TLB
[Mercury]								
Mercury Digestion	Complete			EPA 7471A	1.0		09/04/18	JEN
Mercury	<0.20		mg/Kg	EPA 7471A	1.0	0.20	09/04/18	JEN
[Pesticides]								
Ultrasonic Extraction	Complete			EPA 3550	1.0		08/29/18	AR
Aldrin	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
alpha-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
beta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
delta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
gamma-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Chlordane	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
4,4'-DDD	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDE	0.046		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDT	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Dieldrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan I	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Endosulfan II	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan Sulfate	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin Aldehyde	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin ketone	<0.100		mg/Kg	EPA 8081A	1.0	0.100	08/30/18	AR
Heptachlor	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 039 B-30@0.5'							Date & Time Sampled: 08/28/18 @ 11:17	
Sample Matrix: Soil								
.....continued								
Heptachlor Epoxide	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Methoxychlor	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
Toxaphene	<0.020		mg/Kg	EPA 8081A	1.0	0.020	08/30/18	AR
[Surrogates]								
Tetrachloro-m-xylene	112		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Decachlorobiphenyl	123		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Sample: 040 B-30DUP@0.5'							Date & Time Sampled: 08/28/18 @ 11:17	
Sample Matrix: Soil								
[Metals Title 22 no Hg]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Antimony	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Arsenic	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Barium	108		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Beryllium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Cadmium	0.669		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Chromium	40.2		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Cobalt	5.54		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Copper	41.2		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Lead	34.1		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Molybdenum	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Nickel	8.61		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Selenium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Silver	2.19		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Thallium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Vanadium	43.2		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Zinc	206		mg/Kg	EPA 6010B	1.0	5.00	08/29/18	TLB
[Mercury]								
Mercury Digestion	Complete			EPA 7471A	1.0		09/04/18	JEN
Mercury	<0.20		mg/Kg	EPA 7471A	1.0	0.20	09/04/18	JEN
[Pesticides]								

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 040 B-30DUP@0.5'							Date & Time Sampled: 08/28/18 @ 11:17	
Sample Matrix: Soil								
.....continued								
Ultrasonic Extraction	Complete			EPA 3550	1.0		08/29/18	AR
Aldrin	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
alpha-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
beta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
delta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
gamma-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Chlordane	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
4,4'-DDD	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDE	0.065		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDT	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Dieldrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan I	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Endosulfan II	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan Sulfate	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin Aldehyde	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin ketone	<0.100		mg/Kg	EPA 8081A	1.0	0.100	08/30/18	AR
Heptachlor	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Heptachlor Epoxide	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Methoxychlor	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
Toxaphene	<0.020		mg/Kg	EPA 8081A	1.0	0.020	08/30/18	AR
[Surrogates]								
Tetrachloro-m-xylene	121		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Decachlorobiphenyl	114		%REC	EPA 8081A/8082		50-150	08/30/18	AR

Sample: 041 **B-30@2.5'**

Sample Matrix: **Soil**

Date & Time Sampled: 08/28/18 @ 11:19

[Metals Title 22 no Hg]

Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Antimony	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Arsenic	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 041 B-30@2.5'							Date & Time Sampled: 08/28/18 @ 11:19	
Sample Matrix: Soil								
.....continued								
Barium	83.1		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Beryllium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Cadmium	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Chromium	20.8		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Cobalt	6.14		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Copper	8.97		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Lead	2.69		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Molybdenum	<0.500		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Nickel	8.94		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Selenium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Silver	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Thallium	<1.00		mg/Kg	EPA 6010B	1.0	1.00	08/29/18	TLB
Vanadium	46.1		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Zinc	34.5		mg/Kg	EPA 6010B	1.0	5.00	08/29/18	TLB
[Mercury]								
Mercury Digestion	Complete			EPA 7471A	1.0		09/04/18	JEN
Mercury	<0.20		mg/Kg	EPA 7471A	1.0	0.20	09/04/18	JEN
[Pesticides]								
Ultrasonic Extraction	Complete			EPA 3550	1.0		08/29/18	AR
Aldrin	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
alpha-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
beta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
delta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
gamma-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Chlordane	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
4,4'-DDD	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDE	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDT	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Dieldrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan I	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Endosulfan II	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 041 B-30@2.5' Sample Matrix: Soilcontinued							Date & Time Sampled: 08/28/18 @ 11:19	
Endosulfan Sulfate	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin Aldehyde	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin ketone	<0.100		mg/Kg	EPA 8081A	1.0	0.100	08/30/18	AR
Heptachlor	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Heptachlor Epoxide	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Methoxychlor	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
Toxaphene	<0.020		mg/Kg	EPA 8081A	1.0	0.020	08/30/18	AR
[Surrogates]								
Tetrachloro-m-xylene	87		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Decachlorobiphenyl	127		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Sample: 042 B-36@0.5' Sample Matrix: Soil							Date & Time Sampled: 08/28/18 @ 11:23	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	34.2		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 043 B-37@0.5' Sample Matrix: Soil							Date & Time Sampled: 08/28/18 @ 11:34	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	37.6		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 044 B-31@0.5' Sample Matrix: Soil							Date & Time Sampled: 08/28/18 @ 11:40	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	35.4		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 045 B-24@0.5' Sample Matrix: Soil							Date & Time Sampled: 08/28/18 @ 11:40	

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 045 B-24@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18 @ 11:40	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	29.0		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 046 B-19@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18 @ 11:46	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	35.4		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 047 B-19DUP@0.5' Sample Matrix: Soil					Date & Time Sampled:		08/28/18 @ 11:46	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		08/29/18	TLB
Lead	28.0		mg/Kg	EPA 6010B	1.0	0.500	08/29/18	TLB
Sample: 048 EB082818 Sample Matrix: Aqueous					Date & Time Sampled:		08/28/18 @ 12:12	
[Metals Title 22 no Hg]								
Metals Acid Digestion	Complete			EPA 3010A	1.0		08/29/18	TLB
Antimony	<0.0200		mg/L	EPA 6010B	1.0	0.0200	08/29/18	TLB
Arsenic	<0.0200		mg/L	EPA 6010B	1.0	0.0200	08/29/18	TLB
Barium	<0.0100		mg/L	EPA 6010B	1.0	0.0100	08/29/18	TLB
Beryllium	<0.00500		mg/L	EPA 6010B	1.0	0.00500	08/29/18	TLB
Cadmium	<0.00500		mg/L	EPA 6010B	1.0	0.00500	08/29/18	TLB
Chromium	<0.0100		mg/L	EPA 6010B	1.0	0.0100	08/29/18	TLB
Cobalt	<0.00500		mg/L	EPA 6010B	1.0	0.00500	08/29/18	TLB
Copper	0.0394		mg/L	EPA 6010B	1.0	0.0100	08/29/18	TLB
Lead	<0.0200		mg/L	EPA 6010B	1.0	0.0200	08/29/18	TLB
Molybdenum	<0.0100		mg/L	EPA 6010B	1.0	0.0100	08/29/18	TLB
Nickel	<0.0100		mg/L	EPA 6010B	1.0	0.0100	08/29/18	TLB
Selenium	<0.0200		mg/L	EPA 6010B	1.0	0.0200	08/29/18	TLB
Silver	0.0707		mg/L	EPA 6010B	1.0	0.0200	08/29/18	TLB

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 048 EB082818							Date & Time Sampled: 08/28/18 @ 12:12	
Sample Matrix: Aqueous								
.....continued								
Thallium	<0.100		mg/L	EPA 6010B	1.0	0.100	08/29/18	TLB
Vanadium	<0.0100		mg/L	EPA 6010B	1.0	0.0100	08/29/18	TLB
Zinc	0.228		mg/L	EPA 6010B	1.0	0.0400	08/29/18	TLB
[Mercury]								
Mercury Digestion	Complete			EPA 7470A	1.0		09/04/18	JEN
Mercury	<0.500		ug/L	EPA 7470A	1.0	0.500	09/04/18	JEN
[Pesticides]								
Sep Funnel LLE	Complete			EPA 3510C	1.0		08/29/18	AR
Aldrin	<0.040		µg/L	EPA 8081A	1.0	0.040	08/30/18	AR
alpha-BHC	<0.030		µg/L	EPA 8081A	1.0	0.030	08/30/18	AR
beta-BHC	<0.060		µg/L	EPA 8081A	1.0	0.060	08/30/18	AR
delta-BHC	<0.090		µg/L	EPA 8081A	1.0	0.090	08/30/18	AR
gamma-BHC	<0.040		µg/L	EPA 8081A	1.0	0.040	08/30/18	AR
Chlordane	<0.50		µg/L	EPA 8081A	1.0	0.50	08/30/18	AR
4,4'-DDD	<0.050		µg/L	EPA 8081A	1.0	0.050	08/30/18	AR
4,4'-DDE	<0.050		µg/L	EPA 8081A	1.0	0.050	08/30/18	AR
4,4'-DDT	<0.050		µg/L	EPA 8081A	1.0	0.050	08/30/18	AR
Dieldrin	<0.020		µg/L	EPA 8081A	1.0	0.020	08/30/18	AR
Endosulfan I	<0.050		µg/L	EPA 8081A	1.0	0.050	08/30/18	AR
Endosulfan II	<0.040		µg/L	EPA 8081A	1.0	0.040	08/30/18	AR
Endosulfan Sulfate	<0.10		µg/L	EPA 8081A	1.0	0.10	08/30/18	AR
Endrin	<0.050		µg/L	EPA 8081A	1.0	0.050	08/30/18	AR
Endrin Aldehyde	<0.10		µg/L	EPA 8081A	1.0	0.10	08/30/18	AR
Endrin Ketone	<0.50		µg/L	EPA 8081A	1.0	0.50	08/30/18	AR
Heptachlor	<0.030		µg/L	EPA 8081A	1.0	0.030	08/30/18	AR
Heptachlor Epoxide	<0.080		µg/L	EPA 8081A	1.0	0.080	08/30/18	AR
Methoxychlor	<0.040		µg/L	EPA 8081A	1.0	0.040	08/30/18	AR
Toxaphene	<0.50		µg/L	EPA 8081A	1.0	0.50	08/30/18	AR
[Surrogates]								
Tetrachloro-m-xylene	129		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Decachlorobiphenyl	123		%REC	EPA 8081A/8082		50-150	08/30/18	AR

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 049 COMPOSITE:B-27,B-28,B-29,B-34@0.5'							Date & Time Sampled: 08/28/18 @ 7:18	
Sample Matrix: Soil								
[Pesticides]								
Ultrasonic Extraction	Complete			EPA 3550	1.0		08/29/18	AR
Aldrin	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
alpha-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
beta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
delta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
gamma-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Chlordane	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
4,4'-DDD	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDE	0.0075		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDT	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Dieldrin	0.0074		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan I	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Endosulfan II	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan Sulfate	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin Aldehyde	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin ketone	<0.100		mg/Kg	EPA 8081A	1.0	0.100	08/30/18	AR
Heptachlor	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Heptachlor Epoxide	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Methoxychlor	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
Toxaphene	<0.020		mg/Kg	EPA 8081A	1.0	0.020	08/30/18	AR
[Surrogates]								
Tetrachloro-m-xylene	110		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Decachlorobiphenyl	108		%REC	EPA 8081A/8082		50-150	08/30/18	AR

Sample: 050 **COMPOSITE:B-27, B-28, B-29, B-34@2.5'**

Date & Time Sampled: 08/28/18 @ 7:18

Sample Matrix: **Soil**

[Pesticides]								
Ultrasonic Extraction	Complete			EPA 3550	1.0		08/29/18	AR
Aldrin	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 050 COMPOSITE:B-27, B-28, B-29, B-34@2.5'							Date & Time Sampled: 08/28/18 @ 7:18	
Sample Matrix: Soil								
.....continued								
alpha-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
beta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
delta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
gamma-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Chlordane	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
4,4'-DDD	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDE	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDT	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Dieldrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan I	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Endosulfan II	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan Sulfate	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin Aldehyde	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin ketone	<0.100		mg/Kg	EPA 8081A	1.0	0.100	08/30/18	AR
Heptachlor	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Heptachlor Epoxide	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Methoxychlor	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
Toxaphene	<0.020		mg/Kg	EPA 8081A	1.0	0.020	08/30/18	AR
[Surrogates]								
Tetrachloro-m-xylene	97		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Decachlorobiphenyl	91		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Sample: 051 COMPOSITE:B-21, B-22, B-26@0.5'							Date & Time Sampled: 08/28/18 @ 7:18	
Sample Matrix: Soil								
[Pesticides]								
Ultrasonic Extraction	Complete			EPA 3550	1.0		08/29/18	AR
Aldrin	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
alpha-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
beta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
delta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 051 COMPOSITE:B-21, B-22, B-26@0.5'							Date & Time Sampled: 08/28/18 @ 7:18	
Sample Matrix: Soil								
.....continued								
gamma-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Chlordane	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
4,4'-DDD	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDE	0.014		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDT	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Dieldrin	0.011		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan I	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Endosulfan II	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan Sulfate	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin Aldehyde	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin ketone	<0.100		mg/Kg	EPA 8081A	1.0	0.100	08/30/18	AR
Heptachlor	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Heptachlor Epoxide	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Methoxychlor	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
Toxaphene	<0.020		mg/Kg	EPA 8081A	1.0	0.020	08/30/18	AR
[Surrogates]								
Tetrachloro-m-xylene	122		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Decachlorobiphenyl	108		%REC	EPA 8081A/8082		50-150	08/30/18	AR

Sample: 052 COMPOSITE:B-33, B-35, B-39, B-40@0.5'							Date & Time Sampled: 08/28/18 @ 7:18	
Sample Matrix: Soil								
[Pesticides]								
Ultrasonic Extraction	Complete			EPA 3550	1.0		08/29/18	AR
Aldrin	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
alpha-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
beta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
delta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
gamma-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Chlordane	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
4,4'-DDD	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 052 COMPOSITE:B-33, B-35, B-39, B-40@0.5'							Date & Time Sampled: 08/28/18 @ 7:18	
Sample Matrix: Soil								
.....continued								
4,4'-DDE	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDT	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Dieldrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan I	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Endosulfan II	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan Sulfate	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin Aldehyde	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin ketone	<0.100		mg/Kg	EPA 8081A	1.0	0.100	08/30/18	AR
Heptachlor	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Heptachlor Epoxide	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Methoxychlor	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
Toxaphene	<0.020		mg/Kg	EPA 8081A	1.0	0.020	08/30/18	AR
[Surrogates]								
Tetrachloro-m-xylene	107		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Decachlorobiphenyl	118		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Sample: 053 COMPOSITE:B-20, B-25, B-32, B-38@0.5'							Date & Time Sampled: 08/28/18 @ 7:18	
Sample Matrix: Soil								
[Pesticides]								
Ultrasonic Extraction	Complete			EPA 3550	1.0		08/29/18	AR
Aldrin	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
alpha-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
beta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
delta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
gamma-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Chlordane	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
4,4'-DDD	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDE	0.0025		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDT	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Dieldrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

Date Reported 09/04/18
Date Received 08/28/18
Invoice No. 83397
Cust # P135
Permit Number
Customer P.O. R1V-21.0

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 053 COMPOSITE:B-20, B-25, B-32, B-38@0.5'							Date & Time Sampled: 08/28/18 @ 7:18	
Sample Matrix: Soil								
.....continued								
Endosulfan I	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Endosulfan II	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan Sulfate	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin Aldehyde	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin ketone	<0.100		mg/Kg	EPA 8081A	1.0	0.100	08/30/18	AR
Heptachlor	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Heptachlor Epoxide	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Methoxychlor	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
Toxaphene	<0.020		mg/Kg	EPA 8081A	1.0	0.020	08/30/18	AR
[Surrogates]								
Tetrachloro-m-xylene	117		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Decachlorobiphenyl	111		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Sample: 054 COMPOSITE:B-20DUP, B-25DUP, B-32DUP B-38DUP@0.5'							Date & Time Sampled: 08/28/18 @ 7:18	
Sample Matrix: Soil								
[Pesticides]								
Ultrasonic Extraction	Complete			EPA 3550	1.0		08/29/18	AR
Aldrin	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
alpha-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
beta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
delta-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
gamma-BHC	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Chlordane	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
4,4'-DDD	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDE	0.011		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
4,4'-DDT	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Dieldrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan I	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Endosulfan II	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endosulfan Sulfate	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1808-00216

Date Reported	09/04/18
Date Received	08/28/18
Invoice No.	83397
Cust #	P135
Permit Number	
Customer P.O.	R1V-21.0

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 054 COMPOSITE:B-20DUP, B-25DUP, B-32DUP B-38DUP@0.5'					Date & Time Sampled:		08/28/18 @ 7:18	
Sample Matrix: Soil								
.....continued								
Endrin	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin Aldehyde	<0.0020		mg/Kg	EPA 8081A	1.0	0.0020	08/30/18	AR
Endrin ketone	<0.100		mg/Kg	EPA 8081A	1.0	0.100	08/30/18	AR
Heptachlor	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Heptachlor Epoxide	<0.0010		mg/Kg	EPA 8081A	1.0	0.0010	08/30/18	AR
Methoxychlor	<0.010		mg/Kg	EPA 8081A	1.0	0.010	08/30/18	AR
Toxaphene	<0.020		mg/Kg	EPA 8081A	1.0	0.020	08/30/18	AR
[Surrogates]								
Tetrachloro-m-xylene	126		%REC	EPA 8081A/8082		50-150	08/30/18	AR
Decachlorobiphenyl	110		%REC	EPA 8081A/8082		50-150	08/30/18	AR

Respectfully Submitted:

Ken Zheng - Lab Director

QUALIFIERS

B = Detected in the associated Method Blank at a concentration above the routine RL.
B1 = BOD dilution water is over specifications . The reported result may be biased high.
D = Surrogate recoveries are not calculated due to sample dilution.
E = Estimated value; Value exceeds calibration level of instrument.
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference.
J = Analyte concentration detected between RL and MDL.
Q = One or more quality control criteria did not meet specifications. See Comments for further explanation.
S = Customer provided specification limit exceeded.

ABBREVIATIONS

DF = Dilution Factor
RL = Reporting Limit, Adjusted by DF
MDL = Method Detection Limit, Adjusted by DF
Qual = Qualifier
Tech = Technician

As regulatory limits change frequently, A & R Laboratories advises the recipient of this report to confirm such limits with the appropriate federal, state, or local authorities before acting in reliance on the regulatory limits provided.

For any feedback concerning our services, please contact Jenny Jiang, Project Manager at 951.779.0310. You may also contact Ken Zheng, President at office@arlaboratories.com.



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C
 ONTARIO, CA 91761
 951-779-0310 FAX 951-779-0344
 www.arlaboratories.com office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789 2790 2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
 FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

QUALITY CONTROL DATA REPORT

PLACEWORKS

1808-00216

Date Reported 09/04/2018
 Date Received 08/28/2018
 Date Sampled 08/28/2018

Project: LINCOLN PARK, RIVERSIDE CA

Method # EPA 6010B

QC Reference # 75885 Date Analyzed: 8/29/2018 Technician: TLB

Samples 048

Results

LCS %REC LCS %DUP LCS %RPD

Antimony	102	101	0.9
Arsenic	100	99	1.1
Barium	99	101	1.2
Beryllium	99	99	0.4
Cadmium	99	99	0.5
Chromium	98	97	0.6
Cobalt	99	99	0.5
Copper	99	99	0.4
Lead	99	99	0.5
Molybdenum	100	100	0.4
Nickel	99	99	0.3
Selenium	99	98	0.8
Silver	99	98	0.9
Thallium	99	99	0.2
Vanadium	100	99	0.6
Zinc	99	98	0.5

Control Ranges

LCS %REC LCS %RPD

75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 25
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20
75 - 125	0 - 20

Method # EPA 7470A

QC Reference # 75985 Date Analyzed: 9/4/2018 Technician: JEN

Samples 048

Results

LCS %REC LCS %DUP LCS %RPD SPIKE %REC SPIKE %DUP SPIKE %RPD

Mercury	100	96	4	102	104	1
---------	-----	----	---	-----	-----	---

Control Ranges

LCS %REC LCS %RPD SPIKE %RPD

75 - 125	0 - 25	0 - 25
----------	--------	--------

Method # EPA 7471A

QC Reference # 75980 Date Analyzed: 9/4/2018 Technician: JEN

Samples 014 015 025 032 033 039 040 041

Results

LCS %REC LCS %RPD SPIKE %REC SPIKE %DUP SPIKE %RPD

Mercury	102	108	96	94	2
---------	-----	-----	----	----	---

Control Ranges

LCS %REC LCS %RPD SPIKE %RPD

75 - 125	0 - 25	0 - 25
----------	--------	--------

Method # EPA 8081A

QC Reference # 75932 Date Analyzed: 8/30/2018 Technician: AR

Samples 014 015 032 033 039 040 041 049 050 051 052 053 054



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C
 ONTARIO, CA 91761
 951-779-0310 FAX 951-779-0344
 www.arlaboratories.com office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789 2790 2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
 FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

QUALITY CONTROL DATA REPORT

PLACEWORKS

1808-00216

Date Reported 09/04/2018
 Date Received 08/28/2018
 Date Sampled 08/28/2018

Project: LINCOLN PARK, RIVERSIDE CA

Method # EPA 8081A

QC Reference # 75932 Date Analyzed: 8/30/2018 Technician: AR

Samples 014 015 032 033 039 040 041 049 050 051 052 053 054

Results

	LCS %REC	SPIKE %REC	SPIKE %DUP	SPIKE %RPD
4,4'-DDT	77	90	90	0
Aldrin	85	105	100	4
Dieldrin	123	125	130	4
Endrin	93	115	115	0
gamma-BHC	95	105	100	4
Heptachlor	82	105	95	9

Control Ranges

LCS %REC	SPIKE %RPD
50 - 130	0 - 30
50 - 140	0 - 30
70 - 130	0 - 30
70 - 150	0 - 30
50 - 150	0 - 30
50 - 150	0 - 30

QC Reference # 75935 Date Analyzed: 8/30/2018 Technician: AR

Samples 048

Results

	LCS %REC	LCS %DUP	LCS %RPD
4,4'-DDT	93	91	2.0
Aldrin	149	170	21.0
Dieldrin	128	128	0.0
Endrin	112	117	6.0
gamma-BHC	128	177	49.0
Heptachlor	135	126	23.0

Control Ranges

LCS %REC	LCS %RPD
50 - 130	0 - 30
50 - 140	0 - 30
70 - 130	0 - 30
70 - 150	0 - 30
50 - 150	0 - 30
50 - 150	0 - 30

Method # EPA 8081A/8082

QC Reference # 75932 Date Analyzed: 8/30/2018 Technician: AR

Samples 014 015 032 033 039 040 041 049 050 051 052 053 054

No QC recoveries reported.

QC Reference # 75935 Date Analyzed: 8/30/2018 Technician: AR

Samples 048

No QC recoveries reported.

No method blank results were above reporting limit

Respectfully Submitted:

Ken Zheng - President

For any feedback concerning our services, please contact Jenny Jiang, Project Manager at 951.779.0310. You may also contact Ken Zheng, President at office@arlaboratories.com.

Client Name PLACEWORKS				Analyses Requested				Turn Around Time Requested																	
E-mail DCLINDENING@PLACEWORKS.COM								<input checked="" type="checkbox"/> Chilled <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Seal		<input type="checkbox"/> Rush 8 12 24 48 Hours <input checked="" type="checkbox"/> Normal															
Address 208 S. PLAINFIELD AVE #13 ONTARIO CA 91764										Report Attention Denise Phone # 909 999 4449 Sampled By M. Watson Fax: # _____															
Project No./ Name RN-21.0		Project Site Lincoln Park, Riverside, CA		EPA8260B (VOCs & Oxygenates)		EPA8260B (BTEX & Oxygenates)		LUFT / 8015 (Gasoline)																	
Lab # (Lab use)		Client Sample ID		Sample Collection Date / Time		Matrix Type		Sample Preserve		No., type* & size of container		EPA8081A (Organochlorine Pesticides)		EPA 8082 (PCBs)		EPA 8015M (Carbon Chain C4-C40)		EPA 6010B/7000 (CAM 17 Metals)		Micro: Plate Cnt., Coliform, E-Coil		6010B Lead		Remarks	
1		B-29 @ 0.5'		8/28/18 7:18		soil		ice		1 glass jar		C										Hold		C= sample X= duplicate see B-27 @ 0.5'	
2		B-34 @ 0.5'		8/28/18 7:25								C												see B-27 @ 2.5'	
		B-34 @ 2.5'		7:25								C												see B-27 @ 0.5'	
		B-34 @ 2.5'		7:30								C												see B-27 @ 2.5'	
3		B-28 @ 0.5'		7:33								C												see B-27 @ 0.5'	
		B-28 @ 2.5'		7:39								C												see B-27 @ 2.5'	
4		B-27 @ 0.5'		7:33								C												see B-27 @ 0.5'	
		B-27 @ 2.5'		7:38								C												see B-27 @ 2.5'	
5		B-35 @ 0.5'		07:42								C												see B-33 @ 0.5'	
		B-35 @ 2.5'		7:44								C												see B-33 @ 2.5'	
6		B-40 @ 0.5'		7:47								C												see B-33 @ 0.5'	
		B-40 @ 2.5'		7:50								C												see B-33 @ 2.5'	
7		B-17 @ 0.5'		7:57								C												see B-21 @ 0.5'	
		B-17 @ 2.5'		7:59								C												see B-21 @ 2.5'	
8		B-22 @ 0.5'		7:55								C												see B-21 @ 0.5'	
Relinquished By		Company		Date		Time		Received By		Company		Date		Time		Note: Samples are discarded 30 days after results are reported unless other arrangements are made.									
M. Watson		Placeworks		8/28/18		14:15		Victoria Castelle		AR		8/28/18		14:15											

Matrix Code:	DW=Drinking Water GW=Ground Water WW=Waste Water SD=Solid Waste	SL=Sludge SS=Soil/Sediment AR=Air PP=Pure Product	Preservative Code	IC=Ice HC=HCl HN=HNO ₃	SH=NaOH ST=Na ₂ S ₂ O ₃ HS=H ₂ SO ₄	* Sample Container Types: T=Tedlar Air Bag G=Glass Container ST= Steel Tube	B= Brass Tube P=Plastic Bottle V=VOA Vial	E= EnCore
--------------	--	--	-------------------	---	--	--	---	-----------



A & R Laboratories

1650 S. Grove Ave., Ste C, Ontario, CA 91761
 Tel: 951-779-0310 / 909-781-6335 Fax: 951-779-0344
 E-mail: office@arlaboratories.com

CHAIN OF CUSTODY

A & R Work Order #:

1808-216

Page 2 of 7

Client Name PLACEWORKS				<input checked="" type="checkbox"/> Chilled		Analyses Requested										Turn Around Time Requested			
E-mail DCL@PLACEWORKS.COM				<input checked="" type="checkbox"/> Intact												□ Seal		□ Rush 8 12 24 48 Hours	
Address 2850 INLAND EMPIRE RD ONTARIO CA 91764				Report Attention Denise		Phone # 9099894449		Sampled By M. Watson											
Project No./ Name RIV-210		Project Site Lincoln Park Riverside, CA																	
Lab # (Lab use)	Client Sample ID	Sample Collection		Matrix Type	Sample Preserve	No., type* & size of container	EPA8260B (VOCs & Oxygenates)	EPA8260B(BTEX & Oxygenates)	LUFT / 8015 (Gasoline)	LUFT / 8015 (Diesel)	EPA8081A (Organochlorine Pesticides)	EPA 8082 (PCBs)	EPA 8015M (Carbon Chain C4-C40)	EPA 6010B/7000 (CAM 17 Metals)	Micro: Plate Cnt., Coliform, E-Coli	Remarks			
		Date	Time																
	B-22e2.5'	8/28/18	0805	Soil	ice	1 glass jar											X		
9	B-14@0.5'		0811															X	
	B-14@2.5'		0813															X	
10	B-10@0.5'		0808															X	
	B-10@2.5'		0815															X	
11	B-5c0.5'		0818															X	
	B-5e2.5'		0822															X	
12	B-4e0.5'		0824															X	
	B-4e2.5'		0839															X	
13	B-13e0.5'		0826															X	
	B-13e2.5'		0836															X	
14	B-9e0.5'		0839															X	
15	B-9e2.5'		0843															X	
16	B-16e0.5'		0849															X	
	B-16e2.5'		0859															X	
Relinquished By [Signature]		Company PLACEWORKS		Date 8/28/18		Time 14:15		Received By Victoria Castello		Company AR		Date 8/28		Time 14:15		Note: Samples are discarded 30 days after results are reported unless other arrangements are made.			
Relinquished By		Company		Date		Time		Received By		Company		Date		Time					

Matrix Code:	DW=Drinking Water GW=Ground Water WW=Waste Water SD=Solid/Waste	SL=Sludge SS=Soil/Sediment AR=Air PP=Pure Product	Preservative Code	IC=Ice HC=HCl HN=HNO ₃	SH=NaOH ST=Na ₂ S ₂ O ₃ HS=H ₂ SO ₄	* Sample Container Types: T=Tedlar Air Bag G=Glass Container ST= Steel Tube	B= Brass Tube P=Plastic Bottle V=VOA Vial	E= EnCore
--------------	--	--	-------------------	---	--	--	---	-----------



A & R Laboratories
 1650 S. Grove Ave., Ste C, Ontario, CA 91761
 Tel: 951-779-0310 / 909-781-6335 Fax: 951-779-0344
 E-mail: office@arlaboratories.com

CHAIN OF CUSTODY

A & R Work Order #:

1808-216

Page 3 of 7

Client Name: PLACEWORKS		<input checked="" type="checkbox"/> Chilled		Analyses Requested										Turn Around Time Requested																	
E-mail: DCCENEMING@PLACEWORKS.COM		<input type="checkbox"/> Intact												EPA8260B (VOCs & Oxygenates)		EPA8260B(BTEX & Oxygenates)		LUFT / 8015 (Gasoline)		LUFT / 8015 (Diesel)		EPA8081A (Organochlorine Pesticides)		EPA 8082 (PCBs)		EPA 8015M (Carbon Chain C4-C40)		EPA 6010B/7000 (CAM 17 Metals)		Micro: Plate Cnt., Coliform, E-Coli	
Address: 250 INLAND AVENUE #B ONTARIO CA 91764		<input type="checkbox"/> Seal		Report Attention: Denise		Phone #: 909 989 4419		Sampled By: M. Watson		Project No./ Name: RIV-210		Project Site: LINCOLN PARK, RIVERSIDE, CA																			
Lab # (Lab use)		Client Sample ID		Sample Collection		Matrix Type		Sample Preserve		No., type* & size of container		EPA 8260B (VOCs & Oxygenates)		EPA 8260B(BTEX & Oxygenates)		LUFT / 8015 (Gasoline)		LUFT / 8015 (Diesel)		EPA 8081A (Organochlorine Pesticides)		EPA 8082 (PCBs)		EPA 8015M (Carbon Chain C4-C40)		EPA 6010B/7000 (CAM 17 Metals)		Micro: Plate Cnt., Coliform, E-Coli		<input type="checkbox"/> Rush 8 12 24 48 Hours <input type="checkbox"/> Normal	
				Date		Time																									
17		B-2100.5'		8/28/19		0850		soil ice		2 glass jw																					
		B-2102.5'				0855																									
18		B-2600.5'				0858																									
		B-2602.5'				0902																									
19		B-3300.5'				0913																									
20		B-3300.5'				0914																									
		B-3302.5'				0922																									
		B-3302.5'				0921																									
21		B-3900.5'				0920																									
		B-3902.5'				0925																									
22		B-3800.5'				0927																									
		B-3800.5'				0927																									
		B-3802.5'				0930																									
		B-3802.5'				0930																									
23		B-3200.5'				0932																									
Relinquished By: [Signature]		Company: PLACEWORKS		Date: 8/28/19		Time: 11:15		Received By: Victoria Castelle AK		Company: [Signature]		Date: 8/28		Time: 14:15		Note: Samples are discarded 30 days after results are reported unless other arrangements are made.															
Relinquished By:		Company:		Date:		Time:		Received By:		Company:		Date:		Time:																	

Matrix Code:	DW=Drinking Water GW=Ground Water WW=Waste Water SD=Solid Waste	SL=Sludge SS=Soil/Sediment AR=Air PP=Pure Product	Preservative Code	IC=Ice HC=HCl HN=HNO3	SH=NaOH ST=Na2S2O3 HS=H2SO4	* Sample Container Types: T=Tedlar Air Bag G=Glass Container ST= Steel Tube	B= Brass Tube P=Plastic Bottle V=VOA Vial	E= EnCore
--------------	--	--	-------------------	-----------------------------	-----------------------------------	--	---	-----------



Chain of Custody Record

Lab Job No. 1808-210
 Page 4 of 7

CUSTOMER INFORMATION		PROJECT INFORMATION	
COMPANY: <u>PLACEWORKS</u>	PROJECT NAME: <u>Lincoln Park</u>	SEND REPORT TO: <u>DENISE</u>	NUMBER: <u>RV-21-0</u>
EMAIL: <u>DCE@DENISE@PLACEWORKS.COM</u>	ADDRESS: <u>1316 Park</u>	ADDRESS: <u>285 JIM AND ANNE FB</u>	<u>Riverside, CA</u>
ADDRESS: <u>ONTARIO, CA 91764</u>	P.O. #:	PHONE: <u>909 989 4949</u>	FAX: <u>909 989 4949</u>
	SAMPLED BY: <u>m. Watson</u>		

REQUIRED TURN AROUND TIME: Standard: X
 72 Hours: _____ 48 Hours: _____ 24 Hours: _____

ANALYSIS REQUEST
 60103 Lead
 60104 Arsenic
 60105 Cadmium
 60106 Chromium
 60107 Copper
 60108 Nickel
 60109 Silver
 60110 Zinc
 60111 Vanadium
 60112 Manganese
 60113 Selenium
 60114 Barium
 60115 Boron
 60116 Nitrate
 60117 Nitrite
 60118 Ammonia
 60119 Ammonium
 60120 Phosphate
 60121 Sulfate
 60122 Chloride
 60123 Fluoride
 60124 Cyanide
 60125 Sulfide
 60126 Silica
 60127 Total Solids
 60128 Total Suspended Solids
 60129 Total Dissolved Solids
 60130 Total Hardness
 60131 Calcium
 60132 Magnesium
 60133 Total Alkalinity
 60134 Total Acidity
 60135 Total Hardness
 60136 Total Alkalinity
 60137 Total Acidity
 60138 Total Solids
 60139 Total Suspended Solids
 60140 Total Dissolved Solids
 60141 Total Hardness
 60142 Calcium
 60143 Magnesium
 60144 Total Alkalinity
 60145 Total Acidity
 60146 Total Hardness
 60147 Total Alkalinity
 60148 Total Acidity
 60149 Total Solids
 60150 Total Suspended Solids
 60151 Total Dissolved Solids
 60152 Total Hardness
 60153 Calcium
 60154 Magnesium
 60155 Total Alkalinity
 60156 Total Acidity
 60157 Total Hardness
 60158 Total Alkalinity
 60159 Total Acidity
 60160 Total Solids
 60161 Total Suspended Solids
 60162 Total Dissolved Solids
 60163 Total Hardness
 60164 Calcium
 60165 Magnesium
 60166 Total Alkalinity
 60167 Total Acidity
 60168 Total Hardness
 60169 Total Alkalinity
 60170 Total Acidity
 60171 Total Solids
 60172 Total Suspended Solids
 60173 Total Dissolved Solids
 60174 Total Hardness
 60175 Calcium
 60176 Magnesium
 60177 Total Alkalinity
 60178 Total Acidity
 60179 Total Hardness
 60180 Total Alkalinity
 60181 Total Acidity
 60182 Total Solids
 60183 Total Suspended Solids
 60184 Total Dissolved Solids
 60185 Total Hardness
 60186 Calcium
 60187 Magnesium
 60188 Total Alkalinity
 60189 Total Acidity
 60190 Total Hardness
 60191 Total Alkalinity
 60192 Total Acidity
 60193 Total Solids
 60194 Total Suspended Solids
 60195 Total Dissolved Solids
 60196 Total Hardness
 60197 Calcium
 60198 Magnesium
 60199 Total Alkalinity
 60200 Total Acidity

Hold

C = composite
 X = discrete

Sample ID	Date	Time	Matrix	Container Number/Size	Pres.	Test Instructions & Comments
24 1 B-32 DVP 0.5'	8/28/18	0933	Soil	1/2 glass jar	ice	see B-20 DVP 0.5'
2 B-32 0.5'		0944				
3 B-32 DVP 2.5'		0945				
25 4 B-25 0.5'		0938				see B-20 0.5'
5 B-25 DVP 0.5'		0938				see B-20 DVP 0.5'
6 B-25 2.5'		0944				
7 B-25 DVP 2.5'		0944				
26 8 B-20 0.5'		0948				B-20, B-25, B-32, B-38 0.5'
9 B-20 DVP 0.5'		0948				B-20, B-25, B-32, B-38 DVP 0.5'
10 B-20 2.5'		0951				
11 B-20 DVP 2.5'		0951				
27 12 B-15 0.5'		0955				
13 B-15 2.5'		1006				
28 14 B-12 0.5'		1000				
15 B-12 2.5'		1007				

Total No. of Samples: _____ Method of Shipment: _____ Preservative: 1 = Ice 2 = HCl 3 = HNO₃ 4 = H₂SO₄ 5 = NaOH 6 = Other

Relinquished by	1.	Received By:	1.	Relinquished by	2.	Received By:	2.	Relinquished by	3.	Received By:	3.
Signature:	<u>[Signature]</u>	Signature:	<u>Victoria Castillo</u>	Signature:		Signature:		Signature:		Signature:	
Printed Name:	<u>MIKE WATSON</u>	Printed Name:	<u>Victoria Castillo</u>	Printed Name:		Printed Name:		Printed Name:		Printed Name:	
Date:	<u>8/28/18</u>	Date:	<u>8/28/18</u>	Date:		Date:		Date:		Date:	
Time:	<u>14:15</u>	Time:	<u>14:15</u>	Time:		Time:		Time:		Time:	



Chain of Custody Record

Lab Job No. 1808-210
 Page 5 of 7

CUSTOMER INFORMATION		PROJECT INFORMATION	
COMPANY: <u>PLACEWORKS</u>	PROJECT NAME: <u>LINCOLN PARK</u>	SEND REPORT TO: <u>DENISE</u>	NUMBER: <u>RIV-21.0</u>
EMAIL: <u>DLENDRING@placeworks.com</u>	ADDRESS: <u>13th / Park</u>	ADDRESS: <u>285 INLAND CENTER #B</u>	<u>Riverside, CA</u>
PHONE: <u>949 944 4114</u>	P.O. #:	PHONE: <u>949 944 4114</u>	SAMPLED BY: <u>M. Watson</u>

REQUIRED TURN AROUND TIME: Standard: X
 72 Hours: _____ 48 Hours: _____ 24 Hours: _____

ANALYSIS REQUEST
 60103 LEAD
 60104 LEAD
 80114 (SILICA)
 80115 (SILICA)

Sample ID	Date	Time	Matrix	Container Number/Size	Pres.	Test Instructions & Comments
29 1 B-3@0.5	8/28/18	1016	Soil	1 glass jar	ice	
2 B-3@2.5		1027				
30 3 B-8@0.5'		1012				
4 B-8@2.5'		1015				
31 5 B-2@0.5'		1019				
6 B-2@2.5'		1022				
32 7 B-7@0.5'		1025				
33 8 B-7@2.5'		1029				
34 9 B-6@0.5'		1042				
10 B-6@2.5'		1047				
35 11 B-11@0.5'		1055				
12 B-11@2.5'		1101				
36 13 B-1@0.5'		1103				
14 B-1@2.5'		1106				
37 15 B-18@0.5'		1112				

Total No. of Samples: _____ Method of Shipment: _____ Preservative: 1=Ice 2=HCl 3=HNO₃ 4=H₂SO₄ 5=NaOH 6=Other

Relinquished by	1.	Received By:	1.	Relinquished by	2.	Received By:	2.	Relinquished by	3.	Received By:	3.
Signature:	<u>[Signature]</u>	Signature:	<u>Victoria Castillo</u>	Signature:		Signature:		Signature:		Signature:	
Printed Name:	<u>MIKE WATSON</u>	Printed Name:	<u>Victoria Castillo</u>	Printed Name:		Printed Name:		Printed Name:		Printed Name:	
Date:	<u>8/28/18</u>	Date:	<u>8/28/18</u>	Date:		Date:		Date:		Date:	
Time:	<u>1415</u>	Time:	<u>14:15</u>	Time:		Time:		Time:		Time:	



Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

CHAIN-OF-CUSTODY RECORD

WO NO. / LAB USE ONLY
1808-210

DATE: 8/28/18
PAGE: 7 OF 7

LABORATORY CLIENT: PLACEWORKS

ADDRESS: 2850 INLAND EMPIRE BL SUITE B

CITY: ONTARIO STATE: CA ZIP: 91764

TEL: 909 989 4449 E-MAIL: dclendenin@placeworks.com

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
 SAME DAY 24 HR 48 HR 72 HR 5 DAYS STANDARD

EDD:
 COELT EDF OTHER

CLIENT PROJECT NAME / NO.: Lincoln Park, Riverside, CA RIV-21.0

P.O. NO.:

PROJECT CONTACT: Denise Clendenin

LAB CONTACT OR QUOTE NO.:

GLOBAL ID: LOG CODE: SAMPLER(S): (PRINT) Mike Watson

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	<input type="checkbox"/> TPH(g) <input type="checkbox"/> GRO	<input type="checkbox"/> TPH(d) <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	TPH	BTEX / MTBE <input type="checkbox"/> 8260	VOCs (8260)	Oxygenates (8260)	Prep (5035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	T22 Metals <input checked="" type="checkbox"/> 6010/747X <input type="checkbox"/> 6020/747X	Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6	6010 Lead	HOLD	
		DATE	TIME																						
46	B-1900.5'	8/28/18	1146	Soil	1	X																			
47	B-1900.5'		1146																						
	B-1902.5'		1150																						
	B-1900.5'		1156																						
48	E3082816		1212	Asbestos	2	X	X																		

Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
	Victoria Castillo	8/28/18	1415
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature/Affiliation)	Date:	Time:



Sample Acceptance Checklist

CLIENT: Placeworks

WORK ORDER NUMBER: 1808-216

Temperature: (Criteria: 0.0°C-6.0°C)
 Sample Temp. (w/CF) °C(w/CF) 4.6 °c

Sample(s) outside temperature criteria: PM 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

CUSTODY SEAL:

Cooler Present and Intact Present and Not Intact Not Present
 Sample(s) Present and Intact Present and Not Intact Not Present

Sample Condition:	Yes	No	N/A
Was a COC received	✓		
Were sample IDs present?	✓		
Were sampling dates & times present?	✓		
Was a relinquished signature present?	✓		
Were the tests required clearly indicated?	✓		
Were all samples sealed in plastic bags?		✓	
Did all bottle labels agree with COC? (ID, dates and times)	✓		
Were correct containers used for the tests required?	✓		
Was a sufficient amount of samples sent for tests indicated?	✓		
Was there headspace in VOA vials?			✓
Were the containers labeled with correct preservatives?			✓

Explanations/Comments:

Notification:

For discrepancies, how was the Project Manager notified? Verbal

Verbal: PM Initials: _____ Data/Time: _____

Email: Send to: _____ Data/Time: _____

Project Manager's response:

Completed By: Victoria Castelle Date: 8/28/18



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CASE NARRATIVE

Authorized Signature Name / Title (print)

Ken Zheng, President

Signature / Date

Ken Zheng, President
09/14/2018 12:06:09

Laboratory Job No. (Certificate of Analysis No.)

1809-00069

Project Name / No.

LINCOLN PARK, RIVERSIDE CA R1V-21.0

Dates Sampled (from/to)

08/28/18 To 08/28/18

Dates Received (from/to)

08/28/18 To 08/28/18

Dates Reported (from/to)

09/14/18 To 9/14/2018

Chains of Custody Received

Yes

Comments:

Subcontracting

Inorganic Analyses

No analyses sub-contracted

Sample Condition(s)

All samples intact

Positive Results (Organic Compounds)

None



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C

ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CERTIFICATE OF ANALYSIS

1809-00069

PLACEWORKS
DENISE CLENDENING
2850 INLAND EMPIRE BLVD.
SUITE B
ONTARIO, CA 91764

Project: LINCOLN PARK, RIVERSIDE CA

Date Reported 09/14/18
Date Received 08/28/18
Invoice No. 83474
Cust # P135
Permit Number
Customer P.O. R1V-21.0

Analysis	Result	Qual	Units	Method	DF	RL	Date	Tech
Sample: 001 B-10@2.5' Sample Matrix: Soil							Date & Time Sampled: 08/28/18 @ 8:15	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		09/12/18	TLB
Lead	4.37		mg/Kg	EPA 6010B	1.0	0.500	09/12/18	TLB
Sample: 002 B-12@2.5' Sample Matrix: Soil							Date & Time Sampled: 08/28/18 @ 10:07	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		09/12/18	TLB
Lead	3.89		mg/Kg	EPA 6010B	1.0	0.500	09/12/18	TLB
Sample: 003 B-6@2.5' Sample Matrix: Soil							Date & Time Sampled: 08/28/18 @ 10:47	
[Metals]								
Metals Acid Digestion	Complete			EPA 3050B	1.0		09/12/18	TLB
Lead	4.97		mg/Kg	EPA 6010B	1.0	0.500	09/12/18	TLB

Respectfully Submitted:

Ken Zheng

Ken Zheng - Lab Director

QUALIFIERS

B = Detected in the associated Method Blank at a concentration above the routine RL.
B1 = BOD dilution water is over specifications . The reported result may be biased high.
D = Surrogate recoveries are not calculated due to sample dilution.
E = Estimated value; Value exceeds calibration level of instrument.
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference.
J = Analyte concentration detected between RL and MDL.
Q = One or more quality control criteria did not meet specifications. See Comments for further explanation.
S = Customer provided specification limit exceeded.

ABBREVIATIONS

DF = Dilution Factor
RL = Reporting Limit, Adjusted by DF
MDL = Method Detection Limit, Adjusted by DF
Qual = Qualifier
Tech = Technician



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C
ONTARIO, CA 91761

951-779-0310

www.arlaboratories.com

FAX 951-779-0344

office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

As regulatory limits change frequently, A & R Laboratories advises the recipient of this report to confirm such limits with the appropriate federal, state, or local authorities before acting in reliance on the regulatory limits provided.

For any feedback concerning our services, please contact Jenny Jiang, Project Manager at 951.779.0310. You may also contact Ken Zheng, President at office@arlaboratories.com.



A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C
 ONTARIO, CA 91761
 951-779-0310 FAX 951-779-0344
 www.arlaboratories.com office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789 2790 2122

CHEMISTRY · MICROBIOLOGY · FOOD SAFETY · MOBILE LABORATORIES
 FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

QUALITY CONTROL DATA REPORT

PLACEWORKS
 ONTARIO, CA 91764

1809-00069

Date Reported 09/14/2018
 Date Received 08/28/2018
 Date Sampled 08/28/2018
 Invoice No. 83474
 Customer # P135
 Customer P.O. RIV-21.0

Project: LINCOLN PARK, RIVERSIDE CA

Method #	EPA 6010B				
QC Reference #	76145	Date Analyzed:	9/12/2018	Technician:	TLB
Samples	001 002 003				
Results	LCS %REC	LCS %DUP	LCS %RPD	Control Ranges	
				LCS %REC	LCS %RPD
Arsenic	100	101	0.6	75 - 125	0 - 20
Cadmium	102	103	0.7	75 - 125	0 - 20
Chromium	101	101	7	75 - 125	0 - 20
Copper	104	104	0.0	75 - 125	0 - 20
Lead	102	102	0.6	75 - 125	0 - 20
Nickel	102	102	0.1	75 - 125	0 - 20
Selenium	102	103	1.1	75 - 125	0 - 20
Zinc	102	102	0.7	75 - 125	0 - 20

No method blank results were above reporting limit

Respectfully Submitted:

Ken Zheng - President

For any feedback concerning our services, please contact Jenny Jiang, Project Manager at 951.779.0310. You may also contact Ken Zheng, President at office@arlaboratories.com.



A & R Laboratories
 1650 S. Grove Ave., Ste C, Ontario, CA 91761
 Tel: 951-779-0310 / 909-781-6335 Fax: 951-779-0344
 E-mail: office@arlaboratories.com

CHAIN OF CUSTODY

A & R Work Order #:

1809-69 Page 1 of 7

Client Name PLACEWORKS		<input checked="" type="checkbox"/> Chilled		Analyses Requested * EPA8260B (VOCs & Oxygenates) EPA8260B (BTEX & Oxygenates) LUFT / 8015 (Gasoline) LUFT / 8015 (Diesel) EPA8081A (Organochlorine Pesticides) EPA 8082 (PCBs) EPA 8015M (Carbon Chain C4-C40) EPA 6010B/7000 (CAM 17 Metals) Micro: Plate Cnt., Colliform, E-Coli 6010B Lead								Turn Around Time Requested				
E-mail DCL@DENNING@PLACEWORKS.COM		<input checked="" type="checkbox"/> Intact										Report Attention Denise		Phone # 909 999 4149		Sampled By M. Watson
Address 295 ISLAND EMP #3 ONTARIO CA 91764		<input type="checkbox"/> Seal		Project No./ Name RN-21.0		Project Site Lincoln Park, Rivers, CA										
Lab # (Lab use)	Client Sample ID	Sample Collection Date Time		Matrix Type	Sample Preserve	No., type* & size of container	EPA8260B (VOCs & Oxygenates)	EPA8260B (BTEX & Oxygenates)	LUFT / 8015 (Gasoline)	LUFT / 8015 (Diesel)	EPA8081A (Organochlorine Pesticides)	EPA 8082 (PCBs)	EPA 8015M (Carbon Chain C4-C40)	EPA 6010B/7000 (CAM 17 Metals)	Micro: Plate Cnt., Colliform, E-Coli	Remarks
	B-29 @ 0.5'	8/28/18	7:18	soil	ice	1 glass jar										Hold
	B-29 @ 2.5'	8/28/18	7:21													See B-27 @ 2.5'
	B-34 @ 0.5'		725													See B-27 @ 0.5
	B-34 @ 2.5'		730													See B-27 @ 2.5
	B-28 @ 0.5'		733													See B-27 @ 0.5
	B-28 @ 2.5'		739													See B-27 @ 2.5
	B-27 @ 0.5'		733													B-27 @ 2.5, B-29, B-34 @ 2.5
	B-27 @ 2.5'		738													B-27 @ 2.5, B-29, B-34 @ 2.5
	B-35 @ 0.5'		0742													See B-33 @ 0.5
	B-35 @ 2.5'		744													
	B-40 @ 0.5'		747													See B-33 @ 0.5'
	B-40 @ 2.5'		750													
	B-17 @ 0.5'		757													
	B-17 @ 2.5'		759													
	B-22 @ 0.5'		755													See B-21 @ 0.5
Relinquished By [Signature]		Company PLACEWORKS		Date 8/28/18		Time 1415		Received By Victoria Lestelle		Company AR		Date 8/28/18		Time 14:15		Note: Samples are discarded 30 days after results are reported unless other arrangements are made.
Relinquished By		Company		Date		Time		Received By		Company		Date		Time		

Matrix Code: DW=Drinking Water SL=Sludge Preservative Code: IC=Ice SH=NaOH * Sample Container Types: T=Tealite Air Bag SW=Stainless Steel ES=Et-Cover
 GW=Ground Water SS=Soil/Sediment HC=HCl ST=Na2S2O5 T=Tealite Air Bag 7=7.5 Liter Drum 2=2 Liter Bottle
 WW=Waste Water AS=As HV=H2O2 IS=HSC G=Glass Drum/Bottle 20=20 Liter Drum
 SC=Solid Matrix PP=Pure Product



A & R Laboratories
 1650 S. Grove Ave., Ste C, Ontario, CA 91761
 Tel: 951-779-0310 / 909-781-6335 Fax: 951-779-0344
 E-mail: office@arlaboratories.com

CHAIN OF CUSTODY

A & R Work Order #:
1809-69

Page **2** of **7**

Client Name PLACEWORKS				<input checked="" type="checkbox"/> Chilled		Analyses Requested										Turn Around Time Requested								
E-mail JCLENDEN@PLACEWORKS.COM				<input checked="" type="checkbox"/> Intact												Rush		8 12 24 48		Hours				
Address 250 INLAND EMPIRE RD ONTARIO CA 91764				<input type="checkbox"/> Seal		EPA8260B (VOCs & Oxygenates)		EPA8260B(BTEX & Oxygenates)		LUFT / 8015 (Gasoline)		LUFT / 8015 (Diesel)		EPA8081A (Organochlorine Pesticides)		EPA 8082 (PCBs)		EPA 8015M (Carbon Chain C4-C40)		EPA 6010B/7000 (CAM 17 Metals)		Micro: Plate Cnt., Coliform, E-Coli		
Report Attention Denise		Phone # 9099894449		Sampled By M. Watson		Project No./ Name RIV-210		Project Site Lincoln Park Riverside, CA		EPA 8015M (Carbon Chain C4-C40)		EPA 6010B/7000 (CAM 17 Metals)		Micro: Plate Cnt., Coliform, E-Coli		60ppb LEAD		Normal		Remarks Compare to X=discrete				
Lab # (Lab use)	Client Sample ID	Sample Collection Date	Sample Collection Time	Matrix Type	Sample Preserve	No., type* & size of container	EPA8260B (VOCs & Oxygenates)	EPA8260B(BTEX & Oxygenates)	LUFT / 8015 (Gasoline)	LUFT / 8015 (Diesel)	EPA8081A (Organochlorine Pesticides)	EPA 8082 (PCBs)	EPA 8015M (Carbon Chain C4-C40)	EPA 6010B/7000 (CAM 17 Metals)	Micro: Plate Cnt., Coliform, E-Coli	60ppb LEAD								
	B-22@2.5'	8/28/18	0805	soil	ice	1 glass jar																	X	
	B-14@0.5'		0811																					
	B-14@2.5'		0813																					X
	B-16@0.5'		0808																					
①	B-10@2.5'		0815																					X
	B-5@0.5'		0818																					
	B-5@2.5'		0822																					X
	B-4@0.5'		0824																					X
	B-4@2.5'		0839																					X
	B-13@0.5'		0826																					X
	B-13@2.5'		0836																					X
	B-9@0.5'		0839																					
	B-9@2.5'		0843																					
	B-16@0.5'		0849																					
	B-16@2.5'		0859																					X
Relinquished By M. Watson		Company PLACEWORKS		Date 8/29/18		Time 14:15		Received By Victoria Castelle		Company AR		Date 8/28		Time 14:15		Note: Samples are discarded 30 days after results are reported unless other arrangements are made								
Relinquished By		Company		Date		Time		Received By		Company		Date		Time										

Matrix Code: DW=Drinking Water, GW=Ground Water, SL=Sediment, PS=Soil (California), Preservative Code: IC=Ice, SH=NaOH, ST=Na2S2O3, B=EDTA, Sample Container Types: T=Tedlar A Bag, G=Glass Container, B=Braes Tub, E=E-Core



A & R Laboratories
 1650 S. Grove Ave., Ste C, Ontario, CA 91761
 Tel: 951-779-0310 / 909-781-6335 Fax: 951-779-0344
 E-mail: office@arlaboratories.com

CHAIN OF CUSTODY

A & R Work Order #:

1809-69

page 3 of 7

Client Name: PLACEWORKS						Analyses Requested										Turn Around Time Requested		
E-mail: DCCENEMNG@PLACEWORKS.COM						<input checked="" type="checkbox"/> Chilled										<input type="checkbox"/> Rush 8 12 24 48 Hours		
Address: 250 INLAND AVENUE #8 ONTARIO CA 91764						<input type="checkbox"/> Intact										<input type="checkbox"/> Normal		
Report Attention: Denise		Phone #: 909 999 4419		Sampled By: M. Wilson		<input type="checkbox"/> Seal												
Project No./ Name: RIV-210		Project Site: LINCOLN PARK, RIVERSIDE, CA																
Lab # (Lab use)	Client Sample ID	Sample Collection		Matrix Type	Sample Preserve	No., type* & size of container	EPA8260B (VOCs & Oxygenates)	EPA8260B (BTEX & Oxygenates)	LUFT / 8015 (Gasoline)	LUFT / 8015 (Diesel)	EPA8081A (Organochlorine Pesticides)	EPA 8082 (PCBs)	EPA 8015M (Carbon Chain C4-C40)	EPA 6010B/7000 (CAM 17 Metals)	Micro: Plate Count, Coliform, E-Coli	6010B Lead	Hold	Remarks
		Date	Time															
	B-2100.5'	8/28/19	0850	Soil	ice	2 glass jar												X - duplicate B-21, B-22, B-26 0.5'
	B-2102.5'		0855															X
	B-2600.5'		0858															X
	B-2602.5'		0902															X
	B-3300.5'		0913															X
	B-3300.5'		0914															X
	B-3302.5'		0922															X
	B-3302.5'		0921															X
	B-3900.5'		0920															X
	B-3902.5'		0925															X
	B-3900.5'		0927															X
	B-3900.5'		0927															X
	B-3902.5'		0930															X
	B-3902.5'		0930															X
	B-3200.5'		0932															X
Relinquished By: [Signature]		Company: PLACEWORKS		Date: 8/28/19		Time: 11:15		Received By: Victoria Castelle SK		Company: 		Date: 8/28		Time: 14:15		Note: Samples are discarded 30 days after results are reported unless other arrangements are made.		
Relinquished By:		Company:		Date:		Time:		Received By:		Company:		Date:		Time:				

Matrix Code: DW=Drinking Water, BW=Ground Water, WW=Waste Water, SL=Sludge, SS=Soil/Sediment, AR=Air, PP=Paint Products, Preservative Code: IC=Ice, C=HCl, N=HNO3, SH=NaOH, ST=Na2S2O5, H2O2=H2O2, * Sample Container Types: T=Terlar Air Bag, G=Glass Container, ST=Steel Tank, B= Brass Tube, P= Plastic Bottle, E= EnCore



CUSTOMER INFORMATION		PROJECT INFORMATION	
COMPANY: PLACEWORKS	PROJECT NAME: Lincoln Park	SEND REPORT TO: DENISE	NUMBER: RV-2-0
EMAIL: DCEJEN@PLACEWORKS.COM	ADDRESS: 1316 Park	ADDRESS: 2900 IM AND OVIKRE #B	RIVERSIDE, CA
PHONE: 909 989 4500	P.D. #:	PHONE: 917 64	SAMPLED BY: M. Watson

REQUIRED TURN AROUND TIME: Standard: X
 72 Hours: _____ 48 Hours: _____ 24 Hours: _____

ANALYSIS REQUEST
 60/03 Lead
 60/03 Arsenic
 60/03 Cadmium
 60/03 Chromium
 60/03 Copper
 60/03 Nickel
 60/03 Silver
 60/03 Zinc

Hold

C = Composite
 X = Discrete

Sample ID	Date	Time	Matrix	Container Number/Size	Pres.	Test Instructions & Comments
1 B-32 DUP 0.5'	8/28/18	0933	Soil	1 glass jar	ice	see B-20 DUP 0.5'
2 B-32C 2.5'		0944				X
3 B-32D 2.5'		0945				X
4 B-25C 0.5'		0938				see B-20 0.5'
5 B-25D 0.5'		0938				see B-20 DUP 0.5'
6 B-25E 2.5'		0944				X
7 B-25A 2.5'		0944				X
8 B-20C 0.5'		0948				B-20, B-25, B-32, B-38 0.5'
9 B-20D 0.5'		0948				B-20, B-25, B-32, B-38 DUP 0.5'
10 B-20E 2.5'		0951				X
11 B-20 DUP 2.5'		0951				X
12 B-15C 0.5'		0955				
13 B-15E 2.5'		1006				X
14 B-12C 0.5'		1000				
15 B-12E 2.5'		1007				X

Total No. of Samples: _____ Method of Shipment: _____ Preservative: 1 = Ice 2 = HCl 3 = HNO₃ 4 = H₂SO₄ 5 = NaOH 6 = Other

Relinquished by	1. Received By:	1. Relinquished by	2. Received By:	2. Relinquished by	3. Received By:	3. Relinquished by	4. Received By:
Signature: <i>[Signature]</i>	Signature: Victoria Castillo	Signature:	Signature:	Signature:	Signature:	Signature:	Signature:
Printed Name: MIKE WATSON	Printed Name: Victoria Castillo	Printed Name:	Printed Name:	Printed Name:	Printed Name:	Printed Name:	Printed Name:
Date: 8/28/18 Time: 1415	Date: 8/28/18 Time: 14.15	Date:	Date:	Date:	Date:	Date:	Date:



Chain of Custody Record

Lab Job No. 18009-69
 Page 5 of 7

CUSTOMER INFORMATION		PROJECT INFORMATION	
COMPANY: <u>PLACEWORKS</u>	PROJECT NAME: <u>LINCOLN PARK</u>	SEND REPORT TO: <u>DENISE</u>	NUMBER: <u>RIV-21.0</u>
EMAIL: <u>DLENDENING@PLACEWORKS.COM</u>	ADDRESS: <u>13th Park</u>	ADDRESS: <u>285 INLAND AVENUE #B</u>	ADDRESS: <u>RIVERSIDE CA</u>
PHONE: <u>909 944 4494</u>	PO. #:	PHONE: <u>909 944 4494</u>	SAMPLED BY: <u>M. Watson</u>

REQUIRED TURN AROUND TIME: Standard: X
 72 Hours: _____ 48 Hours: _____ 24 Hours: _____

Sample ID	Date	Time	Matrix	Container Number/Size	Pres.	Test Instructions & Comments
1 B-3@0.5	8/28/18	1016	Soil	1 glass jar	ice	
2 B-3@2.5		1027				X
3 B-8@0.5'		1012				X
4 B-8@2.5'		1015				X
5 B-2@0.5'		1019				X
6 B-2@2.5'		1022				X
7 B-7@0.5'		1025				X
8 B-7@2.5'		1027				X
9 B-6@0.5'		1042				X
⑩ B-6@2.5'		1047				X
11 B-11@0.5'		1055				X
12 B-11@2.5'		1101				X
13 B-1@0.5'		1103				X
14 B-1@2.5'		1106				X
15 B-18@0.5'		1112				X

ANALYSIS REQUEST
 60103 Lead
 60103 Lead
 80114 7/14/18
 80114 05/18

HOLD

Total No. of Samples: _____ Method of Shipment: _____ Preservative: 1=Ice 2=HCl 3=HNO₃ 4=H₂SO₄ 5=NaOH 6=Other

Relinquished by: 1. <u>[Signature]</u>	Received By: 1. <u>Victoria Castillo</u>	Relinquished by: 2. _____	Received By: 2. _____	Relinquished by: 3. _____	Received By: 3. _____
Signature: _____	Signature: _____	Signature: _____	Signature: _____	Signature: _____	Signature: _____
Printed Name: <u>MIKE WATSON</u>	Printed Name: <u>Victoria Castillo</u>	Printed Name: _____	Printed Name: _____	Printed Name: _____	Printed Name: _____
Date: <u>8/28/18</u> Time: <u>14:15</u>	Date: <u>8/28/18</u> Time: <u>14:15</u>	Date: _____ Time: _____	Date: _____ Time: _____	Date: _____ Time: _____	Date: _____ Time: _____

ASSOCIATED LABORATORIES OF MONTROSE ENVIRONMENTAL GROUP, INC.

806 North Batavia • Orange, CA 92868

Phone: (714) 771-6900 • Fax: (714) 771-9933

BILLING ADDRESS: 2 PARK PLAZA, SUITE 1120 • IRVINE, CA 92614



Chain of Custody Record

Lab Job No

Page

1809-69

6 of 7

CUSTOMER INFORMATION		PROJECT INFORMATION					REQUIRED TURN AROUND TIME:				
COMPANY: PLACAWORKS		PROJECT NAME: Lincoln Park, Riverside, CA					Standard: <u>X</u>				
SEND REPORT TO: DENISE		NUMBER: RIV-21-0					72 Hours: _____ 48 Hours: _____ 24 Hours: _____				
EMAIL: DLEN@PLACAWORKS.COM		ADDRESS: 13th / Park Riverside, CA					ANALYSIS REQUEST 60106 Lead 60114 OCP 60117/118/119/120/123/125/126/127/128/129/130/131/132/133/134/135/136/137/138/139/140/141/142/143/144/145/146/147/148/149/150 HOLD				
ADDRESS: 2850 INDEPENDENCE #B ONTARIO CA 91764		PO. #:									
PHONE: 909 999 1149		SAMPLED BY: M. Watson									
Sample ID	Date	Time	Matrix	Container Number/Size	Pres.	Test Instructions & Comments					
1 B-1802.5'	8/28/18	1130	Soil	1 glass	ice					X	
2 B-2300.5'		1110									
3 B-2302.5'		1113								X	
4 B-3000.5'		1117									
5 B-30 DUPE 0.5'		1117									
6 B-3002.5'		1119									
7 B-30 DUPE 2.5'		1119								X	
8 B-3600.5'		1123									
9 B-3602.5'		1125								X	
10 B-3700.5'		1134									
11 B-3702.5'		1136								X	
12 B-3100.5'		1140									
13 B-3102.5'		1143								X	
14 B-2400.5'		1140									
15 B-2402.5'		1146								X	

Total No. of Samples:		Method of Shipment:		Preservative: 1 = Ice 2 = HCl 3 = HNO ₃ 4 = H ₂ SO ₄ 5 = NaOH 6 = Other							
Relinquished by	1.	Received By:	1.	Relinquished by	2.	Received By:	2.	Relinquished by	3.	Received By:	3.
Signature:		Signature:	Victoria Castillo	Signature:		Signature:		Signature:		Signature:	
Printed Name:	MIKE WATSON	Printed Name:	VICTORIA CASTILLO	Printed Name:		Printed Name:		Printed Name:		Printed Name:	
Date:	8/28/18	Date:	8/28/18	Date:		Date:		Date:		Date:	
Time:	1415	Time:	14:15	Time:		Time:		Time:		Time:	



Calscience

7440 Lincoln Way, Garden Grove, CA 92641-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofinsus.com or call us.

CHAIN-OF-CUSTODY RECORD

WO NO. / LAB USE ONLY
1809-69

DATE: 8/28/18
PAGE: 7 OF 7

LABORATORY CLIENT: PLACEWORKS

ADDRESS: 2850 INLAND EMPIRE BL SUITE B

CITY: ONTARIO STATE: CA ZIP: 91764

TEL: 909 989 4449 E-MAIL: sclenden@gcplaceworks.com

TURNAROUND TIME (Rush surcharges may apply to any TAT not "STANDARD"):
 SAME DAY 24 HR 48 HR 72 HR 5 DAYS STANDARD

EDD:
 COELT EDF OTHER

SPECIAL INSTRUCTIONS:

CLIENT PROJECT NAME / NO.: Lincoln Park, Riverside, CA RIV-21.0

P.O. NO.:

PROJECT CONTACT: Denise Clendenen

LAB CONTACT OR QUOTE NO.:

GLOBAL ID: LOG CODE: SAMPLER(S): (PRINT) Mike Watson

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING		MATRIX	NO. OF CONT.	Unpreserved	Preserved	Field Filtered	<input type="checkbox"/> TPH(g) <input type="checkbox"/> GRO	<input type="checkbox"/> TPH(d) <input type="checkbox"/> DRO	TPH <input type="checkbox"/> C6-C36 <input type="checkbox"/> C6-C44	TPH	BTEX / MTBE <input type="checkbox"/> 8260 <input type="checkbox"/>	VOCs (8260)	Oxygenates (8280)	Prep (6035) <input type="checkbox"/> En Core <input type="checkbox"/> Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs <input type="checkbox"/> 8270 <input type="checkbox"/> 8270 SIM	T22 Metals <input checked="" type="checkbox"/> 6010/747X <input type="checkbox"/> 6020/747X	Cr(VI) <input type="checkbox"/> 7196 <input type="checkbox"/> 7199 <input type="checkbox"/> 218.6	6010/747X HPLD	
		DATE	TIME																					
	B-1900.5'	8/28/18	1146	Soil	1																			
	B-1900 DUPE 0.5'		1146																					
	B-1902.5'		1150																					
	B-1900 DUPE 0.5'		1156																					
	E3082816		1212	areas	2																			

Relinquished by (Signature):	Received by (Signature/Affiliation): Victoria Castillo	Date: 8/28/18	Time: 1415
Relinquished by (Signature):	Received by (Signature/Affiliation):	Date:	Time:
Relinquished by (Signature):	Received by (Signature/Affiliation):	Date:	Time:

Appendix B. LeadSpread Results

Appendix

This page intentionally left blank.

LEAD RISK ASSESSMENT SPREADSHEET 8
CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL

[Click here for ABBREVIATED INSTRUCTIONS FOR LEADSPREAD 8](#)

INPUT	
MEDIUM	LEVEL
Lead in Soil/Dust (ug/g)	64.4
Respirable Dust (ug/m ³)	1.5

EXPOSURE PARAMETERS		
	units	children
Days per week	days/wk	7
Geometric Standard Deviation		1.6
Blood lead level of concern (ug/dl)		1
Skin area, residential	cm ²	2900
Soil adherence	ug/cm ²	200
Dermal uptake constant	(ug/dl)/(ug/day)	0.0001
Soil ingestion	mg/day	100
Soil ingestion, pica	mg/day	200
Ingestion constant	(ug/dl)/(ug/day)	0.16
Bioavailability	unitless	0.44
Breathing rate	m ³ /day	6.8
Inhalation constant	(ug/dl)/(ug/day)	0.192

[Click here for REFERENCES](#)

OUTPUT					
Percentile Estimate of Blood Pb (ug/dl)					
	50th	90th	95th	98th	99th
BLOOD Pb, CHILD	0.5	0.8	1.0	1.2	1.4
BLOOD Pb, PICA CHILD	0.9	1.7	2.0	2.4	2.7

PATHWAYS						
CHILDREN	typical			with pica		
	Pathway contribution			Pathway contribution		
	PEF	ug/dl	percent	PEF	ug/dl	percent
Soil Contact	5.8E-5	0.00	1%		0.00	0%
Soil Ingestion	7.0E-3	0.45	99%	1.4E-2	0.91	100%
Inhalation	2.0E-6	0.00	0%		0.00	0%

Appendix E. Qualifications

Appendix

This page intentionally left blank.



DENISE CLENDENING, PhD

Associate Principal, Site Assessment Services

Denise has over 27 years of experience providing technical oversight and performing human health risk assessments, site assessments, and investigations of chemical waste at multiple sites including Resource Conservation & Recovery Act (RCRA) and Superfund sites. She is adept at applying alternatives that are economical yet protective of human health and the environment. She conducts realistic assessments and calculates target cleanup levels based on site-specific exposure scenarios. Her work has involved pesticides, heavy metals, solvents, and petroleum-contaminated soils. She assists multiple school districts in California with site assessment, public relations, and the Department of Toxic Substance Control (DTSC) school site approval process. She participates in public hearings and school board meetings and coordinates her projects with the CEQA process.

Before joining PlaceWorks, Denise managed large divestiture environmental due diligence projects for the electric power industry and was involved in numerous environmental projects for oil field operation. Her experience also includes the development and testing of risk assessment software and teaching training courses in risk assessment using different software programs.

Denise has established a very good reputation with regulatory agencies and negotiates risk-related issues on behalf of her clients. She is a member of the Los Angeles Regional Water Quality Control Board Underground Storage Tank Advisory Board and has extensive experience with site closure activities with the DTSC, Environmental Protection Agency, Regional Water Quality Control Boards, and local oversight agencies throughout California.

HIGHLIGHTS OF EXPERIENCE

ENVIRONMENTAL & HEALTH RISK ASSESSMENTS

- » Xerox Corporation Preliminary Environmental Assessment and Health Risk Assessment | Santa Ana CA
- » Human Health Risk Evaluation, Literature Research for American Petroleum Institute
- » City of Redlands Health Risk Assessment | Redlands CA
- » Caltrans Risk Assessment and Groundwater Impact Analysis | California
- » Risk Assessments and Indoor Air Sampling for Confidential Client(s) | Various Locations
- » Human Health & Ecological Risk Assessment – Technical Review | Various Locations
- » Landfill Risk Assessments | Various Locations
- » Risk Assessments for Pesticide Contaminated Soil | Various Locations
- » Human Health Risk Assessment for Confidential Mineral Resources Client | Arizona
- » Human Health Risk Assessment at Whites Point Nike Missile Site | Los Angeles County CA
- » Human Health Risk Assessment at Fort MacArthur | Los Angeles County CA

EDUCATION

- » PhD, Soil Physics, University of California, Riverside
- » MS, Soil Science, University of California, Riverside
- » BS, Geology, University of California, Riverside

CERTIFICATIONS

- » Oil Spill Response Training

AFFILIATIONS

- » Soil Science Society of America
- » American Geophysical Union
- » American Chemical Society
- » Society of Risk Analysis
- » Coalition of Adequate School Housing

Team member since 2005



DENISE CLENDENING

Associate Principal

dclendening@placeworks.com

SITE ASSESSMENTS

- » Site Remediation for Hull Middle School | Torrance CA
- » PEA for New High School, William S. Hart UHSD | Castaic CA
- » Phase I for Property at East Briar Drive | San Bernardino County CA
- » PEA for Stella Academy Middle School | Los Angeles CA
- » Phase I for Valley Boulevard Widening | City of Industry CA
- » Oil Field Preliminary Environmental Assessment | Culver City CA
- » Lead-Based Paint Evaluations | Various Locations
- » Cogeneration Facilities Permit Applications | Various Locations throughout California
- » NRG Energy Environmental Due Diligence Investigations | California
- » AES Environmental Due Diligence Work Plans | California
- » Remedial Investigation and Remedial Action for Jersey Avenue Elementary School Site (Congresswomen Grace Napolitano presented award for special congressional recognition for project), Little Lake City School District | City of Santa Fe Springs CA
- » Preliminary Environmental Assessments for over 100 school sites throughout California
- » Phase I ESA and PEAs for four school sites, Moreno Valley USD
- » Phase I ESAs, PEAs, SSIs and RAWs for eight school sites, San Bernardino County Superintendent of Schools
- » Phase I ESA for Elementary School No. 19, Rialto USD
- » PEA and SSI for the New High School No. 3 Site, Colton Joint USD
- » Phase I ESA and PEAs for four school sites, Lynwood USD
- » Phase I ESA for the Proposed Elementary School No. 8, San Ysidro School District
- » Phase I ESA for the Proposed K–8 Parker Dam School, Needles USD
- » PEAs for three school sites and environmental and legislative support services, Santa Ana USD
- » Phase I ESA, PSHA, and PEA for Community Day School, Eastside USD
- » PEAs for five school sites in Clovis | Clovis CA
- » PEA for redevelopment project for the City of South Gate | South Gate CA
- » Phase I ESA for Arrowhead Springs Resort I | San Bernardino CA
- » Phase I ESA for two Charter Schools for Green Dot Public Schools | Los Angeles CA
- » Phase I and Phase II ESA for Former Service Station | Los Angeles CA
- » Phase I ESAs, PEA, SSIs, and fill testing for multiple school sites, Pomona USD
- » PEA and methane gas testing, Encinitas USD
- » Phase I ESA and lead testing for multiple sites, Fontana USD
- » Proponent’s Environmental Assessment for PUC | Long Beach CA
- » Initial Site Assessments for Street Widening Projects | Santa Ana CA
- » Phase I ESAs for Renaissance Community Fund | Corona CA

TITLE 5/CDE RISK ASSESSMENTS

- » Geohazard Assessment for Inglewood Site, Today’s Fresh Start Charter School
- » PEAs and Title 5 Assessments for three school sites, Redlands USD
- » Title 5 Compliance Study Reports for four sites, Whittier Union High School District
- » Prairie Vista Lead Testing, Hawthorne USD
- » Environmental Support and Risk Assessment for school sites, San Dieguito Union High School District
- » Human Health Risk Assessment School Site, Pomona USD
- » Title 5 Hazard and Constraints Analysis for four school sites, Irvine USD
- » Title 5 Hazard and Constraints Analysis for school site, Rialto USD



MICHAEL WATSON, PG

Project Geologist

With over a decade in the environmental consulting industry, Mike is proficient in providing field and office support to project managers performing site assessment and remediation. He performs site assessments, geohazard studies, air quality and industrial hygiene assessments, groundwater investigations, and remedial actions. Mike also manages materials acquisition, field equipment maintenance, and subcontractor coordination on large field investigations and monitoring programs.

A dedicated geologist, Mike continually strives to refine his knowledge, methods, and efficacy. He is especially committed to his current work for numerous school districts throughout California, where he assists in site assessment services and the Department of Toxic Substances Control's school site approval process. He performs Phase I ESAs, PEAs, geohazard studies, supplemental site investigations, remedial investigation reports, removal action documents, feasibility study reports, Title 5 Constraints Studies, and fill testing reports. In addition, he assists with the management and implementation of field investigations, assembles project data, and arranges methodical and comprehensive procedures to attain the client's goals.

HIGHLIGHTS OF EXPERIENCE

SITE ASSESSMENTS

- » PEAs, Phase I ESAs, Geohazards Study Reports, and Title 5 Studies for various schools | Moreno Valley USD
- » PEAs and Fill Testing for various schools | Clovis USD
- » PEA for Proposed Castaic High School | William S. Hart Union High School District
- » Phase I ESA for Proposed K-8 Parker Dam School | Needles USD
- » Removal Action, Fill Testing, and Quarterly Groundwater Sampling for Central Region High School No. 13 | Los Angeles USD
- » Removal Actions for Chaffey West Community Day School and Chino Early Education Center | San Bernardino County Superintendent of Schools
- » Phase I ESA for Citrus Creek Residential Development | Upland CA
- » Phase I ESA for the Arrowhead Springs Resort | San Bernardino CA
- » Phase I/II ESAs for Former Gas Station | Los Angeles CA
- » Quarterly Groundwater Sampling, Remedial Investigation and Remedial Action for Santa Fe Springs Athletic Fields | Little Lake City School District/Santa Fe Springs CA
- » Environmental Services for various schools | Hayward USD

REGULATORY COMPLIANCE & STRATEGIC PLANNING

- » Environmental Auditing for General Motors Railroad Locomotive Service Facility | Commerce CA
- » Construction Site Review Implementation, RAW, and Methane Mitigation System Inspection for Hull Middle School | Torrance USD
- » Underground Storage Tank Closure Report and Construction Response – Removal of Six Hydraulic Lifts for Central Region Elementary School No. 13 | Los Angeles USD
- » Removal Action, Oil Well Reabandonment, Crude Oil Pipeline Removal, Construction Response Services, and Construction Site Review Implementation for Harry Bridges Span K-8 | Los Angeles USD

EDUCATION

- » BS, Geology, University of California, Riverside

REGISTRATIONS

- » California Professional Geologist No. 8177

CERTIFICATIONS

- » 40-Hour Hazardous Waste Workers (HAZWOPER) Certification
- » 24-Hour First Responders Certification
- » 8-Hour HAZWOPER Refresher Certification
- » CPR/First Aid Certification
- » NITON X-ray Fluorescence (XRF) Analyzer Certification

AFFILIATIONS

- » Geological Society of America
- » Association of Environmental and Engineering Geologists
- » Seismological Society of America
- » Inland Geological Society
- » South Coast Geological Society

Team member since 2005





MICHAEL WATSON

Project Geologist

mwatson@placeworks.com

- » Operations and Maintenance Inspection and Monitoring Reports, Five-Year Review Report, and Decommissioning of Methane Mitigation System at Woodcrest Jr. High and Liberty Elementary | Chino Valley USD
- » Corrective Measures Study and Quarterly Groundwater Monitoring for Raymond A. Villa Fundamental Intermediate School | Santa Ana USD
- » Soil Vapor and Groundwater Monitoring, Soil Vapor Extraction System Monitoring and AQMD compliance for Former Sargent Industries Facility | Huntington Park CA

CEQA/TITLE 5 ASSESSMENTS

- » CollegeTown Specific Plan EIR | Fullerton CA
- » Anaheim Canyon Specific Plan EIR | Anaheim CA
- » Title 5 studies for various schools in Westminster and Huntington Beach | Westminster School District
- » City of El Monte General Plan | El Monte CA
- » City of Industry General Plan | Industry CA
- » Irvine Business Center | Irvine CA

PUBLICATIONS

- » Watson, M. J., and S. Jorgensen, 2001. Geologic Map of the Margarita Peak 7.5 Minute Quadrangle, San Diego County, California: A Digital Database, Version 1.0. Mapping by S. S. Tan. California Division of Mines and Geology, Preliminary Geologic Map.
- » Watson, M. J. and others, 2003. Quaternary Geologic Materials Map of Part of the Juniper Hills 7.5 Minute Quadrangle, California. In Seismic Hazard Zone Report for the Juniper Hills 7.5-Minute Quadrangle, Los Angeles County, California. Mapping by A. G. Barrows, D. J. Beeby, D. B. Burke, T. W. Dibblee Jr., J. E. Kahle, and D. J. Ponti. California Geological Survey Seismic Hazard Zone Report 102.
- » Watson, M.J., K.R. Bovard, R.M. Alvarez, and C.I. Gutierrez, 2007, Geologic Map of the Oceanside 30' X 60' Quadrangle, California, Mapping by M.P. Kennedy and S.S. Tan. California Geological Survey Regional Geologic Map Series, Map No. 2: Scale 1:100,000.