

CAMPUS PARK WEST PROJECT

APPENDIX J

VOLUME 2: PHASE II ENVIRONMENTAL SITE
ASSESSMENT REPORT

PDS2005-3813-05-001(SPA); PDS2005-3800-05-003(GPA);
PDS2005-3600-05-005(REZ); PDS2005-3100-5424(TM);
Log No. PDS2005-3910-05-02-009(ER);
State Clearinghouse No. 2009061043

for the

FINAL SUBSEQUENT
ENVIRONMENTAL IMPACT REPORT

June 18, 2014

LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT
CAMPUS PARK WEST
APNs 108-121-14, 125-061-01, 125-063-01, 125-036-07, 125-061-08
SAN DIEGO COUNTY, CALIFORNIA, 92028

GPA 05-003, SPA 05-001, REZ 05-005,
TM5424, ER 05-02-009

Prepared for:

Pappas Investments

2020 L Street, 5th Floor
Sacramento, California 95814

Project No. 042410-004

November 6, 2012



Leighton and Associates, Inc.

A LEIGHTON GROUP COMPANY



Leighton and Associates, Inc.

A LEIGHTON GROUP COMPANY

November 6, 2012

Project No. 042410-004

To: Pappas Investments
2020 L Street, 5th Floor
Sacramento, California 95811

Attention: Mr. Thad Johnson

Subject: Limited Phase II Environmental Site Assessment Report, Campus Park West, 108-121-14, 125-061-01, 125-063-01, 125-036-07, 125-061-08, San Diego County, California 92028

INTRODUCTION

Leighton and Associates, Inc. (Leighton) performed a limited Phase II Environmental Site Assessment (ESA) for the Campus Park West property in San Diego County, California (subject site) (Figure 1, Site Location Map). The scope of work for the limited Phase II ESA investigation was based on the findings of the previous Phase I ESA report (Leighton, 2009) prepared for the subject site that identified the following historical land uses that resulted in recognized environmental conditions:

- 1) The possible presence of herbicides, pesticides, or rodenticides in soil in areas historically used for citrus grove farming;
- 2) A storage container with a tractor leaking oil; and
- 3) Water wells and septic systems associated with historical farming and horse facilities may be present within the Site boundaries and may be encountered during grading activities;

Based on the findings of the referenced Phase I ESA report, the County of San Diego Department of Planning and Land Use (SD-DPLU) required a Limited Phase II Environmental Site Assessment in the areas with the highest likelihood of contamination and in the areas with the greatest potential for human exposure to soils. In response to this requirement, the following scope of work was performed to evaluate the possible absence/presence of contaminated soil associated with the Site's agricultural historical land use (HLU).

SCOPE OF WORK

Field Investigation

Soil Sampling

Fifteen (15) hand auger soil borings were located in areas intended to be developed for residential and mixed residential/commercial use (Figure 2). In addition, one (1) hand auger boring was advanced near the RC Flying Club's storage containers due to presence of oils and fuels being stored in the containers. Soil samples were collected at 0.5 feet and between 2 and 3 feet below ground surface (bgs) as directed by SD-DPLU. Borings B-11 and B-14 were determined to be located in a biological resource area and the center of the proposed Pankey Road alignment, respectively, and therefore were not analyzed as part of this investigation. The location of the hand auger borings are noted on Figure 2. A summary of the sample locations and depths are discussed below.

During boring advancement, a photoionization detector (PID) was used to evaluate the soil samples for the presence or absence of volatile organic hydrocarbon vapors. Each soil sample collected was placed in an ice-cooled chest for temporary storage and transported to a State of California Certified laboratory (Associated Laboratories, Orange, California) for selected chemical analyses with a completed chain of custody. Drilling equipment was decontaminated before the commencement of any drilling activities and between the collection of soil samples.

Laboratory Analysis

Twenty eight (28) soil samples were analyzed for organochlorine pesticides by EPA Method 8081. In addition, two (2) soil samples were analyzed for total petroleum hydrocarbons carbon chain identification (TPH ccid) by EPA Method 8015 from boring B-10 due to the possible presence of hydrocarbons released from the tractor stored in the container (Leighton, 2009).

RESULTS OF INVESTIGATION

Organochlorine Pesticides

No organochlorine pesticides were detected in 20 of the 28 soil samples collected and analyzed by EPA Method 8081. No reportable concentrations of organochlorine pesticides were detected in the soil samples collected from 9 of the 14 soil borings with detections only in borings B-4, B-6, B-9, B-10, and B-12. Detected low concentrations of 4,4'-DDD ranged from 0.006 mg/Kg (B-4 at 0.5 feet bgs) to 0.013 mg/Kg (B-10 at 0.5 feet bgs). The detected low concentrations of 4,4'-DDE ranged from 0.063 mg/Kg (B-4 at 0.5 feet bgs) to 0.0053 mg/Kg (B-10 at 0.5 feet bgs). Detected low concentrations of 4,4'-DDT ranged from 0.0076 mg/Kg (B-12 at 0.5 feet bgs) to 0.051 mg/Kg (B-4 at 0.5 feet bgs). Concentrations of detected Dieldrin ranged from 0.0099 mg/Kg (B-6 at 2 feet bgs) to 0.073 mg/Kg (B-4 at 2 feet bgs). Chlordane was only detected in two samples at concentration of 0.059 mg/Kg and 0.094 mg/Kg in borings B-10 and B-12 at 0.5 feet bgs, respectively.

Detected concentrations of all organochlorine pesticides were below their respective California EPA California Human Health Screening Levels (CHHSLs) for residential use in all the samples collected with the exception of Dieldrin in two soil samples (B-4 at 2 feet bgs and B-10 at 0.5 feet bgs), which slightly exceeded the residential use CHHSL. The Dieldrin level at the subject site is not of concern however, since the 95% Upper Confidence Interval (95% UCL) for all samples analyzed for Dieldrin is below residential CHHSLs (see Statistical Analysis Section of the text, Tables 1 and 2 and Appendix C).

The organochlorine pesticide results are summarized in Table 1. A copy of the Associated Laboratories analytical reports is provided in Appendix B.

Total Petroleum Hydrocarbons

Two (2) soil samples collected from boring B-10 (0.5 feet and 2 feet bgs) were tested for Total Petroleum Hydrocarbons carbon chain identification (TPHccid). No light-end hydrocarbons (C₆ to C₁₀) were detected in any of the samples. Mid range hydrocarbons (C₁₀ to C₂₂) and heavy-end hydrocarbons (C₂₂ to C₃₆) were detected only in one sample, B-10 at 0.5 feet bgs, at concentrations of 50.4 mg/Kg and 168 mg/Kg, respectively. The detected concentrations of TPH in B-10 at 0.5 feet bgs are below the California Regional Water Quality Control Board – San Francisco Bay Region's (SFRWQCB) Environmental Screening Levels (ESLs) for TPH middle distillates (C₉ to C₂₅) and TPH residual fuels (C₂₄ to C₄₀) in shallow soils of 83 mg/Kg and 370 mg/Kg, respectively (SFRWQCB, 2007).

The TPH results are summarized in Table 1. A copy of the Associated Laboratories analytical reports is provided in Appendix B.

Statistical Analysis

Leighton Consulting evaluated the results of the soil sample analyses to determine the mean and the 95% upper confidence intervals (UCLs) of the mean for Dieldrin in soil. This evaluation was conducted to establish if the 95% UCL for Dieldrin of 0.0181 mg/Kg in soil is significantly below the California EPA CHHSLs of 0.035 mg/Kg for total exposure to soils in areas of residential use. The statistical methods used during this investigation and the calculated values were generated by utilizing the United States Environmental Protection Agency (EPA)'s statistical program, ProUCL, version 4.1 (USEPA, 2011).

The data were imported into ProUCL and statistical evaluation of Dieldrin analytical results for the complete data set, including non-detects (concentration conservatively input as the reporting limit), was completed to calculate the confidence intervals. The mean and the 95% UCL of the population mean for Dieldrin was 0.0134 mg/Kg and 0.0181 mg/Kg, respectively. Based on these results, the 95% UCL for Dieldrin in soil is below the CHHSLs and soils are suitable for residential use at the Site. The ProUCL datasheet is summarized in Table 2 and the complete datasheet is included in Appendix C.

SUMMARY OF FINDINGS AND CONCLUSIONS

Based on the results of the limited Phase II ESA the following is a summary of findings and conclusions.

- No organochlorine pesticides were identified in 14 of the 28 samples analyzed.
- Low concentrations of organochlorine pesticides were detected in the soil samples collected from borings B-4, B-6, B-9, B-10, and B-12.
 - Very low concentrations of 4,4'-DDD, all below the residential CHHSLs of 2.4 mg/Kg, were found in two samples at 0.006 mg/Kg (B-4 at 0.5 feet bgs) and 0.013 mg/Kg (B-10 at 0.5 feet bgs).

- Very low concentrations of 4,4'-DDE, all below the residential CHHSLs of 1.7 mg/Kg, were found in seven samples at concentrations ranging from 0.0053 mg/Kg (B-10 at 0.5 feet bgs) to 0.063 mg/Kg (B-4 at 0.5 feet bgs).
 - Concentrations of 4,4'-DDT, all below the residential CHHSLs of 1.7 mg/Kg, were found in four samples at concentrations ranging from 0.0076 mg/Kg (B-12 at 0.5 feet bgs) to 0.051 mg/Kg (B-4 at 0.5 feet bgs).
 - Concentrations of Dieldrin found in four samples ranged from 0.0099 mg/Kg (B-6 at 2 feet bgs) to 0.073 mg/Kg (B-4 at 2 feet bgs).
 - Very low concentrations of Chlordane was detected only sample B-10 at 0.5 feet bgs and B-12 at 0.5 feet bgs at concentrations of 0.059 mg/Kg and 0.094 mg/Kg, respectively, which are well below the residential CHHSL of 0.44 mg/Kg.
 - No other organochlorine pesticides were detected above laboratory reporting limits.
- Only two samples were found to have detected concentrations of Dieldrin above California EPA residential CHHSLs. The mean (0.0134 mg/Kg) and the 95% UCL of the population mean (0.0181 mg/Kg) of the samples analyzed for Dieldrin are well below the residential CHHSL of 0.035 mg/Kg. Based on these results, the 95% UCL for Dieldrin in soil is below the CHHSL and soils are suitable for use at the residential Site.
 - TPH was detected in B-10 at 0.5 feet bgs only at concentrations of 50.4 (C₁₀ to C₂₂) mg/Kg and 168 (C₂₂ to C₃₆) mg/Kg. The detected concentrations of TPH in B-10 at 0.5 feet bgs are below the SFRWQCBs ESLs for TPH middle distillates (C₉ to C₂₅) and TPH residual fuels (C₂₄ to C₄₀) in shallow soils of 83 mg/Kg and 370 mg/Kg, respectively. These concentrations are below the SFRWQCB screening levels for hydrocarbon impacted soils, thus the soils are suitable for use at the residential Site.
 - TPH was not detected above laboratory reporting limits in B-10 at 2 feet bgs.



RECOMMENDATIONS

Based on the results of this limited Phase II ESA Leighton recommends no further action at this time. No soils requiring remediation at the subject site were found during this subsurface investigation. However, when the metal storage containers are removed from the subject site, the areas beneath the containers should be inspected for hydrocarbon stained or odorous soils, or indications of the release of hazardous materials, and if such soils are discovered, further testing should be conducted.

In general, observations should be made during any future site development for areas of possible contamination such as, but not limited to, the presence of underground facilities, buried debris, waste drums, tanks, staining or odorous soils. Should such materials be encountered, further investigation and analysis may be necessary at that time.

CLOSING

Should you have any questions regarding this report, please contact the undersigned at (949) 378-8448 or gtellegen@leightongroup.com. We appreciate the opportunity to be of service.

Respectfully submitted,



Gwen Tellegen, PE C58760
Principal Environmental Engineer
LEIGHTON AND ASSOCIATES, INC.



Attachments: Figure 1 – Site Location Map
Figure 2 – Boring Location Map

Table 1 – Summary of Organochlorine Pesticide and TPH Analytical Results

Table 2 – Summary of ProUCL Results

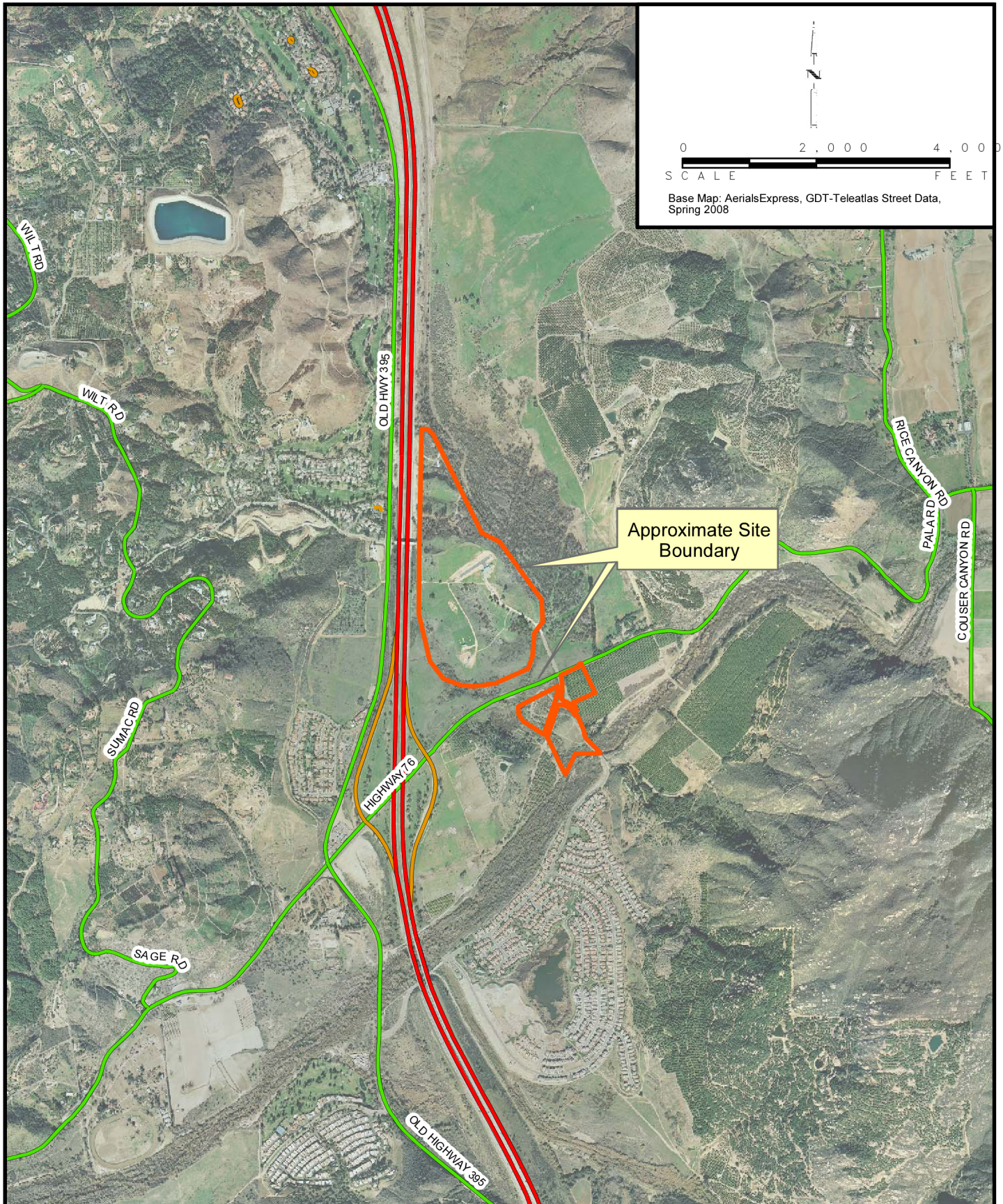
Appendix A – References

Appendix B – Associated Laboratories Reports

Appendix C – ProUCL Datasheet

Distribution: (1) Addressee
(2) Beth Ehsan – SD-DPLU Hazard Specialist (1), Project Manager (1)



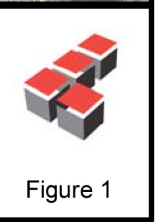


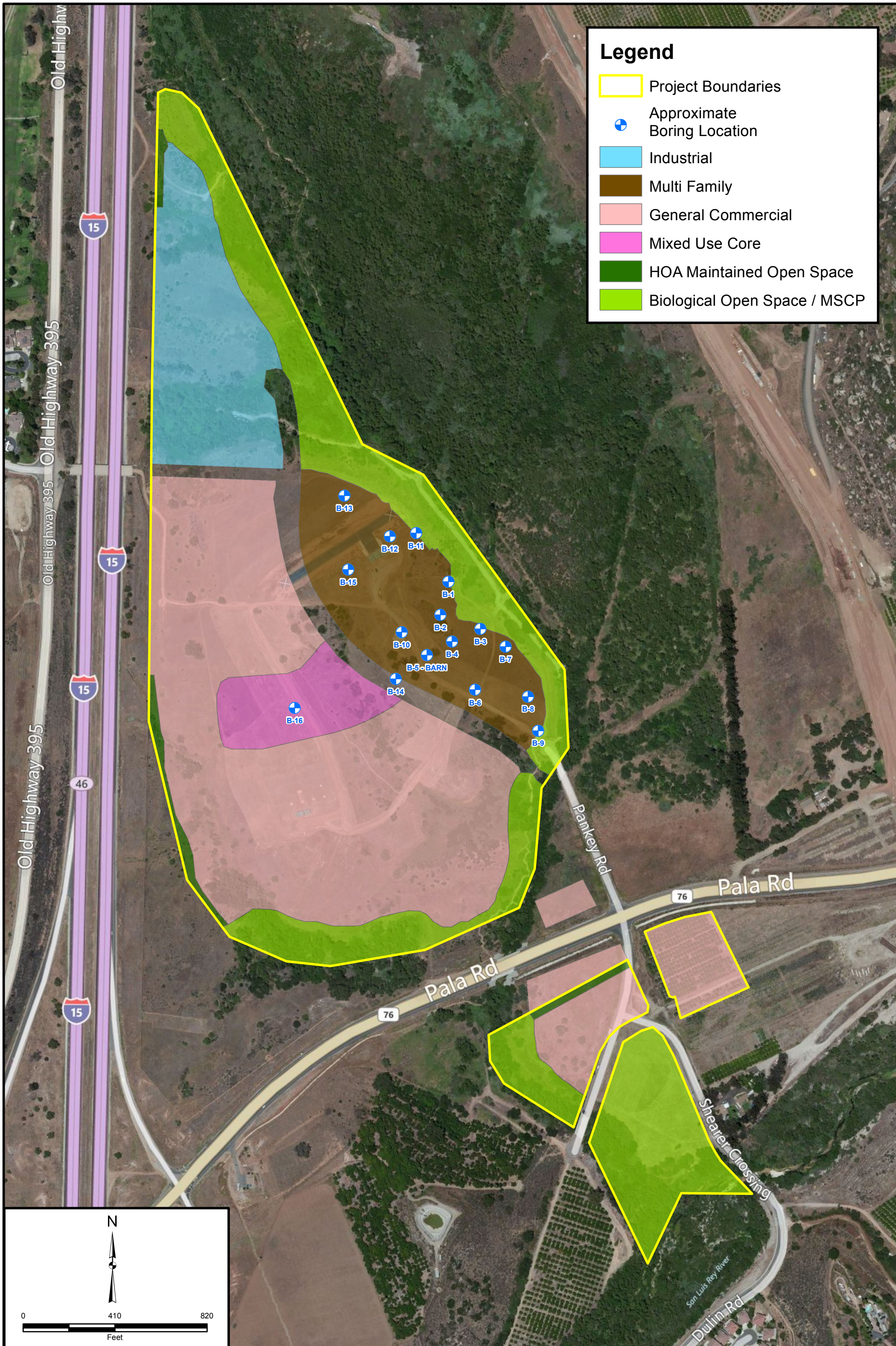
**Campus Park West
Project and Surrounding Area
Fallbrook Area, Unincorporated
San Diego County, California**

**SITE LOCATION
MAP**

Project No.
042410-004

Date
October 2012





Legend

- Project Boundaries
- + Approximate Boring Location
- Industrial
- Multi Family
- General Commercial
- Mixed Use Core
- HOA Maintained Open Space
- Biological Open Space / MSCP

Project: 042410-004
 Scale: 1" = 400'

Eng/Geol: GAT/BCP
 Date: November, 2012

Base Map: Microsoft Bing 2012
 Thematic Info: Leighton
 Author: Leighton Geomatics (cgiovando)

BORING LOCATION MAP
 Limited Phase II Environmental Site Assessment
 Campus Park West, San Diego County, California

Figure 2

Leighton

**Table 1: Summary of Organochlorine Pesticide and TPH Analytical Results
Campus Park West Limited Phase II ESA
San Diego County, California**

Sample	Date	EPA 8081 Organochlorine Pesticides						EPA 8015 TPHccid		
		Depth (ft. bgs)	4,4'-DDD (mg/Kg)	4,4'-DDE (mg/Kg)	4,4'-DDT (mg/Kg)	Dieldrin (mg/Kg)	Chlordane (mg/Kg)	TPH (C6 -C10) (mg/Kg)	TPH (C10 - C22) (mg/Kg)	TPH (C22 - C36) (mg/Kg)
B-1-0.5'	10/1/2012	0.5	<0.005	<0.004	<0.005	<0.003	<0.025	--	--	--
B-1-3'	10/1/2012	3	<0.005	<0.004	<0.005	<0.003	<0.025	--	--	--
B-2-0.5'	10/1/2012	0.5	<0.005	<0.004	<0.005	<0.003	<0.025	--	--	--
B-2-2'	10/1/2012	2	<0.005	<0.004	<0.005	<0.003	<0.025	--	--	--
B-3-0.5'	10/1/2012	0.5	<0.005	<0.004	<0.005	<0.003	<0.025	--	--	--
B-3-2.5'	10/1/2012	2.5	<0.005	<0.004	<0.005	<0.003	<0.025	--	--	--
B-4-0.5'	10/1/2012	0.5	0.0060	0.063	0.051	0.020	<0.025	--	--	--
B-4-2'	10/1/2012	2	<0.005	0.013	0.011	0.073	<0.025	--	--	--
B-5-Barn-0.5'	10/1/2012	0.5	<0.005	<0.004	<0.005	<0.003	<0.025	--	--	--
B-5-Barn-2.5'	10/1/2012	2.5	<0.005	<0.004	<0.005	<0.003	<0.025	--	--	--
B-6-0.5'	10/1/2012	0.5	<0.005	0.011	0.011	<0.003	<0.025	--	--	--
B-6-2'	10/1/2012	2	<0.005	0.013	<0.005	0.0099	<0.025	--	--	--
B-7-0.5'	10/1/2012	0.5	<0.005	<0.004	<0.005	<0.003	<0.025	--	--	--
B-7-2'	10/1/2012	2	<0.005	<0.004	<0.005	<0.003	<0.025	--	--	--
B-8-0.5'	10/1/2012	0.5	<0.005	<0.004	<0.005	<0.003	<0.025	--	--	--
B-8-2.5'	10/1/2012	2.5	<0.005	<0.004	<0.005	<0.003	<0.025	--	--	--
B-9-0.5'	10/1/2012	0.5	<0.005	0.016	<0.005	<0.003	<0.025	--	--	--
B-9-3'	10/1/2012	3	<0.005	0.020	<0.005	<0.003	<0.025	--	--	--
B-10-0.5'	10/1/2012	0.5	0.013	0.0053	0.035	0.036	0.059	<3.0	50.4	168
B-10-2'	10/1/2012	2	<0.005	<0.004	<0.005	<0.003	<0.025	<3.0	<3.0	<5.0
B-12-0.5'	10/24/2012	0.5	<0.005	0.0090	0.0076	<0.003	0.094	--	--	--
B-12-3'	10/24/2012	3	<0.005	<0.004	<0.005	<0.003	<0.025	--	--	--
B-13-0.5'	10/24/2012	0.5	<0.005	<0.004	<0.005	<0.003	<0.025	--	--	--
B-13-2'	10/24/2012	2	<0.005	<0.004	<0.005	<0.003	<0.025	--	--	--
B-15-0.5'	10/25/2012	0.5	<0.005	<0.004	<0.005	<0.003	<0.025	--	--	--
B-15-2'	10/25/2012	2	<0.005	<0.004	<0.005	<0.003	<0.025	--	--	--
B-16-0.5'	10/25/2012	0.5	<0.005	<0.004	<0.005	<0.003	<0.025	--	--	--
B-16-2.5'	10/25/2012	2.5	<0.005	<0.004	<0.005	<0.003	<0.025	--	--	--
95% UCL	--	--	--	--	--	0.0181	--	--	--	--
CHHSLs			2.4	1.7	1.7	0.035	0.44	--	--	--
ESLs	--	--	--	--	--	--	--	83	83	370

Notes:

mg/Kg = milligrams per kilogram

ft. bgs = feet below ground surface

95% UCL = 95 % Upper Confidence Level of the mean

CHHSLs = California Human Health Screening Levels (OEHHA) for Residential Use, updated September 23, 2010

ESLs = California Regional Water Quality Control Board - San Francisco Bay Region Environmental Screening Levels, revised May, 2008

<0.005 = Concentration below Laboratory Detection Limits

-- = Not applicable or not analyzed

**Table 2: Summary of ProUCL Results
Campus Park West
San Diego County, California**

**Data Distribution Test with Detected Values Only
Data appear Normal at 5% Significance Level**

Nonparametric Statistics

Kaplan-Meier (KM) Method	
Mean	0.0134
Standard Deviation	0.0126
Standard Error of Mean	0.00274
95% KM (t) UCL	0.0181
95% KM (z) UCL	0.018
95% KM (jackknife) UCL	0.0203
95% KM (bootstrap t) UCL	0.019
95% KM (BCA) UCL	0.0386
95% KM (Percentile Bootstrap) UCL	0.0386
95% KM (Chebyshev) UCL	0.0254
97.5% KM (Chebyshev) UCL	0.0306
99% KM (Chebyshev) UCL	0.0407
Potential UCLs to Use	
95% KM (t) UCL	0.0181
95% KM (Percentile Bootstrap) UCL	0.0386

APPENDIX A
REFERENCES



Leighton

REFERENCES

- California Regional Water Quality Control Board – San Francisco Bay Region (SFRWQCB), 2007, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final, dated November 2007 (Revised May 2008).
- County of San Diego Department of Planning and Land Use (SD-DPLU), Hazardous Materials Review of Campus Park West; ER 05-02-009, dated August 27, 2010.
- Leighton and Associates (Leighton), 2009, Revised Phase I Environmental Site Assessment (Assessment) Report , Campus Park West, Assessor's Parcel Numbers (APNs) 108-121-14, 125-161-01, 125-163-01, 125-163-07, 125-161-08, San Diego County, California 92028, dated September 11, 2009 (Updated October 17, 2012).
- State of California Office of Environmental Health Hazard Assessment (OEHHA), 2010, California Human Health Screening Levels (CHHSLs), Table 1: Soil Screening Numbers (mg/Kg Soil) Soil Screening Numbers for Nonvolatile Chemicals Based on Total Exposure to Contaminated Soil: Inhalation, Ingestion, and Dermal Absorption, Updated September 23, 2010.
- United States Environmental Protection Agency (EPA), ProUCL, Version 4.1, 2011.



APPENDIX B

ASSOCIATED LABORATORIES ANALYTICAL REPORT





Associated Laboratories

806 N. Batavia - Orange, CA 92868
Tel (714)771-6900 Fax (714)538-1209
www.associatedlabs.com
Info@associatedlabs.com



Client: Leighton and Associates
Address: 3934 Murphy Canyon Drive
#B-205
San Diego, CA 92123
Attn: Gwen Tellegen

Lab Request: 311402
Report Date: 10/16/2012
Date Received: 10/02/2012
Client ID: 14085

Comments: P.O. #042410-004
Campus Park West
I-15 & CA-79, San Diego County

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

<u>Sample #</u>	<u>Client Sample ID</u>	<u>Sample #</u>	<u>Client Sample ID</u>
311402-001	B-1-0.5'	311402-018	B-9-3'
311402-002	B-1-3'	311402-019	B-10-0.5'
311402-003	B-2-0.5'	311402-020	B-10-2'
311402-004	B-2-2'		
311402-005	B-3-0.5'		
311402-006	B-3-2.5'		
311402-007	B-4-0.5'		
311402-008	B-4-2'		
311402-009	B-5-Barn-0.5'		
311402-010	B-5-Barn-2.5'		
311402-011	B-6-0.5'		
311402-012	B-6-2'		
311402-013	B-7-0.5'		
311402-014	B-7-2'		
311402-015	B-8-0.5'		
311402-016	B-8-2.5'		
311402-017	B-9-0.5'		

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Edward S. Behare, Ph.D.
Lab Director

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date reported.

The reports of the Associated Laboratories are confidential property of our clients and may not be reproduced or used for publication in part or in full without our written permission. This is for the mutual protection of the public, our clients, and ourselves.

TESTING & CONSULTING
Chemical
Microbiological
Environmental

Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/01/2012 10:08	Site:	Notes:
Sample #: 311402-001	Client Sample #: B-1-0.5'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i>	Prep Method: EPA 3545						QCBatchID: QC1130357
4,4'-DDD	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
4,4'-DDE	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
a-BHC	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Aldrin	ND	1	0.002	mg/Kg	10/06/12	qnguyen	
b-BHC	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
d-BHC	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Dieldrin	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Endosulfan I	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan II	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Heptachlor	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Methoxychlor	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
Toxaphene	ND	1	0.25	mg/Kg	10/06/12	qnguyen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	121	39-149	
Tetrachloro-m-xylene TCMX (SUR)	122	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/01/2012 10:12	Site:	Notes:
Sample #: 311402-002	Client Sample #: B-1-3'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i>	Prep Method: EPA 3545						QCBatchID: QC1130357
4,4'-DDD	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
4,4'-DDE	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
a-BHC	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Aldrin	ND	1	0.002	mg/Kg	10/06/12	qnguyen	
b-BHC	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
d-BHC	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Dieldrin	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Endosulfan I	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan II	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Heptachlor	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Methoxychlor	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
Toxaphene	ND	1	0.25	mg/Kg	10/06/12	qnguyen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	100	39-149	
Tetrachloro-m-xylene TCMX (SUR)	119	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/01/2012 10:16	Site:	Notes:
Sample #: 311402-003	Client Sample #: B-2-0.5'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i>	Prep Method: EPA 3545		QCBatchID: QC1130357				
4,4'-DDD	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
4,4'-DDE	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
a-BHC	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Aldrin	ND	1	0.002	mg/Kg	10/06/12	qnguyen	
b-BHC	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
d-BHC	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Dieldrin	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Endosulfan I	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan II	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Heptachlor	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Methoxychlor	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
Toxaphene	ND	1	0.25	mg/Kg	10/06/12	qnguyen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	114	39-149	
Tetrachloro-m-xylene TCMX (SUR)	123	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/01/2012 10:27	Site:	Notes:
Sample #: 311402-004	Client Sample #: B-2-2'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i> Prep Method: EPA 3545							QCBatchID: QC1130357
4,4'-DDD	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
4,4'-DDE	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
a-BHC	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Aldrin	ND	1	0.002	mg/Kg	10/06/12	qnguyen	
b-BHC	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
d-BHC	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Dieldrin	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Endosulfan I	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan II	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Heptachlor	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Methoxychlor	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
Toxaphene	ND	1	0.25	mg/Kg	10/06/12	qnguyen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	104	39-149	
Tetrachloro-m-xylene TCMX (SUR)	117	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/01/2012 10:32	Site:	Notes:
Sample #: 311402-005	Client Sample #: B-3-0.5'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i>	Prep Method: EPA 3545		QCBatchID: QC1130357				
4,4'-DDD	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
4,4'-DDE	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
a-BHC	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Aldrin	ND	1	0.002	mg/Kg	10/06/12	qnguyen	
b-BHC	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
d-BHC	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Dieldrin	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Endosulfan I	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan II	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Heptachlor	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Methoxychlor	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
Toxaphene	ND	1	0.25	mg/Kg	10/06/12	qnguyen	

Analyte	% Recovery	Limits	Notes
<i>Decachlorobiphenyl DCB (SUR)</i>	112	39-149	
<i>Tetrachloro-m-xylene TCMX (SUR)</i>	128	50-125	S

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/01/2012 10:35	Site:	Notes:
Sample #: 311402-006	Client Sample #: B-3-2.5'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i> Prep Method: EPA 3545							QCBatchID: QC1130357
4,4'-DDD	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
4,4'-DDE	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
a-BHC	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Aldrin	ND	1	0.002	mg/Kg	10/06/12	qnguyen	
b-BHC	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
d-BHC	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Dieldrin	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Endosulfan I	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan II	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Heptachlor	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Methoxychlor	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
Toxaphene	ND	1	0.25	mg/Kg	10/06/12	qnguyen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	94	39-149	
Tetrachloro-m-xylene TCMX (SUR)	113	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/01/2012 10:42	Site:	Notes:
Sample #: 311402-007	Client Sample #: B-4-0.5'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i> Prep Method: EPA 3545							QCBatchID: QC1130357
4,4'-DDD	0.0060	1	0.005	mg/Kg	10/06/12	qnguyen	
4,4'-DDE	0.063	1	0.004	mg/Kg	10/06/12	qnguyen	
4,4'-DDT	0.051	1	0.005	mg/Kg	10/06/12	qnguyen	
a-BHC	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Aldrin	ND	1	0.002	mg/Kg	10/06/12	qnguyen	
b-BHC	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/09/12	qnguyen	
d-BHC	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Dieldrin	0.020	1	0.003	mg/Kg	10/06/12	qnguyen	
Endosulfan I	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan II	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Heptachlor	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Methoxychlor	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
Toxaphene	ND	1	0.25	mg/Kg	10/06/12	qnguyen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	104	39-149	
Tetrachloro-m-xylene TCMX (SUR)	122	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/01/2012 10:46	Site:	Notes:
Sample #: 311402-008	Client Sample #: B-4-2'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i> Prep Method: EPA 3545							QCBatchID: QC1130357
4,4'-DDD	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
4,4'-DDE	0.013	1	0.004	mg/Kg	10/06/12	qnguyen	
4,4'-DDT	0.011	1	0.005	mg/Kg	10/06/12	qnguyen	
a-BHC	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Aldrin	ND	1	0.002	mg/Kg	10/06/12	qnguyen	
b-BHC	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
d-BHC	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Dieldrin	0.073	1	0.003	mg/Kg	10/06/12	qnguyen	
Endosulfan I	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan II	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Heptachlor	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Methoxychlor	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
Toxaphene	ND	1	0.25	mg/Kg	10/06/12	qnguyen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	101	39-149	
Tetrachloro-m-xylene TCMX (SUR)	119	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/01/2012 11:01	Site:	Notes:
Sample #: 311402-009	Client Sample #: B-5-Barn-0.5'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i> Prep Method: EPA 3545							QCBatchID: QC1130357
4,4'-DDD	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
4,4'-DDE	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
a-BHC	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Aldrin	ND	1	0.002	mg/Kg	10/06/12	qnguyen	
b-BHC	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
d-BHC	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Dieldrin	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Endosulfan I	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan II	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Heptachlor	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Methoxychlor	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
Toxaphene	ND	1	0.25	mg/Kg	10/06/12	qnguyen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	96	39-149	
Tetrachloro-m-xylene TCMX (SUR)	121	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/01/2012 11:07	Site:	Notes:
Sample #: 311402-010	Client Sample #: B-5-Barn-2.5'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i>	Prep Method: EPA 3545						QCBatchID: QC1130357
4,4'-DDD	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
4,4'-DDE	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
a-BHC	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Aldrin	ND	1	0.002	mg/Kg	10/06/12	qnguyen	
b-BHC	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
d-BHC	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Dieldrin	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Endosulfan I	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan II	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Heptachlor	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Methoxychlor	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
Toxaphene	ND	1	0.25	mg/Kg	10/06/12	qnguyen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	112	39-149	
Tetrachloro-m-xylene TCMX (SUR)	120	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/01/2012 11:44	Site:	Notes:
Sample #: 311402-011	Client Sample #: B-6-0.5'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i>	Prep Method: EPA 3545						QCBatchID: QC1130357
4,4'-DDD	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
4,4'-DDE	0.011	1	0.004	mg/Kg	10/06/12	qnguyen	
4,4'-DDT	0.011	1	0.005	mg/Kg	10/06/12	qnguyen	
a-BHC	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Aldrin	ND	1	0.002	mg/Kg	10/06/12	qnguyen	
b-BHC	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
d-BHC	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Dieldrin	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Endosulfan I	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan II	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Heptachlor	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Methoxychlor	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
Toxaphene	ND	1	0.25	mg/Kg	10/06/12	qnguyen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	113	39-149	
Tetrachloro-m-xylene TCMX (SUR)	124	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/01/2012 11:49	Site:	Notes:
Sample #: 311402-012	Client Sample #: B-6-2'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i>	Prep Method: EPA 3545						QCBatchID: QC1130357
4,4'-DDD	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
4,4'-DDE	0.013	1	0.004	mg/Kg	10/06/12	qnguyen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
a-BHC	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Aldrin	ND	1	0.002	mg/Kg	10/06/12	qnguyen	
b-BHC	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
d-BHC	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Dieldrin	0.0099	1	0.003	mg/Kg	10/06/12	qnguyen	
Endosulfan I	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan II	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Heptachlor	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Methoxychlor	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
Toxaphene	ND	1	0.25	mg/Kg	10/06/12	qnguyen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	103	39-149	
Tetrachloro-m-xylene TCMX (SUR)	113	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/01/2012 11:56	Site:	Notes:
Sample #: 311402-013	Client Sample #: B-7-0.5'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i>	Prep Method: EPA 3545		QCBatchID: QC1130357				
4,4'-DDD	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
4,4'-DDE	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
a-BHC	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Aldrin	ND	1	0.002	mg/Kg	10/06/12	qnguyen	
b-BHC	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
d-BHC	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Dieldrin	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Endosulfan I	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan II	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Heptachlor	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Methoxychlor	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
Toxaphene	ND	1	0.25	mg/Kg	10/06/12	qnguyen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	108	39-149	
Tetrachloro-m-xylene TCMX (SUR)	127	50-125	S

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/01/2012 12:02	Site:	Notes:
Sample #: 311402-014	Client Sample #: B-7-2'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i> Prep Method: EPA 3545							QCBatchID: QC1130357
4,4'-DDD	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
4,4'-DDE	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
a-BHC	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Aldrin	ND	1	0.002	mg/Kg	10/06/12	qnguyen	
b-BHC	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
d-BHC	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Dieldrin	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Endosulfan I	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan II	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Heptachlor	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Methoxychlor	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
Toxaphene	ND	1	0.25	mg/Kg	10/06/12	qnguyen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	109	39-149	
Tetrachloro-m-xylene TCMX (SUR)	122	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/01/2012 12:19	Site:	Notes:
Sample #: 311402-015	Client Sample #: B-8-0.5'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i>	Prep Method: EPA 3545						QCBatchID: QC1130357
4,4'-DDD	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
4,4'-DDE	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
a-BHC	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Aldrin	ND	1	0.002	mg/Kg	10/06/12	qnguyen	
b-BHC	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
d-BHC	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Dieldrin	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Endosulfan I	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan II	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Heptachlor	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Methoxychlor	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
Toxaphene	ND	1	0.25	mg/Kg	10/06/12	qnguyen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	97	39-149	
Tetrachloro-m-xylene TCMX (SUR)	118	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/01/2012 12:26	Site:	Notes:
Sample #: 311402-016	Client Sample #: B-8-2.5'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 NELAC	Prep Method: EPA 3545		QCBatchID: QC1130357				
4,4'-DDD	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
4,4'-DDE	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
a-BHC	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Aldrin	ND	1	0.002	mg/Kg	10/06/12	qnguyen	
b-BHC	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
d-BHC	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Dieldrin	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Endosulfan I	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan II	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Heptachlor	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Methoxychlor	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
Toxaphene	ND	1	0.25	mg/Kg	10/06/12	qnguyen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	111	39-149	
Tetrachloro-m-xylene TCMX (SUR)	95	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/01/2012 12:35	Site:	Notes:
Sample #: 311402-017	Client Sample #: B-9-0.5'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i>	Prep Method: EPA 3545		QCBatchID: QC1130357				
4,4'-DDD	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
4,4'-DDE	0.016	1	0.004	mg/Kg	10/06/12	qnguyen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
a-BHC	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Aldrin	ND	1	0.002	mg/Kg	10/06/12	qnguyen	
b-BHC	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
d-BHC	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Dieldrin	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Endosulfan I	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan II	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Heptachlor	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Methoxychlor	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
Toxaphene	ND	1	0.25	mg/Kg	10/06/12	qnguyen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	130	39-149	
Tetrachloro-m-xylene TCMX (SUR)	105	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/01/2012 12:40	Site:	Notes:
Sample #: 311402-018	Client Sample #: B-9-3'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i> Prep Method: EPA 3545							QCBatchID: QC1130357
4,4'-DDD	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
4,4'-DDE	0.020	1	0.004	mg/Kg	10/06/12	qnguyen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
a-BHC	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Aldrin	ND	1	0.002	mg/Kg	10/06/12	qnguyen	
b-BHC	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
d-BHC	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Dieldrin	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Endosulfan I	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan II	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Heptachlor	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Methoxychlor	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
Toxaphene	ND	1	0.25	mg/Kg	10/06/12	qnguyen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	93	39-149	
Tetrachloro-m-xylene TCMX (SUR)	89	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/01/2012 12:58	Site:	Notes:
Sample #: 311402-019	Client Sample #: B-10-0.5'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8015 <i>NELAC</i>	Prep Method: EPA 3545		QCBatchID: QC1130527				
TPH (C6 to C10)	ND	1	3	mg/Kg	10/15/12	anca	
TPH (C10 to C22)	50.4	1	3	mg/Kg	10/15/12	anca	
TPH (C22 to C36)	168	20	100	mg/Kg	10/15/12	anca	

Analyte	% Recovery	Limits	Notes
<i>Triacotane (SUR)</i>	380	60-140	S

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i>	Prep Method: EPA 3545		QCBatchID: QC1130357				
4,4'-DDD	0.013	1	0.005	mg/Kg	10/06/12	qnguyen	
4,4'-DDE	0.0053	1	0.004	mg/Kg	10/06/12	qnguyen	
4,4'-DDT	0.035	1	0.005	mg/Kg	10/06/12	qnguyen	
a-BHC	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Aldrin	ND	1	0.002	mg/Kg	10/06/12	qnguyen	
b-BHC	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Chlordane (technical)	0.059	1	0.025	mg/Kg	10/09/12	qnguyen	
d-BHC	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Dieldrin	0.036	1	0.003	mg/Kg	10/06/12	qnguyen	
Endosulfan I	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan II	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Heptachlor	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Methoxychlor	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
Toxaphene	ND	1	0.25	mg/Kg	10/06/12	qnguyen	

Analyte	% Recovery	Limits	Notes
<i>Decachlorobiphenyl DCB (SUR)</i>	121	39-149	
<i>Tetrachloro-m-xylene TCMX (SUR)</i>	92	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/01/2012 13:07	Site:	Notes:
Sample #: 311402-020	Client Sample #: B-10-2'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8015 <i>NELAC</i>	Prep Method: EPA 3545		QCBatchID: QC1130527				
TPH (C6 to C10)	ND	1	3	mg/Kg	10/15/12	anca	
TPH (C10 to C22)	ND	1	3	mg/Kg	10/15/12	anca	
TPH (C22 to C36)	ND	1	5	mg/Kg	10/15/12	anca	

Analyte	% Recovery	Limits	Notes
Triacontane (SUR)	89	60-140	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i>	Prep Method: EPA 3545		QCBatchID: QC1130357				
4,4'-DDD	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
4,4'-DDE	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
a-BHC	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Aldrin	ND	1	0.002	mg/Kg	10/06/12	qnguyen	
b-BHC	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
d-BHC	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Dieldrin	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Endosulfan I	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan II	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/06/12	qnguyen	
Heptachlor	ND	1	0.004	mg/Kg	10/06/12	qnguyen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/06/12	qnguyen	
Methoxychlor	ND	1	0.025	mg/Kg	10/06/12	qnguyen	
Toxaphene	ND	1	0.25	mg/Kg	10/06/12	qnguyen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	96	39-149	
Tetrachloro-m-xylene TCMX (SUR)	91	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #311402

QC Batch ID: QC1130357	Analyst: LeiRen	Method: EPA 8081A	
Matrix: Solid	Analyzed: 10/06/2012	Instrument: SVOA-GC2	

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1130357MB1				
4,4'-DDD	ND	mg/Kg	0.005	
4,4'-DDE	ND	mg/Kg	0.004	
4,4'-DDT	ND	mg/Kg	0.005	
a-BHC	ND	mg/Kg	0.004	
Aldrin	ND	mg/Kg	0.002	
b-BHC	ND	mg/Kg	0.003	
Chlordane (technical)	ND	mg/Kg	0.025	
d-BHC	ND	mg/Kg	0.005	
Dieldrin	ND	mg/Kg	0.003	
Endosulfan I	ND	mg/Kg	0.004	
Endosulfan II	ND	mg/Kg	0.004	
Endosulfan sulfate	ND	mg/Kg	0.004	
Endrin	ND	mg/Kg	0.004	
Endrin aldehyde	ND	mg/Kg	0.004	
Endrin Ketone	ND	mg/Kg	0.005	
Heptachlor	ND	mg/Kg	0.004	
Heptachlor epoxide	ND	mg/Kg	0.003	
Lindane (Gamma-BHC)	ND	mg/Kg	0.003	
Methoxychlor	ND	mg/Kg	0.025	
Toxaphene	ND	mg/Kg	0.25	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1130357LCS1											
4,4'-DDE	0.1		0.12		mg/Kg	120			70-130		
4,4'-DDT	0.1		0.13		mg/Kg	130			55-130		
a-BHC	0.1		0.13		mg/Kg	130			70-130		
Aldrin	0.1		0.11		mg/Kg	110			55-130		
b-BHC	0.1		0.12		mg/Kg	120			70-130		
d-BHC	0.1		0.12		mg/Kg	120			70-130		
Dieldrin	0.1		0.12		mg/Kg	120			76-151		
Endosulfan I	0.1		0.12		mg/Kg	120			70-130		
Endosulfan II	0.1		0.11		mg/Kg	110			70-130		
Endosulfan sulfate	0.1		0.10		mg/Kg	100			70-130		
Endrin	0.1		0.096		mg/Kg	96			55-130		
Endrin aldehyde	0.1		0.13		mg/Kg	130			70-130		
Heptachlor	0.1		0.13		mg/Kg	130			55-130		
Heptachlor epoxide	0.1		0.13		mg/Kg	130			70-130		
Lindane (Gamma-BHC)	0.1		0.13		mg/Kg	130			55-130		
Methoxychlor	0.1		0.079		mg/Kg	79			70-130		

ND = Not Detected or < RDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #311402

QC Batch ID: QC1130357	Analyst: LeiRen	Method: EPA 8081A	
Matrix: Solid	Analyzed: 10/06/2012	Instrument: SVOA-GC2	

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1130357MS1, QC1130357MSD1											Source: 311402-002	
4,4'-DDE	ND	0.1	0.1	0.10	0.11	mg/Kg	100	110	9.5	70-130	35	
4,4'-DDT	ND	0.1	0.1	0.12	0.13	mg/Kg	120	130	8.0	50-135	35	
a-BHC	ND	0.1	0.1	0.11	0.12	mg/Kg	110	120	8.7	70-130	35	
Aldrin	ND	0.1	0.1	0.099	0.11	mg/Kg	99	110	10.5	50-135	35	
b-BHC	ND	0.1	0.1	0.11	0.12	mg/Kg	110	120	8.7	70-130	35	
d-BHC	ND	0.1	0.1	0.11	0.11	mg/Kg	110	110	0.0	70-130	35	
Dieldrin	ND	0.1	0.1	0.10	0.11	mg/Kg	100	110	9.5	76-151	35	
Endosulfan I	ND	0.1	0.1	0.11	0.12	mg/Kg	110	120	8.7	70-130	35	
Endosulfan II	ND	0.1	0.1	0.097	0.11	mg/Kg	97	110	12.6	70-130	35	
Endosulfan sulfate	ND	0.1	0.1	0.091	0.092	mg/Kg	91	92	1.1	70-130	35	
Endrin	ND	0.1	0.1	0.12	0.13	mg/Kg	120	130	8.0	50-135	35	
Endrin aldehyde	ND	0.1	0.1	0.12	0.13	mg/Kg	120	130	8.0	70-130	35	
Heptachlor	ND	0.1	0.1	0.11	0.12	mg/Kg	110	120	8.7	50-135	35	
Heptachlor epoxide	ND	0.1	0.1	0.11	0.12	mg/Kg	110	120	8.7	70-130	35	
Lindane (Gamma-BHC)	ND	0.1	0.1	0.11	0.12	mg/Kg	110	120	8.7	50-135	35	
Methoxychlor	ND	0.1	0.1	0.13	0.13	mg/Kg	130	130	0.0	70-130	35	

ND = Not Detected or < RDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #311402

QCBatchID: QC1130527	Analyst: anca	Method: EPA 8015B	
Matrix: Solid	Analyzed: 10/12/2012	Instrument: SVOA-GC (group)	

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1130527MB1				
TPH (C10 to C22)	ND	mg/Kg	3	
TPH (C22 to C36)	ND	mg/Kg	5	
TPH (C6 to C10)	ND	mg/Kg	3	
TPH Diesel	ND	mg/Kg	1	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1130527LCS1, QC1130527LCSD1											
TPH Diesel	25	25	18.1	23.6	mg/Kg	72	94	26	70-130	30	

ND = Not Detected or < RDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



Notes and Definitions

B	Analyte was present in an associated method blank. Associated sample data was reported with qualifier.
C	Laboratory Contamination.
D	The sample duplicate RPD was not within control limits, the sample data was reported without further clarification.
DF	Dilution Factor
DW	Sample result is calculated on a dry weigh basis
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
MDL	Method Detection Limit
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
ND	Analyte was not detected or was less than the detection limit.
P	Sample was received without proper preservation according to EPA guidelines.
RDL	Reporting Detection Limit
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
T	Sample was extracted/analyzed past the holding time.



Danielle Roberts

From: Brian Pierce [bpierce@leightongroup.com]
Sent: Wednesday, October 17, 2012 9:59 AM
To: Danielle Roberts
Subject: RE: Campus Park West Additional Analysis (Lab# 311402)

Hi Danielle,

Do we have any results on the additional analyses?

Thanks,

Brian Pierce
Staff Geologist
Leighton and Associates
3934 Murphy Canyon Road, B205
San Diego, California 92123
Telephone: (858) 300-8495
Cell: (619) 666-5800
Fax: (858) 292-0771
bpierce@leightongroup.com



Please don't print this e-mail unless you really need to.

From: Danielle Roberts [mailto:droberts@associatedlabs.com]
Sent: Thursday, October 11, 2012 4:56 PM
To: Brian Pierce
Subject: RE: Campus Park West Additional Analysis (Lab# 311402)

Hi Brian,
I will add the additional analysis

Danielle Roberts
Associated Laboratories
droberts@associatedlabs.com

From: Brian Pierce [mailto:bpierce@leightongroup.com]
Sent: Thursday, October 11, 2012 4:44 PM
To: Danielle Roberts
Cc: Gwen Tellegen
Subject: Campus Park West Additional Analysis (Lab# 311402)

Hi Danielle,

In preparing my report for the Campus Park West project I realized the TPH may be a concern in one of the sample locations. Can you please run samples B-10-0.5' (311402-019) and B-10-2' (311402-020) for 8015 TPHccid?

Thanks,

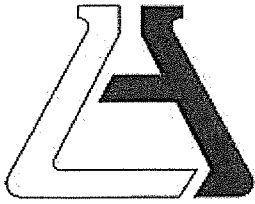
10/17/2012

Nataliya Afendikova

From: Danielle Roberts [droberts@associatedlabs.com]
Sent: Thursday, October 11, 2012 4:59 PM
To: 'Greg Hess'
Cc: nafendikova@associatedlabs.com
Subject: 311402

Please add to 311402-019 and -020 8015 CC.
Thanks

Danielle Roberts
Project Manager
Associated Laboratories
806 N. Batavia
Orange, CA 92868
droberts@associatedlabs.com
Tel 714-771-6900
Cell 714-920-5157



Associated Laboratories

806 N. Batavia - Orange, CA 92868
Tel (714)771-6900 Fax (714)538-1209
www.associatedlabs.com
Info@associatedlabs.com



Client: Leighton and Associates
Address: 3934 Murphy Canyon Drive
#B-205
San Diego, CA 92123
Attn: Gwen Tellegen

Lab Request: 312626
Report Date: 11/02/2012
Date Received: 10/24/2012
Client ID: 14085

Comments: #042410-004
Campus Park West
I-15 & CA-76, San Diego County, CA

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

<u>Sample #</u>	<u>Client Sample ID</u>
312626-003	B-12-0.5'
312626-004	B-12-3'
312626-005	B-13-0.5'
312626-006	B-13-2'

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Edward S. Behare, Ph.D.
Lab Director

NOTE: Unless notified in writing , all samples will be discarded by appropriate disposal protocol 45 days from date reported.

The reports of the Associated Laboratories are confidential property of our clients and may not be reproduced or used for publication in part or in full without our written permission. This is for the mutual protection of the public, our clients, and ourselves.

TESTING & CONSULTING
Chemical
Microbiological
Environmental

Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/24/2012 09:23	Site:	Notes:
Sample #: 312626-003	Client Sample #: B-12-0.5'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 NELAC	Prep Method: EPA 3545						QCBatchID: QC1130977
4,4'-DDD	ND	1	0.005	mg/Kg	10/29/12	LeiRen	
4,4'-DDE	0.0090	1	0.004	mg/Kg	10/29/12	LeiRen	
4,4'-DDT	0.0076	1	0.005	mg/Kg	10/29/12	LeiRen	
a-BHC	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Aldrin	ND	1	0.002	mg/Kg	10/29/12	LeiRen	
b-BHC	ND	1	0.003	mg/Kg	10/29/12	LeiRen	
Chlordane (technical)	0.094	1	0.025	mg/Kg	10/29/12	LeiRen	
d-BHC	ND	1	0.005	mg/Kg	10/29/12	LeiRen	
Dieldrin	ND	1	0.003	mg/Kg	10/29/12	LeiRen	
Endosulfan I	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Endosulfan II	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Endrin	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/29/12	LeiRen	
Heptachlor	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/29/12	LeiRen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/29/12	LeiRen	
Methoxychlor	ND	1	0.025	mg/Kg	10/29/12	LeiRen	
Toxaphene	ND	1	0.25	mg/Kg	10/29/12	LeiRen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	92	39-149	
Tetrachloro-m-xylene TCMX (SUR)	93	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/24/2012 09:27	Site:	Notes:
Sample #: 312626-004	Client Sample #: B-12-3'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i>	Prep Method: EPA 3545						QCBatchID: QC1130977
4,4'-DDD	ND	1	0.005	mg/Kg	10/29/12	LeiRen	
4,4'-DDE	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/29/12	LeiRen	
a-BHC	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Aldrin	ND	1	0.002	mg/Kg	10/29/12	LeiRen	
b-BHC	ND	1	0.003	mg/Kg	10/29/12	LeiRen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/29/12	LeiRen	
d-BHC	ND	1	0.005	mg/Kg	10/29/12	LeiRen	
Dieldrin	ND	1	0.003	mg/Kg	10/29/12	LeiRen	
Endosulfan I	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Endosulfan II	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Endrin	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/29/12	LeiRen	
Heptachlor	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/29/12	LeiRen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/29/12	LeiRen	
Methoxychlor	ND	1	0.025	mg/Kg	10/29/12	LeiRen	
Toxaphene	ND	1	0.25	mg/Kg	10/29/12	LeiRen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	101	39-149	
Tetrachloro-m-xylene TCMX (SUR)	102	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/24/2012 09:40	Site:	Notes:
Sample #: 312626-005	Client Sample #: B-13-0.5'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i>	Prep Method: EPA 3545						QCBatchID: QC1130977
4,4'-DDD	ND	1	0.005	mg/Kg	10/29/12	LeiRen	
4,4'-DDE	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/29/12	LeiRen	
a-BHC	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Aldrin	ND	1	0.002	mg/Kg	10/29/12	LeiRen	
b-BHC	ND	1	0.003	mg/Kg	10/29/12	LeiRen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/29/12	LeiRen	
d-BHC	ND	1	0.005	mg/Kg	10/29/12	LeiRen	
Dieldrin	ND	1	0.003	mg/Kg	10/29/12	LeiRen	
Endosulfan I	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Endosulfan II	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Endrin	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/29/12	LeiRen	
Heptachlor	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/29/12	LeiRen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/29/12	LeiRen	
Methoxychlor	ND	1	0.025	mg/Kg	10/29/12	LeiRen	
Toxaphene	ND	1	0.25	mg/Kg	10/29/12	LeiRen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	93	39-149	
Tetrachloro-m-xylene TCMX (SUR)	99	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/24/2012 09:45	Site:	Notes:
Sample #: 312626-006	Client Sample #: B-13-2'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i>	Prep Method: EPA 3545		QCBatchID: QC1130977				
4,4'-DDD	ND	1	0.005	mg/Kg	10/29/12	LeiRen	
4,4'-DDE	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/29/12	LeiRen	
a-BHC	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Aldrin	ND	1	0.002	mg/Kg	10/29/12	LeiRen	
b-BHC	ND	1	0.003	mg/Kg	10/29/12	LeiRen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/29/12	LeiRen	
d-BHC	ND	1	0.005	mg/Kg	10/29/12	LeiRen	
Dieldrin	ND	1	0.003	mg/Kg	10/29/12	LeiRen	
Endosulfan I	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Endosulfan II	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Endrin	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/29/12	LeiRen	
Heptachlor	ND	1	0.004	mg/Kg	10/29/12	LeiRen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/29/12	LeiRen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/29/12	LeiRen	
Methoxychlor	ND	1	0.025	mg/Kg	10/29/12	LeiRen	
Toxaphene	ND	1	0.25	mg/Kg	10/29/12	LeiRen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	98	39-149	
Tetrachloro-m-xylene TCMX (SUR)	79	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312626

QCBatchID: QC1130977	Analyst: LeiRen	Method: EPA 8081A	
Matrix: Solid	Analyzed: 10/25/2012	Instrument: SVOA-GC (group)	

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1130977MB1				
4,4'-DDD	ND	mg/Kg	0.005	
4,4'-DDE	ND	mg/Kg	0.004	
4,4'-DDT	ND	mg/Kg	0.005	
a-BHC	ND	mg/Kg	0.004	
Aldrin	ND	mg/Kg	0.002	
b-BHC	ND	mg/Kg	0.003	
Chlordane (technical)	ND	mg/Kg	0.025	
d-BHC	ND	mg/Kg	0.005	
Dieldrin	ND	mg/Kg	0.003	
Endosulfan I	ND	mg/Kg	0.004	
Endosulfan II	ND	mg/Kg	0.004	
Endosulfan sulfate	ND	mg/Kg	0.004	
Endrin	ND	mg/Kg	0.004	
Endrin aldehyde	ND	mg/Kg	0.004	
Endrin Ketone	ND	mg/Kg	0.005	
Heptachlor	ND	mg/Kg	0.004	
Heptachlor epoxide	ND	mg/Kg	0.003	
Lindane (Gamma-BHC)	ND	mg/Kg	0.003	
Methoxychlor	ND	mg/Kg	0.025	
Toxaphene	ND	mg/Kg	0.25	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes	
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD		
QC1130977LCS1												
4,4'-DDE	0.1		0.11		mg/Kg	110					70-130	
4,4'-DDT	0.1		0.13		mg/Kg	130					55-130	
a-BHC	0.1		0.11		mg/Kg	110					70-130	
Aldrin	0.1		0.11		mg/Kg	110					55-130	
b-BHC	0.1		0.11		mg/Kg	110					70-130	
d-BHC	0.1		0.099		mg/Kg	99					70-130	
Dieldrin	0.1		0.10		mg/Kg	100					76-151	
Endosulfan I	0.1		0.11		mg/Kg	110					70-130	
Endosulfan II	0.1		0.098		mg/Kg	98					70-130	
Endosulfan sulfate	0.1		0.096		mg/Kg	96					70-130	
Endrin	0.1		0.11		mg/Kg	110					55-130	
Endrin aldehyde	0.1		0.12		mg/Kg	120					70-130	
Heptachlor	0.1		0.12		mg/Kg	120					55-130	
Heptachlor epoxide	0.1		0.12		mg/Kg	120					70-130	
Lindane (Gamma-BHC)	0.1		0.12		mg/Kg	120					55-130	
Methoxychlor	0.1		0.10		mg/Kg	100					70-130	

ND = Not Detected or < RDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312626

QCBatchID: <u>QC1130977</u>	Analyst: LeiRen	Method: EPA 8081A	
Matrix: Solid	Analyzed: 10/25/2012	Instrument: SVOA-GC (group)	

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1130977MS1, QC1130977MSD1							Source: 312599-001					
4,4'-DDE	ND	0.1	0.1	0.097	0.089	mg/Kg	97	89	8.6	70-130	35	
4,4'-DDT	ND	0.1	0.1	0.11	0.10	mg/Kg	110	100	9.5	50-135	35	
a-BHC	ND	0.1	0.1	0.10	0.095	mg/Kg	100	95	5.1	70-130	35	
Aldrin	ND	0.1	0.1	0.098	0.089	mg/Kg	98	89	9.6	50-135	35	
b-BHC	ND	0.1	0.1	0.11	0.094	mg/Kg	110	94	15.7	70-130	35	
d-BHC	ND	0.1	0.1	0.087	0.078	mg/Kg	87	78	10.9	70-130	35	
Dieldrin	ND	0.1	0.1	0.094	0.086	mg/Kg	94	86	8.9	76-151	35	
Endosulfan I	ND	0.1	0.1	0.10	0.093	mg/Kg	100	93	7.3	70-130	35	
Endosulfan II	ND	0.1	0.1	0.086	0.079	mg/Kg	86	79	8.5	70-130	35	
Endosulfan sulfate	ND	0.1	0.1	0.086	0.079	mg/Kg	86	79	8.5	70-130	35	
Endrin	ND	0.1	0.1	0.10	0.094	mg/Kg	100	94	6.2	50-135	35	
Endrin aldehyde	ND	0.1	0.1	0.10	0.093	mg/Kg	100	93	7.3	70-130	35	
Heptachlor	ND	0.1	0.1	0.11	0.10	mg/Kg	110	100	9.5	50-135	35	
Heptachlor epoxide	ND	0.1	0.1	0.11	0.097	mg/Kg	110	97	12.6	70-130	35	
Lindane (Gamma-BHC)	ND	0.1	0.1	0.11	0.097	mg/Kg	110	97	12.6	50-135	35	
Methoxychlor	ND	0.1	0.1	0.13	0.12	mg/Kg	130	120	8.0	70-130	35	

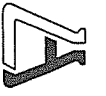
ND = Not Detected or < RDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



Notes and Definitions

B	Analyte was present in an associated method blank. Associated sample data was reported with qualifier.
C	Laboratory Contamination.
D	The sample duplicate RPD was not within control limits, the sample data was reported without further clarification.
DF	Dilution Factor
DW	Sample result is calculated on a dry weigh basis
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
MDL	Method Detection Limit
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
ND	Analyte was not detected or was less than the detection limit.
P	Sample was received without proper preservation according to EPA guidelines.
RDL	Reporting Detection Limit
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
T	Sample was extracted/analyzed past the holding time.





Chain of Custody Record

Lab Job No. 312624
 Page 1 of 2

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

CUSTOMER INFORMATION		PROJECT INFORMATION	
COMPANY: <u>Lighton & Associates</u>	PROJECT NAME: <u>Campus Park West</u>	SEND REPORT TO: <u>Gene Teverson</u>	NUMBER: <u>042410-004</u>
EMAIL: <u>glellegend@lightongroup.com</u>	ADDRESS: <u>1-15 & CA-96</u>	ADDRESS: <u>3934 MURPHY CANYON RD B-205</u>	ADDRESS: <u>SAN DIEGO COUNTY, CA</u>
ADDRESS: <u>SAN DIEGO CA 92125</u>	PO.#:	PHONE: <u>(949) 378-8448</u>	SAMPLED BY: <u>BCP</u>

ANALYSIS REQUEST
8081 - PESTICIDES

Sample ID	Date	Time	Matrix	Container Number/Size	Pres.	Test Instructions & Comments
1	B-11-0.5'	10/24/12	9:08	S	1-8oz TAE	① X
2	B-11-2.5'		9:13			
3	B-12-0.5'		9:23			
4	B-12-3'		9:27			
5	B-13-0.5'		9:40			
6	B-13-2'		9:45			
7	B-14-0.5'		10:02			
8	B-14-2.5'		10:08			
9						
10						
11						
12						
13						
14						
15						

Total No. of Samples: 8 Method of Shipment: Cooled Preservative: 1 = Ice 2 = HCl 3 = HNO₃ 4 = H₂SO₄ 5 = NaOH 6 = Other

Signature: <u>[Signature]</u>	Signature: <u>[Signature]</u>	Signature: <u>[Signature]</u>	Signature: <u>[Signature]</u>
Printed Name: <u>DELAN PIERCE</u>	Printed Name: <u>Walt Lopez</u>	Printed Name: <u>ALT Lopez</u>	Printed Name: <u>Samuel Lee</u>
Date: <u>10/24/12</u> Time: <u>11:55</u>	Date: <u>10-24-12</u> Time: <u>11:55</u>	Date: <u>10-24-12</u> Time: <u>3:00</u>	Date: <u>10-24-12</u> Time: <u>1510</u>

Nataliya Afendikova

From: Danielle Roberts [droberts@associatedlabs.com]
Sent: Thursday, October 25, 2012 1:57 PM
To: 'Greg Hess'
Cc: nafendikova@associatedlabs.com
Subject: 312626

Just received a call from Leighton. They want to put a hold on 312626

-001

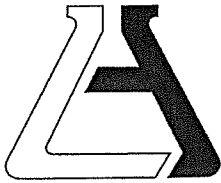
-002

-007

-008

For 8081

Danielle Roberts
Project Manager
Associated Laboratories
806 N. Batavia
Orange, CA 92868
droberts@associatedlabs.com
Tel 714-771-6900
Cell 714-920-5157



ASSOCIATED LABORATORIES

806 North Batavia – Orange, California 92868 – 714-771-6900

FAX 714-538-1209

SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: Leighton's Assu Project: _____
 Date Received: 10/24/12 Sampler's Name: Yes No
 Sample(s) received in cooler: Yes No (Skip Section 2)
 Shipping Information: _____

Section 2
 Was the cooler packed with: Ice ___ Ice Packs ___ Bubble Wrap ___ Styrofoam
 ___ Paper ___ None ___ Other _____
 Cooler or box temperature: 2°C
 (Acceptance range is 0 to 6 Deg. C.)

Section 3	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>		
Is it properly completed? (IDs, sampling date and time, signature, test)	<input checked="" type="checkbox"/>		
Were custody seals present?		<input checked="" type="checkbox"/>	
If Yes – were they intact?			<input checked="" type="checkbox"/>
Were all samples sealed in plastic bags?		<input checked="" type="checkbox"/>	
Did all samples arrive intact? If no, indicate below.	<input checked="" type="checkbox"/>		
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>		
Were correct containers used for the tests required?	<input checked="" type="checkbox"/>		
Was a sufficient amount of sample sent for tests indicated?	<input checked="" type="checkbox"/>		
Was there headspace in VOA vials?			<input checked="" type="checkbox"/>
Were the containers labeled with correct preservatives?			<input checked="" type="checkbox"/>
Was total residual chlorine measured (Fish Bioassay samples only)? *			<input checked="" type="checkbox"/>

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

Section 4
 Explanations/Comments

Section 5
 Was Project Manager notified of discrepancies: Y / N N/A

Completed By: Daniel Lee Date: 10/24/12



Associated Laboratories

806 N. Batavia - Orange, CA 92868
Tel (714)771-6900 Fax (714)538-1209
www.associatedlabs.com
Info@associatedlabs.com



Client: Leighton and Associates
Address: 3934 Murphy Canyon Drive
#B-205
San Diego, CA 92123
Attn: Gwen Tellegen

Lab Request: 312722
Report Date: 10/31/2012
Date Received: 10/25/2012

Client ID: 14085

Comments: #042410.004, Campus Park West
I-5 & CA-76 NE

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

<u>Sample #</u>	<u>Client Sample ID</u>
312722-001	B15-0.5'
312722-002	B15-2.0'
312722-003	B16-0.5'
312722-004	B16-2.5'

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Edward S. Behare, Ph.D.
Lab Director

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date reported.

The reports of the Associated Laboratories are confidential property of our clients and may not be reproduced or used for publication in part or in full without our written permission. This is for the mutual protection of the public, our clients, and ourselves.

TESTING & CONSULTING
Chemical
Microbiological
Environmental

Matrix: Solid	Client: Leighton and Associates	Collector:
Sampled: 10/25/2012 14:25	Site:	Notes:
Sample #: 312722-001	Client Sample #: B15-0.5'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i>	Prep Method: EPA 3545						QCBatchID: QC1131016
4,4'-DDD	ND	1	0.005	mg/Kg	10/30/12	LeiRen	
4,4'-DDE	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/30/12	LeiRen	
a-BHC	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Aldrin	ND	1	0.002	mg/Kg	10/30/12	LeiRen	
b-BHC	ND	1	0.003	mg/Kg	10/30/12	LeiRen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/30/12	LeiRen	
d-BHC	ND	1	0.005	mg/Kg	10/30/12	LeiRen	
Dieldrin	ND	1	0.003	mg/Kg	10/30/12	LeiRen	
Endosulfan I	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Endosulfan II	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Endrin	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/30/12	LeiRen	
Heptachlor	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/30/12	LeiRen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/30/12	LeiRen	
Methoxychlor	ND	1	0.025	mg/Kg	10/30/12	LeiRen	
Toxaphene	ND	1	0.25	mg/Kg	10/30/12	LeiRen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	107	39-149	
Tetrachloro-m-xylene TCMX (SUR)	117	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/25/2012 14:35	Site:	Notes:
Sample #: 312722-002	Client Sample #: B15-2.0'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i>		Prep Method: EPA 3545		QCBatchID: QC1131016			
4,4'-DDD	ND	1	0.005	mg/Kg	10/30/12	LeiRen	
4,4'-DDE	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/30/12	LeiRen	
a-BHC	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Aldrin	ND	1	0.002	mg/Kg	10/30/12	LeiRen	
b-BHC	ND	1	0.003	mg/Kg	10/30/12	LeiRen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/30/12	LeiRen	
d-BHC	ND	1	0.005	mg/Kg	10/30/12	LeiRen	
Dieldrin	ND	1	0.003	mg/Kg	10/30/12	LeiRen	
Endosulfan I	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Endosulfan II	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Endrin	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/30/12	LeiRen	
Heptachlor	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/30/12	LeiRen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/30/12	LeiRen	
Methoxychlor	ND	1	0.025	mg/Kg	10/30/12	LeiRen	
Toxaphene	ND	1	0.25	mg/Kg	10/30/12	LeiRen	

Analyte	% Recovery	Limits	Notes
<i>Decachlorobiphenyl DCB (SUR)</i>	102	39-149	
<i>Tetrachloro-m-xylene TCMX (SUR)</i>	108	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/25/2012	Site:	Notes:
Sample #: 312722-003	Client Sample #: B16-0.5'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i>	Prep Method: EPA 3545		QCBatchID: QC1131016				
4,4'-DDD	ND	1	0.005	mg/Kg	10/30/12	LeiRen	
4,4'-DDE	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/30/12	LeiRen	
a-BHC	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Aldrin	ND	1	0.002	mg/Kg	10/30/12	LeiRen	
b-BHC	ND	1	0.003	mg/Kg	10/30/12	LeiRen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/30/12	LeiRen	
d-BHC	ND	1	0.005	mg/Kg	10/30/12	LeiRen	
Dieldrin	ND	1	0.003	mg/Kg	10/30/12	LeiRen	
Endosulfan I	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Endosulfan II	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Endrin	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/30/12	LeiRen	
Heptachlor	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/30/12	LeiRen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/30/12	LeiRen	
Methoxychlor	ND	1	0.025	mg/Kg	10/30/12	LeiRen	
Toxaphene	ND	1	0.25	mg/Kg	10/30/12	LeiRen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	91	39-149	
Tetrachloro-m-xylene TCMX (SUR)	103	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



Matrix: Solid	Client: Leighton and Associates	Collector: Client
Sampled: 10/25/2012	Site:	Notes:
Sample #: 312722-004	Client Sample #: B16-2.5'	

Analyte	Result	DF	RDL	Units	Analyzed	By	Notes
Method: EPA 8081 <i>NELAC</i>							QCBatchID: QC1131016
Prep Method: EPA 3545							
4,4'-DDD	ND	1	0.005	mg/Kg	10/30/12	LeiRen	
4,4'-DDE	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
4,4'-DDT	ND	1	0.005	mg/Kg	10/30/12	LeiRen	
a-BHC	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Aldrin	ND	1	0.002	mg/Kg	10/30/12	LeiRen	
b-BHC	ND	1	0.003	mg/Kg	10/30/12	LeiRen	
Chlordane (technical)	ND	1	0.025	mg/Kg	10/30/12	LeiRen	
d-BHC	ND	1	0.005	mg/Kg	10/30/12	LeiRen	
Dieldrin	ND	1	0.003	mg/Kg	10/30/12	LeiRen	
Endosulfan I	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Endosulfan II	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Endosulfan sulfate	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Endrin	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Endrin aldehyde	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Endrin Ketone	ND	1	0.005	mg/Kg	10/30/12	LeiRen	
Heptachlor	ND	1	0.004	mg/Kg	10/30/12	LeiRen	
Heptachlor epoxide	ND	1	0.003	mg/Kg	10/30/12	LeiRen	
Lindane (Gamma-BHC)	ND	1	0.003	mg/Kg	10/30/12	LeiRen	
Methoxychlor	ND	1	0.025	mg/Kg	10/30/12	LeiRen	
Toxaphene	ND	1	0.25	mg/Kg	10/30/12	LeiRen	

Analyte	% Recovery	Limits	Notes
Decachlorobiphenyl DCB (SUR)	117	39-149	
Tetrachloro-m-xylene TCMX (SUR)	114	50-125	

ND = Not Detected or < RDL

RDL = Reporting Detection Limit

DF = Dilution Factor



ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312722

QC Batch ID: QC1131016	Analyst: LeiRen	Method: EPA 8081A	
Matrix: Solid	Analyzed: 10/29/2012	Instrument: SVOA-GC (group)	

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1131016MB1				
4,4'-DDD	ND	mg/Kg	0.005	
4,4'-DDE	ND	mg/Kg	0.004	
4,4'-DDT	ND	mg/Kg	0.005	
a-BHC	ND	mg/Kg	0.004	
Aldrin	ND	mg/Kg	0.002	
b-BHC	ND	mg/Kg	0.003	
Chlordane (technical)	ND	mg/Kg	0.025	
d-BHC	ND	mg/Kg	0.005	
Dieldrin	ND	mg/Kg	0.003	
Endosulfan I	ND	mg/Kg	0.004	
Endosulfan II	ND	mg/Kg	0.004	
Endosulfan sulfate	ND	mg/Kg	0.004	
Endrin	ND	mg/Kg	0.004	
Endrin aldehyde	ND	mg/Kg	0.004	
Endrin Ketone	ND	mg/Kg	0.005	
Heptachlor	ND	mg/Kg	0.004	
Heptachlor epoxide	ND	mg/Kg	0.003	
Lindane (Gamma-BHC)	ND	mg/Kg	0.003	
Methoxychlor	ND	mg/Kg	0.025	
Toxaphene	ND	mg/Kg	0.25	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes	
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD		
QC1131016LCS1												
4,4'-DDE	0.1		0.11		mg/Kg	110					70-130	
4,4'-DDT	0.1		0.13		mg/Kg	130					55-130	
a-BHC	0.1		0.11		mg/Kg	110					70-130	
Aldrin	0.1		0.11		mg/Kg	110					55-130	
b-BHC	0.1		0.12		mg/Kg	120					70-130	
d-BHC	0.1		0.089		mg/Kg	89					70-130	
Dieldrin	0.1		0.11		mg/Kg	110					76-151	
Endosulfan I	0.1		0.11		mg/Kg	110					70-130	
Endosulfan II	0.1		0.099		mg/Kg	99					70-130	
Endosulfan sulfate	0.1		0.095		mg/Kg	95					70-130	
Endrin	0.1		0.11		mg/Kg	110					55-130	
Endrin aldehyde	0.1		0.10		mg/Kg	100					70-130	
Heptachlor	0.1		0.13		mg/Kg	130					55-130	
Heptachlor epoxide	0.1		0.12		mg/Kg	120					70-130	
Lindane (Gamma-BHC)	0.1		0.11		mg/Kg	110					55-130	
Methoxychlor	0.1		0.11		mg/Kg	110					70-130	

ND = Not Detected or < RDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



ASSOCIATED LABORATORIES QC SUMMARY FOR LAB REQUEST #312722

QC Batch ID: QC1131016	Analyst: LeiRen	Method: EPA 8081A	
Matrix: Solid	Analyzed: 10/29/2012	Instrument: SVOA-GC (group)	

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
Source: 312722-001												
QC1131016MS1, QC1131016MSD1												
4,4'-DDE	ND	0.1	0.1	0.11	0.11	mg/Kg	110	110	0.0	70-130	35	
4,4'-DDT	ND	0.1	0.1	0.12	0.12	mg/Kg	120	120	0.0	50-135	35	
a-BHC	ND	0.1	0.1	0.11	0.11	mg/Kg	110	110	0.0	70-130	35	
Aldrin	ND	0.1	0.1	0.10	0.10	mg/Kg	100	100	0.0	50-135	35	
b-BHC	ND	0.1	0.1	0.11	0.11	mg/Kg	110	110	0.0	70-130	35	
d-BHC	ND	0.1	0.1	0.094	0.083	mg/Kg	94	83	12.4	70-130	35	
Dieldrin	ND	0.1	0.1	0.10	0.10	mg/Kg	100	100	0.0	76-151	35	
Endosulfan I	ND	0.1	0.1	0.11	0.11	mg/Kg	110	110	0.0	70-130	35	
Endosulfan II	ND	0.1	0.1	0.094	0.097	mg/Kg	94	97	3.1	70-130	35	
Endosulfan sulfate	ND	0.1	0.1	0.093	0.090	mg/Kg	93	90	3.3	70-130	35	
Endrin	ND	0.1	0.1	0.11	0.11	mg/Kg	110	110	0.0	50-135	35	
Endrin aldehyde	ND	0.1	0.1	0.099	0.095	mg/Kg	99	95	4.1	70-130	35	
Heptachlor	ND	0.1	0.1	0.11	0.12	mg/Kg	110	120	8.7	50-135	35	
Heptachlor epoxide	ND	0.1	0.1	0.11	0.11	mg/Kg	110	110	0.0	70-130	35	
Lindane (Gamma-BHC)	ND	0.1	0.1	0.11	0.11	mg/Kg	110	110	0.0	50-135	35	
Methoxychlor	ND	0.1	0.1	0.11	0.11	mg/Kg	110	110	0.0	70-130	35	

ND = Not Detected or < RDL MDL = Method Detection Limit RDL = Reporting Detection Limit DF = Dilution Factor



Notes and Definitions

B	Analyte was present in an associated method blank. Associated sample data was reported with qualifier.
C	Laboratory Contamination.
D	The sample duplicate RPD was not within control limits, the sample data was reported without further clarification.
DF	Dilution Factor
DW	Sample result is calculated on a dry weigh basis
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
MDL	Method Detection Limit
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
ND	Analyte was not detected or was less than the detection limit.
P	Sample was received without proper preservation according to EPA guidelines.
RDL	Reporting Detection Limit
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
T	Sample was extracted/analyzed past the holding time.





REQUIRED TURN AROUND TIME: Standard: ✓
 72 Hours: 48 Hours: 24 Hours:

CUSTOMER INFORMATION
 COMPANY: Telekation Consulting
 PROJECT NAME: Campas Park West
 SEND REPORT TO: follegen
 NUMBER: 042410.00F
 EMAIL: gfelear@bigkhan.com
 ADDRESS: 3934 Murphy Cir B205
Santa Diego CA 92123
 P.O. #: 949 378-8448
 SAMPLED BY: GAT

ANALYSIS REQUEST
 8081 Bstcldoa

Sample ID	Date	Time	Matrix	Container Number/Size	Pres.	Test Instructions & Comments
1 B15-0.5'	10-25-12	2:28 P	soil	1g jar	none	
2 B15-2.0'	10-25-12	3:05 P	soil	1g jar	none	
3 B16-0.5'	10-25-12		soil	1g jar	none	
4 B16-2.5'	10-25-12		soil	1g jar	none	
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

Method of Shipment: Preservative: 1 = Ice 2 = HCl 3 = HNO₃ 4 = H₂SO₄ 5 = NaOH 6 = Other

Relinquished by: 1. Received By: 2. Relinquished by: 3. Received By: 3.

Signature: [Signature] Signature: [Signature] Signature: [Signature]
 Printed Name: Allen Lopez Printed Name: Allen Lopez Printed Name: [Name]
 Date: 10-25-12 3:05 P Date: 10-25-12 4:50 Date: 10-25-12 16:50
 Time: 3:05 P Time: 4:50 Time: 16:50



ASSOCIATED LABORATORIES

806 North Batavia – Orange, California 92868 – 714-771-6900

FAX 714-538-1209

SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: Leighton Project: _____
 Date Received: 10-25-12 Sampler's Name: Yes No
 Sample(s) received in cooler: Yes No (Skip Section 2)
 Shipping Information: _____

Section 2
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler or box temperature: 5.0c
 (Acceptance range is 0 to 6 Deg. C.)

Section 3	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>		
Is it properly completed? (IDs, sampling date and time, signature, test)	<input checked="" type="checkbox"/>		
Were custody seals present?		<input checked="" type="checkbox"/>	
If Yes – were they intact?			<input checked="" type="checkbox"/>
Were all samples sealed in plastic bags?	<input checked="" type="checkbox"/>		
Did all samples arrive intact? If no, indicate below.	<input checked="" type="checkbox"/>		
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>		
Were correct containers used for the tests required?	<input checked="" type="checkbox"/>		
Was a sufficient amount of sample sent for tests indicated?	<input checked="" type="checkbox"/>		
Was there headspace in VOA vials?			<input checked="" type="checkbox"/>
Were the containers labeled with correct preservatives?			<input checked="" type="checkbox"/>
Was total residual chlorine measured (Fish Bioassay samples only)? *			<input checked="" type="checkbox"/>

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

Section 4
 Explanations/Comments

Section 5
 Was Project Manager notified of discrepancies: Y / N N/A
 Completed By: M. Echeverri Date: 10/25/12

APPENDIX C
PROUCL DATASHEET



	A	B	C	D	E	F	G	H	I	J	K	L
1				General UCL Statistics for Data Sets with Non-Detects								
2	User Selected Options											
3	From File		WorkSheet.wst									
4	Full Precision		OFF									
5	Confidence Coefficient		95%									
6	Number of Bootstrap Operations		2000									
7												
8												
9	Dieldrin											
10												
11	General Statistics											
12	Number of Valid Data				28		Number of Detected Data				4	
13	Number of Distinct Detected Data				4		Number of Non-Detect Data				24	
14									Percent Non-Detects		85.71%	
15												
16	Raw Statistics						Log-transformed Statistics					
17	Minimum Detected			0.0099			Minimum Detected			-4.615		
18	Maximum Detected			0.073			Maximum Detected			-2.617		
19	Mean of Detected			0.0347			Mean of Detected			-3.617		
20	SD of Detected			0.0277			SD of Detected			0.85		
21	Minimum Non-Detect			0.003			Minimum Non-Detect			-5.809		
22	Maximum Non-Detect			0.003			Maximum Non-Detect			-5.809		
23												
24												
25	Warning: There are only 4 Distinct Detected Values in this data											
26	Note: It should be noted that even though bootstrap may be performed on this data set											
27	the resulting calculations may not be reliable enough to draw conclusions											
28												
29	It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.											
30												
31												
32	UCL Statistics											
33	Normal Distribution Test with Detected Values Only						Lognormal Distribution Test with Detected Values Only					
34	Shapiro Wilk Test Statistic			0.922			Shapiro Wilk Test Statistic			0.999		
35	5% Shapiro Wilk Critical Value			0.748			5% Shapiro Wilk Critical Value			0.748		
36	Data appear Normal at 5% Significance Level						Data appear Lognormal at 5% Significance Level					
37												
38	Assuming Normal Distribution						Assuming Lognormal Distribution					
39	DL/2 Substitution Method						DL/2 Substitution Method					
40	Mean			0.00625			Mean			-6.09		
41	SD			0.015			SD			1.066		
42	95% DL/2 (t) UCL			0.0111			95% H-Stat (DL/2) UCL			0.00673		
43												
44	Maximum Likelihood Estimate(MLE) Method						Log ROS Method					
45	Mean			0.0412			Mean in Log Scale			-7.815		
46	SD			0.024			SD in Log Scale			2.608		
47	95% MLE (t) UCL			0.0489			Mean in Original Scale			0.00569		
48	95% MLE (Tiku) UCL			0.0612			SD in Original Scale			0.0152		
49							95% t UCL			0.0106		
50							95% Percentile Bootstrap UCL			0.0109		

	A	B	C	D	E	F	G	H	I	J	K	L	
51										95% BCA Bootstrap UCL		0.0135	
52										95% H UCL		0.139	
53													
54	Gamma Distribution Test with Detected Values Only						Data Distribution Test with Detected Values Only						
55					k star (bias corrected)	0.691	Data appear Normal at 5% Significance Level						
56					Theta Star	0.0502							
57					nu star	5.529							
58													
59					A-D Test Statistic	0.208	Nonparametric Statistics						
60					5% A-D Critical Value	0.66	Kaplan-Meier (KM) Method						
61					K-S Test Statistic	0.66						Mean	0.0134
62					5% K-S Critical Value	0.398						SD	0.0126
63	Data appear Gamma Distributed at 5% Significance Level											SE of Mean	0.00274
64												95% KM (t) UCL	0.0181
65	Assuming Gamma Distribution											95% KM (z) UCL	0.018
66	Gamma ROS Statistics using Extrapolated Data											95% KM (jackknife) UCL	0.0203
67					Minimum	0.000001						95% KM (bootstrap t) UCL	0.019
68					Maximum	0.073						95% KM (BCA) UCL	0.0386
69					Mean	0.00496						95% KM (Percentile Bootstrap) UCL	0.0386
70					Median	0.000001						95% KM (Chebyshev) UCL	0.0254
71					SD	0.0154						97.5% KM (Chebyshev) UCL	0.0306
72					k star	0.125						99% KM (Chebyshev) UCL	0.0407
73					Theta star	0.0397							
74					Nu star	6.999	Potential UCLs to Use						
75					AppChi2	2.17						95% KM (t) UCL	0.0181
76	95% Gamma Approximate UCL (Use when n >= 40)					0.016						95% KM (Percentile Bootstrap) UCL	0.0386
77	95% Adjusted Gamma UCL (Use when n < 40)					N/A							
78	Note: DL/2 is not a recommended method.												
79													
80	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.												
81	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).												
82	For additional insight, the user may want to consult a statistician.												
83													