



November 18, 2014

Mr. James McCann  
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Project No. 33114-014115.01

Subject: *Subsurface Investigation Report*  
16500 and 16550 Ashland Avenue  
205 and 255 Ano Avenue  
San Lorenzo, California

Dear Mr. McCann:

Bureau Veritas North America, Inc. is pleased to submit this *Subsurface Investigation Report* for the above-referenced property.

We appreciate the opportunity to be of service to you during this project. If you have any questions or comments regarding this report, please do not hesitate to contact me at (925) 498-6512.

Sincerely,

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Enclosure

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# ***Subsurface Investigation Report***

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16500 and 16550 Ashland Avenue  
205 and 255 Ano Avenue  
San Lorenzo, California

November 18, 2014  
Project Number 33114-014115.01

Prepared for  
**Diocese of Oakland**  
Oakland, California



For the benefit of business and people

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VERITAS**

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## **1.0 INTRODUCTION**

This report presents the results of a Subsurface Investigation (SI) conducted by Bureau Veritas North America, Inc. (BVNA) at the property located at 16500 and 16550 Ashland Avenue and 205 and 255 Ano Avenue in San Lorenzo, Alameda County, California (the "Site"). The SI was performed in accordance with BVNA's Proposal No. 3303.14.321, dated August 5, 2014, Change Order No. 1, dated September 15, 2014, Change Order No. 2a, dated October 30, 2014, and based on findings of BVNA's Phase I ESA of the Site, dated July 22, 2014.

The approximate location of the Site is shown on Figure 1. Figure 2 depicts the site plan with boring/soil sampling locations from the initial phases of the SI. Figure 3 depicts the site with additional discrete soil sampling locations for pesticide evaluation. The approximately 3.14-acre Site is currently developed with three residential dwellings, pavement and foundations from former structures and fallow planting beds for a former commercial plant nursery. The objective of this SI was to evaluate surficial and subsurface soil conditions in the vicinity of Site features and historical uses.

## **2.0 SCOPE OF WORK**

BVNA performed the scope of work described in the sections below.

### **2.1 PRE-FIELD ACTIVITIES**

BVNA acquired a drilling permit from Alameda County Public Works Agency (ACPWA). A copy of the permit is appended. BVNA also completed a Site Health and Safety Plan (SHSP) for the work proposed at the Site in accordance with the requirements of the State of California General Industry Safety Order (GISO) 5192 and Title 29 of the Code of Federal Regulations, Section 1910.120 (29 CFR 1910.120). A copy of the SHSP was kept onsite during field activities. The SHSP detailed the work to be performed, safety precautions, emergency response procedures, nearest hospital information, and onsite personnel responsible for managing emergency situations. BVNA marked the proposed boring locations in white paint and notified Underground Service Alert (USA) of the intended work at least 48 hours prior to drilling, as required by law.

### **2.2 FIELD ACTIVITIES**

On August 28, and September 16, 2014, BVNA advanced 22 soil borings at the Site using direct-push drilling equipment operated by Environmental Control Associates (ECA), a California-licensed drilling firm, located in Aptos, California. The Site was subdivided into four quadrants, with four borings advanced per quadrant on August 28, 2014, to a depth of 4.0 feet below the ground surface (bgs) for the purpose of collecting soil samples; three of these were advanced to 5.0 feet bgs and completed as temporary soil vapor wells. One additional boring (SB-5) was advanced to 18 feet bgs to collect soil and groundwater samples. On September 16, 2014, BVNA advanced five (5) additional soil borings (SB-6 through SB-10) to a total depth of 5.0 feet bgs to collect additional soil vapor samples.

On October 3 and November 5, 2014, BVNA advanced 45 shallow borings to collect discrete soil samples (S-1 through S-45) to evaluate soils for organochlorine pesticide impacts. On October 3, 2014 four (4)



samples of loose surficial soil, apparent potting soil (BV-1 through BV-4) were collected that appeared to contain white vermiculite particles. The sampling locations for the above field activities are shown in Figures 2 and 3.

### **2.2.1 Soil Logging and Sampling**

On August 28, 2014, two soil samples were collected from each of the four soil borings advanced in each quadrant (16 shallow borings in total) from depths of 0.5 to 1.0 and 3.5 to 4.0 feet bgs, for a total of 32 samples retained for chemical analysis. Soil cores were collected from each borehole using a 4-foot long core barrel sampler with a PVC liner that retained a relatively undisturbed soil core.

An additional boring, SB-5 was advanced to a total depth of 18 feet bgs, and three soil samples were collected at depths of approximately 1.0, 3.0 and 10.0 feet bgs. The soil core was examined for soil classification and described on a boring log (Appendix B) in general conformance with the Unified Soil Classification System. Standard soil logging practices were employed. Field screening of the SB-5 soil core was performed using a photoionization detector (PID) to evaluate the potential presence of volatile organic compounds (VOCs). To initiate this procedure, soil samples were removed from the plastic liner, placed into labeled plastic bags and sealed. After sufficient time had elapsed for vapor build-up inside the bags, a PID probe was inserted into each bag to measure ionizable substances in the headspace. Measurements of the headspace were obtained in the parts per million (ppm) range for total VOCs. The results of the headspace tests were recorded on the boring log (Appendix B), ranging from 3.4 to 12.2 ppm.

Soil samples were collected by cutting the retrieved plastic liners containing the soil cores at the designated depths. The liners containing the soil samples were sealed with Teflon tape, aluminum foil and plastic end caps. The samples were then labeled with identifying information, and stored in a pre-chilled ice-chest awaiting transportation to the laboratory. Soil sample information, including project information, sample time, sample date, sample identification and depth, were recorded onto a chain-of-custody document that accompanied the soil samples to the analytical laboratory.

Surficial soil samples obtained on October 3, 2014 were collected by first removing loose surficial soil material and then driving a sample corer containing a stainless-steel liner 6 inches into the ground (sample depth 0.0 to 0.5 feet). Soil samples collected on November 5, 2014 were collected from soil borings advanced by ECA using direct push core samplers with PVC liners to a total depth of 2.0 feet bgs. Soil cores were retained as discrete soil samples from 0.0 to 0.5 feet and 1.5 to 2.0 feet bgs. The recovered soil core liners were sealed with Teflon tape and plastic end caps, labeled, and placed into a chilled cooler for transportation to a laboratory for analysis.

Loose soil samples containing apparent vermiculite (visually estimated at 5 percent or less vermiculite in soil) were collected by placing the suspect material into a plastic bag, which was sealed and labeled. The samples were entered onto a chain-of-custody document and forwarded to a certified laboratory for bulk asbestos testing.



### **2.2.2 Soil Vapor Sampling**

On August 28, 2014, three soil borings (SB-3B, SB-3C and SB-4A) were deepened to 5 feet bgs and completed as temporary soil vapor wells. Approximately 6 inches of clean sand was placed at the bottom of each soil vapor well. A temporary soil vapor probe was constructed by inserting a section of inert tubing containing a vapor-inlet filter at the end that was installed at an approximate depth of 4.5 to 5.0 feet bgs in each well. After the probe was set in place, an additional 6 inches of clean sand was added above the inlet filter. The borehole annulus was filled with approximately one foot of dry granular bentonite, followed by hydrated granular bentonite to grade. On September 16, 2014, BVNA installed an additional five temporary soil vapor wells (SB-6 through SB-10) in the same manner.

Soil vapor sampling was conducted in accordance with the guidance provided in the following documents: Advisory - Active Soil Gas Investigations (DTSC and RWQCB, 2012), and Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (DTSC, 2011). BVNA sampled the temporary soil vapor wells after allowing the wells to equilibrate for at least 2 hours. The vapor wells were purged before sampling by removing approximately three well volumes into a separate purge canister. After purging, soil vapor samples were collected at a flow rate of approximately 150 milliliters per minute using 1.4-liter Summa canisters provided by the certified analytical laboratory. An open container of isopropyl alcohol (IPA) was placed near the sampling manifolds during sample collection to provide a tracer test to confirm that the manifolds were secure and that there were no obvious or significant leaks. The vacuum gauge reading was recorded prior to the start of sampling and at the end of sampling to confirm sample collection. Copies of the soil vapor sampling field logs are provided in Appendix C. The soil vapor samples were recorded on a chain-of-custody document that accompanied the vapor samples from the point of collection to the analytical laboratory.

### **2.2.3 Grab Groundwater Sampling**

On August 28, 2014, BVNA collected a grab-groundwater sample from Boring SB-5. The boring was advanced to a depth of 18 feet bgs to facilitate collection of the sample. A temporary well casing consisting of 1-inch-diameter, schedule 40 PVC casing with 5 feet of slotted-screen was emplaced in the open borehole to facilitate groundwater sampling. New polyethylene tubing outfitted with a ball-check valve was used to obtain groundwater from the well casing. A grab-groundwater sample (SB-5-W) was collected in the appropriate laboratory-supplied vials and bottle-ware, and sealed, labeled and placed in a pre-chilled ice chest for delivery to the laboratory. A chain-of-custody record was completed and accompanied the grab-groundwater sample to the laboratory.

### **2.2.4 Decontamination and Borehole Abandonment**

Drilling equipment and down-hole sampling equipment were washed in a solution of non-phosphate detergent, triple-rinsed with tap water prior to each use, and allowed to dry. Upon completion of sample collection, each boring was grouted with neat cement grout to existing grade in accordance with ACPWA guidelines. The temporary soil vapor wells were destroyed after sampling by removing the probe tubing, leaving in place the hydrated bentonite seal emplaced during the construction of the temporary wells.



## 2.3 LABORATORY ANALYSES

A total of 32 soil samples collected from the 16 shallow soil borings, three (3) additional soil samples and a grab-groundwater sample collected from boring SB-5, and eight (8) soil vapor samples were submitted to Curtis & Tompkins Ltd., a California-certified laboratory located in Berkeley, California. The laboratory was instructed to composite the 0.5- and 4.0-foot bgs soil samples from the shallow borings into eight, 4-point composite samples for analysis. The three soil samples and the grab-groundwater samples from boring SB-5 were analyzed discretely. Copies of the chain-of-custody documents outlining the analytical program and certified analytical reports are provided in the Appendices D and E.

The samples were analyzed using standard United States Environmental Protection Agency (USEPA) Methods as follows:

- Total petroleum hydrocarbons (TPH) quantified as diesel-range organics (DRO) and oil-range organics (ORO) by Method 8015B – 8 four-point composite soil samples, 3 discrete soil samples and 1 grab groundwater sample.
- Volatile Organic Compounds (VOCs) and gasoline-range organics (GRO) by Method 8260B – 3 discrete soil samples and 1 grab groundwater sample.
- Semivolatile Organic Compounds (SVOCs) by Method 8270C – 3 discrete soil samples and 1 grab groundwater sample.
- Organochlorine Pesticides (OCPs) by Method 8081A – 8 four-point composite soil samples.
- California Assessment Manual (CAM) 17 Metals by Method Series 6010B/7471 – 8 four-point composite soil samples and 3 discrete soil samples.
- VOCs by Method TO-15 – 8 soil vapor samples.

Forty eight (48) discrete soil samples (S-1 through S-12, and two each from borings S-13 through S-29 plus two control split samples S-2A 0-0.5' and S-10A 0-0.5') were submitted to Test America Laboratories (TAL), a California-certified laboratory located in Pleasanton, California for analysis. Thirty four (34) discrete soil samples (two each from borings S-30 through S-45 plus two split samples S-2A 0-0.5' and S-10A 0-0.5') were submitted to Curtis & Tompkins LTD, a California certified laboratory located in Berkeley, California for Analysis. For Quality control, two samples submitted to TAL (samples S-2A 0-0.5' and S-14 0-0.5') were transferred to Accutest Laboratories, also a California-certified laboratory located in San Jose, California for analysis. These samples were analyzed using the following USEPA Method:

- Organochlorine Pesticides (OCPs) by Method 8081A - (Samples S-2A 0-0.5' & S-10A 0-0.5', and sample S-14 0-0.5', reanalyzed by Accutest, were also analyzed as matrix spike and matrix spike duplicates for quality control)

Four (4) discrete soil samples (BV-1 through BV-4) were submitted to Micro Analytical Laboratories, Inc., a California-certified laboratory located in Emeryville, California. The samples were analyzed using basic





techniques following USEPA 1982 Interim Method for Bulk Insulation Samples, and EPA-600/R93-116 (1993) methods for all types of bulk materials by visual estimations as follows:

- Bulk Asbestos Analysis - Polarized Light Microscopy (PLM)

### **3.0 INVESTIGATION FINDINGS**

Soils encountered in boring SB-5 generally consisted of interbedded sandy silt, clayey silt and silty sand silt to 13.5 feet bgs, underlain by a sand layer to 14.5 feet bgs, and silty clay to the final depth of the boring at 18 feet bgs. Groundwater was encountered at a depth of 13.5 feet bgs. The additional shallow soil borings encountered sandy silt and silty fine sand with little notable variation to the explored depths of 4 to 5 feet bgs. BVNA did not observe evidence of contaminated soil (e.g., discoloration, odors) in the borings advanced during this SI.

### **3.1 SOIL ANALYTICAL RESULTS**

Soil analytical results are provided in Appendix D. The initial composite soil sample results are summarized in Table 1, the discrete soil sample results for boring SB-5 are summarized in Table 2, and additional discrete soil sample results are summarized in Table 3. Chemical analytical results were compared to California Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for residential land use, where groundwater has potential beneficial uses, and to U.S. Environmental Protection Agency (USEPA) regional screening levels (RSLs) for residential land use. In addition, metal and OCP detections for the composite and discrete soil samples were compared to California Code of Regulations (CCR) Title 22 hazardous waste thresholds. The results are summarized below.

- Petroleum hydrocarbons and VOCs were not detected at concentrations exceeding the applicable ESLs or waste criteria thresholds in the analyzed composite and discrete soil samples (Tables 1 and 2).
- SVOCs were not detected at concentrations exceeding ESLs, except for one detection of phenol at 1.2 mg/kg in the 10-foot-bgs sample collected from SB-5, which exceeds the groundwater protection ESL of 0.076 milligrams per kilogram (mg/kg) but not the residential direct Exposure ESL of 23,000 mg/kg (Table 2).
- Reported detections of OCPs in the 78 discrete soil samples analyzed included: Aldrin, 4,4-DDT, 4,4-DDD, 4,4-DDE, Dieldrin, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin aldehyde, Endrin, Endrin ketone, technical Chlordane,  $\alpha$ -Chlordane, Heptachlor epoxide,  $\alpha$ -Lindane,  $\gamma$ -Lindane, and  $\delta$ -Lindane. Analytes not detected included beta-Lindane, Methoxychlor, and Toxaphene. Analyte concentrations that exceeded an ESL for residential property use are as follows:
  - Dieldrin was detected in 54 of the 78 discrete soil samples analyzed at concentrations that ranged from 0.0025 to 3.20 mg/kg. Discrete soil samples analyzed were collected to a maximum depth of 2 feet bgs. Composite sample results for OCPs collected to a maximum depth of 4 feet bgs, indicated that residual OCPs of concern exist in shallow soils, most notably in the upper one-half foot. All 54 detections exceeded the Soil Leachate ESL



protective of groundwater of 0.0023 mg/kg. Thirty four (34) of the 54 detections exceeded the Direct Exposure ESL for residential property use of 0.034 mg/kg (Table 3).

- Aldrin was detected in 9 of the 78 discrete soil samples analyzed, only in samples collected between 0.0 and 0.5 feet bgs, at concentrations from 0.0024 to 0.120 mg/kg. Two samples had concentrations that exceeded the direct contact ESL of 0.032 mg/kg for residential use (Table 3).
- Chlordane or technical Chlordane is a pesticide that is composed of over 120 structurally related compounds; two prominent isomers are  $\alpha$ - and  $\beta$ -Chlordane. Technical Chlordane and or its two isomers were detected in 48 of the 78 discrete soil samples analyzed at concentrations that ranged from 0.0019 to 2.50 mg/kg. Eight (8) of the 48 detections exceeded the Direct Exposure ESL for residential property use of 0.044 mg/kg (Table 3).
- Gamma-Lindane ( $\gamma$ -BHC,  $\gamma$ -Lindane, also gamma-hexachlorocyclohexane), a variant of hexachlorocyclohexane is an agricultural and pharmaceutical insecticide.  $\gamma$ -Lindane was detected in 3 of the 78 discrete soil samples analyzed at concentrations that ranged from 0.0031 to 0.011 mg/kg. Two detections exceeded the residential soil RSL of 0.0098 mg/kg and the groundwater protection ESL of 0.0098 mg/kg. (Table 3).
- Various metals detected in the composite and discrete soil samples were not detected at concentrations that exceed the applicable ESLs, with the exception of arsenic. Detected arsenic concentrations in all samples range from 3.5 to 4.3 mg/kg, which exceed the ESL of 0.39 mg/kg. The detected metals concentrations did not exceed hazardous waste criteria thresholds.
- Loose soil samples containing apparent vermiculite did not contain asbestos.

### 3.2 GROUNDWATER ANALYTICAL RESULTS

Groundwater analytical results for sample SB-5 are included in Appendix D. Analyzed petroleum hydrocarbons as GRO, DRO and ORO; VOCs and SVOCs were not detected above laboratory reporting limits in the grab-groundwater sample SB-5-W.

### 3.3 SOIL VAPOR ANALYTICAL RESULTS

Soil vapor analytical results are included in Appendix E and summarized in Table 3. The soil vapor results were compared to ESLs and RSLs for residential land use. The California Department of Toxic Substances Control (DTSC) recognizes the USEPA - RSLs; however, a number of VOCs commonly found in soil vapor have been evaluated by DTSC using different inputs, which resulted in modified air screening levels (DTSC, Office of Human and Ecological Risk (HERO), Human Health Risk Assessment (HHRA), Note Number 3, July 14, 2014). DTSC also published guidance on soil gas migration to indoor air using a default attenuation factor (AF) of 0.05 (Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air, October 2011). Therefore, BVNA also compared the soil vapor results to the calculated California Modified RSLs'. VOCs in soil vapor were not detected at concentrations above ESLs, RSLs or California modified RSLs, except as follows:

- Benzene detections in SB-3B-SV (42 micrograms per cubic meter [ $\mu\text{g}/\text{m}^3$ ]) and SB-3C-SV (67  $\mu\text{g}/\text{m}^3$ ) match or exceed the RWQCB residential ESL value of 42  $\mu\text{g}/\text{m}^3$  for soil gas that could be a



concern for intrusion into an occupied structure or confined space. Six (6) of the 10 samples had a benzene concentration that exceeds the calculated California modified RSL (DTSC 2014) with the default AF of 1.7 ug/m<sup>3</sup>. Benzene was not reported in samples SB-8 and SB-10, which may be due to laboratory raised detection levels due to chemical interference.

### **3.4 QUALITY ASSURANCE/QUALITY CONTROL**

The analytical laboratory data was reviewed by BVNA to establish its validity and to ensure the laboratory data was complete and accurate. BVNA verified that holding times for each analytical method were achieved and that the laboratory achieved the specific data quality objectives for each selected analytical method, with the exception of the VOC analyses of the discrete soil samples. The VOC analyses were run 5 days beyond holding time due to a lab tracking error. A review of the data validation process indicates that the laboratories completed QA/QC activities required for the samples such as blanks, lab control samples, matrix spikes, and duplicates. Minor QA/QC issues commonly associated with these analyses are noted in the laboratory analytical reports. The QA/QC parameters for the samples were generally within acceptable limits and suggest that the data is useful for its intended purpose.

### **4.0 HUMAN RISK ASSESSMENT**

Due to the finding of residual OCPs in surficial soils and the proposed future use of the property for school and residential use, the OCP results were evaluated for potential human health risks. BVNA retained Copeland & Associated, Inc. (CAI), to evaluate the potential human health risk for the detected OCP compounds. CAI prepared a Human Risk Assessment report of their findings dated November 17, 2014 (Appendix F).

CAI concluded that OCP soil concentrations exceeded the generally acceptable Regional Screening Levels (RSLs) established by the USEPA and Cal EPA for incremental lifetime cancer risks (ILCRs) for unrestricted residential use with a 95% upper confidence level (95UCL) of 2E-05 based on Dieldrin concentrations. Residential use based on maximum soil concentrations for Dieldrin, Aldrin and Chlordane present an ILCR of 4E-05. School use ILCRs for adults was reported to slightly exceed the target of 1E-06 with a 95UCL risk of 7E-06 and a maximum ILCR of 4E-05. The non-carcinogenic health hazard for residential and school use for both the 95UCL and the maximum soil concentration was found to be acceptable. The non-cancer health hazard is reported as a Health Quotient (HQ), and the acceptable HQ is 1 or less.

### **5.0 CONCLUSION**

The finding of Dieldrin, Aldrin, Chlordane and other OCPs in soil samples suggests that OCP pesticides were used or stored at the Site in multiple locations during the approximately 60 years that the nursery was in operation. The data indicates that surficial soil covering between 50 to 60 percent of the Site is impacted with residual OCPs. Dieldrin was detected in 54 of 78 the discrete soil samples analyzed, with 33 of these exceeding the direct contact ESL for residential use. Several samples also had detections of Aldrin and Chlordane that exceeded the direct contact ESL.



Although Dieldrin was detected at concentrations above the groundwater protection ESL in numerous shallow soil samples across the Site, it was generally below laboratory reporting levels or at low concentrations in samples collected at 1.5-2 feet bgs, and was not detected in the underlying 4.0 foot bgs composite samples. Based on the approximate 10- to 13-foot-interval between the detected concentrations and the water table, the potential for impact to groundwater from Dieldrin is considered to be insignificant.

Phenol was detected in the 10-foot-bgs, discrete soil sample from boring SB-5 at a concentration above the groundwater protection ESL. This compound was not detected in groundwater encountered immediately beneath this depth. The phenol detection appears anomalous in that it was not detected in the overlying 1.0-foot and 3.0-foot-bgs soil samples or the groundwater sample. The source of the phenol detection is unknown and is considered to be insignificant.

Various metals were detected at concentrations that appear to be within background concentrations for the region. Studies of normal or background arsenic concentrations in regional soils have been conducted. One study analyzed regional soils in the San Francisco Bay Area, and the upper range of arsenic in soils was reported at 11 mg/kg (Source: Duverge, 2011). Another study found the upper background concentration for arsenic in soil to be 30 mg/kg (Source: LBNL, 2002). The California Environmental Protection Agency (Cal EPA) and other agencies within California typically do not require cleanup of naturally occurring chemicals to less than background concentrations. The detected concentrations of total metals in the analyzed samples do not appear to show significant variation across the Site, indicating that the material composition is relatively homogenous and is naturally-occurring.

Loose surficial soils that are high in organic materials were observed on Site and appeared to be commercially prepared potting soil suspect of containing vermiculite like materials. The material was sampled to assess the potential for asbestos. No detectable asbestos concentrations were reported in soils analyzed by standard PLM methods. No additional testing is recommended.

Benzene was detected in soil vapor samples collected for this investigation at concentrations exceeding the ESLs and California modified RSLs. Benzene appears to be most elevated in the northeastern portion of the Site in the former general operations area of the nursery near former USTs and former storage structures. The northern and western portions of the Site that have historical and current residential use have detectable benzene concentrations that are below the residential ESL for benzene. Additional investigation may be warranted of indoor air quality in existing residential structures and portions of the site that are designated for future residential use to better assess the potential for possible vapor intrusion into indoor air and the possible necessity for mitigation actions.

The Screening-Level Risk Evaluation by CAI indicates that surficial soils on the Site contain OCPs at concentrations that present a greater than generally acceptable cancer risk for residential use of the Site and slightly exceeds the generally acceptable cancer risk for school use of the Site. If Site soils are remediated, confirmation sampling is recommended for OCP compounds; an additional human health risk assessment may be appropriate if OCP residuals are found to remain on Site in areas designated for residential use or redevelopment for other future uses not currently proposed.



## 6.0 REPRESENTATIONS AND LIMITATIONS

This report is based upon current Site conditions known by BVNA and current laws, policies, and regulations. The information and opinions rendered in this Report are exclusively for use by the Diocese of Oakland. No other party shall rely on the information or opinions presented in this report unless directed by the Diocese of Oakland. BVNA will not distribute or publish this report without consent except as required by law or court order. The information and opinions expressed in this report are given in response to a limited assignment and should be considered and implemented only in light of that assignment. The services provided by BVNA in completing this project were consistent with normal standards of the profession. No other warranty, expressed or implied, is made.

This report prepared by:

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Donald A. Ashton, PG, REPA  
Senior Project Manager  
Health, Safety, and Environmental Services

This report reviewed by:

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Sophie Lagacé, P.E.  
Environmental Services Manager  
Health, Safety, and Environmental Services

November 18, 2014  
Project No. 33114-014115.01



## 7.0 REFERENCES

- Bureau Veritas North America, Inc. (BVNA), 2014. *Phase I Environmental Site Assessment, 16500 & 16600 Ashland Avenue and 205 & 255 Ano Avenue, San Lorenzo, California*, July 22, 2014.
- California Department of Toxic Substances Control (DTSC), 2011, *Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air*, Final, October 2011.
- California Department of Toxic Substances Control (DTSC), Los Angeles Regional Water Control Board, San Francisco Regional Water Quality Control Board, *Advisory Active Soil Gas Investigations*, April 2012 (DTSC-RWQCB 2012).
- California Department of Toxic Substances Control (DTSC), 2014. *Human Health Risk Assessment (HHRA), Note 3*, July 2014 (DTSC 2014).
- California Regional Water Quality Control Board (RWQCB), San Francisco Bay Region, 2013. *User's Guide, Derivation and Application of Environmental Screening Levels*, Interim Final, December 2013.
- Copeland & Associates, Inc., *Health Risk Assessment, for Real Estate Property Located at 16500 and 16550 Ashland Avenue; and 205 and 255 Ano Avenue, San Lorenzo, California*, November 17, 2014.
- Lawrence Berkeley National Laboratory, *Analysis of Background Distributions of Metals in the Soil at Lawrence Berkeley National Laboratory*, June 2002 (LBNL 2002).
- San Francisco State University Thesis by Dylan Jacques Duverge, *Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Retention*, December 2011 (Duverge 2011).



## TABLES

**TABLE 1**  
**Composite Soil Analytical Results**  
**TPH, OCPs and Metals**

16500 and 16550 Ashland Avenue - 205 and 255 Ano Avenue  
 San Lorenzo, California

Sample ID		SB-1-0.5 Comp	SB-2-0.5 Comp	SB-3-0.5 Comp	SB-4-0.5 Comp	SB-1-4.0 Comp	SB-2-4.0 Comp	SB-3-4.0 Comp	SB-4-4.0 Comp	RWQCB ESL Residential Direct Exposure	RWQCB ESL Groundwater Protection	TTLc	STLC (10x)	TCLP (20x)
Sample Date		8/28/2014	8/28/2014	8/28/2014	8/28/2014	8/28/2014	8/28/2014	8/28/2014	8/28/2014					
TPH (mg/kg)	DRO	<b>3.5 Y</b>	<b>1.8 Y</b>	<1.0	4.5 Y	<1.0	<b>1.0 Y</b>	<b>1.6 Y</b>	<1.0	240	100	--	--	--
	MRO	<b>24</b>	<b>14</b>	<b>9.8</b>	<b>27</b>	<5.0	<5.0	<5.0	<5.0	10,000	100	--	--	--
OCPs (mg/kg)	4,4-DDT	<0.0033	<0.0033	<b>0.0048 C</b>	<b>0.0067 C</b>	<0.0033	<0.0033	<0.0033	<0.0033	1.7	4.3	1.0	1.0	--
	4,4-DDE	<0.0033	<0.0033	<0.0033	0.0045	<0.0033	<0.0033	<0.0033	<0.0033	1.7	1,100	1.0	1.0	--
	4,4-DDD	<b>0.0046</b>	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	2.4	750	1.0	1.0	--
	Dieldrin	<b>0.0028 C</b>	<b>0.0040</b>	<b>0.0053</b>	<b>0.0030 C</b>	<0.0017	<0.0017	<0.0017	<0.0017	0.034	<b>0.0023</b>	8.0	8.0	--
	alpha-Chlordane	<b>0.0027</b>	<b>0.018</b>	<b>0.0068</b>	<0.0017	<0.0017	<b>0.0040</b>	<0.0017	<0.0017	0.44*	15*	2.5*	2.5*	0.6*
	gamma-Chlordane	<b>0.0049 C</b>	<b>0.018</b>	<b>0.0075 C</b>	<b>0.0018 C</b>	<0.0017	<b>0.0050</b>	<0.0017	<0.0017	0.44*	15*	2.5*	2.5*	0.6*
	Other Analyzed OCPs	ND	ND	ND	ND	ND	ND	ND	ND	Various	Various	Various	Various	Various
Metals (mg/kg)	Antimony	<b>0.61</b>	<b>0.90</b>	<b>0.80</b>	<0.54	<0.50	<0.54	<0.50	<b>0.71</b>	31	--	500	150	--
	Arsenic	<b>4.3</b>	<b>4.3</b>	<b>4.2</b>	<b>3.5</b>	<b>3.7</b>	<b>3.5</b>	<b>4.0</b>	<b>4.1</b>	<b>0.39</b>	--	500	50	100
	Barium	<b>130</b>	<b>140</b>	<b>180</b>	<b>130</b>	<b>120</b>	<b>120</b>	<b>130</b>	<b>130</b>	15,000	--	10,000	1,000	2,000
	Beryllium	<b>0.45</b>	<b>0.47</b>	<b>0.46</b>	<b>0.46</b>	<b>0.41</b>	<b>0.42</b>	<b>0.43</b>	<b>0.46</b>	15 <sup>DTSC</sup>	--	75	7.5	--
	Cadmium	<b>0.66</b>	<b>0.59</b>	<b>0.83</b>	<b>0.52</b>	<b>0.50</b>	<b>0.47</b>	<b>0.54</b>	<b>0.55</b>	4.6 <sup>DTSC</sup>	--	1.0	10	20
	Chromium	<b>38</b>	<b>40</b>	<b>37</b>	<b>39</b>	<b>35</b>	<b>35</b>	<b>37</b>	<b>38</b>	12,000**	--	2,500**	50**	100**
	Cobalt	<b>9.3</b>	<b>9.1</b>	<b>11</b>	<b>8.4</b>	<b>8.2</b>	<b>7.6</b>	<b>8.8</b>	<b>8.9</b>	23	--	8,000	800	--
	Copper	<b>33</b>	<b>24</b>	<b>36</b>	<b>20</b>	<b>19</b>	<b>19</b>	<b>22</b>	<b>21</b>	3,100	--	2,500	250	--
	Lead	<b>25</b>	<b>7.6</b>	<b>16</b>	<b>6.9</b>	<b>6.0</b>	<b>5.9</b>	<b>7.9</b>	<b>6.4</b>	80	--	1,000	50	100
	Mercury	<b>0.054</b>	<b>0.039</b>	<b>0.057</b>	<b>0.032</b>	<b>0.025</b>	<b>0.026</b>	<b>0.032</b>	<b>0.035</b>	6.7	--	20	2.0	4.0
	Nickel	<b>41</b>	<b>43</b>	<b>33</b>	<b>42</b>	<b>37</b>	<b>35</b>	<b>40</b>	<b>41</b>	1,500	--	2,000	200	--
	Vanadium	<b>40</b>	<b>34</b>	<b>55</b>	<b>35</b>	<b>33</b>	<b>33</b>	<b>33</b>	<b>36</b>	390	--	2,400	240	--
	Zinc	<b>210</b>	<b>65</b>	<b>110</b>	<b>45</b>	<b>43</b>	<b>39</b>	<b>47</b>	<b>44</b>	23000	--	5,000	2,500	--
Other Analyzed Metals	ND	ND	ND	ND	ND	ND	ND	ND	Various	Various	Various	Various	Various	

**Notes:**

Samples reported in milligrams per kilogram (mg/kg), <0.5 = not detected above laboratory reporting limit, Detected analyte concentrations in bold for ease of reading

ND = not detected above analytical laboratory reporting limit

TPH = Total petroleum hydrocarbons; diesel range organics (DRO) and motor range oil organics (MRO) by EPA Method 8015B with silica gel cleanup; 'Y' = pattern not same as standard

OCPs = Organochlorine Pesticides analysed by USEPA 8081A; 'C' = presence confirmed, but relative percent difference (RPD) between columns exceeds 40%; \* = total Chlordane (alpha plus gamma)

Metals analyzed by USEPA 6010B/7471A Series

\*\* = Chromium ESL, TTLc and STLC values for total as trivalent chromium (Cr III); ESL for hexavalent chromium (Cr VI) is 21 mg/kg. TCLP does not sitinguish between chromium ionic species.

RWQCB ESL = Regional Water Quality Control Board Environmental Screening Level for Residential Land Use based on Direct Exposure (Table K-1) and Groundwater Protection (Table G)

Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final (December 2013); <sup>DTSC</sup> = Modified HHRA-HERO Note 3 - 2014.

-- = Not Established

TTLc = Total Threshold Limit Concentration for waste characterization, California Code of Regulations, Title 22.

STLC = Soluble Threshold Limit Concentration for waste characterization, California Code of Regulations, Title 22. Dilution factor for TTLc to STLC is 10:1.

TCLP = Toxicity Characteristic Leachate Procedure for waste characterization, California Code of Regulations, Title 22. Dilution factor for TTLc to TCLP is 20:1. (Note: units in micrograms per liter [ug/L])

Highlighted results exceed regulatory threshold, also highlighted



**TABLE 2**  
**Boring SB-5 - Soil Analytical Results**  
**TPH, VOCs, SVOCs and Metals**  
16500 and 16550 Ashland Avenue - 205 and 255 Ano Avenue  
San Lorenzo, California

Sample ID		SB-5-1.0	SB-5-3.0	SB-5-10.0	RWQCB ESL Residential Direct Exposure	RWQCB ESL Groundwater Protection
Sample Date		8/28/2014	8/28/2014	8/28/2014		
TPH (mg/kg)	GRO	<0.20	<0.17	<0.17	770	100
	DRO	<b>2.7 Y</b>	<1.0	<1.0	240	100
	MRO	<b>23</b>	<b>6.9</b>	<5.0	10,000	100
VOCs (mg/kg)	Acetone	<0.020 b	<b>0.022 b</b>	<0.018 b	60,000	0.50
	Other VOCs	ND	ND	ND	Various	Various
SVOCs (mg/kg)	Phenol	<0.330	<0.330	<b>1.2</b>	23,000	<b>0.076</b>
	Other SVOCs	ND	ND	ND	Various	Various
Metals (mg/kg)	Arsenic	<b>3.9</b>	<b>3.1</b>	<b>3.7</b>	<b>0.39</b>	--
	Barium	<b>120</b>	<b>110</b>	<b>140</b>	15,000	--
	Beryllium	<b>0.40</b>	<b>0.39</b>	<b>0.50</b>	15 <sup>DTSC</sup>	--
	Cadmium	<b>0.85</b>	<b>0.58</b>	<b>0.54</b>	4.6 <sup>DTSC</sup>	--
	Chromium	<b>35</b>	<b>33</b>	<b>44</b>	12,000*	--
	Cobalt	<b>8.6</b>	<b>7.7</b>	<b>11</b>	23	--
	Copper	<b>35</b>	<b>17</b>	<b>22</b>	3,100	--
	Lead	<b>33</b>	<b>12</b>	<b>7.4</b>	80	--
	Mercury	<b>0.053</b>	<b>0.029</b>	<b>0.034</b>	6.7	--
	Nickel	<b>36</b>	<b>34</b>	<b>50</b>	1,500	--
	Vanadium	<b>30</b>	<b>30</b>	<b>36</b>	390	--
	Zinc	<b>200</b>	<b>110</b>	<b>47</b>	23,000	--
Other Analyzed Metals	ND	ND	ND	Various	Various	

**Notes:**

mg/kg = milligrams per kilogram, Reportable analytical results in bold for ease of reading

<1.0 = not detected above indicated laboratory reporting limit

ND = not detected above analytical laboratory reporting limit

TPH = Total petroleum hydrocarbons; gasoline range organics (GRO), diesel range organics (DRO) and motor oil range organics (MRO) by analytical Method 8015B with silica gel cleanup (DRO/MRO only)

VOCs = Volatile organic compounds analyzed by USEPA 8260B

SVOCs = Semivolatile organic compounds analyzed by USEPA 8270C

Metals analyzed by USEPA 6010B/7471A Series

Y = Sample exhibits chromatographic pattern which does not resemble standard

b = Sample analysed outside of hold time

-- = Not Established

\* = Chromium ESL value for total trivalent chromium (Cr III); ESL for hexavalent chromium (Cr VI) is 21 mg/kg

RWQCB ESL = Regional Water Quality Control Board Environmental Screening Level for Residential Land

Use based on Direct Exposure (Table K-1) and Groundwater Protection (Table G)

<sup>DTSC</sup> = California Office of Human and Ecological Risk - Human Health Risk Assessment Note 3 - 2014

Highlighted results exceed a regulatory level, also highlighted

**Table 3**  
**Discrete Soil Analytical Results - Organochlorine Pesticides (OCPs)**  
 16500 to 16550 Ashland Avenue - 205 to 255 Ano Avenue  
 San Lorenzo, California

Sample ID	Sample Date	Aldrin	4,4-DDT	4,4-DDE	4,4-DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin aldehyde	Endrin	Endrin ketone	Chlordane (technical)	alpha-Chlordane	gamma-Chlordane	Heptachlor	Heptachlor epoxide	alpha-BHC (Lindane)	beta-BHC (Lindane)	gamma-BHC (Lindane)	delta-BHC (Lindane)	Methoxychlor	Toxaphene
		OCPs (mg/kg)																					
S-1 0-0.5'	10/3/2014	<0.0019	<0.0019	<0.0019	<0.0019	0.1500	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	0.25	0.0720	0.0520	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0039
S-2 0-0.5'	10/3/2014	0.1200	0.0560	0.0370	0.0250	3.20	<0.0020	<0.0020	<0.0020	0.0400	0.0400	0.0110	0.25	0.0410	0.0570	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0040
S-3 0-0.5'	10/3/2014	<0.0020	<0.0020	0.0041	<0.0020	0.0130	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.04	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0040
S-4 0-0.5'	10/3/2014	<0.0020	0.0120	0.0110	<0.0020	0.0390	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.07	0.0120	0.0130	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0040
S-5 0-0.5'	10/3/2014	<0.0020	<0.0020	<0.0020	<0.0020	0.0047	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.21	0.0300	0.0380	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0040
S-6 0-0.5'	10/3/2014	0.0027	0.2800	0.0440	<0.0020	0.5600	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0170	0.36	0.0530	0.0660	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0040
S-7 0-0.5'	10/3/2014	<0.0020	0.0400	0.0190	<0.0020	0.0420	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.26	0.0470	0.0550	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0040
S-8 0-0.5'	10/3/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.04	0.0083	0.0079	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0040
S-9 0-0.5'	10/3/2014	<0.0020	<0.0020	<0.0020	<0.0020	0.5700	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0033	0.53	0.1300	0.1100	<0.0020	<0.0020	<0.0020	<0.0020	0.0100	<0.0020	<0.0020	<0.0039
S-10 0-0.5'	10/3/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.04	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0040
S-11 0-0.5'	10/3/2014	<0.0020	<0.0020	<0.0020	<0.0020	0.0040	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.04	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0040
S-12 0-0.5'	10/3/2014	<0.0019	<0.0019	<0.0019	<0.0019	<0.0020	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.039	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0039
S-2A 0-0.5' CT	11/5/2014	<0.0018	<0.0034	<0.0034	<0.0034	0.0053	<0.0018	<0.0034	<0.0034	<0.0034	<0.0034	--	--	0.0055	0.0043	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.018	<0.062
S-2A 0-0.5' TAL	11/5/2014	<0.039	0.065	0.057 P	0.120	0.660	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	2.2	0.350 P	0.450	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.780
S-2A 0-0.5' AT	11/5/2014	0.0104 J	0.0690	0.0322 J	<0.033	0.350	<0.033	<0.033	<0.033	<0.033	0.0099 J	--	1.78	--	--	0.0087 J	0.0181 J	<0.033	<0.033	<0.033	<0.033	<0.033	<0.330
S-10A 0-0.5' CT	11/5/2014	<0.0017	0.0038 #	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.06
S-10A 0-0.5' TAL	11/5/2014	<0.0020	0.0200	0.0160	0.0066	0.0038	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.04	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.04
S-13 0-0.5'	11/5/2014	<0.0020	0.100	0.0066	<0.0020	0.054	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.170	0.019 P	0.024	<0.0020	<0.0020	<0.0020	<0.0020	0.0031	<0.0020	<0.0020	<0.040
S-13 1.5-2'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-14 0-0.5' TAL	11/5/2014	0.043	0.940	0.093	0.150	3.00	<0.039	<0.039	<0.039	<0.039	<0.039	0.140	1.50	0.200 P	0.280	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.780
S-14 0-0.5' AT	11/5/2014	0.0367	0.379	0.0587	0.0117 J	1.40	<0.033	<0.033	<0.033	<0.033	0.0357	--	1.52	--	--	0.0076 J	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.330
S-14 1.5-2'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	0.0026	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-15 0-0.5'	11/5/2014	<0.0020	0.0031	<0.0020	0.0032	0.0048	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040
S-15 1.5-2'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-16 0-0.5'	11/5/2014	0.026	0.510	0.250	0.051	1.20	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	0.019	0.750	0.120 P	0.150	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.190
S-16 1.5-2'	11/5/2014	<0.0020	0.0050	<0.0020	<0.0020	0.0067	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040
S-17 0-0.5'	11/5/2014	0.0024	0.042	0.049	0.044	0.100	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.100	0.012 P	0.019	<0.0020	<0.0020	<0.0020	<0.0020	0.0030	<0.0020	<0.0020	<0.040
S-17 1.5-2'	11/5/2014	<0.0020	<0.0020	0.0020	0.0022	0.0051	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-18 0-0.5'	11/5/2014	<0.0020	0.025	0.023	0.025	0.190	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0044	0.049	0.0060 P	0.0079	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040
S-18 1.5-2'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039

**Table 3**  
**Discrete Soil Analytical Results - Organochlorine Pesticides (OCPs)**  
 16500 to 16550 Ashland Avenue - 205 to 255 Ano Avenue  
 San Lorenzo, California

Sample ID	Sample Date	Aldrin	4,4-DDT	4,4-DDE	4,4-DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin aldehyde	Endrin	Endrin ketone	Chlordane (technical)	alpha-Chlordane	gamma-Chlordane	Heptachlor	Heptachlor epoxide	alpha-BHC (Lindane)	beta-BHC (Lindane)	gamma-BHC (Lindane)	delta-BHC (Lindane)	Methoxychlor	Toxaphene
		OCPs (mg/kg)																					
S-19 0-0.5'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<b>0.041</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<b>0.0026 P</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-19 1.5-2'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-20 0-0.5'	11/5/2014	<0.0019	<b>0.021</b>	<b>0.0037</b>	<0.0019	<b>0.026</b>	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.039	<b>0.0040 P</b>	<b>0.0060</b>	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.039
S-20 1.5-2'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-21 0-0.5'	11/5/2014	<0.0098	<b>0.050</b>	<b>0.012</b>	<0.0098	<b>0.620</b>	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.200	<b>0.015 P</b>	<b>0.013 P</b>	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.200
S-21 1.5-2'	11/5/2014	<0.0020	<b>0.0021</b>	<0.0020	<0.0020	<b>0.037</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-22 0-0.5'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-22 1.5-2'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-23 0-0.5'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-23 1.5-2'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040
S-24 0-0.5'	11/5/2014	<0.0020	<b>0.0036</b>	<0.0020	<0.0020	<b>0.0037</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<b>0.074</b>	<b>0.010 P</b>	<b>0.013</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-24 1.5-2'	11/5/2014	<0.0020	<b>0.0023</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040
S-25 0-0.5'	11/5/2014	<0.0020	<b>0.014</b>	<0.0020	<0.0020	<b>0.0032</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-25 1.5-2'	11/5/2014	<0.0098	<b>0.031</b>	<0.0098	<b>0.045</b>	<b>1.100</b>	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<b>0.030</b>	<0.200	<b>0.040 P</b>	<b>0.034 P</b>	<0.0098	<0.0098	<0.0098	<0.0098	<b>0.011</b>	<0.0098	<0.0098	<0.200
S-26 0-0.5'	11/5/2014	<0.0020	<b>0.018</b>	<b>0.0029</b>	<b>0.0021</b>	<b>0.055</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<b>0.0028 P</b>	<b>0.0026 P</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-26 1.5-2'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<b>0.0029</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040
S-27 0-0.5'	11/5/2014	<0.020	<b>0.036</b>	<b>0.038</b>	<b>0.065</b>	<b>0.210</b>	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<b>2.50</b>	<b>0.380 P</b>	<b>0.550</b>	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.390
S-27 1.5-2'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-28 0-0.5'	11/5/2014	<0.0020	<b>0.069</b>	<b>0.026</b>	<0.0020	<b>0.061</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<b>0.0020</b>	<b>0.290</b>	<b>0.042 P</b>	<b>0.057</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040
S-28 1.5-2'	11/5/2014	<0.0020	<b>0.0057</b>	<0.0020	<0.0020	<b>0.0038</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<b>0.0029 P</b>	<b>0.0034</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-29 0-0.5'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-29 1.5-2'	11/5/2014	<0.0039	<b>0.018 P</b>	<b>0.0054</b>	<b>0.013 P</b>	<b>0.130</b>	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<b>0.780</b>	<b>0.130 P</b>	<b>0.180 P</b>	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.078
S-30 0-0.5'	11/5/2014	<b>0.0027 C</b>	<b>0.012 #</b>	<0.0033	<b>0.0035</b>	<b>0.012 C</b>	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<b>0.0024</b>	<b>0.014 C</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-30 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.061

**Table 3**  
**Discrete Soil Analytical Results - Organochlorine Pesticides (OCPs)**  
 16500 to 16550 Ashland Avenue - 205 to 255 Ano Avenue  
 San Lorenzo, California

Sample ID	Sample Date	Aldrin	4,4-DDT	4,4-DDE	4,4-DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin aldehyde	Endrin	Endrin ketone	Chlordane (technical)	alpha-Chlordane	gamma-Chlordane	Heptachlor	Heptachlor epoxide	alpha-BHC (Lindane)	beta-BHC (Lindane)	gamma-BHC (Lindane)	delta-BHC (Lindane)	Methoxychlor	Toxaphene
		OCPs (mg/kg)																					
S-31 0-0.5'	11/5/2014	<0.0084	<b>0.470 C#</b>	<b>0.170</b>	<b>0.063 C</b>	<b>0.470 C</b>	<0.0084	<0.016	<0.016	<b>0.022 C</b>	<b>0.093 C</b>	--	--	<b>0.160</b>	<b>0.140</b>	<0.0084	<0.0084	<0.0084	<0.0084	<0.0084	<0.0084	<0.084	<0.300
S-31 1.5-2'	11/5/2014	<0.0017	<b>0.0058</b>	<0.0033	<0.0033	<b>0.0073</b>	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<b>0.0026</b>	<b>0.0018</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.061
S-32 0-0.5'	11/5/2014	<0.0017	<b>0.0180</b>	<b>0.0067</b>	<0.0033	<b>0.043</b>	<0.0017	<0.0033	<0.0033	<b>0.0051 C</b>	<0.0033	--	--	<b>0.067</b>	<b>0.087</b>	<0.017	<b>0.011 C</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-32 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<b>0.0020</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-33 0-0.5'	11/5/2014	<0.0017	<b>0.039</b>	<b>0.020</b>	<0.0033	<b>0.094</b>	<0.0017	<b>0.0073 C</b>	<b>0.0042</b>	<b>0.0091C</b>	<0.0033	--	--	<b>0.065 C</b>	<b>0.100</b>	<0.017	<b>0.0045 C</b>	<b>0.0042 C</b>	<0.0017	<0.0017	<b>0.0044</b>	<0.017	<0.060
S-33 1.5-2'	11/5/2014	<0.0017	<b>0.0060 C#</b>	<0.0033	<0.0033	<b>0.026</b>	<0.0017	<0.0033	<0.0033	<b>0.0110</b>	<0.0033	--	--	<b>0.0042</b>	<b>0.0049</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-34 0-0.5'	11/5/2014	<b>0.018 C</b>	<b>0.510 #</b>	<b>0.150</b>	<0.017	<b>0.770</b>	<0.0085	<b>0.220</b>	<b>0.024 #</b>	<b>0.098 C</b>	<0.017	--	--	<b>0.660</b>	<b>0.560</b>	<0.0085	<0.0085	<0.0085	<0.0085	<0.0085	<0.0085	<0.085	<0.300
S-34 1.5-2'	11/5/2014	<0.0017	<b>0.0040 C</b>	<0.0033	<0.0033	<b>0.0058</b>	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<b>0.0019</b>	<b>0.0022</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-35 0-0.5'	11/5/2014	<0.017	<b>0.047 #</b>	<b>0.036</b>	<0.034	<b>0.039 C</b>	<0.017	<0.034	<0.034	<0.034	<0.034	--	--	<b>0.056 C</b>	<b>0.100</b>	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.170	<0.610
S-35 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<b>0.0033 C</b>	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<b>0.0022</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.061
S-36 0-0.5'	11/5/2014	<b>0.015</b>	<b>0.095 #</b>	<b>0.020</b>	<0.010	<b>0.180</b>	<0.0052	<0.010	<0.010	<0.010	<0.010	--	--	<b>0.042</b>	<b>0.059 C</b>	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.052	<0.180
S-36 1.5-2'	11/5/2014	<0.0017	<b>0.0048</b>	<0.0033	<0.0033	<b>0.0060</b>	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<b>0.0021 C</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.059
S-37 0-0.5'	11/5/2014	<0.0017	<b>0.0063 #</b>	<0.0033	<0.0033	<b>0.0093</b>	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<b>0.0033</b>	<b>0.0034</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-37 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-38 0-0.5'	11/5/2014	<0.0017	<b>0.062 #</b>	<b>0.015 C</b>	<b>0.0039 C</b>	<b>0.110</b>	<0.017	<b>0.011 C</b>	<b>0.0045 C</b>	<b>0.019 C</b>	<0.0033	--	--	<b>0.310 C</b>	<b>0.340</b>	<0.0017	<b>0.018 C</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-38 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<b>0.0031 C</b>	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<b>0.0020</b>	<b>0.0023 C</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.059
S-39 0-0.5'	11/5/2014	<0.0017	<b>0.070 #</b>	<b>0.018</b>	<b>0.0043 #</b>	<b>0.042</b>	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<b>0.0098</b>	<b>0.012</b>	<0.0017	<0.0017	<0.0017	<0.0017	<b>0.0063</b>	<0.0017	<0.017	<0.059
S-39 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-40 0-0.5'	11/5/2014	<b>0.0056 C</b>	<b>0.100</b>	<b>0.016</b>	<b>0.0094 C#</b>	<b>0.420</b>	<b>0.011 C</b>	<b>0.0080 C</b>	<0.0033	<0.0033	<0.0033	--	--	<b>0.110</b>	<b>0.120</b>	<0.0017	<0.0017	<0.0017	<0.0017	<b>0.0021</b>	<0.0017	<0.017	<0.061
S-40 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.061
S-41 0-0.5'	11/5/2014	<0.017	<0.032	<0.032	<0.032	<b>0.042</b>	<0.017	<0.032	<0.032	<0.032	<0.032	--	--	<b>0.065 C</b>	<b>0.030</b>	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.170	<0.590
S-41 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<b>0.0053 C</b>	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<b>0.012 C</b>	<b>0.0046</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-42 0-0.5'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<b>0.0025</b>	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-42 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060

**Table 3**  
**Discrete Soil Analytical Results - Organochlorine Pesticides (OCPs)**  
 16500 to 16550 Ashland Avenue - 205 to 255 Ano Avenue  
 San Lorenzo, California

Sample ID	Sample Date	Aldrin	4,4-DDT	4,4-DDE	4,4-DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin aldehyde	Endrin	Endrin ketone	Chlordane (technical)	alpha-Chlordane	gamma-Chlordane	Heptachlor	Heptachlor epoxide	alpha-BHC (Lindane)	beta-BHC (Lindane)	gamma-BHC (Lindane)	delta-BHC (Lindane)	Methoxychlor	Toxaphene
		OCPs (mg/kg)																					
S-43 0-0.5'	11/5/2014	<0.034	<b>0.100 C#</b>	<0.066	<0.066	<b>0.100 C</b>	<0.034	<0.066	<0.066	<0.066	<b>0.077</b>	--	--	<b>0.044 C</b>	<b>0.053</b>	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.340	<1.200
S-43 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-44 0-0.5'	11/5/2014	<0.0084	<0.016	<0.016	<b>0.029 #</b>	<b>0.040 C</b>	<0.0084	<0.016	<0.016	<0.016	<0.016	--	--	<b>0.096 C</b>	<b>0.110</b>	<0.0084	<0.0084	<0.0084	<0.0084	<0.0084	<0.0084	<0.084	<0.300
S-44 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<b>0.0041 C</b>	<b>0.0050</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-45 0-0.5'	11/5/2014	<0.034	<b>0.120 #</b>	<0.066	<0.066	<b>0.250 C</b>	<0.034	<0.066	<0.066	<0.066	<b>0.069</b>	--	--	<b>0.059 C</b>	<b>0.075</b>	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.340	<1.200
S-45 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.170	<0.061
ESL - Residential Direct Exposure		0.032	1.7	1.7	2.4	0.034	470 <sup>endo</sup>	470 <sup>endo</sup>	NE	NE	23	NE	0.44*	0.44*	0.44*	0.061	0.061	NE	NE	21	NE	390	0.046
ESL - Groundwater Protection		5.0	4.3	1,100	750	0.0023	3200 <sup>endo</sup>	3200 <sup>endo</sup>	NE	0.00065	0.00065	NE	15*	15*	15*	0.014	0.014	NE	NE	0.0098	NE	19	0.00042
RSL - Residential Soil		0.033	1.9	1.6	2.2	0.031	370 nc	370 nc	NE	18 nc	18 nc	NE	1.8	1.8	1.8	0.059	0.059	NE	NE	0.0098	NE	310 nc	0.48

**Notes:**

Sample results in milligrams per kilogram (mg/kg), <0.0019 = less than indicated laboratory reporting limit; Detected analyte concentration in bold for ease of reading  
 OCPs = Organochlorine Pesticides by USEPA Method 8081A -- = Not a standard analyte by the selected laboratory for the method.  
 C = presence confirmed - relative percent difference (RPD) between columns exceeds 40%; # = calibration drift within method requirements; 'J' = estimated value below lab reporting limit  
 S-2A & S-10A = Split samples analyzed as controls with matrix spiking by laboratories; CT = Curtis & Tompkins LTD; TAL = Testamerica Laboratory, AL = Accutest Laboratories (Re-analysis of S-2A 0-0.5' TAL & S-14 0-0.5' TAL). Split and duplicate results highlighted in green.  
<sup>endo</sup> = ESL established for Endosulfan; \* = Regulatory level established for Chlordane (total or technical)  
 ESL = Regional Water Quality Control Board Environmental Screening Level for Residential Land Use based on Direct Exposure (Table K-1) and Groundwater Protection (Table G)  
 Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final (December 2013)  
 RSL = US E.P.A. Region 9 - Regional Screening Levels for Chemical Contaminants - residential soil, carcinogenic risk; nc = non-carcinogenic risk for child listed when no carcinogenic risk level listed; updated May 2014  
 Highlighted results exceed a regulatory level, red is an ESL and or RSL, yellow is a groundwater protection ESL; NE = Regulatory level not established

**TABLE 4**  
**Soil Vapor Analytical Results**  
 16500 to 16550 Ashland Avenue - 205 to 255 Ano Avenue  
 San Lorenzo, California  
 Project No. 33114-014115.01

Sample ID		SB-3B-SV	SB-3C-SV	SB-4A-SV	SB-6	SB-7	SB-8	SB-9	SB-10	RWQCB ESL Residential	USEPA RSL Residential
Sample Depth (feet bgs)		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0		
Sample Date		8/28/2014	8/28/2014	8/28/2014	9/16/2014	9/16/2014	9/16/2014	9/16/2014	9/16/2014		
VOCs (ug/m <sup>3</sup> )	Acetone	<b>28</b>	<b>20</b>	<b>19</b>	<b>85</b>	<b>95</b>	<320	44	<b>830</b>	16,000,000	1,066,667
	Benzene	<b>42</b>	<b>67</b>	<b>16</b>	<b>3.3</b>	<b>34</b>	<110	<b>3.0</b>	<60	<b>42</b>	<b>1.7<sup>(1)</sup></b>
	2-Butanone (MEK)	<b>12</b>	<b>7.8</b>	<b>7.9</b>	<b>13</b>	<b>30</b>	<98	<b>15</b>	<56	2,600,000	173,333
	Carbon Disulfide	<b>9.6</b>	<b>27</b>	<2.9	<2.9	<b>6.8</b>	<100	<2.9	<59	NE	24,333
	Cyclohexane	<b>170</b>	<b>290</b>	<b>82</b>	<b>190</b>	<b>1,600</b>	<b>3,600</b>	<b>300</b>	<b>1,500</b>	NE	210,000
	Trans-1,2-Dichloroethene	<3.5	<6.9	<3.6		<7.1	<130	<3.6	<b>110</b>	31,000	NE
	Ethylbenzene	<b>51</b>	<b>80</b>	<b>22</b>	<4.1	<b>27</b>	<140	<4.0	<82	490	37
	4-Ethyltoluene	<b>14</b>	<b>19</b>	<b>6.2</b>	<4.6	<8.8	<b>260</b>	<4.5	<93	NE	NE
	n-Heptane	<b>38</b>	<b>55</b>	<b>16</b>	<b>7.0</b>	<b>38</b>	<140	<b>8.4</b>	<77	NE	NE
	n-Hexane	<b>23</b>	<b>29</b>	<b>7.2</b>	<b>55</b>	<b>110</b>	<b>7,800</b>	<b>38</b>	<b>3,500</b>	NE	24,333
	Isopropanol	<8.6	<17	<9.0	<9.2	<18	<330	<9.0	<190	NE	243,333
	4-Methyl-2-Pentanone	<3.6	<7.1	<3.8	<b>6.4</b>	<b>31</b>	<140	<b>6.3</b>	<77	NE	103,333
	Tetrachloroethene (PCE)	<5.9	<12	<6.2	<b>30</b>	<12	<230	<6.2	<130	210	<b>13.8<sup>(1)</sup></b>
	Tetrahydrofuran	<b>5.1</b>	<5.1	<2.7	<b>7.4</b>	<b>31</b>	<98	<b>10</b>	<56	NE	70,000
	Toluene	<b>490</b>	<b>720</b>	<b>190</b>	<b>13</b>	<b>310</b>	<b>370</b>	<b>17</b>	<b>200</b>	160,000	10,333 <sup>(1)</sup>
	1,1,1-Trichloroethane	<4.8	<b>28</b>	<5.0	<5.1	<9.8	<180	<5.0	<100	2,600,000	20,800 <sup>(1)</sup>
	1,3,5-Trimethylbenzene	<b>10</b>	<b>14</b>	<4.5	<4.6	<8.8	<b>190</b>	<4.5	<93	NE	730 <sup>(1)</sup>
	1,2,4-Trimethylbenzene	<b>32</b>	<b>47</b>	<b>13</b>	<b>6.7</b>	<8.8	<b>380</b>	<b>7.6</b>	<93	NE	<b>243</b>
m,p-Xylenes	<b>230</b>	<b>350</b>	<b>94</b>	<b>8.1</b>	<b>100</b>	<b>190</b>	<b>12</b>	<82	52,000	3,333	
o-Xylenes	<b>63</b>	<b>90</b>	<b>24</b>	<4.1	<b>27</b>	<140	<4.0	<82	52,000	3,333	
Other Analyzed VOCs	ND	ND	ND	ND	ND	ND	ND	ND	ND	Various	Various

**Notes:**

VOCs = volatile organic compounds analyzed by USEPA Method TO-15

ug/m<sup>3</sup> = micrograms per cubic meter

< = not detected above analytical laboratory reporting limit (Practical Quantitation Limit)

NE = Not established

RWQCB ESLs = Regional Water Quality Control Board Environmental Screening Levels. Soil Gas Residential Exposure (Table E-2)

USEPA RSL = U.S. Environmental Protection Agency Regional Screening Level (USEPA, May 2014) - RSL default attenuation factor of 0.03

(1) = California-modified RSL, Department of Toxic Substances Control (DTSC), HHRA, Note 3, Table 3, Rev. July 2014 (DTSC default attenuation 0.05)

MEK = methyl ethyl ketone

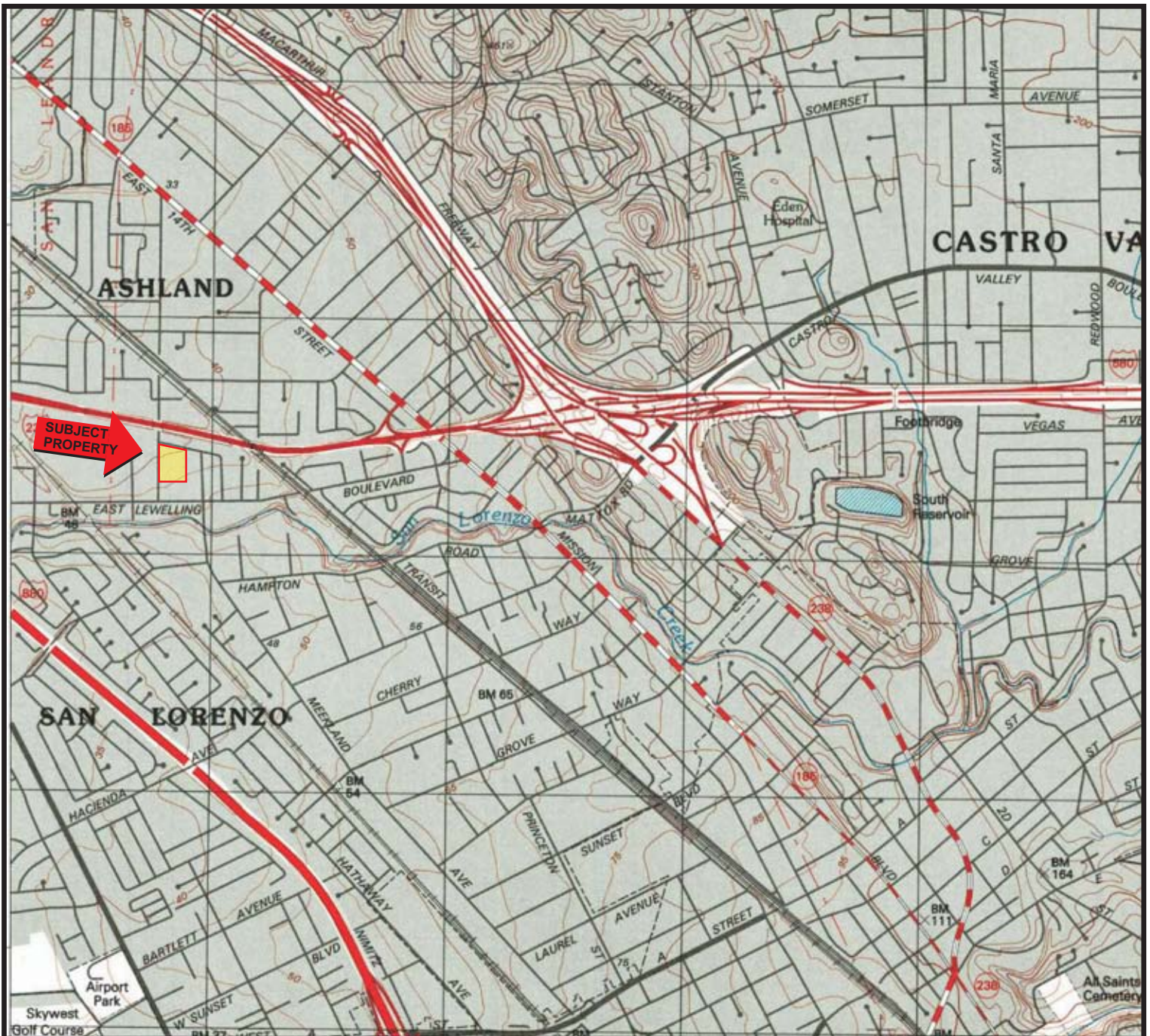
Isopropanol (Isopropyl alcohol) used as leak-check compound

Highlighted concentration exceeds indicated regulatory threshold

Bold numbers indicate laboratory detections for ease of reading

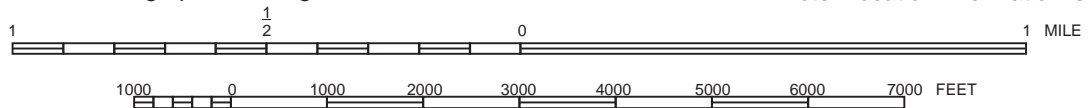


## FIGURES



Source: TOPO! © 2000 National Geographic Holdings

Note: Location Information is Approximate



Portion of the 7.5-Minute Series Hayward, California  
 Quadrangle Topographic Map (Datum: NAD 83)  
 United States Department of the Interior  
 Geological Survey  
 1993



QUADRANGLE LOCATION

**SITE LOCATION**

16500 & 16550 Ashland Avenue  
 205 & 255 Ano Avenue  
 San Lorenzo, Alameda County, California

Project No. 33114-014115.01

**FIGURE**

1



**BUREAU  
 VERITAS**



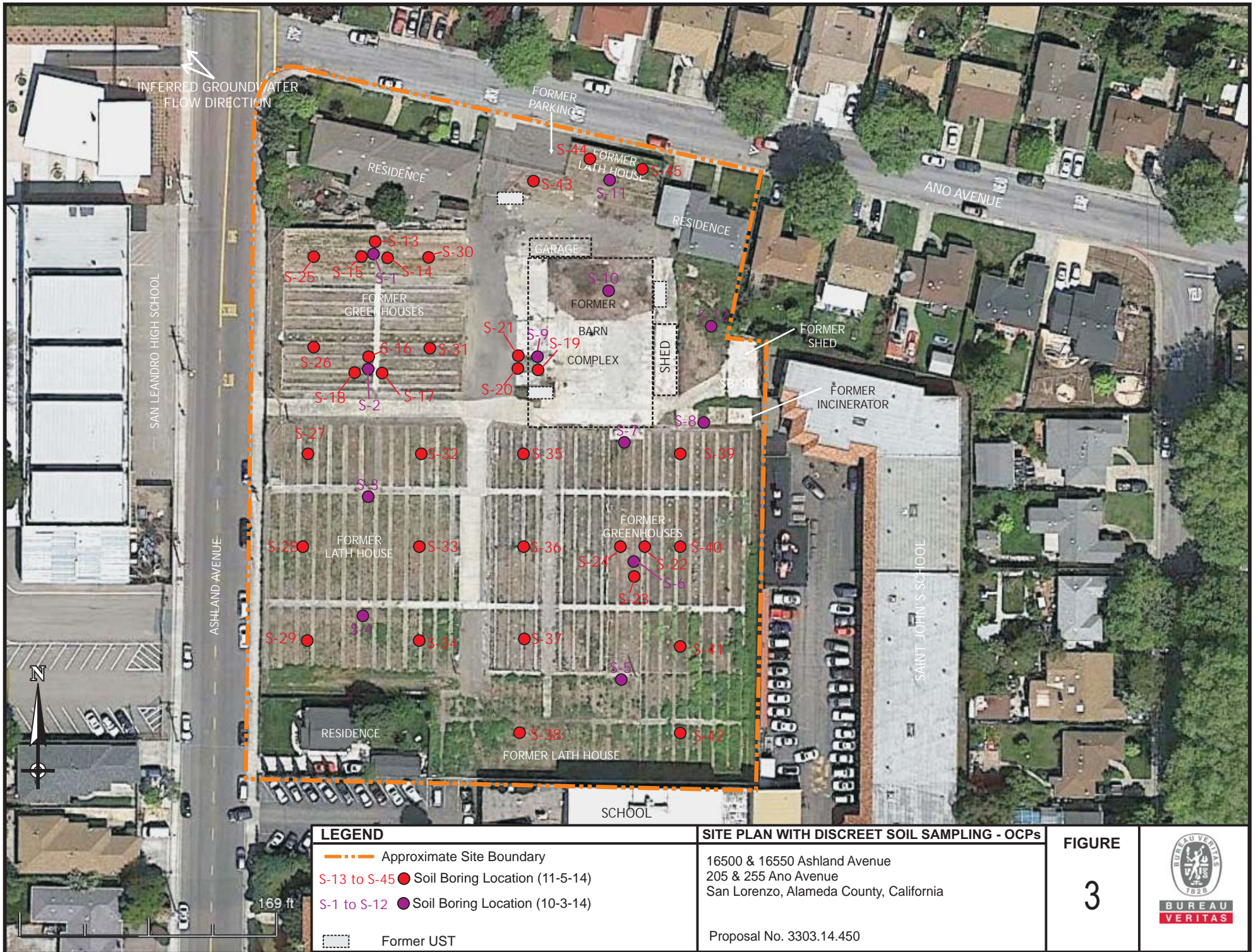


LEGEND	
	Approximate Site Boundary
	Soil Boring
	Soil/Soil Vapor Boring
	Soil/Groundwater Boring
	Soil Sample Location for ACM
	Former UST

SITE PLAN WITH BORING LOCATIONS
16500 & 16550 Ashland Avenue 205 & 255 Ano Avenue San Lorenzo, Alameda County, California
Project No. 33114-014115.01

FIGURE
2





LEGEND	
	Approximate Site Boundary
	S-13 to S-45 Soil Boring Location (11-5-14)
	S-1 to S-12 Soil Boring Location (10-3-14)
	Former UST

SITE PLAN WITH DISCREET SOIL SAMPLING - OCPs	
16500 & 16550 Ashland Avenue 205 & 255 Ano Avenue San Lorenzo, Alameda County, California	
Proposal No. 3303.14.450	

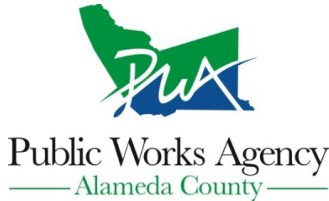
**FIGURE**  
**3**





**APPENDIX A**  
**DRILLING PERMIT**

# Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street  
Hayward, CA 94544-1395  
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 08/20/2014 By jamesy

Permit Numbers: W2014-0780  
Permits Valid from 08/29/2014 to 08/29/2014

**Application Id:** 1408402684187  
**Site Location:** 16550 Ashland Avenue, San Lorenzo, CA 94580  
**Project Start Date:** 08/29/2014  
**Assigned Inspector:** Contact Balance Hydrologics, Inc at (510) 473-5663 or acwells@balancehydro.com  
**Applicant:** Bureau Veritas North America - Don Ashton  
2430 Camino Ramon, #122, San Ramon, CA 94583  
**Property Owner:** Dave Kawahara  
698 Burnett Avenue, Morgan Hill, CA 94580  
**Client:** James McCann  
2121 Harrison, Suite 300, Oakland, CA 94612  
**Contact:** Don Ashton  
**City of Project Site:** San Lorenzo  
**Completion Date:** 08/29/2014  
**Phone:** 925-426-2600  
**Phone:** 408-778-2680  
**Phone:** 510-893-4711  
**Phone:** 925-426-2679  
**Cell:** 925-260-3102

**Receipt Number:** WR2014-0347 **Total Due:** \$265.00  
**Payer Name :** Donald A Ashton **Total Amount Paid:** \$265.00  
**Paid By:** VISA **PAID IN FULL**

## Works Requesting Permits:

Borehole(s) for Geo Probes-Sampling 24 to 72 hours only - 16 Boreholes  
Driller: Environmental Control Associates - Lic #: 695970 - Method: DP

**Work Total: \$265.00**

## Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2014-0780	08/20/2014	11/27/2014	16	2.00 in.	16.00 ft

## Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
4. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
5. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no

## Alameda County Public Works Agency - Water Resources Well Permit

case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

6. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

7. NOTE:

Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

8. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

9. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

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**APPENDIX B**  
**SOIL BORING LOG**



**BUREAU  
VERITAS**

# LOG OF SOIL BORING

- Encountered Groundwater Depth
- Static Groundwater Depth
- Sample Collected
- Sample Analyzed

Project No.: 33114-014115.01  
 Project Name: Oakland Diocese  
 Location: San Lorenzo, California  
 Logged By: P. McLaughlin

**BORING NO.**  
**SB-5**

Start Date: 8/28/14 Start Time: 0855 Elevation (ft, msl): n/a  
 Finish Date: 8/28/14 Finish Time: 0920 Boring Diameter (in) 2

Driller: ECA Drill Method: DPT  
 Hammer Weight: n/a Drop: n/a

Borehole Completion Data: Bacfilled with Portland cement grout.

Depth To <input type="checkbox"/> (ft)	8.5	Depth To <input checked="" type="checkbox"/> (ft)	13.5
Time:	0910	Time:	0923
Date:	8/28/14	Date:	8/28/14

SAMPLE INTERVAL	SAMPLE RECOVERY (in)	SAMPLE ID	PID READING (ppm)	TIME	DEPTH (ft)	SAMPLE GRAPHIC LOG	USCS	DESCRIPTION
				0855			ML	SANDY SILT; dark brown, damp, soft, fine sand, no odor.
	1.0				1			
					2			
	3.0		12.2		3			
42				0900	4			
					5			
					6			
					7		SM	SILTY SAND; olive brown, moist, medium dense, fine sand, no odor.
44				0905	8		ML	SANDY SILT; dark brown, damp, soft, fine sand.
					9		SM	SILTY SAND; olive brown, wet, medium dense, fine sand, no odor.
	10.0		7.8		10		ML	CLAYEY SILT; dark brown, moist, medium stiff, no odor.
46			3.4	0910	11			
					12			
					13		SM	SILTY SAND; olive brown, wet, medium dense, no odor.
					14		SP	SAND; light olive brown, wet, medium dense, fine to medium sand, trace silt, no odor.
					15		ML	SANDY SILT; dark brown, wet, medium stiff.
42				0915	16		CL	SILTY CLAY; dark brown, moist, medium stiff, no odor.
					17			
20				0920	18			Bottom of hole at 18.0 ft bgs.
					19			



**APPENDIX C**  
**SOIL VAPOR SAMPLING FIELD LOGS**





Date: 8/28/14 Project # 33114-014115.01  
 Sample location: SB-3b-SV Sample ID: SB-3b-SV  
 Site name: Oakland Diocese Canister ID: 131  
 Address: 16500 Ashland Ave, San Lorenzo Time: 1450  
 Field staff: P. McLaughlin Weather: Clear, H. breeze  
 Temp: 75°F

Sample type:  Indoor  Outdoor  Soil Vapor at Depth: 5 ft  
 Duration:  Grab  8-hour  24-hour  Other: 8-hour, 1-hour, 150 ml/min  
 Canister type:  1-Liter  6-Liter  Other: \_\_\_\_\_

Purge Can - Initial Vacuum: -29" Hg Purge Can - Final vacuum: -25" Hg Can ID: 000213  
 Sample Can - Initial Vacuum: -28" Hg Sample Can - Final Vacuum: -2" Hg Can ID: 131  
 Manifold ID: A00193

Fuel use in building:  Natural gas  Electric  Other: N/A

Indoor Mechanical Ventilation?  Yes  No Notes: N/A

	Time	Canister Vacuum	Notes
Shut-In Test			
Line Purge	<u>1435</u>	<u>-29" Hg</u>	<u>Begin Purge</u>
	<u>1440</u>	<u>-25" Hg</u>	<u>End Purge</u>
Sample	<u>1441</u>	<u>-28" Hg</u>	<u>Begin Sample</u>
	<u>1443</u>	<u>-23" Hg</u>	<u>OK</u>
	<u>1445</u>	<u>-15" Hg</u>	<u>OK</u>
	<u>1447</u>	<u>-8" Hg</u>	<u>OK</u>
	<u>1449</u>	<u>-3" Hg</u>	<u>OK</u>
	<u>1450</u>	<u>-2" Hg</u>	<u>End Sample</u>

Location/comments: Probe set @ 0830

Leak Compound Used: Isopropyl alcohol  
 Equilibration Period: 6 hrs 20 min Initials: P.M.



Date: 8/28/14 Project # 33114-014115.01  
 Sample location: SB-3c-SV Sample ID: SB-3c-SV  
 Site name: Oakland Diocese Canister ID: L75  
 Address: 16500 Ashland Ave, San Lorenzo Time: 1515  
 Field staff: P. McLaughlin Weather: Clear, lt. breeze  
 Temp: 75°F

Sample type:  Indoor  Outdoor  Soil Vapor at Depth: 5 ft  
 Duration:  Grab  8-hour  24-hour  Other: 8-hour, 1-hour, 150 ml/min  
 Canister type:  1-Liter  6-Liter  Other: \_\_\_\_\_  
 Purge Can - Initial Vacuum: -25" Hg Purge Can - Final vacuum: -21" Hg Can ID: C00213  
 Sample Can - Initial Vacuum: -28" Hg Sample Can - Final Vacuum: -2" Hg Can ID: L75  
 Manifold ID: A00212

Fuel use in building:  Natural gas  Electric  Other: N/A  
 Indoor Mechanical Ventilation?  Yes  No Notes: N/A

	Time	Canister Vacuum	Notes
Shut-In Test			
Line Purge	<u>1459</u>	<u>-25" Hg</u>	<u>Begin Purge</u>
	<u>1504</u>	<u>-21" Hg</u>	<u>End Purge</u>
Sample	<u>1505</u>	<u>-28" Hg</u>	<u>Begin Sample</u>
	<u>1507</u>	<u>-22" Hg</u>	<u>OK</u>
	<u>1509</u>	<u>-15" Hg</u>	<u>OK</u>
	<u>1511</u>	<u>-8.5" Hg</u>	<u>OK</u>
	<u>1513</u>	<u>-5" Hg</u>	<u>OK</u>
	<u>1515</u>	<u>-2" Hg</u>	<u>End Sample</u>

Location/comments: Probe set @ 0800

Leak Compound Used: Isopropyl alcohol  
 Equilibration Period: 7 hrs, 15 min Initials PM



Date: 8/28/14 Project # 33114-014115.01  
 Sample location: SB-4a-SV Sample ID: SB-4a-SV  
 Site name: Oakland Diocese Canister ID: 80  
 Address: 16500 Ashland Ave, San Lorenzo Time: 1542  
 Field staff: P. McLaughlin Weather: clear, lt. breeze  
 Temp: ~75°F

Sample type:  Indoor  Outdoor  Soil Vapor at Depth: 5 ft  
 Duration:  Grab  8-hour  24-hour  Other: 8-hour, 1-hour, (150 ml/min)  
 Canister type:  1-Liter  6-Liter  Other: \_\_\_\_\_  
 Purge Can - Initial Vacuum: -21" Hg Purge Can - Final vacuum: -19" Hg Can ID: C00213  
 Sample Can - Initial Vacuum: -30" Hg Sample Can - Final Vacuum: \_\_\_\_\_ Can ID: 80  
 Manifold ID: A00183

Fuel use in building:  Natural gas  Electric  Other: N/A  
 Indoor Mechanical Ventilation?  Yes  No Notes: N/A

	Time	Canister Vacuum	Notes
Shut-In Test			
Line Purge	<u>1529</u>	<u>-28" Hg</u>	<u>Begin purge</u>
	<u>1534</u>	<u>-19" Hg</u>	<u>End purge</u>
Sample	<u>1535</u>	<u>-30" Hg</u>	<u>Begin Sample</u>
	<u>1538</u>	<u>-19" Hg</u>	<u>OK</u>
	<u>1540</u>	<u>-13" Hg</u>	<u>OK</u>
	<u>1542</u>	<u>-8" Hg</u>	<u>OK</u>
	<u>1544</u>	<u>-5" Hg</u>	<u>OK</u>
	<u>1547</u>	<u>-2" Hg</u>	<u>End sample</u>

Location/comments: Probe set @ 0850  
 Leak Compound Used: Isopropyl alcohol  
 Equilibration Period: 6 hrs, 52 min Initials P.M.



Date: 9-16-2014 Project # 33114-014115.01  
 Sample location: NE ADJ TO RESIDENCE Sample ID: SB-6  
 Site name: Former Kawahara Nursery Canister ID: 192  
 Address: San Lorenzo, CA Time: 14:58-15:06  
 Field staff: D. Ashton Weather-Temp: 79° clear/calm

Sample type:  Indoor  Outdoor  Soil Vapor at Depth:  
 Duration:  Grab  8-hour  24-hour  Other: 8-hour, 1-hour, 150 ml/min  
 Canister type:  1-Liter  6-Liter  Other: 1.4 liter  
 Purge Can - Initial Vacuum: 19.5" Hg Purge Can - Final vacuum: 16.5" Can ID: C00350  
 Sample Can - Initial Vacuum: 29.0" Sample Can - Final Vacuum: 4.0" Can ID: 192  
 Manifold ID: A00202

Fuel use in building:  Natural gas  Electric  Other: NA  
 Indoor Mechanical Ventilation?  Yes  No Notes: NA

	Time	Canister Vacuum	Notes
Shut-In Test	<u>14:52</u>	<u>30.0" Hg</u>	<u>LAB SET - CONTROLLER</u>
Line Purge	<u>14:52</u>	<u>19.5" Hg</u>	<u>START PURGE</u>
	<u>14:56</u>	<u>16.5"</u>	<u>STOP</u>
Sample	<u>14:58</u>	<u>29.0"</u>	<u>START SAMPLE</u>
	<u>15:06</u>	<u>4.0"</u>	<u>STOP</u>

Location/comments: CONTROLLER A00202

Leak Compound Used: IPA  
 Equilibration Period: PRESET @ 11:40 / SAMPLE 14:58 ∴ 198 MINUTES Initials DA



Date: 7-16-14 Project # 33114-014115.01  
 Sample location: NW-DRIVEWAY ADJ TO RES Sample ID: 5B-7  
 Site name: Former Kawahara Nursery Canister ID: 423  
 Address: San Lorenzo, CA Time: 15:25 - 15:38  
 Field staff: D. Ashton Weather-Temp: 77° calm/clear

Sample type:  Indoor  Outdoor  Soil Vapor at Depth:  
 Duration:  Grab  8-hour  24-hour  Other: 8-hour, 1-hour, 150 ml/min  
 Canister type:  1-Liter  6-Liter  Other: 1.4 LITER  
 Purge Can - Initial Vacuum: 16.5" Purge Can - Final vacuum: 13.5" Can ID: 600350  
 Sample Can - Initial Vacuum: 29.0" Sample Can - Final Vacuum: \_\_\_\_\_ Can ID: 423  
 Manifold ID: A00193

Fuel use in building:  Natural gas  Electric  Other: NA  
 Indoor Mechanical Ventilation?  Yes  No Notes: NA

	Time	Canister Vacuum	Notes
Shut-In Test	<u>15:19</u>	<u>-3.0"</u>	<u>LAB SET</u>
Line Purge	<u>15:20</u>	<u>-16.5"</u>	<u>START PURGE</u>
	<u>15:24</u>	<u>-13.5"</u>	<u>STOP</u>
Sample <u>(13)</u>	<u>15:25</u>	<u>-29.0"</u>	<u>START SAMPLE</u>
	<u>15:38</u>	<u>-4.0"</u>	<u>STOP</u>

Location/comments: CONTROLLED # A00193  
 Leak Compound Used: IPA  
 Equilibration Period: \_\_\_\_\_ Initials: [Signature]  
PROBE SET @ 11:55 / SAMPLE 15:25 ∴ 290 MINUTES



Date: 9-16-14 Project # 33114-014115.01  
 Sample location: NW NEXT TO RESIDENCE Sample ID: SB-8  
 Site name: Former Kawahara Nursery Canister ID: 57  
 Address: San Lorenzo, CA Time: 13:25-13:36  
 Field staff: D. Ashton Weather-Temp: 72° CLEAR/CALM

Sample type:  Indoor  Outdoor  Soil Vapor at Depth:  
 Duration:  Grab  8-hour  24-hour  Other: 8-hour, 1-hour, 150 ml/min  
 Canister type:  1-Liter  6-Liter  Other: 1.4 LITER  
 Purge Can - Initial Vacuum: 28.5 Purge Can - Final vacuum: 25.5 Can ID: C00350  
 Sample Can - Initial Vacuum: 30.0 Sample Can - Final Vacuum: 4.0 Can ID: 57  
 Manifold ID: A00207

Fuel use in building:  Natural gas  Electric  Other: NA  
 Indoor Mechanical Ventilation?  Yes  No Notes: NA

	Time	Canister Vacuum	Notes
Shut-In Test	<u>13:20</u>	<u>-30.0"</u>	<u>Flow Controller @ -30.0" Hg +</u>
		<u>GAUGE BASE READING = 3.8" Hg</u>	
Line Purge	<u>13:13</u>	<u>-28.5" Hg</u>	<u>START PURGE</u>
	<u>13:19</u>	<u>-25.5" Hg</u>	<u>STOP</u>
Sample	<u>13:24</u>	<u>30.5" Hg</u>	<u>START</u>
<u>(11)</u>	<u>13:25</u>	<u>30.0" Hg</u>	<u>START</u>
	<u>13:36</u>	<u>4.0" Hg</u>	<u>STOP (GAUGE BASE: 2.5" = 0.0")</u>
			<u>A00207</u>

Location/comments: VAC GAUGE/CONTROLLED A00207 - LAB VAC = 30" Hg +

Leak Compound Used: IPA Initials: [Signature]  
 Equilibration Period: GRADE SB7 @ 10:55 / SAMPLE 13:25 ∴ 150 MINUTES



Date: 9-16-14 Project # 33114-014115.01  
 Sample location: SW CORNER BY RES Sample ID: SB-9  
 Site name: Former Kawahara Nursery Canister ID: 74  
 Address: San Lorenzo, CA Time: 14:04-14:17  
 Field staff: D. Ashton Weather-Temp: 72 CALM/CLEAR

Sample type:  Indoor  Outdoor  Soil Vapor at Depth:  
 Duration:  Grab  8-hour  24-hour  Other: 8-hour, 1-hour, 100 FLOW  
 Canister type:  1-Liter  6-Liter  Other: 1.4 LITER  
 Purge Can - Initial Vacuum: 25.5" Purge Can - Final vacuum: 22.5" Can ID: CO0350  
 Sample Can - Initial Vacuum: 30.0" Sample Can - Final Vacuum: 3.8" Can ID: 74  
 Manifold ID: A00165

Fuel use in building:  Natural gas  Electric  Other: NA  
 Indoor Mechanical Ventilation?  Yes  No Notes: NA

	Time	Canister Vacuum	Notes
Shut-In Test	<u>13:52</u>	<u>-30.0" Hg</u>	<u>FLOW CONTROLLER - LAB SET</u>
Line Purge	<u>13:54</u>	<u>-25.5" Hg</u>	<u>START PURGE</u>
	<u>13:57</u>	<u>22.5" Hg</u>	
Sample	<u>14:04</u>	<u>30.0" Hg</u>	<u>START SAMPLE</u>
<u>(13)</u>	<u>14:17</u>	<u>3.8" Hg</u>	<u>STOP</u>

Location/comments: VAC GAGE/CONTROLLER: A 00165  
NOTE: TURNS ON CONTROLLER BURRARD!  
 Leak Compound Used: IPA  
 Equilibration Period: PROBE SET @ 11:02 / SAMPLE 14:04 ∴ 182 MINUTES  
 Initials: [Signature]



Date: 9-16-14 Project # 33114-014115.01  
 Sample location: EAST SIDE BMA INCUBATOR AAO Sample ID: SB-10  
 Site name: Former Kawahara Nursery Canister ID: 99  
 Address: San Lorenzo, CA Time: 14:31-14:41  
 Field staff: D. Ashton Weather-Temp: 72° cloudy/clear

Sample type:  Indoor  Outdoor  Soil Vapor at Depth:  
 Duration:  Grab  8-hour  24-hour  Other: 8-hour, 1-hour, 100-150 ml/min  
 Canister type:  1-Liter  6-Liter  Other: 1.4 LITER  
 Purge Can - Initial Vacuum: 22.5" Purge Can - Final vacuum: 19.5" Can ID: C00350  
 Sample Can - Initial Vacuum: 29.0" Sample Can - Final Vacuum: 4.0" Can ID: 99  
 Manifold ID: A00212

Fuel use in building:  Natural gas  Electric  Other: NA  
 Indoor Mechanical Ventilation?  Yes  No Notes: NA

	Time	Canister Vacuum	Notes
Shut-In Test	<u>29.0" Hg</u>	<u>14:28</u>	<u>LAB SET</u>
Line Purge	<u>14:28</u>	<u>22.5" Hg</u>	<u>START PURGE</u>
	<u>14:28</u>	<u>19.5"</u>	<u>STOP</u>
Sample	<u>14:31</u>	<u>29" Hg</u>	<u>START</u>
	<u>14:41</u>	<u>4.0" Hg</u>	<u>STOP</u>

Location/comments: contaminated/CAUGA # A00212

Leak Compound Used: IPA  
 Equilibration Period: Probe SET @ 11:24 / SAMPLE 14:31 ∴ 187 MINUTES  
 Initials: [Signature]





## **APPENDIX D**

### **ANALYTICAL LABORATORY REPORTS SOIL AND GRAB-GROUNDWATER**



**Curtis & Tompkins, Ltd.**  
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 260374
ANALYTICAL REPORT

Bureau Veritas North America
2430 Camino Ramon
San Ramon, Ca 94583

Project : 33114-014115.01
Location : Oakland Diocese
Level : II

Table with 4 columns: Sample ID, Lab ID, Sample ID, Lab ID. Lists various sample and lab identifiers such as SB-3A-0.5, 260374-001, SB-1A-4.0, 260374-021, etc.

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: [Handwritten Signature]
Mike J. Dahlquist
Project Manager
mike.dahlquist@ctberk.com

Date: 09/05/2014

## CASE NARRATIVE

Laboratory number: 260374  
Client: Bureau Veritas North America  
Project: 33114-014115.01  
Location: Oakland Diocese  
Request Date: 08/28/14  
Samples Received: 08/28/14

This data package contains sample and QC results for eight four-point soil composites, requested for the above referenced project on 08/28/14. The samples were received cold and intact.

### TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

### Pesticides (EPA 8081A):

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. All samples underwent florisil cleanup using EPA Method 3620C. Matrix spikes QC755960, QC755961 (batch 215004) were not reported because the parent sample required a dilution that would have diluted out the spikes. No other analytical problems were encountered.

### Metals (EPA 6010B and EPA 7471A):

Low recovery was observed for lead in the MS for batch 215038; the parent sample was not a project sample, the BS/BSD were within limits, and the associated RPD was within limits. High recovery was also observed for lead in the MSD for batch 215038; the BS/BSD were within limits, and the associated RPD was within limits. No other analytical problems were encountered.

260374

# CHAIN OF CUSTODY



**BUREAU  
VERITAS**

Lab: Curtis & Tompkins  
TAT: Standard

**Report results to:**

Name: Philip McLaughlin  
Company: Bureau Veritas  
Mailing Address: 2430 Camino Ramon, Suite 122  
City, State, Zip: San Ramon, California 94583  
Telephone No.: (925) 498-6512  
Fax No.: (925) 428-0106  
Email: philip.mclaughlin@us.bureauveritas.com

33114-014115.01  
Oakland Diocese  
16500 Ashland Ave, San Lorenzo, C.

Special instructions and/or specific regulatory requirements:

TPH-d/mo with silica gel cleanup (SGC)

Sample ID	Date/Time	Soil	Analyses Requested				Sample Condition/Comments	Preservative
			TPH-d/mo 8015 w/SGC	TPH-g/VOCs by 8260B	SVOCs by 8270	Organochlorine Pesticides 8081A		
1 SB-3a-0.5	8/28/14	1100	X	X	X	X	ice	
2 SB-3b-0.5	8/28/14	0825	X	X	X	ice		
3 SB-3c-0.5	8/28/14	0750	No	No	No	SB-3-0.5 Comp		
4 SB-3d-0.5	8/28/14	1015	X	X	X	ice		
5 SB-3a-4.0	8/28/14	1100	X	X	X	ice		
6 SB-3b-4.0	8/28/14	0825	X	X	X	ice		
7 SB-3c-4.0	8/28/14	0750	X	X	X	ice		
8 SB-3d-4.0	8/28/14	1015	X	X	X	ice		

Collected by: Philip McLaughlin  
Relinquished by: Philip McLaughlin  
Relinquished by: Philip McLaughlin  
Method of Shipment: \_\_\_\_\_

Collector's Signature: Philip McLaughlin  
Received by: Philip McLaughlin  
Received by: Philip McLaughlin  
Sample Condition on Rcpt: \_\_\_\_\_

Date/Time: 8-28-14/18:37  
Date/Time: 8-28-14/18:37  
Date/Time: \_\_\_\_\_  
Date/Time: \_\_\_\_\_

# 260374



**BUREAU  
VERITAS**

**CHAIN OF CUSTODY**

**Report results to:**

Name: Philip McLaughlin  
 Company: Bureau Veritas  
 Mailing Address: 2430 Camino Ramon, Suite 122  
 City, State, Zip: San Ramon, California 94583  
 Telephone No.: (925) 498-6512  
 Fax No.: (925) 426-0106  
 Email: philip.mclaughlin@us.bureauveritas.com

Lab: Curtis & Tompkins  
 TAT: Standard  
 33114-014115.01  
 Oakland Diocese  
 16500 Ashland Ave, San Lorenzo, C

Special instructions and/or specific regulatory requirements:

TPH-d/mo with silica gel cleanup (SGC)

Analyses Requested	TPH-d/mo 8015 w/ SGC	TPH-g/VOCs by 8260B	SVOCs by 8270	Organochlorine Pesticides 8081A	CAM 17 Metals by 6010B/7471
	X			X	X
	↓			↓	↓
	↓			↓	↓
	↓			↓	↓
	X			X	X
	↓			↓	↓
	↓			↓	↓

EDD Format for Geotracker  
 Yes No

Sample Condition/Comments	Preservative
SB-44-0.5	ice
SB-45-0.5	↓
SB-46-0.5	↓
SB-48-0.5	↓
SB-44-4.0	ice
SB-45-4.0	↓
SB-46-4.0	↓
SB-48-4.0	↓

1  
2  
4  
12  
13  
14  
15  
4

Collected by: Philip McLaughlin  
 Relinquished by: Philip McLaughlin Date/Time 8/28/14 18:57  
 Relinquished by: Philip McLaughlin Date/Time 8/28/14 18:57  
 Method of Shipment:

Collector's Signature: Philip McLaughlin  
 Received by: [Signature] Date/Time 8/28/14 18:57  
 Received by: [Signature] Date/Time  
 Sample Condition on Rcpt:

Composite Soil

#260374

Page 3 of 4

# CHAIN OF CUSTODY



**BUREAU  
VERITAS**

### Report results to:

Name: Philip McLaughlin  
 Company: Bureau Veritas  
 Mailing Address: 2430 Camino Ramon, Suite 122  
 City, State, Zip: San Ramon, California 94583  
 Telephone No.: (925) 498-6512  
 Fax No.: (925) 426-0106  
 Email: philip.mclaughlin@us.bureauveritas.com

Lab: Curtis & Tompkins

TAT: Standard

33114-014115.01  
 Oakland Diocese  
 16500 Ashland Ave, San Lorenzo, C.

Special instructions and/or specific regulatory requirements:

TPH-d/mo with silica gel cleanup (SGC)

Analyses Requested	TPH-d/mo 8015 w/ SGC	TPH-g/VOCs by 8260B	SVOCs by 8270	Organochlorine Pesticides 8081A	CAM 17 Metals by 8010B/7471
	X			X	X
	↓	↓		↓	↓
	↓	↓		↓	↓
	↓	↓		↓	↓
	X			X	X
	↓	↓		↓	↓
	↓	↓		↓	↓
	↓	↓		↓	↓

EDD Formal for Geotracker  
 Yes No

Sample Condition/Comments	RESERVATIVE
SB-19-0.5 8/28/14 1235 Soil	↓
SB-16-0.5 1145	↓
SB-10-0.5 1215	↓
SB-10-0.5 1150	↓
SB-19-4.0 8/28/14 1235 Soil	↓
SB-16-4.0 1145	↓
SB-10-4.0 1215	↓
SB-10-4.0 1150	↓
SB-1-0.5 Comp 37	↓
SB-1-4.0 Comp 38	↓
SB-1-4.0 Comp 38	↓
SB-1-4.0 Comp 38	↓

Collected by: Philip McLaughlin  
 Relinquished by: Philip McLaughlin  
 Relinquished by: Philip McLaughlin  
 Method of Shipment:

8-28-14/1837  
 Date/Time

Collector's Signature: Philip McLaughlin  
 Received by: [Signature] Date/Time: 8/28/14 18:37  
 Received by: [Signature] Date/Time: [Signature] Date/Time

Sample Condition on Rcpt:





**COOLER RECEIPT CHECKLIST**



Login # 260374 Date Received 8/28/14 Number of coolers 1  
 Client CAUTION Project 3214-014115.01

Date Opened 8/29/14 By (print) [initials] (sign) [signature]  
 Date Logged in [initials] By (print) [initials] (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc) YES ~~NO~~  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? ....  YES (circle) on cooler on samples  NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO ~~N/A~~

3. Were custody papers dry and intact when received? \_\_\_\_\_ ~~YES~~ NO

4. Were custody papers filled out properly (ink, signed, etc)? \_\_\_\_\_ ~~YES~~ NO

5. Is the project identifiable from custody papers? (If so fill out top of form) \_\_\_\_\_ ~~YES~~ NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

- Bubble Wrap  Foam blocks  Bags  None
- Cloth material  Cardboard  Styrofoam  Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C  
 Type of ice used:  Wet  Blue/Gel  None Temp(°C) \_\_\_\_\_

Samples received on ice & cold without a temperature blank; temp taken with IR gun

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES ~~NO~~  
 If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? \_\_\_\_\_ ~~YES~~ NO

10. Are there any missing / extra samples? \_\_\_\_\_ YES ~~NO~~

11. Are samples in the appropriate containers for indicated tests? \_\_\_\_\_ ~~YES~~ NO

12. Are sample labels present, in good condition and complete? \_\_\_\_\_ ~~YES~~ NO

13. Do the sample labels agree with custody papers? \_\_\_\_\_ ~~YES~~ NO

14. Was sufficient amount of sample sent for tests requested? \_\_\_\_\_ ~~YES~~ NO

15. Are the samples appropriately preserved? \_\_\_\_\_ YES NO ~~N/A~~

16. Did you check preservatives for all bottles for each sample? \_\_\_\_\_ YES NO ~~N/A~~

17. Did you document your preservative check? \_\_\_\_\_ YES NO ~~N/A~~

18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO ~~N/A~~

19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO ~~N/A~~

20. Are bubbles > 6mm absent in VOA samples? \_\_\_\_\_ YES NO ~~N/A~~

21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES ~~NO~~  
 If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

**COMMENTS**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### Detections Summary for 260374

Results for any subcontracted analyses are not included in this summary.

Client : Bureau Veritas North America  
 Project : 33114-014115.01  
 Location : Oakland Diocese

Client Sample ID : SB-3-0.5 COMP

Laboratory Sample ID :

260374-033

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Motor Oil C24-C36	9.8		5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Dieldrin	5.3		1.7	0.40	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
4,4'-DDT	4.8	C	3.3	0.48	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
alpha-Chlordane	6.8		1.7	0.21	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
gamma-Chlordane	7.5	C	1.7	0.25	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Antimony	0.80		0.46	0.15	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	4.2		0.23	0.077	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	180		0.23	0.045	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.46		0.093	0.018	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.83		0.23	0.015	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	37		0.23	0.019	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	11		0.23	0.018	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	36		0.24	0.080	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	16		0.23	0.068	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.057		0.018	0.0010	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Nickel	33		0.23	0.063	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	55		0.23	0.023	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	110		0.93	0.090	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB-3-4.0 COMP

Laboratory Sample ID :

260374-034

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	1.6	Y	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Arsenic	4.0		0.25	0.082	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	130		0.25	0.048	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.43		0.099	0.019	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.54		0.25	0.016	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	37		0.25	0.021	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	8.8		0.25	0.019	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	22		0.26	0.086	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	7.9		0.25	0.072	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.032		0.016	0.00087	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Nickel	40		0.25	0.067	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	33		0.25	0.025	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	47		0.99	0.097	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB-4-0.5 COMP

Laboratory Sample ID :

260374-035

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	4.5	Y	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Motor Oil C24-C36	27		5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Dieldrin	3.0	C	1.7	0.40	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
4,4'-DDE	4.5		3.3	0.59	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
4,4'-DDT	6.7	C	3.3	0.47	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
gamma-Chlordane	1.8	C	1.7	0.25	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Arsenic	3.5		0.27	0.089	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	130		0.27	0.052	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.46		0.11	0.020	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.52		0.27	0.017	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	39		0.27	0.023	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	8.4		0.27	0.021	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	20		0.28	0.093	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	6.9		0.27	0.079	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.032		0.016	0.00087	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Nickel	42		0.27	0.073	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	35		0.27	0.027	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	45		1.1	0.10	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB-4-4.0 COMP

Laboratory Sample ID :

260374-036

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Antimony	0.71		0.46	0.15	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	4.1		0.23	0.076	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	130		0.23	0.045	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.46		0.092	0.017	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.55		0.23	0.015	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	38		0.23	0.019	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	8.9		0.23	0.018	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	21		0.24	0.079	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	6.4		0.23	0.067	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.035		0.016	0.00087	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Nickel	41		0.23	0.062	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	36		0.23	0.023	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	44		0.92	0.089	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB-1-0.5 COMP

Laboratory Sample ID :

260374-037

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	3.5	Y	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Motor Oil C24-C36	24		5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Dieldrin	2.8	C	1.7	0.40	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
4,4'-DDD	4.6		3.3	0.73	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
alpha-Chlordane	2.7		1.7	0.21	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
gamma-Chlordane	4.9	C	1.7	0.25	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Antimony	0.61		0.50	0.16	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	4.3		0.25	0.082	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	130		0.25	0.048	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.45		0.099	0.019	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.66		0.25	0.016	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	38		0.25	0.021	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	9.3		0.25	0.019	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	33		0.26	0.086	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	25		0.25	0.072	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.054		0.015	0.00086	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Nickel	41		0.25	0.067	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	40		0.25	0.025	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	210		0.99	0.097	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB-1-4.0 COMP

Laboratory Sample ID :

260374-038

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Arsenic	3.7		0.25	0.083	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	120		0.25	0.049	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.41		0.10	0.019	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.50		0.25	0.016	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	35		0.25	0.021	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	8.2		0.25	0.019	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	19		0.26	0.086	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	6.0		0.25	0.073	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.025		0.017	0.00096	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Nickel	37		0.25	0.068	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	33		0.25	0.025	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	43		1.0	0.098	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB-2-0.5 COMP

Laboratory Sample ID :

260374-039

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	1.8	Y	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Motor Oil C24-C36	14		5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Dieldrin	4.0		1.7	0.40	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
alpha-Chlordane	18		1.7	0.21	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
gamma-Chlordane	18		1.7	0.24	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Antimony	0.90		0.51	0.16	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Arsenic	4.3		0.26	0.085	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	140		0.26	0.050	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.47		0.10	0.019	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.59		0.26	0.016	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	40		0.26	0.021	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	9.1		0.26	0.020	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	24		0.26	0.088	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	7.6		0.26	0.075	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.039		0.017	0.00096	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Nickel	43		0.26	0.069	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	34		0.26	0.025	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	65		1.0	0.10	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB-2-4.0 COMP

Laboratory Sample ID :

260374-040

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	1.0	Y	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
alpha-Chlordane	4.0		1.7	0.21	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
gamma-Chlordane	5.0		1.7	0.24	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Arsenic	3.5		0.27	0.089	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	120		0.27	0.052	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.42		0.11	0.020	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.47		0.27	0.017	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	35		0.27	0.023	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	7.6		0.27	0.021	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	19		0.28	0.093	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	5.9		0.27	0.079	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.026		0.016	0.00090	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Nickel	35		0.27	0.073	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	33		0.27	0.027	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	39		1.1	0.10	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

C = Presence confirmed, but RPD between columns exceeds 40%

Y = Sample exhibits chromatographic pattern which does not resemble standard

Total Extractable Hydrocarbons			
Lab #:	260374	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	214915
Units:	mg/Kg	Sampled:	08/28/14
Basis:	as received	Received:	08/28/14
Diln Fac:	1.000		

Field ID: SB-3-0.5 COMP      Prepared: 08/29/14  
 Type: SAMPLE      Analyzed: 09/02/14  
 Lab ID: 260374-033      Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	9.8	5.0

Surrogate	%REC	Limits
o-Terphenyl	83	64-136

Field ID: SB-3-4.0 COMP      Prepared: 08/29/14  
 Type: SAMPLE      Analyzed: 09/02/14  
 Lab ID: 260374-034      Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	1.6 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	92	64-136

Field ID: SB-4-0.5 COMP      Prepared: 08/29/14  
 Type: SAMPLE      Analyzed: 09/02/14  
 Lab ID: 260374-035      Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	4.5 Y	1.0
Motor Oil C24-C36	27	5.0

Surrogate	%REC	Limits
o-Terphenyl	107	64-136

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	260374	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	214915
Units:	mg/Kg	Sampled:	08/28/14
Basis:	as received	Received:	08/28/14
Diln Fac:	1.000		

Field ID: SB-4-4.0 COMP      Prepared: 08/29/14  
 Type: SAMPLE      Analyzed: 09/02/14  
 Lab ID: 260374-036      Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	112	64-136

Field ID: SB-1-0.5 COMP      Prepared: 08/29/14  
 Type: SAMPLE      Analyzed: 09/02/14  
 Lab ID: 260374-037      Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	3.5 Y	1.0
Motor Oil C24-C36	24	5.0

Surrogate	%REC	Limits
o-Terphenyl	107	64-136

Field ID: SB-1-4.0 COMP      Prepared: 08/29/14  
 Type: SAMPLE      Analyzed: 09/02/14  
 Lab ID: 260374-038      Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	108	64-136

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	260374	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	214915
Units:	mg/Kg	Sampled:	08/28/14
Basis:	as received	Received:	08/28/14
Diln Fac:	1.000		

Field ID: SB-2-0.5 COMP      Prepared: 08/29/14  
 Type: SAMPLE      Analyzed: 09/02/14  
 Lab ID: 260374-039      Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	1.8 Y	1.0
Motor Oil C24-C36	14	5.0

Surrogate	%REC	Limits
o-Terphenyl	107	64-136

Field ID: SB-2-4.0 COMP      Prepared: 08/29/14  
 Type: SAMPLE      Analyzed: 09/02/14  
 Lab ID: 260374-040      Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	1.0 Y	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	103	64-136

Type: BLANK      Analyzed: 08/29/14  
 Lab ID: QC755611      Cleanup Method: EPA 3630C  
 Prepared: 08/28/14

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	97	64-136

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit



## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	260374	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC755612	Batch#:	214915
Matrix:	Soil	Prepared:	08/28/14
Units:	mg/Kg	Analyzed:	08/29/14

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.04	34.44	69	61-132

Surrogate	%REC	Limits
o-Terphenyl	73	64-136

## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	260374	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	214915
MSS Lab ID:	260319-001	Sampled:	08/28/14
Matrix:	Soil	Received:	08/28/14
Units:	mg/Kg	Prepared:	08/28/14
Basis:	as received	Analyzed:	08/29/14
Diln Fac:	1.000		

Type: MS Cleanup Method: EPA 3630C  
 Lab ID: QC755613

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	23.65	50.38	77.83	108	40-146

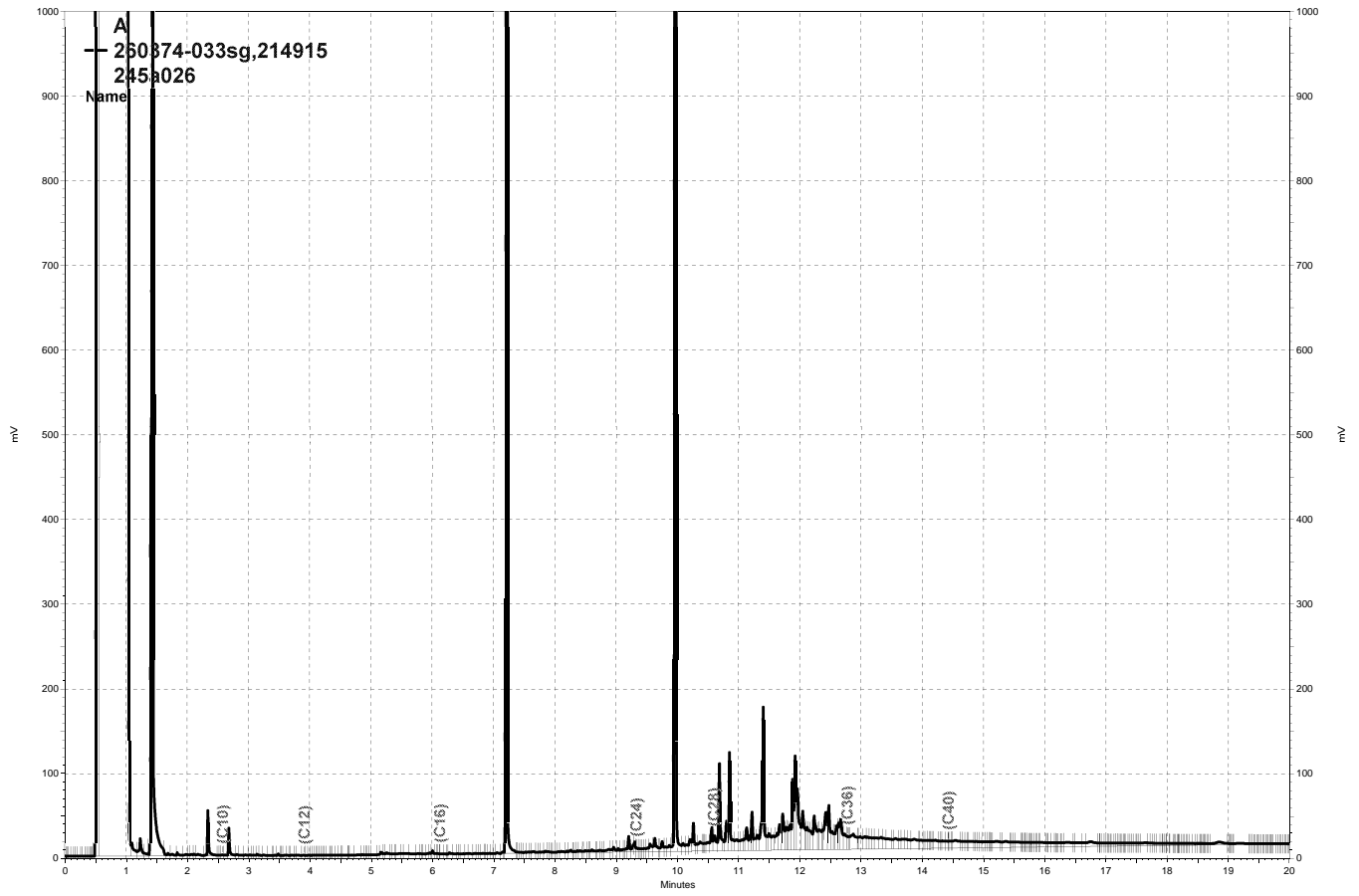
Surrogate	%REC	Limits
o-Terphenyl	110	64-136

Type: MSD Cleanup Method: EPA 3630C  
 Lab ID: QC755614

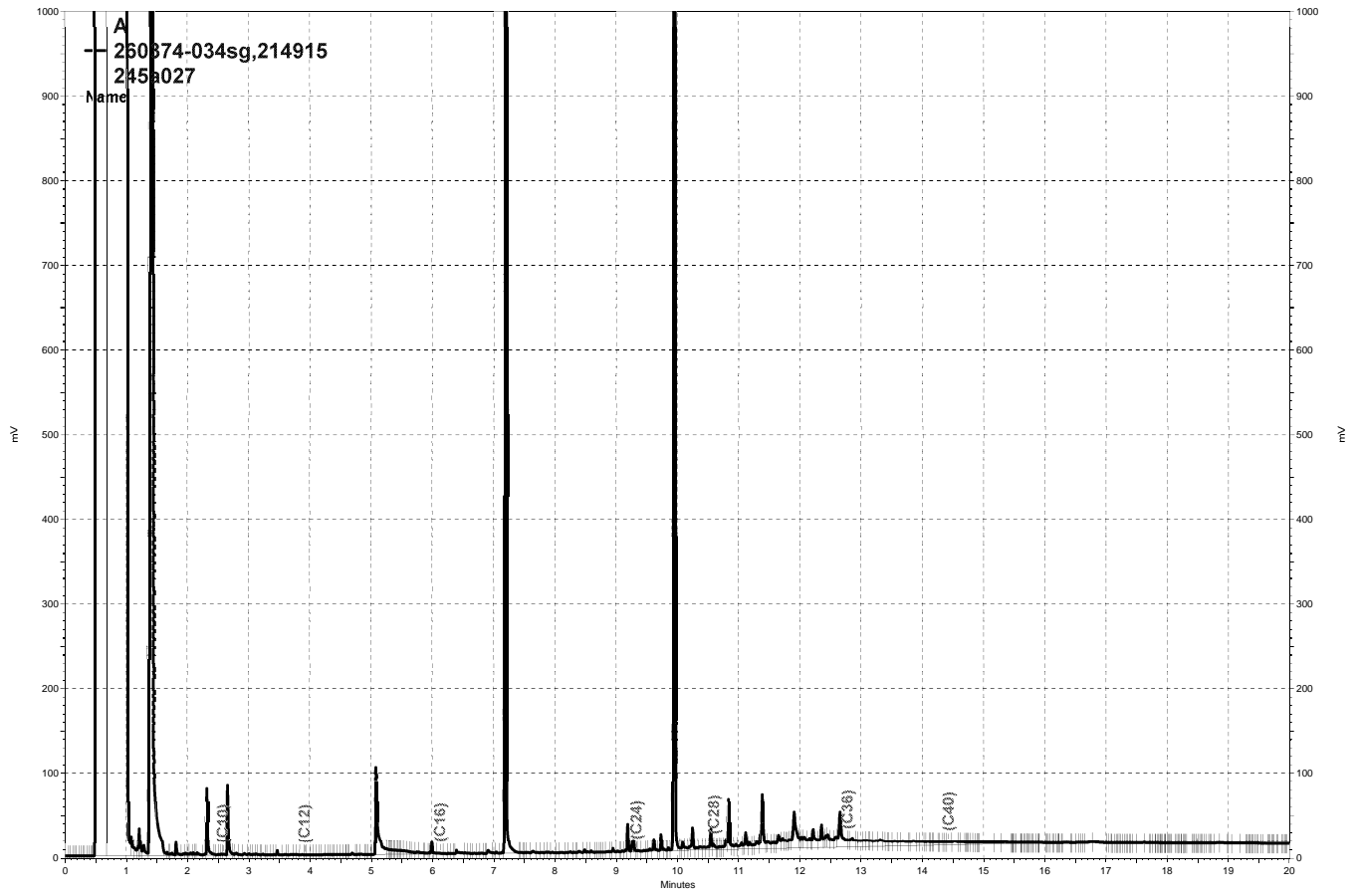
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.67	63.88	81	40-146	19	56

Surrogate	%REC	Limits
o-Terphenyl	97	64-136

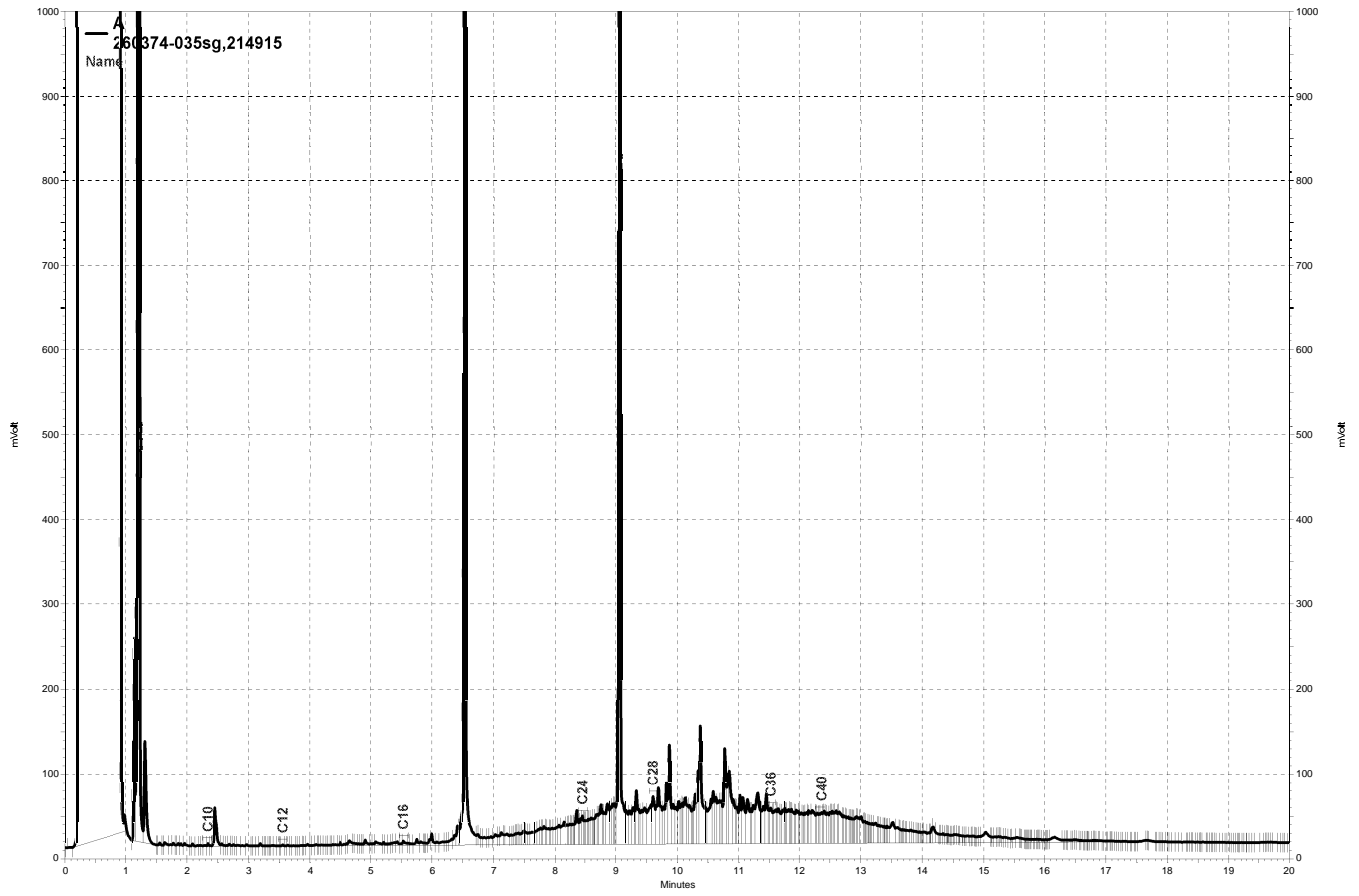
RPD= Relative Percent Difference



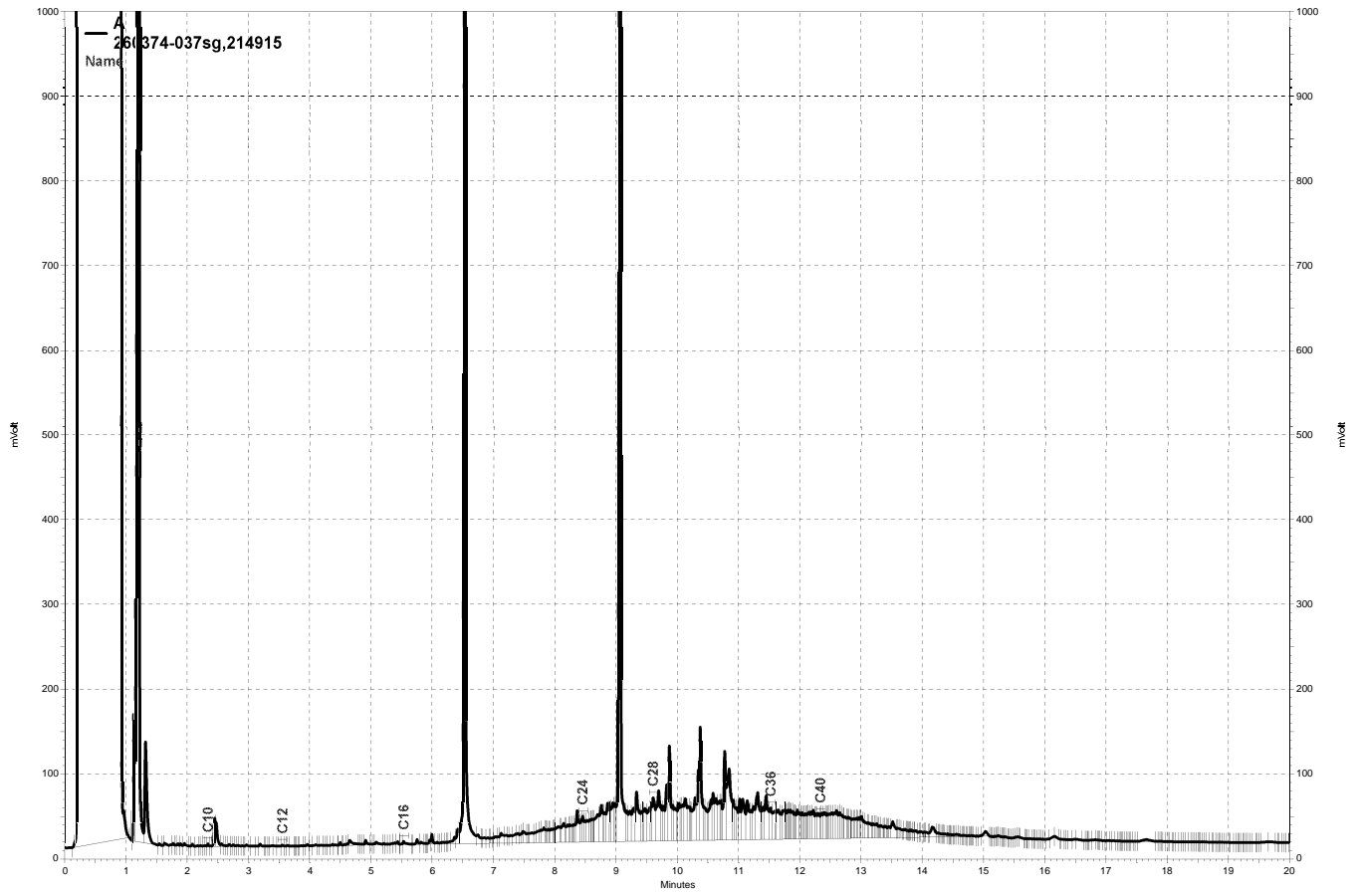
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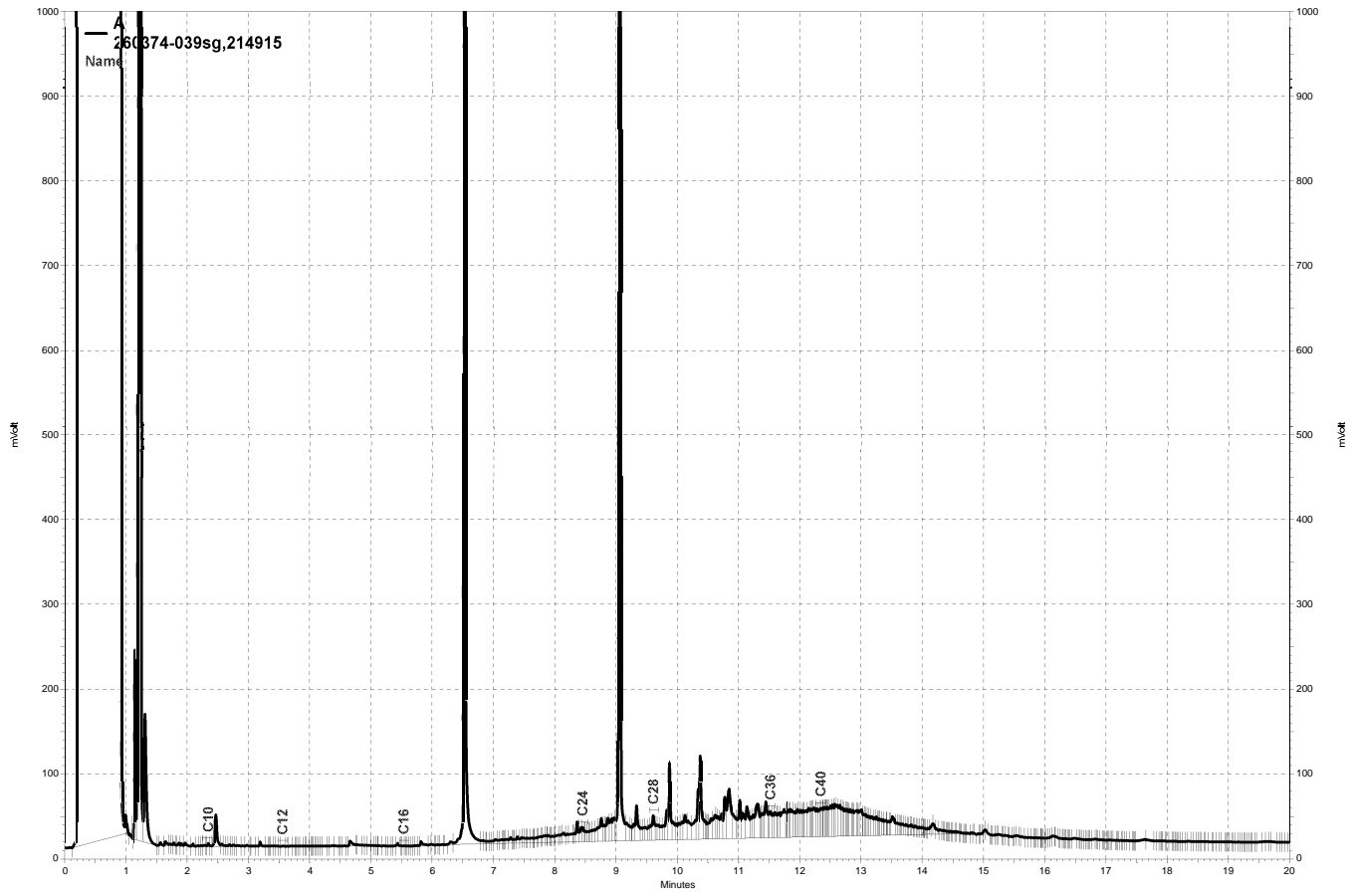
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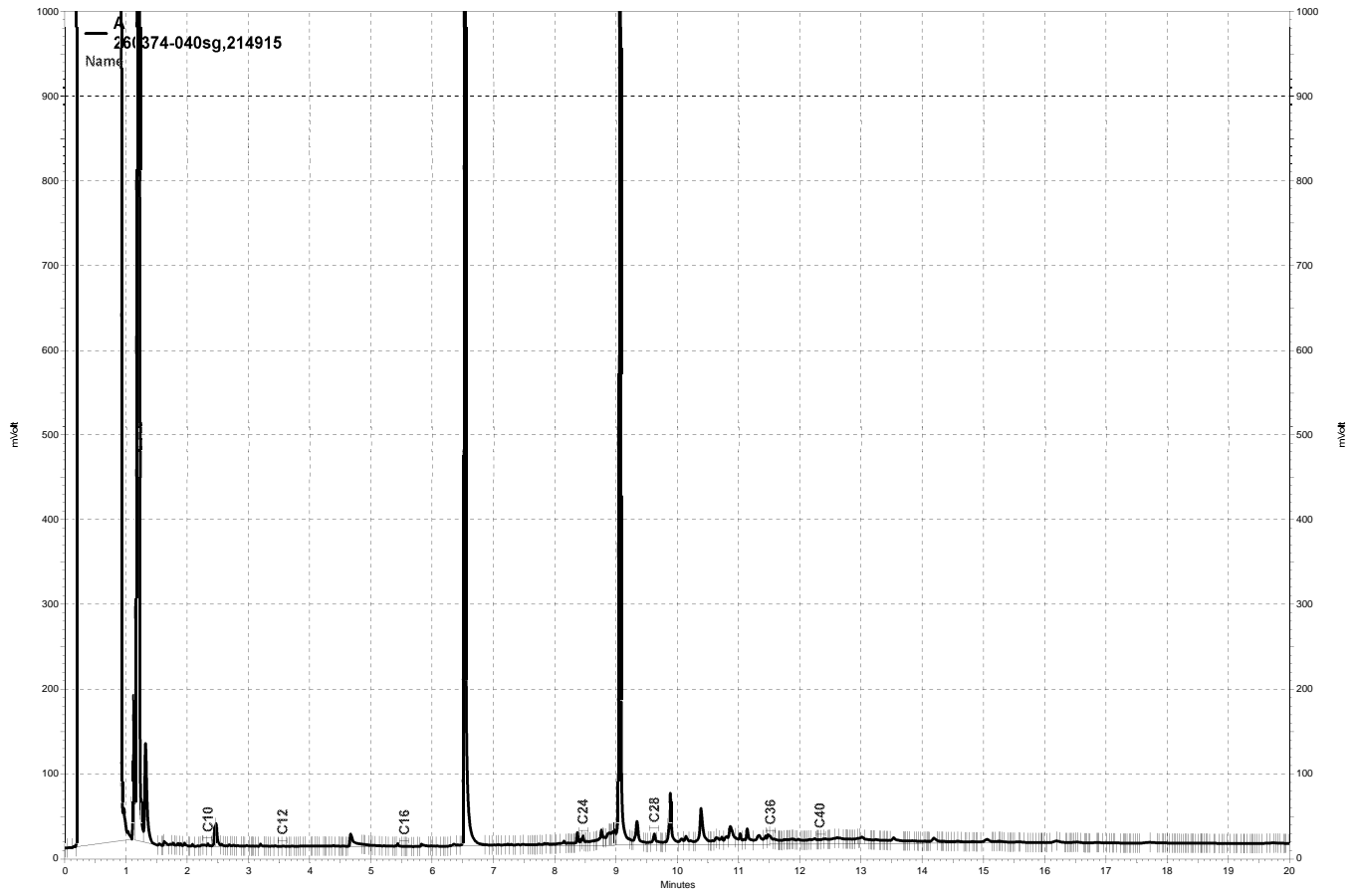
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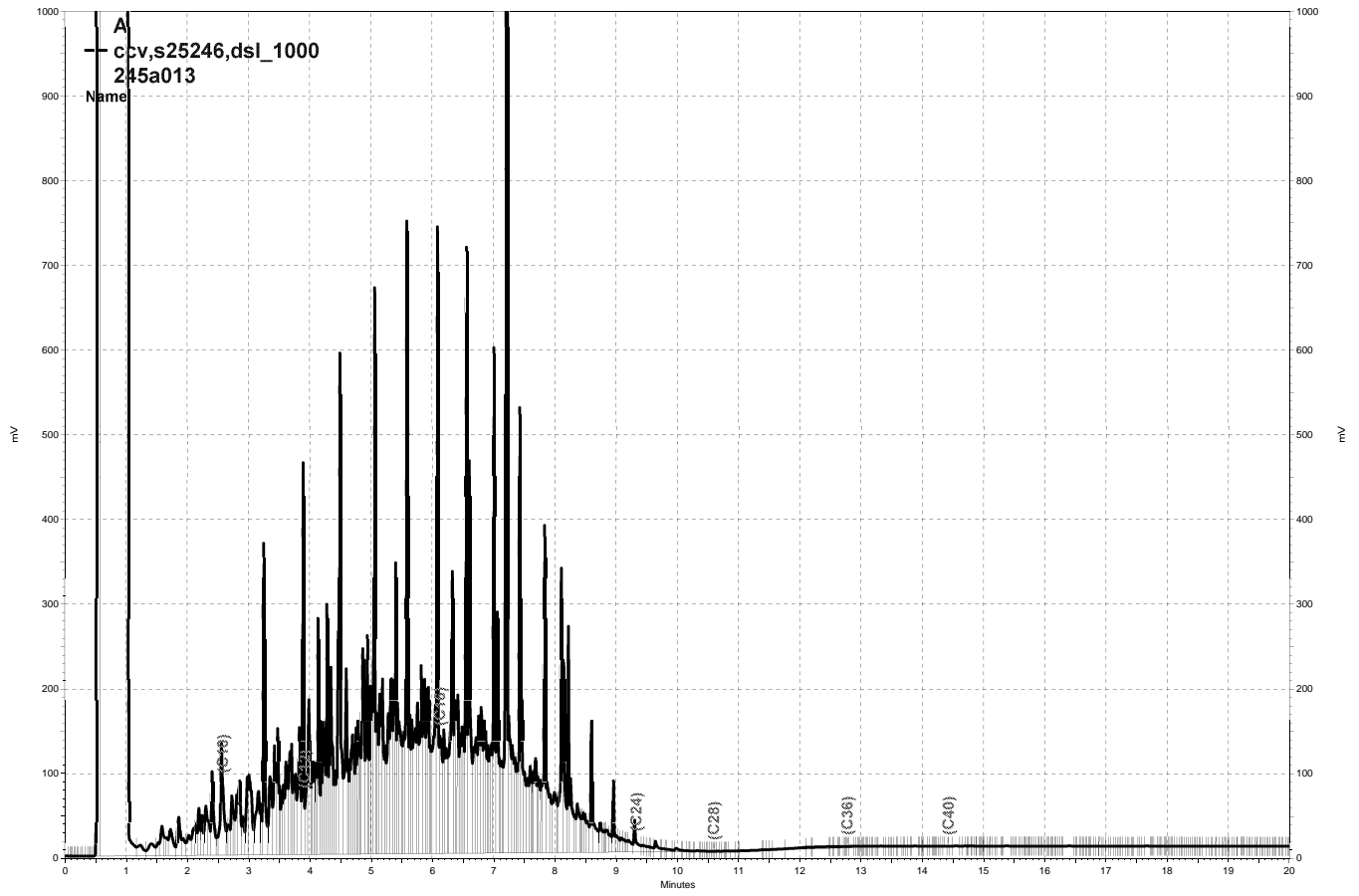


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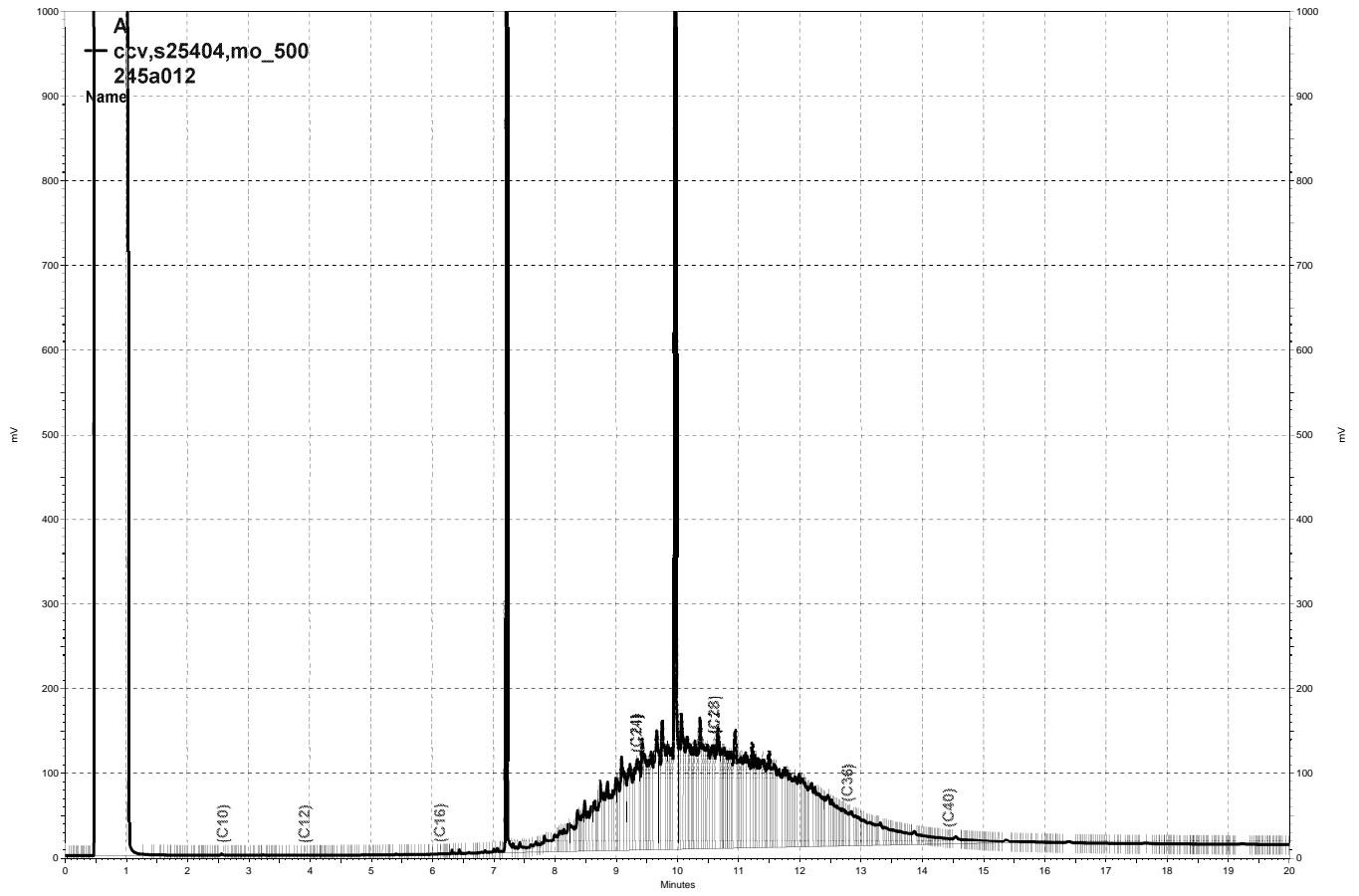


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Organochlorine Pesticides			
Lab #:	260374	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	SB-3-0.5 COMP	Batch#:	215004
Lab ID:	260374-033	Sampled:	08/28/14
Matrix:	Soil	Received:	08/28/14
Units:	ug/Kg	Prepared:	09/02/14
Basis:	as received	Analyzed:	09/04/14
Diln Fac:	1.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	5.3	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	4.8 C	3.3
alpha-Chlordane	6.8	1.7
gamma-Chlordane	7.5 C	1.7
Methoxychlor	ND	17
Toxaphene	ND	61

Surrogate	%REC	Limits
TCMX	88	42-134
Decachlorobiphenyl	73	29-122

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	260374	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	SB-3-4.0 COMP	Batch#:	215004
Lab ID:	260374-034	Sampled:	08/28/14
Matrix:	Soil	Received:	08/28/14
Units:	ug/Kg	Prepared:	09/02/14
Basis:	as received	Analyzed:	09/04/14
Diln Fac:	1.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	ND	1.7
Methoxychlor	ND	17
Toxaphene	ND	60

Surrogate	%REC	Limits
TCMX	76	42-134
Decachlorobiphenyl	62	29-122

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	260374	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	SB-4-0.5 COMP	Batch#:	215004
Lab ID:	260374-035	Sampled:	08/28/14
Matrix:	Soil	Received:	08/28/14
Units:	ug/Kg	Prepared:	09/02/14
Basis:	as received	Analyzed:	09/04/14
Diln Fac:	1.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	3.0 C	1.7
4,4'-DDE	4.5	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	6.7 C	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	1.8 C	1.7
Methoxychlor	ND	17
Toxaphene	ND	60

Surrogate	%REC	Limits
TCMX	87	42-134
Decachlorobiphenyl	65	29-122

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	260374	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	SB-4-4.0 COMP	Batch#:	215004
Lab ID:	260374-036	Sampled:	08/28/14
Matrix:	Soil	Received:	08/28/14
Units:	ug/Kg	Prepared:	09/02/14
Basis:	as received	Analyzed:	09/04/14
Diln Fac:	1.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	ND	1.7
Methoxychlor	ND	17
Toxaphene	ND	60

Surrogate	%REC	Limits
TCMX	64	42-134
Decachlorobiphenyl	63	29-122

ND= Not Detected  
 RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	260374	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	SB-1-0.5 COMP	Batch#:	215004
Lab ID:	260374-037	Sampled:	08/28/14
Matrix:	Soil	Received:	08/28/14
Units:	ug/Kg	Prepared:	09/02/14
Basis:	as received	Analyzed:	09/04/14
Diln Fac:	1.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	2.8 C	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	4.6	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND	3.3
alpha-Chlordane	2.7	1.7
gamma-Chlordane	4.9 C	1.7
Methoxychlor	ND	17
Toxaphene	ND	60

Surrogate	%REC	Limits
TCMX	79	42-134
Decachlorobiphenyl	69	29-122

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	260374	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	SB-1-4.0 COMP	Batch#:	215004
Lab ID:	260374-038	Sampled:	08/28/14
Matrix:	Soil	Received:	08/28/14
Units:	ug/Kg	Prepared:	09/02/14
Basis:	as received	Analyzed:	09/04/14
Diln Fac:	1.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	ND	1.7
Methoxychlor	ND	17
Toxaphene	ND	61

Surrogate	%REC	Limits
TCMX	75	42-134
Decachlorobiphenyl	63	29-122

ND= Not Detected

RL= Reporting Limit



Organochlorine Pesticides			
Lab #:	260374	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	SB-2-0.5 COMP	Batch#:	215004
Lab ID:	260374-039	Sampled:	08/28/14
Matrix:	Soil	Received:	08/28/14
Units:	ug/Kg	Prepared:	09/02/14
Basis:	as received	Analyzed:	09/04/14
Diln Fac:	1.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	4.0	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND	3.3
alpha-Chlordane	18	1.7
gamma-Chlordane	18	1.7
Methoxychlor	ND	17
Toxaphene	ND	60

Surrogate	%REC	Limits
TCMX	89	42-134
Decachlorobiphenyl	63	29-122

ND= Not Detected  
 RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	260374	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	SB-2-4.0 COMP	Batch#:	215004
Lab ID:	260374-040	Sampled:	08/28/14
Matrix:	Soil	Received:	08/28/14
Units:	ug/Kg	Prepared:	09/02/14
Basis:	as received	Analyzed:	09/04/14
Diln Fac:	1.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND	3.3
alpha-Chlordane	4.0	1.7
gamma-Chlordane	5.0	1.7
Methoxychlor	ND	17
Toxaphene	ND	60

Surrogate	%REC	Limits
TCMX	76	42-134
Decachlorobiphenyl	61	29-122

ND= Not Detected

RL= Reporting Limit

**Batch QC Report**

<b>Organochlorine Pesticides</b>			
Lab #:	260374	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC755958	Batch#:	215004
Matrix:	Soil	Prepared:	09/02/14
Units:	ug/Kg	Analyzed:	09/04/14

Cleanup Method: EPA 3620B

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	ND	1.7
Methoxychlor	ND	17
Toxaphene	ND	60

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
TCMX	92	42-134
Decachlorobiphenyl	68	29-122

 ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**

<b>Organochlorine Pesticides</b>			
Lab #:	260374	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC755959	Batch#:	215004
Matrix:	Soil	Prepared:	09/02/14
Units:	ug/Kg	Analyzed:	09/04/14

Cleanup Method: EPA 3620B

<b>Analyte</b>	<b>Spiked</b>	<b>Result</b>	<b>%REC</b>	<b>Limits</b>
gamma-BHC	13.21	10.79	82	46-120
Heptachlor	13.21	10.99	83	41-124
Aldrin	13.21	10.81	82	48-122
Dieldrin	13.21	12.54	95	39-142
Endrin	13.21	12.64	96	45-138
4,4'-DDT	13.21	11.92	90	32-145

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
TCMX	97	42-134
Decachlorobiphenyl	72	29-122

California Title 22 Metals			
Lab #:	260374	Project#:	33114-014115.01
Client:	Bureau Veritas North America	Location:	Oakland Diocese
Field ID:	SB-3-0.5 COMP	Basis:	as received
Lab ID:	260374-033	Diln Fac:	1.000
Matrix:	Soil	Sampled:	08/28/14
Units:	mg/Kg	Received:	08/28/14

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	0.80	0.46	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Arsenic	4.2	0.23	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Barium	180	0.23	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Beryllium	0.46	0.093	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cadmium	0.83	0.23	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Chromium	37	0.23	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cobalt	11	0.23	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Copper	36	0.24	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Lead	16	0.23	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Mercury	0.057	0.018	214980	09/02/14	09/02/14	METHOD	EPA 7471A
Molybdenum	ND	0.23	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Nickel	33	0.23	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Selenium	ND	0.46	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Silver	ND	0.23	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Thallium	ND	0.46	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Vanadium	55	0.23	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Zinc	110	0.93	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B

ND= Not Detected  
 RL= Reporting Limit

**California Title 22 Metals**

Lab #:	260374	Project#:	33114-014115.01
Client:	Bureau Veritas North America	Location:	Oakland Diocese
Field ID:	SB-3-4.0 COMP	Basis:	as received
Lab ID:	260374-034	Diln Fac:	1.000
Matrix:	Soil	Sampled:	08/28/14
Units:	mg/Kg	Received:	08/28/14

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	0.50	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Arsenic	4.0	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Barium	130	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Beryllium	0.43	0.099	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cadmium	0.54	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Chromium	37	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cobalt	8.8	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Copper	22	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Lead	7.9	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Mercury	0.032	0.016	214980	09/02/14	09/02/14	METHOD	EPA 7471A
Molybdenum	ND	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Nickel	40	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Selenium	ND	0.50	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Silver	ND	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Thallium	ND	0.50	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Vanadium	33	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Zinc	47	0.99	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B

ND= Not Detected  
 RL= Reporting Limit

California Title 22 Metals			
Lab #:	260374	Project#:	33114-014115.01
Client:	Bureau Veritas North America	Location:	Oakland Diocese
Field ID:	SB-4-0.5 COMP	Basis:	as received
Lab ID:	260374-035	Diln Fac:	1.000
Matrix:	Soil	Sampled:	08/28/14
Units:	mg/Kg	Received:	08/28/14

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	0.54	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Arsenic	3.5	0.27	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Barium	130	0.27	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Beryllium	0.46	0.11	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cadmium	0.52	0.27	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Chromium	39	0.27	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cobalt	8.4	0.27	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Copper	20	0.28	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Lead	6.9	0.27	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Mercury	0.032	0.016	214980	09/02/14	09/02/14	METHOD	EPA 7471A
Molybdenum	ND	0.27	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Nickel	42	0.27	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Selenium	ND	0.54	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Silver	ND	0.27	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Thallium	ND	0.54	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Vanadium	35	0.27	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Zinc	45	1.1	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B

ND= Not Detected  
 RL= Reporting Limit

California Title 22 Metals			
Lab #:	260374	Project#:	33114-014115.01
Client:	Bureau Veritas North America	Location:	Oakland Diocese
Field ID:	SB-4-4.0 COMP	Basis:	as received
Lab ID:	260374-036	Diln Fac:	1.000
Matrix:	Soil	Sampled:	08/28/14
Units:	mg/Kg	Received:	08/28/14

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	0.71	0.46	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Arsenic	4.1	0.23	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Barium	130	0.23	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Beryllium	0.46	0.092	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cadmium	0.55	0.23	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Chromium	38	0.23	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cobalt	8.9	0.23	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Copper	21	0.24	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Lead	6.4	0.23	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Mercury	0.035	0.016	214980	09/02/14	09/02/14	METHOD	EPA 7471A
Molybdenum	ND	0.23	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Nickel	41	0.23	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Selenium	ND	0.46	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Silver	ND	0.23	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Thallium	ND	0.46	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Vanadium	36	0.23	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Zinc	44	0.92	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B

ND= Not Detected  
 RL= Reporting Limit



California Title 22 Metals			
Lab #:	260374	Project#:	33114-014115.01
Client:	Bureau Veritas North America	Location:	Oakland Diocese
Field ID:	SB-1-0.5 COMP	Basis:	as received
Lab ID:	260374-037	Diln Fac:	1.000
Matrix:	Soil	Sampled:	08/28/14
Units:	mg/Kg	Received:	08/28/14

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	0.61	0.50	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Arsenic	4.3	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Barium	130	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Beryllium	0.45	0.099	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cadmium	0.66	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Chromium	38	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cobalt	9.3	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Copper	33	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Lead	25	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Mercury	0.054	0.015	214980	09/02/14	09/02/14	METHOD	EPA 7471A
Molybdenum	ND	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Nickel	41	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Selenium	ND	0.50	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Silver	ND	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Thallium	ND	0.50	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Vanadium	40	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Zinc	210	0.99	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B

ND= Not Detected  
 RL= Reporting Limit

California Title 22 Metals			
Lab #:	260374	Project#:	33114-014115.01
Client:	Bureau Veritas North America	Location:	Oakland Diocese
Field ID:	SB-1-4.0 COMP	Basis:	as received
Lab ID:	260374-038	Diln Fac:	1.000
Matrix:	Soil	Sampled:	08/28/14
Units:	mg/Kg	Received:	08/28/14

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	0.50	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Arsenic	3.7	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Barium	120	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Beryllium	0.41	0.10	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cadmium	0.50	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Chromium	35	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cobalt	8.2	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Copper	19	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Lead	6.0	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Mercury	0.025	0.017	214980	09/02/14	09/02/14	METHOD	EPA 7471A
Molybdenum	ND	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Nickel	37	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Selenium	ND	0.50	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Silver	ND	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Thallium	ND	0.50	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Vanadium	33	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Zinc	43	1.0	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B

ND= Not Detected  
 RL= Reporting Limit

California Title 22 Metals			
Lab #:	260374	Project#:	33114-014115.01
Client:	Bureau Veritas North America	Location:	Oakland Diocese
Field ID:	SB-2-0.5 COMP	Basis:	as received
Lab ID:	260374-039	Diln Fac:	1.000
Matrix:	Soil	Sampled:	08/28/14
Units:	mg/Kg	Received:	08/28/14

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	0.90	0.51	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Arsenic	4.3	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Barium	140	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Beryllium	0.47	0.10	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cadmium	0.59	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Chromium	40	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cobalt	9.1	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Copper	24	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Lead	7.6	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Mercury	0.039	0.017	214980	09/02/14	09/02/14	METHOD	EPA 7471A
Molybdenum	ND	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Nickel	43	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Selenium	ND	0.51	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Silver	ND	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Thallium	ND	0.51	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Vanadium	34	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Zinc	65	1.0	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B

ND= Not Detected  
 RL= Reporting Limit

California Title 22 Metals			
Lab #:	260374	Project#:	33114-014115.01
Client:	Bureau Veritas North America	Location:	Oakland Diocese
Field ID:	SB-2-4.0 COMP	Basis:	as received
Lab ID:	260374-040	Diln Fac:	1.000
Matrix:	Soil	Sampled:	08/28/14
Units:	mg/Kg	Received:	08/28/14

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	0.54	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Arsenic	3.5	0.27	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Barium	120	0.27	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Beryllium	0.42	0.11	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cadmium	0.47	0.27	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Chromium	35	0.27	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cobalt	7.6	0.27	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Copper	19	0.28	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Lead	5.9	0.27	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Mercury	0.026	0.016	214980	09/02/14	09/02/14	METHOD	EPA 7471A
Molybdenum	ND	0.27	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Nickel	35	0.27	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Selenium	ND	0.54	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Silver	ND	0.27	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Thallium	ND	0.54	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Vanadium	33	0.27	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Zinc	39	1.1	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

California Title 22 Metals			
Lab #:	260374	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115.01	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	214980
Lab ID:	QC755862	Prepared:	09/02/14
Matrix:	Soil	Analyzed:	09/02/14
Units:	mg/Kg		

Result	RL
ND	0.017

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

California Title 22 Metals			
Lab #:	260374	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115.01	Analysis:	EPA 7471A
Analyte:	Mercury	Batch#:	214980
Matrix:	Soil	Prepared:	09/02/14
Units:	mg/Kg	Analyzed:	09/02/14
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC755863	0.2083	0.2177	105	80-120		
BSD	QC755864	0.2083	0.2111	101	80-120	3	20

RPD= Relative Percent Difference

**Batch QC Report**

<b>California Title 22 Metals</b>			
Lab #:	260374	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115.01	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	SB-5-1.0	Batch#:	214980
MSS Lab ID:	260349-001	Sampled:	08/28/14
Matrix:	Soil	Received:	08/28/14
Units:	mg/Kg	Prepared:	09/02/14
Basis:	as received	Analyzed:	09/02/14

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC755865	0.05311	0.1953	0.2508	101	69-136		
MSD	QC755866		0.1953	0.2988	126	69-136	17	35

RPD= Relative Percent Difference

## Batch QC Report

California Title 22 Metals			
Lab #:	260374	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3050B
Project#:	33114-014115.01	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC756093	Batch#:	215038
Matrix:	Soil	Prepared:	09/03/14
Units:	mg/Kg	Analyzed:	09/04/14

Analyte	Result	RL
Antimony	ND	0.50
Arsenic	ND	0.25
Barium	ND	0.25
Beryllium	ND	0.10
Cadmium	ND	0.25
Chromium	ND	0.25
Cobalt	ND	0.25
Copper	ND	0.26
Lead	ND	0.25
Molybdenum	ND	0.25
Nickel	ND	0.25
Selenium	ND	0.50
Silver	ND	0.25
Thallium	ND	0.50
Vanadium	ND	0.25
Zinc	ND	1.0

ND= Not Detected  
 RL= Reporting Limit



**Batch QC Report**

California Title 22 Metals			
Lab #:	260374	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3050B
Project#:	33114-014115.01	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	215038
Units:	mg/Kg	Prepared:	09/03/14
Diln Fac:	5.000	Analyzed:	09/04/14

Type: BS Lab ID: QC756094

Analyte	Spiked	Result	%REC	Limits
Antimony	50.00	48.27	97	80-120
Arsenic	50.00	48.40	97	80-120
Barium	50.00	49.53	99	80-120
Beryllium	50.00	49.38	99	80-120
Cadmium	50.00	51.63	103	80-120
Chromium	50.00	49.74	99	80-120
Cobalt	50.00	48.28	97	80-120
Copper	50.00	50.71	101	80-120
Lead	50.00	48.01	96	80-120
Molybdenum	50.00	49.97	100	80-120
Nickel	50.00	48.85	98	80-120
Selenium	50.00	49.39	99	80-120
Silver	50.00	48.68	97	80-120
Thallium	50.00	47.94	96	80-120
Vanadium	50.00	50.27	101	80-120
Zinc	50.00	49.35	99	80-120

Type: BSD Lab ID: QC756095

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	50.00	48.21	96	80-120	0	20
Arsenic	50.00	48.68	97	80-120	1	20
Barium	50.00	49.16	98	80-120	1	20
Beryllium	50.00	49.73	99	80-120	1	20
Cadmium	50.00	51.26	103	80-120	1	20
Chromium	50.00	49.15	98	80-120	1	20
Cobalt	50.00	48.60	97	80-120	1	20
Copper	50.00	50.90	102	80-120	0	20
Lead	50.00	48.05	96	80-120	0	20
Molybdenum	50.00	50.04	100	80-120	0	20
Nickel	50.00	48.90	98	80-120	0	20
Selenium	50.00	50.11	100	80-120	1	20
Silver	50.00	48.09	96	80-120	1	20
Thallium	50.00	48.32	97	80-120	1	20
Vanadium	50.00	49.85	100	80-120	1	20
Zinc	50.00	49.50	99	80-120	0	20

RPD= Relative Percent Difference

**Batch QC Report**

California Title 22 Metals			
Lab #:	260374	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3050B
Project#:	33114-014115.01	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	215038
MSS Lab ID:	260319-001	Sampled:	08/28/14
Matrix:	Soil	Received:	08/28/14
Units:	mg/Kg	Prepared:	09/03/14
Basis:	as received	Analyzed:	09/04/14
Diln Fac:	1.000		

Type: MS Lab ID: QC756096

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	1.336	50.00	12.65	23	9-120
Arsenic	4.543	50.00	47.85	87	72-120
Barium	132.6	50.00	169.2	73	50-133
Beryllium	0.4616	50.00	45.63	90	80-120
Cadmium	1.288	50.00	45.68	89	72-120
Chromium	33.27	50.00	72.48	78	61-120
Cobalt	7.142	50.00	49.93	86	60-120
Copper	27.17	50.00	74.70	95	47-149
Lead	94.90	50.00	119.5	49 *	52-122
Molybdenum	0.8652	50.00	41.75	82	68-120
Nickel	38.90	50.00	77.87	78	46-135
Selenium	<0.1448	50.00	42.16	84	70-120
Silver	<0.07401	50.00	46.44	93	67-120
Thallium	<0.1614	50.00	39.44	79	64-120
Vanadium	34.21	50.00	76.49	85	54-137
Zinc	49.53	50.00	90.32	82	39-141

Type: MSD Lab ID: QC756097

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	47.17	13.01	25	9-120	8	26
Arsenic	47.17	45.18	86	72-120	0	30
Barium	47.17	164.8	68	50-133	1	43
Beryllium	47.17	43.06	90	80-120	0	20
Cadmium	47.17	43.34	89	72-120	0	22
Chromium	47.17	69.84	78	61-120	0	31
Cobalt	47.17	47.82	86	60-120	1	39
Copper	47.17	77.47	107	47-149	7	32
Lead	47.17	172.3	164 *	52-122	38	49
Molybdenum	47.17	39.75	82	68-120	1	23
Nickel	47.17	75.47	78	46-135	0	37
Selenium	47.17	39.33	83	70-120	1	26
Silver	47.17	44.39	94	67-120	1	25
Thallium	47.17	37.56	80	64-120	1	20
Vanadium	47.17	78.87	95	54-137	6	31
Zinc	47.17	88.25	82	39-141	1	37

\*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference



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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 260349**  
**ANALYTICAL REPORT**

Bureau Veritas North America  
2430 Camino Ramon  
San Ramon, Ca 94583

Project : 33114-014115.01  
Location : Oakland Diocese  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
SB-5-1.0	260349-001
SB-5-3.0	260349-002
SB-5-10.0	260349-003

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Mike J. Dahlquist  
Project Manager  
mike.dahlquist@ctberk.com

Date: 09/09/2014

CA ELAP# 2896, NELAP# 4044-001

## CASE NARRATIVE

Laboratory number: 260349  
Client: Bureau Veritas North America  
Project: 33114-014115.01  
Location: Oakland Diocese  
Request Date: 08/28/14  
Samples Received: 08/28/14

This data package contains sample and QC results for three soil samples, requested for the above referenced project on 08/28/14. The samples were received cold and intact.

### TPH-Purgeables and/or BTXE by GC (EPA 8015B):

No analytical problems were encountered.

### TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

### Volatile Organics by GC/MS (EPA 8260B):

Matrix spikes were not performed for this analysis in batch 215159 due to insufficient sample amount. 260349-001, 260349-002, and 260349-003 were analyzed outside of hold time; affected data was qualified with "b". No other analytical problems were encountered.

### Semivolatile Organics by GC/MS (EPA 8270C):

Matrix spikes QC756273, QC756274 (batch 215073) were not reported because the parent sample was reanalyzed in another batch. No other analytical problems were encountered.

### Metals (EPA 6010B and EPA 7471A):

Low recovery was observed for lead in the MS for batch 215038; the parent sample was not a project sample, the BS/BSD were within limits, and the associated RPD was within limits. High recovery was also observed for lead in the MSD for batch 215038; the BS/BSD were within limits, and the associated RPD was within limits. No other analytical problems were encountered.





### Detections Summary for 260349

Results for any subcontracted analyses are not included in this summary.

Client : Bureau Veritas North America  
 Project : 33114-014115.01  
 Location : Oakland Diocese

Client Sample ID : SB-5-1.0

Laboratory Sample ID :

260349-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Diesel C10-C24	2.7	Y	1.0	0.31	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Motor Oil C24-C36	23		5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Arsenic	3.9		0.24	0.080	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	120		0.24	0.047	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.40		0.096	0.018	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.85		0.24	0.015	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	35		0.24	0.020	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	8.6		0.24	0.019	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	35		0.25	0.083	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	33		0.24	0.070	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.053		0.016	0.00090	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Nickel	36		0.24	0.065	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	30		0.24	0.024	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	200		0.96	0.094	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Client Sample ID : SB-5-3.0

Laboratory Sample ID :

260349-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Motor Oil C24-C36	6.9		5.0	1.5	mg/Kg	As Recd	1.000	EPA 8015B	EPA 3550B
Acetone	22	b	20	1.0	ug/Kg	As Recd	1.014	EPA 8260B	EPA 5035
Arsenic	3.1		0.26	0.087	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	110		0.26	0.051	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.39		0.11	0.020	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.58		0.26	0.017	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	33		0.26	0.022	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	7.7		0.26	0.020	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	17		0.27	0.091	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	12		0.26	0.077	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.029		0.016	0.00089	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Nickel	34		0.26	0.071	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	30		0.26	0.026	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	110		1.1	0.10	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B



Client Sample ID : SB-5-10.0

Laboratory Sample ID :

260349-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Phenol	1,200		330	7.1	ug/Kg	As Recd	1.000	EPA 8270C	EPA 3550B
Arsenic	3.7		0.28	0.092	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Barium	140		0.28	0.054	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Beryllium	0.50		0.11	0.021	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cadmium	0.54		0.28	0.018	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Chromium	44		0.28	0.023	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Cobalt	11		0.28	0.022	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Copper	22		0.29	0.096	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Lead	7.4		0.28	0.081	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Mercury	0.034		0.016	0.00092	mg/Kg	As Recd	1.000	EPA 7471A	METHOD
Nickel	50		0.28	0.075	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Vanadium	36		0.28	0.027	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B
Zinc	47		1.1	0.11	mg/Kg	As Recd	1.000	EPA 6010B	EPA 3050B

Y = Sample exhibits chromatographic pattern which does not resemble standard

b = See narrative



## Batch QC Report

Gasoline by GC/FID (5035 Prep)			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 5035
Project#:	33114-014115.01	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC755793	Batch#:	214962
Matrix:	Soil	Analyzed:	08/31/14
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	0.9904	99	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	101	67-137

Batch QC Report

Gasoline by GC/FID (5035 Prep)			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 5030B
Project#:	33114-014115.01	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	260318-001	Batch#:	214962
Matrix:	Soil	Sampled:	08/27/14
Units:	mg/Kg	Received:	08/28/14
Basis:	as received	Analyzed:	08/31/14

Type: MS Lab ID: QC755795

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.1241	10.64	7.655	71	42-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	105	67-137

Type: MSD Lab ID: QC755796

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.901	7.615	76	42-120	7	44

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	108	67-137

RPD= Relative Percent Difference

Total Extractable Hydrocarbons			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	214915
Units:	mg/Kg	Sampled:	08/28/14
Basis:	as received	Received:	08/28/14
Diln Fac:	1.000		

Field ID: SB-5-1.0                      Prepared: 08/29/14  
 Type: SAMPLE                              Analyzed: 09/02/14  
 Lab ID: 260349-001                      Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	2.7 Y	1.0
Motor Oil C24-C36	23	5.0

Surrogate	%REC	Limits
o-Terphenyl	94	64-136

Field ID: SB-5-3.0                      Prepared: 08/29/14  
 Type: SAMPLE                              Analyzed: 09/02/14  
 Lab ID: 260349-002                      Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	6.9	5.0

Surrogate	%REC	Limits
o-Terphenyl	92	64-136

Field ID: SB-5-10.0                      Prepared: 08/29/14  
 Type: SAMPLE                              Analyzed: 09/04/14  
 Lab ID: 260349-003                      Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	102	64-136

Type: BLANK                                      Analyzed: 08/29/14  
 Lab ID: QC755611                              Cleanup Method: EPA 3630C  
 Prepared: 08/28/14

Analyte	Result	RL
Diesel C10-C24	ND	1.0
Motor Oil C24-C36	ND	5.0

Surrogate	%REC	Limits
o-Terphenyl	97	64-136

Y= Sample exhibits chromatographic pattern which does not resemble standard  
 ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

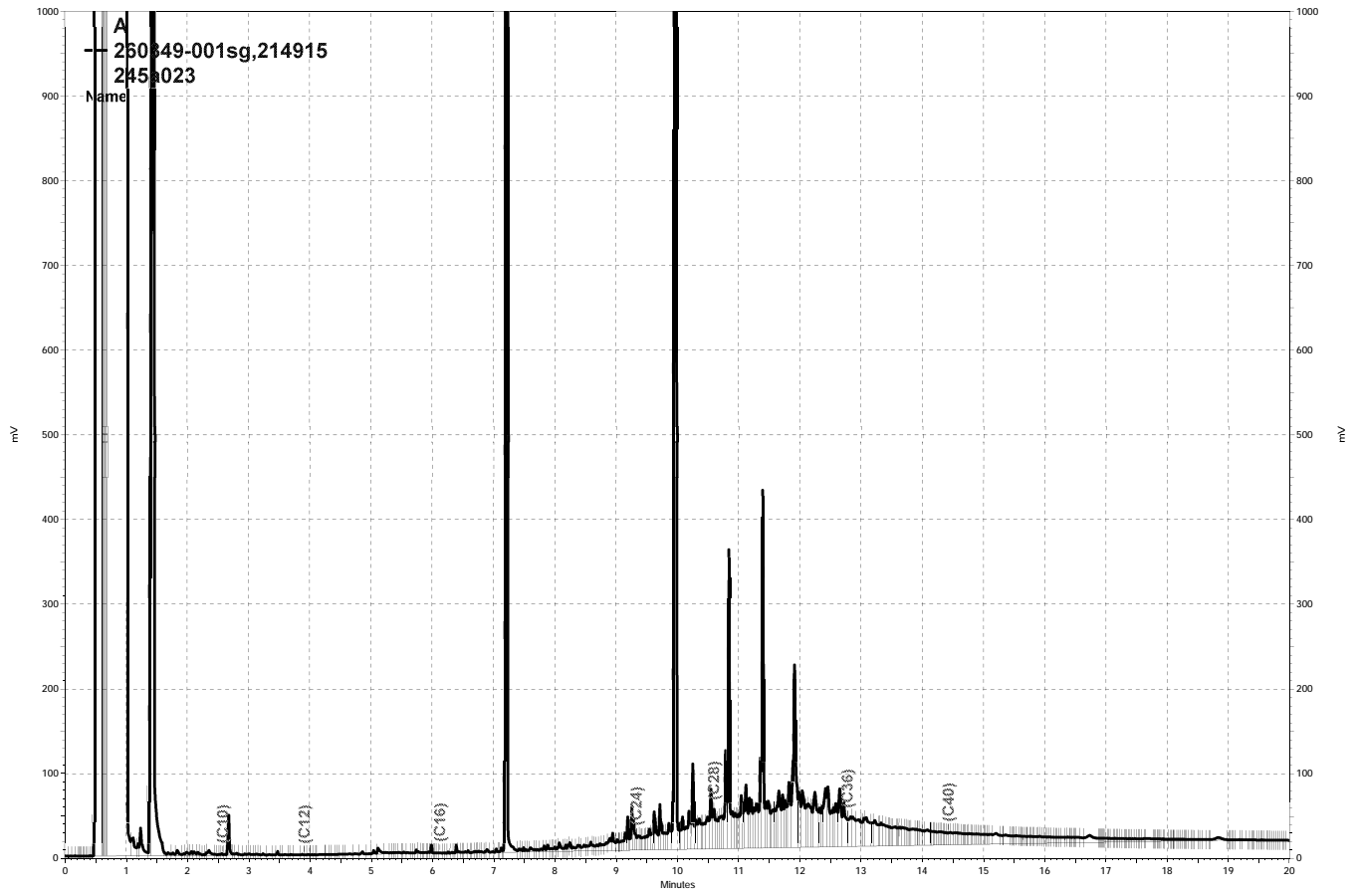
Total Extractable Hydrocarbons			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC755612	Batch#:	214915
Matrix:	Soil	Prepared:	08/28/14
Units:	mg/Kg	Analyzed:	08/29/14

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.04	34.44	69	61-132

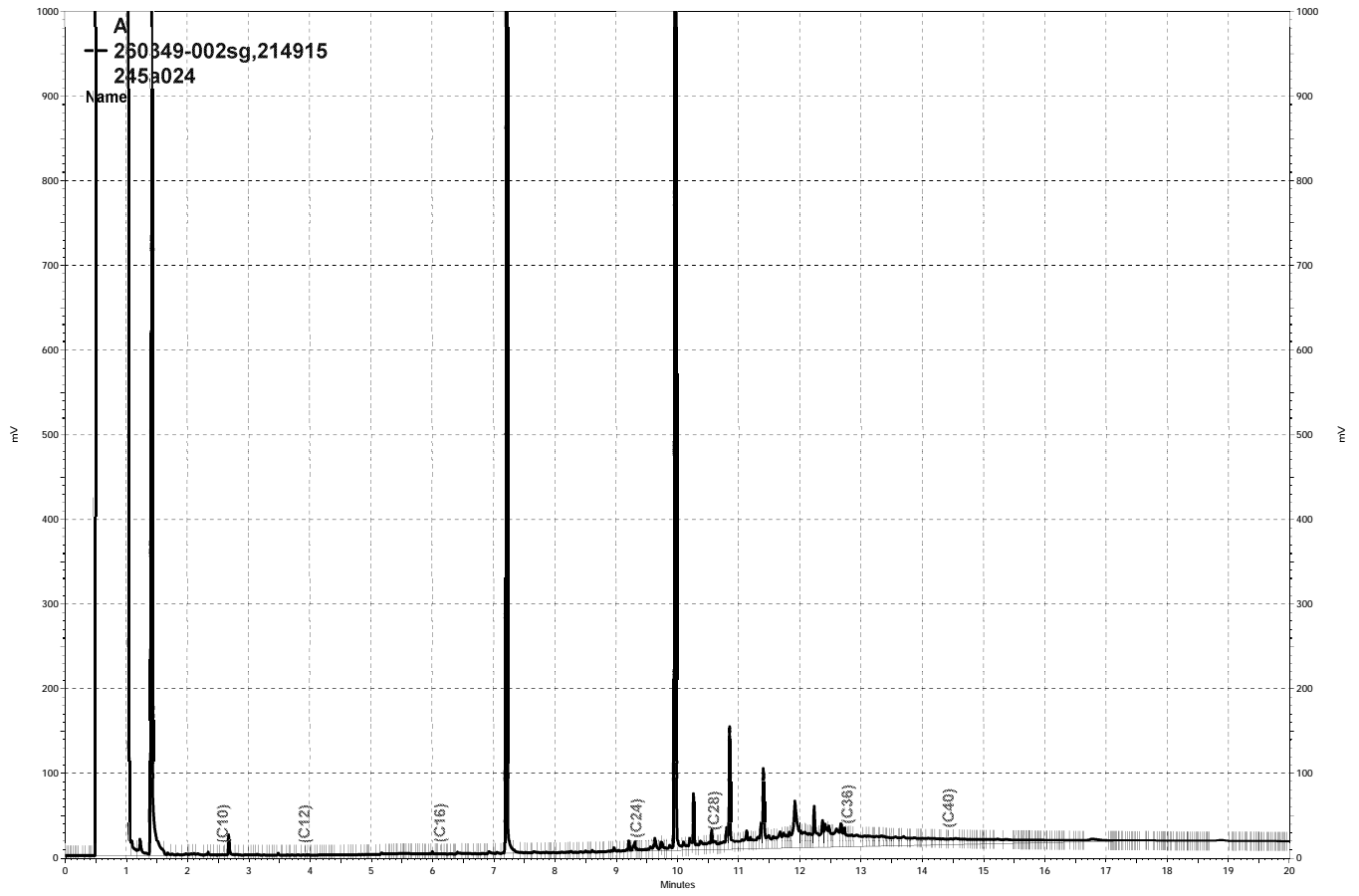
Surrogate	%REC	Limits
o-Terphenyl	73	64-136



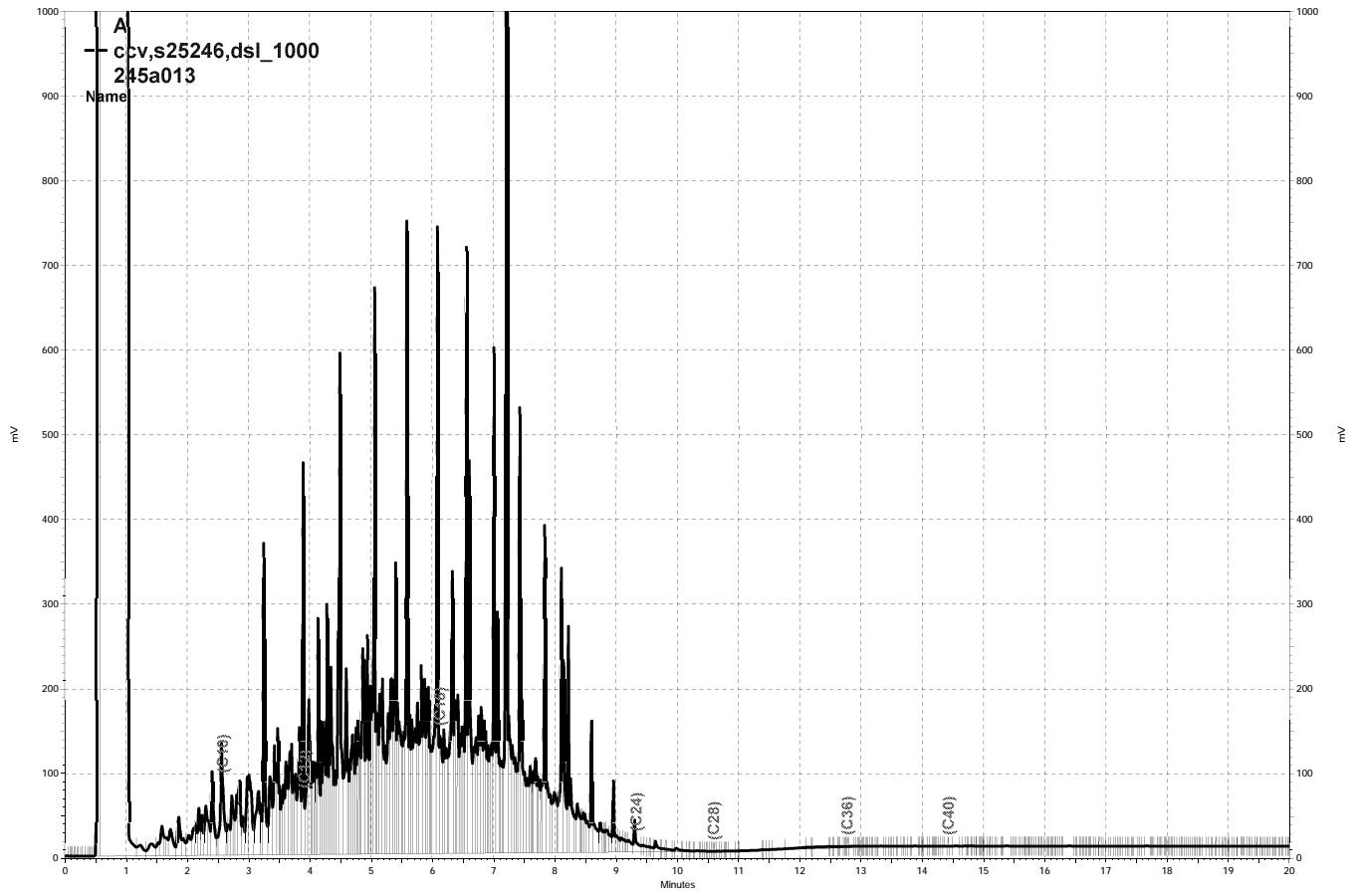


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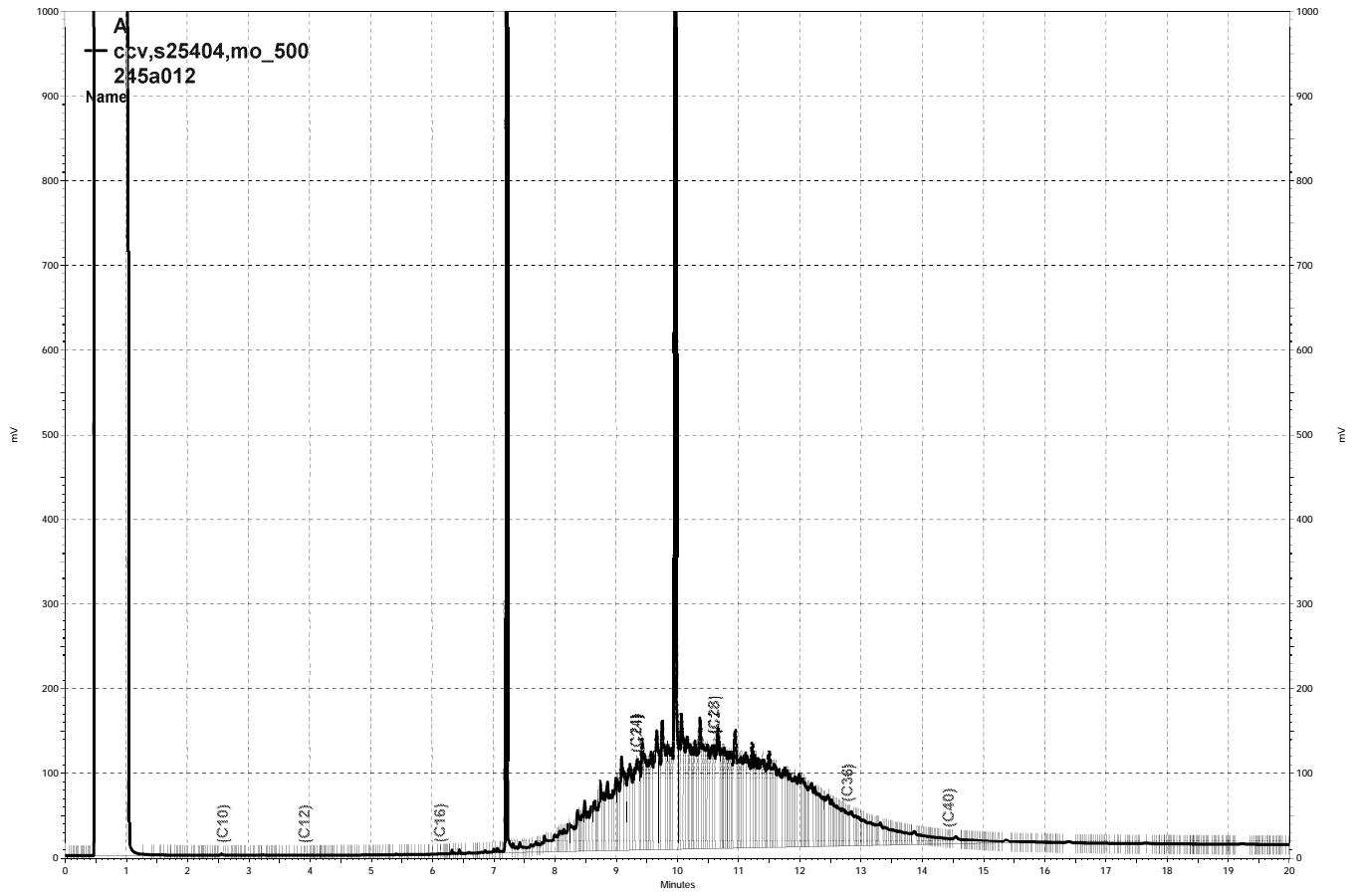




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\\Lims\gdrive\ezchrom\Projects\GC17A\Data\245a013, A



— \\Lims\gdrive\ezchrom\Projects\GC17A\Data\245a012, A

### Purgeable Organics by GC/MS

Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 5035
Project#:	33114-014115.01	Analysis:	EPA 8260B
Field ID:	SB-5-1.0	Diln Fac:	1.000
Lab ID:	260349-001	Batch#:	215159
Matrix:	Soil	Sampled:	08/28/14
Units:	ug/Kg	Received:	08/28/14
Basis:	as received	Analyzed:	09/08/14

Analyte	Result	RL
Freon 12	ND b	10
Chloromethane	ND b	10
Vinyl Chloride	ND b	10
Bromomethane	ND b	10
Chloroethane	ND b	10
Trichlorofluoromethane	ND b	5.0
Acetone	ND b	20
Freon 113	ND b	5.0
1,1-Dichloroethene	ND b	5.0
Methylene Chloride	ND b	20
Carbon Disulfide	ND b	5.0
MTBE	ND b	5.0
trans-1,2-Dichloroethene	ND b	5.0
Vinyl Acetate	ND b	50
1,1-Dichloroethane	ND b	5.0
2-Butanone	ND b	10
cis-1,2-Dichloroethene	ND b	5.0
2,2-Dichloropropane	ND b	5.0
Chloroform	ND b	5.0
Bromochloromethane	ND b	5.0
1,1,1-Trichloroethane	ND b	5.0
1,1-Dichloropropene	ND b	5.0
Carbon Tetrachloride	ND b	5.0
1,2-Dichloroethane	ND b	5.0
Benzene	ND b	5.0
Trichloroethene	ND b	5.0
1,2-Dichloropropane	ND b	5.0
Bromodichloromethane	ND b	5.0
Dibromomethane	ND b	5.0
4-Methyl-2-Pentanone	ND b	10
cis-1,3-Dichloropropene	ND b	5.0
Toluene	ND b	5.0
trans-1,3-Dichloropropene	ND b	5.0
1,1,2-Trichloroethane	ND b	5.0
2-Hexanone	ND b	10
1,3-Dichloropropane	ND b	5.0
Tetrachloroethene	ND b	5.0
Dibromochloromethane	ND b	5.0
1,2-Dibromoethane	ND b	5.0
Chlorobenzene	ND b	5.0
1,1,1,2-Tetrachloroethane	ND b	5.0
Ethylbenzene	ND b	5.0
m,p-Xylenes	ND b	5.0
o-Xylene	ND b	5.0
Styrene	ND b	5.0
Bromoform	ND b	5.0
Isopropylbenzene	ND b	5.0
1,1,2,2-Tetrachloroethane	ND b	5.0
1,2,3-Trichloropropane	ND b	5.0
Propylbenzene	ND b	5.0
Bromobenzene	ND b	5.0
1,3,5-Trimethylbenzene	ND b	5.0
2-Chlorotoluene	ND b	5.0

b= See narrative  
 ND= Not Detected  
 RL= Reporting Limit

Purgeable Organics by GC/MS			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 5035
Project#:	33114-014115.01	Analysis:	EPA 8260B
Field ID:	SB-5-1.0	Diln Fac:	1.000
Lab ID:	260349-001	Batch#:	215159
Matrix:	Soil	Sampled:	08/28/14
Units:	ug/Kg	Received:	08/28/14
Basis:	as received	Analyzed:	09/08/14

Analyte	Result	RL
4-Chlorotoluene	ND b	5.0
tert-Butylbenzene	ND b	5.0
1,2,4-Trimethylbenzene	ND b	5.0
sec-Butylbenzene	ND b	5.0
para-Isopropyl Toluene	ND b	5.0
1,3-Dichlorobenzene	ND b	5.0
1,4-Dichlorobenzene	ND b	5.0
n-Butylbenzene	ND b	5.0
1,2-Dichlorobenzene	ND b	5.0
1,2-Dibromo-3-Chloropropane	ND b	5.0
1,2,4-Trichlorobenzene	ND b	5.0
Hexachlorobutadiene	ND b	5.0
Naphthalene	ND b	5.0
1,2,3-Trichlorobenzene	ND b	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	96 b	76-128
1,2-Dichloroethane-d4	113 b	80-137
Toluene-d8	98 b	80-120
Bromofluorobenzene	91 b	79-128

b= See narrative  
 ND= Not Detected  
 RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 5035
Project#:	33114-014115.01	Analysis:	EPA 8260B
Field ID:	SB-5-3.0	Diln Fac:	1.014
Lab ID:	260349-002	Batch#:	215159
Matrix:	Soil	Sampled:	08/28/14
Units:	ug/Kg	Received:	08/28/14
Basis:	as received	Analyzed:	09/08/14

Analyte	Result	RL
Freon 12	ND b	10
Chloromethane	ND b	10
Vinyl Chloride	ND b	10
Bromomethane	ND b	10
Chloroethane	ND b	10
Trichlorofluoromethane	ND b	5.1
Acetone	22 b	20
Freon 113	ND b	5.1
1,1-Dichloroethene	ND b	5.1
Methylene Chloride	ND b	20
Carbon Disulfide	ND b	5.1
MTBE	ND b	5.1
trans-1,2-Dichloroethene	ND b	5.1
Vinyl Acetate	ND b	51
1,1-Dichloroethane	ND b	5.1
2-Butanone	ND b	10
cis-1,2-Dichloroethene	ND b	5.1
2,2-Dichloropropane	ND b	5.1
Chloroform	ND b	5.1
Bromochloromethane	ND b	5.1
1,1,1-Trichloroethane	ND b	5.1
1,1-Dichloropropene	ND b	5.1
Carbon Tetrachloride	ND b	5.1
1,2-Dichloroethane	ND b	5.1
Benzene	ND b	5.1
Trichloroethene	ND b	5.1
1,2-Dichloropropane	ND b	5.1
Bromodichloromethane	ND b	5.1
Dibromomethane	ND b	5.1
4-Methyl-2-Pentanone	ND b	10
cis-1,3-Dichloropropene	ND b	5.1
Toluene	ND b	5.1
trans-1,3-Dichloropropene	ND b	5.1
1,1,2-Trichloroethane	ND b	5.1
2-Hexanone	ND b	10
1,3-Dichloropropane	ND b	5.1
Tetrachloroethene	ND b	5.1
Dibromochloromethane	ND b	5.1
1,2-Dibromoethane	ND b	5.1
Chlorobenzene	ND b	5.1
1,1,1,2-Tetrachloroethane	ND b	5.1
Ethylbenzene	ND b	5.1
m,p-Xylenes	ND b	5.1
o-Xylene	ND b	5.1
Styrene	ND b	5.1
Bromoform	ND b	5.1
Isopropylbenzene	ND b	5.1
1,1,2,2-Tetrachloroethane	ND b	5.1
1,2,3-Trichloropropane	ND b	5.1
Propylbenzene	ND b	5.1
Bromobenzene	ND b	5.1
1,3,5-Trimethylbenzene	ND b	5.1
2-Chlorotoluene	ND b	5.1

b= See narrative  
 ND= Not Detected  
 RL= Reporting Limit

**Purgeable Organics by GC/MS**

Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 5035
Project#:	33114-014115.01	Analysis:	EPA 8260B
Field ID:	SB-5-3.0	Diln Fac:	1.014
Lab ID:	260349-002	Batch#:	215159
Matrix:	Soil	Sampled:	08/28/14
Units:	ug/Kg	Received:	08/28/14
Basis:	as received	Analyzed:	09/08/14

Analyte	Result	RL
4-Chlorotoluene	ND b	5.1
tert-Butylbenzene	ND b	5.1
1,2,4-Trimethylbenzene	ND b	5.1
sec-Butylbenzene	ND b	5.1
para-Isopropyl Toluene	ND b	5.1
1,3-Dichlorobenzene	ND b	5.1
1,4-Dichlorobenzene	ND b	5.1
n-Butylbenzene	ND b	5.1
1,2-Dichlorobenzene	ND b	5.1
1,2-Dibromo-3-Chloropropane	ND b	5.1
1,2,4-Trichlorobenzene	ND b	5.1
Hexachlorobutadiene	ND b	5.1
Naphthalene	ND b	5.1
1,2,3-Trichlorobenzene	ND b	5.1

Surrogate	%REC	Limits
Dibromofluoromethane	96 b	76-128
1,2-Dichloroethane-d4	108 b	80-137
Toluene-d8	101 b	80-120
Bromofluorobenzene	96 b	79-128

b= See narrative  
 ND= Not Detected  
 RL= Reporting Limit  
 Page 2 of 2

### Purgeable Organics by GC/MS

Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 5035
Project#:	33114-014115.01	Analysis:	EPA 8260B
Field ID:	SB-5-10.0	Diln Fac:	0.8897
Lab ID:	260349-003	Batch#:	215159
Matrix:	Soil	Sampled:	08/28/14
Units:	ug/Kg	Received:	08/28/14
Basis:	as received	Analyzed:	09/08/14

Analyte	Result	RL
Freon 12	ND b	8.9
Chloromethane	ND b	8.9
Vinyl Chloride	ND b	8.9
Bromomethane	ND b	8.9
Chloroethane	ND b	8.9
Trichlorofluoromethane	ND b	4.4
Acetone	ND b	18
Freon 113	ND b	4.4
1,1-Dichloroethene	ND b	4.4
Methylene Chloride	ND b	18
Carbon Disulfide	ND b	4.4
MTBE	ND b	4.4
trans-1,2-Dichloroethene	ND b	4.4
Vinyl Acetate	ND b	44
1,1-Dichloroethane	ND b	4.4
2-Butanone	ND b	8.9
cis-1,2-Dichloroethene	ND b	4.4
2,2-Dichloropropane	ND b	4.4
Chloroform	ND b	4.4
Bromochloromethane	ND b	4.4
1,1,1-Trichloroethane	ND b	4.4
1,1-Dichloropropene	ND b	4.4
Carbon Tetrachloride	ND b	4.4
1,2-Dichloroethane	ND b	4.4
Benzene	ND b	4.4
Trichloroethene	ND b	4.4
1,2-Dichloropropane	ND b	4.4
Bromodichloromethane	ND b	4.4
Dibromomethane	ND b	4.4
4-Methyl-2-Pentanone	ND b	8.9
cis-1,3-Dichloropropene	ND b	4.4
Toluene	ND b	4.4
trans-1,3-Dichloropropene	ND b	4.4
1,1,2-Trichloroethane	ND b	4.4
2-Hexanone	ND b	8.9
1,3-Dichloropropane	ND b	4.4
Tetrachloroethene	ND b	4.4
Dibromochloromethane	ND b	4.4
1,2-Dibromoethane	ND b	4.4
Chlorobenzene	ND b	4.4
1,1,1,2-Tetrachloroethane	ND b	4.4
Ethylbenzene	ND b	4.4
m,p-Xylenes	ND b	4.4
o-Xylene	ND b	4.4
Styrene	ND b	4.4
Bromoform	ND b	4.4
Isopropylbenzene	ND b	4.4
1,1,2,2-Tetrachloroethane	ND b	4.4
1,2,3-Trichloropropane	ND b	4.4
Propylbenzene	ND b	4.4
Bromobenzene	ND b	4.4
1,3,5-Trimethylbenzene	ND b	4.4
2-Chlorotoluene	ND b	4.4

b= See narrative  
 ND= Not Detected  
 RL= Reporting Limit



**Purgeable Organics by GC/MS**

Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 5035
Project#:	33114-014115.01	Analysis:	EPA 8260B
Field ID:	SB-5-10.0	Diln Fac:	0.8897
Lab ID:	260349-003	Batch#:	215159
Matrix:	Soil	Sampled:	08/28/14
Units:	ug/Kg	Received:	08/28/14
Basis:	as received	Analyzed:	09/08/14

Analyte	Result	RL
4-Chlorotoluene	ND b	4.4
tert-Butylbenzene	ND b	4.4
1,2,4-Trimethylbenzene	ND b	4.4
sec-Butylbenzene	ND b	4.4
para-Isopropyl Toluene	ND b	4.4
1,3-Dichlorobenzene	ND b	4.4
1,4-Dichlorobenzene	ND b	4.4
n-Butylbenzene	ND b	4.4
1,2-Dichlorobenzene	ND b	4.4
1,2-Dibromo-3-Chloropropane	ND b	4.4
1,2,4-Trichlorobenzene	ND b	4.4
Hexachlorobutadiene	ND b	4.4
Naphthalene	ND b	4.4
1,2,3-Trichlorobenzene	ND b	4.4

Surrogate	%REC	Limits
Dibromofluoromethane	97 b	76-128
1,2-Dichloroethane-d4	111 b	80-137
Toluene-d8	97 b	80-120
Bromofluorobenzene	90 b	79-128

b= See narrative  
 ND= Not Detected  
 RL= Reporting Limit  
 Page 2 of 2

**Batch QC Report**

<b>Purgeable Organics by GC/MS</b>			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 5035
Project#:	33114-014115.01	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC756625	Batch#:	215159
Matrix:	Soil	Analyzed:	09/08/14
Units:	ug/Kg		

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected

RL= Reporting Limit

**Batch QC Report**

<b>Purgeable Organics by GC/MS</b>			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 5035
Project#:	33114-014115.01	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC756625	Batch#:	215159
Matrix:	Soil	Analyzed:	09/08/14
Units:	ug/Kg		

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
Dibromofluoromethane	93	76-128
1,2-Dichloroethane-d4	109	80-137
Toluene-d8	110	80-120
Bromofluorobenzene	89	79-128

ND= Not Detected

RL= Reporting Limit



Semivolatile Organics by GC/MS			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8270C
Field ID:	SB-5-1.0	Batch#:	214951
Lab ID:	260349-001	Sampled:	08/28/14
Matrix:	Soil	Received:	08/28/14
Units:	ug/Kg	Prepared:	08/29/14
Basis:	as received	Analyzed:	09/02/14
Diln Fac:	1.000		

Analyte	Result	RL
N-Nitrosodimethylamine	ND	330
Phenol	ND	330
bis(2-Chloroethyl)ether	ND	330
2-Chlorophenol	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
Benzyl alcohol	ND	330
1,2-Dichlorobenzene	ND	330
2-Methylphenol	ND	330
bis(2-Chloroisopropyl) ether	ND	330
4-Methylphenol	ND	330
N-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
2-Nitrophenol	ND	660
2,4-Dimethylphenol	ND	330
Benzoic acid	ND	1,600
bis(2-Chloroethoxy)methane	ND	330
2,4-Dichlorophenol	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	66
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
4-Chloro-3-methylphenol	ND	330
2-Methylnaphthalene	ND	66
Hexachlorocyclopentadiene	ND	660
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	330
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	660
Dimethylphthalate	ND	330
Acenaphthylene	ND	66
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	660
Acenaphthene	ND	66
2,4-Dinitrophenol	ND	660
4-Nitrophenol	ND	660
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330
Diethylphthalate	ND	330
Fluorene	ND	66
4-Chlorophenyl-phenylether	ND	330
4-Nitroaniline	ND	660
4,6-Dinitro-2-methylphenol	ND	660
N-Nitrosodiphenylamine	ND	330
Azobenzene	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Pentachlorophenol	ND	660
Phenanthrene	ND	66
Anthracene	ND	66
Di-n-butylphthalate	ND	330

ND= Not Detected  
 RL= Reporting Limit

Semivolatile Organics by GC/MS			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8270C
Field ID:	SB-5-1.0	Batch#:	214951
Lab ID:	260349-001	Sampled:	08/28/14
Matrix:	Soil	Received:	08/28/14
Units:	ug/Kg	Prepared:	08/29/14
Basis:	as received	Analyzed:	09/02/14
Diln Fac:	1.000		

Analyte	Result	RL
Fluoranthene	ND	66
Pyrene	ND	66
Butylbenzylphthalate	ND	330
3,3'-Dichlorobenzidine	ND	660
Benzo(a)anthracene	ND	66
Chrysene	ND	66
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	66
Benzo(k)fluoranthene	ND	66
Benzo(a)pyrene	ND	66
Indeno(1,2,3-cd)pyrene	ND	66
Dibenz(a,h)anthracene	ND	66
Benzo(g,h,i)perylene	ND	66

Surrogate	%REC	Limits
2-Fluorophenol	64	33-120
Phenol-d5	69	39-120
2,4,6-Tribromophenol	56	33-120
Nitrobenzene-d5	67	46-120
2-Fluorobiphenyl	72	51-120
Terphenyl-d14	87	50-120

ND= Not Detected  
 RL= Reporting Limit

Semivolatile Organics by GC/MS			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8270C
Field ID:	SB-5-3.0	Batch#:	214951
Lab ID:	260349-002	Sampled:	08/28/14
Matrix:	Soil	Received:	08/28/14
Units:	ug/Kg	Prepared:	08/29/14
Basis:	as received	Analyzed:	09/02/14
Diln Fac:	1.000		

Analyte	Result	RL
N-Nitrosodimethylamine	ND	330
Phenol	ND	330
bis(2-Chloroethyl)ether	ND	330
2-Chlorophenol	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
Benzyl alcohol	ND	330
1,2-Dichlorobenzene	ND	330
2-Methylphenol	ND	330
bis(2-Chloroisopropyl) ether	ND	330
4-Methylphenol	ND	330
N-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
2-Nitrophenol	ND	670
2,4-Dimethylphenol	ND	330
Benzoic acid	ND	1,700
bis(2-Chloroethoxy)methane	ND	330
2,4-Dichlorophenol	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	67
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
4-Chloro-3-methylphenol	ND	330
2-Methylnaphthalene	ND	67
Hexachlorocyclopentadiene	ND	670
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	330
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	670
Dimethylphthalate	ND	330
Acenaphthylene	ND	67
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	670
Acenaphthene	ND	67
2,4-Dinitrophenol	ND	670
4-Nitrophenol	ND	670
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330
Diethylphthalate	ND	330
Fluorene	ND	67
4-Chlorophenyl-phenylether	ND	330
4-Nitroaniline	ND	670
4,6-Dinitro-2-methylphenol	ND	670
N-Nitrosodiphenylamine	ND	330
Azobenzene	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Pentachlorophenol	ND	670
Phenanthrene	ND	67
Anthracene	ND	67
Di-n-butylphthalate	ND	330

ND= Not Detected  
 RL= Reporting Limit

Semivolatile Organics by GC/MS			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8270C
Field ID:	SB-5-3.0	Batch#:	214951
Lab ID:	260349-002	Sampled:	08/28/14
Matrix:	Soil	Received:	08/28/14
Units:	ug/Kg	Prepared:	08/29/14
Basis:	as received	Analyzed:	09/02/14
Diln Fac:	1.000		

Analyte	Result	RL
Fluoranthene	ND	67
Pyrene	ND	67
Butylbenzylphthalate	ND	330
3,3'-Dichlorobenzidine	ND	670
Benzo(a)anthracene	ND	67
Chrysene	ND	67
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	67
Benzo(k)fluoranthene	ND	67
Benzo(a)pyrene	ND	67
Indeno(1,2,3-cd)pyrene	ND	67
Dibenz(a,h)anthracene	ND	67
Benzo(g,h,i)perylene	ND	67

Surrogate	%REC	Limits
2-Fluorophenol	62	33-120
Phenol-d5	68	39-120
2,4,6-Tribromophenol	58	33-120
Nitrobenzene-d5	65	46-120
2-Fluorobiphenyl	72	51-120
Terphenyl-d14	82	50-120

ND= Not Detected  
 RL= Reporting Limit



**Semivolatile Organics by GC/MS**

Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8270C
Field ID:	SB-5-10.0	Basis:	as received
Lab ID:	260349-003	Diln Fac:	1.000
Matrix:	Soil	Sampled:	08/28/14
Units:	ug/Kg	Received:	08/28/14

Analyte	Result	RL	Batch#	Prepared	Analyzed
N-Nitrosodimethylamine	ND	330	215073	09/04/14	09/04/14
Phenol	1,200	330	215073	09/04/14	09/04/14
bis(2-Chloroethyl)ether	ND	330	215073	09/04/14	09/04/14
2-Chlorophenol	ND	330	215073	09/04/14	09/04/14
1,3-Dichlorobenzene	ND	330	215073	09/04/14	09/04/14
1,4-Dichlorobenzene	ND	330	215073	09/04/14	09/04/14
Benzyl alcohol	ND	330	215073	09/04/14	09/04/14
1,2-Dichlorobenzene	ND	330	215073	09/04/14	09/04/14
2-Methylphenol	ND	330	215073	09/04/14	09/04/14
bis(2-Chloroisopropyl) ether	ND	330	215073	09/04/14	09/04/14
4-Methylphenol	ND	330	215073	09/04/14	09/04/14
N-Nitroso-di-n-propylamine	ND	330	215073	09/04/14	09/04/14
Hexachloroethane	ND	330	215073	09/04/14	09/04/14
Nitrobenzene	ND	330	215073	09/04/14	09/04/14
Isophorone	ND	330	215073	09/04/14	09/04/14
2-Nitrophenol	ND	670	215073	09/04/14	09/04/14
2,4-Dimethylphenol	ND	330	215073	09/04/14	09/04/14
Benzoic acid	ND	1,600	215175	09/08/14	09/09/14
bis(2-Chloroethoxy)methane	ND	330	215073	09/04/14	09/04/14
2,4-Dichlorophenol	ND	330	215073	09/04/14	09/04/14
1,2,4-Trichlorobenzene	ND	330	215073	09/04/14	09/04/14
Naphthalene	ND	67	215073	09/04/14	09/04/14
4-Chloroaniline	ND	330	215073	09/04/14	09/04/14
Hexachlorobutadiene	ND	330	215073	09/04/14	09/04/14
4-Chloro-3-methylphenol	ND	330	215073	09/04/14	09/04/14
2-Methylnaphthalene	ND	67	215073	09/04/14	09/04/14
Hexachlorocyclopentadiene	ND	670	215073	09/04/14	09/04/14
2,4,6-Trichlorophenol	ND	330	215073	09/04/14	09/04/14
2,4,5-Trichlorophenol	ND	330	215073	09/04/14	09/04/14
2-Chloronaphthalene	ND	330	215073	09/04/14	09/04/14
2-Nitroaniline	ND	670	215073	09/04/14	09/04/14
Dimethylphthalate	ND	330	215073	09/04/14	09/04/14
Acenaphthylene	ND	67	215073	09/04/14	09/04/14
2,6-Dinitrotoluene	ND	330	215073	09/04/14	09/04/14
3-Nitroaniline	ND	670	215073	09/04/14	09/04/14
Acenaphthene	ND	67	215073	09/04/14	09/04/14
2,4-Dinitrophenol	ND	670	215073	09/04/14	09/04/14
4-Nitrophenol	ND	670	215073	09/04/14	09/04/14

ND= Not Detected  
 RL= Reporting Limit

**Semivolatile Organics by GC/MS**

Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8270C
Field ID:	SB-5-10.0	Basis:	as received
Lab ID:	260349-003	Diln Fac:	1.000
Matrix:	Soil	Sampled:	08/28/14
Units:	ug/Kg	Received:	08/28/14

Analyte	Result	RL	Batch#	Prepared	Analyzed
Dibenzofuran	ND	330	215073	09/04/14	09/04/14
2,4-Dinitrotoluene	ND	330	215073	09/04/14	09/04/14
Diethylphthalate	ND	330	215073	09/04/14	09/04/14
Fluorene	ND	67	215073	09/04/14	09/04/14
4-Chlorophenyl-phenylether	ND	330	215073	09/04/14	09/04/14
4-Nitroaniline	ND	670	215073	09/04/14	09/04/14
4,6-Dinitro-2-methylphenol	ND	670	215073	09/04/14	09/04/14
N-Nitrosodiphenylamine	ND	330	215073	09/04/14	09/04/14
Azobenzene	ND	330	215073	09/04/14	09/04/14
4-Bromophenyl-phenylether	ND	330	215073	09/04/14	09/04/14
Hexachlorobenzene	ND	330	215073	09/04/14	09/04/14
Pentachlorophenol	ND	670	215073	09/04/14	09/04/14
Phenanthrene	ND	67	215073	09/04/14	09/04/14
Anthracene	ND	67	215073	09/04/14	09/04/14
Di-n-butylphthalate	ND	330	215073	09/04/14	09/04/14
Fluoranthene	ND	67	215073	09/04/14	09/04/14
Pyrene	ND	67	215073	09/04/14	09/04/14
Butylbenzylphthalate	ND	330	215073	09/04/14	09/04/14
3,3'-Dichlorobenzidine	ND	670	215073	09/04/14	09/04/14
Benzo(a)anthracene	ND	67	215073	09/04/14	09/04/14
Chrysene	ND	67	215073	09/04/14	09/04/14
bis(2-Ethylhexyl)phthalate	ND	330	215073	09/04/14	09/04/14
Di-n-octylphthalate	ND	330	215073	09/04/14	09/04/14
Benzo(b)fluoranthene	ND	67	215073	09/04/14	09/04/14
Benzo(k)fluoranthene	ND	67	215073	09/04/14	09/04/14
Benzo(a)pyrene	ND	67	215073	09/04/14	09/04/14
Indeno(1,2,3-cd)pyrene	ND	67	215073	09/04/14	09/04/14
Dibenz(a,h)anthracene	ND	67	215073	09/04/14	09/04/14
Benzo(g,h,i)perylene	ND	67	215073	09/04/14	09/04/14

Surrogate	%REC	Limits	Batch#	Prepared	Analyzed
2-Fluorophenol	76	33-120	215073	09/04/14	09/04/14
Phenol-d5	75	39-120	215073	09/04/14	09/04/14
2,4,6-Tribromophenol	90	33-120	215073	09/04/14	09/04/14
Nitrobenzene-d5	66	46-120	215073	09/04/14	09/04/14
2-Fluorobiphenyl	74	51-120	215073	09/04/14	09/04/14
Terphenyl-d14	75	50-120	215073	09/04/14	09/04/14

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Semivolatile Organics by GC/MS			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC755743	Batch#:	214951
Matrix:	Soil	Prepared:	08/29/14
Units:	ug/Kg	Analyzed:	09/02/14

Analyte	Result	RL
N-Nitrosodimethylamine	ND	340
Phenol	ND	340
bis(2-Chloroethyl)ether	ND	340
2-Chlorophenol	ND	340
1,3-Dichlorobenzene	ND	340
1,4-Dichlorobenzene	ND	340
Benzyl alcohol	ND	340
1,2-Dichlorobenzene	ND	340
2-Methylphenol	ND	340
bis(2-Chloroisopropyl) ether	ND	340
4-Methylphenol	ND	340
N-Nitroso-di-n-propylamine	ND	340
Hexachloroethane	ND	340
Nitrobenzene	ND	340
Isophorone	ND	340
2-Nitrophenol	ND	680
2,4-Dimethylphenol	ND	340
Benzoic acid	ND	1,700
bis(2-Chloroethoxy)methane	ND	340
2,4-Dichlorophenol	ND	340
1,2,4-Trichlorobenzene	ND	340
Naphthalene	ND	68
4-Chloroaniline	ND	340
Hexachlorobutadiene	ND	340
4-Chloro-3-methylphenol	ND	340
2-Methylnaphthalene	ND	68
Hexachlorocyclopentadiene	ND	680
2,4,6-Trichlorophenol	ND	340
2,4,5-Trichlorophenol	ND	340
2-Chloronaphthalene	ND	340
2-Nitroaniline	ND	680
Dimethylphthalate	ND	340
Acenaphthylene	ND	68
2,6-Dinitrotoluene	ND	340
3-Nitroaniline	ND	680
Acenaphthene	ND	68
2,4-Dinitrophenol	ND	680
4-Nitrophenol	ND	680
Dibenzofuran	ND	340
2,4-Dinitrotoluene	ND	340
Diethylphthalate	ND	340
Fluorene	ND	68
4-Chlorophenyl-phenylether	ND	340
4-Nitroaniline	ND	680
4,6-Dinitro-2-methylphenol	ND	680
N-Nitrosodiphenylamine	ND	340
Azobenzene	ND	340
4-Bromophenyl-phenylether	ND	340
Hexachlorobenzene	ND	340
Pentachlorophenol	ND	680
Phenanthrene	ND	68
Anthracene	ND	68
Di-n-butylphthalate	ND	340
Fluoranthene	ND	68

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Semivolatile Organics by GC/MS			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC755743	Batch#:	214951
Matrix:	Soil	Prepared:	08/29/14
Units:	ug/Kg	Analyzed:	09/02/14

Analyte	Result	RL
Pyrene	ND	68
Butylbenzylphthalate	ND	340
3,3'-Dichlorobenzidine	ND	680
Benzo(a)anthracene	ND	68
Chrysene	ND	68
bis(2-Ethylhexyl)phthalate	ND	340
Di-n-octylphthalate	ND	340
Benzo(b)fluoranthene	ND	68
Benzo(k)fluoranthene	ND	68
Benzo(a)pyrene	ND	68
Indeno(1,2,3-cd)pyrene	ND	68
Dibenz(a,h)anthracene	ND	68
Benzo(g,h,i)perylene	ND	68

Surrogate	%REC	Limits
2-Fluorophenol	75	33-120
Phenol-d5	79	39-120
2,4,6-Tribromophenol	61	33-120
Nitrobenzene-d5	78	46-120
2-Fluorobiphenyl	86	51-120
Terphenyl-d14	84	50-120

ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**

<b>Semivolatile Organics by GC/MS</b>			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8270C
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC755744	Batch#:	214951
Matrix:	Soil	Prepared:	08/29/14
Units:	ug/Kg	Analyzed:	09/02/14

<b>Analyte</b>	<b>Spiked</b>	<b>Result</b>	<b>%REC</b>	<b>Limits</b>
Phenol	2,709	1,840	68	43-120
2-Chlorophenol	2,709	1,960	72	50-120
1,4-Dichlorobenzene	2,709	2,136	79	52-120
N-Nitroso-di-n-propylamine	2,709	1,758	65	30-121
1,2,4-Trichlorobenzene	2,709	2,332	86	53-120
4-Chloro-3-methylphenol	2,709	2,368	87	58-120
Acenaphthene	1,016	825.4	81	53-120
4-Nitrophenol	2,709	1,935	71	46-120
2,4-Dinitrotoluene	2,709	2,267	84	57-120
Pentachlorophenol	2,709	1,579	58	31-120
Pyrene	1,016	933.3	92	55-120

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
2-Fluorophenol	72	33-120
Phenol-d5	70	39-120
2,4,6-Tribromophenol	81	33-120
Nitrobenzene-d5	78	46-120
2-Fluorobiphenyl	82	51-120
Terphenyl-d14	83	50-120

**Batch QC Report**

Semivolatile Organics by GC/MS			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8270C
Field ID:	SB-5-3.0	Batch#:	214951
MSS Lab ID:	260349-002	Sampled:	08/28/14
Matrix:	Soil	Received:	08/28/14
Units:	ug/Kg	Prepared:	08/29/14
Basis:	as received	Analyzed:	09/02/14
Diln Fac:	1.000		

Type: MS Lab ID: QC755745

Analyte	MSS Result	Spiked	Result	%REC	Limits
Phenol	<17.28	2,683	1,712	64	50-120
2-Chlorophenol	<16.42	2,683	1,810	67	50-120
1,4-Dichlorobenzene	<10.09	2,683	2,042	76	55-120
N-Nitroso-di-n-propylamine	<10.76	2,683	1,703	63	43-120
1,2,4-Trichlorobenzene	<9.642	2,683	2,253	84	58-120
4-Chloro-3-methylphenol	<14.67	2,683	2,293	85	60-120
Acenaphthene	<6.921	1,006	838.5	83	59-120
4-Nitrophenol	<68.59	2,683	1,953	73	45-120
2,4-Dinitrotoluene	<9.666	2,683	2,256	84	59-120
Pentachlorophenol	<148.0	2,683	1,360	51	17-120
Pyrene	<9.340	1,006	947.8	94	53-124

Surrogate	%REC	Limits
2-Fluorophenol	67	33-120
Phenol-d5	65	39-120
2,4,6-Tribromophenol	76	33-120
Nitrobenzene-d5	75	46-120
2-Fluorobiphenyl	78	51-120
Terphenyl-d14	84	50-120

Type: MSD Lab ID: QC755746

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Phenol	2,650	1,689	64	50-120	0	35
2-Chlorophenol	2,650	1,782	67	50-120	0	38
1,4-Dichlorobenzene	2,650	1,961	74	55-120	3	39
N-Nitroso-di-n-propylamine	2,650	1,641	62	43-120	3	38
1,2,4-Trichlorobenzene	2,650	2,132	80	58-120	4	34
4-Chloro-3-methylphenol	2,650	2,183	82	60-120	4	32
Acenaphthene	993.7	803.9	81	59-120	3	37
4-Nitrophenol	2,650	1,873	71	45-120	3	40
2,4-Dinitrotoluene	2,650	2,150	81	59-120	4	29
Pentachlorophenol	2,650	1,433	54	17-120	7	51
Pyrene	993.7	913.8	92	53-124	2	49

Surrogate	%REC	Limits
2-Fluorophenol	64	33-120
Phenol-d5	65	39-120
2,4,6-Tribromophenol	75	33-120
Nitrobenzene-d5	72	46-120
2-Fluorobiphenyl	76	51-120
Terphenyl-d14	83	50-120

RPD= Relative Percent Difference

## Batch QC Report

Semivolatile Organics by GC/MS			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC756271	Batch#:	215073
Matrix:	Soil	Prepared:	09/04/14
Units:	ug/Kg	Analyzed:	09/04/14

Analyte	Result	RL
N-Nitrosodimethylamine	ND	330
Phenol	ND	330
bis(2-Chloroethyl)ether	ND	330
2-Chlorophenol	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
Benzyl alcohol	ND	330
1,2-Dichlorobenzene	ND	330
2-Methylphenol	ND	330
bis(2-Chloroisopropyl) ether	ND	330
4-Methylphenol	ND	330
N-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
2-Nitrophenol	ND	670
2,4-Dimethylphenol	ND	330
Benzoic acid	ND	1,700
bis(2-Chloroethoxy)methane	ND	330
2,4-Dichlorophenol	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	67
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
4-Chloro-3-methylphenol	ND	330
2-Methylnaphthalene	ND	67
Hexachlorocyclopentadiene	ND	670
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	330
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	670
Dimethylphthalate	ND	330
Acenaphthylene	ND	67
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	670
Acenaphthene	ND	67
2,4-Dinitrophenol	ND	670
4-Nitrophenol	ND	670
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330
Diethylphthalate	ND	330
Fluorene	ND	67
4-Chlorophenyl-phenylether	ND	330
4-Nitroaniline	ND	670
4,6-Dinitro-2-methylphenol	ND	670
N-Nitrosodiphenylamine	ND	330
Azobenzene	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Pentachlorophenol	ND	670
Phenanthrene	ND	67
Anthracene	ND	67
Di-n-butylphthalate	ND	330
Fluoranthene	ND	67

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Semivolatile Organics by GC/MS			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC756271	Batch#:	215073
Matrix:	Soil	Prepared:	09/04/14
Units:	ug/Kg	Analyzed:	09/04/14

Analyte	Result	RL
Pyrene	ND	67
Butylbenzylphthalate	ND	330
3,3'-Dichlorobenzidine	ND	670
Benzo(a)anthracene	ND	67
Chrysene	ND	67
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	67
Benzo(k)fluoranthene	ND	67
Benzo(a)pyrene	ND	67
Indeno(1,2,3-cd)pyrene	ND	67
Dibenz(a,h)anthracene	ND	67
Benzo(g,h,i)perylene	ND	67

Surrogate	%REC	Limits
2-Fluorophenol	73	33-120
Phenol-d5	75	39-120
2,4,6-Tribromophenol	67	33-120
Nitrobenzene-d5	79	46-120
2-Fluorobiphenyl	86	51-120
Terphenyl-d14	83	50-120

ND= Not Detected  
 RL= Reporting Limit



**Batch QC Report**

<b>Semivolatile Organics by GC/MS</b>			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8270C
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC756272	Batch#:	215073
Matrix:	Soil	Prepared:	09/04/14
Units:	ug/Kg	Analyzed:	09/04/14

<b>Analyte</b>	<b>Spiked</b>	<b>Result</b>	<b>%REC</b>	<b>Limits</b>
Phenol	2,684	1,645	61	43-120
2-Chlorophenol	2,684	1,825	68	50-120
1,4-Dichlorobenzene	2,684	2,085	78	52-120
N-Nitroso-di-n-propylamine	2,684	1,586	59	30-121
1,2,4-Trichlorobenzene	2,684	2,336	87	53-120
4-Chloro-3-methylphenol	2,684	2,352	88	58-120
Acenaphthene	1,006	801.6	80	53-120
4-Nitrophenol	2,684	1,671	62	46-120
2,4-Dinitrotoluene	2,684	2,232	83	57-120
Pentachlorophenol	2,684	1,184	44	31-120
Pyrene	1,006	904.1	90	55-120

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
2-Fluorophenol	69	33-120
Phenol-d5	63	39-120
2,4,6-Tribromophenol	79	33-120
Nitrobenzene-d5	77	46-120
2-Fluorobiphenyl	80	51-120
Terphenyl-d14	84	50-120

**Batch QC Report**

<b>Semivolatile Organics by GC/MS</b>			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC756696	Batch#:	215175
Matrix:	Soil	Prepared:	09/08/14
Units:	ug/Kg	Analyzed:	09/09/14

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
N-Nitrosodimethylamine	ND	330
Phenol	ND	330
bis(2-Chloroethyl)ether	ND	330
2-Chlorophenol	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
Benzyl alcohol	ND	330
1,2-Dichlorobenzene	ND	330
2-Methylphenol	ND	330
bis(2-Chloroisopropyl) ether	ND	330
4-Methylphenol	ND	330
N-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
2-Nitrophenol	ND	660
2,4-Dimethylphenol	ND	330
Benzoic acid	ND	1,600
bis(2-Chloroethoxy)methane	ND	330
2,4-Dichlorophenol	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	66
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
4-Chloro-3-methylphenol	ND	330
2-Methylnaphthalene	ND	66
Hexachlorocyclopentadiene	ND	660
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	330
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	660
Dimethylphthalate	ND	330
Acenaphthylene	ND	66
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	660
Acenaphthene	ND	66
2,4-Dinitrophenol	ND	660
4-Nitrophenol	ND	660
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330
Diethylphthalate	ND	330
Fluorene	ND	66
4-Chlorophenyl-phenylether	ND	330
4-Nitroaniline	ND	660
4,6-Dinitro-2-methylphenol	ND	660
N-Nitrosodiphenylamine	ND	330
Azobenzene	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Pentachlorophenol	ND	660
Phenanthrene	ND	66
Anthracene	ND	66
Di-n-butylphthalate	ND	330
Fluoranthene	ND	66

ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**

<b>Semivolatile Organics by GC/MS</b>			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC756696	Batch#:	215175
Matrix:	Soil	Prepared:	09/08/14
Units:	ug/Kg	Analyzed:	09/09/14

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
Pyrene	ND	66
Butylbenzylphthalate	ND	330
3,3'-Dichlorobenzidine	ND	660
Benzo(a)anthracene	ND	66
Chrysene	ND	66
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	66
Benzo(k)fluoranthene	ND	66
Benzo(a)pyrene	ND	66
Indeno(1,2,3-cd)pyrene	ND	66
Dibenz(a,h)anthracene	ND	66
Benzo(g,h,i)perylene	ND	66

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
2-Fluorophenol	59	33-120
Phenol-d5	65	39-120
2,4,6-Tribromophenol	58	33-120
Nitrobenzene-d5	68	46-120
2-Fluorobiphenyl	78	51-120
Terphenyl-d14	76	50-120

ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**

<b>Semivolatile Organics by GC/MS</b>			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8270C
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC756697	Batch#:	215175
Matrix:	Soil	Prepared:	09/08/14
Units:	ug/Kg	Analyzed:	09/09/14

<b>Analyte</b>	<b>Spiked</b>	<b>Result</b>	<b>%REC</b>	<b>Limits</b>
Phenol	2,655	1,634	62	43-120
2-Chlorophenol	2,655	1,569	59	50-120
1,4-Dichlorobenzene	2,655	1,908	72	52-120
N-Nitroso-di-n-propylamine	2,655	1,571	59	30-121
1,2,4-Trichlorobenzene	2,655	2,162	81	53-120
4-Chloro-3-methylphenol	2,655	2,199	83	58-120
Acenaphthene	995.7	744.3	75	53-120
4-Nitrophenol	2,655	1,651	62	46-120
2,4-Dinitrotoluene	2,655	2,041	77	57-120
Pentachlorophenol	2,655	1,463	55	31-120
Pyrene	995.7	852.6	86	55-120

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
2-Fluorophenol	51	33-120
Phenol-d5	58	39-120
2,4,6-Tribromophenol	73	33-120
Nitrobenzene-d5	64	46-120
2-Fluorobiphenyl	71	51-120
Terphenyl-d14	74	50-120

**California Title 22 Metals**

Lab #:	260349	Project#:	33114-014115.01
Client:	Bureau Veritas North America	Location:	Oakland Diocese
Field ID:	SB-5-1.0	Basis:	as received
Lab ID:	260349-001	Diln Fac:	1.000
Matrix:	Soil	Sampled:	08/28/14
Units:	mg/Kg	Received:	08/28/14

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	0.48	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Arsenic	3.9	0.24	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Barium	120	0.24	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Beryllium	0.40	0.096	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cadmium	0.85	0.24	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Chromium	35	0.24	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cobalt	8.6	0.24	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Copper	35	0.25	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Lead	33	0.24	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Mercury	0.053	0.016	214980	09/02/14	09/02/14	METHOD	EPA 7471A
Molybdenum	ND	0.24	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Nickel	36	0.24	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Selenium	ND	0.48	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Silver	ND	0.24	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Thallium	ND	0.48	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Vanadium	30	0.24	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Zinc	200	0.96	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B

ND= Not Detected  
 RL= Reporting Limit

California Title 22 Metals			
Lab #:	260349	Project#:	33114-014115.01
Client:	Bureau Veritas North America	Location:	Oakland Diocese
Field ID:	SB-5-3.0	Basis:	as received
Lab ID:	260349-002	Diln Fac:	1.000
Matrix:	Soil	Sampled:	08/28/14
Units:	mg/Kg	Received:	08/28/14

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	0.53	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Arsenic	3.1	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Barium	110	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Beryllium	0.39	0.11	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cadmium	0.58	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Chromium	33	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cobalt	7.7	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Copper	17	0.27	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Lead	12	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Mercury	0.029	0.016	214980	09/02/14	09/02/14	METHOD	EPA 7471A
Molybdenum	ND	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Nickel	34	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Selenium	ND	0.53	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Silver	ND	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Thallium	ND	0.53	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Vanadium	30	0.26	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Zinc	110	1.1	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B

ND= Not Detected  
 RL= Reporting Limit

California Title 22 Metals			
Lab #:	260349	Project#:	33114-014115.01
Client:	Bureau Veritas North America	Location:	Oakland Diocese
Field ID:	SB-5-10.0	Basis:	as received
Lab ID:	260349-003	Diln Fac:	1.000
Matrix:	Soil	Sampled:	08/28/14
Units:	mg/Kg	Received:	08/28/14

Analyte	Result	RL	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	0.56	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Arsenic	3.7	0.28	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Barium	140	0.28	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Beryllium	0.50	0.11	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cadmium	0.54	0.28	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Chromium	44	0.28	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Cobalt	11	0.28	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Copper	22	0.29	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Lead	7.4	0.28	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Mercury	0.034	0.016	214980	09/02/14	09/02/14	METHOD	EPA 7471A
Molybdenum	ND	0.28	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Nickel	50	0.28	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Selenium	ND	0.56	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Silver	ND	0.28	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Thallium	ND	0.56	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Vanadium	36	0.28	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B
Zinc	47	1.1	215038	09/03/14	09/04/14	EPA 3050B	EPA 6010B

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

California Title 22 Metals			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115.01	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	214980
Lab ID:	QC755862	Prepared:	09/02/14
Matrix:	Soil	Analyzed:	09/02/14
Units:	mg/Kg		

Result	RL
ND	0.017

ND= Not Detected  
 RL= Reporting Limit



## Batch QC Report

California Title 22 Metals			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115.01	Analysis:	EPA 7471A
Analyte:	Mercury	Batch#:	214980
Matrix:	Soil	Prepared:	09/02/14
Units:	mg/Kg	Analyzed:	09/02/14
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC755863	0.2083	0.2177	105	80-120		
BSD	QC755864	0.2083	0.2111	101	80-120	3	20

RPD= Relative Percent Difference

**Batch QC Report**

<b>California Title 22 Metals</b>			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115.01	Analysis:	EPA 7471A
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	SB-5-1.0	Batch#:	214980
MSS Lab ID:	260349-001	Sampled:	08/28/14
Matrix:	Soil	Received:	08/28/14
Units:	mg/Kg	Prepared:	09/02/14
Basis:	as received	Analyzed:	09/02/14

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC755865	0.05311	0.1953	0.2508	101	69-136		
MSD	QC755866		0.1953	0.2988	126	69-136	17	35

RPD= Relative Percent Difference

## Batch QC Report

California Title 22 Metals			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3050B
Project#:	33114-014115.01	Analysis:	EPA 6010B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC756093	Batch#:	215038
Matrix:	Soil	Prepared:	09/03/14
Units:	mg/Kg	Analyzed:	09/04/14

Analyte	Result	RL
Antimony	ND	0.50
Arsenic	ND	0.25
Barium	ND	0.25
Beryllium	ND	0.10
Cadmium	ND	0.25
Chromium	ND	0.25
Cobalt	ND	0.25
Copper	ND	0.26
Lead	ND	0.25
Molybdenum	ND	0.25
Nickel	ND	0.25
Selenium	ND	0.50
Silver	ND	0.25
Thallium	ND	0.50
Vanadium	ND	0.25
Zinc	ND	1.0

ND= Not Detected

RL= Reporting Limit

**Batch QC Report**

California Title 22 Metals			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3050B
Project#:	33114-014115.01	Analysis:	EPA 6010B
Matrix:	Soil	Batch#:	215038
Units:	mg/Kg	Prepared:	09/03/14
Diln Fac:	5.000	Analyzed:	09/04/14

Type: BS Lab ID: QC756094

Analyte	Spiked	Result	%REC	Limits
Antimony	50.00	48.27	97	80-120
Arsenic	50.00	48.40	97	80-120
Barium	50.00	49.53	99	80-120
Beryllium	50.00	49.38	99	80-120
Cadmium	50.00	51.63	103	80-120
Chromium	50.00	49.74	99	80-120
Cobalt	50.00	48.28	97	80-120
Copper	50.00	50.71	101	80-120
Lead	50.00	48.01	96	80-120
Molybdenum	50.00	49.97	100	80-120
Nickel	50.00	48.85	98	80-120
Selenium	50.00	49.39	99	80-120
Silver	50.00	48.68	97	80-120
Thallium	50.00	47.94	96	80-120
Vanadium	50.00	50.27	101	80-120
Zinc	50.00	49.35	99	80-120

Type: BSD Lab ID: QC756095

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	50.00	48.21	96	80-120	0	20
Arsenic	50.00	48.68	97	80-120	1	20
Barium	50.00	49.16	98	80-120	1	20
Beryllium	50.00	49.73	99	80-120	1	20
Cadmium	50.00	51.26	103	80-120	1	20
Chromium	50.00	49.15	98	80-120	1	20
Cobalt	50.00	48.60	97	80-120	1	20
Copper	50.00	50.90	102	80-120	0	20
Lead	50.00	48.05	96	80-120	0	20
Molybdenum	50.00	50.04	100	80-120	0	20
Nickel	50.00	48.90	98	80-120	0	20
Selenium	50.00	50.11	100	80-120	1	20
Silver	50.00	48.09	96	80-120	1	20
Thallium	50.00	48.32	97	80-120	1	20
Vanadium	50.00	49.85	100	80-120	1	20
Zinc	50.00	49.50	99	80-120	0	20

RPD= Relative Percent Difference

**Batch QC Report**

California Title 22 Metals			
Lab #:	260349	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3050B
Project#:	33114-014115.01	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	215038
MSS Lab ID:	260319-001	Sampled:	08/28/14
Matrix:	Soil	Received:	08/28/14
Units:	mg/Kg	Prepared:	09/03/14
Basis:	as received	Analyzed:	09/04/14
Diln Fac:	1.000		

Type: MS Lab ID: QC756096

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	1.336	50.00	12.65	23	9-120
Arsenic	4.543	50.00	47.85	87	72-120
Barium	132.6	50.00	169.2	73	50-133
Beryllium	0.4616	50.00	45.63	90	80-120
Cadmium	1.288	50.00	45.68	89	72-120
Chromium	33.27	50.00	72.48	78	61-120
Cobalt	7.142	50.00	49.93	86	60-120
Copper	27.17	50.00	74.70	95	47-149
Lead	94.90	50.00	119.5	49 *	52-122
Molybdenum	0.8652	50.00	41.75	82	68-120
Nickel	38.90	50.00	77.87	78	46-135
Selenium	<0.1448	50.00	42.16	84	70-120
Silver	<0.07401	50.00	46.44	93	67-120
Thallium	<0.1614	50.00	39.44	79	64-120
Vanadium	34.21	50.00	76.49	85	54-137
Zinc	49.53	50.00	90.32	82	39-141

Type: MSD Lab ID: QC756097

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	47.17	13.01	25	9-120	8	26
Arsenic	47.17	45.18	86	72-120	0	30
Barium	47.17	164.8	68	50-133	1	43
Beryllium	47.17	43.06	90	80-120	0	20
Cadmium	47.17	43.34	89	72-120	0	22
Chromium	47.17	69.84	78	61-120	0	31
Cobalt	47.17	47.82	86	60-120	1	39
Copper	47.17	77.47	107	47-149	7	32
Lead	47.17	172.3	164 *	52-122	38	49
Molybdenum	47.17	39.75	82	68-120	1	23
Nickel	47.17	75.47	78	46-135	0	37
Selenium	47.17	39.33	83	70-120	1	26
Silver	47.17	44.39	94	67-120	1	25
Thallium	47.17	37.56	80	64-120	1	20
Vanadium	47.17	78.87	95	54-137	6	31
Zinc	47.17	88.25	82	39-141	1	37

\*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference



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Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 260340  
ANALYTICAL REPORT**

Bureau Veritas North America  
2430 Camino Ramon  
San Ramon, Ca 94583

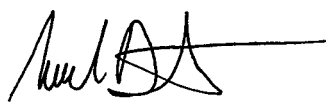
Project : 33114-014115.01  
Location : Oakland Diocese  
Level : II

Sample ID  
SB-5-W

Lab ID  
260340-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature:



Mike J. Dahlquist  
Project Manager  
mike.dahlquist@ctberk.com

Date: 09/05/2014

CA ELAP# 2896, NELAP# 4044-001

**CASE NARRATIVE**

Laboratory number: 260340  
Client: Bureau Veritas North America  
Project: 33114-014115.01  
Location: Oakland Diocese  
Request Date: 08/28/14  
Samples Received: 08/28/14

This data package contains sample and QC results for one water sample, requested for the above referenced project on 08/28/14. The sample was received cold and intact.

**TPH-Extractables by GC (EPA 8015B):**

No analytical problems were encountered.

**Volatile Organics by GC/MS (EPA 8260B):**

No analytical problems were encountered.

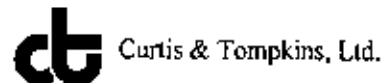
**Semivolatile Organics by GC/MS (EPA 8270C):**

No analytical problems were encountered.





**COOLER RECEIPT CHECKLIST**



Login # 260340 Date Received 8/28/14 Number of coolers 1  
 Client Bureau Venta Project 33114-014115-01  
 Date Opened 8/28/14 By (print) [Signature] (sign) [Signature]  
 Date Logged in 8/28/14 By (print) [Signature] (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES ~~NO~~  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? ...  YES (circle) on cooler on samples  NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO ~~N/A~~

3. Were custody papers dry and intact when received? \_\_\_\_\_ YES NO

4. Were custody papers filled out properly (ink, signed, etc)? \_\_\_\_\_ YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) \_\_\_\_\_ YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

- Bubble Wrap  Foam blocks  Bags  None
- Cloth material  Cardboard  Styrofoam  Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used:  Wet  Blue/Gel  None Temp(°C) \_\_\_\_\_

Samples received on ice & cold without a temperature blank; temp taken with IR gun

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES ~~NO~~

If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? \_\_\_\_\_ ~~YES~~ NO

10. Are there any missing / extra samples? \_\_\_\_\_ YES ~~NO~~

11. Are samples in the appropriate containers for indicated tests? \_\_\_\_\_ YES NO

12. Are sample labels present, in good condition and complete? \_\_\_\_\_ YES NO

13. Do the sample labels agree with custody papers? \_\_\_\_\_ YES NO

14. Was sufficient amount of sample sent for tests requested? \_\_\_\_\_ YES NO

15. Are the samples appropriately preserved? \_\_\_\_\_ YES NO N/A

16. Did you check preservatives for all bottles for each sample? \_\_\_\_\_ YES NO N/A

17. Did you document your preservative check? \_\_\_\_\_ YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? \_\_\_\_\_ YES NO N/A

21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES ~~NO~~

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

**COMMENTS**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Detections Summary for 260340

Results for any subcontracted analyses are not included in this summary.

Client : Bureau Veritas North America  
Project : 33114-014115.01  
Location : Oakland Diocese

Client Sample ID : SB-5-W

Laboratory Sample ID :

260340-001

No Detections

Total Extractable Hydrocarbons			
Lab #:	260340	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3520C
Project#:	33114-014115.01	Analysis:	EPA 8015B
Field ID:	SB-5-W	Sampled:	08/28/14
Matrix:	Water	Received:	08/28/14
Units:	ug/L	Prepared:	08/29/14
Diln Fac:	1.000	Analyzed:	09/02/14
Batch#:	214954		

Type: SAMPLE Cleanup Method: EPA 3630C  
 Lab ID: 260340-001

Analyte	Result	RL
Diesel C10-C24	ND	49
Motor Oil C24-C36	ND	290

Surrogate	%REC	Limits
o-Terphenyl	101	66-129

Type: BLANK Cleanup Method: EPA 3630C  
 Lab ID: QC755753

Analyte	Result	RL
Diesel C10-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	115	66-129

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	260340	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3520C
Project#:	33114-014115.01	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	214954
Units:	ug/L	Prepared:	08/29/14
Diln Fac:	1.000	Analyzed:	09/02/14

Type: BS Cleanup Method: EPA 3630C  
 Lab ID: QC755754

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,410	96	61-120

Surrogate	%REC	Limits
o-Terphenyl	111	66-129

Type: BSD Cleanup Method: EPA 3630C  
 Lab ID: QC755755

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	2,662	106	61-120	10	45

Surrogate	%REC	Limits
o-Terphenyl	117	66-129

RPD= Relative Percent Difference

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	260340	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 5030B
Project#:	33114-014115.01	Analysis:	EPA 8260B
Field ID:	SB-5-W	Batch#:	214933
Lab ID:	260340-001	Sampled:	08/28/14
Matrix:	Water	Received:	08/28/14
Units:	ug/L	Analyzed:	08/29/14
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5

ND= Not Detected  
 RL= Reporting Limit

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	260340	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 5030B
Project#:	33114-014115.01	Analysis:	EPA 8260B
Field ID:	SB-5-W	Batch#:	214933
Lab ID:	260340-001	Sampled:	08/28/14
Matrix:	Water	Received:	08/28/14
Units:	ug/L	Analyzed:	08/29/14
Diln Fac:	1.000		

Analyte	Result	RL
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	88	77-136
1,2-Dichloroethane-d4	97	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	92	80-120

ND= Not Detected

RL= Reporting Limit

**Batch QC Report**
**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	260340	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 5030B
Project#:	33114-014115.01	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	214933
Units:	ug/L	Analyzed:	08/29/14
Diln Fac:	1.000		

Type: BS Lab ID: QC755665

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	23.96	96	65-134
Benzene	25.00	27.72	111	80-124
Trichloroethene	25.00	27.69	111	80-120
Toluene	25.00	27.22	109	80-122
Chlorobenzene	25.00	28.68	115	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	89	77-136
1,2-Dichloroethane-d4	96	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	93	80-120

Type: BSD Lab ID: QC755666

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	21.44	86	65-134	11	20
Benzene	25.00	24.42	98	80-124	13	20
Trichloroethene	25.00	24.67	99	80-120	12	20
Toluene	25.00	23.73	95	80-122	14	20
Chlorobenzene	25.00	25.27	101	80-120	13	20

Surrogate	%REC	Limits
Dibromofluoromethane	90	77-136
1,2-Dichloroethane-d4	97	75-139
Toluene-d8	99	80-120
Bromofluorobenzene	90	80-120

RPD= Relative Percent Difference



## Batch QC Report

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	260340	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 5030B
Project#:	33114-014115.01	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	214933
Units:	ug/L	Analyzed:	08/29/14
Diln Fac:	1.000		

Type: BS Lab ID: QC755667

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,001	100	70-130

Surrogate	%REC	Limits
Dibromofluoromethane	87	77-136
1,2-Dichloroethane-d4	98	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	93	80-120

Type: BSD Lab ID: QC755668

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	965.7	97	70-130	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	86	77-136
1,2-Dichloroethane-d4	100	75-139
Toluene-d8	97	80-120
Bromofluorobenzene	90	80-120

RPD= Relative Percent Difference

**Batch QC Report**
**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	260340	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 5030B
Project#:	33114-014115.01	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC755669	Batch#:	214933
Matrix:	Water	Analyzed:	08/29/14
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Freon 12	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
Acetone	ND	10
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	10
Carbon Disulfide	ND	0.5
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
Vinyl Acetate	ND	10
1,1-Dichloroethane	ND	0.5
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	0.5
2,2-Dichloropropane	ND	0.5
Chloroform	ND	0.5
Bromochloromethane	ND	0.5
1,1,1-Trichloroethane	ND	0.5
1,1-Dichloropropene	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
Dibromomethane	ND	0.5
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
2-Hexanone	ND	10
1,3-Dichloropropane	ND	0.5

ND= Not Detected

RL= Reporting Limit

**Batch QC Report**
**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	260340	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 5030B
Project#:	33114-014115.01	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC755669	Batch#:	214933
Matrix:	Water	Analyzed:	08/29/14
Units:	ug/L		

Analyte	Result	RL
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
1,2-Dibromoethane	ND	0.5
Chlorobenzene	ND	0.5
1,1,1,2-Tetrachloroethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Styrene	ND	0.5
Bromoform	ND	1.0
Isopropylbenzene	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,2,3-Trichloropropane	ND	0.5
Propylbenzene	ND	0.5
Bromobenzene	ND	0.5
1,3,5-Trimethylbenzene	ND	0.5
2-Chlorotoluene	ND	0.5
4-Chlorotoluene	ND	0.5
tert-Butylbenzene	ND	0.5
1,2,4-Trimethylbenzene	ND	0.5
sec-Butylbenzene	ND	0.5
para-Isopropyl Toluene	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
n-Butylbenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,2-Dibromo-3-Chloropropane	ND	2.0
1,2,4-Trichlorobenzene	ND	0.5
Hexachlorobutadiene	ND	2.0
Naphthalene	ND	2.0
1,2,3-Trichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	90	77-136
1,2-Dichloroethane-d4	104	75-139
Toluene-d8	98	80-120
Bromofluorobenzene	93	80-120

ND= Not Detected

RL= Reporting Limit

Semivolatile Organics by GC/MS			
Lab #:	260340	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3520C
Project#:	33114-014115.01	Analysis:	EPA 8270C
Field ID:	SB-5-W	Batch#:	214908
Lab ID:	260340-001	Sampled:	08/28/14
Matrix:	Water	Received:	08/28/14
Units:	ug/L	Prepared:	08/29/14
Diln Fac:	1.000	Analyzed:	09/03/14

Analyte	Result	RL
N-Nitrosodimethylamine	ND	10
Phenol	ND	10
bis(2-Chloroethyl)ether	ND	10
2-Chlorophenol	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
Benzyl alcohol	ND	10
1,2-Dichlorobenzene	ND	10
2-Methylphenol	ND	10
bis(2-Chloroisopropyl) ether	ND	10
4-Methylphenol	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
2-Nitrophenol	ND	21
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	52
bis(2-Chloroethoxy)methane	ND	10
2,4-Dichlorophenol	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
4-Chloro-3-methylphenol	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	21
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	21
Dimethylphthalate	ND	10
Acenaphthylene	ND	10
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	21
Acenaphthene	ND	10
2,4-Dinitrophenol	ND	21
4-Nitrophenol	ND	21
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
Fluorene	ND	10
4-Chlorophenyl-phenylether	ND	10
4-Nitroaniline	ND	21
4,6-Dinitro-2-methylphenol	ND	21
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Pentachlorophenol	ND	21
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10

ND= Not Detected  
 RL= Reporting Limit

### Semivolatile Organics by GC/MS

Lab #:	260340	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3520C
Project#:	33114-014115.01	Analysis:	EPA 8270C
Field ID:	SB-5-W	Batch#:	214908
Lab ID:	260340-001	Sampled:	08/28/14
Matrix:	Water	Received:	08/28/14
Units:	ug/L	Prepared:	08/29/14
Diln Fac:	1.000	Analyzed:	09/03/14

Analyte	Result	RL
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	21
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	%REC	Limits
2-Fluorophenol	70	39-120
Phenol-d5	72	40-120
2,4,6-Tribromophenol	75	46-122
Nitrobenzene-d5	73	50-120
2-Fluorobiphenyl	76	50-120
Terphenyl-d14	41	21-120

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Semivolatile Organics by GC/MS			
Lab #:	260340	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3520C
Project#:	33114-014115.01	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC755581	Batch#:	214908
Matrix:	Water	Prepared:	08/28/14
Units:	ug/L	Analyzed:	08/29/14

Analyte	Result	RL
N-Nitrosodimethylamine	ND	10
Phenol	ND	10
bis(2-Chloroethyl)ether	ND	10
2-Chlorophenol	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
Benzyl alcohol	ND	10
1,2-Dichlorobenzene	ND	10
2-Methylphenol	ND	10
bis(2-Chloroisopropyl) ether	ND	10
4-Methylphenol	ND	10
N-Nitroso-di-n-propylamine	ND	10
Hexachloroethane	ND	10
Nitrobenzene	ND	10
Isophorone	ND	10
2-Nitrophenol	ND	20
2,4-Dimethylphenol	ND	10
Benzoic acid	ND	50
bis(2-Chloroethoxy)methane	ND	10
2,4-Dichlorophenol	ND	10
1,2,4-Trichlorobenzene	ND	10
Naphthalene	ND	10
4-Chloroaniline	ND	10
Hexachlorobutadiene	ND	10
4-Chloro-3-methylphenol	ND	10
2-Methylnaphthalene	ND	10
Hexachlorocyclopentadiene	ND	20
2,4,6-Trichlorophenol	ND	10
2,4,5-Trichlorophenol	ND	10
2-Chloronaphthalene	ND	10
2-Nitroaniline	ND	20
Dimethylphthalate	ND	10
Acenaphthylene	ND	10
2,6-Dinitrotoluene	ND	10
3-Nitroaniline	ND	20
Acenaphthene	ND	10
2,4-Dinitrophenol	ND	20
4-Nitrophenol	ND	20
Dibenzofuran	ND	10
2,4-Dinitrotoluene	ND	10
Diethylphthalate	ND	10
Fluorene	ND	10
4-Chlorophenyl-phenylether	ND	10
4-Nitroaniline	ND	20
4,6-Dinitro-2-methylphenol	ND	20
N-Nitrosodiphenylamine	ND	10
Azobenzene	ND	10
4-Bromophenyl-phenylether	ND	10
Hexachlorobenzene	ND	10
Pentachlorophenol	ND	20
Phenanthrene	ND	10
Anthracene	ND	10
Di-n-butylphthalate	ND	10
Fluoranthene	ND	10

ND= Not Detected  
 RL= Reporting Limit

## Batch QC Report

Semivolatile Organics by GC/MS			
Lab #:	260340	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3520C
Project#:	33114-014115.01	Analysis:	EPA 8270C
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC755581	Batch#:	214908
Matrix:	Water	Prepared:	08/28/14
Units:	ug/L	Analyzed:	08/29/14

Analyte	Result	RL
Pyrene	ND	10
Butylbenzylphthalate	ND	10
3,3'-Dichlorobenzidine	ND	20
Benzo(a)anthracene	ND	10
Chrysene	ND	10
bis(2-Ethylhexyl)phthalate	ND	10
Di-n-octylphthalate	ND	10
Benzo(b)fluoranthene	ND	10
Benzo(k)fluoranthene	ND	10
Benzo(a)pyrene	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Dibenz(a,h)anthracene	ND	10
Benzo(g,h,i)perylene	ND	10

Surrogate	%REC	Limits
2-Fluorophenol	95	39-120
Phenol-d5	96	40-120
2,4,6-Tribromophenol	110	46-122
Nitrobenzene-d5	87	50-120
2-Fluorobiphenyl	90	50-120
Terphenyl-d14	94	21-120

ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**

Semivolatile Organics by GC/MS			
Lab #:	260340	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3520C
Project#:	33114-014115.01	Analysis:	EPA 8270C
Matrix:	Water	Batch#:	214908
Units:	ug/L	Prepared:	08/28/14
Diln Fac:	1.000	Analyzed:	08/29/14

Type: BS Lab ID: QC755582

Analyte	Spiked	Result	%REC	Limits
Phenol	80.00	64.05	80	54-120
2-Chlorophenol	80.00	64.30	80	65-120
1,4-Dichlorobenzene	80.00	59.08	74	56-120
N-Nitroso-di-n-propylamine	80.00	55.73	70	45-120
1,2,4-Trichlorobenzene	80.00	58.68	73	55-120
4-Chloro-3-methylphenol	80.00	62.83	79	54-120
Acenaphthene	30.00	23.68	79	62-120
4-Nitrophenol	80.00	59.92	75	58-120
2,4-Dinitrotoluene	80.00	64.14	80	66-120
Pentachlorophenol	80.00	70.19	88	58-120
Pyrene	30.00	24.20	81	65-120

Surrogate	%REC	Limits
2-Fluorophenol	80	39-120
Phenol-d5	81	40-120
2,4,6-Tribromophenol	98	46-122
Nitrobenzene-d5	76	50-120
2-Fluorobiphenyl	75	50-120
Terphenyl-d14	82	21-120

Type: BSD Lab ID: QC755583

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Phenol	80.00	66.36	83	54-120	4	29
2-Chlorophenol	80.00	68.30	85	65-120	6	33
1,4-Dichlorobenzene	80.00	59.94	75	56-120	1	25
N-Nitroso-di-n-propylamine	80.00	62.63	78	45-120	12	26
1,2,4-Trichlorobenzene	80.00	60.49	76	55-120	3	24
4-Chloro-3-methylphenol	80.00	67.50	84	54-120	7	46
Acenaphthene	30.00	25.32	84	62-120	7	22
4-Nitrophenol	80.00	64.84	81	58-120	8	28
2,4-Dinitrotoluene	80.00	71.81	90	66-120	11	22
Pentachlorophenol	80.00	78.20	98	58-120	11	27
Pyrene	30.00	28.33	94	65-120	16	22

Surrogate	%REC	Limits
2-Fluorophenol	78	39-120
Phenol-d5	81	40-120
2,4,6-Tribromophenol	99	46-122
Nitrobenzene-d5	75	50-120
2-Fluorobiphenyl	75	50-120
Terphenyl-d14	87	21-120

RPD= Relative Percent Difference



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Pleasanton  
1220 Quarry Lane  
Pleasanton, CA 94566  
Tel: (925)484-1919

TestAmerica Job ID: 720-60371-1  
Client Project/Site: Kawahara

For:  
Bureau Veritas North America, Inc.  
Bishop Ranch 6  
2430 Camino Ramon Suite 122  
San Ramon, California 94583

Attn: Don Ashton



Authorized for release by:  
10/13/2014 4:15:42 PM

Micah Smith, Project Manager II  
(925)484-1919  
[micah.smith@testamericainc.com](mailto:micah.smith@testamericainc.com)

### LINKS

Review your project  
results through  
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Have a Question?



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[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Definitions/Glossary

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
X	Surrogate is outside control limits
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Case Narrative

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

**Job ID: 720-60371-1**

**Laboratory: TestAmerica Pleasanton**

## Narrative

### Job Narrative 720-60371-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 10/3/2014 3:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 24.2° C.

#### GC Semi VOA

Method(s) 8081A: The %RPD between the primary and confirmation column / detector exceeded 40% for alpha-chlordane for the following sample(s): S-2 (720-60371-6), S-4 (720-60371-8), S-5 (720-60371-9), S-6 (720-60371-10), S-7 (720-60371-11), S-8 (720-60371-12). The lower value(s) has been reported and qualified in accordance with the laboratory's SOP.

Method(s) 8081A: The following sample(s) required a dilution due to the nature of the sample matrix: S-2 (720-60371-6). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

## Client Sample ID: S-9

Lab Sample ID: 720-60371-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	570		9.8		ug/Kg	5		8081A	Total/NA
Endrin ketone	3.3		2.0		ug/Kg	1		8081A	Total/NA
gamma-BHC (Lindane)	10		2.0		ug/Kg	1		8081A	Total/NA
Chlordane (technical)	530		39		ug/Kg	1		8081A	Total/NA
alpha-Chlordane	130		2.0		ug/Kg	1		8081A	Total/NA
gamma-Chlordane	110		2.0		ug/Kg	1		8081A	Total/NA

## Client Sample ID: S-10

Lab Sample ID: 720-60371-2

No Detections.

## Client Sample ID: S-11

Lab Sample ID: 720-60371-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	4.0		2.0		ug/Kg	1		8081A	Total/NA

## Client Sample ID: S-12

Lab Sample ID: 720-60371-4

No Detections.

## Client Sample ID: S-1

Lab Sample ID: 720-60371-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	150		1.9		ug/Kg	1		8081A	Total/NA
Chlordane (technical)	250		39		ug/Kg	1		8081A	Total/NA
alpha-Chlordane	72		1.9		ug/Kg	1		8081A	Total/NA
gamma-Chlordane	52		1.9		ug/Kg	1		8081A	Total/NA

## Client Sample ID: S-2

Lab Sample ID: 720-60371-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aldrin	120		2.0		ug/Kg	1		8081A	Total/NA
Dieldrin	3200		40		ug/Kg	20		8081A	Total/NA
Endrin	40		2.0		ug/Kg	1		8081A	Total/NA
Endrin ketone	11		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDT	56		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDE	37		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDD	25		2.0		ug/Kg	1		8081A	Total/NA
Chlordane (technical)	250		40		ug/Kg	1		8081A	Total/NA
alpha-Chlordane	41	p	2.0		ug/Kg	1		8081A	Total/NA
gamma-Chlordane	57		2.0		ug/Kg	1		8081A	Total/NA

## Client Sample ID: S-3

Lab Sample ID: 720-60371-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	13		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDE	4.1		2.0		ug/Kg	1		8081A	Total/NA

## Client Sample ID: S-4

Lab Sample ID: 720-60371-8

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

## Detection Summary

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

### Client Sample ID: S-4 (Continued)

Lab Sample ID: 720-60371-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	39		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDT	12		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDE	11		2.0		ug/Kg	1		8081A	Total/NA
Chlordane (technical)	74		40		ug/Kg	1		8081A	Total/NA
alpha-Chlordane	12	p	2.0		ug/Kg	1		8081A	Total/NA
gamma-Chlordane	13		2.0		ug/Kg	1		8081A	Total/NA

### Client Sample ID: S-5

Lab Sample ID: 720-60371-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	4.7		2.0		ug/Kg	1		8081A	Total/NA
Chlordane (technical)	210		40		ug/Kg	1		8081A	Total/NA
alpha-Chlordane	30	p	2.0		ug/Kg	1		8081A	Total/NA
gamma-Chlordane	38		2.0		ug/Kg	1		8081A	Total/NA

### Client Sample ID: S-6

Lab Sample ID: 720-60371-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aldrin	2.7		2.0		ug/Kg	1		8081A	Total/NA
Dieldrin	560		4.0		ug/Kg	2		8081A	Total/NA
Endrin ketone	17		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDT	280		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDE	44		2.0		ug/Kg	1		8081A	Total/NA
Chlordane (technical)	360		40		ug/Kg	1		8081A	Total/NA
alpha-Chlordane	53	p	2.0		ug/Kg	1		8081A	Total/NA
gamma-Chlordane	66		2.0		ug/Kg	1		8081A	Total/NA

### Client Sample ID: S-7

Lab Sample ID: 720-60371-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	42		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDT	40		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDE	19		2.0		ug/Kg	1		8081A	Total/NA
Chlordane (technical)	260		40		ug/Kg	1		8081A	Total/NA
alpha-Chlordane	47	p	2.0		ug/Kg	1		8081A	Total/NA
gamma-Chlordane	55		2.0		ug/Kg	1		8081A	Total/NA

### Client Sample ID: S-8

Lab Sample ID: 720-60371-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
alpha-Chlordane	8.3	p	2.0		ug/Kg	1		8081A	Total/NA
gamma-Chlordane	7.9		2.0		ug/Kg	1		8081A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

**Client Sample ID: S-9**

**Lab Sample ID: 720-60371-1**

**Date Collected: 10/03/14 11:35**

**Matrix: Solid**

**Date Received: 10/03/14 15:35**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:26	1
<b>Dieldrin</b>	<b>570</b>		9.8		ug/Kg		10/08/14 12:06	10/13/14 13:28	5
Endrin aldehyde	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:26	1
Endrin	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:26	1
<b>Endrin ketone</b>	<b>3.3</b>		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:26	1
Heptachlor	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:26	1
Heptachlor epoxide	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:26	1
4,4'-DDT	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:26	1
4,4'-DDE	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:26	1
4,4'-DDD	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:26	1
Endosulfan I	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:26	1
Endosulfan II	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:26	1
alpha-BHC	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:26	1
beta-BHC	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:26	1
<b>gamma-BHC (Lindane)</b>	<b>10</b>		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:26	1
delta-BHC	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:26	1
Endosulfan sulfate	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:26	1
Methoxychlor	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:26	1
Toxaphene	ND		39		ug/Kg		10/08/14 12:06	10/12/14 02:26	1
<b>Chlordane (technical)</b>	<b>530</b>		39		ug/Kg		10/08/14 12:06	10/12/14 02:26	1
<b>alpha-Chlordane</b>	<b>130</b>		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:26	1
<b>gamma-Chlordane</b>	<b>110</b>		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:26	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Tetrachloro-m-xylene</i>	78		57 - 122				10/08/14 12:06	10/12/14 02:26	1
<i>Tetrachloro-m-xylene</i>	81		57 - 122				10/08/14 12:06	10/13/14 13:28	5
<i>DCB Decachlorobiphenyl</i>	114		21 - 136				10/08/14 12:06	10/12/14 02:26	1
<i>DCB Decachlorobiphenyl</i>	82		21 - 136				10/08/14 12:06	10/13/14 13:28	5

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Percent Moisture</b>	<b>17</b>		0.10		%			10/08/14 15:23	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

**Client Sample ID: S-10**

**Lab Sample ID: 720-60371-2**

**Date Collected: 10/03/14 11:49**

**Matrix: Solid**

**Date Received: 10/03/14 15:35**

## Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
Dieldrin	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
Endrin aldehyde	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
Endrin	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
Endrin ketone	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
Heptachlor	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
Heptachlor epoxide	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
4,4'-DDT	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
4,4'-DDE	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
4,4'-DDD	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
Endosulfan I	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
Endosulfan II	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
alpha-BHC	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
beta-BHC	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
delta-BHC	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
Endosulfan sulfate	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
Methoxychlor	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
Toxaphene	ND		40		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
Chlordane (technical)	ND		40		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
alpha-Chlordane	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
gamma-Chlordane	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 02:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	82		57 - 122				10/08/14 12:06	10/12/14 02:44	1
DCB Decachlorobiphenyl	89	p	21 - 136				10/08/14 12:06	10/12/14 02:44	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17		0.10		%			10/08/14 15:23	1



# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

**Client Sample ID: S-11**

**Lab Sample ID: 720-60371-3**

**Date Collected: 10/03/14 11:59**

**Matrix: Solid**

**Date Received: 10/03/14 15:35**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
<b>Dieldrin</b>	<b>4.0</b>		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
Endrin aldehyde	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
Endrin	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
Endrin ketone	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
Heptachlor	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
Heptachlor epoxide	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
4,4'-DDT	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
4,4'-DDE	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
4,4'-DDD	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
Endosulfan I	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
Endosulfan II	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
alpha-BHC	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
beta-BHC	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
delta-BHC	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
Endosulfan sulfate	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
Methoxychlor	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
Toxaphene	ND		40		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
Chlordane (technical)	ND		40		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
alpha-Chlordane	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
gamma-Chlordane	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:01	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Tetrachloro-m-xylene</i>	85		57 - 122				10/08/14 12:06	10/12/14 03:01	1
<i>DCB Decachlorobiphenyl</i>	127		21 - 136				10/08/14 12:06	10/12/14 03:01	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Percent Moisture</b>	<b>9.5</b>		0.10		%			10/08/14 15:23	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

**Client Sample ID: S-12**  
**Date Collected: 10/03/14 12:15**  
**Date Received: 10/03/14 15:35**

**Lab Sample ID: 720-60371-4**  
**Matrix: Solid**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
Dieldrin	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
Endrin aldehyde	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
Endrin	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
Endrin ketone	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
Heptachlor	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
Heptachlor epoxide	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
4,4'-DDT	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
4,4'-DDE	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
4,4'-DDD	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
Endosulfan I	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
Endosulfan II	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
alpha-BHC	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
beta-BHC	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
gamma-BHC (Lindane)	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
delta-BHC	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
Endosulfan sulfate	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
Methoxychlor	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
Toxaphene	ND		39		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
Chlordane (technical)	ND		39		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
alpha-Chlordane	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
gamma-Chlordane	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	82		57 - 122				10/08/14 12:06	10/12/14 03:19	1
DCB Decachlorobiphenyl	138	X	21 - 136				10/08/14 12:06	10/12/14 03:19	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12		0.10		%			10/08/14 15:23	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

**Client Sample ID: S-1**

**Lab Sample ID: 720-60371-5**

**Date Collected: 10/03/14 12:26**

**Matrix: Solid**

**Date Received: 10/03/14 15:35**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
<b>Dieldrin</b>	<b>150</b>		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
Endrin aldehyde	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
Endrin	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
Endrin ketone	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
Heptachlor	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
Heptachlor epoxide	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
4,4'-DDT	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
4,4'-DDE	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
4,4'-DDD	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
Endosulfan I	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
Endosulfan II	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
alpha-BHC	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
beta-BHC	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
gamma-BHC (Lindane)	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
delta-BHC	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
Endosulfan sulfate	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
Methoxychlor	ND		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
Toxaphene	ND		39		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
<b>Chlordane (technical)</b>	<b>250</b>		39		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
<b>alpha-Chlordane</b>	<b>72</b>		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
<b>gamma-Chlordane</b>	<b>52</b>		1.9		ug/Kg		10/08/14 12:06	10/12/14 03:36	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	83		57 - 122				10/08/14 12:06	10/12/14 03:36	1
DCB Decachlorobiphenyl	120		21 - 136				10/08/14 12:06	10/12/14 03:36	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Percent Moisture</b>	<b>8.9</b>		0.10		%			10/08/14 15:23	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

**Client Sample ID: S-2**

**Lab Sample ID: 720-60371-6**

**Date Collected: 10/03/14 12:36**

**Matrix: Solid**

**Date Received: 10/03/14 15:35**

## Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Aldrin</b>	<b>120</b>		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:54	1
<b>Dieldrin</b>	<b>3200</b>		40		ug/Kg		10/08/14 12:06	10/13/14 13:45	20
Endrin aldehyde	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:54	1
<b>Endrin</b>	<b>40</b>		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:54	1
<b>Endrin ketone</b>	<b>11</b>		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:54	1
Heptachlor	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:54	1
Heptachlor epoxide	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:54	1
<b>4,4'-DDT</b>	<b>56</b>		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:54	1
<b>4,4'-DDE</b>	<b>37</b>		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:54	1
<b>4,4'-DDD</b>	<b>25</b>		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:54	1
Endosulfan I	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:54	1
Endosulfan II	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:54	1
alpha-BHC	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:54	1
beta-BHC	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:54	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:54	1
delta-BHC	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:54	1
Endosulfan sulfate	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:54	1
Methoxychlor	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:54	1
Toxaphene	ND		40		ug/Kg		10/08/14 12:06	10/12/14 03:54	1
<b>Chlordane (technical)</b>	<b>250</b>		40		ug/Kg		10/08/14 12:06	10/12/14 03:54	1
<b>alpha-Chlordane</b>	<b>41</b>	<b>p</b>	2.0		ug/Kg		10/08/14 12:06	10/12/14 03:54	1
<b>gamma-Chlordane</b>	<b>57</b>		2.0		ug/Kg		10/08/14 12:06	10/12/14 03:54	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Tetrachloro-m-xylene</i>	84		57 - 122				10/08/14 12:06	10/12/14 03:54	1
<i>Tetrachloro-m-xylene</i>	0	X D	57 - 122				10/08/14 12:06	10/13/14 13:45	20
<i>DCB Decachlorobiphenyl</i>	129		21 - 136				10/08/14 12:06	10/12/14 03:54	1
<i>DCB Decachlorobiphenyl</i>	0	X D	21 - 136				10/08/14 12:06	10/13/14 13:45	20

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Percent Moisture</b>	<b>14</b>		0.10		%			10/08/14 15:23	1

TestAmerica Pleasanton

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

**Client Sample ID: S-3**

**Lab Sample ID: 720-60371-7**

**Date Collected: 10/03/14 12:50**

**Matrix: Solid**

**Date Received: 10/03/14 15:35**

## Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
<b>Dieldrin</b>	<b>13</b>		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
Endrin aldehyde	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
Endrin	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
Endrin ketone	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
Heptachlor	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
Heptachlor epoxide	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
4,4'-DDT	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
<b>4,4'-DDE</b>	<b>4.1</b>		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
4,4'-DDD	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
Endosulfan I	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
Endosulfan II	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
alpha-BHC	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
beta-BHC	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
delta-BHC	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
Endosulfan sulfate	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
Methoxychlor	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
Toxaphene	ND		40		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
Chlordane (technical)	ND		40		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
alpha-Chlordane	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
gamma-Chlordane	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:11	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Tetrachloro-m-xylene</i>	79		57 - 122				10/08/14 12:06	10/12/14 04:11	1
<i>DCB Decachlorobiphenyl</i>	114		21 - 136				10/08/14 12:06	10/12/14 04:11	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Percent Moisture</b>	<b>14</b>		0.10		%			10/08/14 15:23	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

**Client Sample ID: S-4**

**Lab Sample ID: 720-60371-8**

**Date Collected: 10/03/14 13:14**

**Matrix: Solid**

**Date Received: 10/03/14 15:35**

## Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
<b>Dieldrin</b>	<b>39</b>		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
Endrin aldehyde	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
Endrin	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
Endrin ketone	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
Heptachlor	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
Heptachlor epoxide	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
<b>4,4'-DDT</b>	<b>12</b>		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
<b>4,4'-DDE</b>	<b>11</b>		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
4,4'-DDD	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
Endosulfan I	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
Endosulfan II	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
alpha-BHC	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
beta-BHC	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
delta-BHC	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
Endosulfan sulfate	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
Methoxychlor	ND		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
Toxaphene	ND		40		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
<b>Chlordane (technical)</b>	<b>74</b>		40		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
<b>alpha-Chlordane</b>	<b>12 p</b>		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
<b>gamma-Chlordane</b>	<b>13</b>		2.0		ug/Kg		10/08/14 12:06	10/12/14 04:29	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	84		57 - 122				10/08/14 12:06	10/12/14 04:29	1
DCB Decachlorobiphenyl	123		21 - 136				10/08/14 12:06	10/12/14 04:29	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Percent Moisture</b>	<b>12</b>		0.10		%			10/08/14 15:23	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

**Client Sample ID: S-5**

**Lab Sample ID: 720-60371-9**

**Date Collected: 10/03/14 13:30**

**Matrix: Solid**

**Date Received: 10/03/14 15:35**

## Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
<b>Dieldrin</b>	<b>4.7</b>		2.0		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
Endrin aldehyde	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
Endrin	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
Endrin ketone	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
Heptachlor	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
Heptachlor epoxide	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
4,4'-DDT	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
4,4'-DDE	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
4,4'-DDD	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
Endosulfan I	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
Endosulfan II	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
alpha-BHC	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
beta-BHC	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
delta-BHC	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
Endosulfan sulfate	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
Methoxychlor	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
Toxaphene	ND		40		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
<b>Chlordane (technical)</b>	<b>210</b>		40		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
<b>alpha-Chlordane</b>	<b>30</b>	<b>p</b>	2.0		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
<b>gamma-Chlordane</b>	<b>38</b>		2.0		ug/Kg		10/09/14 18:23	10/11/14 19:58	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Tetrachloro-m-xylene</i>	90		57 - 122				10/09/14 18:23	10/11/14 19:58	1
<i>DCB Decachlorobiphenyl</i>	143	X	21 - 136				10/09/14 18:23	10/11/14 19:58	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Percent Moisture</b>	<b>9.5</b>		0.10		%			10/08/14 15:23	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

**Client Sample ID: S-6**

**Lab Sample ID: 720-60371-10**

**Date Collected: 10/03/14 13:45**

**Matrix: Solid**

**Date Received: 10/03/14 15:35**

## Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Aldrin</b>	<b>2.7</b>		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:16	1
<b>Dieldrin</b>	<b>560</b>		4.0		ug/Kg		10/09/14 18:23	10/13/14 13:11	2
Endrin aldehyde	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:16	1
Endrin	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:16	1
<b>Endrin ketone</b>	<b>17</b>		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:16	1
Heptachlor	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:16	1
Heptachlor epoxide	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:16	1
<b>4,4'-DDT</b>	<b>280</b>		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:16	1
<b>4,4'-DDE</b>	<b>44</b>		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:16	1
4,4'-DDD	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:16	1
Endosulfan I	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:16	1
Endosulfan II	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:16	1
alpha-BHC	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:16	1
beta-BHC	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:16	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:16	1
delta-BHC	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:16	1
Endosulfan sulfate	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:16	1
Methoxychlor	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:16	1
Toxaphene	ND		40		ug/Kg		10/09/14 18:23	10/11/14 20:16	1
<b>Chlordane (technical)</b>	<b>360</b>		40		ug/Kg		10/09/14 18:23	10/11/14 20:16	1
<b>alpha-Chlordane</b>	<b>53</b>	<b>p</b>	2.0		ug/Kg		10/09/14 18:23	10/11/14 20:16	1
<b>gamma-Chlordane</b>	<b>66</b>		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:16	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Tetrachloro-m-xylene</i>	107		57 - 122				10/09/14 18:23	10/11/14 20:16	1
<i>Tetrachloro-m-xylene</i>	114		57 - 122				10/09/14 18:23	10/13/14 13:11	2
<i>DCB Decachlorobiphenyl</i>	132		21 - 136				10/09/14 18:23	10/11/14 20:16	1
<i>DCB Decachlorobiphenyl</i>	115		21 - 136				10/09/14 18:23	10/13/14 13:11	2

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Percent Moisture</b>	<b>7.7</b>		0.10		%			10/08/14 15:23	1

TestAmerica Pleasanton



# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

**Client Sample ID: S-7**

**Lab Sample ID: 720-60371-11**

**Date Collected: 10/03/14 13:57**

**Matrix: Solid**

**Date Received: 10/03/14 15:35**

## Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
<b>Dieldrin</b>	<b>42</b>		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
Endrin aldehyde	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
Endrin	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
Endrin ketone	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
Heptachlor	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
Heptachlor epoxide	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
<b>4,4'-DDT</b>	<b>40</b>		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
<b>4,4'-DDE</b>	<b>19</b>		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
4,4'-DDD	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
Endosulfan I	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
Endosulfan II	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
alpha-BHC	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
beta-BHC	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
delta-BHC	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
Endosulfan sulfate	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
Methoxychlor	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
Toxaphene	ND		40		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
<b>Chlordane (technical)</b>	<b>260</b>		40		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
<b>alpha-Chlordane</b>	<b>47</b>	<b>p</b>	2.0		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
<b>gamma-Chlordane</b>	<b>55</b>		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:33	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	98		57 - 122				10/09/14 18:23	10/11/14 20:33	1
DCB Decachlorobiphenyl	139	X	21 - 136				10/09/14 18:23	10/11/14 20:33	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Percent Moisture</b>	<b>7.7</b>		0.10		%			10/08/14 15:23	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

**Client Sample ID: S-8**

**Lab Sample ID: 720-60371-12**

**Date Collected: 10/03/14 14:08**

**Matrix: Solid**

**Date Received: 10/03/14 15:35**

## Method: 8081A - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
Dieldrin	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
Endrin aldehyde	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
Endrin	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
Endrin ketone	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
Heptachlor	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
Heptachlor epoxide	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
4,4'-DDT	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
4,4'-DDE	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
4,4'-DDD	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
Endosulfan I	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
Endosulfan II	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
alpha-BHC	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
beta-BHC	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
delta-BHC	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
Endosulfan sulfate	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
Methoxychlor	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
Toxaphene	ND		40		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
Chlordane (technical)	ND		40		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
alpha-Chlordane	8.3	p	2.0		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
gamma-Chlordane	7.9		2.0		ug/Kg		10/09/14 18:23	10/11/14 20:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	91		57 - 122				10/09/14 18:23	10/11/14 20:51	1
DCB Decachlorobiphenyl	140	X	21 - 136				10/09/14 18:23	10/11/14 20:51	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	8.8		0.10		%			10/08/14 15:23	1

# QC Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

## Method: 8081A - Organochlorine Pesticides (GC)

**Lab Sample ID: MB 720-168410/1-A**

**Matrix: Solid**

**Analysis Batch: 168467**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 168410**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		10/08/14 12:04	10/09/14 04:12	1
Dieldrin	ND		2.0		ug/Kg		10/08/14 12:04	10/09/14 04:12	1
Endrin aldehyde	ND		2.0		ug/Kg		10/08/14 12:04	10/09/14 04:12	1
Endrin	ND		2.0		ug/Kg		10/08/14 12:04	10/09/14 04:12	1
Endrin ketone	ND		2.0		ug/Kg		10/08/14 12:04	10/09/14 04:12	1
Heptachlor	ND		2.0		ug/Kg		10/08/14 12:04	10/09/14 04:12	1
Heptachlor epoxide	ND		2.0		ug/Kg		10/08/14 12:04	10/09/14 04:12	1
4,4'-DDT	ND		2.0		ug/Kg		10/08/14 12:04	10/09/14 04:12	1
4,4'-DDE	ND		2.0		ug/Kg		10/08/14 12:04	10/09/14 04:12	1
4,4'-DDD	ND		2.0		ug/Kg		10/08/14 12:04	10/09/14 04:12	1
Endosulfan I	ND		2.0		ug/Kg		10/08/14 12:04	10/09/14 04:12	1
Endosulfan II	ND		2.0		ug/Kg		10/08/14 12:04	10/09/14 04:12	1
alpha-BHC	ND		2.0		ug/Kg		10/08/14 12:04	10/09/14 04:12	1
beta-BHC	ND		2.0		ug/Kg		10/08/14 12:04	10/09/14 04:12	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		10/08/14 12:04	10/09/14 04:12	1
delta-BHC	ND		2.0		ug/Kg		10/08/14 12:04	10/09/14 04:12	1
Endosulfan sulfate	ND		2.0		ug/Kg		10/08/14 12:04	10/09/14 04:12	1
Methoxychlor	ND		2.0		ug/Kg		10/08/14 12:04	10/09/14 04:12	1
Toxaphene	ND		40		ug/Kg		10/08/14 12:04	10/09/14 04:12	1
Chlordane (technical)	ND		40		ug/Kg		10/08/14 12:04	10/09/14 04:12	1
alpha-Chlordane	ND		2.0		ug/Kg		10/08/14 12:04	10/09/14 04:12	1
gamma-Chlordane	ND		2.0		ug/Kg		10/08/14 12:04	10/09/14 04:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	96		57 - 122	10/08/14 12:04	10/09/14 04:12	1
DCB Decachlorobiphenyl	93		21 - 136	10/08/14 12:04	10/09/14 04:12	1

**Lab Sample ID: LCS 720-168410/2-A**

**Matrix: Solid**

**Analysis Batch: 168467**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 168410**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	16.3	13.5		ug/Kg		83	65 - 120
Dieldrin	16.3	13.9		ug/Kg		85	72 - 120
Endrin aldehyde	16.3	13.1		ug/Kg		81	68 - 120
Endrin	16.3	14.3		ug/Kg		88	68 - 120
Endrin ketone	16.3	14.5		ug/Kg		89	67 - 120
Heptachlor	16.3	13.8		ug/Kg		84	69 - 120
Heptachlor epoxide	16.3	14.4		ug/Kg		88	68 - 120
4,4'-DDT	16.3	13.9		ug/Kg		86	63 - 127
4,4'-DDE	16.3	14.0		ug/Kg		86	70 - 120
4,4'-DDD	16.3	13.4		ug/Kg		82	69 - 120
Endosulfan I	16.3	14.2		ug/Kg		87	62 - 120
Endosulfan II	16.3	13.8		ug/Kg		85	65 - 120
alpha-BHC	16.3	13.7		ug/Kg		84	62 - 120
beta-BHC	16.3	15.1		ug/Kg		93	74 - 124
gamma-BHC (Lindane)	16.3	13.9		ug/Kg		85	72 - 120
delta-BHC	16.3	13.0		ug/Kg		80	43 - 125

TestAmerica Pleasanton

# QC Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: LCS 720-168410/2-A**

**Matrix: Solid**

**Analysis Batch: 168467**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 168410**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Endosulfan sulfate	16.3	13.2		ug/Kg		81	67 - 120
Methoxychlor	16.3	14.9		ug/Kg		92	71 - 132
alpha-Chlordane	16.3	14.2		ug/Kg		87	70 - 120
gamma-Chlordane	16.3	14.2		ug/Kg		87	68 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	93		57 - 122
DCB Decachlorobiphenyl	96		21 - 136

**Lab Sample ID: MB 720-168546/1-A**

**Matrix: Solid**

**Analysis Batch: 168658**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 168546**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 18:29	1
Dieldrin	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 18:29	1
Endrin aldehyde	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 18:29	1
Endrin	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 18:29	1
Endrin ketone	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 18:29	1
Heptachlor	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 18:29	1
Heptachlor epoxide	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 18:29	1
4,4'-DDT	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 18:29	1
4,4'-DDE	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 18:29	1
4,4'-DDD	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 18:29	1
Endosulfan I	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 18:29	1
Endosulfan II	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 18:29	1
alpha-BHC	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 18:29	1
beta-BHC	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 18:29	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 18:29	1
delta-BHC	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 18:29	1
Endosulfan sulfate	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 18:29	1
Methoxychlor	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 18:29	1
Toxaphene	ND		40		ug/Kg		10/09/14 18:23	10/11/14 18:29	1
Chlordane (technical)	ND		40		ug/Kg		10/09/14 18:23	10/11/14 18:29	1
alpha-Chlordane	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 18:29	1
gamma-Chlordane	ND		2.0		ug/Kg		10/09/14 18:23	10/11/14 18:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	98		57 - 122	10/09/14 18:23	10/11/14 18:29	1
DCB Decachlorobiphenyl	113		21 - 136	10/09/14 18:23	10/11/14 18:29	1

**Lab Sample ID: LCS 720-168546/2-A**

**Matrix: Solid**

**Analysis Batch: 168658**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 168546**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	16.5	14.9		ug/Kg		90	65 - 120
Dieldrin	16.5	14.6		ug/Kg		89	72 - 120

TestAmerica Pleasanton

# QC Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: LCS 720-168546/2-A**

**Matrix: Solid**

**Analysis Batch: 168658**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 168546**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec. Limits
	Added	Result	Qualifier				
Endrin aldehyde	16.5	15.8		ug/Kg		96	68 - 120
Endrin	16.5	16.4		ug/Kg		99	68 - 120
Endrin ketone	16.5	16.1		ug/Kg		98	67 - 120
Heptachlor	16.5	15.3		ug/Kg		93	69 - 120
Heptachlor epoxide	16.5	14.6		ug/Kg		89	68 - 120
4,4'-DDT	16.5	16.6		ug/Kg		101	63 - 127
4,4'-DDE	16.5	16.0		ug/Kg		97	70 - 120
4,4'-DDD	16.5	16.4		ug/Kg		100	69 - 120
Endosulfan I	16.5	14.8		ug/Kg		90	62 - 120
Endosulfan II	16.5	15.7		ug/Kg		95	65 - 120
alpha-BHC	16.5	15.0		ug/Kg		91	62 - 120
beta-BHC	16.5	15.7		ug/Kg		95	74 - 124
gamma-BHC (Lindane)	16.5	15.3		ug/Kg		93	72 - 120
delta-BHC	16.5	13.2		ug/Kg		80	43 - 125
Endosulfan sulfate	16.5	15.7		ug/Kg		95	67 - 120
Methoxychlor	16.5	16.8		ug/Kg		102	71 - 132
alpha-Chlordane	16.5	15.9		ug/Kg		97	70 - 120
gamma-Chlordane	16.5	15.8		ug/Kg		96	68 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	102		57 - 122
DCB Decachlorobiphenyl	115		21 - 136

# QC Association Summary

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

## GC Semi VOA

### Prep Batch: 168410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-60371-1	S-9	Total/NA	Solid	3546	
720-60371-2	S-10	Total/NA	Solid	3546	
720-60371-3	S-11	Total/NA	Solid	3546	
720-60371-4	S-12	Total/NA	Solid	3546	
720-60371-5	S-1	Total/NA	Solid	3546	
720-60371-6	S-2	Total/NA	Solid	3546	
720-60371-7	S-3	Total/NA	Solid	3546	
720-60371-8	S-4	Total/NA	Solid	3546	
LCS 720-168410/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 720-168410/1-A	Method Blank	Total/NA	Solid	3546	

### Analysis Batch: 168467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-168410/2-A	Lab Control Sample	Total/NA	Solid	8081A	168410
MB 720-168410/1-A	Method Blank	Total/NA	Solid	8081A	168410

### Prep Batch: 168546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-60371-9	S-5	Total/NA	Solid	3546	
720-60371-10	S-6	Total/NA	Solid	3546	
720-60371-11	S-7	Total/NA	Solid	3546	
720-60371-12	S-8	Total/NA	Solid	3546	
LCS 720-168546/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 720-168546/1-A	Method Blank	Total/NA	Solid	3546	

### Analysis Batch: 168658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-60371-1	S-9	Total/NA	Solid	8081A	168410
720-60371-2	S-10	Total/NA	Solid	8081A	168410
720-60371-3	S-11	Total/NA	Solid	8081A	168410
720-60371-4	S-12	Total/NA	Solid	8081A	168410
720-60371-5	S-1	Total/NA	Solid	8081A	168410
720-60371-6	S-2	Total/NA	Solid	8081A	168410
720-60371-7	S-3	Total/NA	Solid	8081A	168410
720-60371-8	S-4	Total/NA	Solid	8081A	168410
720-60371-9	S-5	Total/NA	Solid	8081A	168546
720-60371-10	S-6	Total/NA	Solid	8081A	168546
720-60371-11	S-7	Total/NA	Solid	8081A	168546
720-60371-12	S-8	Total/NA	Solid	8081A	168546
LCS 720-168546/2-A	Lab Control Sample	Total/NA	Solid	8081A	168546
MB 720-168546/1-A	Method Blank	Total/NA	Solid	8081A	168546

### Analysis Batch: 168674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-60371-1	S-9	Total/NA	Solid	8081A	168410
720-60371-6	S-2	Total/NA	Solid	8081A	168410
720-60371-10	S-6	Total/NA	Solid	8081A	168546

# QC Association Summary

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

## General Chemistry

### Analysis Batch: 168435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-60371-1	S-9	Total/NA	Solid	Moisture	
720-60371-2	S-10	Total/NA	Solid	Moisture	
720-60371-3	S-11	Total/NA	Solid	Moisture	
720-60371-4	S-12	Total/NA	Solid	Moisture	
720-60371-5	S-1	Total/NA	Solid	Moisture	
720-60371-6	S-2	Total/NA	Solid	Moisture	
720-60371-7	S-3	Total/NA	Solid	Moisture	
720-60371-8	S-4	Total/NA	Solid	Moisture	
720-60371-9	S-5	Total/NA	Solid	Moisture	
720-60371-10	S-6	Total/NA	Solid	Moisture	
720-60371-11	S-7	Total/NA	Solid	Moisture	
720-60371-12	S-8	Total/NA	Solid	Moisture	

# Lab Chronicle

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

## Client Sample ID: S-9

Lab Sample ID: 720-60371-1

Date Collected: 10/03/14 11:35

Matrix: Solid

Date Received: 10/03/14 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			168410	10/08/14 12:06		TAL PLS
Total/NA	Analysis	8081A		5	168674	10/13/14 13:28	MQL	TAL PLS
Total/NA	Prep	3546			168410	10/08/14 12:06		TAL PLS
Total/NA	Analysis	8081A		1	168658	10/12/14 02:26	MQL	TAL PLS
Total/NA	Analysis	Moisture		1	168435	10/08/14 15:23	MJK	TAL PLS

## Client Sample ID: S-10

Lab Sample ID: 720-60371-2

Date Collected: 10/03/14 11:49

Matrix: Solid

Date Received: 10/03/14 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			168410	10/08/14 12:06		TAL PLS
Total/NA	Analysis	8081A		1	168658	10/12/14 02:44	MQL	TAL PLS
Total/NA	Analysis	Moisture		1	168435	10/08/14 15:23	MJK	TAL PLS

## Client Sample ID: S-11

Lab Sample ID: 720-60371-3

Date Collected: 10/03/14 11:59

Matrix: Solid

Date Received: 10/03/14 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			168410	10/08/14 12:06		TAL PLS
Total/NA	Analysis	8081A		1	168658	10/12/14 03:01	MQL	TAL PLS
Total/NA	Analysis	Moisture		1	168435	10/08/14 15:23	MJK	TAL PLS

## Client Sample ID: S-12

Lab Sample ID: 720-60371-4

Date Collected: 10/03/14 12:15

Matrix: Solid

Date Received: 10/03/14 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			168410	10/08/14 12:06		TAL PLS
Total/NA	Analysis	8081A		1	168658	10/12/14 03:19	MQL	TAL PLS
Total/NA	Analysis	Moisture		1	168435	10/08/14 15:23	MJK	TAL PLS

## Client Sample ID: S-1

Lab Sample ID: 720-60371-5

Date Collected: 10/03/14 12:26

Matrix: Solid

Date Received: 10/03/14 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			168410	10/08/14 12:06		TAL PLS
Total/NA	Analysis	8081A		1	168658	10/12/14 03:36	MQL	TAL PLS
Total/NA	Analysis	Moisture		1	168435	10/08/14 15:23	MJK	TAL PLS

TestAmerica Pleasanton



# Lab Chronicle

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

## Client Sample ID: S-2

Lab Sample ID: 720-60371-6

Date Collected: 10/03/14 12:36

Matrix: Solid

Date Received: 10/03/14 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			168410	10/08/14 12:06		TAL PLS
Total/NA	Analysis	8081A		20	168674	10/13/14 13:45	MQL	TAL PLS
Total/NA	Prep	3546			168410	10/08/14 12:06		TAL PLS
Total/NA	Analysis	8081A		1	168658	10/12/14 03:54	MQL	TAL PLS
Total/NA	Analysis	Moisture		1	168435	10/08/14 15:23	MJK	TAL PLS

## Client Sample ID: S-3

Lab Sample ID: 720-60371-7

Date Collected: 10/03/14 12:50

Matrix: Solid

Date Received: 10/03/14 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			168410	10/08/14 12:06		TAL PLS
Total/NA	Analysis	8081A		1	168658	10/12/14 04:11	MQL	TAL PLS
Total/NA	Analysis	Moisture		1	168435	10/08/14 15:23	MJK	TAL PLS

## Client Sample ID: S-4

Lab Sample ID: 720-60371-8

Date Collected: 10/03/14 13:14

Matrix: Solid

Date Received: 10/03/14 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			168410	10/08/14 12:06		TAL PLS
Total/NA	Analysis	8081A		1	168658	10/12/14 04:29	MQL	TAL PLS
Total/NA	Analysis	Moisture		1	168435	10/08/14 15:23	MJK	TAL PLS

## Client Sample ID: S-5

Lab Sample ID: 720-60371-9

Date Collected: 10/03/14 13:30

Matrix: Solid

Date Received: 10/03/14 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			168546	10/09/14 18:23	DFR	TAL PLS
Total/NA	Analysis	8081A		1	168658	10/11/14 19:58	MQL	TAL PLS
Total/NA	Analysis	Moisture		1	168435	10/08/14 15:23	MJK	TAL PLS

## Client Sample ID: S-6

Lab Sample ID: 720-60371-10

Date Collected: 10/03/14 13:45

Matrix: Solid

Date Received: 10/03/14 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			168546	10/09/14 18:23	DFR	TAL PLS
Total/NA	Analysis	8081A		2	168674	10/13/14 13:11	MQL	TAL PLS
Total/NA	Prep	3546			168546	10/09/14 18:23	DFR	TAL PLS
Total/NA	Analysis	8081A		1	168658	10/11/14 20:16	MQL	TAL PLS

TestAmerica Pleasanton

# Lab Chronicle

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

## Client Sample ID: S-6

Lab Sample ID: 720-60371-10

Date Collected: 10/03/14 13:45

Matrix: Solid

Date Received: 10/03/14 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	168435	10/08/14 15:23	MJK	TAL PLS

## Client Sample ID: S-7

Lab Sample ID: 720-60371-11

Date Collected: 10/03/14 13:57

Matrix: Solid

Date Received: 10/03/14 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			168546	10/09/14 18:23	DFR	TAL PLS
Total/NA	Analysis	8081A		1	168658	10/11/14 20:33	MQL	TAL PLS
Total/NA	Analysis	Moisture		1	168435	10/08/14 15:23	MJK	TAL PLS

## Client Sample ID: S-8

Lab Sample ID: 720-60371-12

Date Collected: 10/03/14 14:08

Matrix: Solid

Date Received: 10/03/14 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			168546	10/09/14 18:23	DFR	TAL PLS
Total/NA	Analysis	8081A		1	168658	10/11/14 20:51	MQL	TAL PLS
Total/NA	Analysis	Moisture		1	168435	10/08/14 15:23	MJK	TAL PLS

**Laboratory References:**

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

# Certification Summary

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

## Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-16

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

# Method Summary

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

Method	Method Description	Protocol	Laboratory
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
Moisture	Percent Moisture	EPA	TAL PLS

**Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

# Sample Summary

Client: Bureau Veritas North America, Inc.  
Project/Site: Kawahara

TestAmerica Job ID: 720-60371-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-60371-1	S-9	Solid	10/03/14 11:35	10/03/14 15:35
720-60371-2	S-10	Solid	10/03/14 11:49	10/03/14 15:35
720-60371-3	S-11	Solid	10/03/14 11:59	10/03/14 15:35
720-60371-4	S-12	Solid	10/03/14 12:15	10/03/14 15:35
720-60371-5	S-1	Solid	10/03/14 12:26	10/03/14 15:35
720-60371-6	S-2	Solid	10/03/14 12:36	10/03/14 15:35
720-60371-7	S-3	Solid	10/03/14 12:50	10/03/14 15:35
720-60371-8	S-4	Solid	10/03/14 13:14	10/03/14 15:35
720-60371-9	S-5	Solid	10/03/14 13:30	10/03/14 15:35
720-60371-10	S-6	Solid	10/03/14 13:45	10/03/14 15:35
720-60371-11	S-7	Solid	10/03/14 13:57	10/03/14 15:35
720-60371-12	S-8	Solid	10/03/14 14:08	10/03/14 15:35



CHAIN OF CUSTODY

1220-60371



BUREAU VERITAS

Lab: TW

TAT: Standard

Page 1 of 2

Report results to:

Don Ashton  
 Bureau Veritas  
 2430 Camino Ramon, Suite 122  
 San Ramon, California 94583  
 (925) 426-2600, Droid: (925) 426-2679  
 Fax No. (925) 426-0106  
 Email: [Don.Ashton@us.bureauveritas.com](mailto:Don.Ashton@us.bureauveritas.com)

Project Information  
 Project No. 33114-D14 115.01  
 Name KAWHKA  
 Location SAW LOT 20

Special instructions and/or specific regulatory requirements:

EDD Report for Geotracker: Yes No

Sample Identification	Date Sampled	Time Sampled	Method Used	Notes/Comments	Analysis Requested	Sample Condition/Comments	Preservative
5-9	10-3-14	11:35	Soil		X	OCP, METALS, BOD/A	ICE
5-10	10-3-14	11:49			X	% moisture	
5-11		11:59					
5-12		12:15					
5-1		12:26					
5-2		12:36					
5-3		12:50					
5-4		13:14					
5-5		13:30					
5-6		13:45					



720-60371 Chain of Custody

Yes No

Collected by: [Signature] Date/Time 10-3-14 15:35  
 Relinquished by: [Signature] Date/Time \_\_\_\_\_  
 Method of Shipment: \_\_\_\_\_

Collector's Signature: [Signature]  
 Received by: [Signature] Date/Time 10-3-14 15:35  
 Sample Condition on Rept: 24-28

# CHAIN OF CUSTODY

## 120-00571



**BUREAU  
VERITAS**

**Report results to:**

Don Ashton  
 Bureau Veritas  
 2430 Camino Ramon, Suite 122  
 San Ramon, California 94583  
 (925) 426-2600 Drc: (925) 426-2679  
 (925) 426-0106  
 Don.Ashton@us.bureauveritas.com

**Project Information**  
 Project No. 33114-014115, 01  
 Name KAUF WHEA  
 Location SAW LAB RW 20

Lab: \_\_\_\_\_  
 TAT: Standard

Page 22 of 22

156712

Special instructions and/or specific regulatory requirements:

EDD Report for Geotracker: Yes  No

Sample Identification	Date Sampled	Time Sampled	Material Media	No. of Cans	Analyses Requested	Yes	No	Sample Condition/Comments	Preservative
G-7	10-3-14	18:57	SOIL	1	OC's METHOD 8001A				ICE
S-B	11	14:08	W	1	% MOISTURE				ICE

Collected by: [Signature] Date/Time 10-3-14 15:35  
 Relinquished by: [Signature] Date/Time \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date/Time \_\_\_\_\_  
 Method of Shipment: \_\_\_\_\_

Collector's Signature: \_\_\_\_\_  
 Received by: [Signature] Date/Time 10-3-14 15:35  
 Received by: \_\_\_\_\_ Date/Time \_\_\_\_\_  
 Sample Condition on Rcpt: \_\_\_\_\_

## Login Sample Receipt Checklist

Client: Bureau Veritas North America, Inc.

Job Number: 720-60371-1

**Login Number: 60371**

**List Source: TestAmerica Pleasanton**

**List Number: 1**

**Creator: Gonzales, Justinn**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	







**Curtis & Tompkins, Ltd.**  
Analytical Laboratories, Since 1878





Laboratory Job Number 262300
ANALYTICAL REPORT

Bureau Veritas North America
2430 Camino Ramon
San Ramon, Ca 94583

Project : 33114-014115.01
Location : Oakland Diocese
Level : II

Table with 4 columns: Sample ID, Lab ID, Sample ID, Lab ID. Lists sample and lab identifiers for various depths (e.g., S-2A 0-0.5', 262300-001).

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Date: 11/07/2014

John Goyette
Senior Program Manager
goyette@ctberk.com
(510) 204-2233

**CASE NARRATIVE**

Laboratory number: 262300  
Client: Bureau Veritas North America  
Project: 33114-014115.01  
Location: Oakland Diocese  
Request Date: 11/05/14  
Samples Received: 11/05/14

This data package contains sample and QC results for thirty four soil samples, requested for the above referenced project on 11/05/14. The samples were received cold and intact.

**Pesticides (EPA 8081A):**

All samples underwent sulfur cleanup using the copper option in EPA Method 3660B. All samples underwent florisil cleanup using EPA Method 3620C. No analytical problems were encountered.

**Curtis & Tompkins, Ltd.**  
 Analytical Laboratory Since 1878  
 2323 Fifth Street  
 Berkeley, CA 94710  
 (510)486-0900 Phone  
 (510)486-0532 Fax

# CHAIN OF CUSTODY

Chain of Custody #:

## Analytical Request

C&T LOGIN # 262300

Project No: 33114-014115.01

Project Name: Diocese - Kawahara

EDD Format:  I  II  III  N Company: Bureau Veritas

Turnaround Time:  RUSH 2 Days  Stan

Sampler: Don Ashton

Report To: Don Ashton

Telephone: 925 426-2679 c:925 260-3102

Email: Don.Ashton@us.bureauveritas.com

Lab No.	Sample ID.	Sampling		Matrix		Chemical Preservative					OCPs Method 8081A	
		Date	Time	Water	Soil	Container #	HI	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	NaOH		None
1	S-2A 0-0.5'	11/5/2014	0833	X		1					X	Note: A
2	S-10A 0-0.05'	11/5/2014	0830	X		1					X	Note: B
3	S-30 0-0.5'	11/5/2014	0910	X		1					X	
4	S-30 1.5-2'	11/5/2014	0910	X		1					X	
5	S-31 0-0.5'	11/5/2014	1003	X		1					X	
6	S-31 1.5-2'	11/5/2014	1003	X		1					X	
7	S-32 0-0.5'	11/5/2014	1053	X		1					X	
8	S-32 1.5-2'	11/5/2014	1053	X		1					X	
9	S-33 0-0.5'	11/5/2014	1043	X		1					X	
10	S-33 1.5-2'	11/5/2014	1043	X		1					X	
11	S-34 0-0.5'	11/5/2014	1038	X		1					X	
12	S-34 1.5-2'	11/5/2014	1038	X		1					X	
13	S-35 0-0.5'	11/5/2014	1115	X		1					X	
14	S-35 1.5-2'	11/5/2014	1115	X		1					X	

**Notes:**

A: Please prepare MS & MSD using this sample (OCPs ~3 mg/kg)  
 B: Please prepare MS & MSD using this sample (expect ND concentration)  
 NOTE: OPEN SAMPLE END WITH ARLEN  
 RUSH 1 to 2 days.....

**SAMPLE RECEIPT**  
 Intact  Cold  
 On Ice  Ambient

**RELINQUISHED BY:**

*Don Ashton* 11-5-14 15:00 DATE/TIME  
*Don Ashton* 11-5-14 15:00 DATE/TIME

**RECEIVED BY:**

*Don Ashton* 11-5-14 15:00 DATE/TIME  
*Don Ashton* 11/05 15:05 DATE/TIME

**Curtis & Tompkins, Ltd.**  
 Analytical Laboratory Since 1878  
 2323 Fifth Street  
 Berkeley, CA 94710  
 (510)486-0900 Phone  
 (510)486-0532 Fax

# CHAIN OF CUSTODY

C&T LOGIN # 262300

Project No: 33114-014115.01  
 Project Name: Diocese - Kawahara  
 EDD Format:  I  II  III  Stan  
 Turnaround Time: RUSH 2 Days  
 Sampler: Don Ashton  
 Report To: Don Ashton  
 Company: Bureau Veritas  
 Telephone: 925 426-2679 c:925 260-3102  
 Email: Don.Ashton@us.bureauveritas.com

Lab No.	Sample ID.	Sampling		Matrix		Chemical Preservative					OCPs Method 8081A
		Date	Time	Water	Soil	# of Containers	HCl	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	NaOH	
S-36	0-0.5'	11/5/2014	11:22	X		1					X
S-36	1.5-2'	11/5/2014	11:22	X		1					X
S-37	0-0.5'	11/5/2014	11:37	X		1					X
S-37	1.5-2'	11/5/2014	11:37	X		1					X
S-38	0-0.5'	11/5/2014	11:44	X		1					X
S-38	1.5-2'	11/5/2014	11:44	X		1					X
S-39	0-0.5'	11/5/2014	12:09	X		1					X
S-39	1.5-2'	11/5/2014	12:09	X		1					X
S-40	0-0.5'	11/5/2014	12:11	X		1					X
S-40	1.5-2'	11/5/2014	12:11	X		1					X
S-41	0-0.5'	11/5/2014	12:14	X		1					X
S-41	1.5-2'	11/5/2014	12:14	X		1					X
S-42	0-0.5'	11/5/2014	12:23	X		1					X
S-42	1.5-2'	11/5/2014	12:23	X		1					X

Notes:  
 A: Please prepare MS & MSD using this sample (OCPs ~3 mg/kg)  
 B: Please prepare MS & MSD using this sample (expect ND concentration)  
*NOTE: OPEN SAMPLE READ*  
 RUSH 1 to 2 days.....

RECEIVED BY: [Signature] 11-5-14 15:00 DATE/TIME  
 11-5-14 15:45 DATE/TIME

RELINQUISHED BY: [Signature] 11-5-14 15:00 DATE/TIME  
 11-5-14 15:45 DATE/TIME

**Curtis & Tompkins, Ltd.**  
 Analytical Laboratory Since 1878  
 2323 Fifth Street  
 Berkeley, CA 94710  
 (510)486-0900 Phone  
 (510)486-0532 Fax

# CHAIN OF CUSTODY

Chain of Custody #:

## Analytical Request

C&T LOGIN # 262300

Project No: 33114-014115.01

Project Name: Diocese - Kawahara

EDD Format:  I  II  III  Rpt Level:  I  II  III  2 Days

Turnaround Time: RUSH

Sampler: Don Ashton

Report To: Don Ashton

Company: Bureau Veritas

Telephone: 925 426-2679 c:925 260-3102

Email: Don.Ashton@us.bureauveritas.com

Lab No.	Sample ID.	Sampling		Matrix			Chemical Preservative				OCPS Method 8081A
		Date	Time	Water	Soil	# of Containers	HCl	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	NaOH	
29	S-43 0-0.5'	11/5/2014	1306	X		1					X
30	S-43 1.5-2'	11/5/2014	1306	X		1					X
31	S-44 0-0.5'	11/5/2014	1300	X		1					X
32	S-44 1.5-2'	11/5/2014	1300	X		1					X
33	S-45 0-0.5'	11/5/2014	1256	X		1					X
34	S-45 1.5-2'	11/5/2014	1256	X		1					X

**Notes:**

- A: Please prepare MS & MSD using this sample (OCPS ~3 mg/kg)
- B: Please prepare MS & MSD using this sample (expect ND concentration)

*Note: Open Sample End with Arsen*

**SAMPLE RECEIPT**

- Intact
- Cold
- On Ice
- Ambient

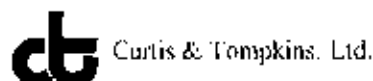
**RELINQUISHED BY:**

**RECEIVED BY:**

*[Signature]* 11-5-14 15:00  
 DATE/TIME

*[Signature]* 11-5-14 15:00  
 DATE/TIME

**COOLER RECEIPT CHECKLIST**



Login # 262300 Date Received 11/05/14 Number of coolers 1  
 Client Bureau Veritas Project 33114-014115.01

Date Opened 11/05 By (print) MC (sign) [Signature]  
 Date Logged in 6 By (print) h (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES  NO

Shipping info \_\_\_\_\_

2A. Were custody seals present? ....  YES (circle) on cooler on samples  NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO  N/A

3. Were custody papers dry and intact when received?  YES NO

4. Were custody papers filled out properly (ink, signed, etc)?  YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form)  YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

- Bubble Wrap  Foam blocks  Bags  None
- Cloth material  Cardboard  Styrofoam  Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used:  Wet  Blue/Gel  None Temp(°C) \_\_\_\_\_

Samples Received on ice & cold without a temperature blank; temp. taken with IR gun \_\_\_\_\_

Samples received on ice directly from the field. Cooling process had begun \_\_\_\_\_

8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES  NO

If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened?  YES NO

10. Are there any missing / extra samples? \_\_\_\_\_ YES  NO

11. Are samples in the appropriate containers for indicated tests?  YES NO

12. Are sample labels present, in good condition and complete?  YES NO

13. Do the sample labels agree with custody papers?  YES NO

14. Was sufficient amount of sample sent for tests requested?  YES NO

15. Are the samples appropriately preserved? \_\_\_\_\_ YES NO  N/A

16. Did you check preservatives for all bottles for each sample? \_\_\_\_\_ YES NO  N/A

17. Did you document your preservative check? \_\_\_\_\_ YES NO  N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO  N/A

19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO  N/A

20. Are bubbles > 6mm absent in VOA samples? \_\_\_\_\_ YES NO  N/A

21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES  NO

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

**COMMENTS**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### Detections Summary for 262300

Results for any subcontracted analyses are not included in this summary.

Client : Bureau Veritas North America  
 Project : 33114-014115.01  
 Location : Oakland Diocese

Client Sample ID : S-2A 0-0.5'                      Laboratory Sample ID :                      262300-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Dieldrin	5.3		1.8	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
alpha-Chlordane	5.5		1.8	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
gamma-Chlordane	4.3		1.8	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B

Client Sample ID : S-10A 0-0.5'                      Laboratory Sample ID :                      262300-002

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
4,4'-DDT	3.8	#	3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B

Client Sample ID : S-30 0-0.5'                      Laboratory Sample ID :                      262300-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Aldrin	2.7	C	1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Dieldrin	12	C	1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
4,4'-DDD	3.5		3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
4,4'-DDT	12	#	3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
alpha-Chlordane	2.4		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
gamma-Chlordane	14	C	1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B

Client Sample ID : S-30 1.5-2'                      Laboratory Sample ID :                      262300-004

No Detections

Client Sample ID : S-31 0-0.5'                      Laboratory Sample ID :                      262300-005

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Heptachlor epoxide	15	C	8.4	ug/Kg	As Recd	5.000	EPA 8081A	EPA 3550B
Dieldrin	470	C	8.4	ug/Kg	As Recd	5.000	EPA 8081A	EPA 3550B
4,4'-DDE	170		16	ug/Kg	As Recd	5.000	EPA 8081A	EPA 3550B
Endrin	93	C	16	ug/Kg	As Recd	5.000	EPA 8081A	EPA 3550B
4,4'-DDD	63	C	16	ug/Kg	As Recd	5.000	EPA 8081A	EPA 3550B
Endrin aldehyde	22	C	16	ug/Kg	As Recd	5.000	EPA 8081A	EPA 3550B
4,4'-DDT	470	#,C	16	ug/Kg	As Recd	5.000	EPA 8081A	EPA 3550B
alpha-Chlordane	160		8.4	ug/Kg	As Recd	5.000	EPA 8081A	EPA 3550B
gamma-Chlordane	140		8.4	ug/Kg	As Recd	5.000	EPA 8081A	EPA 3550B



Client Sample ID : S-31 1.5-2'

Laboratory Sample ID :

262300-006

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Dieldrin	7.3		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
4,4'-DDT	5.8		3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
alpha-Chlordane	2.6		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
gamma-Chlordane	1.8		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B

Client Sample ID : S-32 0-0.5'

Laboratory Sample ID :

262300-007

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Heptachlor epoxide	11	C	1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Dieldrin	43		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
4,4'-DDE	6.7		3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Endrin aldehyde	5.1	C	3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
4,4'-DDT	18		3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
alpha-Chlordane	67		17	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3550B
gamma-Chlordane	87		17	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3550B

Client Sample ID : S-32 1.5-2'

Laboratory Sample ID :

262300-008

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
gamma-Chlordane	2.0		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B

Client Sample ID : S-33 0-0.5'

Laboratory Sample ID :

262300-009

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
alpha-BHC	4.2	C	1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
delta-BHC	4.4		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Heptachlor epoxide	4.5	C	1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Dieldrin	94		17	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3550B
4,4'-DDE	20		3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Endosulfan II	7.3	C	3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Endosulfan sulfate	4.2		3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Endrin aldehyde	9.1	C	3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
4,4'-DDT	39		3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
alpha-Chlordane	65	C	17	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3550B
gamma-Chlordane	100		17	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3550B

Client Sample ID : S-33 1.5-2'

Laboratory Sample ID :

262300-010

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Dieldrin	26		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Endrin aldehyde	11		3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
4,4'-DDT	6.0	#,C	3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
alpha-Chlordane	4.2		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
gamma-Chlordane	4.9		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B

Client Sample ID : S-34 0-0.5'

Laboratory Sample ID :

262300-011

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Aldrin	18	C	8.5	ug/Kg	As Recd	5.000	EPA 8081A	EPA 3550B
Dieldrin	770		34	ug/Kg	As Recd	20.00	EPA 8081A	EPA 3550B
4,4'-DDE	150		17	ug/Kg	As Recd	5.000	EPA 8081A	EPA 3550B
Endosulfan II	220		66	ug/Kg	As Recd	20.00	EPA 8081A	EPA 3550B
Endosulfan sulfate	24	#	17	ug/Kg	As Recd	5.000	EPA 8081A	EPA 3550B
Endrin aldehyde	98	C	66	ug/Kg	As Recd	20.00	EPA 8081A	EPA 3550B
4,4'-DDT	510	#	17	ug/Kg	As Recd	5.000	EPA 8081A	EPA 3550B
alpha-Chlordane	660		34	ug/Kg	As Recd	20.00	EPA 8081A	EPA 3550B
gamma-Chlordane	560		34	ug/Kg	As Recd	20.00	EPA 8081A	EPA 3550B

Client Sample ID : S-34 1.5-2'

Laboratory Sample ID :

262300-012

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Dieldrin	5.8		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
4,4'-DDT	4.0	C	3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
alpha-Chlordane	1.9		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
gamma-Chlordane	2.2		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B

Client Sample ID : S-35 0-0.5'

Laboratory Sample ID :

262300-013

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Dieldrin	39	C	17	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3550B
4,4'-DDE	36		34	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3550B
4,4'-DDT	47	#	34	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3550B
alpha-Chlordane	56	C	17	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3550B
gamma-Chlordane	100		17	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3550B

Client Sample ID : S-35 1.5-2'

Laboratory Sample ID :

262300-014

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Dieldrin	3.3	C	1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
gamma-Chlordane	2.2		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B

Client Sample ID : S-36 0-0.5'

Laboratory Sample ID :

262300-015

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Aldrin	15		5.2	ug/Kg	As Recd	3.000	EPA 8081A	EPA 3550B
Dieldrin	180		5.2	ug/Kg	As Recd	3.000	EPA 8081A	EPA 3550B
4,4'-DDE	20		10	ug/Kg	As Recd	3.000	EPA 8081A	EPA 3550B
4,4'-DDT	95	#	10	ug/Kg	As Recd	3.000	EPA 8081A	EPA 3550B
alpha-Chlordane	42		5.2	ug/Kg	As Recd	3.000	EPA 8081A	EPA 3550B
gamma-Chlordane	59	C	5.2	ug/Kg	As Recd	3.000	EPA 8081A	EPA 3550B

Client Sample ID : S-36 1.5-2'

Laboratory Sample ID :

262300-016

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Dieldrin	6.0		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
4,4'-DDT	4.8		3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
gamma-Chlordane	2.1	C	1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B

Client Sample ID : S-37 0-0.5'

Laboratory Sample ID :

262300-017

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Dieldrin	9.3		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
4,4'-DDT	6.3	#	3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
alpha-Chlordane	3.3		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
gamma-Chlordane	3.4		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B

Client Sample ID : S-37 1.5-2'

Laboratory Sample ID :

262300-018

No Detections

Client Sample ID : S-38 0-0.5'

Laboratory Sample ID :

262300-019

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Heptachlor epoxide	18	C	1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Dieldrin	110		17	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3550B
4,4'-DDE	15	C	3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Endosulfan II	11	C	3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Endosulfan sulfate	4.5	C	3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
4,4'-DDD	3.9	C	3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Endrin aldehyde	19	C	3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
4,4'-DDT	62	#	3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
alpha-Chlordane	310	C	17	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3550B
gamma-Chlordane	340		17	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3550B

Client Sample ID : S-38 1.5-2'

Laboratory Sample ID :

262300-020

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Dieldrin	3.1	C	1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
alpha-Chlordane	2.0		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
gamma-Chlordane	2.3	C	1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B

Client Sample ID : S-39 0-0.5'

Laboratory Sample ID :

262300-021

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
gamma-BHC	6.3		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Dieldrin	42		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
4,4'-DDE	18		3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
4,4'-DDD	4.3	#	3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
4,4'-DDT	70	#	33	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3550B
alpha-Chlordane	9.8		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
gamma-Chlordane	12		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B

Client Sample ID : S-39 1.5-2'

Laboratory Sample ID :

262300-022

No Detections

Client Sample ID : S-40 0-0.5'

Laboratory Sample ID :

262300-023

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
gamma-BHC	2.1		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Aldrin	5.6	C	1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Endosulfan I	11	C	1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Dieldrin	420		17	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3550B
4,4'-DDE	16		3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
Endosulfan II	8.0	C	3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
4,4'-DDD	9.4	#,C	3.3	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
4,4'-DDT	100		33	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3550B
alpha-Chlordane	110		17	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3550B
gamma-Chlordane	120		17	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3550B

Client Sample ID : S-40 1.5-2'

Laboratory Sample ID :

262300-024

No Detections

Client Sample ID : S-41 0-0.5'

Laboratory Sample ID :

262300-025

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Dieldrin	42		17	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3550B
alpha-Chlordane	65	C	17	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3550B
gamma-Chlordane	30		17	ug/Kg	As Recd	10.00	EPA 8081A	EPA 3550B

Client Sample ID : S-41 1.5-2'

Laboratory Sample ID :

262300-026

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Dieldrin	5.3	C	1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
alpha-Chlordane	12	C	1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
gamma-Chlordane	4.6		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B

Client Sample ID : S-42 0-0.5'

Laboratory Sample ID :

262300-027

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Dieldrin	2.5		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B

Client Sample ID : S-42 1.5-2'

Laboratory Sample ID :

262300-028

No Detections

Client Sample ID : S-43 0-0.5'

Laboratory Sample ID :

262300-029

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Dieldrin	100	C	34	ug/Kg	As Recd	20.00	EPA 8081A	EPA 3550B
Endrin	77		66	ug/Kg	As Recd	20.00	EPA 8081A	EPA 3550B
4,4'-DDT	100	#,C	66	ug/Kg	As Recd	20.00	EPA 8081A	EPA 3550B
alpha-Chlordane	44	C	34	ug/Kg	As Recd	20.00	EPA 8081A	EPA 3550B
gamma-Chlordane	53		34	ug/Kg	As Recd	20.00	EPA 8081A	EPA 3550B

Client Sample ID : S-43 1.5-2'

Laboratory Sample ID :

262300-030

No Detections

Client Sample ID : S-44 0-0.5'

Laboratory Sample ID :

262300-031

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Dieldrin	40	C	8.4	ug/Kg	As Recd	5.000	EPA 8081A	EPA 3550B
4,4'-DDD	29	#	16	ug/Kg	As Recd	5.000	EPA 8081A	EPA 3550B
alpha-Chlordane	96	C	8.4	ug/Kg	As Recd	5.000	EPA 8081A	EPA 3550B
gamma-Chlordane	110		8.4	ug/Kg	As Recd	5.000	EPA 8081A	EPA 3550B

Client Sample ID : S-44 1.5-2'

Laboratory Sample ID :

262300-032

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
alpha-Chlordane	4.1	C	1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B
gamma-Chlordane	5.0		1.7	ug/Kg	As Recd	1.000	EPA 8081A	EPA 3550B

Client Sample ID : S-45 0-0.5'

Laboratory Sample ID :

262300-033

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Dieldrin	250	C	34	ug/Kg	As Recd	20.00	EPA 8081A	EPA 3550B
Endrin	69		66	ug/Kg	As Recd	20.00	EPA 8081A	EPA 3550B
4,4'-DDT	120	#	66	ug/Kg	As Recd	20.00	EPA 8081A	EPA 3550B
alpha-Chlordane	59	C	34	ug/Kg	As Recd	20.00	EPA 8081A	EPA 3550B
gamma-Chlordane	75		34	ug/Kg	As Recd	20.00	EPA 8081A	EPA 3550B

Client Sample ID : S-45 1.5-2'

Laboratory Sample ID :

262300-034

No Detections

# = CCV drift outside limits; average CCV drift within limits per method requirements  
C = Presence confirmed, but RPD between columns exceeds 40%

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-2A 0-0.5'	Batch#:	217159
Lab ID:	262300-001	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/06/14
Basis:	as received	Analyzed:	11/07/14
Diln Fac:	1.000		

Analyte	Result	RL
alpha-BHC	ND	1.8
beta-BHC	ND	1.8
gamma-BHC	ND	1.8
delta-BHC	ND	1.8
Heptachlor	ND	1.8
Aldrin	ND	1.8
Heptachlor epoxide	ND	1.8
Endosulfan I	ND	1.8
Dieldrin	5.3	1.8
4,4'-DDE	ND	3.4
Endrin	ND	3.4
Endosulfan II	ND	3.4
Endosulfan sulfate	ND	3.4
4,4'-DDD	ND	3.4
Endrin aldehyde	ND	3.4
4,4'-DDT	ND	3.4
alpha-Chlordane	5.5	1.8
gamma-Chlordane	4.3	1.8
Methoxychlor	ND	18
Toxaphene	ND	62

Surrogate	%REC	Limits
TCMX	87	42-134
Decachlorobiphenyl	77	29-122

ND= Not Detected  
 RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-10A 0-0.5'	Batch#:	217169
Lab ID:	262300-002	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/06/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	1.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	3.8 #	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	ND	1.7
Methoxychlor	ND	17
Toxaphene	ND	60

Surrogate	%REC	Limits
TCMX	67	42-134
Decachlorobiphenyl	77	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements

ND= Not Detected

RL= Reporting Limit



Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-30 0-0.5'	Batch#:	217159
Lab ID:	262300-003	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/05/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	2.7 C	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	12 C	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	3.5	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	12 #	3.3
alpha-Chlordane	2.4	1.7
gamma-Chlordane	14 C	1.7
Methoxychlor	ND	17
Toxaphene	ND	60

Surrogate	%REC	Limits
TCMX	96	42-134
Decachlorobiphenyl	80	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-30 1.5-2'	Batch#:	217159
Lab ID:	262300-004	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/05/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND #	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	ND	1.7
Methoxychlor	ND	17
Toxaphene	ND	61

Surrogate	%REC	Limits
TCMX	64	42-134
Decachlorobiphenyl	65	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements  
 ND= Not Detected  
 RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-31 0-0.5'	Batch#:	217159
Lab ID:	262300-005	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/05/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	5.000		

Analyte	Result	RL
alpha-BHC	ND	8.4
beta-BHC	ND	8.4
gamma-BHC	ND	8.4
delta-BHC	ND	8.4
Heptachlor	ND	8.4
Aldrin	ND	8.4
Heptachlor epoxide	15 C	8.4
Endosulfan I	ND	8.4
Dieldrin	470 C	8.4
4,4'-DDE	170	16
Endrin	93 C	16
Endosulfan II	ND	16
Endosulfan sulfate	ND	16
4,4'-DDD	63 C	16
Endrin aldehyde	22 C	16
4,4'-DDT	470 C #	16
alpha-Chlordane	160	8.4
gamma-Chlordane	140	8.4
Methoxychlor	ND	84
Toxaphene	ND	300

Surrogate	%REC	Limits
TCMX	102	42-134
Decachlorobiphenyl	91	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-31 1.5-2'	Batch#:	217159
Lab ID:	262300-006	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/05/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	7.3	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	5.8	3.3
alpha-Chlordane	2.6	1.7
gamma-Chlordane	1.8	1.7
Methoxychlor	ND	17
Toxaphene	ND	61

Surrogate	%REC	Limits
TCMX	66	42-134
Decachlorobiphenyl	45	29-122

ND= Not Detected  
 RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-32 0-0.5'	Batch#:	217159
Lab ID:	262300-007	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/05/14
Basis:	as received	Analyzed:	11/06/14

Analyte	Result	RL	Diln Fac
alpha-BHC	ND #	1.7	1.000
beta-BHC	ND	1.7	1.000
gamma-BHC	ND	1.7	1.000
delta-BHC	ND #	1.7	1.000
Heptachlor	ND #	1.7	1.000
Aldrin	ND	1.7	1.000
Heptachlor epoxide	11 C	1.7	1.000
Endosulfan I	ND	1.7	1.000
Dieldrin	43	1.7	1.000
4,4'-DDE	6.7	3.3	1.000
Endrin	ND #	3.3	1.000
Endosulfan II	ND	3.3	1.000
Endosulfan sulfate	ND #	3.3	1.000
4,4'-DDD	ND #	3.3	1.000
Endrin aldehyde	5.1 C	3.3	1.000
4,4'-DDT	18	3.3	1.000
alpha-Chlordane	67	17	10.00
gamma-Chlordane	87	17	10.00
Methoxychlor	ND #	17	1.000
Toxaphene	ND	60	1.000

Surrogate	%REC	Limits	Diln Fac
TCMX	71	42-134	1.000
Decachlorobiphenyl	64	29-122	1.000

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-32 1.5-2'	Batch#:	217159
Lab ID:	262300-008	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/05/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	2.0	1.7
Methoxychlor	ND	17
Toxaphene	ND	60

Surrogate	%REC	Limits
TCMX	73	42-134
Decachlorobiphenyl	44	29-122

ND= Not Detected  
 RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-33 0-0.5'	Batch#:	217159
Lab ID:	262300-009	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/05/14
Basis:	as received	Analyzed:	11/06/14

Analyte	Result	RL	Diln Fac
alpha-BHC	4.2 C	1.7	1.000
beta-BHC	ND	1.7	1.000
gamma-BHC	ND	1.7	1.000
delta-BHC	4.4	1.7	1.000
Heptachlor	ND	1.7	1.000
Aldrin	ND	1.7	1.000
Heptachlor epoxide	4.5 C	1.7	1.000
Endosulfan I	ND	1.7	1.000
Dieldrin	94	17	10.00
4,4'-DDE	20	3.3	1.000
Endrin	ND	3.3	1.000
Endosulfan II	7.3 C	3.3	1.000
Endosulfan sulfate	4.2	3.3	1.000
4,4'-DDD	ND	3.3	1.000
Endrin aldehyde	9.1 C	3.3	1.000
4,4'-DDT	39	3.3	1.000
alpha-Chlordane	65 C	17	10.00
gamma-Chlordane	100	17	10.00
Methoxychlor	ND #	17	1.000
Toxaphene	ND	60	1.000

Surrogate	%REC	Limits	Diln Fac
TCMX	75	42-134	1.000
Decachlorobiphenyl	54	29-122	1.000

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-33 1.5-2'	Batch#:	217159
Lab ID:	262300-010	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/05/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	26	1.7
4,4'-DDE	ND	3.3
Endrin	ND #	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	11	3.3
4,4'-DDT	6.0 C #	3.3
alpha-Chlordane	4.2	1.7
gamma-Chlordane	4.9	1.7
Methoxychlor	ND #	17
Toxaphene	ND	60

Surrogate	%REC	Limits
TCMX	75	42-134
Decachlorobiphenyl	50	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit



Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-34 0-0.5'	Batch#:	217159
Lab ID:	262300-011	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/05/14
Basis:	as received	Analyzed:	11/06/14

Analyte	Result	RL	Diln Fac
alpha-BHC	ND	8.5	5.000
beta-BHC	ND	8.5	5.000
gamma-BHC	ND	8.5	5.000
delta-BHC	ND	8.5	5.000
Heptachlor	ND	8.5	5.000
Aldrin	18 C	8.5	5.000
Heptachlor epoxide	ND	8.5	5.000
Endosulfan I	ND	8.5	5.000
Dieldrin	770	34	20.00
4,4'-DDE	150	17	5.000
Endrin	ND #	17	5.000
Endosulfan II	220	66	20.00
Endosulfan sulfate	24 #	17	5.000
4,4'-DDD	ND	17	5.000
Endrin aldehyde	98 C	66	20.00
4,4'-DDT	510 #	17	5.000
alpha-Chlordane	660	34	20.00
gamma-Chlordane	560	34	20.00
Methoxychlor	ND #	85	5.000
Toxaphene	ND	300	5.000

Surrogate	%REC	Limits	Diln Fac
TCMX	96	42-134	5.000
Decachlorobiphenyl	76	29-122	5.000

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-34 1.5-2'	Batch#:	217159
Lab ID:	262300-012	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/05/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	5.8	1.7
4,4'-DDE	ND	3.3
Endrin	ND #	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	4.0 C	3.3
alpha-Chlordane	1.9	1.7
gamma-Chlordane	2.2	1.7
Methoxychlor	ND #	17
Toxaphene	ND	60

Surrogate	%REC	Limits
TCMX	73	42-134
Decachlorobiphenyl	48	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-35 0-0.5'	Batch#:	217159
Lab ID:	262300-013	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/05/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	10.00		

Analyte	Result	RL
alpha-BHC	ND	17
beta-BHC	ND	17
gamma-BHC	ND	17
delta-BHC	ND	17
Heptachlor	ND	17
Aldrin	ND	17
Heptachlor epoxide	ND	17
Endosulfan I	ND	17
Dieldrin	39 C	17
4,4'-DDE	36	34
Endrin	ND #	34
Endosulfan II	ND	34
Endosulfan sulfate	ND	34
4,4'-DDD	ND	34
Endrin aldehyde	ND	34
4,4'-DDT	47 #	34
alpha-Chlordane	56 C	17
gamma-Chlordane	100	17
Methoxychlor	ND #	170
Toxaphene	ND	610

Surrogate	%REC	Limits
TCMX	DO	42-134
Decachlorobiphenyl	DO	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-35 1.5-2'	Batch#:	217159
Lab ID:	262300-014	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/05/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	3.3 C	1.7
4,4'-DDE	ND	3.3
Endrin	ND #	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	2.2	1.7
Methoxychlor	ND #	17
Toxaphene	ND	61

Surrogate	%REC	Limits
TCMX	69	42-134
Decachlorobiphenyl	47	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-36 0-0.5'	Batch#:	217159
Lab ID:	262300-015	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/05/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	3.000		

Analyte	Result	RL
alpha-BHC	ND	5.2
beta-BHC	ND	5.2
gamma-BHC	ND	5.2
delta-BHC	ND	5.2
Heptachlor	ND	5.2
Aldrin	15	5.2
Heptachlor epoxide	ND	5.2
Endosulfan I	ND	5.2
Dieldrin	180	5.2
4,4'-DDE	20	10
Endrin	ND #	10
Endosulfan II	ND	10
Endosulfan sulfate	ND	10
4,4'-DDD	ND	10
Endrin aldehyde	ND	10
4,4'-DDT	95 #	10
alpha-Chlordane	42	5.2
gamma-Chlordane	59 C	5.2
Methoxychlor	ND #	52
Toxaphene	ND	180

Surrogate	%REC	Limits
TCMX	80	42-134
Decachlorobiphenyl	71	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-36 1.5-2'	Batch#:	217159
Lab ID:	262300-016	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/05/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	6.0	1.7
4,4'-DDE	ND	3.3
Endrin	ND #	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	4.8	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	2.1 C	1.7
Methoxychlor	ND #	17
Toxaphene	ND	59

Surrogate	%REC	Limits
TCMX	75	42-134
Decachlorobiphenyl	66	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-37 0-0.5'	Batch#:	217159
Lab ID:	262300-017	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/05/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	9.3	1.7
4,4'-DDE	ND	3.3
Endrin	ND #	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	6.3 #	3.3
alpha-Chlordane	3.3	1.7
gamma-Chlordane	3.4	1.7
Methoxychlor	ND #	17
Toxaphene	ND	60

Surrogate	%REC	Limits
TCMX	55	42-134
Decachlorobiphenyl	59	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements  
 ND= Not Detected  
 RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-37 1.5-2'	Batch#:	217159
Lab ID:	262300-018	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/05/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	1.7
4,4'-DDE	ND	3.3
Endrin	ND #	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	ND #	1.7
Methoxychlor	ND #	17
Toxaphene	ND	60

Surrogate	%REC	Limits
TCMX	91	42-134
Decachlorobiphenyl	65	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements  
 ND= Not Detected  
 RL= Reporting Limit



Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-38 0-0.5'	Batch#:	217159
Lab ID:	262300-019	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/05/14
Basis:	as received	Analyzed:	11/06/14

Analyte	Result	RL	Diln Fac
alpha-BHC	ND	1.7	1.000
beta-BHC	ND	1.7	1.000
gamma-BHC	ND	1.7	1.000
delta-BHC	ND	1.7	1.000
Heptachlor	ND	1.7	1.000
Aldrin	ND	1.7	1.000
Heptachlor epoxide	18 C	1.7	1.000
Endosulfan I	ND	17	10.00
Dieldrin	110	17	10.00
4,4'-DDE	15 C	3.3	1.000
Endrin	ND	3.3	1.000
Endosulfan II	11 C	3.3	1.000
Endosulfan sulfate	4.5 C	3.3	1.000
4,4'-DDD	3.9 C	3.3	1.000
Endrin aldehyde	19 C	3.3	1.000
4,4'-DDT	62 #	3.3	1.000
alpha-Chlordane	310 C	17	10.00
gamma-Chlordane	340	17	10.00
Methoxychlor	ND	17	1.000
Toxaphene	ND	60	1.000

Surrogate	%REC	Limits	Diln Fac
TCMX	85	42-134	1.000
Decachlorobiphenyl	87	29-122	1.000

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-38 1.5-2'	Batch#:	217159
Lab ID:	262300-020	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/05/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	1.000		

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	3.1 C	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND	3.3
alpha-Chlordane	2.0	1.7
gamma-Chlordane	2.3 C	1.7
Methoxychlor	ND	17
Toxaphene	ND	59

Surrogate	%REC	Limits
TCMX	55	42-134
Decachlorobiphenyl	38	29-122

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-39 0-0.5'	Batch#:	217159
Lab ID:	262300-021	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/05/14
Basis:	as received	Analyzed:	11/06/14

Analyte	Result	RL	Diln Fac
alpha-BHC	ND #	1.7	1.000
beta-BHC	ND	1.7	1.000
gamma-BHC	6.3	1.7	1.000
delta-BHC	ND #	1.7	1.000
Heptachlor	ND #	1.7	1.000
Aldrin	ND	1.7	1.000
Heptachlor epoxide	ND	1.7	1.000
Endosulfan I	ND	1.7	1.000
Dieldrin	42	1.7	1.000
4,4'-DDE	18	3.3	1.000
Endrin	ND #	3.3	1.000
Endosulfan II	ND	3.3	1.000
Endosulfan sulfate	ND #	3.3	1.000
4,4'-DDD	4.3 #	3.3	1.000
Endrin aldehyde	ND	3.3	1.000
4,4'-DDT	70 #	33	10.00
alpha-Chlordane	9.8	1.7	1.000
gamma-Chlordane	12	1.7	1.000
Methoxychlor	ND #	17	1.000
Toxaphene	ND	59	1.000

Surrogate	%REC	Limits	Diln Fac
TCMX	74	42-134	1.000
Decachlorobiphenyl	61	29-122	1.000

#= CCV drift outside limits; average CCV drift within limits per method requirements  
 ND= Not Detected  
 RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-39 1.5-2'	Batch#:	217169
Lab ID:	262300-022	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/06/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	1.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	ND	1.7
Methoxychlor	ND	17
Toxaphene	ND	60

Surrogate	%REC	Limits
TCMX	73	42-134
Decachlorobiphenyl	58	29-122

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-40 0-0.5'	Batch#:	217169
Lab ID:	262300-023	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/06/14
Basis:	as received	Analyzed:	11/06/14

Cleanup Method: EPA 3620B

Analyte	Result	RL	Diln Fac
alpha-BHC	ND #	1.7	1.000
beta-BHC	ND	1.7	1.000
gamma-BHC	2.1	1.7	1.000
delta-BHC	ND #	1.7	1.000
Heptachlor	ND #	1.7	1.000
Aldrin	5.6 C	1.7	1.000
Heptachlor epoxide	ND	1.7	1.000
Endosulfan I	11 C	1.7	1.000
Dieldrin	420	17	10.00
4,4'-DDE	16	3.3	1.000
Endrin	ND #	3.3	1.000
Endosulfan II	8.0 C	3.3	1.000
Endosulfan sulfate	ND	3.3	1.000
4,4'-DDD	9.4 C #	3.3	1.000
Endrin aldehyde	ND	3.3	1.000
4,4'-DDT	100	33	10.00
alpha-Chlordane	110	17	10.00
gamma-Chlordane	120	17	10.00
Methoxychlor	ND	17	1.000
Toxaphene	ND	61	1.000

Surrogate	%REC	Limits	Diln Fac
TCMX	51	42-134	1.000
Decachlorobiphenyl	66	29-122	1.000

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-40 1.5-2'	Batch#:	217169
Lab ID:	262300-024	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/06/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	1.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	ND	1.7
Methoxychlor	ND	17
Toxaphene	ND	61

Surrogate	%REC	Limits
TCMX	79	42-134
Decachlorobiphenyl	73	29-122

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-41 0-0.5'	Batch#:	217169
Lab ID:	262300-025	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/06/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	10.00		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	17
beta-BHC	ND	17
gamma-BHC	ND	17
delta-BHC	ND	17
Heptachlor	ND	17
Aldrin	ND	17
Heptachlor epoxide	ND	17
Endosulfan I	ND	17
Dieldrin	42	17
4,4'-DDE	ND	32
Endrin	ND	32
Endosulfan II	ND	32
Endosulfan sulfate	ND	32
4,4'-DDD	ND	32
Endrin aldehyde	ND	32
4,4'-DDT	ND #	32
alpha-Chlordane	65 C	17
gamma-Chlordane	30	17
Methoxychlor	ND	170
Toxaphene	ND	590

Surrogate	%REC	Limits
TCMX	DO	42-134
Decachlorobiphenyl	DO	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-41 1.5-2'	Batch#:	217169
Lab ID:	262300-026	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/06/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	1.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	5.3 C	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND #	3.3
alpha-Chlordane	12 C	1.7
gamma-Chlordane	4.6	1.7
Methoxychlor	ND	17
Toxaphene	ND	60

Surrogate	%REC	Limits
TCMX	88	42-134
Decachlorobiphenyl	78	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit



Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-42 0-0.5'	Batch#:	217192
Lab ID:	262300-027	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	10/06/14
Basis:	as received	Analyzed:	11/07/14
Diln Fac:	1.000		

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	2.5	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	ND	1.7
Methoxychlor	ND	17
Toxaphene	ND	60

Surrogate	%REC	Limits
TCMX	96	42-134
Decachlorobiphenyl	77	29-122

ND= Not Detected  
 RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-42 1.5-2'	Batch#:	217169
Lab ID:	262300-028	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/06/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	1.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND #	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	ND	1.7
Methoxychlor	ND	17
Toxaphene	ND	61

Surrogate	%REC	Limits
TCMX	43	42-134
Decachlorobiphenyl	65	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements  
 ND= Not Detected  
 RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-43 0-0.5'	Batch#:	217169
Lab ID:	262300-029	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/06/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	20.00		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	34
beta-BHC	ND	34
gamma-BHC	ND	34
delta-BHC	ND	34
Heptachlor	ND	34
Aldrin	ND	34
Heptachlor epoxide	ND	34
Endosulfan I	ND	34
Dieldrin	100 C	34
4,4'-DDE	ND	66
Endrin	77	66
Endosulfan II	ND	66
Endosulfan sulfate	ND	66
4,4'-DDD	ND	66
Endrin aldehyde	ND	66
4,4'-DDT	100 C #	66
alpha-Chlordane	44 C	34
gamma-Chlordane	53	34
Methoxychlor	ND	340
Toxaphene	ND	1,200

Surrogate	%REC	Limits
TCMX	DO	42-134
Decachlorobiphenyl	DO	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-43 1.5-2'	Batch#:	217169
Lab ID:	262300-030	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/06/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	1.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND #	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	ND	1.7
Methoxychlor	ND	17
Toxaphene	ND	60

Surrogate	%REC	Limits
TCMX	65	42-134
Decachlorobiphenyl	80	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements  
 ND= Not Detected  
 RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-44 0-0.5'	Batch#:	217169
Lab ID:	262300-031	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/06/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	5.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	8.4
beta-BHC	ND	8.4
gamma-BHC	ND	8.4
delta-BHC	ND	8.4
Heptachlor	ND	8.4
Aldrin	ND	8.4
Heptachlor epoxide	ND	8.4
Endosulfan I	ND	8.4
Dieldrin	40 C	8.4
4,4'-DDE	ND	16
Endrin	ND	16
Endosulfan II	ND	16
Endosulfan sulfate	ND	16
4,4'-DDD	29 #	16
Endrin aldehyde	ND	16
4,4'-DDT	ND #	16
alpha-Chlordane	96 C	8.4
gamma-Chlordane	110	8.4
Methoxychlor	ND	84
Toxaphene	ND	300

Surrogate	%REC	Limits
TCMX	91	42-134
Decachlorobiphenyl	85	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-44 1.5-2'	Batch#:	217169
Lab ID:	262300-032	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/06/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	1.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND #	3.3
alpha-Chlordane	4.1 C	1.7
gamma-Chlordane	5.0	1.7
Methoxychlor	ND	17
Toxaphene	ND	60

Surrogate	%REC	Limits
TCMX	75	42-134
Decachlorobiphenyl	80	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-45 0-0.5'	Batch#:	217169
Lab ID:	262300-033	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/06/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	20.00		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	34
beta-BHC	ND	34
gamma-BHC	ND	34
delta-BHC	ND	34
Heptachlor	ND	34
Aldrin	ND	34
Heptachlor epoxide	ND	34
Endosulfan I	ND	34
Dieldrin	250 C	34
4,4'-DDE	ND	66
Endrin	69	66
Endosulfan II	ND	66
Endosulfan sulfate	ND	66
4,4'-DDD	ND	66
Endrin aldehyde	ND	66
4,4'-DDT	120 #	66
alpha-Chlordane	59 C	34
gamma-Chlordane	75	34
Methoxychlor	ND	340
Toxaphene	ND	1,200

Surrogate	%REC	Limits
TCMX	DO	42-134
Decachlorobiphenyl	DO	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements

C= Presence confirmed, but RPD between columns exceeds 40%

DO= Diluted Out

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-45 1.5-2'	Batch#:	217169
Lab ID:	262300-034	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/06/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	1.000		

Cleanup Method: EPA 3620B

Analyte	Result	RL
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND #	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	ND	1.7
Methoxychlor	ND	17
Toxaphene	ND	61

Surrogate	%REC	Limits
TCMX	49	42-134
Decachlorobiphenyl	89	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements  
 ND= Not Detected  
 RL= Reporting Limit



**Batch QC Report**

<b>Organochlorine Pesticides</b>			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC764554	Batch#:	217159
Matrix:	Soil	Prepared:	11/05/14
Units:	ug/Kg	Analyzed:	11/06/14

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	ND	1.7
Methoxychlor	ND	17
Toxaphene	ND	59

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
TCMX	99	42-134
Decachlorobiphenyl	82	29-122

ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**

<b>Organochlorine Pesticides</b>			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC764555	Batch#:	217159
Matrix:	Soil	Prepared:	11/05/14
Units:	ug/Kg	Analyzed:	11/06/14

<b>Analyte</b>	<b>Spiked</b>	<b>Result</b>	<b>%REC</b>	<b>Limits</b>
gamma-BHC	13.34	10.13	76	46-120
Heptachlor	13.34	10.83	81	41-124
Aldrin	13.34	10.05	75	48-122
Dieldrin	13.34	11.40	85	39-142
Endrin	13.34	11.26	84	45-138
4,4'-DDT	13.34	10.80 #	81	32-145

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
TCMX	90	42-134
Decachlorobiphenyl	76	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements

**Batch QC Report**

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-2A 0-0.5'	Batch#:	217159
MSS Lab ID:	262300-001	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/06/14
Basis:	as received	Analyzed:	11/07/14
Diln Fac:	1.000		

Type: MS Lab ID: QC764556

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	<0.2227	13.11	11.15	85	42-136
Heptachlor	0.4784	13.11	11.63	85	40-144
Aldrin	<0.2111	13.11	10.79	82	45-143
Dieldrin	5.257	13.11	14.62	71	47-145
Endrin	<0.5774	13.11	11.19	85	46-150
4,4'-DDT	3.217	13.11	13.52	79	30-157

Surrogate	%REC	Limits
TCMX	92	42-134
Decachlorobiphenyl	76	29-122

Type: MSD Lab ID: QC764557

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	13.50	11.82	88	42-136	3	40
Heptachlor	13.50	13.27	95	40-144	10	46
Aldrin	13.50	12.04	89	45-143	8	41
Dieldrin	13.50	21.34	119	47-145	35	36
Endrin	13.50	13.55	100	46-150	16	41
4,4'-DDT	13.50	17.47	106	30-157	23	52

Surrogate	%REC	Limits
TCMX	94	42-134
Decachlorobiphenyl	86	29-122

RPD= Relative Percent Difference

**Batch QC Report**

<b>Organochlorine Pesticides</b>			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC764590	Batch#:	217169
Matrix:	Soil	Prepared:	11/06/14
Units:	ug/Kg	Analyzed:	11/06/14

Cleanup Method: EPA 3620B

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	ND	1.7
Methoxychlor	ND	17
Toxaphene	ND	61

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
TCMX	85	42-134
Decachlorobiphenyl	74	29-122

 ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**

<b>Organochlorine Pesticides</b>			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC764591	Batch#:	217169
Matrix:	Soil	Prepared:	11/06/14
Units:	ug/Kg	Analyzed:	11/06/14

Cleanup Method: EPA 3620B

<b>Analyte</b>	<b>Spiked</b>	<b>Result</b>	<b>%REC</b>	<b>Limits</b>
gamma-BHC	13.42	11.56	86	46-120
Heptachlor	13.42	12.26	91	41-124
Aldrin	13.42	11.25	84	48-122
Dieldrin	13.42	12.53	93	39-142
Endrin	13.42	12.59	94	45-138
4,4'-DDT	13.42	13.18 #	98	32-145

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
TCMX	94	42-134
Decachlorobiphenyl	86	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements

**Batch QC Report**

<b>Organochlorine Pesticides</b>			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	S-10A 0-0.5'	Batch#:	217169
MSS Lab ID:	262300-002	Sampled:	11/05/14
Matrix:	Soil	Received:	11/05/14
Units:	ug/Kg	Prepared:	11/06/14
Basis:	as received	Analyzed:	11/06/14
Diln Fac:	1.000		

Type: MS  
Lab ID: QC764592

Cleanup Method: EPA 3620B

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	<0.2161	13.15	13.41	102	42-136
Heptachlor	<0.1916	13.15	10.20	78	40-144
Aldrin	<0.2049	13.15	9.653	73	45-143
Dieldrin	1.011	13.15	12.13	85	47-145
Endrin	<0.5604	13.15	11.88	90	46-150
4,4'-DDT	3.770	13.15	14.65 #	83	30-157

Surrogate	%REC	Limits
TCMX	86	42-134
Decachlorobiphenyl	86	29-122

Type: MSD  
Lab ID: QC764593

Cleanup Method: EPA 3620B

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	13.34	9.047	68	42-136	40	40
Heptachlor	13.34	10.15	76	40-144	2	46
Aldrin	13.34	9.085	68	45-143	7	41
Dieldrin	13.34	10.58	72	47-145	15	36
Endrin	13.34	9.608	72	46-150	23	41
4,4'-DDT	13.34	11.75 #	60	30-157	23	52

Surrogate	%REC	Limits
TCMX	79	42-134
Decachlorobiphenyl	69	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements  
RPD= Relative Percent Difference

**Batch QC Report**

<b>Organochlorine Pesticides</b>			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC764694	Batch#:	217192
Matrix:	Soil	Prepared:	11/06/14
Units:	ug/Kg	Analyzed:	11/07/14

<b>Analyte</b>	<b>Result</b>	<b>RL</b>
alpha-BHC	ND	1.7
beta-BHC	ND	1.7
gamma-BHC	ND	1.7
delta-BHC	ND	1.7
Heptachlor	ND	1.7
Aldrin	ND	1.7
Heptachlor epoxide	ND	1.7
Endosulfan I	ND	1.7
Dieldrin	ND	1.7
4,4'-DDE	ND	3.3
Endrin	ND	3.3
Endosulfan II	ND	3.3
Endosulfan sulfate	ND	3.3
4,4'-DDD	ND	3.3
Endrin aldehyde	ND	3.3
4,4'-DDT	ND	3.3
alpha-Chlordane	ND	1.7
gamma-Chlordane	ND	1.7
Methoxychlor	ND	17
Toxaphene	ND	59

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
TCMX	84	42-134
Decachlorobiphenyl	75	29-122

ND= Not Detected  
 RL= Reporting Limit

**Batch QC Report**

<b>Organochlorine Pesticides</b>			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC764698	Batch#:	217192
Matrix:	Soil	Prepared:	11/06/14
Units:	ug/Kg	Analyzed:	11/07/14

<b>Analyte</b>	<b>Spiked</b>	<b>Result</b>	<b>%REC</b>	<b>Limits</b>
gamma-BHC	13.18	9.976	76	46-120
Heptachlor	13.18	9.809	74	41-124
Aldrin	13.18	9.715	74	48-122
Dieldrin	13.18	10.43	79	39-142
Endrin	13.18	7.754 #	59	45-138
4,4'-DDT	13.18	8.028	61	32-145

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
TCMX	91	42-134
Decachlorobiphenyl	67	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements



**Batch QC Report**

Organochlorine Pesticides			
Lab #:	262300	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	EPA 3550B
Project#:	33114-014115.01	Analysis:	EPA 8081A
Field ID:	ZZZZZZZZZZ	Batch#:	217192
MSS Lab ID:	262223-002	Sampled:	10/29/14
Matrix:	Soil	Received:	10/31/14
Units:	ug/Kg	Prepared:	11/06/14
Basis:	as received	Analyzed:	11/07/14
Diln Fac:	1.000		

Type: MS Lab ID: QC764699

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	<0.2156	13.55	10.90	80	42-136
Heptachlor	<0.2508	13.55	10.90	80	40-144
Aldrin	<0.2253	13.55	10.89	80	45-143
Dieldrin	<0.2596	13.55	12.02	89	47-145
Endrin	<0.1294	13.55	10.03 #	74	46-150
4,4'-DDT	<0.2726	13.55	10.10	75	30-157

Surrogate	%REC	Limits
TCMX	84	42-134
Decachlorobiphenyl	73	29-122

Type: MSD Lab ID: QC764700

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	13.39	9.040	68	42-136	17	40
Heptachlor	13.39	9.002	67	40-144	18	46
Aldrin	13.39	8.949	67	45-143	18	41
Dieldrin	13.39	9.748	73	47-145	20	36
Endrin	13.39	9.550 #	71	46-150	4	41
4,4'-DDT	13.39	9.962	74	30-157	0	52

Surrogate	%REC	Limits
TCMX	77	42-134
Decachlorobiphenyl	61	29-122

#= CCV drift outside limits; average CCV drift within limits per method requirements  
 RPD= Relative Percent Difference

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Pleasanton  
1220 Quarry Lane  
Pleasanton, CA 94566  
Tel: (925)484-1919

TestAmerica Job ID: 720-61033-1  
Client Project/Site: Nursery, San Lorenzo

For:  
Bureau Veritas North America, Inc.  
Bishop Ranch 6  
2430 Camino Ramon Suite 122  
San Ramon, California 94583

Attn: Don Ashton



Authorized for release by:  
11/7/2014 4:57:31 PM

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### LINKS

Review your project  
results through  
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Have a Question?



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[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

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# Definitions/Glossary

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
X	Surrogate is outside control limits
F1	MS and/or MSD Recovery exceeds the control limits
F2	MS/MSD RPD exceeds control limits

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Case Narrative

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Job ID: 720-61033-1**

**Laboratory: TestAmerica Pleasanton**

## Narrative

### Job Narrative 720-61033-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 11/5/2014 2:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 10.2° C.

#### GC Semi VOA

Method(s) 8081A: The following sample(s) required a dilution due to the nature of the sample matrix: S-2A-0-0.5' (720-61033-1), S-14-0-0.5' (720-61033-5), S-27-0-0.5' (720-61033-31). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8081A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for batch 170338 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method(s) 8081A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 170339 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8081A: The %RPD between the primary and confirmation column exceeded 40% for a-chlordane for the following sample(s): S-24-0-0.5' (720-61033-25), S-26-0-0.5' (720-61033-29), S-27-0-0.5' (720-61033-31), S-28-0-0.5' (720-61033-33), S-28-1.5-2' (720-61033-34), S-17-0-0.5' (720-61033-11), S-18-0-0.5' (720-61033-13), S-19-0-0.5' (720-61033-15), S-13-0-0.5' (720-61033-3), S-14-0-0.5' (720-61033-5), S-16-0-0.5' (720-61033-9), S-20-0-0.5' (720-61033-17), S-21-0-0.5' (720-61033-19). The lower value has been reported and qualified in accordance with the laboratory's SOP.

Method(s) 8081A: The %RPD between the primary and confirmation column exceeded 40% for DDE & a-chlordane for the following sample(s): S-2A-0-0.5' (720-61033-1). The lower values has been reported and qualified in accordance with the laboratory's SOP.

Method(s) 8081A: The %RPD between the primary and confirmation column exceeded 40% for DDD, DDT & a-chlordane for the following sample(s): S-29-1.5-2' (720-61033-36). The lower values has been reported and qualified in accordance with the laboratory's SOP.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

## Client Sample ID: S-2A-0-0.5'

Lab Sample ID: 720-61033-1

Sample Analysis Not Complete.

## Client Sample ID: S-10A-0-0.5'

Lab Sample ID: 720-61033-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	3.8		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDT	20		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDE	16		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDD	6.6		2.0		ug/Kg	1		8081A	Total/NA

## Client Sample ID: S-13-0-0.5'

Lab Sample ID: 720-61033-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	54		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDT	100		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDE	6.6		2.0		ug/Kg	1		8081A	Total/NA
gamma-BHC (Lindane)	3.1		2.0		ug/Kg	1		8081A	Total/NA
Chlordane (technical)	170		40		ug/Kg	1		8081A	Total/NA
alpha-Chlordane	19	p	2.0		ug/Kg	1		8081A	Total/NA
gamma-Chlordane	24		2.0		ug/Kg	1		8081A	Total/NA

## Client Sample ID: S-13-1.5-2'

Lab Sample ID: 720-61033-4

No Detections.

## Client Sample ID: S-14-0-0.5'

Lab Sample ID: 720-61033-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aldrin	43		39		ug/Kg	20		8081A	Total/NA
Dieldrin	3000		39		ug/Kg	20		8081A	Total/NA
Endrin ketone	140		39		ug/Kg	20		8081A	Total/NA
4,4'-DDT	940		39		ug/Kg	20		8081A	Total/NA
4,4'-DDE	93		39		ug/Kg	20		8081A	Total/NA
4,4'-DDD	150		39		ug/Kg	20		8081A	Total/NA
Chlordane (technical)	1500		780		ug/Kg	20		8081A	Total/NA
alpha-Chlordane	200	p	39		ug/Kg	20		8081A	Total/NA
gamma-Chlordane	280		39		ug/Kg	20		8081A	Total/NA

## Client Sample ID: S-14-1.5-2'

Lab Sample ID: 720-61033-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	2.6		2.0		ug/Kg	1		8081A	Total/NA

## Client Sample ID: S-15-0-0.5'

Lab Sample ID: 720-61033-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	4.8		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDT	3.1		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDD	3.2		2.0		ug/Kg	1		8081A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Detection Summary

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

## Client Sample ID: S-15-1.5-2'

Lab Sample ID: 720-61033-8

No Detections.

## Client Sample ID: S-16-0-0.5'

Lab Sample ID: 720-61033-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aldrin	26		9.7		ug/Kg	5		8081A	Total/NA
Dieldrin	1200		9.7		ug/Kg	5		8081A	Total/NA
Endrin ketone	19		9.7		ug/Kg	5		8081A	Total/NA
4,4'-DDT	510		9.7		ug/Kg	5		8081A	Total/NA
4,4'-DDE	250		9.7		ug/Kg	5		8081A	Total/NA
4,4'-DDD	51		9.7		ug/Kg	5		8081A	Total/NA
Chlordane (technical)	750		190		ug/Kg	5		8081A	Total/NA
alpha-Chlordane	120	p	9.7		ug/Kg	5		8081A	Total/NA
gamma-Chlordane	150		9.7		ug/Kg	5		8081A	Total/NA

## Client Sample ID: S-16-1.5-2'

Lab Sample ID: 720-61033-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	6.7		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDT	5.0		2.0		ug/Kg	1		8081A	Total/NA

## Client Sample ID: S-17-0-0.5'

Lab Sample ID: 720-61033-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aldrin	2.4		2.0		ug/Kg	1		8081A	Total/NA
Dieldrin	100		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDT	42		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDE	49		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDD	44		2.0		ug/Kg	1		8081A	Total/NA
gamma-BHC (Lindane)	3.0		2.0		ug/Kg	1		8081A	Total/NA
Chlordane (technical)	100		40		ug/Kg	1		8081A	Total/NA
alpha-Chlordane	12	p	2.0		ug/Kg	1		8081A	Total/NA
gamma-Chlordane	19		2.0		ug/Kg	1		8081A	Total/NA

## Client Sample ID: S-17-1.5-2'

Lab Sample ID: 720-61033-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	5.1		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDE	2.0		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDD	2.2		2.0		ug/Kg	1		8081A	Total/NA

## Client Sample ID: S-18-0-0.5'

Lab Sample ID: 720-61033-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	190		2.0		ug/Kg	1		8081A	Total/NA
Endrin ketone	4.4		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDT	25		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDE	23		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDD	25		2.0		ug/Kg	1		8081A	Total/NA
Chlordane (technical)	49		40		ug/Kg	1		8081A	Total/NA
alpha-Chlordane	6.0	p	2.0		ug/Kg	1		8081A	Total/NA
gamma-Chlordane	7.9		2.0		ug/Kg	1		8081A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Detection Summary

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

## Client Sample ID: S-18-1.5-2'

Lab Sample ID: 720-61033-14

No Detections.

## Client Sample ID: S-19-0-0.5'

Lab Sample ID: 720-61033-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	41		2.0		ug/Kg	1		8081A	Total/NA
alpha-Chlordane	2.6	p	2.0		ug/Kg	1		8081A	Total/NA

## Client Sample ID: S-19-1.5-2'

Lab Sample ID: 720-61033-16

No Detections.

## Client Sample ID: S-20-0-0.5'

Lab Sample ID: 720-61033-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	26		1.9		ug/Kg	1		8081A	Total/NA
4,4'-DDT	21		1.9		ug/Kg	1		8081A	Total/NA
4,4'-DDE	3.7		1.9		ug/Kg	1		8081A	Total/NA
alpha-Chlordane	4.0	p	1.9		ug/Kg	1		8081A	Total/NA
gamma-Chlordane	6.0		1.9		ug/Kg	1		8081A	Total/NA

## Client Sample ID: S-20-1.5-2'

Lab Sample ID: 720-61033-18

No Detections.

## Client Sample ID: S-21-0-0.5'

Lab Sample ID: 720-61033-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	620		9.8		ug/Kg	5		8081A	Total/NA
4,4'-DDT	50		9.8		ug/Kg	5		8081A	Total/NA
4,4'-DDE	12		9.8		ug/Kg	5		8081A	Total/NA
alpha-Chlordane	15	p	9.8		ug/Kg	5		8081A	Total/NA
gamma-Chlordane	13	p	9.8		ug/Kg	5		8081A	Total/NA

## Client Sample ID: S-21-1.5-2'

Lab Sample ID: 720-61033-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	37		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDT	2.1		2.0		ug/Kg	1		8081A	Total/NA

## Client Sample ID: S-22-0-0.5'

Lab Sample ID: 720-61033-21

No Detections.

## Client Sample ID: S-22-1.5-2'

Lab Sample ID: 720-61033-22

No Detections.

## Client Sample ID: S-23-0-0.5'

Lab Sample ID: 720-61033-23

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton



# Detection Summary

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

## Client Sample ID: S-23-1.5-2'

Lab Sample ID: 720-61033-24

No Detections.

## Client Sample ID: S-24-0-0.5'

Lab Sample ID: 720-61033-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	3.7		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDT	3.6		2.0		ug/Kg	1		8081A	Total/NA
Chlordane (technical)	74		39		ug/Kg	1		8081A	Total/NA
alpha-Chlordane	10	p	2.0		ug/Kg	1		8081A	Total/NA
gamma-Chlordane	13		2.0		ug/Kg	1		8081A	Total/NA

## Client Sample ID: S-24-1.5-2'

Lab Sample ID: 720-61033-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDT	2.3		2.0		ug/Kg	1		8081A	Total/NA

## Client Sample ID: S-25-0-0.5'

Lab Sample ID: 720-61033-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	3.2		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDT	14		2.0		ug/Kg	1		8081A	Total/NA

## Client Sample ID: S-25-1.5-25'

Lab Sample ID: 720-61033-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	1100		9.8		ug/Kg	5		8081A	Total/NA
Endrin ketone	30		9.8		ug/Kg	5		8081A	Total/NA
4,4'-DDT	31		9.8		ug/Kg	5		8081A	Total/NA
4,4'-DDD	45		9.8		ug/Kg	5		8081A	Total/NA
gamma-BHC (Lindane)	11		9.8		ug/Kg	5		8081A	Total/NA
alpha-Chlordane	40		9.8		ug/Kg	5		8081A	Total/NA
gamma-Chlordane	34		9.8		ug/Kg	5		8081A	Total/NA

## Client Sample ID: S-26-0-0.5'

Lab Sample ID: 720-61033-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	55		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDT	18		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDE	2.9		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDD	2.1		2.0		ug/Kg	1		8081A	Total/NA
alpha-Chlordane	2.8	p	2.0		ug/Kg	1		8081A	Total/NA
gamma-Chlordane	2.6	p	2.0		ug/Kg	1		8081A	Total/NA

## Client Sample ID: S-26-1.5-25'

Lab Sample ID: 720-61033-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	2.9		2.0		ug/Kg	1		8081A	Total/NA

## Client Sample ID: S-27-0-0.5'

Lab Sample ID: 720-61033-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	210		20		ug/Kg	10		8081A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Detection Summary

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

## Client Sample ID: S-27-0-0.5' (Continued)

Lab Sample ID: 720-61033-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDT	36		20		ug/Kg	10		8081A	Total/NA
4,4'-DDE	38		20		ug/Kg	10		8081A	Total/NA
4,4'-DDD	65		20		ug/Kg	10		8081A	Total/NA
Chlordane (technical)	2500		390		ug/Kg	10		8081A	Total/NA
alpha-Chlordane	380	p	20		ug/Kg	10		8081A	Total/NA
gamma-Chlordane	550		20		ug/Kg	10		8081A	Total/NA

## Client Sample ID: S-27-1.5-2'

Lab Sample ID: 720-61033-32

No Detections.

## Client Sample ID: S-28-0-0.5'

Lab Sample ID: 720-61033-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	61		2.0		ug/Kg	1		8081A	Total/NA
Endrin ketone	2.0		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDT	69		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDE	26		2.0		ug/Kg	1		8081A	Total/NA
Chlordane (technical)	290		40		ug/Kg	1		8081A	Total/NA
alpha-Chlordane	42	p	2.0		ug/Kg	1		8081A	Total/NA
gamma-Chlordane	57		2.0		ug/Kg	1		8081A	Total/NA

## Client Sample ID: S-28-1.5-2'

Lab Sample ID: 720-61033-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	3.8		2.0		ug/Kg	1		8081A	Total/NA
4,4'-DDT	5.7		2.0		ug/Kg	1		8081A	Total/NA
alpha-Chlordane	2.9	p	2.0		ug/Kg	1		8081A	Total/NA
gamma-Chlordane	3.4		2.0		ug/Kg	1		8081A	Total/NA

## Client Sample ID: S-29-0-0.5'

Lab Sample ID: 720-61033-35

No Detections.

## Client Sample ID: S-29-1.5-2'

Lab Sample ID: 720-61033-36

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	130		3.9		ug/Kg	2		8081A	Total/NA
4,4'-DDT	18	p	3.9		ug/Kg	2		8081A	Total/NA
4,4'-DDE	5.4		3.9		ug/Kg	2		8081A	Total/NA
4,4'-DDD	13	p	3.9		ug/Kg	2		8081A	Total/NA
Chlordane (technical)	780		78		ug/Kg	2		8081A	Total/NA
alpha-Chlordane	130	p	3.9		ug/Kg	2		8081A	Total/NA
gamma-Chlordane	180		3.9		ug/Kg	2		8081A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-2A-0-0.5'**

**Lab Sample ID: 720-61033-1**

**Date Collected: 11/05/14 08:33**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		39		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
<b>Dieldrin</b>	<b>660</b>		39		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
Endrin aldehyde	ND		39		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
Endrin	ND		39		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
Endrin ketone	ND		39		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
Heptachlor	ND		39		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
Heptachlor epoxide	ND		39		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
<b>4,4'-DDT</b>	<b>65</b>		39		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
<b>4,4'-DDE</b>	<b>57</b>	<b>p</b>	39		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
<b>4,4'-DDD</b>	<b>120</b>		39		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
Endosulfan I	ND		39		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
Endosulfan II	ND		39		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
alpha-BHC	ND		39		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
beta-BHC	ND		39		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
gamma-BHC (Lindane)	ND		39		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
delta-BHC	ND		39		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
Endosulfan sulfate	ND		39		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
Methoxychlor	ND		39		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
Toxaphene	ND		780		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
<b>Chlordane (technical)</b>	<b>2200</b>		780		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
<b>alpha-Chlordane</b>	<b>350</b>	<b>p</b>	39		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
<b>gamma-Chlordane</b>	<b>450</b>		39		ug/Kg		11/05/14 18:14	11/06/14 12:43	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	0	X D	57 - 122				11/05/14 18:14	11/06/14 12:43	20
DCB Decachlorobiphenyl	0	X D	21 - 136				11/05/14 18:14	11/06/14 12:43	20

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-10A-0-0.5'**

**Lab Sample ID: 720-61033-2**

Date Collected: 11/05/14 08:30

Matrix: Solid

Date Received: 11/05/14 14:05

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
<b>Dieldrin</b>	<b>3.8</b>		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
<b>4,4'-DDT</b>	<b>20</b>		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
<b>4,4'-DDE</b>	<b>16</b>		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
<b>4,4'-DDD</b>	<b>6.6</b>		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
Toxaphene	ND		40		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
Chlordane (technical)	ND		40		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
alpha-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:00	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	95		57 - 122				11/05/14 18:19	11/06/14 14:00	1
DCB Decachlorobiphenyl	91		21 - 136				11/05/14 18:19	11/06/14 14:00	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
 Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-13-0-0.5'**

**Lab Sample ID: 720-61033-3**

Date Collected: 11/05/14 09:05

Matrix: Solid

Date Received: 11/05/14 14:05

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
<b>Dieldrin</b>	<b>54</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
<b>4,4'-DDT</b>	<b>100</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
<b>4,4'-DDE</b>	<b>6.6</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
<b>gamma-BHC (Lindane)</b>	<b>3.1</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
Toxaphene	ND		40		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
<b>Chlordane (technical)</b>	<b>170</b>		40		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
<b>alpha-Chlordane</b>	<b>19</b>	<b>p</b>	2.0		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
<b>gamma-Chlordane</b>	<b>24</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:21	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	104		57 - 122				11/05/14 18:14	11/06/14 11:21	1
DCB Decachlorobiphenyl	104		21 - 136				11/05/14 18:14	11/06/14 11:21	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-13-1.5-2'**

**Lab Sample ID: 720-61033-4**

**Date Collected: 11/05/14 09:05**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
Dieldrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
4,4'-DDT	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
Toxaphene	ND		39		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
Chlordane (technical)	ND		39		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
alpha-Chlordane	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 08:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	115		57 - 122				11/05/14 18:14	11/06/14 08:49	1
DCB Decachlorobiphenyl	64	p	21 - 136				11/05/14 18:14	11/06/14 08:49	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-14-0-0.5'**

**Lab Sample ID: 720-61033-5**

**Date Collected: 11/05/14 08:45**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Aldrin</b>	<b>43</b>		39		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
<b>Dieldrin</b>	<b>3000</b>		39		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
Endrin aldehyde	ND		39		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
Endrin	ND		39		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
<b>Endrin ketone</b>	<b>140</b>		39		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
Heptachlor	ND		39		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
Heptachlor epoxide	ND		39		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
<b>4,4'-DDT</b>	<b>940</b>		39		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
<b>4,4'-DDE</b>	<b>93</b>		39		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
<b>4,4'-DDD</b>	<b>150</b>		39		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
Endosulfan I	ND		39		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
Endosulfan II	ND		39		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
alpha-BHC	ND		39		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
beta-BHC	ND		39		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
gamma-BHC (Lindane)	ND		39		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
delta-BHC	ND		39		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
Endosulfan sulfate	ND		39		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
Methoxychlor	ND		39		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
Toxaphene	ND		780		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
<b>Chlordane (technical)</b>	<b>1500</b>		780		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
<b>alpha-Chlordane</b>	<b>200</b>	<b>p</b>	39		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
<b>gamma-Chlordane</b>	<b>280</b>		39		ug/Kg		11/05/14 18:14	11/06/14 13:07	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	0	X D	57 - 122				11/05/14 18:14	11/06/14 13:07	20
DCB Decachlorobiphenyl	0	X D	21 - 136				11/05/14 18:14	11/06/14 13:07	20

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
 Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-14-1.5-2'**

**Lab Sample ID: 720-61033-6**

**Date Collected: 11/05/14 08:45**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
<b>Dieldrin</b>	<b>2.6</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
4,4'-DDT	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
Toxaphene	ND		39		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
Chlordane (technical)	ND		39		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
alpha-Chlordane	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:39	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Tetrachloro-m-xylene</i>	92		57 - 122				11/05/14 18:14	11/06/14 11:39	1
<i>DCB Decachlorobiphenyl</i>	96		21 - 136				11/05/14 18:14	11/06/14 11:39	1



# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-15-0-0.5'**

**Lab Sample ID: 720-61033-7**

**Date Collected: 11/05/14 08:50**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
<b>Dieldrin</b>	<b>4.8</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
<b>4,4'-DDT</b>	<b>3.1</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
<b>4,4'-DDD</b>	<b>3.2</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
Toxaphene	ND		40		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
Chlordane (technical)	ND		40		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
alpha-Chlordane	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:39	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	118		57 - 122				11/05/14 18:14	11/06/14 09:39	1
DCB Decachlorobiphenyl	61	p	21 - 136				11/05/14 18:14	11/06/14 09:39	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
 Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-15-1.5-2'**

**Lab Sample ID: 720-61033-8**

**Date Collected: 11/05/14 08:50**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
Dieldrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
4,4'-DDT	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
Toxaphene	ND		39		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
Chlordane (technical)	ND		39		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
alpha-Chlordane	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 09:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	89		57 - 122				11/05/14 18:14	11/06/14 09:56	1
DCB Decachlorobiphenyl	107		21 - 136				11/05/14 18:14	11/06/14 09:56	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-16-0-0.5'**

**Lab Sample ID: 720-61033-9**

Date Collected: 11/05/14 09:50

Matrix: Solid

Date Received: 11/05/14 14:05

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Aldrin</b>	<b>26</b>		9.7		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
<b>Dieldrin</b>	<b>1200</b>		9.7		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
Endrin aldehyde	ND		9.7		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
Endrin	ND		9.7		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
<b>Endrin ketone</b>	<b>19</b>		9.7		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
Heptachlor	ND		9.7		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
Heptachlor epoxide	ND		9.7		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
<b>4,4'-DDT</b>	<b>510</b>		9.7		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
<b>4,4'-DDE</b>	<b>250</b>		9.7		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
<b>4,4'-DDD</b>	<b>51</b>		9.7		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
Endosulfan I	ND		9.7		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
Endosulfan II	ND		9.7		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
alpha-BHC	ND		9.7		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
beta-BHC	ND		9.7		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
gamma-BHC (Lindane)	ND		9.7		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
delta-BHC	ND		9.7		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
Endosulfan sulfate	ND		9.7		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
Methoxychlor	ND		9.7		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
Toxaphene	ND		190		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
<b>Chlordane (technical)</b>	<b>750</b>		190		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
<b>alpha-Chlordane</b>	<b>120</b>	<b>p</b>	9.7		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
<b>gamma-Chlordane</b>	<b>150</b>		9.7		ug/Kg		11/05/14 18:14	11/06/14 12:15	5
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Tetrachloro-m-xylene</i>	88		57 - 122				11/05/14 18:14	11/06/14 12:15	5
<i>DCB Decachlorobiphenyl</i>	98		21 - 136				11/05/14 18:14	11/06/14 12:15	5

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-16-1.5-2'**

**Lab Sample ID: 720-61033-10**

Date Collected: 11/05/14 09:50

Matrix: Solid

Date Received: 11/05/14 14:05

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
<b>Dieldrin</b>	<b>6.7</b>		2.0		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
<b>4,4'-DDT</b>	<b>5.0</b>		2.0		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
Toxaphene	ND		40		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
Chlordane (technical)	ND		40		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
alpha-Chlordane	ND		2.0		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:14	11/07/14 03:27	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	103		57 - 122				11/05/14 18:14	11/07/14 03:27	1
DCB Decachlorobiphenyl	114		21 - 136				11/05/14 18:14	11/07/14 03:27	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-17-0-0.5'**

**Lab Sample ID: 720-61033-11**

**Date Collected: 11/05/14 10:10**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Aldrin</b>	<b>2.4</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
<b>Dieldrin</b>	<b>100</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
<b>4,4'-DDT</b>	<b>42</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
<b>4,4'-DDE</b>	<b>49</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
<b>4,4'-DDD</b>	<b>44</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
<b>gamma-BHC (Lindane)</b>	<b>3.0</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Toxaphene	ND		40		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
<b>Chlordane (technical)</b>	<b>100</b>		40		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
<b>alpha-Chlordane</b>	<b>12</b>	<b>p</b>	2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
<b>gamma-Chlordane</b>	<b>19</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	117		57 - 122				11/05/14 18:14	11/06/14 10:46	1
DCB Decachlorobiphenyl	79		21 - 136				11/05/14 18:14	11/06/14 10:46	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-17-1.5-2'**

**Lab Sample ID: 720-61033-12**

**Date Collected: 11/05/14 10:10**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
<b>Dieldrin</b>	<b>5.1</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
4,4'-DDT	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
<b>4,4'-DDE</b>	<b>2.0</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
<b>4,4'-DDD</b>	<b>2.2</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
Toxaphene	ND		39		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
Chlordane (technical)	ND		39		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
alpha-Chlordane	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:03	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Tetrachloro-m-xylene</i>	108		57 - 122				11/05/14 18:14	11/06/14 11:03	1
<i>DCB Decachlorobiphenyl</i>	71		21 - 136				11/05/14 18:14	11/06/14 11:03	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
 Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-18-0-0.5'**

**Lab Sample ID: 720-61033-13**

**Date Collected: 11/05/14 09:58**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
<b>Dieldrin</b>	<b>190</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
<b>Endrin ketone</b>	<b>4.4</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
<b>4,4'-DDT</b>	<b>25</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
<b>4,4'-DDE</b>	<b>23</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
<b>4,4'-DDD</b>	<b>25</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
Toxaphene	ND		40		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
<b>Chlordane (technical)</b>	<b>49</b>		40		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
<b>alpha-Chlordane</b>	<b>6.0</b>	<b>p</b>	2.0		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
<b>gamma-Chlordane</b>	<b>7.9</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:20	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	103		57 - 122				11/05/14 18:14	11/06/14 11:20	1
DCB Decachlorobiphenyl	56	<b>p</b>	21 - 136				11/05/14 18:14	11/06/14 11:20	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-18-1.5-2'**

**Lab Sample ID: 720-61033-14**

**Date Collected: 11/05/14 09:58**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
Dieldrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
4,4'-DDT	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
Toxaphene	ND		39		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
Chlordane (technical)	ND		39		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
alpha-Chlordane	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	113		57 - 122				11/05/14 18:14	11/06/14 11:37	1
DCB Decachlorobiphenyl	100		21 - 136				11/05/14 18:14	11/06/14 11:37	1



# Client Sample Results

Client: Bureau Veritas North America, Inc.  
 Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-19-0-0.5'**

**Lab Sample ID: 720-61033-15**

**Date Collected: 11/05/14 09:35**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
<b>Dieldrin</b>	<b>41</b>		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
4,4'-DDT	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
Toxaphene	ND		39		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
Chlordane (technical)	ND		39		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
<b>alpha-Chlordane</b>	<b>2.6</b>	<b>p</b>	2.0		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 11:54	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	108		57 - 122				11/05/14 18:14	11/06/14 11:54	1
DCB Decachlorobiphenyl	72		21 - 136				11/05/14 18:14	11/06/14 11:54	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
 Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-19-1.5-2'**

**Lab Sample ID: 720-61033-16**

**Date Collected: 11/05/14 09:35**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
Dieldrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
4,4'-DDT	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
Toxaphene	ND		39		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
Chlordane (technical)	ND		39		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
alpha-Chlordane	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	95		57 - 122				11/05/14 18:14	11/06/14 10:10	1
DCB Decachlorobiphenyl	109		21 - 136				11/05/14 18:14	11/06/14 10:10	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-20-0-0.5'**

**Lab Sample ID: 720-61033-17**

Date Collected: 11/05/14 09:20

Matrix: Solid

Date Received: 11/05/14 14:05

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
<b>Dieldrin</b>	<b>26</b>		1.9		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
Endrin aldehyde	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
Endrin	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
Endrin ketone	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
Heptachlor	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
Heptachlor epoxide	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
<b>4,4'-DDT</b>	<b>21</b>		1.9		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
<b>4,4'-DDE</b>	<b>3.7</b>		1.9		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
4,4'-DDD	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
Endosulfan I	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
Endosulfan II	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
alpha-BHC	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
beta-BHC	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
gamma-BHC (Lindane)	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
delta-BHC	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
Endosulfan sulfate	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
Methoxychlor	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
Toxaphene	ND		39		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
Chlordane (technical)	ND		39		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
<b>alpha-Chlordane</b>	<b>4.0</b>	<b>p</b>	1.9		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
<b>gamma-Chlordane</b>	<b>6.0</b>		1.9		ug/Kg		11/05/14 18:14	11/06/14 10:28	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	96		57 - 122				11/05/14 18:14	11/06/14 10:28	1
DCB Decachlorobiphenyl	114		21 - 136				11/05/14 18:14	11/06/14 10:28	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-20-1.5-2'**

**Lab Sample ID: 720-61033-18**

**Date Collected: 11/05/14 09:20**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Dieldrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
4,4'-DDT	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Toxaphene	ND		39		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Chlordane (technical)	ND		39		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
alpha-Chlordane	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:14	11/06/14 10:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	89		57 - 122				11/05/14 18:14	11/06/14 10:46	1
DCB Decachlorobiphenyl	101		21 - 136				11/05/14 18:14	11/06/14 10:46	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-21-0-0.5'**

**Lab Sample ID: 720-61033-19**

**Date Collected: 11/05/14 09:18**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		9.8		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
<b>Dieldrin</b>	<b>620</b>		9.8		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
Endrin aldehyde	ND		9.8		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
Endrin	ND		9.8		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
Endrin ketone	ND		9.8		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
Heptachlor	ND		9.8		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
Heptachlor epoxide	ND		9.8		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
<b>4,4'-DDT</b>	<b>50</b>		9.8		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
<b>4,4'-DDE</b>	<b>12</b>		9.8		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
4,4'-DDD	ND		9.8		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
Endosulfan I	ND		9.8		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
Endosulfan II	ND		9.8		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
alpha-BHC	ND		9.8		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
beta-BHC	ND		9.8		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
gamma-BHC (Lindane)	ND		9.8		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
delta-BHC	ND		9.8		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
Endosulfan sulfate	ND		9.8		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
Methoxychlor	ND		9.8		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
Toxaphene	ND		200		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
Chlordane (technical)	ND		200		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
<b>alpha-Chlordane</b>	<b>15</b>	<b>p</b>	9.8		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
<b>gamma-Chlordane</b>	<b>13</b>	<b>p</b>	9.8		ug/Kg		11/05/14 18:14	11/06/14 12:33	5
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	113		57 - 122				11/05/14 18:14	11/06/14 12:33	5
DCB Decachlorobiphenyl	92		21 - 136				11/05/14 18:14	11/06/14 12:33	5

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-21-1.5-2'**

**Lab Sample ID: 720-61033-20**

**Date Collected: 11/05/14 09:18**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
<b>Dieldrin</b>	<b>37</b>		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
<b>4,4'-DDT</b>	<b>2.1</b>		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
Toxaphene	ND		39		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
Chlordane (technical)	ND		39		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
alpha-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:18	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Tetrachloro-m-xylene</i>	92		57 - 122				11/05/14 18:19	11/06/14 14:18	1
<i>DCB Decachlorobiphenyl</i>	93		21 - 136				11/05/14 18:19	11/06/14 14:18	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
 Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-22-0-0.5'**

**Lab Sample ID: 720-61033-21**

**Date Collected: 11/05/14 12:44**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
Dieldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
4,4'-DDT	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
Toxaphene	ND		39		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
Chlordane (technical)	ND		39		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
alpha-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	96		57 - 122				11/05/14 18:19	11/06/14 14:36	1
DCB Decachlorobiphenyl	97		21 - 136				11/05/14 18:19	11/06/14 14:36	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
 Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-22-1.5-2'**

**Lab Sample ID: 720-61033-22**

**Date Collected: 11/05/14 12:44**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
Dieldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
4,4'-DDT	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
Toxaphene	ND		39		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
Chlordane (technical)	ND		39		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
alpha-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 14:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	94		57 - 122				11/05/14 18:19	11/06/14 14:54	1
DCB Decachlorobiphenyl	94		21 - 136				11/05/14 18:19	11/06/14 14:54	1



# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-23-0-0.5'**

**Lab Sample ID: 720-61033-23**

**Date Collected: 11/05/14 12:34**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
Dieldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
4,4'-DDT	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
Toxaphene	ND		39		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
Chlordane (technical)	ND		39		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
alpha-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	90		57 - 122				11/05/14 18:19	11/06/14 15:12	1
DCB Decachlorobiphenyl	93		21 - 136				11/05/14 18:19	11/06/14 15:12	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-23-1.5-2'**

**Lab Sample ID: 720-61033-24**

**Date Collected: 11/05/14 12:34**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
Dieldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
4,4'-DDT	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
Toxaphene	ND		40		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
Chlordane (technical)	ND		40		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
alpha-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/06/14 15:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	82		57 - 122				11/05/14 18:19	11/06/14 15:30	1
DCB Decachlorobiphenyl	92		21 - 136				11/05/14 18:19	11/06/14 15:30	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-24-0-0.5'**

**Lab Sample ID: 720-61033-25**

**Date Collected: 11/05/14 11:57**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
<b>Dieldrin</b>	<b>3.7</b>		2.0		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
<b>4,4'-DDT</b>	<b>3.6</b>		2.0		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
Toxaphene	ND		39		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
<b>Chlordane (technical)</b>	<b>74</b>		39		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
<b>alpha-Chlordane</b>	<b>10</b>	<b>p</b>	2.0		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
<b>gamma-Chlordane</b>	<b>13</b>		2.0		ug/Kg		11/05/14 18:19	11/07/14 03:44	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	86		57 - 122				11/05/14 18:19	11/07/14 03:44	1
DCB Decachlorobiphenyl	113		21 - 136				11/05/14 18:19	11/07/14 03:44	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
 Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-24-1.5-2'**

**Lab Sample ID: 720-61033-26**

Date Collected: 11/05/14 11:57

Matrix: Solid

Date Received: 11/05/14 14:05

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
Dieldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
<b>4,4'-DDT</b>	<b>2.3</b>		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
Toxaphene	ND		40		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
Chlordane (technical)	ND		40		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
alpha-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	81		57 - 122				11/05/14 18:19	11/07/14 04:01	1
DCB Decachlorobiphenyl	100		21 - 136				11/05/14 18:19	11/07/14 04:01	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-25-0-0.5'**

**Lab Sample ID: 720-61033-27**

**Date Collected: 11/05/14 08:58**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
<b>Dieldrin</b>	<b>3.2</b>		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
<b>4,4'-DDT</b>	<b>14</b>		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
Toxaphene	ND		39		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
Chlordane (technical)	ND		39		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
alpha-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:18	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	95		57 - 122				11/05/14 18:19	11/07/14 04:18	1
DCB Decachlorobiphenyl	111		21 - 136				11/05/14 18:19	11/07/14 04:18	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
 Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-25-1.5-25'**

**Lab Sample ID: 720-61033-28**

**Date Collected: 11/05/14 08:58**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		9.8		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
<b>Dieldrin</b>	<b>1100</b>		9.8		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
Endrin aldehyde	ND		9.8		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
Endrin	ND		9.8		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
<b>Endrin ketone</b>	<b>30</b>		9.8		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
Heptachlor	ND		9.8		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
Heptachlor epoxide	ND		9.8		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
<b>4,4'-DDT</b>	<b>31</b>		9.8		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
4,4'-DDE	ND		9.8		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
<b>4,4'-DDD</b>	<b>45</b>		9.8		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
Endosulfan I	ND		9.8		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
Endosulfan II	ND		9.8		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
alpha-BHC	ND		9.8		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
beta-BHC	ND		9.8		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
<b>gamma-BHC (Lindane)</b>	<b>11</b>		9.8		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
delta-BHC	ND		9.8		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
Endosulfan sulfate	ND		9.8		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
Methoxychlor	ND		9.8		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
Toxaphene	ND		200		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
Chlordane (technical)	ND		200		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
<b>alpha-Chlordane</b>	<b>40</b>		9.8		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
<b>gamma-Chlordane</b>	<b>34</b>		9.8		ug/Kg		11/05/14 18:19	11/07/14 10:28	5
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Tetrachloro-m-xylene</i>	110		57 - 122				11/05/14 18:19	11/07/14 10:28	5
<i>DCB Decachlorobiphenyl</i>	91		21 - 136				11/05/14 18:19	11/07/14 10:28	5

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
 Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-26-0-0.5'**

**Lab Sample ID: 720-61033-29**

**Date Collected: 11/05/14 09:45**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
<b>Dieldrin</b>	<b>55</b>		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
<b>4,4'-DDT</b>	<b>18</b>		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
<b>4,4'-DDE</b>	<b>2.9</b>		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
<b>4,4'-DDD</b>	<b>2.1</b>		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
Toxaphene	ND		39		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
Chlordane (technical)	ND		39		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
<b>alpha-Chlordane</b>	<b>2.8</b>	<b>p</b>	2.0		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
<b>gamma-Chlordane</b>	<b>2.6</b>	<b>p</b>	2.0		ug/Kg		11/05/14 18:19	11/07/14 04:51	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	91		57 - 122				11/05/14 18:19	11/07/14 04:51	1
DCB Decachlorobiphenyl	131		21 - 136				11/05/14 18:19	11/07/14 04:51	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-26-1.5-25'**

**Lab Sample ID: 720-61033-30**

**Date Collected: 11/05/14 09:45**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
<b>Dieldrin</b>	<b>2.9</b>		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
4,4'-DDT	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
Toxaphene	ND		40		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
Chlordane (technical)	ND		40		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
alpha-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:08	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	96		57 - 122				11/05/14 18:19	11/07/14 05:08	1
DCB Decachlorobiphenyl	109		21 - 136				11/05/14 18:19	11/07/14 05:08	1



# Client Sample Results

Client: Bureau Veritas North America, Inc.  
 Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-27-0-0.5'**

**Lab Sample ID: 720-61033-31**

**Date Collected: 11/05/14 10:20**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		20		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
<b>Dieldrin</b>	<b>210</b>		20		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
Endrin aldehyde	ND		20		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
Endrin	ND		20		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
Endrin ketone	ND		20		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
Heptachlor	ND		20		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
Heptachlor epoxide	ND		20		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
<b>4,4'-DDT</b>	<b>36</b>		20		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
<b>4,4'-DDE</b>	<b>38</b>		20		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
<b>4,4'-DDD</b>	<b>65</b>		20		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
Endosulfan I	ND		20		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
Endosulfan II	ND		20		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
alpha-BHC	ND		20		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
beta-BHC	ND		20		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
gamma-BHC (Lindane)	ND		20		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
delta-BHC	ND		20		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
Endosulfan sulfate	ND		20		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
Methoxychlor	ND		20		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
Toxaphene	ND		390		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
<b>Chlordane (technical)</b>	<b>2500</b>		390		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
<b>alpha-Chlordane</b>	<b>380</b>	<b>p</b>	20		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
<b>gamma-Chlordane</b>	<b>550</b>		20		ug/Kg		11/05/14 18:19	11/07/14 10:45	10
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	0	X D	57 - 122				11/05/14 18:19	11/07/14 10:45	10
DCB Decachlorobiphenyl	0	X D	21 - 136				11/05/14 18:19	11/07/14 10:45	10

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-27-1.5-2'**

**Lab Sample ID: 720-61033-32**

**Date Collected: 11/05/14 10:20**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
Dieldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
4,4'-DDT	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
Toxaphene	ND		39		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
Chlordane (technical)	ND		39		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
alpha-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 10:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	112		57 - 122				11/05/14 18:19	11/07/14 10:11	1
DCB Decachlorobiphenyl	92		21 - 136				11/05/14 18:19	11/07/14 10:11	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-28-0-0.5'**

**Lab Sample ID: 720-61033-33**

**Date Collected: 11/05/14 10:22**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
<b>Dieldrin</b>	<b>61</b>		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
<b>Endrin ketone</b>	<b>2.0</b>		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
<b>4,4'-DDT</b>	<b>69</b>		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
<b>4,4'-DDE</b>	<b>26</b>		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
Toxaphene	ND		40		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
<b>Chlordane (technical)</b>	<b>290</b>		40		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
<b>alpha-Chlordane</b>	<b>42</b>	<b>p</b>	2.0		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
<b>gamma-Chlordane</b>	<b>57</b>		2.0		ug/Kg		11/05/14 18:19	11/07/14 05:59	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	95		57 - 122				11/05/14 18:19	11/07/14 05:59	1
DCB Decachlorobiphenyl	112		21 - 136				11/05/14 18:19	11/07/14 05:59	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
 Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-28-1.5-2'**

**Lab Sample ID: 720-61033-34**

**Date Collected: 11/05/14 10:22**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
<b>Dieldrin</b>	<b>3.8</b>		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
<b>4,4'-DDT</b>	<b>5.7</b>		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
Toxaphene	ND		39		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
Chlordane (technical)	ND		39		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
<b>alpha-Chlordane</b>	<b>2.9</b>	<b>p</b>	2.0		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
<b>gamma-Chlordane</b>	<b>3.4</b>		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:15	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	93		57 - 122				11/05/14 18:19	11/07/14 06:15	1
DCB Decachlorobiphenyl	112		21 - 136				11/05/14 18:19	11/07/14 06:15	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-29-0-0.5'**

**Lab Sample ID: 720-61033-35**

**Date Collected: 11/05/14 10:26**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
Dieldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
4,4'-DDT	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
Toxaphene	ND		39		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
Chlordane (technical)	ND		39		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
alpha-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 06:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	103		57 - 122				11/05/14 18:19	11/07/14 06:32	1
DCB Decachlorobiphenyl	116		21 - 136				11/05/14 18:19	11/07/14 06:32	1

# Client Sample Results

Client: Bureau Veritas North America, Inc.  
 Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-29-1.5-2'**

**Lab Sample ID: 720-61033-36**

**Date Collected: 11/05/14 10:26**

**Matrix: Solid**

**Date Received: 11/05/14 14:05**

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		3.9		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
<b>Dieldrin</b>	<b>130</b>		3.9		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
Endrin aldehyde	ND		3.9		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
Endrin	ND		3.9		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
Endrin ketone	ND		3.9		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
Heptachlor	ND		3.9		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
Heptachlor epoxide	ND		3.9		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
<b>4,4'-DDT</b>	<b>18</b>	<b>p</b>	3.9		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
<b>4,4'-DDE</b>	<b>5.4</b>		3.9		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
<b>4,4'-DDD</b>	<b>13</b>	<b>p</b>	3.9		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
Endosulfan I	ND		3.9		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
Endosulfan II	ND		3.9		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
alpha-BHC	ND		3.9		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
beta-BHC	ND		3.9		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
gamma-BHC (Lindane)	ND		3.9		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
delta-BHC	ND		3.9		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
Endosulfan sulfate	ND		3.9		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
Methoxychlor	ND		3.9		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
Toxaphene	ND		78		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
<b>Chlordane (technical)</b>	<b>780</b>		78		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
<b>alpha-Chlordane</b>	<b>130</b>	<b>p</b>	3.9		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
<b>gamma-Chlordane</b>	<b>180</b>		3.9		ug/Kg		11/05/14 18:19	11/07/14 11:15	2
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Tetrachloro-m-xylene</i>	95		57 - 122				11/05/14 18:19	11/07/14 11:15	2
<i>DCB Decachlorobiphenyl</i>	94		21 - 136				11/05/14 18:19	11/07/14 11:15	2

# QC Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

## Method: 8081A - Organochlorine Pesticides (GC)

**Lab Sample ID: MB 720-170338/1-A**

**Matrix: Solid**

**Analysis Batch: 170355**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 170338**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 05:34	1
Dieldrin	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 05:34	1
Endrin aldehyde	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 05:34	1
Endrin	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 05:34	1
Endrin ketone	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 05:34	1
Heptachlor	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 05:34	1
Heptachlor epoxide	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 05:34	1
4,4'-DDT	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 05:34	1
4,4'-DDE	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 05:34	1
4,4'-DDD	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 05:34	1
Endosulfan I	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 05:34	1
Endosulfan II	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 05:34	1
alpha-BHC	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 05:34	1
beta-BHC	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 05:34	1
gamma-BHC (Lindane)	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 05:34	1
delta-BHC	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 05:34	1
Endosulfan sulfate	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 05:34	1
Methoxychlor	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 05:34	1
Toxaphene	ND		39		ug/Kg		11/05/14 18:14	11/06/14 05:34	1
Chlordane (technical)	ND		39		ug/Kg		11/05/14 18:14	11/06/14 05:34	1
alpha-Chlordane	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 05:34	1
gamma-Chlordane	ND		1.9		ug/Kg		11/05/14 18:14	11/06/14 05:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	96		57 - 122	11/05/14 18:14	11/06/14 05:34	1
DCB Decachlorobiphenyl	93		21 - 136	11/05/14 18:14	11/06/14 05:34	1

**Lab Sample ID: LCS 720-170338/2-A**

**Matrix: Solid**

**Analysis Batch: 170355**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 170338**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	16.1	14.0		ug/Kg		87	65 - 120
Dieldrin	16.1	13.7		ug/Kg		85	72 - 120
Endrin aldehyde	16.1	14.1		ug/Kg		88	68 - 120
Endrin	16.1	14.8		ug/Kg		92	68 - 120
Endrin ketone	16.1	14.4		ug/Kg		89	67 - 120
Heptachlor	16.1	13.8		ug/Kg		85	69 - 120
Heptachlor epoxide	16.1	13.6		ug/Kg		84	68 - 120
4,4'-DDT	16.1	13.9		ug/Kg		86	63 - 127
4,4'-DDE	16.1	14.2		ug/Kg		88	70 - 120
4,4'-DDD	16.1	14.0		ug/Kg		87	69 - 120
Endosulfan I	16.1	13.8		ug/Kg		86	62 - 120
Endosulfan II	16.1	14.1		ug/Kg		88	65 - 120
alpha-BHC	16.1	13.2		ug/Kg		82	62 - 120
beta-BHC	16.1	15.2		ug/Kg		94	74 - 124
gamma-BHC (Lindane)	16.1	13.9		ug/Kg		86	72 - 120
delta-BHC	16.1	8.48		ug/Kg		53	43 - 125

TestAmerica Pleasanton

# QC Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: LCS 720-170338/2-A**

**Matrix: Solid**

**Analysis Batch: 170355**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 170338**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Endosulfan sulfate	16.1	13.2		ug/Kg		82	67 - 120
Methoxychlor	16.1	14.3		ug/Kg		88	71 - 132
alpha-Chlordane	16.1	14.4		ug/Kg		89	70 - 120
gamma-Chlordane	16.1	14.3		ug/Kg		88	68 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	98		57 - 122
DCB Decachlorobiphenyl	92		21 - 136

**Lab Sample ID: 720-61033-1 MS**

**Matrix: Solid**

**Analysis Batch: 170346**

**Client Sample ID: S-2A-0-0.5'**

**Prep Type: Total/NA**

**Prep Batch: 170338**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	ND		164	179		ug/Kg		97	53 - 120
Dieldrin	590		164	652	F1	ug/Kg		40	46 - 130
Endrin aldehyde	ND		164	132		ug/Kg		80	40 - 120
Endrin	ND		164	138		ug/Kg		84	32 - 143
Endrin ketone	ND		164	86.1		ug/Kg		52	40 - 120
Heptachlor	ND		164	126		ug/Kg		76	52 - 120
Heptachlor epoxide	ND		164	265	F1	ug/Kg		161	40 - 120
4,4'-DDT	65		164	79.9	F1	ug/Kg		9	17 - 144
4,4'-DDE	90		164	184		ug/Kg		57	40 - 120
4,4'-DDD	110		164	271		ug/Kg		99	40 - 120
Endosulfan I	ND		164	144		ug/Kg		88	40 - 120
Endosulfan II	ND		164	134		ug/Kg		82	40 - 120
alpha-BHC	ND		164	148		ug/Kg		90	40 - 120
beta-BHC	ND		164	128		ug/Kg		78	40 - 120
gamma-BHC (Lindane)	ND		164	133		ug/Kg		81	58 - 120
delta-BHC	ND		164	105		ug/Kg		64	40 - 120
Endosulfan sulfate	ND		164	93.4		ug/Kg		57	40 - 120
Methoxychlor	ND		164	ND	F1	ug/Kg		10	40 - 120
alpha-Chlordane	350	p	164	639	F1	ug/Kg		173	40 - 120
gamma-Chlordane	450		164	551		ug/Kg		64	40 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	122		57 - 122
DCB Decachlorobiphenyl	65		21 - 136

**Lab Sample ID: 720-61033-1 MSD**

**Matrix: Solid**

**Analysis Batch: 170346**

**Client Sample ID: S-2A-0-0.5'**

**Prep Type: Total/NA**

**Prep Batch: 170338**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Aldrin	ND		162	199		ug/Kg		111	53 - 120	8	20
Dieldrin	590		162	958	F1 F2	ug/Kg		230	46 - 130	38	20
Endrin aldehyde	ND		162	129		ug/Kg		80	40 - 120	2	20
Endrin	ND		162	144	p F2	ug/Kg		89	32 - 143	34	20

TestAmerica Pleasanton



# QC Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: 720-61033-1 MSD**

**Matrix: Solid**

**Analysis Batch: 170346**

**Client Sample ID: S-2A-0-0.5'**

**Prep Type: Total/NA**

**Prep Batch: 170338**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Endrin ketone	ND		162	109	F2	ug/Kg		67	40 - 120	55	20
Heptachlor	ND		162	144		ug/Kg		89	52 - 120	13	20
Heptachlor epoxide	ND		162	361	F1 F2	ug/Kg		223	40 - 120	31	20
4,4'-DDT	56		162	95.0		ug/Kg		24	17 - 144	19	20
4,4'-DDE	90		162	229	F2	ug/Kg		86	40 - 120	22	20
4,4'-DDD	120		162	339	F1	ug/Kg		132	40 - 120	20	20
Endosulfan I	ND		162	149		ug/Kg		92	40 - 120	4	20
Endosulfan II	ND		162	153		ug/Kg		94	40 - 120	13	30
alpha-BHC	ND		162	155		ug/Kg		96	40 - 120	5	20
beta-BHC	ND		162	135		ug/Kg		83	40 - 120	6	20
gamma-BHC (Lindane)	ND		162	145		ug/Kg		89	58 - 120	9	20
delta-BHC	ND		162	106		ug/Kg		65	40 - 120	1	20
Endosulfan sulfate	ND		162	105		ug/Kg		65	40 - 120	12	20
Methoxychlor	ND		162	ND	F1 F2	ug/Kg		13	40 - 120	27	20
alpha-Chlordane	550		162	1150	F1 F2	ug/Kg		370	40 - 120	86	20
gamma-Chlordane	450		162	986	F1 F2	ug/Kg		334	40 - 120	57	20

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	115		57 - 122
DCB Decachlorobiphenyl	70		21 - 136

**Lab Sample ID: MB 720-170339/1-A**

**Matrix: Solid**

**Analysis Batch: 170449**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 170339**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 02:20	1
Dieldrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 02:20	1
Endrin aldehyde	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 02:20	1
Endrin	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 02:20	1
Endrin ketone	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 02:20	1
Heptachlor	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 02:20	1
Heptachlor epoxide	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 02:20	1
4,4'-DDT	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 02:20	1
4,4'-DDE	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 02:20	1
4,4'-DDD	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 02:20	1
Endosulfan I	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 02:20	1
Endosulfan II	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 02:20	1
alpha-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 02:20	1
beta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 02:20	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 02:20	1
delta-BHC	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 02:20	1
Endosulfan sulfate	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 02:20	1
Methoxychlor	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 02:20	1
Toxaphene	ND		39		ug/Kg		11/05/14 18:19	11/07/14 02:20	1
Chlordane (technical)	ND		39		ug/Kg		11/05/14 18:19	11/07/14 02:20	1
alpha-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 02:20	1
gamma-Chlordane	ND		2.0		ug/Kg		11/05/14 18:19	11/07/14 02:20	1

TestAmerica Pleasanton

# QC Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: MB 720-170339/1-A**

**Matrix: Solid**

**Analysis Batch: 170449**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 170339**

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	111		57 - 122	11/05/14 18:19	11/07/14 02:20	1
DCB Decachlorobiphenyl	108		21 - 136	11/05/14 18:19	11/07/14 02:20	1

**Lab Sample ID: LCS 720-170339/2-A**

**Matrix: Solid**

**Analysis Batch: 170449**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 170339**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dieldrin	16.5	16.5		ug/Kg		100	72 - 120
Endrin aldehyde	16.5	16.0		ug/Kg		97	68 - 120
Endrin	16.5	16.7		ug/Kg		101	68 - 120
Endrin ketone	16.5	17.1		ug/Kg		104	67 - 120
Heptachlor	16.5	16.1		ug/Kg		98	69 - 120
Heptachlor epoxide	16.5	16.6		ug/Kg		101	68 - 120
4,4'-DDT	16.5	17.1		ug/Kg		104	63 - 127
4,4'-DDE	16.5	16.9		ug/Kg		103	70 - 120
4,4'-DDD	16.5	16.6		ug/Kg		101	69 - 120
Endosulfan I	16.5	16.7		ug/Kg		101	62 - 120
Endosulfan II	16.5	16.4		ug/Kg		100	65 - 120
alpha-BHC	16.5	14.9		ug/Kg		90	62 - 120
beta-BHC	16.5	16.3		ug/Kg		99	74 - 124
gamma-BHC (Lindane)	16.5	15.2		ug/Kg		92	72 - 120
delta-BHC	16.5	9.78		ug/Kg		59	43 - 125
Endosulfan sulfate	16.5	15.5		ug/Kg		94	67 - 120
Methoxychlor	16.5	18.9		ug/Kg		115	71 - 132
alpha-Chlordane	16.5	16.6		ug/Kg		101	70 - 120
gamma-Chlordane	16.5	16.6		ug/Kg		101	68 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	108		57 - 122
DCB Decachlorobiphenyl	115		21 - 136

**Lab Sample ID: 720-61033-2 MS**

**Matrix: Solid**

**Analysis Batch: 170355**

**Client Sample ID: S-10A-0-0.5'**

**Prep Type: Total/NA**

**Prep Batch: 170339**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dieldrin	2.9		16.5	17.7		ug/Kg		90	46 - 130
Endrin aldehyde	ND		16.5	12.8		ug/Kg		78	40 - 120
Endrin	ND		16.5	19.3		ug/Kg		117	32 - 143
Endrin ketone	ND		16.5	15.1		ug/Kg		92	40 - 120
Heptachlor	ND		16.5	14.4		ug/Kg		88	52 - 120
Heptachlor epoxide	ND		16.5	16.1		ug/Kg		98	40 - 120
4,4'-DDT	15		16.5	33.9		ug/Kg		114	17 - 144
4,4'-DDE	16		16.5	38.9	F1	ug/Kg		140	40 - 120
4,4'-DDD	6.6		16.5	23.8		ug/Kg		104	40 - 120

TestAmerica Pleasanton

# QC Sample Results

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: 720-61033-2 MS**

**Matrix: Solid**

**Analysis Batch: 170355**

**Client Sample ID: S-10A-0-0.5'**

**Prep Type: Total/NA**

**Prep Batch: 170339**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
Endosulfan I	ND		16.5	15.4		ug/Kg		94	40 - 120
Endosulfan II	ND		16.5	15.5		ug/Kg		94	40 - 120
alpha-BHC	ND		16.5	13.5		ug/Kg		82	40 - 120
beta-BHC	ND		16.5	15.8		ug/Kg		96	40 - 120
gamma-BHC (Lindane)	ND		16.5	16.4		ug/Kg		100	58 - 120
delta-BHC	ND		16.5	8.47		ug/Kg		51	40 - 120
Endosulfan sulfate	ND		16.5	13.9		ug/Kg		84	40 - 120
Methoxychlor	ND		16.5	16.2		ug/Kg		98	40 - 120
alpha-Chlordane	ND		16.5	18.2		ug/Kg		101	40 - 120
gamma-Chlordane	2.1		16.5	17.7		ug/Kg		95	40 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	98		57 - 122
DCB Decachlorobiphenyl	96		21 - 136

**Lab Sample ID: 720-61033-2 MSD**

**Matrix: Solid**

**Analysis Batch: 170355**

**Client Sample ID: S-10A-0-0.5'**

**Prep Type: Total/NA**

**Prep Batch: 170339**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	
	Result	Qualifier	Added	Result	Qualifier					RPD	Limit
Aldrin	ND		16.3	13.1		ug/Kg		81	53 - 120	11	20
Dieldrin	2.9		16.3	16.8		ug/Kg		85	46 - 130	5	20
Endrin aldehyde	ND		16.3	11.8		ug/Kg		72	40 - 120	8	20
Endrin	ND		16.3	18.3		ug/Kg		112	32 - 143	5	20
Endrin ketone	ND		16.3	14.4		ug/Kg		88	40 - 120	9	20
Heptachlor	ND		16.3	12.4		ug/Kg		76	52 - 120	15	20
Heptachlor epoxide	ND		16.3	14.8		ug/Kg		91	40 - 120	8	20
4,4'-DDT	15		16.3	34.7		ug/Kg		120	17 - 144	3	20
4,4'-DDE	16		16.3	36.8	F1	ug/Kg		128	40 - 120	6	20
4,4'-DDD	6.6		16.3	24.0		ug/Kg		107	40 - 120	1	20
Endosulfan I	ND		16.3	14.3		ug/Kg		87	40 - 120	8	20
Endosulfan II	ND		16.3	15.5		ug/Kg		95	40 - 120	8	30
alpha-BHC	ND		16.3	11.7		ug/Kg		72	40 - 120	14	20
beta-BHC	ND		16.3	14.2		ug/Kg		87	40 - 120	11	20
gamma-BHC (Lindane)	ND		16.3	14.5		ug/Kg		89	58 - 120	13	20
delta-BHC	ND		16.3	7.50		ug/Kg		46	40 - 120	12	20
Endosulfan sulfate	ND		16.3	13.2		ug/Kg		81	40 - 120	5	20
Methoxychlor	ND		16.3	16.8		ug/Kg		103	40 - 120	4	20
alpha-Chlordane	ND		16.3	17.2		ug/Kg		96	40 - 120	6	20
gamma-Chlordane	2.1		16.3	17.2		ug/Kg		93	40 - 120	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	88		57 - 122
DCB Decachlorobiphenyl	94		21 - 136

TestAmerica Pleasanton

# QC Association Summary

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

## GC Semi VOA

### Prep Batch: 170338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-61033-1	S-2A-0-0.5'	Total/NA	Solid	3546	
720-61033-1 MS	S-2A-0-0.5'	Total/NA	Solid	3546	
720-61033-1 MSD	S-2A-0-0.5'	Total/NA	Solid	3546	
720-61033-3	S-13-0-0.5'	Total/NA	Solid	3546	
720-61033-4	S-13-1.5-2'	Total/NA	Solid	3546	
720-61033-5	S-14-0-0.5'	Total/NA	Solid	3546	
720-61033-6	S-14-1.5-2'	Total/NA	Solid	3546	
720-61033-7	S-15-0-0.5'	Total/NA	Solid	3546	
720-61033-8	S-15-1.5-2'	Total/NA	Solid	3546	
720-61033-9	S-16-0-0.5'	Total/NA	Solid	3546	
720-61033-10	S-16-1.5-2'	Total/NA	Solid	3546	
720-61033-11	S-17-0-0.5'	Total/NA	Solid	3546	
720-61033-12	S-17-1.5-2'	Total/NA	Solid	3546	
720-61033-13	S-18-0-0.5'	Total/NA	Solid	3546	
720-61033-14	S-18-1.5-2'	Total/NA	Solid	3546	
720-61033-15	S-19-0-0.5'	Total/NA	Solid	3546	
720-61033-16	S-19-1.5-2'	Total/NA	Solid	3546	
720-61033-17	S-20-0-0.5'	Total/NA	Solid	3546	
720-61033-18	S-20-1.5-2'	Total/NA	Solid	3546	
720-61033-19	S-21-0-0.5'	Total/NA	Solid	3546	
LCS 720-170338/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 720-170338/1-A	Method Blank	Total/NA	Solid	3546	

### Prep Batch: 170339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-61033-2	S-10A-0-0.5'	Total/NA	Solid	3546	
720-61033-2 MS	S-10A-0-0.5'	Total/NA	Solid	3546	
720-61033-2 MSD	S-10A-0-0.5'	Total/NA	Solid	3546	
720-61033-20	S-21-1.5-2'	Total/NA	Solid	3546	
720-61033-21	S-22-0-0.5'	Total/NA	Solid	3546	
720-61033-22	S-22-1.5-2'	Total/NA	Solid	3546	
720-61033-23	S-23-0-0.5'	Total/NA	Solid	3546	
720-61033-24	S-23-1.5-2'	Total/NA	Solid	3546	
720-61033-25	S-24-0-0.5'	Total/NA	Solid	3546	
720-61033-26	S-24-1.5-2'	Total/NA	Solid	3546	
720-61033-27	S-25-0-0.5'	Total/NA	Solid	3546	
720-61033-28	S-25-1.5-25'	Total/NA	Solid	3546	
720-61033-29	S-26-0-0.5'	Total/NA	Solid	3546	
720-61033-30	S-26-1.5-25'	Total/NA	Solid	3546	
720-61033-31	S-27-0-0.5'	Total/NA	Solid	3546	
720-61033-32	S-27-1.5-2'	Total/NA	Solid	3546	
720-61033-33	S-28-0-0.5'	Total/NA	Solid	3546	
720-61033-34	S-28-1.5-2'	Total/NA	Solid	3546	
720-61033-35	S-29-0-0.5'	Total/NA	Solid	3546	
720-61033-36	S-29-1.5-2'	Total/NA	Solid	3546	
LCS 720-170339/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 720-170339/1-A	Method Blank	Total/NA	Solid	3546	

### Analysis Batch: 170346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-61033-1	S-2A-0-0.5'	Total/NA	Solid	8081A	170338

TestAmerica Pleasanton

# QC Association Summary

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

## GC Semi VOA (Continued)

### Analysis Batch: 170346 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-61033-1 MS	S-2A-0-0.5'	Total/NA	Solid	8081A	170338
720-61033-1 MSD	S-2A-0-0.5'	Total/NA	Solid	8081A	170338
720-61033-4	S-13-1.5-2'	Total/NA	Solid	8081A	170338
720-61033-7	S-15-0-0.5'	Total/NA	Solid	8081A	170338
720-61033-8	S-15-1.5-2'	Total/NA	Solid	8081A	170338
720-61033-11	S-17-0-0.5'	Total/NA	Solid	8081A	170338
720-61033-12	S-17-1.5-2'	Total/NA	Solid	8081A	170338
720-61033-13	S-18-0-0.5'	Total/NA	Solid	8081A	170338
720-61033-14	S-18-1.5-2'	Total/NA	Solid	8081A	170338
720-61033-15	S-19-0-0.5'	Total/NA	Solid	8081A	170338

### Analysis Batch: 170355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-61033-2	S-10A-0-0.5'	Total/NA	Solid	8081A	170339
720-61033-2 MS	S-10A-0-0.5'	Total/NA	Solid	8081A	170339
720-61033-2 MSD	S-10A-0-0.5'	Total/NA	Solid	8081A	170339
720-61033-3	S-13-0-0.5'	Total/NA	Solid	8081A	170338
720-61033-5	S-14-0-0.5'	Total/NA	Solid	8081A	170338
720-61033-6	S-14-1.5-2'	Total/NA	Solid	8081A	170338
720-61033-9	S-16-0-0.5'	Total/NA	Solid	8081A	170338
720-61033-16	S-19-1.5-2'	Total/NA	Solid	8081A	170338
720-61033-17	S-20-0-0.5'	Total/NA	Solid	8081A	170338
720-61033-18	S-20-1.5-2'	Total/NA	Solid	8081A	170338
720-61033-19	S-21-0-0.5'	Total/NA	Solid	8081A	170338
720-61033-20	S-21-1.5-2'	Total/NA	Solid	8081A	170339
720-61033-21	S-22-0-0.5'	Total/NA	Solid	8081A	170339
720-61033-22	S-22-1.5-2'	Total/NA	Solid	8081A	170339
720-61033-23	S-23-0-0.5'	Total/NA	Solid	8081A	170339
720-61033-24	S-23-1.5-2'	Total/NA	Solid	8081A	170339
LCS 720-170338/2-A	Lab Control Sample	Total/NA	Solid	8081A	170338
MB 720-170338/1-A	Method Blank	Total/NA	Solid	8081A	170338

### Analysis Batch: 170449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-61033-10	S-16-1.5-2'	Total/NA	Solid	8081A	170338
720-61033-25	S-24-0-0.5'	Total/NA	Solid	8081A	170339
720-61033-26	S-24-1.5-2'	Total/NA	Solid	8081A	170339
720-61033-27	S-25-0-0.5'	Total/NA	Solid	8081A	170339
720-61033-28	S-25-1.5-25'	Total/NA	Solid	8081A	170339
720-61033-29	S-26-0-0.5'	Total/NA	Solid	8081A	170339
720-61033-30	S-26-1.5-25'	Total/NA	Solid	8081A	170339
720-61033-31	S-27-0-0.5'	Total/NA	Solid	8081A	170339
720-61033-32	S-27-1.5-2'	Total/NA	Solid	8081A	170339
720-61033-33	S-28-0-0.5'	Total/NA	Solid	8081A	170339
720-61033-34	S-28-1.5-2'	Total/NA	Solid	8081A	170339
720-61033-35	S-29-0-0.5'	Total/NA	Solid	8081A	170339
720-61033-36	S-29-1.5-2'	Total/NA	Solid	8081A	170339
LCS 720-170339/2-A	Lab Control Sample	Total/NA	Solid	8081A	170339
MB 720-170339/1-A	Method Blank	Total/NA	Solid	8081A	170339

TestAmerica Pleasanton

# Lab Chronicle

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

## Client Sample ID: S-2A-0-0.5'

Date Collected: 11/05/14 08:33

Date Received: 11/05/14 14:05

## Lab Sample ID: 720-61033-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170338	11/05/14 18:14	DFR	TAL PLS
Total/NA	Analysis	8081A		20	170346	11/06/14 12:43	JZT	TAL PLS

## Client Sample ID: S-10A-0-0.5'

Date Collected: 11/05/14 08:30

Date Received: 11/05/14 14:05

## Lab Sample ID: 720-61033-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170339	11/05/14 18:19	BSY	TAL PLS
Total/NA	Analysis	8081A		1	170355	11/06/14 14:00	JZT	TAL PLS

## Client Sample ID: S-13-0-0.5'

Date Collected: 11/05/14 09:05

Date Received: 11/05/14 14:05

## Lab Sample ID: 720-61033-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170338	11/05/14 18:14	DFR	TAL PLS
Total/NA	Analysis	8081A		1	170355	11/06/14 11:21	JZT	TAL PLS

## Client Sample ID: S-13-1.5-2'

Date Collected: 11/05/14 09:05

Date Received: 11/05/14 14:05

## Lab Sample ID: 720-61033-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170338	11/05/14 18:14	DFR	TAL PLS
Total/NA	Analysis	8081A		1	170346	11/06/14 08:49	JZT	TAL PLS

## Client Sample ID: S-14-0-0.5'

Date Collected: 11/05/14 08:45

Date Received: 11/05/14 14:05

## Lab Sample ID: 720-61033-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170338	11/05/14 18:14	DFR	TAL PLS
Total/NA	Analysis	8081A		20	170355	11/06/14 13:07	JZT	TAL PLS

## Client Sample ID: S-14-1.5-2'

Date Collected: 11/05/14 08:45

Date Received: 11/05/14 14:05

## Lab Sample ID: 720-61033-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170338	11/05/14 18:14	DFR	TAL PLS
Total/NA	Analysis	8081A		1	170355	11/06/14 11:39	JZT	TAL PLS

TestAmerica Pleasanton

# Lab Chronicle

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-15-0-0.5'**

**Lab Sample ID: 720-61033-7**

Date Collected: 11/05/14 08:50

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170338	11/05/14 18:14	DFR	TAL PLS
Total/NA	Analysis	8081A		1	170346	11/06/14 09:39	JZT	TAL PLS

**Client Sample ID: S-15-1.5-2'**

**Lab Sample ID: 720-61033-8**

Date Collected: 11/05/14 08:50

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170338	11/05/14 18:14	DFR	TAL PLS
Total/NA	Analysis	8081A		1	170346	11/06/14 09:56	JZT	TAL PLS

**Client Sample ID: S-16-0-0.5'**

**Lab Sample ID: 720-61033-9**

Date Collected: 11/05/14 09:50

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170338	11/05/14 18:14	DFR	TAL PLS
Total/NA	Analysis	8081A		5	170355	11/06/14 12:15	JZT	TAL PLS

**Client Sample ID: S-16-1.5-2'**

**Lab Sample ID: 720-61033-10**

Date Collected: 11/05/14 09:50

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170338	11/05/14 18:14	DFR	TAL PLS
Total/NA	Analysis	8081A		1	170449	11/07/14 03:27	JZT	TAL PLS

**Client Sample ID: S-17-0-0.5'**

**Lab Sample ID: 720-61033-11**

Date Collected: 11/05/14 10:10

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170338	11/05/14 18:14	DFR	TAL PLS
Total/NA	Analysis	8081A		1	170346	11/06/14 10:46	JZT	TAL PLS

**Client Sample ID: S-17-1.5-2'**

**Lab Sample ID: 720-61033-12**

Date Collected: 11/05/14 10:10

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170338	11/05/14 18:14	DFR	TAL PLS
Total/NA	Analysis	8081A		1	170346	11/06/14 11:03	JZT	TAL PLS

TestAmerica Pleasanton

# Lab Chronicle

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-18-0-0.5'**

**Lab Sample ID: 720-61033-13**

Date Collected: 11/05/14 09:58

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170338	11/05/14 18:14	DFR	TAL PLS
Total/NA	Analysis	8081A		1	170346	11/06/14 11:20	JZT	TAL PLS

**Client Sample ID: S-18-1.5-2'**

**Lab Sample ID: 720-61033-14**

Date Collected: 11/05/14 09:58

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170338	11/05/14 18:14	DFR	TAL PLS
Total/NA	Analysis	8081A		1	170346	11/06/14 11:37	JZT	TAL PLS

**Client Sample ID: S-19-0-0.5'**

**Lab Sample ID: 720-61033-15**

Date Collected: 11/05/14 09:35

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170338	11/05/14 18:14	DFR	TAL PLS
Total/NA	Analysis	8081A		1	170346	11/06/14 11:54	JZT	TAL PLS

**Client Sample ID: S-19-1.5-2'**

**Lab Sample ID: 720-61033-16**

Date Collected: 11/05/14 09:35

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170338	11/05/14 18:14	DFR	TAL PLS
Total/NA	Analysis	8081A		1	170355	11/06/14 10:10	JZT	TAL PLS

**Client Sample ID: S-20-0-0.5'**

**Lab Sample ID: 720-61033-17**

Date Collected: 11/05/14 09:20

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170338	11/05/14 18:14	DFR	TAL PLS
Total/NA	Analysis	8081A		1	170355	11/06/14 10:28	JZT	TAL PLS

**Client Sample ID: S-20-1.5-2'**

**Lab Sample ID: 720-61033-18**

Date Collected: 11/05/14 09:20

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170338	11/05/14 18:14	DFR	TAL PLS
Total/NA	Analysis	8081A		1	170355	11/06/14 10:46	JZT	TAL PLS

TestAmerica Pleasanton



# Lab Chronicle

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-21-0-0.5'**

**Lab Sample ID: 720-61033-19**

Date Collected: 11/05/14 09:18

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170338	11/05/14 18:14	DFR	TAL PLS
Total/NA	Analysis	8081A		5	170355	11/06/14 12:33	JZT	TAL PLS

**Client Sample ID: S-21-1.5-2'**

**Lab Sample ID: 720-61033-20**

Date Collected: 11/05/14 09:18

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170339	11/05/14 18:19	BSY	TAL PLS
Total/NA	Analysis	8081A		1	170355	11/06/14 14:18	JZT	TAL PLS

**Client Sample ID: S-22-0-0.5'**

**Lab Sample ID: 720-61033-21**

Date Collected: 11/05/14 12:44

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170339	11/05/14 18:19	BSY	TAL PLS
Total/NA	Analysis	8081A		1	170355	11/06/14 14:36	JZT	TAL PLS

**Client Sample ID: S-22-1.5-2'**

**Lab Sample ID: 720-61033-22**

Date Collected: 11/05/14 12:44

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170339	11/05/14 18:19	BSY	TAL PLS
Total/NA	Analysis	8081A		1	170355	11/06/14 14:54	JZT	TAL PLS

**Client Sample ID: S-23-0-0.5'**

**Lab Sample ID: 720-61033-23**

Date Collected: 11/05/14 12:34

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170339	11/05/14 18:19	BSY	TAL PLS
Total/NA	Analysis	8081A		1	170355	11/06/14 15:12	JZT	TAL PLS

**Client Sample ID: S-23-1.5-2'**

**Lab Sample ID: 720-61033-24**

Date Collected: 11/05/14 12:34

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170339	11/05/14 18:19	BSY	TAL PLS
Total/NA	Analysis	8081A		1	170355	11/06/14 15:30	JZT	TAL PLS

TestAmerica Pleasanton

# Lab Chronicle

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-24-0-0.5'**

**Lab Sample ID: 720-61033-25**

Date Collected: 11/05/14 11:57

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170339	11/05/14 18:19	BSY	TAL PLS
Total/NA	Analysis	8081A		1	170449	11/07/14 03:44	JZT	TAL PLS

**Client Sample ID: S-24-1.5-2'**

**Lab Sample ID: 720-61033-26**

Date Collected: 11/05/14 11:57

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170339	11/05/14 18:19	BSY	TAL PLS
Total/NA	Analysis	8081A		1	170449	11/07/14 04:01	JZT	TAL PLS

**Client Sample ID: S-25-0-0.5'**

**Lab Sample ID: 720-61033-27**

Date Collected: 11/05/14 08:58

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170339	11/05/14 18:19	BSY	TAL PLS
Total/NA	Analysis	8081A		1	170449	11/07/14 04:18	JZT	TAL PLS

**Client Sample ID: S-25-1.5-25'**

**Lab Sample ID: 720-61033-28**

Date Collected: 11/05/14 08:58

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170339	11/05/14 18:19	BSY	TAL PLS
Total/NA	Analysis	8081A		5	170449	11/07/14 10:28	JZT	TAL PLS

**Client Sample ID: S-26-0-0.5'**

**Lab Sample ID: 720-61033-29**

Date Collected: 11/05/14 09:45

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170339	11/05/14 18:19	BSY	TAL PLS
Total/NA	Analysis	8081A		1	170449	11/07/14 04:51	JZT	TAL PLS

**Client Sample ID: S-26-1.5-25'**

**Lab Sample ID: 720-61033-30**

Date Collected: 11/05/14 09:45

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170339	11/05/14 18:19	BSY	TAL PLS
Total/NA	Analysis	8081A		1	170449	11/07/14 05:08	JZT	TAL PLS

TestAmerica Pleasanton

# Lab Chronicle

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Client Sample ID: S-27-0-0.5'**

**Lab Sample ID: 720-61033-31**

Date Collected: 11/05/14 10:20

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170339	11/05/14 18:19	BSY	TAL PLS
Total/NA	Analysis	8081A		10	170449	11/07/14 10:45	JZT	TAL PLS

**Client Sample ID: S-27-1.5-2'**

**Lab Sample ID: 720-61033-32**

Date Collected: 11/05/14 10:20

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170339	11/05/14 18:19	BSY	TAL PLS
Total/NA	Analysis	8081A		1	170449	11/07/14 10:11	JZT	TAL PLS

**Client Sample ID: S-28-0-0.5'**

**Lab Sample ID: 720-61033-33**

Date Collected: 11/05/14 10:22

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170339	11/05/14 18:19	BSY	TAL PLS
Total/NA	Analysis	8081A		1	170449	11/07/14 05:59	JZT	TAL PLS

**Client Sample ID: S-28-1.5-2'**

**Lab Sample ID: 720-61033-34**

Date Collected: 11/05/14 10:22

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170339	11/05/14 18:19	BSY	TAL PLS
Total/NA	Analysis	8081A		1	170449	11/07/14 06:15	JZT	TAL PLS

**Client Sample ID: S-29-0-0.5'**

**Lab Sample ID: 720-61033-35**

Date Collected: 11/05/14 10:26

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170339	11/05/14 18:19	BSY	TAL PLS
Total/NA	Analysis	8081A		1	170449	11/07/14 06:32	JZT	TAL PLS

**Client Sample ID: S-29-1.5-2'**

**Lab Sample ID: 720-61033-36**

Date Collected: 11/05/14 10:26

Matrix: Solid

Date Received: 11/05/14 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			170339	11/05/14 18:19	BSY	TAL PLS
Total/NA	Analysis	8081A		2	170449	11/07/14 11:15	JZT	TAL PLS

TestAmerica Pleasanton

# Lab Chronicle

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

**Laboratory References:**

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

# Certification Summary

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

## Laboratory: TestAmerica Pleasanton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-16

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

# Method Summary

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

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Method	Method Description	Protocol	Laboratory
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS

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**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919



# Sample Summary

Client: Bureau Veritas North America, Inc.  
Project/Site: Nursery, San Lorenzo

TestAmerica Job ID: 720-61033-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-61033-1	S-2A-0-0.5'	Solid	11/05/14 08:33	11/05/14 14:05
720-61033-2	S-10A-0-0.5'	Solid	11/05/14 08:30	11/05/14 14:05
720-61033-3	S-13-0-0.5'	Solid	11/05/14 09:05	11/05/14 14:05
720-61033-4	S-13-1.5-2'	Solid	11/05/14 09:05	11/05/14 14:05
720-61033-5	S-14-0-0.5'	Solid	11/05/14 08:45	11/05/14 14:05
720-61033-6	S-14-1.5-2'	Solid	11/05/14 08:45	11/05/14 14:05
720-61033-7	S-15-0-0.5'	Solid	11/05/14 08:50	11/05/14 14:05
720-61033-8	S-15-1.5-2'	Solid	11/05/14 08:50	11/05/14 14:05
720-61033-9	S-16-0-0.5'	Solid	11/05/14 09:50	11/05/14 14:05
720-61033-10	S-16-1.5-2'	Solid	11/05/14 09:50	11/05/14 14:05
720-61033-11	S-17-0-0.5'	Solid	11/05/14 10:10	11/05/14 14:05
720-61033-12	S-17-1.5-2'	Solid	11/05/14 10:10	11/05/14 14:05
720-61033-13	S-18-0-0.5'	Solid	11/05/14 09:58	11/05/14 14:05
720-61033-14	S-18-1.5-2'	Solid	11/05/14 09:58	11/05/14 14:05
720-61033-15	S-19-0-0.5'	Solid	11/05/14 09:35	11/05/14 14:05
720-61033-16	S-19-1.5-2'	Solid	11/05/14 09:35	11/05/14 14:05
720-61033-17	S-20-0-0.5'	Solid	11/05/14 09:20	11/05/14 14:05
720-61033-18	S-20-1.5-2'	Solid	11/05/14 09:20	11/05/14 14:05
720-61033-19	S-21-0-0.5'	Solid	11/05/14 09:18	11/05/14 14:05
720-61033-20	S-21-1.5-2'	Solid	11/05/14 09:18	11/05/14 14:05
720-61033-21	S-22-0-0.5'	Solid	11/05/14 12:44	11/05/14 14:05
720-61033-22	S-22-1.5-2'	Solid	11/05/14 12:44	11/05/14 14:05
720-61033-23	S-23-0-0.5'	Solid	11/05/14 12:34	11/05/14 14:05
720-61033-24	S-23-1.5-2'	Solid	11/05/14 12:34	11/05/14 14:05
720-61033-25	S-24-0-0.5'	Solid	11/05/14 11:57	11/05/14 14:05
720-61033-26	S-24-1.5-2'	Solid	11/05/14 11:57	11/05/14 14:05
720-61033-27	S-25-0-0.5'	Solid	11/05/14 08:58	11/05/14 14:05
720-61033-28	S-25-1.5-25'	Solid	11/05/14 08:58	11/05/14 14:05
720-61033-29	S-26-0-0.5'	Solid	11/05/14 09:45	11/05/14 14:05
720-61033-30	S-26-1.5-25'	Solid	11/05/14 09:45	11/05/14 14:05
720-61033-31	S-27-0-0.5'	Solid	11/05/14 10:20	11/05/14 14:05
720-61033-32	S-27-1.5-2'	Solid	11/05/14 10:20	11/05/14 14:05
720-61033-33	S-28-0-0.5'	Solid	11/05/14 10:22	11/05/14 14:05
720-61033-34	S-28-1.5-2'	Solid	11/05/14 10:22	11/05/14 14:05
720-61033-35	S-29-0-0.5'	Solid	11/05/14 10:26	11/05/14 14:05
720-61033-36	S-29-1.5-2'	Solid	11/05/14 10:26	11/05/14 14:05

>>> Select a Laboratory <<<

#N/A  
#N/A  
#N/A  
#N/A

Chain of Custody Record  
720-61033

TestAmerica  
THE LEADER IN ENVIRONMENTAL TESTING  
157389

Regulatory Program:  OW  NPDES  RCRA  Other:

TestAmerica Laboratories, Inc.

Client Contact: Bureau Veritas NA, Inc. Project Manager:  CALENDIA DAVIS  WORKING DAVIS

2420 Camino Ramon #122 San Ramon, CA 94583 Phone: TAT: (inferred from Bldg) 2

925 428-2879 F: 925 478-0108 Project Name: Nursery

Site: San Lorenzo P O #

Analysis Turnaround Time:  2 weeks  1 week  2 days  1 day

Sample Identification	Sample Date	Sample Time	Sample Type (e-comp. matrix)	# of con.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	OCPs Method 8081A
S-2A 0-0.5'	11/5/2014	0833	G Soil	1	Y	X	
S-10A 0-0.5'	11/5/2014	0830	G Soil	1	Y	X	
S-13 0-0.5'	11/5/2014	0905	G Soil	1	X		
S-13 1.5-2'	11/5/2014	0905	G Soil	1	X		
S-14 0-0.5'	11/5/2014	0845	G Soil	1	X		
S-14 1.5-2'	11/5/2014	0845	G Soil	1	X		
S-15 0-0.5'	11/5/2014	0850	G Soil	1	X		
S-15 1.5-2'	11/5/2014	0850	G Soil	1	X		
S-16 0-0.5'	11/5/2014	0950	G Soil	1	X		
S-16 1.5-2'	11/5/2014	0950	G Soil	1	X		
S-17 0-0.5'	11/5/2014	1010	G Soil	1	X		
S-17 1.5-2'	11/5/2014	1010	G Soil	1	X		

Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-hazard ammable  San Injunct  Poison B  Unknown

Special Instructions/OC Requirements & Comments: ADVISE: OPEN SAMPLE LINER - END WITH RUSH

Quantity Seals Intact:  Yes  No

Relinquished by: Ken Carter

Relinquished by: Company: BUNA Date/Time: 11-5-14

Relinquished by: Company: Date/Time: Received in Laboratory by: Jovan Hernandez Date/Time: 11-5-14

COG No: 1 of 3 COCs

Sampler: For Lab Use Only: Walk-in Client: Lab Sampling: Lab I SNG No.:

Sample Specific Notes: Prepare this sample for MS & MSD (Report N/A) (mg/kg)

Prepare this sample for MS & MSD (Report N/A) (mg/kg)

Prepare this sample for MS & MSD (Report N/A) (mg/kg)

RUSH



720-61033 Chain of Custody

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return to Client  Disposed by Lab  Archive for 1 month

10.22



>>> Select a Laboratory <<<

#N/A  
#N/A  
#N/A  
#N/A

Chain of Custody Record  
**720-61033**

**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING  
TestAmerica Laboratories, Inc.

Regulatory Program:  DW  RCRA  CERCLA

Date: 11-5-14

Client Contact

Project Manager:

Site Contact: Don Ashton

Date:

COC No: 2 of 3 COCs

Bureau Vertus NA, Inc  
2430 Cantilino Ramon #122  
San Ramon, CA 94583

TS/Fax:  
Analysis Turnaround Time  
 CALIFORNIA DAYS  
 WORKING DAYS

Lab Contact: Mich Smith

Carrier:

Sampler:  
For Lab Use Only:  
Walk-to Client:  
Lab Sampling:  
Job / SDC No.:

325 428-2679 Phone  
E: 875-475-0106  
Project Name: Nursery  
Site: San Lorenzo  
P O #

TAI if different from Receipt  
 3 weeks  
 1 week  
 2 days  
 1 day

Filtered Sample (Y/N)  
Perform MS/MSD (Y/N)  
OCPs Method 8081A

Sample Specific Notes:

Sample Identification	Sample Date	Sample Time	Sample Type (Comp, Un-chem)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	OCPs Method 8081A
S-18 0-0.5	11/5/2014	0938	G	Soil	1			X
S-19 1.5-2	11/5/2014	0958	G	Soil	1			X
S-19 0-0.5	11/5/2014	0935	G	Soil	1			X
S-19 1.5-2	11/5/2014	0935	G	Soil	1			X
S-20 0-0.5	11/5/2014	0920	G	Soil	1			X
S-20 1.5-2	11/5/2014	0920	G	Soil	1			X
S-21 0-0.5	11/5/2014	0918	G	Soil	1			X
S-21 1.5-2	11/5/2014	0918	G	Soil	1			X
S-22 0-0.5	11/5/2014	1244	G	Soil	1			X
S-22 1.5-2	11/5/2014	1244	G	Soil	1			X
S-23 0-0.5	11/5/2014	1234	G	Soil	1			X
S-23 1.5-2	11/5/2014	1234	G	Soil	1			X

**RUSH**

Possible Hazard Identification: 1=lead, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH, 6= Other

Possible Hazard Identification: Have any samples from a listed EPA Hazardous Waste? Please list any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Special Instructions/OC Requirements & Comments:

Notes: *Plan samples live - end with answer ->*

Relinquished by: *Don Ashton*

Relinquished by: *Don Ashton*

Relinquished by: *Don Ashton*

Relinquished by: *Don Ashton*

Relinquished by: *Don Ashton*

>>> Select a Laboratory <<<

#N/A  
#N/A  
#N/A  
#N/A

*Per Smith*

Chain of Custody Record  
**720-610333**

**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING  
TestAmerica Laboratories, Inc.

Regulatory Program:  DW  WDES  RCRA  Other

COG No. 3 of 3 COGs

Client Contact Bureau Veritas NA, Inc. Project Manager: *Per Smith* Site Contact: Don Ashton Date: 11-5-14

2430 Camino Ramon #122 San Ramon, CA 94583 Phone T: 925 426-0106 FAX: 925 426-0106

Project Name: Nursery Site: San Lorenzo P O #

Analysis Turnaround Time:  CALENDAR DAYS  WORKING DAYS

LA1 if different from Day 2:  2 weeks  1 week  2 days  1 day

Sample Identification

Sample ID	Sample Date	Sample Time	Sample Type (Gross/Net)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	OCPs Method 8081A
S-24 0-0.5'	11/5/2014	1157	G	Soil	1			X
S-24 1.5-2'	11/5/2014	1157	G	Soil	1			X
S-25 0-0.5'	11/5/2014	0858	G	Soil	1			X
S-25 1.5-2'	11/5/2014	0858	G	Soil	1			X
S-26 0-0.5'	11/5/2014	0945	G	Soil	1			X
S-26 1.5-2'	11/5/2014	0945	G	Soil	1			X
S-27 0-0.5'	11/5/2014	1020	G	Soil	1			X
S-27 1.5-2'	11/5/2014	1020	G	Soil	1			X
S-28 0-0.5'	11/5/2014	1022	G	Soil	1			X
S-28 1.5-2'	11/5/2014	1022	G	Soil	1			X
S-28 0-0.5'	11/5/2014	1026	G	Soil	1			X
S-28 1.5-2'	11/5/2014	1026	G	Soil	1			X

Sample Specific Notes: **RUSH**

Preservation Used: 1=Ice; 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please list any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Special Instructions/OC Requirements & Comments:  Not-Hazard  Removable  Non-Hazard  Return to Client  Disposed by Lab  Archive for \_\_\_\_\_ Months

Note: Open sample line - end with arrow →

Quantity Sealed/Intact:  Yes  No

Requisitioned by: *Don Ashton* Company: *BNPA* Date/Time: *11-5-14 1405*

Requisitioned by: *Don Ashton* Company: *BNPA* Date/Time: *11-5-14 1405*

Received in Laboratory by: *Don Ashton* Date/Time: *11-5-14 1405*

Received by: *Don Ashton* Date/Time: *11-5-14 1405*

Received in Laboratory by: *Don Ashton* Date/Time: *11-5-14 1405*

Received by: *Don Ashton* Date/Time: *11-5-14 1405*

Received in Laboratory by: *Don Ashton* Date/Time: *11-5-14 1405*

Received by: *Don Ashton* Date/Time: *11-5-14 1405*

## Login Sample Receipt Checklist

Client: Bureau Veritas North America, Inc.

Job Number: 720-61033-1

**Login Number: 61033**

**List Source: TestAmerica Pleasanton**

**List Number: 1**

**Creator: Mullen, Joan**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



**Technical Report for**

**Bureau Veritas, Inc**

**Nursery, San Lorenzo**

**NURSERY, SAN LORENZO**

**Accutest Job Number: C37041**

**Sampling Date: 11/05/14**

**Report to:**

**Bureau Veritas, Inc**  
**2430 Camino Ramon, #122**  
**San Ramon, CA 94583**  
**don.ashton@us.bureauveritas.com**

**ATTN: Don Ashton**

**Total number of pages in report: 14**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.



**James J. Rhudy**  
**Lab Director**

**Client Service contact: Nutan Kabir 408-588-0200**

Certifications: CA (ELAP 2910) AK (UST-092) AZ (AZ0762) NV (CA00150) OR (CA300006) WA (C925)  
DoD ELAP (L-A-B L2242)

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Test results relate only to samples analyzed.

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### Sample Summary

Bureau Veritas, Inc

Job No: C37041

Nursery, San Lorenzo

Project No: NURSERY, SAN LORENZO

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
C37041-1	11/05/14	08:33	11/10/14	SO	Soil	61033-1 S-2A 0-0.5'
C37041-1D	11/05/14	08:33	11/10/14	SO	Soil Dup/MSD	61033-1 S-2A 0-0.5'
C37041-1S	11/05/14	08:33	11/10/14	SO	Soil Matrix Spike	61033-1 S-2A 0-0.5'
C37041-2	11/05/14	08:45	11/10/14	SO	Soil	61033-5 S-14 0-0.5'

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Soil samples reported on a dry weight basis unless otherwise indicated on result page.

## Summary of Hits

**Job Number:** C37041  
**Account:** Bureau Veritas, Inc  
**Project:** Nursery, San Lorenzo  
**Collected:** 11/05/14

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
<b>C37041-1</b>	<b>61033-1 S-2A 0-0.5'</b>					
Aldrin		10.4 J	33	4.0	ug/kg	SW846 8081A
Chlordane		1780	330	33	ug/kg	SW846 8081A
Dieldrin		350	20	6.0	ug/kg	SW846 8081A
4,4'-DDE		32.2 J	33	6.0	ug/kg	SW846 8081A
4,4'-DDT		69.0	33	5.0	ug/kg	SW846 8081A
Endrin <sup>a</sup>		9.9 J	33	6.0	ug/kg	SW846 8081A
Heptachlor		8.7 J	33	4.7	ug/kg	SW846 8081A
Heptachlor epoxide		18.1 J	33	5.0	ug/kg	SW846 8081A
<b>C37041-2</b>	<b>61033-5 S-14 0-0.5'</b>					
Aldrin		36.7	33	4.0	ug/kg	SW846 8081A
Chlordane		1520	330	33	ug/kg	SW846 8081A
Dieldrin		1400	20	6.0	ug/kg	SW846 8081A
4,4'-DDD <sup>a</sup>		11.7 J	33	7.0	ug/kg	SW846 8081A
4,4'-DDE		58.7	33	6.0	ug/kg	SW846 8081A
4,4'-DDT		379	33	5.0	ug/kg	SW846 8081A
Endrin <sup>a</sup>		35.7	33	6.0	ug/kg	SW846 8081A
Heptachlor		7.6 J	33	4.6	ug/kg	SW846 8081A

(a) Quantitation between primary and confirmation differed by > 40%. Lower value reported.

Sample Results

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Report of Analysis

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## Report of Analysis

<b>Client Sample ID:</b> 61033-1 S-2A 0-0.5'	
<b>Lab Sample ID:</b> C37041-1	<b>Date Sampled:</b> 11/05/14
<b>Matrix:</b> SO - Soil	<b>Date Received:</b> 11/10/14
<b>Method:</b> SW846 8081A SW846 3550B	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> Nursery, San Lorenzo	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	MM025305.D	10	11/10/14	RV	11/10/14	OP11171	GMM750
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.0 g	10.0 ml
Run #2		

## Pesticide PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	10.4	33	4.0	ug/kg	J
319-84-6	alpha-BHC	ND	33	3.7	ug/kg	
319-85-7	beta-BHC	ND	33	8.0	ug/kg	
319-86-8	delta-BHC	ND	33	4.0	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	33	4.0	ug/kg	
12789-03-6	Chlordane	1780	330	33	ug/kg	
60-57-1	Dieldrin	350	20	6.0	ug/kg	
72-54-8	4,4' -DDD	ND	33	7.0	ug/kg	
72-55-9	4,4' -DDE	32.2	33	6.0	ug/kg	J
50-29-3	4,4' -DDT	69.0	33	5.0	ug/kg	
72-20-8	Endrin <sup>b</sup>	9.9	33	6.0	ug/kg	J
7421-93-4	Endrin aldehyde	ND	33	6.0	ug/kg	
959-98-8	Endosulfan-I	ND	33	5.7	ug/kg	
33213-65-9	Endosulfan-II	ND	33	6.0	ug/kg	
1031-07-8	Endosulfan sulfate	ND	33	5.7	ug/kg	
76-44-8	Heptachlor	8.7	33	4.7	ug/kg	J
1024-57-3	Heptachlor epoxide	18.1	33	5.0	ug/kg	J
72-43-5	Methoxychlor	ND	33	5.3	ug/kg	
8001-35-2	Toxaphene	ND	330	67	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		49-127%
877-09-8	Tetrachloro-m-xylene	88%		49-127%
2051-24-3	Decachlorobiphenyl	92%		53-145%
2051-24-3	Decachlorobiphenyl	91%		53-145%

(a) All results reported on a wet weight basis.

(b) Quantitation between primary and confirmation differed by > 40%. Lower value reported.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> 61033-5 S-14 0-0.5'	
<b>Lab Sample ID:</b> C37041-2	<b>Date Sampled:</b> 11/05/14
<b>Matrix:</b> SO - Soil	<b>Date Received:</b> 11/10/14
<b>Method:</b> SW846 8081A SW846 3550B	<b>Percent Solids:</b> n/a <sup>a</sup>
<b>Project:</b> Nursery, San Lorenzo	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	MM025306.D	10	11/10/14	RV	11/10/14	OP11171	GMM750
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	10.0 ml
Run #2		

## Pesticide PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	36.7	33	4.0	ug/kg	
319-84-6	alpha-BHC	ND	33	3.7	ug/kg	
319-85-7	beta-BHC	ND	33	8.0	ug/kg	
319-86-8	delta-BHC	ND	33	4.0	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	33	4.0	ug/kg	
12789-03-6	Chlordane	1520	330	33	ug/kg	
60-57-1	Dieldrin	1400	20	6.0	ug/kg	
72-54-8	4,4'-DDD <sup>b</sup>	11.7	33	7.0	ug/kg	J
72-55-9	4,4'-DDE	58.7	33	6.0	ug/kg	
50-29-3	4,4'-DDT	379	33	5.0	ug/kg	
72-20-8	Endrin <sup>b</sup>	35.7	33	6.0	ug/kg	
7421-93-4	Endrin aldehyde	ND	33	6.0	ug/kg	
959-98-8	Endosulfan-I	ND	33	5.6	ug/kg	
33213-65-9	Endosulfan-II	ND	33	6.0	ug/kg	
1031-07-8	Endosulfan sulfate	ND	33	5.6	ug/kg	
76-44-8	Heptachlor	7.6	33	4.6	ug/kg	J
1024-57-3	Heptachlor epoxide	ND	33	5.0	ug/kg	
72-43-5	Methoxychlor	ND	33	5.3	ug/kg	
8001-35-2	Toxaphene	ND	330	66	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		49-127%
877-09-8	Tetrachloro-m-xylene	89%		49-127%
2051-24-3	Decachlorobiphenyl	96%		53-145%
2051-24-3	Decachlorobiphenyl	91%		53-145%

(a) All results reported on a wet weight basis.

(b) Quantitation between primary and confirmation differed by > 40%. Lower value reported.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Misc. Forms

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Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody

>>> Select a Laboratory <<<

ANIA  
BWA  
BWA  
BWA

# Chain of Custody Record

## 720-61033

### TestAmerica

157389

11/17/2014

Regulatory Program:  BW  HSES  RCRA  Other

TestAmerica Laboratories, Inc.

Client Contact: Burling Vistas NA, Inc. P&W Chem. no. 40-100 #122 San Ramon, CA 94583 Tel: 925-428-2579 Fax: 925-438-0100 Project Name: Property Site: San Lorenzo City: CA		Project Manager: Title:		Site Contact: Don Acilium Lab Contact: Mitch Kunkin		Date: 11-5-14		ERIC No: C-3-0003	
Analysis Turnaround Time: <input type="checkbox"/> STANDARD DAY <input checked="" type="checkbox"/> EXPEDITED DAY Test Address: Chem 1000 3 hours 1 week 2 days 1 day		Sample Identification		Sample Date		Sample Time		Sample Type	
1-61033-1		S-2A 0-0.1		11/5/2014		0833		Soil	
2		S-10A 0-0.5		11/5/2014		0830		Soil	
3		S-11 0-0.5		11/5/2014		0905		Soil	
4		S-18 1-0.2		11/5/2014		0905		Soil	
5		S-14 0-0.5		11/5/2014		0848		Soil	
6		S-19 1-0.2		11/5/2014		0928		Soil	
7		S-25 0-0.5		11/5/2014		0850		Soil	
8		S-16 1-0.2		11/5/2014		0950		Soil	
9		S-16 0-0.5		11/5/2014		0950		Soil	
10		S-16 1-0.2		11/5/2014		0950		Soil	
11		S-17 0-0.5		11/5/2014		1010		Soil	
12		S-17 1-0.2		11/5/2014		1010		Soil	
<p>Preservation: 0-100% 1-100% 2-100% 3-H2SO4 4-HNO3 5-NaOH 6-Other</p> <p>Final Site Use: <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Other</p> <p>Are any samples from a listed EPA Hazardous Waste? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No. If any EPA Waste Codes for the sample in the Comments Section of this lab is no debris of the sample.</p> <p>Sample Disposal: (A lab may be required if samples are retained longer than 1 month)</p> <p><input type="checkbox"/> Return to Client <input type="checkbox"/> Recycle <input type="checkbox"/> Solid Waste <input type="checkbox"/> Other <input checked="" type="checkbox"/> Incineration <input type="checkbox"/> Landfill <input type="checkbox"/> Other</p> <p>Special Instructions/Requirements/Comments: NOTE: OPEN SAMPLE LINER - END WITH ARROW →</p> <p>NOTE: BWA. CONCEPT STATIONS BEING ASSESSED S-2A 0-0.50 mg/kg DIBENZO S-10A 1-0.2 mg/kg DIBENZO</p> <p>Client Signature: <i>Don Acilium</i> Date: 11-5-14 Company: BWA Received by: <i>Don Acilium</i> Date: 11-5-14 Received in Laboratory by: <i>Don Acilium</i> Date: 11-5-14</p>									

# RUSH



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11-10-14 1650  
11/10/14 1730  
11-5-14  
11-5-14 1440 1405

## Accutest Laboratories Sample Receipt Summary

**Accutest Job Number:** C37041      **Client:** TEST AMERICA      **Project:** BUREAU VERITAS  
**Date / Time Received:** 11/10/2014 5:36:00 PM      **Delivery Method:** Accutest Courier      **Airbill #s:**

**Cooler Temps (Initial/Adjusted):** #1: (3.7/3.7):

<u>Cooler Security</u>	<u>Y or N</u>		<u>Y or N</u>	
1. Custody Seals Present:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact:	<input type="checkbox"/>	<input type="checkbox"/>	4. SmpI Dates/Time OK	<input checked="" type="checkbox"/> <input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	IR1;	
3. Cooler media:	Ice (Bag)	
4. No. Coolers:	1	

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:	Intact		

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments

4.1  
4

## GC Semi-volatiles

5

### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

# Method Blank Summary

**Job Number:** C37041  
**Account:** BVCASR Bureau Veritas, Inc  
**Project:** Nursery, San Lorenzo

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11171-MB	MM025314.D	1	11/10/14	RV	11/10/14	OP11171	GMM750

The QC reported here applies to the following samples:

Method: SW846 8081A

C37041-1, C37041-2

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	3.3	0.40	ug/kg	
319-84-6	alpha-BHC	ND	3.3	0.37	ug/kg	
319-85-7	beta-BHC	ND	3.3	0.80	ug/kg	
319-86-8	delta-BHC	ND	3.3	0.40	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	3.3	0.40	ug/kg	
12789-03-6	Chlordane	ND	33	3.3	ug/kg	
60-57-1	Dieldrin	ND	2.0	0.60	ug/kg	
72-54-8	4,4' -DDD	ND	3.3	0.70	ug/kg	
72-55-9	4,4' -DDE	ND	3.3	0.60	ug/kg	
50-29-3	4,4' -DDT	ND	3.3	0.50	ug/kg	
72-20-8	Endrin	ND	3.3	0.60	ug/kg	
7421-93-4	Endrin aldehyde	ND	3.3	0.60	ug/kg	
959-98-8	Endosulfan-I	ND	3.3	0.57	ug/kg	
33213-65-9	Endosulfan-II	ND	3.3	0.60	ug/kg	
1031-07-8	Endosulfan sulfate	ND	3.3	0.57	ug/kg	
76-44-8	Heptachlor	ND	3.3	0.47	ug/kg	
1024-57-3	Heptachlor epoxide	ND	3.3	0.50	ug/kg	
72-43-5	Methoxychlor	ND	3.3	0.53	ug/kg	
8001-35-2	Toxaphene	ND	33	6.7	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
877-09-8	Tetrachloro-m-xylene	107%	49-127%
877-09-8	Tetrachloro-m-xylene	108%	49-127%
2051-24-3	Decachlorobiphenyl	92%	53-145%
2051-24-3	Decachlorobiphenyl	96%	53-145%

5.1.1  
5

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** C37041  
**Account:** BVCASR Bureau Veritas, Inc  
**Project:** Nursery, San Lorenzo

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11171-BS	MM025309.D	1	11/10/14	RV	11/10/14	OP11171	GMM750
OP11171-BSD	MM025310.D	1	11/10/14	RV	11/10/14	OP11171	GMM750

The QC reported here applies to the following samples:

Method: SW846 8081A

C37041-1, C37041-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	33.3	34.2	103	34.7	104	1	74-124/20
319-84-6	alpha-BHC	33.3	37.6	113	38.0	114	1	70-127/20
319-85-7	beta-BHC	33.3	38.8	116	38.8	116	0	76-137/20
319-86-8	delta-BHC	33.3	39.3	118	40.1	120	2	69-132/20
58-89-9	gamma-BHC (Lindane)	33.3	37.5	113	38.1	114	2	75-130/20
60-57-1	Dieldrin	33.3	35.5	107	36.6	110	3	75-135/13
72-54-8	4,4'-DDD	33.3	33.9	102	36.0	108	6	74-134/20
72-55-9	4,4'-DDE	33.3	35.2	106	36.2	109	3	73-131/20
50-29-3	4,4'-DDT	33.3	37.7	113	37.6	113	0	66-129/20
72-20-8	Endrin	33.3	37.7	113	39.6	119	5	80-143/20
7421-93-4	Endrin aldehyde	33.3	31.5	95	32.3	97	3	71-133/20
959-98-8	Endosulfan-I	33.3	34.8	104	35.7	107	3	77-135/20
33213-65-9	Endosulfan-II	33.3	35.6	107	35.3	106	1	75-134/20
1031-07-8	Endosulfan sulfate	33.3	34.8	104	35.6	107	2	69-137/20
76-44-8	Heptachlor	33.3	37.4	112	38.1	114	2	82-132/20
1024-57-3	Heptachlor epoxide	33.3	35.2	106	35.9	108	2	79-127/20
72-43-5	Methoxychlor	33.3	38.6	116	39.8	119	3	70-137/20

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	110%	103%	49-127%
877-09-8	Tetrachloro-m-xylene	111%	103%	49-127%
2051-24-3	Decachlorobiphenyl	93%	91%	53-145%
2051-24-3	Decachlorobiphenyl	92%	92%	53-145%

\* = Outside of Control Limits.

5.2.1  
 5



# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** C37041  
**Account:** BVCASR Bureau Veritas, Inc  
**Project:** Nursery, San Lorenzo

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11171-MS2	MM025307.D	1000	11/10/14	RV	11/10/14	OP11171	GMM750
OP11171-MSD2	MM025308.D	1000	11/10/14	RV	11/10/14	OP11171	GMM750
C37041-1	MM025305.D	10	11/10/14	RV	11/10/14	OP11171	GMM750

The QC reported here applies to the following samples:

Method: SW846 8081A

C37041-1, C37041-2

CAS No.	Compound	C37041-1 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	10.4	J	45700	42200	92	45700	42700	93	1	74-124/20
319-84-6	alpha-BHC	ND		45700	43900	96	45700	44100	97	0	70-127/20
319-85-7	beta-BHC	ND		45700	42300	93	45700	42900	94	1	76-137/20
319-86-8	delta-BHC	ND		45700	46500	102	45700	47000	103	1	69-132/20
58-89-9	gamma-BHC (Lindane)	ND		45700	44700	98	45700	45000	99	1	75-130/20
60-57-1	Dieldrin	350		45700	43800	95	45700	44500	97	2	45-132/24
72-54-8	4,4'-DDD	ND		45700	42400	93	45700	43100	94	2	74-134/20
72-55-9	4,4'-DDE	32.2	J	45700	42900	94	45700	43400	95	1	73-131/20
50-29-3	4,4'-DDT	69.0		45700	37700	82	45700	37800	83	0	66-129/20
72-20-8	Endrin	9.9	J	45700	45400	99	45700	46200	101	2	80-143/20
7421-93-4	Endrin aldehyde	ND		45700	38600	85	45700	39300	86	2	71-133/20
959-98-8	Endosulfan-I	ND		45700	42800	94	45700	43200	95	1	77-135/20
33213-65-9	Endosulfan-II	ND		45700	40500	89	45700	40900	90	1	75-134/20
1031-07-8	Endosulfan sulfate	ND		45700	40700	89	45700	41000	90	1	69-137/20
76-44-8	Heptachlor	8.7	J	45700	43800	96	45700	44000	96	0	82-132/20
1024-57-3	Heptachlor epoxide	18.1	J	45700	41500	91	45700	42300	93	2	79-127/20
72-43-5	Methoxychlor	ND		45700	41300	90	45700	42500	93	3	70-137/20

CAS No.	Surrogate Recoveries	MS	MSD	C37041-1	Limits
877-09-8	Tetrachloro-m-xylene	62%	51%	90%	49-127%
877-09-8	Tetrachloro-m-xylene	64%	72%	88%	49-127%
2051-24-3	Decachlorobiphenyl	88%	79%	92%	53-145%
2051-24-3	Decachlorobiphenyl	115%	126%	91%	53-145%

\* = Outside of Control Limits.

5.3.1  
 5



**APPENDIX E**

**ANALYTICAL LABORATORY REPORTS**

**SOIL VAPOR**



**Curtis & Tompkins, Ltd.**  
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 260366  
ANALYTICAL REPORT**

Bureau Veritas North America  
2430 Camino Ramon  
San Ramon, Ca 94583

Project : 33114-014115  
Location : Oakland Diocese  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
SB-3B-SV	260366-001
SB-3C-SV	260366-002
SB-4A-SV	260366-003

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Mike J. Dahlquist  
Project Manager  
mike.dahlquist@ctberk.com

Date: 09/05/2014

CA ELAP# 2896, NELAP# 4044-001

**CASE NARRATIVE**

Laboratory number: 260366  
Client: Bureau Veritas North America  
Project: 33114-014115  
Location: Oakland Diocese  
Request Date: 08/28/14  
Samples Received: 08/28/14

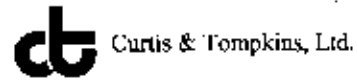
This data package contains sample and QC results for three air samples, requested for the above referenced project on 08/28/14. The samples were received cold and intact.

**Volatile Organics in Air by MS (EPA TO-15):**

High recovery was observed for vinyl acetate in the BSD for batch 214963; the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples. No other analytical problems were encountered.



**COOLER RECEIPT CHECKLIST**



Login # 26536 Date Received 8/28/14 Number of coolers 0  
 Client Clayton Project Oakland Diocese  
 Date Opened 8/29/14 By (print) JH (sign) [Signature]  
 Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES  NO

Shipping info \_\_\_\_\_

2A. Were custody seals present? ....  YES (circle) on cooler on samples  NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO  N/A

3. Were custody papers dry and intact when received? \_\_\_\_\_  YES NO

4. Were custody papers filled out properly (ink, signed, etc)? \_\_\_\_\_  YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) \_\_\_\_\_  YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

- Bubble Wrap
- Foam blocks
- Bags
- None
- Cloth material
- Cardboard
- Styrofoam
- Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used:  Wet  Blue/Gel  None Temp(°C) \_\_\_\_\_

Samples Received on ice & cold without a temperature blank

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES  NO  
 If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? \_\_\_\_\_  YES NO

10. Are there any missing / extra samples? \_\_\_\_\_ YES  NO

11. Are samples in the appropriate containers for indicated tests? \_\_\_\_\_  YES NO

12. Are sample labels present, in good condition and complete? \_\_\_\_\_  YES NO

13. Do the sample labels agree with custody papers? \_\_\_\_\_  YES NO

14. Was sufficient amount of sample sent for tests requested? \_\_\_\_\_ YES  NO

15. Are the samples appropriately preserved? \_\_\_\_\_ YES NO  N/A

16. Did you check preservatives for all bottles for each sample? \_\_\_\_\_ YES NO  N/A

17. Did you document your preservative check? \_\_\_\_\_ YES NO  N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO  N/A

19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO  N/A

20. Are bubbles > 6mm absent in VOA samples? \_\_\_\_\_ YES NO  N/A

21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES  NO

If YES; Who was called? \_\_\_\_\_ Date called \_\_\_\_\_ By \_\_\_\_\_ Date \_\_\_\_\_

**COMMENTS**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### Detections Summary for 260366

Results for any subcontracted analyses are not included in this summary.

Client : Bureau Veritas North America  
 Project : 33114-014115  
 Location : Oakland Diocese

Client Sample ID : SB-3B-SV

Laboratory Sample ID :

260366-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Acetone	12		3.5	0.26	ppbv	As Recd	1.750	EPA TO-15	METHOD
Carbon Disulfide	3.1		0.88	0.18	ppbv	As Recd	1.750	EPA TO-15	METHOD
n-Hexane	6.6		0.88	0.18	ppbv	As Recd	1.750	EPA TO-15	METHOD
2-Butanone	4.0		0.88	0.18	ppbv	As Recd	1.750	EPA TO-15	METHOD
Tetrahydrofuran	1.7		0.88	0.18	ppbv	As Recd	1.750	EPA TO-15	METHOD
Cyclohexane	50		0.88	0.18	ppbv	As Recd	1.750	EPA TO-15	METHOD
Benzene	13		0.88	0.038	ppbv	As Recd	1.750	EPA TO-15	METHOD
n-Heptane	9.3		0.88	0.18	ppbv	As Recd	1.750	EPA TO-15	METHOD
Toluene	130		0.88	0.18	ppbv	As Recd	1.750	EPA TO-15	METHOD
Ethylbenzene	12		0.88	0.18	ppbv	As Recd	1.750	EPA TO-15	METHOD
m,p-Xylenes	52		0.88	0.18	ppbv	As Recd	1.750	EPA TO-15	METHOD
o-Xylene	14		0.88	0.18	ppbv	As Recd	1.750	EPA TO-15	METHOD
4-Ethyltoluene	2.8		0.88	0.18	ppbv	As Recd	1.750	EPA TO-15	METHOD
1,3,5-Trimethylbenzene	2.1		0.88	0.18	ppbv	As Recd	1.750	EPA TO-15	METHOD
1,2,4-Trimethylbenzene	6.6		0.88	0.18	ppbv	As Recd	1.750	EPA TO-15	METHOD

Client Sample ID : SB-3C-SV

Laboratory Sample ID :

260366-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Acetone	8.3		7.0	0.51	ppbv	As Recd	3.480	EPA TO-15	METHOD
Carbon Disulfide	8.8		1.7	0.35	ppbv	As Recd	3.480	EPA TO-15	METHOD
n-Hexane	8.2		1.7	0.35	ppbv	As Recd	3.480	EPA TO-15	METHOD
2-Butanone	2.6		1.7	0.35	ppbv	As Recd	3.480	EPA TO-15	METHOD
1,1,1-Trichloroethane	5.1		1.7	0.35	ppbv	As Recd	3.480	EPA TO-15	METHOD
Cyclohexane	85		1.7	0.35	ppbv	As Recd	3.480	EPA TO-15	METHOD
Benzene	21		1.7	0.076	ppbv	As Recd	3.480	EPA TO-15	METHOD
n-Heptane	13		1.7	0.35	ppbv	As Recd	3.480	EPA TO-15	METHOD
Toluene	190		1.7	0.35	ppbv	As Recd	3.480	EPA TO-15	METHOD
Ethylbenzene	18		1.7	0.35	ppbv	As Recd	3.480	EPA TO-15	METHOD
m,p-Xylenes	80		1.7	0.35	ppbv	As Recd	3.480	EPA TO-15	METHOD
o-Xylene	21		1.7	0.35	ppbv	As Recd	3.480	EPA TO-15	METHOD
4-Ethyltoluene	3.9		1.7	0.35	ppbv	As Recd	3.480	EPA TO-15	METHOD
1,3,5-Trimethylbenzene	2.9		1.7	0.35	ppbv	As Recd	3.480	EPA TO-15	METHOD
1,2,4-Trimethylbenzene	9.6		1.7	0.35	ppbv	As Recd	3.480	EPA TO-15	METHOD



Client Sample ID : SB-4A-SV

Laboratory Sample ID :

260366-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Acetone	8.0		3.7	0.27	ppbv	As Recd	1.840	EPA TO-15	METHOD
n-Hexane	2.1		0.92	0.18	ppbv	As Recd	1.840	EPA TO-15	METHOD
2-Butanone	2.7		0.92	0.18	ppbv	As Recd	1.840	EPA TO-15	METHOD
Cyclohexane	24		0.92	0.18	ppbv	As Recd	1.840	EPA TO-15	METHOD
Benzene	5.0		0.92	0.040	ppbv	As Recd	1.840	EPA TO-15	METHOD
n-Heptane	3.9		0.92	0.18	ppbv	As Recd	1.840	EPA TO-15	METHOD
Toluene	51		0.92	0.18	ppbv	As Recd	1.840	EPA TO-15	METHOD
Ethylbenzene	5.1		0.92	0.18	ppbv	As Recd	1.840	EPA TO-15	METHOD
m,p-Xylenes	22		0.92	0.18	ppbv	As Recd	1.840	EPA TO-15	METHOD
o-Xylene	5.6		0.92	0.18	ppbv	As Recd	1.840	EPA TO-15	METHOD
4-Ethyltoluene	1.3		0.92	0.18	ppbv	As Recd	1.840	EPA TO-15	METHOD
1,2,4-Trimethylbenzene	2.7		0.92	0.18	ppbv	As Recd	1.840	EPA TO-15	METHOD

### Volatile Organics in Air

Lab #:	260366	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115	Analysis:	EPA TO-15
Field ID:	SB-3B-SV	Diln Fac:	1.750
Lab ID:	260366-001	Batch#:	214963
Matrix:	Air	Sampled:	08/28/14
Units (V):	ppbv	Received:	08/28/14
Units (M):	ug/m3	Analyzed:	09/01/14

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	0.88	ND	4.3
Freon 114	ND	0.88	ND	6.1
Chloromethane	ND	0.88	ND	1.8
Vinyl Chloride	ND	0.88	ND	2.2
1,3-Butadiene	ND	0.88	ND	1.9
Bromomethane	ND	0.88	ND	3.4
Chloroethane	ND	0.88	ND	2.3
Trichlorofluoromethane	ND	0.88	ND	4.9
Acrolein	ND	3.5	ND	8.0
1,1-Dichloroethene	ND	0.88	ND	3.5
Freon 113	ND	0.88	ND	6.7
Acetone	12	3.5	28	8.3
Carbon Disulfide	3.1	0.88	9.6	2.7
Isopropanol	ND	3.5	ND	8.6
Methylene Chloride	ND	0.88	ND	3.0
trans-1,2-Dichloroethene	ND	0.88	ND	3.5
MTBE	ND	0.88	ND	3.2
n-Hexane	6.6	0.88	23	3.1
1,1-Dichloroethane	ND	0.88	ND	3.5
Vinyl Acetate	ND	0.88	ND	3.1
cis-1,2-Dichloroethene	ND	0.88	ND	3.5
2-Butanone	4.0	0.88	12	2.6
Ethyl Acetate	ND	0.88	ND	3.2
Tetrahydrofuran	1.7	0.88	5.1	2.6
Chloroform	ND	0.88	ND	4.3
1,1,1-Trichloroethane	ND	0.88	ND	4.8
Cyclohexane	50	0.88	170	3.0
Carbon Tetrachloride	ND	0.88	ND	5.5
Benzene	13	0.88	42	2.8
1,2-Dichloroethane	ND	0.88	ND	3.5
n-Heptane	9.3	0.88	38	3.6
Trichloroethene	ND	0.88	ND	4.7
1,2-Dichloropropane	ND	0.88	ND	4.0
Bromodichloromethane	ND	0.88	ND	5.9
cis-1,3-Dichloropropene	ND	0.88	ND	4.0

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	260366	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115	Analysis:	EPA TO-15
Field ID:	SB-3B-SV	Diln Fac:	1.750
Lab ID:	260366-001	Batch#:	214963
Matrix:	Air	Sampled:	08/28/14
Units (V):	ppbv	Received:	08/28/14
Units (M):	ug/m3	Analyzed:	09/01/14

Analyte	Result (V)	RL	Result (M)	RL
4-Methyl-2-Pentanone	ND	0.88	ND	3.6
Toluene	130	0.88	490	3.3
trans-1,3-Dichloropropene	ND	0.88	ND	4.0
1,1,2-Trichloroethane	ND	0.88	ND	4.8
Tetrachloroethene	ND	0.88	ND	5.9
2-Hexanone	ND	0.88	ND	3.6
Dibromochloromethane	ND	0.88	ND	7.5
1,2-Dibromoethane	ND	0.88	ND	6.7
Chlorobenzene	ND	0.88	ND	4.0
Ethylbenzene	12	0.88	51	3.8
m,p-Xylenes	52	0.88	230	3.8
o-Xylene	14	0.88	63	3.8
Styrene	ND	0.88	ND	3.7
Bromoform	ND	0.88	ND	9.0
1,1,2,2-Tetrachloroethane	ND	0.88	ND	6.0
4-Ethyltoluene	2.8	0.88	14	4.3
1,3,5-Trimethylbenzene	2.1	0.88	10	4.3
1,2,4-Trimethylbenzene	6.6	0.88	32	4.3
1,3-Dichlorobenzene	ND	0.88	ND	5.3
1,4-Dichlorobenzene	ND	0.88	ND	5.3
Benzyl chloride	ND	0.88	ND	4.5
1,2-Dichlorobenzene	ND	0.88	ND	5.3
1,2,4-Trichlorobenzene	ND	0.88	ND	6.5
Hexachlorobutadiene	ND	0.88	ND	9.3
Naphthalene	ND	3.5	ND	18

Surrogate	%REC	Limits
Bromofluorobenzene	93	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	260366	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115	Analysis:	EPA TO-15
Field ID:	SB-3C-SV	Diln Fac:	3.480
Lab ID:	260366-002	Batch#:	214934
Matrix:	Air	Sampled:	08/28/14
Units (V):	ppbv	Received:	08/28/14
Units (M):	ug/m3	Analyzed:	08/29/14

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	1.7	ND	8.6
Freon 114	ND	1.7	ND	12
Chloromethane	ND	1.7	ND	3.6
Vinyl Chloride	ND	1.7	ND	4.4
1,3-Butadiene	ND	1.7	ND	3.8
Bromomethane	ND	1.7	ND	6.8
Chloroethane	ND	1.7	ND	4.6
Trichlorofluoromethane	ND	1.7	ND	9.8
Acrolein	ND	7.0	ND	16
1,1-Dichloroethene	ND	1.7	ND	6.9
Freon 113	ND	1.7	ND	13
Acetone	8.3	7.0	20	17
Carbon Disulfide	8.8	1.7	27	5.4
Isopropanol	ND	7.0	ND	17
Methylene Chloride	ND	1.7	ND	6.0
trans-1,2-Dichloroethene	ND	1.7	ND	6.9
MTBE	ND	1.7	ND	6.3
n-Hexane	8.2	1.7	29	6.1
1,1-Dichloroethane	ND	1.7	ND	7.0
Vinyl Acetate	ND	1.7	ND	6.1
cis-1,2-Dichloroethene	ND	1.7	ND	6.9
2-Butanone	2.6	1.7	7.8	5.1
Ethyl Acetate	ND	1.7	ND	6.3
Tetrahydrofuran	ND	1.7	ND	5.1
Chloroform	ND	1.7	ND	8.5
1,1,1-Trichloroethane	5.1	1.7	28	9.5
Cyclohexane	85	1.7	290	6.0
Carbon Tetrachloride	ND	1.7	ND	11
Benzene	21	1.7	67	5.6
1,2-Dichloroethane	ND	1.7	ND	7.0
n-Heptane	13	1.7	55	7.1
Trichloroethene	ND	1.7	ND	9.4
1,2-Dichloropropane	ND	1.7	ND	8.0
Bromodichloromethane	ND	1.7	ND	12
cis-1,3-Dichloropropene	ND	1.7	ND	7.9

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	260366	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115	Analysis:	EPA TO-15
Field ID:	SB-3C-SV	Diln Fac:	3.480
Lab ID:	260366-002	Batch#:	214934
Matrix:	Air	Sampled:	08/28/14
Units (V):	ppbv	Received:	08/28/14
Units (M):	ug/m3	Analyzed:	08/29/14

Analyte	Result (V)	RL	Result (M)	RL
4-Methyl-2-Pentanone	ND	1.7	ND	7.1
Toluene	190	1.7	720	6.6
trans-1,3-Dichloropropene	ND	1.7	ND	7.9
1,1,2-Trichloroethane	ND	1.7	ND	9.5
Tetrachloroethene	ND	1.7	ND	12
2-Hexanone	ND	1.7	ND	7.1
Dibromochloromethane	ND	1.7	ND	15
1,2-Dibromoethane	ND	1.7	ND	13
Chlorobenzene	ND	1.7	ND	8.0
Ethylbenzene	18	1.7	80	7.6
m,p-Xylenes	80	1.7	350	7.6
o-Xylene	21	1.7	90	7.6
Styrene	ND	1.7	ND	7.4
Bromoform	ND	1.7	ND	18
1,1,2,2-Tetrachloroethane	ND	1.7	ND	12
4-Ethyltoluene	3.9	1.7	19	8.6
1,3,5-Trimethylbenzene	2.9	1.7	14	8.6
1,2,4-Trimethylbenzene	9.6	1.7	47	8.6
1,3-Dichlorobenzene	ND	1.7	ND	10
1,4-Dichlorobenzene	ND	1.7	ND	10
Benzyl chloride	ND	1.7	ND	9.0
1,2-Dichlorobenzene	ND	1.7	ND	10
1,2,4-Trichlorobenzene	ND	1.7	ND	13
Hexachlorobutadiene	ND	1.7	ND	19
Naphthalene	ND	7.0	ND	36

Surrogate	%REC	Limits
Bromofluorobenzene	89	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	260366	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115	Analysis:	EPA TO-15
Field ID:	SB-4A-SV	Diln Fac:	1.840
Lab ID:	260366-003	Batch#:	214963
Matrix:	Air	Sampled:	08/28/14
Units (V):	ppbv	Received:	08/28/14
Units (M):	ug/m3	Analyzed:	09/01/14

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	0.92	ND	4.5
Freon 114	ND	0.92	ND	6.4
Chloromethane	ND	0.92	ND	1.9
Vinyl Chloride	ND	0.92	ND	2.4
1,3-Butadiene	ND	0.92	ND	2.0
Bromomethane	ND	0.92	ND	3.6
Chloroethane	ND	0.92	ND	2.4
Trichlorofluoromethane	ND	0.92	ND	5.2
Acrolein	ND	3.7	ND	8.4
1,1-Dichloroethene	ND	0.92	ND	3.6
Freon 113	ND	0.92	ND	7.1
Acetone	8.0	3.7	19	8.7
Carbon Disulfide	ND	0.92	ND	2.9
Isopropanol	ND	3.7	ND	9.0
Methylene Chloride	ND	0.92	ND	3.2
trans-1,2-Dichloroethene	ND	0.92	ND	3.6
MTBE	ND	0.92	ND	3.3
n-Hexane	2.1	0.92	7.2	3.2
1,1-Dichloroethane	ND	0.92	ND	3.7
Vinyl Acetate	ND	0.92	ND	3.2
cis-1,2-Dichloroethene	ND	0.92	ND	3.6
2-Butanone	2.7	0.92	7.9	2.7
Ethyl Acetate	ND	0.92	ND	3.3
Tetrahydrofuran	ND	0.92	ND	2.7
Chloroform	ND	0.92	ND	4.5
1,1,1-Trichloroethane	ND	0.92	ND	5.0
Cyclohexane	24	0.92	82	3.2
Carbon Tetrachloride	ND	0.92	ND	5.8
Benzene	5.0	0.92	16	2.9
1,2-Dichloroethane	ND	0.92	ND	3.7
n-Heptane	3.9	0.92	16	3.8
Trichloroethene	ND	0.92	ND	4.9
1,2-Dichloropropane	ND	0.92	ND	4.3
Bromodichloromethane	ND	0.92	ND	6.2
cis-1,3-Dichloropropene	ND	0.92	ND	4.2

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	260366	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115	Analysis:	EPA TO-15
Field ID:	SB-4A-SV	Diln Fac:	1.840
Lab ID:	260366-003	Batch#:	214963
Matrix:	Air	Sampled:	08/28/14
Units (V):	ppbv	Received:	08/28/14
Units (M):	ug/m3	Analyzed:	09/01/14

Analyte	Result (V)	RL	Result (M)	RL
4-Methyl-2-Pentanone	ND	0.92	ND	3.8
Toluene	51	0.92	190	3.5
trans-1,3-Dichloropropene	ND	0.92	ND	4.2
1,1,2-Trichloroethane	ND	0.92	ND	5.0
Tetrachloroethene	ND	0.92	ND	6.2
2-Hexanone	ND	0.92	ND	3.8
Dibromochloromethane	ND	0.92	ND	7.8
1,2-Dibromoethane	ND	0.92	ND	7.1
Chlorobenzene	ND	0.92	ND	4.2
Ethylbenzene	5.1	0.92	22	4.0
m,p-Xylenes	22	0.92	94	4.0
o-Xylene	5.6	0.92	24	4.0
Styrene	ND	0.92	ND	3.9
Bromoform	ND	0.92	ND	9.5
1,1,2,2-Tetrachloroethane	ND	0.92	ND	6.3
4-Ethyltoluene	1.3	0.92	6.2	4.5
1,3,5-Trimethylbenzene	ND	0.92	ND	4.5
1,2,4-Trimethylbenzene	2.7	0.92	13	4.5
1,3-Dichlorobenzene	ND	0.92	ND	5.5
1,4-Dichlorobenzene	ND	0.92	ND	5.5
Benzyl chloride	ND	0.92	ND	4.8
1,2-Dichlorobenzene	ND	0.92	ND	5.5
1,2,4-Trichlorobenzene	ND	0.92	ND	6.8
Hexachlorobutadiene	ND	0.92	ND	9.8
Naphthalene	ND	3.7	ND	19

Surrogate	%REC	Limits
Bromofluorobenzene	90	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units





**Batch QC Report**

<b>Volatile Organics in Air</b>			
Lab #:	260366	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	214934
Units (V):	ppbv	Analyzed:	08/29/14
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits
cis-1,3-Dichloropropene	10.00	9.379	94	70-130
4-Methyl-2-Pentanone	10.00	9.576	96	70-130
Toluene	10.00	9.339	93	70-130
trans-1,3-Dichloropropene	10.00	9.519	95	70-130
1,1,2-Trichloroethane	10.00	10.43	104	70-130
Tetrachloroethene	10.00	9.604	96	70-130
2-Hexanone	10.00	9.039	90	70-130
Dibromochloromethane	10.00	9.043	90	70-130
1,2-Dibromoethane	10.00	10.25	102	70-130
Chlorobenzene	10.00	8.404	84	70-130
Ethylbenzene	10.00	8.655	87	70-130
m,p-Xylenes	20.00	18.27	91	70-130
o-Xylene	10.00	9.251	93	70-130
Styrene	10.00	7.625	76	70-130
Bromoform	10.00	8.005	80	70-130
1,1,2,2-Tetrachloroethane	10.00	9.668	97	70-130
4-Ethyltoluene	10.00	10.46	105	70-130
1,3,5-Trimethylbenzene	10.00	10.08	101	70-130
1,2,4-Trimethylbenzene	10.00	11.05	111	70-130
1,3-Dichlorobenzene	10.00	9.343	93	70-130
1,4-Dichlorobenzene	10.00	9.441	94	70-130
Benzyl chloride	10.00	8.799	88	70-130
1,2-Dichlorobenzene	10.00	9.520	95	70-130
1,2,4-Trichlorobenzene	10.00	9.945	99	62-130
Hexachlorobutadiene	10.00	9.141	91	68-130
Naphthalene	10.00	10.54	105	54-136

Surrogate	%REC	Limits
Bromofluorobenzene	99	70-130

RPD= Relative Percent Difference

Result V= Result in volume units

## Batch QC Report

Volatile Organics in Air			
Lab #:	260366	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	214934
Units (V):	ppbv	Analyzed:	08/29/14
Diln Fac:	1.000		

Type: BSD Lab ID: QC755673

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
Freon 12	10.00	9.971	100	70-130	4	20
Freon 114	10.00	8.869	89	70-130	1	20
Chloromethane	10.00	10.96	110	70-130	2	27
Vinyl Chloride	10.00	10.04	100	70-130	2	23
1,3-Butadiene	10.00	8.349	83	70-130	3	21
Bromomethane	10.00	11.00	110	70-130	2	20
Chloroethane	10.00	9.026	90	70-130	3	20
Trichlorofluoromethane	10.00	10.42	104	70-130	2	20
Acrolein	10.00	11.39	114	62-130	1	31
1,1-Dichloroethene	10.00	9.703	97	70-130	2	20
Freon 113	10.00	10.28	103	70-130	2	23
Acetone	10.00	7.976	80	67-130	1	20
Carbon Disulfide	10.00	8.625	86	70-130	0	20
Isopropanol	10.00	7.955	80	60-130	13	21
Methylene Chloride	10.00	8.758	88	68-130	1	23
trans-1,2-Dichloroethene	10.00	9.720	97	70-130	1	20
MTBE	10.00	9.533	95	70-130	2	20
n-Hexane	10.00	9.555	96	70-130	3	20
1,1-Dichloroethane	10.00	9.624	96	70-130	2	20
Vinyl Acetate	10.00	12.05	121	70-130	2	21
cis-1,2-Dichloroethene	10.00	9.454	95	70-130	1	20
2-Butanone	10.00	8.843	88	70-130	0	20
Ethyl Acetate	10.00	9.413	94	70-130	1	20
Tetrahydrofuran	10.00	9.250	93	70-130	5	20
Chloroform	10.00	9.802	98	70-130	1	20
1,1,1-Trichloroethane	10.00	9.623	96	70-130	0	20
Cyclohexane	10.00	9.589	96	70-130	2	20
Carbon Tetrachloride	10.00	9.316	93	70-130	1	20
Benzene	10.00	9.194	92	70-130	1	20
1,2-Dichloroethane	10.00	9.173	92	70-130	1	20
n-Heptane	10.00	8.732	87	70-130	4	20
Trichloroethene	10.00	9.111	91	70-130	3	20
1,2-Dichloropropane	10.00	9.306	93	70-130	2	20
Bromodichloromethane	10.00	9.124	91	70-130	2	20

RPD= Relative Percent Difference

Result V= Result in volume units

**Batch QC Report**

<b>Volatile Organics in Air</b>			
Lab #:	260366	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	214934
Units (V):	ppbv	Analyzed:	08/29/14
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
cis-1,3-Dichloropropene	10.00	9.488	95	70-130	1	20
4-Methyl-2-Pentanone	10.00	9.814	98	70-130	2	20
Toluene	10.00	9.166	92	70-130	2	23
trans-1,3-Dichloropropene	10.00	9.815	98	70-130	3	20
1,1,2-Trichloroethane	10.00	9.837	98	70-130	6	20
Tetrachloroethene	10.00	9.253	93	70-130	4	20
2-Hexanone	10.00	9.033	90	70-130	0	21
Dibromochloromethane	10.00	8.708	87	70-130	4	20
1,2-Dibromoethane	10.00	9.643	96	70-130	6	20
Chlorobenzene	10.00	8.094	81	70-130	4	21
Ethylbenzene	10.00	8.248	82	70-130	5	20
m,p-Xylenes	20.00	17.39	87	70-130	5	20
o-Xylene	10.00	8.735	87	70-130	6	20
Styrene	10.00	7.134	71	70-130	7	21
Bromoform	10.00	7.569	76	70-130	6	20
1,1,2,2-Tetrachloroethane	10.00	9.452	95	70-130	2	24
4-Ethyltoluene	10.00	9.864	99	70-130	6	22
1,3,5-Trimethylbenzene	10.00	9.533	95	70-130	6	23
1,2,4-Trimethylbenzene	10.00	10.37	104	70-130	6	24
1,3-Dichlorobenzene	10.00	9.026	90	70-130	3	22
1,4-Dichlorobenzene	10.00	9.189	92	70-130	3	22
Benzyl chloride	10.00	8.434	84	70-130	4	21
1,2-Dichlorobenzene	10.00	9.147	91	70-130	4	22
1,2,4-Trichlorobenzene	10.00	9.500	95	62-130	5	28
Hexachlorobutadiene	10.00	8.766	88	68-130	4	27
Naphthalene	10.00	10.52	105	54-136	0	29

Surrogate	%REC	Limits
Bromofluorobenzene	94	70-130

RPD= Relative Percent Difference

Result V= Result in volume units

**Batch QC Report**

Volatile Organics in Air			
Lab #:	260366	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC755674	Diln Fac:	1.000
Matrix:	Air	Batch#:	214934
Units (V):	ppbv	Analyzed:	08/29/14

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	0.50	ND	2.5
Freon 114	ND	0.50	ND	3.5
Chloromethane	ND	0.50	ND	1.0
Vinyl Chloride	ND	0.50	ND	1.3
1,3-Butadiene	ND	0.50	ND	1.1
Bromomethane	ND	0.50	ND	1.9
Chloroethane	ND	0.50	ND	1.3
Trichlorofluoromethane	ND	0.50	ND	2.8
Acrolein	ND	2.0	ND	4.6
1,1-Dichloroethene	ND	0.50	ND	2.0
Freon 113	ND	0.50	ND	3.8
Acetone	ND	2.0	ND	4.8
Carbon Disulfide	ND	0.50	ND	1.6
Isopropanol	ND	2.0	ND	4.9
Methylene Chloride	ND	0.50	ND	1.7
trans-1,2-Dichloroethene	ND	0.50	ND	2.0
MTBE	ND	0.50	ND	1.8
n-Hexane	ND	0.50	ND	1.8
1,1-Dichloroethane	ND	0.50	ND	2.0
Vinyl Acetate	ND	0.50	ND	1.8
cis-1,2-Dichloroethene	ND	0.50	ND	2.0
2-Butanone	ND	0.50	ND	1.5
Ethyl Acetate	ND	0.50	ND	1.8
Tetrahydrofuran	ND	0.50	ND	1.5
Chloroform	ND	0.50	ND	2.4
1,1,1-Trichloroethane	ND	0.50	ND	2.7
Cyclohexane	ND	0.50	ND	1.7
Carbon Tetrachloride	ND	0.50	ND	3.1
Benzene	ND	0.50	ND	1.6
1,2-Dichloroethane	ND	0.50	ND	2.0
n-Heptane	ND	0.50	ND	2.0
Trichloroethene	ND	0.50	ND	2.7
1,2-Dichloropropane	ND	0.50	ND	2.3
Bromodichloromethane	ND	0.50	ND	3.4
cis-1,3-Dichloropropene	ND	0.50	ND	2.3

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

**Batch QC Report**

<b>Volatile Organics in Air</b>			
Lab #:	260366	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC755674	Diln Fac:	1.000
Matrix:	Air	Batch#:	214934
Units (V):	ppbv	Analyzed:	08/29/14

Analyte	Result (V)	RL	Result (M)	RL
4-Methyl-2-Pentanone	ND	0.50	ND	2.0
Toluene	ND	0.50	ND	1.9
trans-1,3-Dichloropropene	ND	0.50	ND	2.3
1,1,2-Trichloroethane	ND	0.50	ND	2.7
Tetrachloroethene	ND	0.50	ND	3.4
2-Hexanone	ND	0.50	ND	2.0
Dibromochloromethane	ND	0.50	ND	4.3
1,2-Dibromoethane	ND	0.50	ND	3.8
Chlorobenzene	ND	0.50	ND	2.3
Ethylbenzene	ND	0.50	ND	2.2
m,p-Xylenes	ND	0.50	ND	2.2
o-Xylene	ND	0.50	ND	2.2
Styrene	ND	0.50	ND	2.1
Bromoform	ND	0.50	ND	5.2
1,1,2,2-Tetrachloroethane	ND	0.50	ND	3.4
4-Ethyltoluene	ND	0.50	ND	2.5
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5
1,3-Dichlorobenzene	ND	0.50	ND	3.0
1,4-Dichlorobenzene	ND	0.50	ND	3.0
Benzyl chloride	ND	0.50	ND	2.6
1,2-Dichlorobenzene	ND	0.50	ND	3.0
1,2,4-Trichlorobenzene	ND	0.50	ND	3.7
Hexachlorobutadiene	ND	0.50	ND	5.3
Naphthalene	ND	2.0	ND	10

Surrogate	%REC	Limits
Bromofluorobenzene	92	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Batch QC Report

Volatile Organics in Air			
Lab #:	260366	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	214963
Units (V):	ppbv	Analyzed:	08/31/14
Diln Fac:	1.000		

Type: BS Lab ID: QC755797

Analyte	Spiked	Result (V)	%REC	Limits
Freon 12	10.00	10.62	106	70-130
Freon 114	10.00	9.105	91	70-130
Chloromethane	10.00	10.01	100	70-130
Vinyl Chloride	10.00	10.66	107	70-130
1,3-Butadiene	10.00	9.046	90	70-130
Bromomethane	10.00	11.51	115	70-130
Chloroethane	10.00	10.46	105	70-130
Trichlorofluoromethane	10.00	10.91	109	70-130
Acrolein	10.00	11.03	110	62-130
1,1-Dichloroethene	10.00	10.11	101	70-130
Freon 113	10.00	10.81	108	70-130
Acetone	10.00	8.934	89	67-130
Carbon Disulfide	10.00	8.924	89	70-130
Isopropanol	10.00	8.893	89	60-130
Methylene Chloride	10.00	8.961	90	68-130
trans-1,2-Dichloroethene	10.00	9.873	99	70-130
MTBE	10.00	9.874	99	70-130
n-Hexane	10.00	10.27	103	70-130
1,1-Dichloroethane	10.00	10.04	100	70-130
Vinyl Acetate	10.00	12.76	128	70-130
cis-1,2-Dichloroethene	10.00	9.632	96	70-130
2-Butanone	10.00	9.223	92	70-130
Ethyl Acetate	10.00	9.591	96	70-130
Tetrahydrofuran	10.00	9.567	96	70-130
Chloroform	10.00	10.01	100	70-130
1,1,1-Trichloroethane	10.00	9.998	100	70-130
Cyclohexane	10.00	9.611	96	70-130
Carbon Tetrachloride	10.00	9.181	92	70-130
Benzene	10.00	9.350	94	70-130
1,2-Dichloroethane	10.00	9.221	92	70-130
n-Heptane	10.00	8.838	88	70-130
Trichloroethene	10.00	9.198	92	70-130
1,2-Dichloropropane	10.00	9.608	96	70-130

\*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Result V= Result in volume units

**Batch QC Report**

<b>Volatile Organics in Air</b>			
Lab #:	260366	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	214963
Units (V):	ppbv	Analyzed:	08/31/14
Diln Fac:	1.000		

<b>Analyte</b>	<b>Spiked</b>	<b>Result (V)</b>	<b>%REC</b>	<b>Limits</b>
Bromodichloromethane	10.00	9.041	90	70-130
cis-1,3-Dichloropropene	10.00	9.785	98	70-130
4-Methyl-2-Pentanone	10.00	10.24	102	70-130
Toluene	10.00	10.14	101	70-130
trans-1,3-Dichloropropene	10.00	10.16	102	70-130
1,1,2-Trichloroethane	10.00	11.07	111	70-130
Tetrachloroethene	10.00	10.71	107	70-130
2-Hexanone	10.00	10.38	104	70-130
Dibromochloromethane	10.00	9.752	98	70-130
1,2-Dibromoethane	10.00	11.17	112	70-130
Chlorobenzene	10.00	8.893	89	70-130
Ethylbenzene	10.00	8.541	85	70-130
m,p-Xylenes	20.00	18.31	92	70-130
o-Xylene	10.00	9.402	94	70-130
Styrene	10.00	7.567	76	70-130
Bromoform	10.00	7.237	72	70-130
1,1,2,2-Tetrachloroethane	10.00	10.60	106	70-130
4-Ethyltoluene	10.00	10.62	106	70-130
1,3,5-Trimethylbenzene	10.00	10.53	105	70-130
1,2,4-Trimethylbenzene	10.00	11.58	116	70-130
1,3-Dichlorobenzene	10.00	9.622	96	70-130
1,4-Dichlorobenzene	10.00	9.785	98	70-130
Benzyl chloride	10.00	8.786	88	70-130
1,2-Dichlorobenzene	10.00	10.09	101	70-130
1,2,4-Trichlorobenzene	10.00	11.28	113	62-130
Hexachlorobutadiene	10.00	9.706	97	68-130
Naphthalene	10.00	12.70	127	54-136

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
Bromofluorobenzene	96	70-130

\*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Result V= Result in volume units

**Batch QC Report**

Volatile Organics in Air			
Lab #:	260366	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	214963
Units (V):	ppbv	Analyzed:	08/31/14
Diln Fac:	1.000		

Type: BSD Lab ID: QC755798

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
Freon 12	10.00	10.78	108	70-130	2	20
Freon 114	10.00	9.627	96	70-130	6	20
Chloromethane	10.00	10.34	103	70-130	3	27
Vinyl Chloride	10.00	10.73	107	70-130	1	23
1,3-Butadiene	10.00	9.519	95	70-130	5	21
Bromomethane	10.00	11.97	120	70-130	4	20
Chloroethane	10.00	11.17	112	70-130	7	20
Trichlorofluoromethane	10.00	11.21	112	70-130	3	20
Acrolein	10.00	11.97	120	62-130	8	31
1,1-Dichloroethene	10.00	10.59	106	70-130	5	20
Freon 113	10.00	11.23	112	70-130	4	23
Acetone	10.00	9.292	93	67-130	4	20
Carbon Disulfide	10.00	9.337	93	70-130	5	20
Isopropanol	10.00	9.126	91	60-130	3	21
Methylene Chloride	10.00	9.492	95	68-130	6	23
trans-1,2-Dichloroethene	10.00	10.75	108	70-130	9	20
MTBE	10.00	10.52	105	70-130	6	20
n-Hexane	10.00	10.74	107	70-130	4	20
1,1-Dichloroethane	10.00	10.44	104	70-130	4	20
Vinyl Acetate	10.00	13.66	137 *	70-130	7	21
cis-1,2-Dichloroethene	10.00	10.23	102	70-130	6	20
2-Butanone	10.00	10.10	101	70-130	9	20
Ethyl Acetate	10.00	10.42	104	70-130	8	20
Tetrahydrofuran	10.00	9.828	98	70-130	3	20
Chloroform	10.00	10.65	107	70-130	6	20
1,1,1-Trichloroethane	10.00	10.08	101	70-130	1	20
Cyclohexane	10.00	10.16	102	70-130	6	20
Carbon Tetrachloride	10.00	9.283	93	70-130	1	20
Benzene	10.00	9.671	97	70-130	3	20
1,2-Dichloroethane	10.00	9.789	98	70-130	6	20
n-Heptane	10.00	8.975	90	70-130	2	20
Trichloroethene	10.00	9.663	97	70-130	5	20
1,2-Dichloropropane	10.00	9.869	99	70-130	3	20

\*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Result V= Result in volume units



**Batch QC Report**

<b>Volatile Organics in Air</b>			
Lab #:	260366	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	214963
Units (V):	ppbv	Analyzed:	08/31/14
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
Bromodichloromethane	10.00	9.474	95	70-130	5	20
cis-1,3-Dichloropropene	10.00	10.05	100	70-130	3	20
4-Methyl-2-Pentanone	10.00	10.42	104	70-130	2	20
Toluene	10.00	10.17	102	70-130	0	23
trans-1,3-Dichloropropene	10.00	10.27	103	70-130	1	20
1,1,2-Trichloroethane	10.00	11.24	112	70-130	2	20
Tetrachloroethene	10.00	10.59	106	70-130	1	20
2-Hexanone	10.00	10.43	104	70-130	0	21
Dibromochloromethane	10.00	9.618	96	70-130	1	20
1,2-Dibromoethane	10.00	11.27	113	70-130	1	20
Chlorobenzene	10.00	8.802	88	70-130	1	21
Ethylbenzene	10.00	8.553	86	70-130	0	20
m,p-Xylenes	20.00	18.17	91	70-130	1	20
o-Xylene	10.00	9.398	94	70-130	0	20
Styrene	10.00	7.547	75	70-130	0	21
Bromoform	10.00	7.294	73	70-130	1	20
1,1,2,2-Tetrachloroethane	10.00	10.88	109	70-130	3	24
4-Ethyltoluene	10.00	10.70	107	70-130	1	22
1,3,5-Trimethylbenzene	10.00	10.53	105	70-130	0	23
1,2,4-Trimethylbenzene	10.00	11.67	117	70-130	1	24
1,3-Dichlorobenzene	10.00	9.609	96	70-130	0	22
1,4-Dichlorobenzene	10.00	9.827	98	70-130	0	22
Benzyl chloride	10.00	8.833	88	70-130	1	21
1,2-Dichlorobenzene	10.00	9.599	96	70-130	5	22
1,2,4-Trichlorobenzene	10.00	11.01	110	62-130	2	28
Hexachlorobutadiene	10.00	9.528	95	68-130	2	27
Naphthalene	10.00	11.83	118	54-136	7	29

Surrogate	%REC	Limits
Bromofluorobenzene	92	70-130

\*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Result V= Result in volume units

**Batch QC Report**

Volatile Organics in Air			
Lab #:	260366	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC755799	Diln Fac:	1.000
Matrix:	Air	Batch#:	214963
Units (V):	ppbv	Analyzed:	08/31/14

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	0.50	ND	2.5
Freon 114	ND	0.50	ND	3.5
Chloromethane	ND	0.50	ND	1.0
Vinyl Chloride	ND	0.50	ND	1.3
1,3-Butadiene	ND	0.50	ND	1.1
Bromomethane	ND	0.50	ND	1.9
Chloroethane	ND	0.50	ND	1.3
Trichlorofluoromethane	ND	0.50	ND	2.8
Acrolein	ND	2.0	ND	4.6
1,1-Dichloroethene	ND	0.50	ND	2.0
Freon 113	ND	0.50	ND	3.8
Acetone	ND	2.0	ND	4.8
Carbon Disulfide	ND	0.50	ND	1.6
Isopropanol	ND	2.0	ND	4.9
Methylene Chloride	ND	0.50	ND	1.7
trans-1,2-Dichloroethene	ND	0.50	ND	2.0
MTBE	ND	0.50	ND	1.8
n-Hexane	ND	0.50	ND	1.8
1,1-Dichloroethane	ND	0.50	ND	2.0
Vinyl Acetate	ND	0.50	ND	1.8
cis-1,2-Dichloroethene	ND	0.50	ND	2.0
2-Butanone	ND	0.50	ND	1.5
Ethyl Acetate	ND	0.50	ND	1.8
Tetrahydrofuran	ND	0.50	ND	1.5
Chloroform	ND	0.50	ND	2.4
1,1,1-Trichloroethane	ND	0.50	ND	2.7
Cyclohexane	ND	0.50	ND	1.7
Carbon Tetrachloride	ND	0.50	ND	3.1
Benzene	ND	0.50	ND	1.6
1,2-Dichloroethane	ND	0.50	ND	2.0
n-Heptane	ND	0.50	ND	2.0
Trichloroethene	ND	0.50	ND	2.7
1,2-Dichloropropane	ND	0.50	ND	2.3
Bromodichloromethane	ND	0.50	ND	3.4
cis-1,3-Dichloropropene	ND	0.50	ND	2.3

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

**Batch QC Report**

Volatile Organics in Air			
Lab #:	260366	Location:	Oakland Diocese
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC755799	Diln Fac:	1.000
Matrix:	Air	Batch#:	214963
Units (V):	ppbv	Analyzed:	08/31/14

Analyte	Result (V)	RL	Result (M)	RL
4-Methyl-2-Pentanone	ND	0.50	ND	2.0
Toluene	ND	0.50	ND	1.9
trans-1,3-Dichloropropene	ND	0.50	ND	2.3
1,1,2-Trichloroethane	ND	0.50	ND	2.7
Tetrachloroethene	ND	0.50	ND	3.4
2-Hexanone	ND	0.50	ND	2.0
Dibromochloromethane	ND	0.50	ND	4.3
1,2-Dibromoethane	ND	0.50	ND	3.8
Chlorobenzene	ND	0.50	ND	2.3
Ethylbenzene	ND	0.50	ND	2.2
m,p-Xylenes	ND	0.50	ND	2.2
o-Xylene	ND	0.50	ND	2.2
Styrene	ND	0.50	ND	2.1
Bromoform	ND	0.50	ND	5.2
1,1,2,2-Tetrachloroethane	ND	0.50	ND	3.4
4-Ethyltoluene	ND	0.50	ND	2.5
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5
1,3-Dichlorobenzene	ND	0.50	ND	3.0
1,4-Dichlorobenzene	ND	0.50	ND	3.0
Benzyl chloride	ND	0.50	ND	2.6
1,2-Dichlorobenzene	ND	0.50	ND	3.0
1,2,4-Trichlorobenzene	ND	0.50	ND	3.7
Hexachlorobutadiene	ND	0.50	ND	5.3
Naphthalene	ND	2.0	ND	10

Surrogate	%REC	Limits
Bromofluorobenzene	88	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units



**Curtis & Tompkins, Ltd.**  
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 260912  
ANALYTICAL REPORT

Bureau Veritas North America  
2430 Camino Ramon  
San Ramon, Ca 94583

Project : 33114-014115.01  
Location : Kawahara-S. Leandro  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
SB-6	260912-001
SB-7	260912-002
SB-8	260912-003
SB-9	260912-004
SB-10	260912-005

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

John Goyette  
Senior Program Manager  
goyette@ctberk.com  
(510) 204-2233

Date: 09/18/2014

CA ELAP# 2896, NELAP# 4044-001

**CASE NARRATIVE**

Laboratory number: 260912  
Client: Bureau Veritas North America  
Project: 33114-014115.01  
Location: Kawahara-S. Leandro  
Request Date: 09/16/14  
Samples Received: 09/16/14

This data package contains sample and QC results for five air samples, requested for the above referenced project on 09/16/14. The samples were received intact.

**Volatile Organics in Air by MS (EPA TO-15):**

High response was observed for vinyl acetate in the CCV analyzed 09/17/14 16:38; affected data was qualified with "b". High recoveries were observed for vinyl acetate in the BS/BSD for batch 215459; the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples. No other analytical problems were encountered.

# CHAIN OF CUSTODY



2323 Fifth Street  
Berkeley, CA 94710

Phone (510) 486-0900  
Fax (510) 486-0532

Project No: 33114-014115.01

Project Name: LAUNDRY AREA - S. LEANDED

Project P. O. No: [Blank]

Company: BUREAU VERITAS

Telephone: 925 426-2679

Email: DON.ASHTON@US.BUREAUVERITAS.COM

Report Level:  I  II  III  IV

Turnaround Time:  RUSH 24 HR  Standard

Page 1 of 1  
Chain of Custody #

ANALYTICAL REQUEST	
70-15	XXXXXX VCS

Lab No.	Sample ID.	SAMPLING		MATRIX	# of Containers	CHEMICAL PRESERVATIVE							
		Date Collected	Time Collected			HCl	H2SO4	HNO3	NaOH	None			
1	SB-6	9-16-2014	14:58	Solid	1								
2	SB-7		15:06	Solid	1								
3	SB-8		15:30	Solid	1								
4	SB-9		15:36	Solid	1								
5	SB-10		14:51	Solid	1								
			14:57	Solid	1								
			14:41	Solid	1								

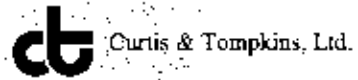
Notes: RUSH

SAMPLE RECEIPT  
 Intact  
 Cold  
 On Ice  
 Ambient

REQUISITIONED BY: Don Ashton  
 DATE: 9-16-14 TIME: 16:45

RECEIVED BY: [Signature]  
 DATE: 9-16-14 TIME: 16:48

**COOLER RECEIPT CHECKLIST**



Login # 260912 Date Received 9/16/14 Number of coolers 0  
 Client Clayton Project Kawahara - S. Leandro  
 Date Opened 9/16/14 By (print) AA1 (sign) [Signature]  
 Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES  NO

2A. Were custody seals present?  YES (circle) on cooler on samples  NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO  N/A

3. Were custody papers dry and intact when received? \_\_\_\_\_ YES NO

4. Were custody papers filled out properly (ink, signed, etc)? \_\_\_\_\_ YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) \_\_\_\_\_ YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

- Bubble Wrap
- Foam blocks
- Bags
- None
- Cloth material
- Cardboard
- Styrofoam
- Paper towels

7. Temperature documentation: \_\_\_\_\_ \* Notify PM if temperature exceeds 6°C

Type of ice used:  Wet  Blue/Gel  None Temp(°C) \_\_\_\_\_

Samples Received on ice & cold without a temperature blank

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES  NO  
 If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? \_\_\_\_\_ YES NO

10. Are there any missing / extra samples? \_\_\_\_\_ YES NO

11. Are samples in the appropriate containers for indicated tests? \_\_\_\_\_ YES NO

12. Are sample labels present, in good condition and complete? \_\_\_\_\_ YES NO

13. Do the sample labels agree with custody papers? \_\_\_\_\_ YES NO

14. Was sufficient amount of sample sent for tests requested? \_\_\_\_\_ YES NO

15. Are the samples appropriately preserved? \_\_\_\_\_ YES NO  N/A

16. Did you check preservatives for all bottles for each sample? \_\_\_\_\_ YES NO  N/A

17. Did you document your preservative check? \_\_\_\_\_ YES NO  N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO  N/A

19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO  N/A

20. Are there bubbles > 6mm diam in VOA samples? \_\_\_\_\_ YES NO  N/A

21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES  NO

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

**COMMENTS**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_





Client Sample ID : SB-8

Laboratory Sample ID :

260912-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
n-Hexane	2,200		33	6.6	ppbv	As Recd	66.40	EPA TO-15	METHOD
Cyclohexane	1,000		33	6.6	ppbv	As Recd	66.40	EPA TO-15	METHOD
Toluene	97		33	6.6	ppbv	As Recd	66.40	EPA TO-15	METHOD
m,p-Xylenes	45		33	6.6	ppbv	As Recd	66.40	EPA TO-15	METHOD
4-Ethyltoluene	53		33	6.6	ppbv	As Recd	66.40	EPA TO-15	METHOD
1,3,5-Trimethylbenzene	39		33	6.6	ppbv	As Recd	66.40	EPA TO-15	METHOD
1,2,4-Trimethylbenzene	77		33	6.6	ppbv	As Recd	66.40	EPA TO-15	METHOD

Client Sample ID : SB-9

Laboratory Sample ID :

260912-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Acetone	19		3.7	0.27	ppbv	As Recd	1.840	EPA TO-15	METHOD
n-Hexane	11		0.92	0.18	ppbv	As Recd	1.840	EPA TO-15	METHOD
2-Butanone	5.1		0.92	0.18	ppbv	As Recd	1.840	EPA TO-15	METHOD
Tetrahydrofuran	3.4		0.92	0.18	ppbv	As Recd	1.840	EPA TO-15	METHOD
Cyclohexane	87		0.92	0.18	ppbv	As Recd	1.840	EPA TO-15	METHOD
Benzene	0.93		0.92	0.040	ppbv	As Recd	1.840	EPA TO-15	METHOD
n-Heptane	2.0		0.92	0.18	ppbv	As Recd	1.840	EPA TO-15	METHOD
4-Methyl-2-Pentanone	1.5		0.92	0.18	ppbv	As Recd	1.840	EPA TO-15	METHOD
Toluene	4.6		0.92	0.18	ppbv	As Recd	1.840	EPA TO-15	METHOD
m,p-Xylenes	2.7		0.92	0.18	ppbv	As Recd	1.840	EPA TO-15	METHOD
1,2,4-Trimethylbenzene	1.5		0.92	0.18	ppbv	As Recd	1.840	EPA TO-15	METHOD

Client Sample ID : SB-10

Laboratory Sample ID :

260912-005

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Acetone	350		76	5.6	ppbv	As Recd	37.80	EPA TO-15	METHOD
trans-1,2-Dichloroethene	27		19	1.1	ppbv	As Recd	37.80	EPA TO-15	METHOD
n-Hexane	1,000		19	3.8	ppbv	As Recd	37.80	EPA TO-15	METHOD
Cyclohexane	430		19	3.8	ppbv	As Recd	37.80	EPA TO-15	METHOD
Toluene	53		19	3.8	ppbv	As Recd	37.80	EPA TO-15	METHOD

### Volatile Organics in Air

Lab #:	260912	Location:	Kawahara-S. Leandro
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115.01	Analysis:	EPA TO-15
Field ID:	SB-6	Diln Fac:	1.880
Lab ID:	260912-001	Batch#:	215459
Matrix:	Air	Sampled:	09/16/14
Units (V):	ppbv	Received:	09/16/14
Units (M):	ug/m3	Analyzed:	09/17/14

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	0.94	ND	4.6
Freon 114	ND	0.94	ND	6.6
Chloromethane	ND	0.94	ND	1.9
Vinyl Chloride	ND	0.94	ND	2.4
1,3-Butadiene	ND	0.94	ND	2.1
Bromomethane	ND	0.94	ND	3.6
Chloroethane	ND	0.94	ND	2.5
Trichlorofluoromethane	ND	0.94	ND	5.3
Acrolein	ND	3.8	ND	8.6
1,1-Dichloroethene	ND	0.94	ND	3.7
Freon 113	ND	0.94	ND	7.2
Acetone	36	3.8	85	8.9
Carbon Disulfide	ND	0.94	ND	2.9
Isopropanol	ND	3.8	ND	9.2
Methylene Chloride	ND	0.94	ND	3.3
trans-1,2-Dichloroethene	ND	0.94	ND	3.7
MTBE	ND	0.94	ND	3.4
n-Hexane	16	0.94	55	3.3
1,1-Dichloroethane	ND	0.94	ND	3.8
Vinyl Acetate	ND	0.94	ND	3.3
cis-1,2-Dichloroethene	ND	0.94	ND	3.7
2-Butanone	4.5	0.94	13	2.8
Ethyl Acetate	ND	0.94	ND	3.4
Tetrahydrofuran	2.5	0.94	7.4	2.8
Chloroform	ND	0.94	ND	4.6
1,1,1-Trichloroethane	ND	0.94	ND	5.1
Cyclohexane	56	0.94	190	3.2
Carbon Tetrachloride	ND	0.94	ND	5.9
Benzene	1.0	0.94	3.3	3.0
1,2-Dichloroethane	ND	0.94	ND	3.8
n-Heptane	1.7	0.94	7.0	3.9
Trichloroethene	ND	0.94	ND	5.1
1,2-Dichloropropane	ND	0.94	ND	4.3
Bromodichloromethane	ND	0.94	ND	6.3
cis-1,3-Dichloropropene	ND	0.94	ND	4.3

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	260912	Location:	Kawahara-S. Leandro
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115.01	Analysis:	EPA TO-15
Field ID:	SB-6	Diln Fac:	1.880
Lab ID:	260912-001	Batch#:	215459
Matrix:	Air	Sampled:	09/16/14
Units (V):	ppbv	Received:	09/16/14
Units (M):	ug/m3	Analyzed:	09/17/14

Analyte	Result (V)	RL	Result (M)	RL
4-Methyl-2-Pentanone	1.6	0.94	6.4	3.9
Toluene	3.3	0.94	13	3.5
trans-1,3-Dichloropropene	ND	0.94	ND	4.3
1,1,2-Trichloroethane	ND	0.94	ND	5.1
Tetrachloroethene	4.4	0.94	30	6.4
2-Hexanone	ND	0.94	ND	3.9
Dibromochloromethane	ND	0.94	ND	8.0
1,2-Dibromoethane	ND	0.94	ND	7.2
Chlorobenzene	ND	0.94	ND	4.3
Ethylbenzene	ND	0.94	ND	4.1
m,p-Xylenes	1.9	0.94	8.1	4.1
o-Xylene	ND	0.94	ND	4.1
Styrene	ND	0.94	ND	4.0
Bromoform	ND	0.94	ND	9.7
1,1,2,2-Tetrachloroethane	ND	0.94	ND	6.5
4-Ethyltoluene	ND	0.94	ND	4.6
1,3,5-Trimethylbenzene	ND	0.94	ND	4.6
1,2,4-Trimethylbenzene	1.4	0.94	6.7	4.6
1,3-Dichlorobenzene	ND	0.94	ND	5.7
1,4-Dichlorobenzene	ND	0.94	ND	5.7
Benzyl chloride	ND	0.94	ND	4.9
1,2-Dichlorobenzene	ND	0.94	ND	5.7
1,2,4-Trichlorobenzene	ND	0.94	ND	7.0
Hexachlorobutadiene	ND	0.94	ND	10
Naphthalene	ND	3.8	ND	20

Surrogate	%REC	Limits
Bromofluorobenzene	93	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	260912	Location:	Kawahara-S. Leandro
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115.01	Analysis:	EPA TO-15
Field ID:	SB-7	Units (M):	ug/m3
Lab ID:	260912-002	Batch#:	215459
Matrix:	Air	Sampled:	09/16/14
Units (V):	ppbv	Received:	09/16/14

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Analyzed
Freon 12	ND	1.8	ND	8.9	3.600	09/17/14
Freon 114	ND	1.8	ND	13	3.600	09/17/14
Chloromethane	ND	1.8	ND	3.7	3.600	09/17/14
Vinyl Chloride	ND	1.8	ND	4.6	3.600	09/17/14
1,3-Butadiene	ND	1.8	ND	4.0	3.600	09/17/14
Bromomethane	ND	1.8	ND	7.0	3.600	09/17/14
Chloroethane	ND	1.8	ND	4.7	3.600	09/17/14
Trichlorofluoromethane	ND	1.8	ND	10	3.600	09/17/14
Acrolein	ND	7.2	ND	17	3.600	09/17/14
1,1-Dichloroethene	ND	1.8	ND	7.1	3.600	09/17/14
Freon 113	ND	1.8	ND	14	3.600	09/17/14
Acetone	40	7.2	95	17	3.600	09/17/14
Carbon Disulfide	2.2	1.8	6.8	5.6	3.600	09/17/14
Isopropanol	ND	7.2	ND	18	3.600	09/17/14
Methylene Chloride	ND	1.8	ND	6.3	3.600	09/17/14
trans-1,2-Dichloroethene	ND	1.8	ND	7.1	3.600	09/17/14
MTBE	ND	1.8	ND	6.5	3.600	09/17/14
n-Hexane	32	1.8	110	6.3	3.600	09/17/14
1,1-Dichloroethane	ND	1.8	ND	7.3	3.600	09/17/14
Vinyl Acetate	ND	1.8	ND	6.3	3.600	09/17/14
cis-1,2-Dichloroethene	ND	1.8	ND	7.1	3.600	09/17/14
2-Butanone	10	1.8	30	5.3	3.600	09/17/14
Ethyl Acetate	ND	1.8	ND	6.5	3.600	09/17/14
Tetrahydrofuran	11	1.8	31	5.3	3.600	09/17/14
Chloroform	ND	1.8	ND	8.8	3.600	09/17/14
1,1,1-Trichloroethane	ND	1.8	ND	9.8	3.600	09/17/14
Cyclohexane	460	2.7	1,600	9.3	5.400	09/18/14
Carbon Tetrachloride	ND	1.8	ND	11	3.600	09/17/14
Benzene	11	1.8	34	5.8	3.600	09/17/14
1,2-Dichloroethane	ND	1.8	ND	7.3	3.600	09/17/14
n-Heptane	9.3	1.8	38	7.4	3.600	09/17/14
Trichloroethene	ND	1.8	ND	9.7	3.600	09/17/14
1,2-Dichloropropane	ND	1.8	ND	8.3	3.600	09/17/14
Bromodichloromethane	ND	1.8	ND	12	3.600	09/17/14
cis-1,3-Dichloropropene	ND	1.8	ND	8.2	3.600	09/17/14
4-Methyl-2-Pentanone	7.5	1.8	31	7.4	3.600	09/17/14

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Volatile Organics in Air			
Lab #:	260912	Location:	Kawahara-S. Leandro
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115.01	Analysis:	EPA TO-15
Field ID:	SB-7	Units (M):	ug/m3
Lab ID:	260912-002	Batch#:	215459
Matrix:	Air	Sampled:	09/16/14
Units (V):	ppbv	Received:	09/16/14

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Analyzed
Toluene	83	1.8	310	6.8	3.600	09/17/14
trans-1,3-Dichloropropene	ND	1.8	ND	8.2	3.600	09/17/14
1,1,2-Trichloroethane	ND	1.8	ND	9.8	3.600	09/17/14
Tetrachloroethene	ND	1.8	ND	12	3.600	09/17/14
2-Hexanone	ND	1.8	ND	7.4	3.600	09/17/14
Dibromochloromethane	ND	1.8	ND	15	3.600	09/17/14
1,2-Dibromoethane	ND	1.8	ND	14	3.600	09/17/14
Chlorobenzene	ND	1.8	ND	8.3	3.600	09/17/14
Ethylbenzene	6.2	1.8	27	7.8	3.600	09/17/14
m,p-Xylenes	24	1.8	100	7.8	3.600	09/17/14
o-Xylene	6.1	1.8	27	7.8	3.600	09/17/14
Styrene	ND	1.8	ND	7.7	3.600	09/17/14
Bromoform	ND	1.8	ND	19	3.600	09/17/14
1,1,2,2-Tetrachloroethane	ND	1.8	ND	12	3.600	09/17/14
4-Ethyltoluene	ND	1.8	ND	8.8	3.600	09/17/14
1,3,5-Trimethylbenzene	ND	1.8	ND	8.8	3.600	09/17/14
1,2,4-Trimethylbenzene	2.4	1.8	12	8.8	3.600	09/17/14
1,3-Dichlorobenzene	ND	1.8	ND	11	3.600	09/17/14
1,4-Dichlorobenzene	ND	1.8	ND	11	3.600	09/17/14
Benzyl chloride	ND	1.8	ND	9.3	3.600	09/17/14
1,2-Dichlorobenzene	ND	1.8	ND	11	3.600	09/17/14
1,2,4-Trichlorobenzene	ND	1.8	ND	13	3.600	09/17/14
Hexachlorobutadiene	ND	1.8	ND	19	3.600	09/17/14
Naphthalene	ND	7.2	ND	38	3.600	09/17/14

Surrogate	%REC	Limits	Diln Fac	Analyzed
Bromofluorobenzene	97	70-130	3.600	09/17/14

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	260912	Location:	Kawahara-S. Leandro
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115.01	Analysis:	EPA TO-15
Field ID:	SB-8	Diln Fac:	66.40
Lab ID:	260912-003	Batch#:	215459
Matrix:	Air	Sampled:	09/16/14
Units (V):	ppbv	Received:	09/16/14
Units (M):	ug/m3	Analyzed:	09/17/14

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	33	ND	160
Freon 114	ND	33	ND	230
Chloromethane	ND	33	ND	69
Vinyl Chloride	ND	33	ND	85
1,3-Butadiene	ND	33	ND	73
Bromomethane	ND	33	ND	130
Chloroethane	ND	33	ND	88
Trichlorofluoromethane	ND	33	ND	190
Acrolein	ND	130	ND	300
1,1-Dichloroethene	ND	33	ND	130
Freon 113	ND	33	ND	250
Acetone	ND	130	ND	320
Carbon Disulfide	ND	33	ND	100
Isopropanol	ND	130	ND	330
Methylene Chloride	ND	33	ND	120
trans-1,2-Dichloroethene	ND	33	ND	130
MTBE	ND	33	ND	120
n-Hexane	2,200	33	7,800	120
1,1-Dichloroethane	ND	33	ND	130
Vinyl Acetate	ND	33	ND	120
cis-1,2-Dichloroethene	ND	33	ND	130
2-Butanone	ND	33	ND	98
Ethyl Acetate	ND	33	ND	120
Tetrahydrofuran	ND	33	ND	98
Chloroform	ND	33	ND	160
1,1,1-Trichloroethane	ND	33	ND	180
Cyclohexane	1,000	33	3,600	110
Carbon Tetrachloride	ND	33	ND	210
Benzene	ND	33	ND	110
1,2-Dichloroethane	ND	33	ND	130
n-Heptane	ND	33	ND	140
Trichloroethene	ND	33	ND	180
1,2-Dichloropropane	ND	33	ND	150
Bromodichloromethane	ND	33	ND	220
cis-1,3-Dichloropropene	ND	33	ND	150

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	260912	Location:	Kawahara-S. Leandro
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115.01	Analysis:	EPA TO-15
Field ID:	SB-8	Diln Fac:	66.40
Lab ID:	260912-003	Batch#:	215459
Matrix:	Air	Sampled:	09/16/14
Units (V):	ppbv	Received:	09/16/14
Units (M):	ug/m3	Analyzed:	09/17/14

Analyte	Result (V)	RL	Result (M)	RL
4-Methyl-2-Pentanone	ND	33	ND	140
Toluene	97	33	370	130
trans-1,3-Dichloropropene	ND	33	ND	150
1,1,2-Trichloroethane	ND	33	ND	180
Tetrachloroethene	ND	33	ND	230
2-Hexanone	ND	33	ND	140
Dibromochloromethane	ND	33	ND	280
1,2-Dibromoethane	ND	33	ND	260
Chlorobenzene	ND	33	ND	150
Ethylbenzene	ND	33	ND	140
m,p-Xylenes	45	33	190	140
o-Xylene	ND	33	ND	140
Styrene	ND	33	ND	140
Bromoform	ND	33	ND	340
1,1,2,2-Tetrachloroethane	ND	33	ND	230
4-Ethyltoluene	53	33	260	160
1,3,5-Trimethylbenzene	39	33	190	160
1,2,4-Trimethylbenzene	77	33	380	160
1,3-Dichlorobenzene	ND	33	ND	200
1,4-Dichlorobenzene	ND	33	ND	200
Benzyl chloride	ND	33	ND	170
1,2-Dichlorobenzene	ND	33	ND	200
1,2,4-Trichlorobenzene	ND	33	ND	250
Hexachlorobutadiene	ND	33	ND	350
Naphthalene	ND	130	ND	700

Surrogate	%REC	Limits
Bromofluorobenzene	95	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units



### Volatile Organics in Air

Lab #:	260912	Location:	Kawahara-S. Leandro
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115.01	Analysis:	EPA TO-15
Field ID:	SB-9	Diln Fac:	1.840
Lab ID:	260912-004	Batch#:	215459
Matrix:	Air	Sampled:	09/16/14
Units (V):	ppbv	Received:	09/16/14
Units (M):	ug/m3	Analyzed:	09/18/14

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	0.92	ND	4.5
Freon 114	ND	0.92	ND	6.4
Chloromethane	ND	0.92	ND	1.9
Vinyl Chloride	ND	0.92	ND	2.4
1,3-Butadiene	ND	0.92	ND	2.0
Bromomethane	ND	0.92	ND	3.6
Chloroethane	ND	0.92	ND	2.4
Trichlorofluoromethane	ND	0.92	ND	5.2
Acrolein	ND	3.7	ND	8.4
1,1-Dichloroethene	ND	0.92	ND	3.6
Freon 113	ND	0.92	ND	7.1
Acetone	19	3.7	44	8.7
Carbon Disulfide	ND	0.92	ND	2.9
Isopropanol	ND	3.7	ND	9.0
Methylene Chloride	ND	0.92	ND	3.2
trans-1,2-Dichloroethene	ND	0.92	ND	3.6
MTBE	ND	0.92	ND	3.3
n-Hexane	11	0.92	38	3.2
1,1-Dichloroethane	ND	0.92	ND	3.7
Vinyl Acetate	ND	0.92	ND	3.2
cis-1,2-Dichloroethene	ND	0.92	ND	3.6
2-Butanone	5.1	0.92	15	2.7
Ethyl Acetate	ND	0.92	ND	3.3
Tetrahydrofuran	3.4	0.92	10	2.7
Chloroform	ND	0.92	ND	4.5
1,1,1-Trichloroethane	ND	0.92	ND	5.0
Cyclohexane	87	0.92	300	3.2
Carbon Tetrachloride	ND	0.92	ND	5.8
Benzene	0.93	0.92	3.0	2.9
1,2-Dichloroethane	ND	0.92	ND	3.7
n-Heptane	2.0	0.92	8.4	3.8
Trichloroethene	ND	0.92	ND	4.9
1,2-Dichloropropane	ND	0.92	ND	4.3
Bromodichloromethane	ND	0.92	ND	6.2
cis-1,3-Dichloropropene	ND	0.92	ND	4.2

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	260912	Location:	Kawahara-S. Leandro
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115.01	Analysis:	EPA TO-15
Field ID:	SB-9	Diln Fac:	1.840
Lab ID:	260912-004	Batch#:	215459
Matrix:	Air	Sampled:	09/16/14
Units (V):	ppbv	Received:	09/16/14
Units (M):	ug/m3	Analyzed:	09/18/14

Analyte	Result (V)	RL	Result (M)	RL
4-Methyl-2-Pentanone	1.5	0.92	6.3	3.8
Toluene	4.6	0.92	17	3.5
trans-1,3-Dichloropropene	ND	0.92	ND	4.2
1,1,2-Trichloroethane	ND	0.92	ND	5.0
Tetrachloroethene	ND	0.92	ND	6.2
2-Hexanone	ND	0.92	ND	3.8
Dibromochloromethane	ND	0.92	ND	7.8
1,2-Dibromoethane	ND	0.92	ND	7.1
Chlorobenzene	ND	0.92	ND	4.2
Ethylbenzene	ND	0.92	ND	4.0
m,p-Xylenes	2.7	0.92	12	4.0
o-Xylene	ND	0.92	ND	4.0
Styrene	ND	0.92	ND	3.9
Bromoform	ND	0.92	ND	9.5
1,1,2,2-Tetrachloroethane	ND	0.92	ND	6.3
4-Ethyltoluene	ND	0.92	ND	4.5
1,3,5-Trimethylbenzene	ND	0.92	ND	4.5
1,2,4-Trimethylbenzene	1.5	0.92	7.6	4.5
1,3-Dichlorobenzene	ND	0.92	ND	5.5
1,4-Dichlorobenzene	ND	0.92	ND	5.5
Benzyl chloride	ND	0.92	ND	4.8
1,2-Dichlorobenzene	ND	0.92	ND	5.5
1,2,4-Trichlorobenzene	ND	0.92	ND	6.8
Hexachlorobutadiene	ND	0.92	ND	9.8
Naphthalene	ND	3.7	ND	19

Surrogate	%REC	Limits
Bromofluorobenzene	92	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	260912	Location:	Kawahara-S. Leandro
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115.01	Analysis:	EPA TO-15
Field ID:	SB-10	Diln Fac:	37.80
Lab ID:	260912-005	Batch#:	215459
Matrix:	Air	Sampled:	09/16/14
Units (V):	ppbv	Received:	09/16/14
Units (M):	ug/m3	Analyzed:	09/17/14

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	19	ND	93
Freon 114	ND	19	ND	130
Chloromethane	ND	19	ND	39
Vinyl Chloride	ND	19	ND	48
1,3-Butadiene	ND	19	ND	42
Bromomethane	ND	19	ND	73
Chloroethane	ND	19	ND	50
Trichlorofluoromethane	ND	19	ND	110
Acrolein	ND	76	ND	170
1,1-Dichloroethene	ND	19	ND	75
Freon 113	ND	19	ND	140
Acetone	350	76	830	180
Carbon Disulfide	ND	19	ND	59
Isopropanol	ND	76	ND	190
Methylene Chloride	ND	19	ND	66
trans-1,2-Dichloroethene	27	19	110	75
MTBE	ND	19	ND	68
n-Hexane	1,000	19	3,500	67
1,1-Dichloroethane	ND	19	ND	76
Vinyl Acetate	ND	19	ND	67
cis-1,2-Dichloroethene	ND	19	ND	75
2-Butanone	ND	19	ND	56
Ethyl Acetate	ND	19	ND	68
Tetrahydrofuran	ND	19	ND	56
Chloroform	ND	19	ND	92
1,1,1-Trichloroethane	ND	19	ND	100
Cyclohexane	430	19	1,500	65
Carbon Tetrachloride	ND	19	ND	120
Benzene	ND	19	ND	60
1,2-Dichloroethane	ND	19	ND	76
n-Heptane	ND	19	ND	77
Trichloroethene	ND	19	ND	100
1,2-Dichloropropane	ND	19	ND	87
Bromodichloromethane	ND	19	ND	130
cis-1,3-Dichloropropene	ND	19	ND	86

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	260912	Location:	Kawahara-S. Leandro
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115.01	Analysis:	EPA TO-15
Field ID:	SB-10	Diln Fac:	37.80
Lab ID:	260912-005	Batch#:	215459
Matrix:	Air	Sampled:	09/16/14
Units (V):	ppbv	Received:	09/16/14
Units (M):	ug/m3	Analyzed:	09/17/14

Analyte	Result (V)	RL	Result (M)	RL
4-Methyl-2-Pentanone	ND	19	ND	77
Toluene	53	19	200	71
trans-1,3-Dichloropropene	ND	19	ND	86
1,1,2-Trichloroethane	ND	19	ND	100
Tetrachloroethene	ND	19	ND	130
2-Hexanone	ND	19	ND	77
Dibromochloromethane	ND	19	ND	160
1,2-Dibromoethane	ND	19	ND	150
Chlorobenzene	ND	19	ND	87
Ethylbenzene	ND	19	ND	82
m,p-Xylenes	ND	19	ND	82
o-Xylene	ND	19	ND	82
Styrene	ND	19	ND	81
Bromoform	ND	19	ND	200
1,1,2,2-Tetrachloroethane	ND	19	ND	130
4-Ethyltoluene	ND	19	ND	93
1,3,5-Trimethylbenzene	ND	19	ND	93
1,2,4-Trimethylbenzene	ND	19	ND	93
1,3-Dichlorobenzene	ND	19	ND	110
1,4-Dichlorobenzene	ND	19	ND	110
Benzyl chloride	ND	19	ND	98
1,2-Dichlorobenzene	ND	19	ND	110
1,2,4-Trichlorobenzene	ND	19	ND	140
Hexachlorobutadiene	ND	19	ND	200
Naphthalene	ND	76	ND	400

Surrogate	%REC	Limits
Bromofluorobenzene	95	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units



**Batch QC Report**

<b>Volatile Organics in Air</b>			
Lab #:	260912	Location:	Kawahara-S. Leandro
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115.01	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	215459
Units (V):	ppbv	Analyzed:	09/17/14
Diln Fac:	1.000		

<b>Analyte</b>	<b>Spiked</b>	<b>Result (V)</b>	<b>%REC</b>	<b>Limits</b>
1,2-Dichloropropane	10.00	9.990	100	70-130
Bromodichloromethane	10.00	9.842	98	70-130
cis-1,3-Dichloropropene	10.00	10.03	100	70-130
4-Methyl-2-Pentanone	10.00	10.05	101	70-130
Toluene	10.00	9.889	99	70-130
trans-1,3-Dichloropropene	10.00	9.974	100	70-130
1,1,2-Trichloroethane	10.00	10.84	108	70-130
Tetrachloroethene	10.00	10.07	101	70-130
2-Hexanone	10.00	9.372	94	70-130
Dibromochloromethane	10.00	9.942	99	70-130
1,2-Dibromoethane	10.00	10.70	107	70-130
Chlorobenzene	10.00	8.910	89	70-130
Ethylbenzene	10.00	8.903	89	70-130
m,p-Xylenes	20.00	19.07	95	70-130
o-Xylene	10.00	9.679	97	70-130
Styrene	10.00	7.840	78	70-130
Bromoform	10.00	9.910	99	70-130
1,1,2,2-Tetrachloroethane	10.00	10.29	103	70-130
4-Ethyltoluene	10.00	10.59	106	70-130
1,3,5-Trimethylbenzene	10.00	10.32	103	70-130
1,2,4-Trimethylbenzene	10.00	11.29	113	70-130
1,3-Dichlorobenzene	10.00	9.406	94	70-130
1,4-Dichlorobenzene	10.00	9.532	95	70-130
Benzyl chloride	10.00	8.876	89	70-130
1,2-Dichlorobenzene	10.00	9.610	96	70-130
1,2,4-Trichlorobenzene	10.00	8.983	90	62-130
Hexachlorobutadiene	10.00	7.990	80	68-130
Naphthalene	10.00	8.309	83	54-136

<b>Surrogate</b>	<b>%REC</b>	<b>Limits</b>
Bromofluorobenzene	98	70-130

\*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



**Batch QC Report**

Volatile Organics in Air			
Lab #:	260912	Location:	Kawahara-S. Leandro
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115.01	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	215459
Units (V):	ppbv	Analyzed:	09/17/14
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
1,2-Dichloropropane	10.00	9.742	97	70-130	3	20
Bromodichloromethane	10.00	9.529	95	70-130	3	20
cis-1,3-Dichloropropene	10.00	9.804	98	70-130	2	20
4-Methyl-2-Pentanone	10.00	10.04	100	70-130	0	20
Toluene	10.00	10.58	106	70-130	7	23
trans-1,3-Dichloropropene	10.00	9.841	98	70-130	1	20
1,1,2-Trichloroethane	10.00	11.25	113	70-130	4	20
Tetrachloroethene	10.00	10.78	108	70-130	7	20
2-Hexanone	10.00	9.917	99	70-130	6	21
Dibromochloromethane	10.00	10.66	107	70-130	7	20
1,2-Dibromoethane	10.00	11.28	113	70-130	5	20
Chlorobenzene	10.00	9.419	94	70-130	6	21
Ethylbenzene	10.00	9.121	91	70-130	2	20
m,p-Xylenes	20.00	19.40	97	70-130	2	20
o-Xylene	10.00	9.684	97	70-130	0	20
Styrene	10.00	8.144	81	70-130	4	21
Bromoform	10.00	10.29	103	70-130	4	20
1,1,2,2-Tetrachloroethane	10.00	10.49	105	70-130	2	24
4-Ethyltoluene	10.00	10.98	110	70-130	4	22
1,3,5-Trimethylbenzene	10.00	10.82	108	70-130	5	23
1,2,4-Trimethylbenzene	10.00	11.68	117	70-130	3	24
1,3-Dichlorobenzene	10.00	9.824	98	70-130	4	22
1,4-Dichlorobenzene	10.00	9.871	99	70-130	3	22
Benzyl chloride	10.00	9.065	91	70-130	2	21
1,2-Dichlorobenzene	10.00	9.817	98	70-130	2	22
1,2,4-Trichlorobenzene	10.00	9.690	97	62-130	8	28
Hexachlorobutadiene	10.00	8.336	83	68-130	4	27
Naphthalene	10.00	8.883	89	54-136	7	29

Surrogate	%REC	Limits
Bromofluorobenzene	98	70-130

\*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



**Batch QC Report**

Volatile Organics in Air			
Lab #:	260912	Location:	Kawahara-S. Leandro
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115.01	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC757834	Diln Fac:	1.000
Matrix:	Air	Batch#:	215459
Units (V):	ppbv	Analyzed:	09/17/14

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	0.50	ND	2.5
Freon 114	ND	0.50	ND	3.5
Chloromethane	ND	0.50	ND	1.0
Vinyl Chloride	ND	0.50	ND	1.3
1,3-Butadiene	ND	0.50	ND	1.1
Bromomethane	ND	0.50	ND	1.9
Chloroethane	ND	0.50	ND	1.3
Trichlorofluoromethane	ND	0.50	ND	2.8
Acrolein	ND	2.0	ND	4.6
1,1-Dichloroethene	ND	0.50	ND	2.0
Freon 113	ND	0.50	ND	3.8
Acetone	ND	2.0	ND	4.8
Carbon Disulfide	ND	0.50	ND	1.6
Isopropanol	ND	2.0	ND	4.9
Methylene Chloride	ND	0.50	ND	1.7
trans-1,2-Dichloroethene	ND	0.50	ND	2.0
MTBE	ND	0.50	ND	1.8
n-Hexane	ND	0.50	ND	1.8
1,1-Dichloroethane	ND	0.50	ND	2.0
Vinyl Acetate	ND	0.50	ND	1.8
cis-1,2-Dichloroethene	ND	0.50	ND	2.0
2-Butanone	ND	0.50	ND	1.5
Ethyl Acetate	ND	0.50	ND	1.8
Tetrahydrofuran	ND	0.50	ND	1.5
Chloroform	ND	0.50	ND	2.4
1,1,1-Trichloroethane	ND	0.50	ND	2.7
Cyclohexane	ND	0.50	ND	1.7
Carbon Tetrachloride	ND	0.50	ND	3.1
Benzene	ND	0.50	ND	1.6
1,2-Dichloroethane	ND	0.50	ND	2.0
n-Heptane	ND	0.50	ND	2.0
Trichloroethene	ND	0.50	ND	2.7
1,2-Dichloropropane	ND	0.50	ND	2.3
Bromodichloromethane	ND	0.50	ND	3.4
cis-1,3-Dichloropropene	ND	0.50	ND	2.3

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

**Batch QC Report**

<b>Volatile Organics in Air</b>			
Lab #:	260912	Location:	Kawahara-S. Leandro
Client:	Bureau Veritas North America	Prep:	METHOD
Project#:	33114-014115.01	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC757834	Diln Fac:	1.000
Matrix:	Air	Batch#:	215459
Units (V):	ppbv	Analyzed:	09/17/14

Analyte	Result (V)	RL	Result (M)	RL
4-Methyl-2-Pentanone	ND	0.50	ND	2.0
Toluene	ND	0.50	ND	1.9
trans-1,3-Dichloropropene	ND	0.50	ND	2.3
1,1,2-Trichloroethane	ND	0.50	ND	2.7
Tetrachloroethene	ND	0.50	ND	3.4
2-Hexanone	ND	0.50	ND	2.0
Dibromochloromethane	ND	0.50	ND	4.3
1,2-Dibromoethane	ND	0.50	ND	3.8
Chlorobenzene	ND	0.50	ND	2.3
Ethylbenzene	ND	0.50	ND	2.2
m,p-Xylenes	ND	0.50	ND	2.2
o-Xylene	ND	0.50	ND	2.2
Styrene	ND	0.50	ND	2.1
Bromoform	ND	0.50	ND	5.2
1,1,2,2-Tetrachloroethane	ND	0.50	ND	3.4
4-Ethyltoluene	ND	0.50	ND	2.5
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5
1,3-Dichlorobenzene	ND	0.50	ND	3.0
1,4-Dichlorobenzene	ND	0.50	ND	3.0
Benzyl chloride	ND	0.50	ND	2.6
1,2-Dichlorobenzene	ND	0.50	ND	3.0
1,2,4-Trichlorobenzene	ND	0.50	ND	3.7
Hexachlorobutadiene	ND	0.50	ND	5.3
Naphthalene	ND	2.0	ND	10

Surrogate	%REC	Limits
Bromofluorobenzene	93	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units



**APPENDIX F**

**HEALTH RISK ASSESSMENT REPORT**

**HEALTH RISK ASSESSMENT**

**FOR REAL ESTATE PROPERTY LOCATED AT  
16500 AND 16550 ASHLAND AVENUE; 205 AND 255 ANO AVENUE  
SAN LORENZO, CALIFORNIA**

**PREPARED FOR:**

**BUREAU VERITAS NORTH AMERICA, INC.  
2430 CAMINO RAMON, SUITE 122  
SAN RAMON, CALIFORNIA**

**PREPARED BY:**

**COPELAND & ASSOCIATES, INC.**



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**NOVEMBER 17, 2014**

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Figure 1	Sample Locations
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## LIST OF ACRONYMS

bgs	below ground surface
CalEPA	California Environmental Protection Agency
COPCs	chemicals of potential concern
CSM	conceptual site model
DTSC	Department of Toxic Substances Control
DU	data usability
EPC	exposure point concentration
HI	hazard index
HQ	hazard quotient
HRA	health risk assessment
ILCR	incremental lifetime cancer risk
IUR	inhalation unit risk
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
mg/kg	milligrams per kilogram
mg/kg-day	milligrams per kilogram per day
OEHHA	Office of Environmental and Health Hazard Assessment
PEF	particulate emission factor
RAGS	Risk Assessment Guidance for Superfund
RfC	reference concentration
REL	reference exposure level
RfD	reference dose
RME	reasonable maximum exposure
SF	(cancer) slope factor
UCL	upper confidence limit
USEPA	United States Environmental Protection Agency

## 1.0 INTRODUCTION

This health risk assessment (HRA) has been prepared to assess the nature and extent of potential human health risks associated with exposure to organochlorine pesticides detected in soil at the site located at 16500 and 16550 Ashland Avenue; 205 and 255 Año Avenue, San Lorenzo, California (the site; Figure 1). The remainder of this section presents an overview of the risk assessment process and a summary of the contents of the HRA.

### 1.1 THE RISK ASSESSMENT PROCESS

An HRA is an appropriate analytical method for determining the potential health risks for hypothetical site receptors where a chemical release has or may have occurred (USEPA, 1989; CalEPA/DTSC, 2013a,b). The receptors evaluated in a standard HRA are assumed to have a reasonable maximum exposure (RME) by applicable exposure routes. The assumption of potential exposure (by any complete and/or potentially complete exposure pathway) represents a conservative (i.e., health protective) approach. This approach is recommended by regulatory risk assessment guidance in order to make the HRA sufficiently protective of the potential receptors (USEPA, 1989; CalEPA/DTSC, 2013b).

The HRA process applies four evaluation components as the basis for identifying potential health risks posed to current and potential future receptors at a site (USEPA, 1989; CalEPA/DTSC, 2013b). These HRA components are:

1. **Data Evaluation/Chemicals of Potential Concern:** Site characterization data are evaluated for risk assessment usability and the chemicals of potential concern (COPCs) are selected.
2. **Toxicity Assessment:** Relevant toxicity endpoints and dose-response criteria are identified for the COPCs.
3. **Exposure Assessment:** The routes through which potential exposure to COPCs may occur are identified. Potential human receptors are also identified. The magnitude and duration of the receptor-specific exposures are estimated.
4. **Risk Characterization:** The results of the toxicity assessment and exposure assessment are employed to estimate the incremental lifetime cancer risk (ILCR) and the noncancer hazard index (HI) for each receptor.

A baseline HRA evaluates potential risks at a specific site based on existing conditions in the absence of remedial action. The HRA is used by risk managers as a basis for making decisions regarding the safety of a particular property, as well as the need for risk management measures.

The methodologies used in this HRA are consistent with current risk assessment practices and information provided in the following guidance documents:



- Human Health Risk Assessment (HHRA) Note: HERO HHRA Note Number: 3. DTSC Recommended Methodology for Use of USEPA Regional Screening Levels (RSLs) in the Human Health Risk Assessment Process at Hazardous Waste Sites and Permitted Facilities (CalEPA/DTSC, 2013a)
- Human Health Risk Assessment (HHRA) Note: HERO HHRA Note Number 1. Recommended DTSC Default Exposure Factors for Use in Risk Assessment at California Hazardous Waste Sites and Permitted Facilities (CalEPA/DTSC, 2011)
- Preliminary Endangerment Assessment Guidance Manual (CalEPA/DTSC, 2013b)
- Risk Assessment Guidance for Superfund (RAGS), Volume I, Human Health Evaluation Manual (Part A) Interim Final (USEPA, 1989)
- Guidance for Data Usability in Risk Assessment (Part A), Final (USEPA, 1992a)
- Guidelines for Exposure Assessment (USEPA, 1992b)
- Supplemental Guidance for Developing Soil Screening Levels at Superfund Sites (USEPA, 2002)
- Risk Assessment Guidance for Superfund (RAGS), Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment) Final (USEPA, 2004)
- Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part F, Supplemental Guidance for Inhalation Risk Assessment) (USEPA, 2009)
- Exposure Factors Handbook (USEPA, 2011)
- USEPA Regional Screening Levels, May (USEPA, 2014)

## 1.2 REPORT ORGANIZATION

The organization of this report is as follows:

- **Section 2.0 - Site Background.** This section includes a site description and summaries of site history and site investigations.
- **Section 3.0 - Data Evaluation and Selection of Chemicals of Potential Concern.** The data usability evaluation and the selection of COPCs are presented.
- **Section 4.0 - Toxicity Assessment.** The toxicity criteria applied are defined and the source of chemical-specific values are identified.
- **Section 5.0 - Exposure Assessment.** The exposure scenarios and pathways, exposure parameters, exposure point concentrations, and exposure calculations are discussed.
- **Section 6.0 - Risk Characterization.** The methods and results regarding the potential incremental lifetime cancer risks and noncancer hazards for the identified receptors are presented. Additionally a qualitative uncertainty analysis is presented.
- **Section 7.0 - References Cited.** The references cited in the HRA are listed.

## **2.0 SITE BACKGROUND**

The approximately 3.14-acre site is currently developed with three residential dwellings, pavement and hot houses-lath houses for a former commercial plant nursery.

Environmental conditions at the site have been investigated by Bureau Veritas North America (BVNA). On August 28, and September 16, 2014, BVNA advanced 22 soil borings using direct-push drilling equipment operated by Environmental Control Associates, a California-licensed drilling firm, located in Aptos, California. The site was subdivided into four quadrants, with four borings advanced per quadrant on August 28, 2014, to a depth of 4.0 feet below the ground surface (bgs) for the purpose of collecting soil samples; three of these were advanced to 5.0 feet bgs and completed as temporary soil vapor wells. One additional boring (SB-5) was advanced to 18 feet bgs to collect soil and groundwater samples. On September 16, 2014, BVNA again visited the site and advanced five additional soil borings (SB-6 through SB-10) to a total depth of 5.0 feet bgs at various locations on the site to collect additional soil vapor samples. Based on the very low results of the soil vapor samples, further analysis of soil vapor was deemed unnecessary.

On October 3, 2014, BVNA returned to the site and collected 12 surficial soil samples (samples S-1 through S-12). Analytical results obtained from the October 3, 2013 sampling event were provided to Copeland & Associates (CAI) by BVNA and were used as the basis for a screening risk assessment (CAI, 2014).

On November 5, 2014 BVNA collected 0-0.5 foot and 1.5-2.0 foot samples at 33 locations (for a total of 66 additional soil samples to provide a robust dataset for this HRA. Thirty four (34) samples were sent to Test America laboratory and 32 samples were sent to Curtis Tompkins laboratory for organochlorine pesticide analysis by EPA Method 8081A. Two additional soil samples were collected (S-2A-0-0.5' and S-10A 0-0.5') as quality control split samples from the prior October 3, 2014 sampling locations S-2 0-0.5' and S-10 0-0.5'. Two split or duplicate samples in addition to the discrete soil sample mentioned above were also sent to both Test America laboratory and Curtis Tompkins laboratory for analysis by EPA Method 8081A, including matrix spike and matrix spike duplicate analysis using these site-specific soil samples. For additional quality control, Test America transferred two samples (S-2A 0-0.5' and S-14A 0-0.5') to Accutest laboratories for analysis by EPA method 8081A, including matrix spike and matrix spike duplicate analysis.

CAI assumes that methodologies for sampling of environmental media, sample laboratory analysis and reporting have been conducted in accordance with established USEPA and California Environmental Protection Agency standards and guidance documents. CAI further assumes soil analytical data provided by BVNA dutifully reflects soil environmental conditions at the site and that the only anthropogenic chemicals detected in soil that could pose a health risk to future onsite receptors are those chemicals reported to CAI by BVNA. A summary of the data employed in the HRA is presented in Table 1.

### 3.0 DATA EVALUATION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

This section documents the data usability (DU) evaluation and selection of chemicals of potential concern (COPCs).

#### 3.1 DU EVALUATION

The DU evaluation was conducted using the Guidance for Data Usability in Risk Assessment (USEPA, 1992a). The DU evaluation provides the basis for identifying that the site characterization data are adequate for the HRA (USEPA, 1992a).

USEPA has established a specific guidance framework to provide risk assessors a consistent basis for making decisions about the minimum quality and quantity of environmental analytical data that are sufficient to support HRA-based decisions (USEPA, 1992a). The USEPA DU guidance provides an explicit set of data quality criteria that are used to determine the usability of site characterization data in the HRA process. These USEPA criteria include:

- **Criterion I - Reports:** Confirmation that report(s) relied upon are complete and appropriate for use in the HRA.
- **Criterion II - Documentation:** Confirmation that each analytical result is associated with a specific sample location.
- **Criterion III - Data Sources:** Confirmation that the analytical methods used are appropriate to identify the COPCs for the media of interest.
- **Criterion IV - Analytical Methods and Detection Limits:** Confirmation that analytical methods appropriately identify the chemical form or species and that the sample detection limit is at or below a concentration appropriate for the risk assessment application.
- **Criterion V - Data Review:** Confirmation that the quality of analytical results is assessed by a professional knowledgeable in field collection procedures and analytical chemistry and that data quality are adequate to estimate exposure concentrations.
- **Criterion VI - Data Quality Indicators:** Documentation that sampling and analysis data quality indicators (including precision, accuracy, holding time, and reproducibility) are evaluated using criteria specific to the risk assessment.

Each of these criteria was evaluated for the October 2, 2014 data and the November 5, 2014 data. Key notations are summarized below.

#### **Criterion I – Reports**

Data were taken from data summary tables prepared by BVNA, which were cross-checked with the laboratory reports.

### **Criterion II – Documentation**

A sample location for each analytical result was confirmed. Sample locations are shown on Figure 1.

### **Criterion III - Data Sources**

EPA Method 8081A was used to characterize organochlorine pesticides in site soil. This is a broad spectrum method for organochlorine pesticides, which are the site-related chemicals.

### **Criterion IV - Analytical Methods and Detection Limits**

EPA Method 8081A appropriately identifies the chemical form or species. Sample detection limit are adequate for the risk assessment application.

### **Criterion V - Data Review**

Teri Copeland, DABT conducted the DU evaluation.

### **Criterion VI - Data Quality Indicators (DQIs)**

Precision is characterized by comparing laboratory control sample (LCS) and LCS duplicate (LCSD) data and comparing matrix spike (MS) and MS duplicate (MSD) data. Precision is reported by the lab as “%RPD”. Accuracy is characterized by percent recovery of spiked samples (LCS and MS) and are reported as percent recovery of the spiked samples. Holding time was met for all samples. The October 3, 2014 data were generally reproduced in the November 5, 2014 samples.

Key sample-specific DQI information noted by the labs is summarized below.

#### Test America October 3, 2014 Data (S1 through S12)

- (1) The % RPD for alpha chlordane exceeded 40% for the following samples: S-2, S-4, S-5, S-6, S-7, and S-8. Uncertainties associated with this analyte are minimal as alpha chlordane does not contribute significantly to the risk estimates. Additionally, risk estimates were conservatively calculated using 95% upper confidence levels (UCLs) as well as the site-wide maximum for each detected chemical.
- (2) S-2 required dilution, resulting in a surrogate spike concentration that could not be calculated. LCS and LCSD were within limits.
- (3) MS/MSD data were not reported. Two of the October sample locations were resampled in November and adequate MS/MSD data were reported for those locations. LCS/LCSD data were within limits.

#### Test America, November 5, 2014 Data

Samples:

S-2A 0-0.5’

S-10A 0-0.5’

S-13 0-0.5’

S-13 1.5-2’

S-14 0-0.5’

S-14 1.5-2’

S-15 0-0.5'  
S-15 1.5-2'  
S-16 0-0.5'  
S-16 1.5-2'  
S-17 0-0.5'  
S-17 1.5-2'  
S-18 0-0.5'  
S-18 1.5-2'  
S-19 0-0.5'  
S-19 1.5-2'  
S-20 0-0.5'  
S-20 1.5-2'  
S-21 0-0.5'  
S-21-1.5-2'  
S-22 0-0.5'  
S-22 1.5-2'  
S-23 0-0.5'  
S-23 1.5-2'  
S-24 0-0.5'  
S-24 1.5-2'  
S-25 0-0.5'  
S-25 1.5-2'  
S-26 0-0.5'  
S-26 1.5-2'  
S-27 0-0.5'  
S-27 1.5-2'  
S-28 0-0.5',  
S-28 1.5-2'  
S-29 0-0.5'  
S-29 1.5-2'

- (1) The following sample(s) required a dilution due to the nature of the sample matrix: S-2A-0-0.5', S-14-0-0.5', S-27-0-0.5'. Because of this dilution, the surrogate spike concentration in the sample could not be calculated.
- (2) The MS/MSD recoveries and precision for batch 170338 and 170339 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated LCS/LCSD precision was within limits.
- (3) The %RPD between the primary and confirmation column exceeded 40% for a-chlordane for the following sample(s): S-24-0-0.5', S-26-0-0.5, S-27-0-0.5, S-28-0-0.5', S-28-1.5-2', S-17-0-0.5,, S-18-0-0.5, S-19-0-0.5', S-13-0-0.5', S-14-0-0.5, S-16-0-0.5', S-20-0-0.5', S-21-0-0.5' . This chemical does not contribute significantly to risk.
- (4) The %RPD between the primary and confirmation column exceeded 40% for DDE and alpha chlordane for the following sample: S-2A-0-0.5'. These chemicals do not contribute significantly to risk.

Curtis Tompkins, November 5, 2014 Data

Samples:

S-2A 0-0.5'  
S-10A 0-0.5'  
S-30 0-0.5'  
S-30 1.5-2'  
S-31 0-0.5'  
S-31 1.5-2'  
S-32 0-0.5'  
S-32 1.5-2'  
S-33 0-0.5'  
S-33 1.5-2'  
S-34 0-0.5'  
S-34 1.5-2'  
S-35 0-0.5'  
S-35 1.5-2'  
S-36 0-0.5'  
S-36 1.5-2'  
S-37 0-0.5'  
S-37 1.5-2'  
S-38 0-0.5'  
S-38 1.5-2'  
S-39 0-0.5'  
S-39 1.5-2'  
S-40 0-0.5'  
S-40 1.5-2'  
S-41 0-0.5'  
S-41 1.5-2'  
S-42 0-0.5';  
S-42 1.5-2'  
S-43 0-0.5'  
S-43 1.5-2'  
S-44 0-0.5'  
S-44 1.5-2'  
S-45 0-0.5'  
S-45 1.5-2'

- (1) A number of samples/analytes were flagged “#”, indicating that the continuing calibration verification (CCV) drift was outside limits but the average CCV was within method requirements: Detected analytes with this flag were limited to DDT, DDD, alpha chlordane, and endosulfan sulfate. These chemicals do not significantly contribute to risk.
- (2) A number of samples/analytes were flagged “C”, indicating that the RPD exceeded 40%. With the exception of dieldrin in four samples at low concentrations, detected analytes with this flag were limited to chemicals that do not contribute significantly to risk.

### **3.2 SELECTION OF CHEMICALS OF POTENTIAL CONCERN**

COPCs are selected to ensure that the risk assessment focuses on those chemicals that are site-related and could significantly contribute to overall site risk (USEPA, 1989). CalEPA/DTSC (2013a) and the USEPA (1989) recommend that chemicals be eliminated from the risk assessment only if adequate rationale can be provided.

All chemicals detected in at least one soil sample were identified as soil COPCs.



## **4.0 TOXICITY ASSESSMENT**

This step of the HRA consists of identifying the relevant toxicity endpoints and the appropriate toxicity criteria for each COPC. Toxicity criteria were taken from the USEPA Regional Screening Level guidance (USEPA, 2014) and are listed in Table 2. The methods used to establish the toxicity criteria to evaluate potential carcinogenic and noncarcinogenic health impacts are discussed separately in the following sections.

### **4.1 CARCINOGENIC HEALTH EFFECTS**

To assess carcinogenic health effects, cancer slope factors (SFs) are used for oral and dermal exposures, while inhalation unit risks (IURs) are used for inhalation exposures. SFs and IURs are upper-bound estimates of the carcinogenic potency of chemicals. The SF is expressed as risk per dose  $(\text{mg}/\text{kg}\text{-day})^{-1}$  and the IUR is expressed as risk per air concentration  $(\mu\text{g}/\text{m}^3)^{-1}$ . These toxicity criteria are used to estimate the incremental risk of developing cancer, corresponding to a lifetime of exposure at the concentrations described in the exposure assessment. In standard risk assessment procedures, estimates of carcinogenic potency reflect the conservative assumption that no threshold exists for carcinogenic effects (i.e., that any exposure to a carcinogenic chemical will contribute an incremental amount to an individual's overall risk of developing cancer) (USEPA, 1986, 1989).

### **4.2 NONCARCINOGENIC HEALTH EFFECTS**

The potential for noncancer health effects from chronic exposures was evaluated by comparing the estimated daily exposure with a reference dose (RfD) for oral and dermal exposure routes, and a reference concentration (RfC) for inhalation exposure routes. Chronic toxicity values represent average daily exposure levels at which no adverse health effects are expected to occur under chronic exposure scenarios and are expressed in units of milligrams per kilogram per day  $(\text{mg}/\text{kg}\text{-day})$  for the RfD and micrograms per cubic meter  $(\mu\text{g}/\text{m}^3)$  for the RfC.

## **5.0 EXPOSURE ASSESSMENT**

Exposure assessment is the process of measuring or estimating the intensity, frequency, and duration of human exposure. The definition of exposure (USEPA, 1992b) is “a condition in which a chemical contacts the outer boundary of a human.” The amount of chemical contacted is evaluated as dose (for oral and dermal exposure pathways) or exposure level (for inhalation exposure pathways). In the HRA process, actual exposure cannot be determined; accordingly, a conservative hypothetical exposure is assumed and evaluated based on default regulatory guidance for estimating potential upper bound exposure levels.

This section identifies the exposure scenarios and receptors; discusses the identification of complete and potentially complete exposure pathways; and presents the conceptual site model (CSM). The pathway-specific dose/exposure equations for soil ingestion, dermal contact and inhalation exposure pathways and the default exposure parameters are presented. This section also describes the methods used to estimate exposure point concentrations

### **5.1 EXPOSURE SCENARIOS**

Based on potential future land uses for the site, residential receptors (child and adult) and school receptors (staff and students) were evaluated in the HRA.

A reasonable maximum exposure (RME) was assessed for the future receptor scenarios. The RME, as defined by the USEPA, is the “highest exposure that is reasonably expected to occur” and is estimated by using a combination of upper-bound values and average values for the exposure parameters (USEPA, 1989). To ensure that exposure levels are not underestimated, the RME approach of assessing exposure relies upon conservative assumptions for the exposure parameters. The exposure parameters are provided in Table 3 and Table 4.

### **5.2 CONCEPTUAL SITE MODEL**

The identification of exposure pathways, environmental media of interest (i.e., exposure points), and COPCs is supported by the conceptual site model (CSM), which integrates information regarding sources, release and transport mechanisms with the receptor-specific exposures (USEPA, 1988, 1989). Information regarding sources and release/transport mechanisms is provided in the

The remainder of this subsection identifies the receptors and the receptor-specific exposure pathways.

Complete and potentially complete exposure pathways are identified where the following criteria are, or may be, present (USEPA, 1989):

- A source and mechanism for chemical release
- An environmental transport medium (i.e., air, soil)
- A point of potential human contact with the medium
- A route of exposure (e.g., inhalation, ingestion, dermal contact)

For a future residential land use, the receptors are child and adult residents. For a future school scenario, the receptors are adult staff and child students

The potential routes of exposure for each of these receptors are:

- Incidental ingestion of COPCs in shallow soil
- Dermal contact with COPCs in shallow soil
- Inhalation of wind-eroded shallow soil particulates in outdoor air.

### 5.3 EXPOSURE ASSESSMENT EQUATIONS FOR SOIL PATHWAYS

This section describes the method used for the exposure assessment for the soil exposure pathways. Reasonable maximum exposures to COPCs in soil were calculated for all receptors using the exposure pathway-specific dose and exposure equations presented below. For oral and dermal exposure pathways, the approach for carcinogens is to calculate a lifetime average daily dose (LADD). This is based on chronic lifetime exposure extrapolated over the estimated average 70-year lifetime (USEPA, 1989), and is consistent with the cancer slope factors, which are based on chronic lifetime exposures. For the noncarcinogens, an average daily dose (ADD) is calculated, which estimates dose averaged over the estimated exposure period. As set forth in recent guidance (USEPA, 2009), the contaminant concentration in air, rather than contaminant intake (dose), is used as the basis for estimating chemical exposure via inhalation. This is described further in Section 6.4.

#### 5.3.1 Soil Ingestion

The following equation was used to quantify the ADD and LADD for COPCs due to incidental soil ingestion (CalEPA/DTSC, 2011, CalEPA/DTSC, 2013; USEPA, 1989):

Eq. 1

$$Dose = \frac{C_{soil} \times SIR \times CF \times FI \times EF \times ED \times BIO}{BW \times AT}$$

where:

Dose = ADD for noncarcinogens and LADD for carcinogens (mg/kg-day)

$C_{soil}$  = exposure-point concentration in soil (mg/kg)

SIR = soil ingestion rate (mg/day)

CF = conversion factor ( $10^{-6}$  kg/mg)

FI = fraction ingested from contaminated source (unitless)

EF = exposure frequency (days/year)

ED	=	exposure duration (years)
BIO	=	relative bioavailability <sup>1</sup> (unitless)
BW	=	body weight (kg)
AT	=	averaging time (days); equal to the ED × 365 days/year for noncarcinogens (AT <sub>nc</sub> ) and 70 years (average lifetime) × 365 days/year for carcinogens (AT <sub>c</sub> )

The exposure parameters used for this pathway, and the data sources are presented in Table 3 and Table 4.

### **5.3.2 Dermal Contact with Soil**

The following equation was used to quantify the ADD and LADD for COPCs due to dermal contact with soil (CalEPA/DTSC, 2011, CalEPA/DTSC, 2013; USEPA, 1989):

Eq. 2

$$Dose = \frac{C_{soil} \times CF \times SA \times AF \times ABS \times EF \times ED}{BW \times AT}$$

where:

Dose	=	ADD for noncarcinogens and LADD for carcinogens (mg/kg-day)
C <sub>soil</sub>	=	exposure-point concentration in soil (mg/kg)
CF	=	conversion factor (10 <sup>-6</sup> kg/mg)
SA	=	skin surface area (cm <sup>2</sup> /event)
AF	=	soil-to-skin adherence factor (mg/cm <sup>2</sup> )
ABS	=	absorption factor (unitless)
EF	=	exposure frequency (events/year)
ED	=	exposure duration (years)
BW	=	body weight (kg)
AT	=	averaging time (days); equal to the ED × 365 days/year for noncarcinogens (AT <sub>nc</sub> ) and 70 years (average lifetime) × 365 days/year for carcinogens (AT <sub>c</sub> )

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<sup>1</sup> The HRA conservatively assumed a relative oral bioavailability of 100%.

The exposure parameters used for this pathway, and the data sources are presented in Table 3 and Table 4.

### **5.3.3 Inhalation of Particulates from Soil**

The contaminant concentration in air, rather than contaminant intake, is used as the basis for estimating chemical inhalation risks based on guidance described in RAGS Part F, Supplemental Guidance for Inhalation Risk Assessment (USEPA, 2009). The inhalation equation is as follows:

Eq. 3

$$EC = \frac{C_{soil} \times CF \times ET \times EF \times ED}{AT \times PEF}$$

where:

- EC = exposure concentration ( $\mu\text{g}/\text{m}^3$ )
- $C_{soil}$  = exposure-point concentration in soil (mg/kg)
- CF = conversion factor (1,000  $\mu\text{g}/\text{mg}$ )
- ET = exposure time onsite (hr/day)
- EF = exposure frequency (days/yr)
- ED = exposure duration (year)
- AT = averaging time (hours); equal to the ED (years)  $\times$  365 days/year  $\times$  24 hours/day for noncarcinogens ( $AT_{nc}$ ) and 70 years (average lifetime)  $\times$  365  $\times$  24 hours/day days/year for carcinogens ( $AT_c$ )
- PEF = particulate emission factor ( $\text{m}^3/\text{kg}$ )<sup>2</sup>

The exposure parameters used for this pathway, and the data sources are presented in Table 3 and Table 4.

## **5.4 DETERMINATION OF REPRESENTATIVE EXPOSURE POINT CONCENTRATIONS**

A representative exposure point concentration (EPC) is a COPC-specific and medium-specific concentration used in the dose and exposure equations for each exposure pathway. The methods, rationale, and assumptions employed in deriving the EPCs are discussed below for the relevant environmental media for the site.

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<sup>2</sup> The PEF estimates an air concentration based on a soil concentration (USEPA, 2002).

In accordance with USEPA guidance (USEPA, 1989), soil EPCs were calculated for the direct contact soil exposure scenarios and particulate inhalation exposure as the 95% upper confidence limit (UCL) on the mean site-wide concentration using the USEPA's ProUCL software (version 5.0; USEPA, 2013). Additionally, in accordance with CalEPA/DTSC, 2013, EPCs were also calculated using the maximum site concentration for each COPC. The EPCs are summarized in Table 5.

## 6.0 RISK CHARACTERIZATION

In the last step of the HRA, the results of the toxicity assessment and exposure assessment are employed to estimate the potential risks to human health posed by the COPCs. This step is known as risk characterization. In the risk characterization, cancer risks are evaluated separately from non-cancer adverse health effects.

### 6.1 EVALUATION OF POTENTIAL INCREMENTAL LIFETIME CANCER RISKS

Carcinogenic risks (ILCRs) are estimated as the incremental probability of an individual developing cancer over a lifetime as a result of exposure to a given chemical at a given concentration. ILCRs were evaluated for soil ingestion and dermal contact pathways by multiplying the estimated average exposure rate or dose (i.e., LADD calculated in the exposure assessment) by the chemical's SF. ILCRs for the inhalation pathway were derived by multiplying the estimated average exposure concentration (i.e., EC calculated in the exposure assessment) by the chemical's IUR. The SF or IUR converts estimated LADDs or ECs averaged over a lifetime to incremental risk (over the background incidence) of an individual developing cancer. According to USEPA (1989), this approach is appropriate for theoretical upper-bound incremental lifetime cancer risks of less than  $1 \times 10^{-2}$ . Lifetime chemical-specific risks and total site risks were estimated in the HRA as follows:

$$ILCR_{oral\ or\ dermal} = LADD \times SF$$

where:

- ILCR = incremental lifetime cancer risk (unitless)
- LADD = lifetime average daily dose (mg/kg-day)
- SF = cancer slope factor (mg/kg-day)<sup>-1</sup>

$$ILCR_{inhalation} = EC \times IUR$$

where:

- ILCR = incremental lifetime cancer risk
- EC = exposure concentration (µg/m<sup>3</sup>)
- IUR = inhalation unit risk factor (µg/m<sup>3</sup>)<sup>-1</sup>

The estimated ILCR for each COPC (if more than one) and exposure route are summed, regardless of the type of cancer associated with each chemical, to estimate the total ILCR for each receptor. ILCRs are summarized in Tables 6 through 9.

## 6.2 EVALUATION OF POTENTIAL NONCANCER HEALTH EFFECTS

For the soil ingestion and dermal contact pathways, noncancer adverse health effects were evaluated by comparing the estimated average exposure rate (i.e., ADDs or ECs estimated in the exposure assessment) with an exposure level at which no adverse health effects are expected to occur for a long period of exposure (i.e., the RfDs and RfCs). ADDs and RfDs are compared by dividing the ADD by the RfD to obtain the hazard quotient (HQ), as follows:

$$\text{Hazard Quotient}_{\text{oral or dermal}} = \frac{\text{ADD}}{\text{RfD}}$$

where:

ADD = average daily dose (mg/kg-day)

RfD = reference dose (mg/kg-day)

For the inhalation pathway, ECs and RfCs are compared by dividing the EC by the RfC to obtain the HQ for this pathway, as follows:

$$\text{Hazard Quotient}_{\text{inhalation}} = \frac{\text{EC}}{\text{RfC}}$$

where:

EC = exposure concentration (mg/m<sup>3</sup>)

RfC = reference concentration (mg/m<sup>3</sup>)

A hazard quotient less than or equal to 1 indicates that the predicted exposure to that chemical should not result in an adverse noncarcinogenic health effect (USEPA, 1989). When more than one pathway is evaluated, the hazard quotients for each pathway, for all COPCs, are summed to determine whether exposure to a combination of pathways poses a health concern. This sum of the hazard quotients is known as a hazard index (HI). HIs are summarized in Tables 6 through 9.



## 7.0 SUMMARY AND CONCLUSIONS

A site specific HRA was prepared to assess the nature and extent of potential human health risks associated with exposure to organochlorine pesticides detected in soil at the site located at 16500 and 16550 Ashland Avenue; 205 and 255 Año Avenue, San Lorenzo, California. The potential future land uses include a residential development and a school. For the residential scenario, child and adult residents were evaluated. For the school scenario, staff and students were evaluated. Shallow soil data collected in October and November of 2014 and analyzed for organochlorine pesticides by EPA Method 8081A were used to characterize soil exposure concentrations. Exposure concentrations were estimated two ways for each set of receptors: (1) a 95<sup>th</sup> UCL for the site-wide data set was calculated for each detected COPC and (2) the maximum site concentration for each COPC was used. A data usability evaluation confirmed that the soil data are analytically usable for the HRA and sample distribution is adequate for the HRA. Toxicity values for the COPCs were taken from the USEPA Regional Screening Tables (USEPA, 2014). Exposure parameters were taken from current CalEPA and USEPA guidance.

A summary of the incremental lifetime cancer risks and noncancer hazard indices using the site-wide UCL as the basis for the exposure concentration is in the two tables presented below.

<b>Receptor</b>	<b>ILCR (adult &amp; child)</b>	<b>Hazard Index (child)</b>
Resident	2E-05	0.24

The ILCR is within the USEPA de minimis range of  $10^{-6}$  to  $10^{-4}$ , but exceeds the target of  $10^{-6}$  generally applied by California agencies for residential and school land uses. The child resident HI is below the ceiling target of 1.<sup>3</sup>

<b>Receptor</b>	<b>ILCR (adult)</b>	<b>Hazard Index (child)</b>
Adult Staff	7E-06	0.03
Child Student	3E-06	0.05

The ILCRs are within the USEPA de minimis range of  $10^{-6}$  to  $10^{-4}$ , but slightly exceed the target of  $10^{-6}$  generally applied by California agencies for residential and school land uses. The HIs are well below the ceiling target of 1.

<sup>3</sup> The adult resident HI is always lower than the child HI, so only the child HI is calculated.

A summary of the incremental lifetime cancer risks and noncancer hazard indices using the maximum site concentration as the basis for the exposure concentration is in the two tables presented below.

<b>Receptor</b>	<b>ILCR (adult &amp; child)</b>	<b>Hazard Index (child)</b>
Resident	1E-04	1.3

The ILCR is at the upper end of the USEPA de minimis range of  $10^{-6}$  to  $10^{-4}$ , but exceeds the target of  $10^{-6}$  generally applied by California agencies for residential and school land uses. The child resident HI slightly exceeds the ceiling target of 1.

<b>Receptor</b>	<b>ILCR (adult)</b>	<b>Hazard Index (child)</b>
Adult Staff	4E-05	0.16
Child Student	2E-05	0.29

The ILCRs are within the USEPA de minimis range of  $10^{-6}$  to  $10^{-4}$ , but exceed the target of  $10^{-6}$  generally applied by California agencies for residential and school land uses. The HIs are below the ceiling target of 1.

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# **TABLES**

**Table 1**  
**Discrete Soil Analytical Results - Organochlorine Pesticides (OCPs)**  
 16500 to 16550 Ashland Avenue - 205 to 255 Ano Avenue  
 San Lorenzo, California

Sample ID	Sample Date	Aldrin	4,4-DDT	4,4-DDE	4,4-DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin aldehyde	Endrin	Endrin ketone	Chlordane (technical)	alpha-Chlordane	gamma-Chlordane	Heptachlor	Heptachlor epoxide	alpha-BHC (Lindane)	beta-BHC (Lindane)	gamma-BHC (Lindane)	delta-BHC (Lindane)	Methoxychlor	Toxaphene
		OCPs (mg/kg)																					
S-1 0-0.5'	10/3/2014	<0.0019	<0.0019	<0.0019	<0.0019	0.1500	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	0.25	0.0720	0.0520	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0039
S-2 0-0.5'	10/3/2014	0.1200	0.0560	0.0370	0.0250	3.20	<0.0020	<0.0020	<0.0020	0.0400	0.0400	0.0110	0.25	0.0410	0.0570	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0040
S-3 0-0.5'	10/3/2014	<0.0020	<0.0020	0.0041	<0.0020	0.0130	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.04	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0040
S-4 0-0.5'	10/3/2014	<0.0020	0.0120	0.0110	<0.0020	0.0390	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.07	0.0120	0.0130	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0040
S-5 0-0.5'	10/3/2014	<0.0020	<0.0020	<0.0020	<0.0020	0.0047	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.21	0.0300	0.0380	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0040
S-6 0-0.5'	10/3/2014	0.0027	0.2800	0.0440	<0.0020	0.5600	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0170	0.36	0.0530	0.0660	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0040
S-7 0-0.5'	10/3/2014	<0.0020	0.0400	0.0190	<0.0020	0.0420	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.26	0.0470	0.0550	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0040
S-8 0-0.5'	10/3/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.04	0.0083	0.0079	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0040
S-9 0-0.5'	10/3/2014	<0.0020	<0.0020	<0.0020	<0.0020	0.5700	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0033	0.53	0.1300	0.1100	<0.0020	<0.0020	<0.0020	<0.0020	0.0100	<0.0020	<0.0020	<0.0039
S-10 0-0.5'	10/3/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.04	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0040
S-11 0-0.5'	10/3/2014	<0.0020	<0.0020	<0.0020	<0.0020	0.0040	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.04	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0040
S-12 0-0.5'	10/3/2014	<0.0019	<0.0019	<0.0019	<0.0019	<0.0020	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.039	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0039
S-2A 0-0.5' CT	11/5/2014	<0.0018	<0.0034	<0.0034	<0.0034	0.0053	<0.0018	<0.0034	<0.0034	<0.0034	<0.0034	--	--	0.0055	0.0043	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.018	<0.062
S-2A 0-0.5' TAL	11/5/2014	<0.039	0.065	0.057 P	0.120	0.660	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	2.2	0.350 P	0.450	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.780
S-2A 0-0.5' AT	11/5/2014	0.0104 J	0.0690	0.0322 J	<0.033	0.350	<0.033	<0.033	<0.033	<0.033	0.0099 J	--	1.78	--	--	0.0087 J	0.0181 J	<0.033	<0.033	<0.033	<0.033	<0.033	<0.330
S-10A 0-0.5' CT	11/5/2014	<0.0017	0.0038 #	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.06
S-10A 0-0.5' TAL	11/5/2014	<0.0020	0.0200	0.0160	0.0066	0.0038	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.04	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.04
S-13 0-0.5'	11/5/2014	<0.0020	0.100	0.0066	<0.0020	0.054	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.170	0.019 P	0.024	<0.0020	<0.0020	<0.0020	<0.0020	0.0031	<0.0020	<0.0020	<0.040
S-13 1.5-2'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-14 0-0.5' TAL	11/5/2014	0.043	0.940	0.093	0.150	3.00	<0.039	<0.039	<0.039	<0.039	<0.039	0.140	1.50	0.200 P	0.280	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.039	<0.780
S-14 0-0.5' AT	11/5/2014	0.0367	0.379	0.0587	0.0117 J	1.40	<0.033	<0.033	<0.033	<0.033	0.0357	--	1.52	--	--	0.0076 J	<0.033	<0.033	<0.033	<0.033	<0.033	<0.033	<0.330
S-14 1.5-2'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	0.0026	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-15 0-0.5'	11/5/2014	<0.0020	0.0031	<0.0020	0.0032	0.0048	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040
S-15 1.5-2'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-16 0-0.5'	11/5/2014	0.026	0.510	0.250	0.051	1.20	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	0.019	0.750	0.120 P	0.150	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.190
S-16 1.5-2'	11/5/2014	<0.0020	0.0050	<0.0020	<0.0020	0.0067	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040
S-17 0-0.5'	11/5/2014	0.0024	0.042	0.049	0.044	0.100	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.100	0.012 P	0.019	<0.0020	<0.0020	<0.0020	<0.0020	0.0030	<0.0020	<0.0020	<0.040
S-17 1.5-2'	11/5/2014	<0.0020	<0.0020	0.0020	0.0022	0.0051	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-18 0-0.5'	11/5/2014	<0.0020	0.025	0.023	0.025	0.190	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0044	0.049	0.0060 P	0.0079	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040
S-18 1.5-2'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039

**Table 1**  
**Discrete Soil Analytical Results - Organochlorine Pesticides (OCPs)**  
16500 to 16550 Ashland Avenue - 205 to 255 Ano Avenue  
San Lorenzo, California

Sample ID	Sample Date	Aldrin	4,4-DDT	4,4-DDE	4,4-DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin aldehyde	Endrin	Endrin ketone	Chlordane (technical)	alpha-Chlordane	gamma-Chlordane	Heptachlor	Heptachlor epoxide	alpha-BHC (Lindane)	beta-BHC (Lindane)	gamma-BHC (Lindane)	delta-BHC (Lindane)	Methoxychlor	Toxaphene
		OCPs (mg/kg)																					
S-19 0-0.5'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<b>0.041</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<b>0.0026 P</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-19 1.5-2'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-20 0-0.5'	11/5/2014	<0.0019	<b>0.021</b>	<b>0.0037</b>	<0.0019	<b>0.026</b>	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.039	<b>0.0040 P</b>	<b>0.0060</b>	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.039
S-20 1.5-2'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-21 0-0.5'	11/5/2014	<0.0098	<b>0.050</b>	<b>0.012</b>	<0.0098	<b>0.620</b>	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.200	<b>0.015 P</b>	<b>0.013 P</b>	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.200
S-21 1.5-2'	11/5/2014	<0.0020	<b>0.0021</b>	<0.0020	<0.0020	<b>0.037</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-22 0-0.5'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-22 1.5-2'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-23 0-0.5'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-23 1.5-2'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040
S-24 0-0.5'	11/5/2014	<0.0020	<b>0.0036</b>	<0.0020	<0.0020	<b>0.0037</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<b>0.074</b>	<b>0.010 P</b>	<b>0.013</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-24 1.5-2'	11/5/2014	<0.0020	<b>0.0023</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040
S-25 0-0.5'	11/5/2014	<0.0020	<b>0.014</b>	<0.0020	<0.0020	<b>0.0032</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-25 1.5-2'	11/5/2014	<0.0098	<b>0.031</b>	<0.0098	<b>0.045</b>	<b>1.100</b>	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<b>0.030</b>	<0.200	<b>0.040 P</b>	<b>0.034 P</b>	<0.0098	<0.0098	<0.0098	<0.0098	<b>0.011</b>	<0.0098	<0.0098	<0.200
S-26 0-0.5'	11/5/2014	<0.0020	<b>0.018</b>	<b>0.0029</b>	<b>0.0021</b>	<b>0.055</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<b>0.0028 P</b>	<b>0.0026 P</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-26 1.5-2'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<b>0.0029</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040
S-27 0-0.5'	11/5/2014	<0.020	<b>0.036</b>	<b>0.038</b>	<b>0.065</b>	<b>0.210</b>	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<b>2.50</b>	<b>0.380 P</b>	<b>0.550</b>	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.390
S-27 1.5-2'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-28 0-0.5'	11/5/2014	<0.0020	<b>0.069</b>	<b>0.026</b>	<0.0020	<b>0.061</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<b>0.0020</b>	<b>0.290</b>	<b>0.042 P</b>	<b>0.057</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.040
S-28 1.5-2'	11/5/2014	<0.0020	<b>0.0057</b>	<0.0020	<0.0020	<b>0.0038</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<b>0.0029 P</b>	<b>0.0034</b>	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-29 0-0.5'	11/5/2014	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.039
S-29 1.5-2'	11/5/2014	<0.0039	<b>0.018 P</b>	<b>0.0054</b>	<b>0.013 P</b>	<b>0.130</b>	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<b>0.780</b>	<b>0.130 P</b>	<b>0.180 P</b>	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.0039	<0.078
S-30 0-0.5'	11/5/2014	<b>0.0027 C</b>	<b>0.012 #</b>	<0.0033	<b>0.0035</b>	<b>0.012 C</b>	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<b>0.0024</b>	<b>0.014 C</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-30 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.061

**Table 1**  
**Discrete Soil Analytical Results - Organochlorine Pesticides (OCPs)**  
16500 to 16550 Ashland Avenue - 205 to 255 Ano Avenue  
San Lorenzo, California

Sample ID	Sample Date	Aldrin	4,4-DDT	4,4-DDE	4,4-DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin aldehyde	Endrin	Endrin ketone	Chlordane (technical)	alpha-Chlordane	gamma-Chlordane	Heptachlor	Heptachlor epoxide	alpha-BHC (Lindane)	beta-BHC (Lindane)	gamma-BHC (Lindane)	delta-BHC (Lindane)	Methoxychlor	Toxaphene
		OCPs (mg/kg)																					
S-31 0-0.5'	11/5/2014	<0.0084	<b>0.470 C#</b>	<b>0.170</b>	<b>0.063 C</b>	<b>0.470 C</b>	<0.0084	<0.016	<0.016	<b>0.022 C</b>	<b>0.093 C</b>	--	--	<b>0.160</b>	<b>0.140</b>	<0.0084	<0.0084	<0.0084	<0.0084	<0.0084	<0.0084	<0.084	<0.300
S-31 1.5-2'	11/5/2014	<0.0017	<b>0.0058</b>	<0.0033	<0.0033	<b>0.0073</b>	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<b>0.0026</b>	<b>0.0018</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.061
S-32 0-0.5'	11/5/2014	<0.0017	<b>0.0180</b>	<b>0.0067</b>	<0.0033	<b>0.043</b>	<0.0017	<0.0033	<0.0033	<b>0.0051 C</b>	<0.0033	--	--	<b>0.067</b>	<b>0.087</b>	<0.017	<b>0.011 C</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-32 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<b>0.0020</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-33 0-0.5'	11/5/2014	<0.0017	<b>0.039</b>	<b>0.020</b>	<0.0033	<b>0.094</b>	<0.0017	<b>0.0073 C</b>	<b>0.0042</b>	<b>0.0091C</b>	<0.0033	--	--	<b>0.065 C</b>	<b>0.100</b>	<0.017	<b>0.0045 C</b>	<b>0.0042 C</b>	<0.0017	<0.0017	<b>0.0044</b>	<0.017	<0.060
S-33 1.5-2'	11/5/2014	<0.0017	<b>0.0060 C#</b>	<0.0033	<0.0033	<b>0.026</b>	<0.0017	<0.0033	<0.0033	<b>0.0110</b>	<0.0033	--	--	<b>0.0042</b>	<b>0.0049</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-34 0-0.5'	11/5/2014	<b>0.018 C</b>	<b>0.510 #</b>	<b>0.150</b>	<0.017	<b>0.770</b>	<0.0085	<b>0.220</b>	<b>0.024 #</b>	<b>0.098 C</b>	<0.017	--	--	<b>0.660</b>	<b>0.560</b>	<0.0085	<0.0085	<0.0085	<0.0085	<0.0085	<0.0085	<0.085	<0.300
S-34 1.5-2'	11/5/2014	<0.0017	<b>0.0040 C</b>	<0.0033	<0.0033	<b>0.0058</b>	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<b>0.0019</b>	<b>0.0022</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-35 0-0.5'	11/5/2014	<0.017	<b>0.047 #</b>	<b>0.036</b>	<0.034	<b>0.039 C</b>	<0.017	<0.034	<0.034	<0.034	<0.034	--	--	<b>0.056 C</b>	<b>0.100</b>	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.170	<0.610
S-35 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<b>0.0033 C</b>	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<b>0.0022</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.061
S-36 0-0.5'	11/5/2014	<b>0.015</b>	<b>0.095 #</b>	<b>0.020</b>	<0.010	<b>0.180</b>	<0.0052	<0.010	<0.010	<0.010	<0.010	--	--	<b>0.042</b>	<b>0.059 C</b>	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.052	<0.180
S-36 1.5-2'	11/5/2014	<0.0017	<b>0.0048</b>	<0.0033	<0.0033	<b>0.0060</b>	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<b>0.0021 C</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.059
S-37 0-0.5'	11/5/2014	<0.0017	<b>0.0063 #</b>	<0.0033	<0.0033	<b>0.0093</b>	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<b>0.0033</b>	<b>0.0034</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-37 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-38 0-0.5'	11/5/2014	<0.0017	<b>0.062 #</b>	<b>0.015 C</b>	<b>0.0039 C</b>	<b>0.110</b>	<0.017	<b>0.011 C</b>	<b>0.0045 C</b>	<b>0.019 C</b>	<0.0033	--	--	<b>0.310 C</b>	<b>0.340</b>	<0.0017	<b>0.018 C</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-38 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<b>0.0031 C</b>	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<b>0.0020</b>	<b>0.0023 C</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.059
S-39 0-0.5'	11/5/2014	<0.0017	<b>0.070 #</b>	<b>0.018</b>	<b>0.0043 #</b>	<b>0.042</b>	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<b>0.0098</b>	<b>0.012</b>	<0.0017	<0.0017	<0.0017	<0.0017	<b>0.0063</b>	<0.0017	<0.017	<0.059
S-39 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-40 0-0.5'	11/5/2014	<b>0.0056 C</b>	<b>0.100</b>	<b>0.016</b>	<b>0.0094 C#</b>	<b>0.420</b>	<b>0.011 C</b>	<b>0.0080 C</b>	<0.0033	<0.0033	<0.0033	--	--	<b>0.110</b>	<b>0.120</b>	<0.0017	<0.0017	<0.0017	<0.0017	<b>0.0021</b>	<0.0017	<0.017	<0.061
S-40 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.061
S-41 0-0.5'	11/5/2014	<0.017	<0.032	<0.032	<0.032	<b>0.042</b>	<0.017	<0.032	<0.032	<0.032	<0.032	--	--	<b>0.065 C</b>	<b>0.030</b>	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.170	<0.590
S-41 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<b>0.0053 C</b>	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<b>0.012 C</b>	<b>0.0046</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-42 0-0.5'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<b>0.0025</b>	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-42 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060



**Table 1**  
**Discrete Soil Analytical Results - Organochlorine Pesticides (OCPs)**  
 16500 to 16550 Ashland Avenue - 205 to 255 Ano Avenue  
 San Lorenzo, California

Sample ID	Sample Date	Aldrin	4,4-DDT	4,4-DDE	4,4-DDD	Dieldrin	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin aldehyde	Endrin	Endrin ketone	Chlordane (technical)	alpha-Chlordane	gamma-Chlordane	Heptachlor	Heptachlor epoxide	alpha-BHC (Lindane)	beta-BHC (Lindane)	gamma-BHC (Lindane)	delta-BHC (Lindane)	Methoxychlor	Toxaphene
		OCPs (mg/kg)																					
S-43 0-0.5'	11/5/2014	<0.034	<b>0.100 C#</b>	<0.066	<0.066	<b>0.100 C</b>	<0.034	<0.066	<0.066	<0.066	<b>0.077</b>	--	--	<b>0.044 C</b>	<b>0.053</b>	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.340	<1.200
S-43 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-44 0-0.5'	11/5/2014	<0.0084	<0.016	<0.016	<b>0.029 #</b>	<b>0.040 C</b>	<0.0084	<0.016	<0.016	<0.016	<0.016	--	--	<b>0.096 C</b>	<b>0.110</b>	<0.0084	<0.0084	<0.0084	<0.0084	<0.0084	<0.0084	<0.084	<0.300
S-44 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<b>0.0041 C</b>	<b>0.0050</b>	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.017	<0.060
S-45 0-0.5'	11/5/2014	<0.034	<b>0.120 #</b>	<0.066	<0.066	<b>0.250 C</b>	<0.034	<0.066	<0.066	<0.066	<b>0.069</b>	--	--	<b>0.059 C</b>	<b>0.075</b>	<0.034	<0.034	<0.034	<0.034	<0.034	<0.034	<0.340	<1.200
S-45 1.5-2'	11/5/2014	<0.0017	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	--	--	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.170	<0.061
ESL - Residential Direct Exposure		0.032	1.7	1.7	2.4	0.034	470 <sup>endo</sup>	470 <sup>endo</sup>	NE	NE	23	NE	0.44*	0.44*	0.44*	0.061	0.061	NE	NE	21	NE	390	0.046
ESL - Groundwater Protection		5.0	4.3	1,100	750	0.0023	3200 <sup>endo</sup>	3200 <sup>endo</sup>	NE	0.00065	0.00065	NE	15*	15*	15*	0.014	0.014	NE	NE	0.0098	NE	19	0.00042
RSL - Residential Soil		0.033	1.9	1.6	2.2	0.031	370 nc	370 nc	NE	18 nc	18 nc	NE	1.8	1.8	1.8	0.059	0.059	NE	NE	0.0098	NE	310 nc	0.48
Hazardous Waste	TTLIC	1.4	1.0	1.0	1.0	8.0	NE	NE	NE	NE	0.2	NE	2.5*	2.5*	2.5*	4.7	4.7	4.0	4.0	4.0	4.0	100	5
	STLC (x10)	1.4	1.0	1.0	1.0	8.0	NE	NE	NE	NE	0.2	NE	2.5*	2.5*	2.5*	4.7	4.7	4.0	4.0	4.0	4.0	100	5
TCLP (x20 - mg/L)		NE	NE	NE	NE	NE	NE	NE	NE	0.4	0.4	0.4	0.6*	0.6*	0.6*	0.16	0.16	8.0	8.0	8.0	8.0	200.0	1.0

**Notes:**

Sample results in milligrams per kilogram (mg/kg), <0.0019 = less than indicated laboratory reporting limit; Detected analyte concentration in bold for ease of reading; Highlighted concentrations exceed regulatory guideline also highlighted  
 OCPs = Organochlorine Pesticides by USEPA Method 8081A -- = Not a standard analyte by the selected laboratory for the method.  
 C = presence confirmed - relative percent difference (RPD) between columns exceeds 40%; # = calibration drift within method requirements; 'J' = estimated value below lab reporting limit  
 S-2A & S-10A = Split samples analyzed as controls with matrix spiking by laboratories; CT = Curtis & Tompkins LTD; TAL = Testamerica Laboratory, AL = Accutest Laboratories (Re-analysis of S-2A 0-0.5' TAL & S-14 0-0.5' TAL). Split and duplicate results highlighted in green.  
<sup>endo</sup> = ESL established for Endosulfan; \* = Regulatory level established for Chlordane (total or technical)  
 ESL = Regional Water Quality Control Board Environmental Screening Level for Residential Land Use based on Direct Exposure (Table K-1) and Groundwater Protection (Table G)  
 Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, Interim Final (December 2013)  
 RSL = US E.P.A. Region 9 - Regional Screening Levels for Chemical Contaminants - residential soil, carcinogenic risk; nc = non-carcinogenic risk for child listed when no carcinogenic risk level listed; updated May 2014  
 NE = Regulatory level not established  
 TTLIC = Total Threshold Limit Concentration for waste characterization, California Code of Regulations, Title 22.  
 STLC = Soluble Threshold Limit Concentration for waste characterization, California Code of Regulations, Title 22. Dilution factor for TTLIC to STLC is 10:1.  
 TCLP = Toxicity Characteristic Leachate Procedure for waste characterization, California Code of Regulations, Title 22. Dilution factor for TTLIC to TCLP is 20:1. (Note: units in micrograms per liter [ug/L])

**Table 2**  
**Toxicity Criteria of Chemicals of Potential Concern**

Chemical	Chronic Oral Reference Dose (RfD <sub>o</sub> ) [mg/kg-day]		Inhalation Reference Concentration [ug/m <sup>3</sup> ]		Oral Cancer Slope Factor (CSF <sub>o</sub> ) [mg/kg-day] <sup>-1</sup>		Inhalation Unir Risk (IUR) [ug/m <sup>3</sup> ] <sup>-1</sup>	
<i>Pesticides</i>								
Aldrin	3.0E-05	e	NA	e	1.7E+01	e	4.9E-03	e
BHC (alpha)	8.0E-03	e	NA	e	6.3E+00	e	1.8E-03	e
BHC (delta)	NA	e	NA	e	1.8E+00	e	5.1E-04	e
BHC (gamma)	3.0E-04	e	NA	e	1.1E+00	e	3.1E-04	e
Chlordane (alpha)	5.0E-04	e	7.0E-04	e	3.5E-01	e	1.0E-04	e
Chlordane (gamma)	5.0E-04	e	7.0E-04	e	3.5E-01	e	1.0E-04	e
Chlordane (technical)	5.0E-04	e	7.0E-04	e	3.5E-01	e	1.0E-04	e
DDD	NA	e	NA	e	2.4E-01	e	6.9E-05	e
DDE	NA	e	NA	e	3.4E-01	e	9.7E-05	e
DDT	5.0E-04	e	NA	e	3.4E-01	e	9.7E-05	e
Dieldrin	5.0E-05	e	NA	e	1.6E+01	e	4.6E-03	e
Endosulfan I	6.0E-03	e	NA	e	NA	e	NA	e
Endosulfan II	6.0E-03	e	NA	e	NA	e	NA	e
Endosulfan sulfate	6.0E-03	e	NA	e	NA	e	NA	e
Endrin	3.0E-04	e	NA	e	NA	e	NA	e
Endrin aldehyde	3.0E-04	e	NA	e	NA	e	NA	e
Endrin ketone	3.0E-04	e	NA	e	NA	e	NA	e
Heptachlor	5.0E-04	e	NA	e	4.5E+00	e	1.3E-03	e
Heptachlor epoxide	1.3E-05	e	NA	e	9.1E+00	e	2.6E-03	e

**Notes:**

e = U.S. EPA Regional Screening Levels tables, May 2014

**Table 3  
Exposure Parameters for Residential Receptor**

<b>Child Parameter</b>	<b>Value</b>	<b>Units</b>	<b>Primary Source*</b>
<b>Residential Scenario: Child</b>			
Soil ingestion rate:	200	mg/day	USEPA, 2011
Exposure time:	24	hours	USEPA, 2009
Body weight:	15	kg	USEPA, 1989
Exposure frequency:	350	days/year	USEPA, 1989
Exposure duration:	6	years	USEPA, 1989
Dermal Absorp. Factor:	chemical-specific	unitless	USEPA, 2004
Adherence factor:	0.2	mg/cm <sup>2</sup>	USEPA, 2004
Surface area:	2900	cm <sup>2</sup>	USEPA, 2004
Particulate emission factor:	1.36 E+09	m <sup>3</sup> /kg	USEPA, 2002
Averaging Time:			
Noncarcinogens:	2190	days	USEPA, 1989
Noncarcinogens:	52,560	hours	USEPA, 2009
Carcinogens:	25550	days	USEPA, 1989
Carcinogens:	613200	hours	USEPA, 2009

\* Values are consistent with CalEPA/DTSC 2011b.

<b>Adult Parameter</b>	<b>Value</b>	<b>Units</b>	<b>Primary Source*</b>
<b>Residential Scenario: Adult</b>			
Soil ingestion rate:	100	mg/day	USEPA, 2011
Exposure time:	8	hours	USEPA, 2009
Body weight:	70	kg	USEPA, 1989
Exposure frequency:	350	days/year	USEPA, 1989
Exposure duration:	24	years	USEPA, 1989
Dermal Absorp. Factor:	chemical-specific	unitless	USEPA, 2004
Adherence factor:	0.07	mg/cm <sup>2</sup>	USEPA, 2004
Surface area:	5700	cm <sup>2</sup>	USEPA, 2004
Particulate emission factor:	1.36 E+09	m <sup>3</sup> /kg	USEPA, 2002
Averaging Time:			
Noncarcinogens:	8760	days	USEPA, 1989
Noncarcinogens:	210,240	hours	USEPA, 2009
Carcinogens:	25550	days	USEPA, 1989
Carcinogens:	613200	hours	USEPA, 2009

\* Values are consistent with CalEPA/DTSC 2011b.

**Table 4  
Exposure Parameters for School Receptors**

Exposure/Site Specific Parameter	Units	School Exposure Parameters		
		Staff	Student	Source
Soil Ingestion Rate (IR-S)	mg/day	100	100	CalEPA/OEHHA, 2004
Skin Surface Area (SA)	cm <sup>2</sup> /day	5,700	2,900	CalEPA/DTSC, 2011
Skin Adsorption Factor (ABS)	unitless	chem-specific	chem-specific	USEPA, 2014
Adherence Factor (AF)	mg/cm <sup>2</sup>	0.20	0.80	CalEPA/DTSC, 2011
Fraction of Soil Exposed (FE)	unitless	1	1	Default
Inhalation Rate of Air (IR-A)	m <sup>3</sup> /day	20	10	CalEPA/DTSC, 2011
Exposure Frequency (EF)	days/year	250	180	CalEPA/OEHHA, 2004
Exposure Frequency (dermal; EF <sub>d</sub> )	days/year	250	180	CalEPA/OEHHA, 2004
Exposure Duration (ED)	years	25	6	CalEPA/DTSC, 2011
Conversion Factor (CF)	kg/mg	1.0E-06	1.0E-06	--
Body Weight (BW)	kg	70	42.3	CalEPA/OEHHA, 2004
Averaging Time for Noncarcinogens (AT <sub>nc</sub> )	days	9,125	2,190	EPA 1989 (ED*365 days/yr)
Averaging Time for Carcinogens (AT <sub>c</sub> )	days	25,550	25,550	EPA 1989

**Table 5**  
**Statistical Parameters for Soil Pesticide Data**  
**16500 and 16550 Ashland Avenue & 205 and 255 Ano Avenue**  
**San Lorenzo, California**

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Statistical Parameter (units)	Chemical				
	Aldrin	DDT	DDE	DDD	Dieldrin
Number of Samples	80	80	80	80	80
Number of Detections	10	42	28	19	56
Number of Nondetected	70	38	52	61	24
Percent of Nondetected (%)	87.5	47.5	65	76.25	30
Minimum Detected (ug/kg)	0.0017	0.0019	0.0019	0.0019	0.0017
Maximum Detected (ug/kg)	0.034	0.032	0.066	0.066	0.002
Mean Concentration (ug/kg)	0.0246	0.0963	0.0411	0.035	0.264
Median Concentration (ug/kg)	0.0127	0.0335	0.0195	0.025	0.0415
Standard Deviation	0.0359	0.185	0.058	0.0414	0.614
Coefficient of Variability	1.46	1.922	1.41	1.182	2.325
95UCL (ug/kg)	0.0131	0.151	0.0265	0.0186	0.554

Notes:

DDD = Dichlorodiphenyldichloroethane

DDE = Dichlorodiphenyldichloroethylene

DDT = Dichlorodiphenyltrichloroethane

ug/kg = Micrograms per kilogram

95UCL = 95 percent upper confidence limit on the arithmetic mean concentration

NA = Not applicable

**Table 5**  
**Statistical Parameters for Soil Pesticide Data**  
**16500 and 16550 Ashland Avenue & 205 and 255 Ano Avenue**  
**San Lorenzo, California**

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Statistical Parameter (units)	Chemical				
	Endosulfan I	Endosulfan II	Endosulfan sulfate	Endrin aldehyde	Endrin
Number of Samples	80	80	80	79	80
Number of Detections	1	4	3	6	6
Number of Nondetected	79	76	77	73	74
Percent of Nondetected (%)	98.75	95	96.25	92.41	92.5
Minimum Detected (ug/kg)	0.0017	0.0019	0.0019	0.0019	0.0019
Maximum Detected (ug/kg)	0.034	0.066	0.066	0.066	0.034
Mean Concentration (ug/kg)	0.011	0.0616	0.0109	0.0325	0.0541
Median Concentration (ug/kg)	0.011	0.0095	0.0045	0.0205	0.0545
Standard Deviation	NA	0.106	0.0113	0.0342	0.0308
Coefficient of Variability	NA	1.715	1.041	1.052	0.57
95UCL (ug/kg)	NA	NA	NA	0.00694	0.00904

Notes:

ug/kg = Micrograms per kilogram

95UCL = 95 percent upper confidence limit on the arithmetic mean concentration

NA = Not applicable

**Table 5**  
**Statistical Parameters for Soil Pesticide Data**  
**16500 and 16550 Ashland Avenue & 205 and 255 Ano Avenue**  
**San Lorenzo, California**

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Statistical Parameter (units)	Chemical				
	Endrin ketone	Chlordane (technical)	alpha- Chlordane	gamma- Chlordane	Heptachlor
Number of Samples	48	48	80	80	80
Number of Detections	8	17	45	47	2
Number of Nondetected	40	31	35	33	78
Percent of Nondetected (%)	83.33	64.58	43.75	41.25	97.5
Minimum Detected (ug/kg)	0.0019	0.002	0.0017	0.0017	0.0017
Maximum Detected (ug/kg)	0.039	0.2	0.002	0.002	0.034
Mean Concentration (ug/kg)	0.0283	0.61	0.0779	0.0855	0.00815
Median Concentration (ug/kg)	0.014	0.26	0.041	0.034	0.00815
Standard Deviation	0.0461	0.751	0.126	0.135	0.00077782
Coefficient of Variability	1.627	1.232	1.621	1.584	0.0954
95UCL (ug/kg)	0.0171	0.439	0.0716	0.08	NA

Notes:

ug/kg = Micrograms per kilogram

95UCL = 95 percent upper confidence limit on the arithmetic mean concentration

NA = Not applicable

**Table 5**  
**Statistical Parameters for Soil Pesticide Data**  
**16500 and 16550 Ashland Avenue & 205 and 255 Ano Avenue**  
**San Lorenzo, California**

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Statistical Parameter (units)	Chemical				
	Heptachlor epoxide	alpha-BHC	beta-BHC	gamma-BHC	delta-BHC
Number of Samples	80	80	80	80	80
Number of Detections	4	1	0	6	1
Number of Nondetected	76	79	80	74	79
Percent of Nondetected (%)	95	98.75	100	92.5	98.75
Minimum Detected (ug/kg)	0.0017	0.0017	0.0017	0.0017	0.0017
Maximum Detected (ug/kg)	0.034	0.039	0.039	0.039	0.039
Mean Concentration (ug/kg)	0.0129	0.0042	NA	0.00592	0.0044
Median Concentration (ug/kg)	0.0145	0.0042	NA	0.0047	0.0044
Standard Deviation	0.00651	NA	NA	0.00384	NA
Coefficient of Variability	0.505	NA	NA	0.649	NA
95UCL (ug/kg)	NA	NA	NA	0.00239	NA

Notes:

ug/kg = Micrograms per kilogram

95UCL = 95 percent upper confidence limit on the arithmetic mean concentration

NA = Not applicable



**Table 6**  
**Estimated Cumulative Risks and Hazards**  
**Residential Exposure Scenario and 95UCL Soil Concentrations**  
**16500 and 16550 Ashland Avenue & 205 and 255 Ano Avenue**  
**San Lorenzo, California**

COPC	Residential Exposure Scenario		
	Exposure Point Concentration (mg/kg)	Cancer Risk Adult & Child	Hazard Index Child
<i>Pesticides</i>			
Aldrin	0.0131	4.6E-07	7.2E-03
BHC (alpha)	0.0042	5.5E-08	8.7E-06
BHC (delta)	0.0044	1.6E-08	--
BHC (gamma)	0.00239	4.6E-09	1.1E-04
Chlordane (alpha)	0.0716	4.4E-08	2.1E-03
Chlordane	0.08	4.9E-08	2.4E-03
Chlordane	0.439	2.7E-07	1.3E-02
DDD	0.0186	9.2E-09	--
DDE	0.0265	1.9E-08	--
DDT	0.151	8.8E-08	4.2E-03
<b>Dieldrin</b>	<b>0.554</b>	<b>1.8E-05</b>	1.8E-01
Endosulfan I	0.011	--	3.0E-05
Endosulfan II	0.22	--	6.0E-04
Endosulfan	0.024	--	6.6E-05
Endrin	0.00904	--	5.0E-04
Endrin aldehyde	0.00694	--	3.8E-04
Endrin ketone	0.0171	--	9.4E-04
Heptachlor	0.0087	8.1E-08	2.9E-04
Heptachlor	0.0181	3.4E-07	2.3E-02
<b>TOTAL RISKS and</b>		<b>2.0E-05</b>	<b>2.4E-01</b>

Notes:  
 " \* " compound  
 Includes  
 EPC: Exposure

**Table 7**  
**Estimated Cumulative Risks and Hazards**  
**Residential Exposure Scenario and Maximum Detected Soil**  
**16500 and 16550 Ashland Avenue & 205 and 255 Ano Avenue**  
**San Lorenzo, California**

COPC	Residential		
	Exposure Point	Cancer Risk Adult & Child	Hazard Index Child
<i><b>Pesticides</b></i>			
Aldrin	0.12	4.2E-06	6.6E-02
BHC (alpha)	0.0042	5.5E-08	8.7E-06
BHC (delta)	0.0044	1.6E-08	--
BHC (gamma)	0.011	2.1E-08	5.2E-04
Chlordane (alpha)	0.66	4.1E-07	2.0E-02
Chlordane (gamma)	0.56	3.5E-07	1.7E-02
Chlordane (technical)	2.5	1.5E-06	7.4E-02
DDD	0.15	7.5E-08	--
DDE	0.25	1.8E-07	--
DDT	0.94	5.5E-07	2.6E-02
Dieldrin	3.2	1.1E-04	1.1E+00
Endosulfan I	0.011	--	3.0E-05
Endosulfan II	0.22	--	6.0E-04
Endosulfan sulfate	0.024	--	6.6E-05
Endrin	0.093	--	5.1E-03
Endrin aldehyde	0.098	--	5.4E-03
Endrin ketone	0.14	--	7.7E-03
Heptachlor	0.0087	8.1E-08	2.9E-04
Heptachlor epoxide	0.0181	3.4E-07	2.3E-02
<b>TOTAL RISKS and HAZARDS</b>		<b>1.1E-04</b>	<b>1.3E+00</b>

Notes:

" \* " compound not a COPC; "--" Not Applicable

Includes Incidental Soil Ingestion, Dermal Contact, and Fugitive Dust Inhalation  
EPC: Exposure Point Concentration in milligrams per kilogram used in the risk

**Table 8**  
**Estimated Cumulative Risks and Hazards**  
**School Exposure Scenario and 95UCL Soil Concentrations**  
**16500 and 16550 Ashland Avenue & 205 and 255 Ano Avenue**  
**San Lorenzo, California**

COPC	School Exposure Scenario				
	School EPC (mg/kg)	Cancer Risk		Hazard Index	
		Staff	Students	Staff	Students
<i><b>Pesticides</b></i>					
Aldrin	0.0131	1.7E-07	7.4E-08	9.1E-04	1.7E-03
BHC (alpha)	0.0042	2.0E-08	8.8E-09	1.1E-06	2.0E-06
BHC (delta)	0.0044	5.9E-09	2.6E-09	--	--
BHC (gamma)	0.00239	1.3E-09	5.1E-10	1.1E-05	1.8E-05
Chlordane (alpha)	0.0716	1.3E-08	4.8E-09	2.2E-04	3.3E-04
Chlordane (gamma)	0.08	1.4E-08	5.4E-09	2.5E-04	3.7E-04
Chlordane (technical)	0.439	7.8E-08	3.0E-08	1.4E-03	2.0E-03
DDD	0.0186	3.3E-09	1.5E-09	--	--
DDE	0.0265	6.7E-09	3.0E-09	--	--
DDT	0.151	2.4E-08	8.7E-09	4.0E-04	6.0E-04
<b>Dieldrin</b>	<b>0.554</b>	<b>6.6E-06</b>	<b>2.9E-06</b>	2.3E-02	4.3E-02
Endosulfan I	0.011	--	--	3.8E-06	7.1E-06
Endosulfan II	0.22	--	--	7.7E-05	1.4E-04
Endosulfan sulfate	0.024	--	--	8.4E-06	1.5E-05
Endrin	0.00904	--	--	6.3E-05	1.2E-04
Endrin aldehyde	0.00694	--	--	4.8E-05	9.0E-05
Endrin ketone	0.0171	--	--	1.2E-04	2.2E-04
Heptachlor	0.0087	2.9E-08	1.3E-08	3.6E-05	6.7E-05
Heptachlor epoxide	0.0181	1.2E-07	5.5E-08	2.9E-03	5.4E-03
<b>TOTAL RISKS and HAZARDS</b>		<b>7.1E-06</b>	<b>3.1E-06</b>	<b>3.0E-02</b>	<b>5.4E-02</b>

Notes:

"\*" compound not a COPC; "--" Not Applicable

Includes Incidental Soil Ingestion, Dermal Contact, and Fugitive Dust Inhalation

EPC: Exposure Point Concentration in milligrams per kilogram used in the risk and hazard

**Table 9  
Estimated Cumulative Risks and Hazards**

**School Exposure Scenario and Maximum Detected  
16500 and 16550 Ashland Avenue & 205 and 255 Ano Avenue  
San Lorenzo, California**

COPC	School Exposure Scenario				
	School EPC (mg/kg)	Cancer Risk		Hazard Index	
		Staff	Students	Staff	Students
<i>Pesticides</i>					
Aldrin	0.12	1.5E-06	6.8E-07	8.4E-03	1.5E-02
BHC (alpha)	0.0042	2.0E-08	8.8E-09	1.1E-06	2.0E-06
BHC (delta)	0.0044	5.9E-09	2.6E-09	--	--
BHC (gamma)	0.011	6.2E-09	2.3E-09	5.2E-05	8.2E-05
Chlordane (alpha)	0.66	1.2E-07	4.5E-08	2.0E-03	3.1E-03
Chlordane (gamma)	0.56	1.0E-07	3.8E-08	1.7E-03	2.6E-03
Chlordane (technical)	2.5	4.5E-07	1.7E-07	7.7E-03	1.2E-02
DDD	0.15	2.7E-08	1.2E-08	--	--
DDE	0.25	6.4E-08	2.8E-08	--	--
DDT	0.94	1.5E-07	5.4E-08	2.5E-03	3.7E-03
<b>Dieldrin</b>	<b>3.2</b>	<b>3.8E-05</b>	<b>1.7E-05</b>	1.3E-01	2.5E-01
Endosulfan I	0.011	--	--	3.8E-06	7.1E-06
Endosulfan II	0.22	--	--	7.7E-05	1.4E-04
Endosulfan sulfate	0.024	--	--	8.4E-06	1.5E-05
Endrin	0.093	--	--	6.5E-04	1.2E-03
Endrin aldehyde	0.098	--	--	6.8E-04	1.3E-03
Endrin ketone	0.14	--	--	9.8E-04	1.8E-03
Heptachlor	0.0087	2.9E-08	1.3E-08	3.6E-05	6.7E-05
Heptachlor epoxide	0.0181	1.2E-07	5.5E-08	2.9E-03	5.4E-03
<b>TOTAL RISKS and HAZARDS</b>		<b>4.1E-05</b>	<b>1.8E-05</b>	<b>1.6E-01</b>	<b>2.9E-01</b>

Notes:





"\*" compound not a COPC; "--" Not Applicable

Includes Incidental Soil Ingestion, Dermal Contact, and Fugitive Dust Inhalation

EPC: Exposure Point Concentration in milligrams per kilogram used in the risk and hazard

# **FIGURE 1**



LEGEND	
	Approximate Site Boundary
 S-13 to S-45	Soil Boring Location (11-5-14)
 S-1 to S-12	Soil Boring Location (10-3-14)
	Former UST

SITE PLAN WITH DISCREET SOIL SAMPLING - OCPs
16500 & 16550 Ashland Avenue 205 & 255 Ano Avenue San Lorenzo, Alameda County, California
Proposal No. 3303.14.450

FIGURE  
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