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Subject:

Soil, Water, and Soil Gas Investigation Report

357 105th Avenue, Oakland, CA

Fuel Leak Case No. RO0003156; Global ID T10000006426

Dear Mr. Soby

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached *Soil, Water, and Soil Gas Investigation Report* for the above referenced property prepared by Almar Environmental are true and correct to the best of my knowledge.

Sincerely,

Mr. Dan Neishi

Responsible Party Representative



# Soil, Water, and Soil Gas Investigation Report

# 357 105<sup>th</sup> Avenue Oakland, California

October 21, 2015

## Prepared for:

Neishi Brothers Nursery c/o Dan S. Neishi Trust & Mitsugi Neishi Heirs of Estate 357 105<sup>th</sup> Avenue Oakland, CA 94603

# Prepared by:

Almar Environmental 407 Almar Avenue Santa Cruz, California 95060

<b>TABLE</b>	OF CONTENTS	Page No.
1.0	INTRODUCTION	1
2.0	SITE INFORMATION	1
2.1	Physical Setting	1
3.0	SOIL, WATER, AND SOIL GAS FIELD INVESTIGATION	2
3.1	Regulatory Liaison, Permitting, and Project Management	2
3.2	Drilling and Soil Sampling	2
3	3.2.1 Encountered Subsurface Materials	3
3.3	Groundwater Sampling	3
3.4	Borings for Temporary Soil-Gas Sampling Points	3
3.5	Construction of Soil-Gas Sampling Points	3
3.6	Soil Gas Sampling	3
3.7	Backfilling of Borings	4
4.0	SAMPLE ANALYSIS AND RESULTS	4
4.1	Laboratory Analytical Methods	4
4.2	Soil Analytical Results	4
4.3	Grab Groundwater Analytical Results	5
4.4	Soil Gas Analytical Results	5
4.5	Discussion of Analytical Results	6
5.0	LTCP DATA GAP ANALYSIS	7
5.1	General Criteria	7
5.2	Media-Specific Criteria	8
6.0	CONCLUSIONS AND RECOMMENDATIONS	g
6.1	Conclusions	g
6.2	Recommendations	10
7.0	CERTIFICATION AND DISTRIBUTION	10
8.0	REFERENCES	11

### **FIGURES**

- Figure 1 Site Vicinity Map
- Figure 2 Aerial Photograph of Site Area
- Figure 3 Site Map Showing Current and Historical Boring Locations
- Figure 4 Site Map Showing Current Groundwater Concentrations (9/18/15)
- Figure 5 TPHg Isoconcentration Map: September 18, 2015
- Figure 6 Benzene Isoconcentration Map: September 18, 2015
- Figure 7 Naphthalene Isoconcentration Map: September 18, 2015
- Figure 8 Site Map Showing Soil Gas Concentrations (9/21/15)

#### **TABLES**

- Table 1 Summary of Current Soil Analytical Data
- Table 2 Summary of Historical Soil Analytical Data
- Table 3 Summary of Current Groundwater Analytical Data
- Table 4 Summary of Current Soil Gas Analytical Data

#### **APPENDICES**

Appendix A ACHCSA Directive Letter – August 18, 2015

Appendix B Drilling Permit - ACPWA

Appendix C Boring Logs



Appendix D Soil Gas Purge and Sampling Records
Appendix E Lab Data Sheets: Soil and Groundwater

Appendix F Lab Data Sheets: Soil Gas



#### 1.0 INTRODUCTION

Almar Environmental (Almar) appreciates the opportunity to work on the 357 105<sup>th</sup> Avenue project in Oakland, California (Figures 1 through 3). Almar has been retained by the Dan S. Neishi Trust & Mitsugi Neishi Heirs of Estate to prepare this *Soil, Water, and Soil Gas Investigation Report* for the subject site. On July 20<sup>th</sup>, 2015 Almar prepared a Revised *Soil, Water, and Soil Gas Investigation Workplan and Site Conceptual Model* for the site. The Workplan proposed, in general, to advance up to eight (8) temporary borings in areas around the former tank location and in the assumed up and down gradient groundwater flow directions and collect soil and "grab" groundwater samples from each boring. The Workplan also proposed installing and collecting soil gas samples from four (4) temporary soil gas sampling points. The Alameda County health Care Services Agency (ACHCSA) reviewed the Workplan and issued a directive letter (Appendix A) approving the proposed scope of work. As such, the Workplan was implemented in September 2015. The details and results of the investigation are presented, herein.

#### 2.0 SITE INFORMATION

The project site is located at 357 105<sup>th</sup> Avenue in the city of Oakland, California (Figure 1). The site consists of roughly rectangular residential/commercial property associated with Alameda County Assessor's parcel number 45-5370-9-2. An Aerial Photograph of the Site Area is included as Figure 2 and a detailed Site Map showing current and historical sampling locations is included as Figure 3.

#### 2.1 Physical Setting

Based on the U.S. Geological Survey San Leandro, California Quadrangle 7.5 Minute Series Topo Map, the subject property is approximately 20 feet (ft) above mean sea level (msl). The topographic slope of the subject property and surrounding areas is generally to the west, towards the San Francisco Bay (Figure 1).

According to the *Preliminary Geologic Map Emphasizing Bedrock Formations in Alameda County, California*, the site lies upon Holocene and Pleistocene surficial undivided sediments (Qu) (Graymer, Jones, Brabb, 1996). Site specific soils, encountered during this current investigation were described as predominantly Silty Clay (CL). A more detailed description of the encountered subsurface materials is presented in Section 3.2.1.

The nearest surface water to the site is San Leandro Creek, located approximately 1,000 feet south of the subject site, and the San Francisco Bay which is located approximately 2.0 miles southwest of the site (Figure 1). Based upon topography of the area, regional groundwater flow is expected to be to the west/southwest (towards the San Francisco Bay and San Leandro Creek). Site specific groundwater conditions encountered during this current investigation are presented in Section 3.2.1.

#### 2.2 Site Background and Summary of Previous Environmental Investigations

#### <u>UST Removal – November, 2014</u>

On November 25, 2014, one, approximately 1,000 gallon underground storage tank (UST), was removed under permit from the Oakland Fire Department (OFD) by Environmental Restoration Services, a licensed hazardous materials removal contractor. The tank was originally believed to have contained diesel but during the removal activities was found to contain gasoline. As required by the removal permit and under direction from the OFD inspector, ERS collected two soil samples, one from below



either end of the tank, at approximately 7.5 to 8.0 feet bgs. One additional, sample was also collected from below the former dispenser at approximately 3.0 feet bgs. Elevated concentrations of Total Petroleum Hydrocarbons as gasoline (TPHg) (up to 497 mg/Kg), ethylbenzene (up to 10.6 mg/Kg), and total xylenes (up to 48.3 mg/Kg) were reported in the samples collected from below the tank. Excavated overburden soil and clean imported baserock was compacted back into the tank pit following sampling. A full summary of the historical soil analytical data from the tank removal is presented in Table 2. Based upon these results, a leaking underground fuel tank (LUFT) case was opened by the ACHCSA and a directive letter was issued requesting a workplan be prepared to further assess the extent of contamination at the subject site and to characterize the case.

#### Soil, Water, and Soil Gas Investigation Workplan – July, 2015

On July 20<sup>th</sup>, 2015 Almar prepared a Revised *Soil, Water, and Soil Gas Investigation Workplan and Site Conceptual Model* for the site. This Workplan proposed, in general, to advance up to eight (8) temporary borings in areas around the former tank location and in the assumed up and down gradient groundwater flow directions and collect soil and "grab" groundwater samples from each boring. The Workplan also proposed installing and collecting soil gas samples from four (4) temporary soil gas sampling points. The ACHCSA reviewed the Workplan and issued a directive letter (Appendix A) approving the proposed scope of work. As such, the Workplan was implemented in September 2015. The details and results of the investigation are presented in the following sections.

#### 3.0 SOIL, WATER, AND SOIL GAS FIELD INVESTIGATION

Field activities involving soil borings, grab groundwater, and soil gas sampling were performed on September 18 and 21, 2015. Almar advanced a total of eight (8) temporary borings (DP-1 through DP-8) and collected soil and grab groundwater samples from each of the borings. Additionally, Almar installed and collected soil gas samples from four (4) temporary soil gas sampling points (SG-1 through SG-4). The specific details of the investigation are presented below. All project activities were completed under the direction of a State of California Professional Geologist.

#### 3.1 Regulatory Liaison, Permitting, and Project Management

Almar represented the client with regulatory agencies and onsite residences in meetings and/or communications. A representative of Almar also coordinated, oversaw, and/or conducted all activities detailed in this Workplan. Almar also obtained the appropriate subsurface drilling permit from the Alameda County Public Works Agency (ACPWA) (Appendix B). As required by law, Almar marked the subject property and notified Underground Service Alert (USA) to clear the boring locations of underground utilities prior to drilling activities.

#### 3.2 Drilling and Soil Sampling

Soil borings were advanced by a C-57 licensed driller, under the direction of a licensed State of California Professional Geologist. A Geoprobe<sup>™</sup> direct-push sampling rig, capable of continuous core soil sampling, was used to advance the temporary borings. The Geoprobe<sup>™</sup> direct-pushed (hammered) a 2-inch diameter steel core barrel to the desired depth at each of the boring locations. The core barrels were lined with clear plastic disposable tubing to facilitate continuous soil coring and soil logging for description. Soils were logged using the United Soil Classification System (USCS). Soil samples were collected at five (5) foot intervals and where contamination was noted in the field with the photoionization detector (PID).



Soil samples for laboratory analysis were collected by cutting the desired section of disposable plastic tubing, sealing the ends of the tube with Teflon™ tape, and capped. The caps were then sealed with silicone tape, labeled, sealed in individual plastic bags, and placed in a pre-chilled ice chest with ice to remain at 4° Celsius (°C) until they arrived at the lab. A discussion of the soil sampling analytical results is presented in Section 4.2.

#### 3.2.1 Encountered Subsurface Materials

Site specific soils encountered during this investigation were identified as predominately Silty Clay (CL) of varying consistency and plasticity from the ground surface to the total depths explored (12 to 13 feet bgs). Coarser grained materials described as Clayey Sand (SC) to Clayey Gravelly Sand (SW) were also encountered between 10.5 to 13 feet bgs in the majority of the borings advanced during this investigation. Groundwater was first encountered within these coarser grained materials and subsequently rose to a static to a static level as high as 3.90 feet bgs, indicative of a confined aquifer. Detailed boring logs depicting the encountered subsurface materials are presented in Appendix C.

#### 3.3 Groundwater Sampling

Once groundwater was encountered in each of the borings, and a sufficient amount was present for sampling, the Macrocore sampler was removed from the boring, and a temporary flush threaded, %-inch schedule 40 polyvinyl chloride (PVC) casing was placed within the boring. The bottom cap was flush threaded and the screened casing was 0.010-inch slots. Groundwater samples were then collected from the temporary casing using a peristaltic pump. Each groundwater sample was collected in laboratory supplied EPA Testing Method approved containers, labeled, sealed in individual plastic bags, and placed in a pre-chilled ice chest with ice to remain at 4 degrees Celsius (°C) until they arrive at the lab. A discussion of the groundwater sampling analytical results is presented in Section 4.3.

#### 3.4 Borings for Temporary Soil-Gas Sampling Points

In addition to the borings described above, Almar also advanced four borings (SG-1 through SG-4) and converted each of the borings into temporary soil gas sampling points. Each boring was advanced with a Geoprobe™ direct-push sampling rig in the same manner described in Section 3.2. The boring locations are shown on Figure 3.

#### 3.5 Construction of Soil-Gas Sampling Points

Following advancement of the borings, Almar converted each of the borings into temporary soil gas sampling points. Each sampling was constructed by placing ¼-inch diameter Teflon® tubing attached to a polyethylene vapor implant to 5.0 feet bgs. A sand pack consisting of #2/12 sand was then installed around the implant from 5.5 to 4.5 feet bgs. Approximately 12-inches of dry granular bentonite was placed above the sand pack, followed by a hydrated bentonite seal to the ground surface. The seal was designed to minimize ambient air from the atmosphere from intruding into the area of the polyethylene probe. Specific well construction details are depicted on the boring logs (Attachment C).

#### 3.6 Soil Gas Sampling

On September 21, 2015, after allowing at least 48-hours post installation of the soil-gas sampling point for subsurface conditions to equilibrate, Almar conducted the purging and sampling of each of the four (4) soil gas sample points. To ensure representative soil gas samples were collected, Almar followed the steps outlined by the CA DTSC in their *Soil Gas Advisory Document* (March 2010). In general, a Helium tracer shroud was used to perform a quantitative leak test while sampling each soil gas point. A sealed



chamber was placed over the head of the soil gas point. A minimum 20% Helium in air atmosphere was maintained around the sample train and above the sample point annulus.

Each of the soil gas samples was collected using a SUMA® canister supplied by the contracted laboratory. Prior to the collection of the sample, the at least 3 purge volumes of air (soil gas) were removed from the probe and tubing associated with the point. Each sampling point was purged using a SUMA® canister (purge canister) attached to a flow meter which, in turn is attached to the Teflon tubing of the soil gas point. The sampling points were purged at a rate of 150 ml/minute. Once the points were purged, a sample collection SUMA® canister was attached to the Teflon tubing of the sampling point, the initial negative pressure of the canister measured (and recorded), and soil gas was delivered to the canister from the well until a negative pressure of about five-inches of Hg is noted on the vacuum gauge on the sample collection SUMA® canister. All vacuum readings were documented on the chain of custody record and are shown on the soil gas purge data sheets (Appendix D). A discussion of the soil gas sampling analytical results is presented in Section 4.4.

#### 3.7 Backfilling of Borings

Once all soil, grab groundwater, and soil gas samples were collected from the borings, each boring was backfilled from the bottom of the boring to ground surface with neat cement grout. The neat cement grout was composed of a mix consistency of one 94 pound bag of Portland cement to five gallons of water.

#### 4.0 SAMPLE ANALYSIS AND RESULTS

During the drilling activities, soil, grab groundwater, and soil gas samples for laboratory analysis were collected in the methods described in Sections 3.2, 3.3, and 3.6, respectively. The analytical results are summarized in the following sections.

#### 4.1 Laboratory Analytical Methods

#### Soil and Groundwater Samples

Once all soil and groundwater samples were collected and appropriately packed, they were transported by courier observing chain-of-custody procedures to BC Laboratories, Inc. (State of California-certified testing laboratory #1186) for analysis. Soil samples from five foot intervals and all groundwater samples were analyzed for Total Petroleum Hydrocarbons as gasoline (TPHg) and diesel (TPHd) by EPA Test Method 8015B/Fuel Finger Print. Each sample was additionally analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), MtBE, and naphthalene by EPA Test Method 8260b.

#### Soil Gas Samples

Once the soil gas samples were collected, they were transported, observing formal chain-of-custody (COC) procedures to Curtis & Tompkins, Ltd. (State of California-certified testing laboratory #2896) for analysis. Each soil gas sample was analyzed for VOCs (including PCE) by EPA Test Method TO-15, gasoline range organics (TPHg) by EPA Test Method TO-3, and the fixed gases Oxygen and Helium by ASTM D1946.

#### 4.2 Soil Analytical Results

A total of sixteen (16) soil samples were submitted for laboratory analysis. A summary of the current analytical results is presented in Table 1, historical data is presented in Table 2. The complete laboratory data sheets are presented in Appendix E and summarized as follows:



- **TPHg** was not detected above laboratory detection limits (<20 mg/Kg) in any of the samples submitted for analysis;
- **TPHd** was not detected above laboratory detection limits (<20 mg/Kg) in any of the samples submitted for analysis;
- Benzene was detected above laboratory detection limits in one of the 16 samples submitted for analysis at a concentration of 0.049 mg/Kg in sample DP-4d10.0;
- **Toluene** was detected above laboratory detection limits in one of the 16 samples submitted for analysis at a concentration of 1.6 mg/Kg in sample DP-4d10.0;
- **Ethylbenzene** was detected above laboratory detection limits in one of the 16 samples submitted for analysis at a concentration of 1.7 mg/Kg in sample DP-4d10.0;
- **Xylenes** (total) were detected in two one of the 16 samples submitted for analysis at concentrations of 0.016 mg/Kg and 8.2 mg/Kg in samples DP-2d10.0 and DP-4d10.0, respectively;
- MtBE was not detected above laboratory detection limits (<0.005 mg/Kg) in any of the samples submitted for analysis; and
- **Naphthalene** was detected in three of the 16 samples submitted for analysis at concentrations ranging from 0.045 mg/Kg (DP-5d10.0) to 1.3 mg/Kg (DP-4d10.0).

#### 4.3 Grab Groundwater Analytical Results

A summary of the laboratory analysis of the grab groundwater samples is presented in Table 3. The complete laboratory data sheets are presented in Appendix E. A brief summary of the analytical data is as follows:

- TPHg was detected in three of the eight samples submitted for analysis at concentrations ranging from 1,300  $\mu$ g/L (DP-5) to 9,700  $\mu$ g/L (DP-4);
- **TPHd** was detected above laboratory detection limits in one of the eight samples submitted for analysis at a concentration of 400 μg/L in sample DP-4;
- **Benzene** was detected in two one of the eight samples submitted for analysis at concentrations of 8.8 μg/L and 380 μg/L in samples DP-2 and DP-4, respectively;
- **Toluene** was detected in three of the eight samples submitted for analysis at concentrations ranging from 1.5 μg/L (DP-1) to 2,800 μg/L (DP-4);
- **Ethylbenzene** was detected in three of the eight samples submitted for analysis at concentrations ranging from 2.8 μg/L (DP-5) to 1,100 μg/L (DP-4);
- **Xylenes** (total) were detected in four of the eight samples submitted for analysis at concentrations ranging from 2.2  $\mu$ g/L (DP-3) to 4,700  $\mu$ g/L (DP-4);
- MtBE was not detected above laboratory detection limits (<0.50  $\mu$ g/L) in any of the samples submitted for analysis; and
- Naphthalene was detected in three of the eight samples submitted for analysis at concentrations ranging from 33  $\mu$ g/L (DP-5) to 210  $\mu$ g/L (DP-4).

#### 4.4 Soil Gas Analytical Results

A total of four soil gas samples (SG-1 through SG-4) were collected and submitted for laboratory analysis. A summary of the soil vapor sampling analytical laboratory results is presented in Table 4 and the complete laboratory data sheets are presented in Attachment F. A brief summary of the analytical data is presented as follows:



- O<sub>2</sub> was reported in each of the four soil vapor samples submitted for analysis. The mol % concentrations ranged from 9.0% (SG-2) to 13% (SG-4);
- **Helium** was reported in three of the four samples submitted for analysis, at concentrations ranging from 0.27 Mol% (SG-1) to 0.51 Mol% (SG-2). These detected concentrations are well below the DTSC required 5%, indicating that minimal breakthrough occurred and all samples are valid;
- **TPHg** ( $C_6$ - $C_{12}$ ) was reported in each of the four samples submitted for analysis, at concentrations ranging from 26,000  $\mu$ g/m³ (SG-3) to 680,000  $\mu$ g/m³ (SG-4);
- **Benzene** was reported in each of the four samples submitted for analysis, at concentrations ranging from 12  $\mu$ g/m³ (SG-3) to 5,900  $\mu$ g/m³ (SG-2);
- **Toluene** was reported in two of the four samples submitted for analysis, at concentrations of 24  $\mu g/m^3$  and 100  $\mu g/m^3$  in SG-3 and SG-2, respectively;
- **Ethylbenzene** was reported in two of the four samples submitted for analysis, at concentrations of 170 μg/m³ and 5,400 μg/m³ in SG-3 and SG-4, respectively;
- **Xylenes** (total) were reported in two of the four samples submitted for analysis, at concentrations of  $537 \mu g/m^3$  and  $1,600 \mu g/m^3$  in SG-3 and SG-4, respectively;
- MtBE was not reported above laboratory detection levels in any of the samples submitted for analysis;
- Naphthalene was not reported above laboratory detection levels in any of the samples submitted for analysis; and
- No other contaminants of concern (COCs) were reported above laboratory detection limits in any of the samples submitted for analysis.

#### 4.5 Discussion of Analytical Results

The purpose of this investigation was to 1.) Further define the extent of contaminants of concern in subsurface soils, 2.) Determine the extent of impacts to groundwater (if any), and 3.) Determine the condition of soil vapor at the subject site.

#### Soil Results

A total of 16 soil samples were collected and submitted for laboratory analysis as part of this investigation. Based upon the analytical results, the vertical and horizontal extent of soil contamination has been sufficiently defined, as only low concentrations of BTEX compounds were detected in one sample (DP-4d10.0) during this investigation. It should also be noted that relatively low concentrations of naphthalene were also detected in three of the samples submitted for analysis. However, as shown on Table 1, the highest detected concentration was 1.3 mg/Kg which is well below the established residential Low Threat Closure Policy (LTCP) value of 9.7 mg/Kg. This also indicates that minimal, if any, secondary source remains in the subsurface soils at the site.

#### **Groundwater Results**

A total of eight grab groundwater samples were collected and submitted for laboratory analysis as part of this investigation. Based upon the analytical results, and as shown on Table 3, shallow groundwater at the subject site appears to be impacted with TPHg, benzene, and naphthalene (and to a lesser extent toluene, ethylbenzene and total xylenes). As illustrated on Figures 4 through 7, the lateral extent of groundwater contamination appears to be sufficiently delineated to the north, east, and south. However, the plume appears to be unbounded to the west and southwest, in the direction of temporary borings DP-2 and DP-5, respectively. Groundwater at the site is estimated to flow in a southwesterly



direction. Slightly elevated concentrations of TPHg and Naphthalene in the samples collected from these two borings indicate the plume is still undefined in these directions.

#### Soil Gas Results

A total of four soil gas samples were collected and submitted for laboratory analysis as part of this investigation. Each of the samples was collected from 5 feet bgs in the locations shown on Figure 3. O<sub>2</sub> was reported in each of the four samples at mol % concentrations ranging from 9.0% (SG-2) to 13% (SG-4). For LTCP purposes this indicates a 5 foot bioattenuation zone is present at the site (LTCP: Appendix 4 -Scenario 4). Laboratory analysis of the samples also indicated TPHg and benzene were present in three of the four samples at concentrations exceeding Regional Water Quality Control Board (RWQCB) established environmental screening levels (ESLs) for residential properties (Table 4). However, all detected soil gas concentrations were below LTCP established concentrations for potential residential properties where a bioattenuation zone is present.

#### 5.0 LTCP DATA GAP ANALYSIS

Based upon the results of this investigation, Almar believes this case may potentially qualify for closure under the State Water Resource Control Board's (SWRCB's) Low Threat Closure Policy (LTCP). In order for the case to qualify for closure, all general and media-specific criteria of the policy must be met. In the following sections each criteria of the LTCP is addressed and any remaining data gaps are identified.

#### 5.1 General Criteria

There are eight specific general criteria (identified as a through h) of the LTCP that must be satisfied prior to closure. The following is a list of each of these eight criteria and whether they have been satisfied or not:

- a. The unauthorized release is located within the service area of a public water system.
  - Yes, this criteria has been met.
- b. The unauthorized release consists only of petroleum.
  - Yes, this criteria has been met. The main constituent of concern (COC) appears to be TPHg, and to a lesser extent benzene and naphthalene.
- c. The unauthorized ("primary") release from the UST system has been stopped.
  - **Yes,** this criteria has been met. All known USTs and associated pipes and appurtenant structures have been removed.
- d. Free product has been removed to the maximum extent practicable.
  - **Yes**, this criteria appears has been met. No free product was encountered during tank removal activities or during this initial soil and water investigation.
- e. A conceptual site model that assesses the nature, extent, and mobility of the release has been developed.
  - Yes, an initial site conceptual model (SCM) was prepared for the site. The SCM was prepared and presented as part of Almar's Revised Soil, Water, and Soil Gas Investigation Workplan and Site Conceptual Model document. A copy of this document can be found on file with the ACHCSA and online within the SWRCB's Geotracker database at the following link:



#### http://geotracker.waterboards.ca.gov/esi/uploads/geo report/4202234625/T10000006426.PDF

- f. Secondary source has been removed to the extent practicable.
  - Yes, this criteria appears has been met. "Secondary source" is defined as petroleum-impacted soil or groundwater located at or immediately beneath the point of release from the primary source. Based upon the results of this investigation, little to no secondary source remains in the subsurface soils and groundwater at the site.
- g. Soil and groundwater have been tested for MtBE and results reported in accordance with Health and Safety Code section 25296.15.
  - Yes, this criteria appears has been met. Soil and groundwater samples collected during this current investigation were tested for MtBE. MtBE was not detected above laboratory test limits in any of the samples submitted for analysis (Table 1 and 3).
- h. Nuisance as defined by Water Code section 13050 does not exist at the site.
  - **Yes**, this criteria appears has been met, as no nuisances as defined by the policy are known to exist at the site.

#### 5.2 Media-Specific Criteria

To simplify implementation, the LTCP has identified three media-specific criteria which must be addressed and satisfied. The three media-specific criteria are: 1.) Groundwater, 2.) Vapor Intrusion to Indoor Air, and 3.) Direct Contact and Outdoor Air Exposure. Each of these three criteria are addressed below.

#### 1.) Groundwater-Specific Criteria

To satisfy the media-specific criteria for groundwater, the contaminant plume that exceeds water quality objectives must be stable or decreasing in areal extent, and meet all of the additional characteristics of one of the five classes of groundwater sites listed in the LTCP. Which of the five classes the site falls under is determined by plume length, free product status, the location of the nearest water supply well or surface water body, and the dissolved concentrations of benzene and MtBE. Based upon the results of this current investigation we know that the dissolved phase concentration of both benzene and MtBE is less than 1,000  $\mu$ g/L and there is no free product at the site. Therefore, the site will likely follow under groundwater-specific criteria scenario 4. However, to qualify for closure under this scenario the contaminant plume length must be less than 1,000 feet. At this juncture, an official plume length has not been determined. As discussed in Section 4.5, the plume appears to still be unbounded in the downgradient direction, southwest of boring location DP-5. This lack of a definitive plume length is data gap #1.

Additionally, in order to qualify for closure under scenario 4, the nearest existing water supply well or surface water body must be greater than 1,000 feet from the defined plume boundary. The nearest known surface water body is the San Leandro Creek, which is located almost exactly 1,000 feet southwest of the subject site. Once a proper plume length is determined an exact evaluation of the distance of this creek from the edge of the plume must be made. Additionally, a formal well survey has not been conducted to determine if any active water supply wells exist within a 1,000 foot radius of the site. This lack of a formal well survey is data gap #2.



#### 2.) Petroleum Vapor Intrusion to Indoor Air

Exposure to petroleum vapors migrating from soil or groundwater to indoor air may pose unacceptable human health risks. Because buildings for human occupancy (residential) are reasonably expected to be constructed in the future, the vapor intrusion risks to indoor air must be addressed. These vapor intrusion concerns were addressed as part of this current investigation. Based upon the results of this investigation, the site appears to meet the criteria of Scenario 4 (Appendix 4) of the LTCP. The site meets this criteria because: 1.) a bioattenuation zone (as defined by the LTCP) is present and 2.) all measured soil gas concentrations are less than the minimum required concentrations for benzene, ethylbenzene, and naphthalene (see Table 4). Therefore, this media-specific criteria has been met.

#### 3.) Direct Contact and Outdoor Air Exposure

The LTCP describes conditions where direct contact with contaminated soil or inhalation of contaminants volatized to outdoor air poses a low threat to human health. Table 1 of the LTCP describes concentrations of constituents (specifically, benzene, ethylbenzene, naphthalene, and PAHs) in soil that will have no significant risk of adversely affecting human health. A total of 20 soil samples from various depths were collected during this current investigation and analyzed for the contaminants of concern. None of the subsurface samples were found to contain concentrations exceeding those described in Table 1 of the LTCP (see tables 1A and 1B). Therefore, this condition of the LTCP has been satisfied.

#### 6.0 CONCLUSIONS AND RECOMMENDATIONS

#### 6.1 Conclusions

The following conclusions are based upon review of historical environmental reports, interpretation of analytical data, and field measurements collected during September 2015:

- The vertical and lateral extent of contaminants of concern (primarily TPHg, benzene, and naphthalene) in subsurface soils appear to be fully defined.
- Little (if any) secondary source appears to remain in the subsurface at the subject site. This indicates that secondary source has been removed to the extent practical.
- Shallow groundwater at the subject site appears to be impacted with TPHg, benzene, and naphthalene (and to a lesser extent toluene, ethylbenzene and total xylenes). The lateral extent of groundwater contamination appears to be sufficiently delineated to the north, east, and south. However, the plume appears to be unbounded to the west and southwest, in the direction of temporary borings DP-2 and DP-5, respectively.
- A total of four soil gas samples were collected and submitted for laboratory analysis as part of this investigation. O₂ was reported in each of the four samples at mol % concentrations ranging from 9.0% (SG-2) to 13% (SG-4). For LTCP purposes this indicates a 5 foot bioattenuation zone is present at the site (LTCP: Appendix 4 -Scenario 4). All detected soil gas concentrations were below LTCP established concentrations for potential residential properties where a bioattenuation zone is present.
- The site meets all eight (identified as a through h) of the general criteria of the LTCP.
- The site meets the media-specific criteria of the LTCP for petroleum vapor intrusion to indoor air.



- The site meets the media-specific criteria of the LTCP for direct contact and outdoor air exposure.
- The site <u>does not</u> meet media-specific criteria of the LTCP for groundwater specific criteria because two data gaps remain: 1.) lack of a definitive plume length and 2.) a formal well survey has not been conducted.

#### 6.2 Recommendations

Based on the data collected during this investigation and the above conclusions, Almar makes the following recommendations:

- An additional soil and water investigation should be conducted to fully determine the lateral extent of groundwater contamination in currently unbounded directions to the west and southwest of temporary borings DP-2 and DP-5.
- A formal well survey should be conducted.

#### 7.0 CERTIFICATION AND DISTRIBUTION

To the best of our knowledge, all statements made in this report are true and correct. This report is based on data provided by the client and others, site conditions observed, samples collected and analytical data. No warranty whatsoever is made that this report addresses all contamination found on the site.

ONAL GE

FORREST N COOK

No. 8201

Respectfully submitted,

Forrest N. Cook

Owner/Principal Scientist

Almar Environmental

California Professional Geologist #8201 (exp 9/16)

cc:

Mr. Mathew Soby Alameda County Health Care Services Agency 1131 Harbor Bay Parkway, Ste. 250 Alameda, CA 94502-6577 mathew.soby@acgov.org



#### 8.0 REFERENCES

Almar Environmental. May 4, 2015. *Initial Soil and Water Investigation Workplan and Site Conceptual Model*. 357 105<sup>th</sup> Ave., Oakland, CA.

Almar Environmental. July 21, 2015. *Revised Initial Soil and Water Investigation Workplan and Site Conceptual Model*. 357 105<sup>th</sup> Ave., Oakland, CA.

Brabb, E.E., Graymer, R.W., and Jones, D.L., 1996, *Preliminary Geologic Map Emphasizing Bedrock Formations in Alameda County, California: Derived from the Digital Database Open-File 96-252*. U.S. Geological Survey, Menlo Park, CA.

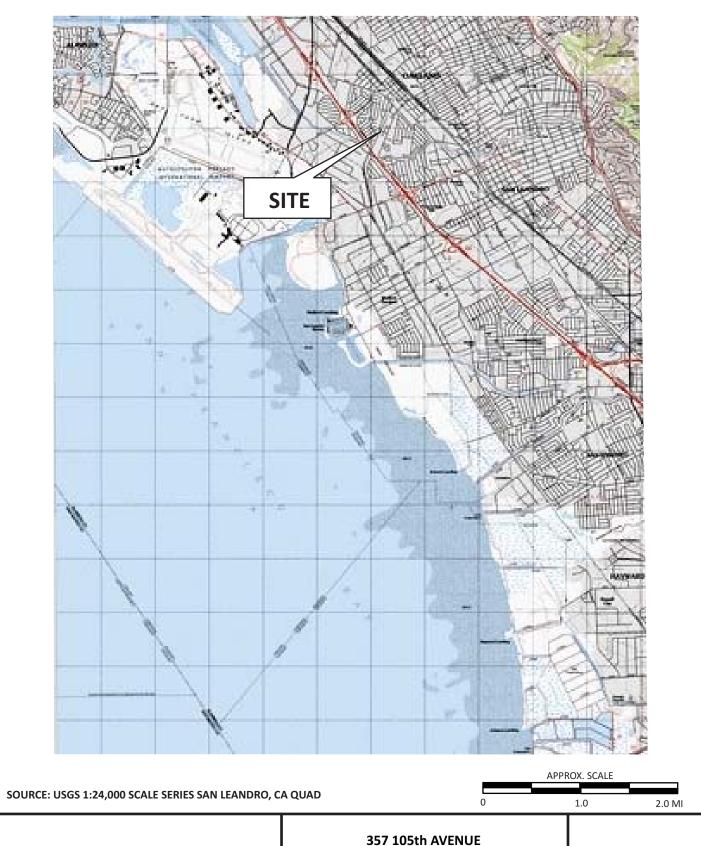
Environmental Restoration Services. November 15, 2014. *Underground Tank Technical Closure Report.* 357 105<sup>th</sup> Avenue, Oakland, California.

United States Department of the Interior Geologic Survey (USGS). 1954, Revised 1994. San Leandro, California 7.5-Minute Quadrangle.



## **FIGURES**





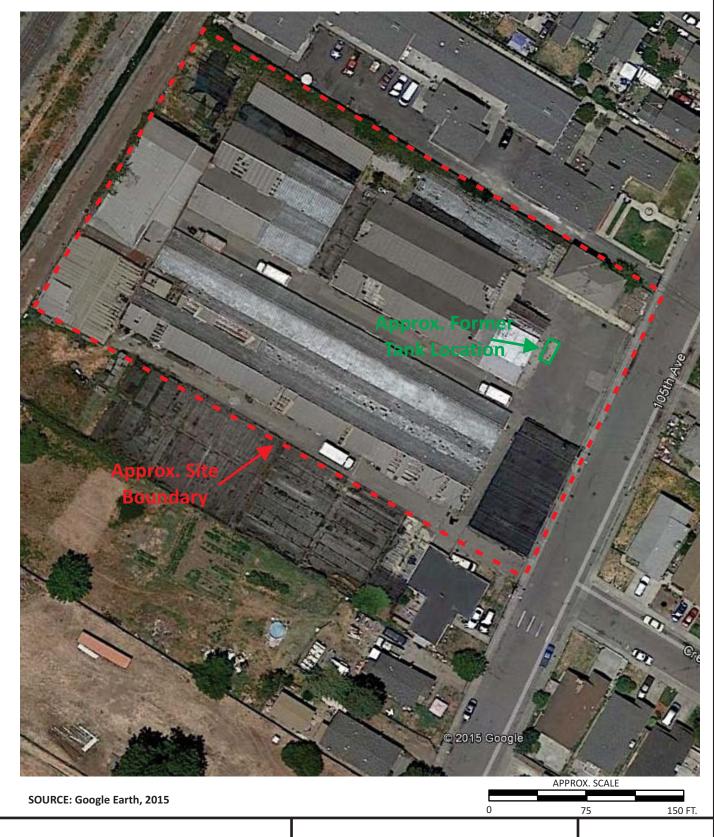


357 105th AVENUE OAKLAND, CALIFORNIA

SITE VICINITY TOPO MAP

**FIGURE** 

1

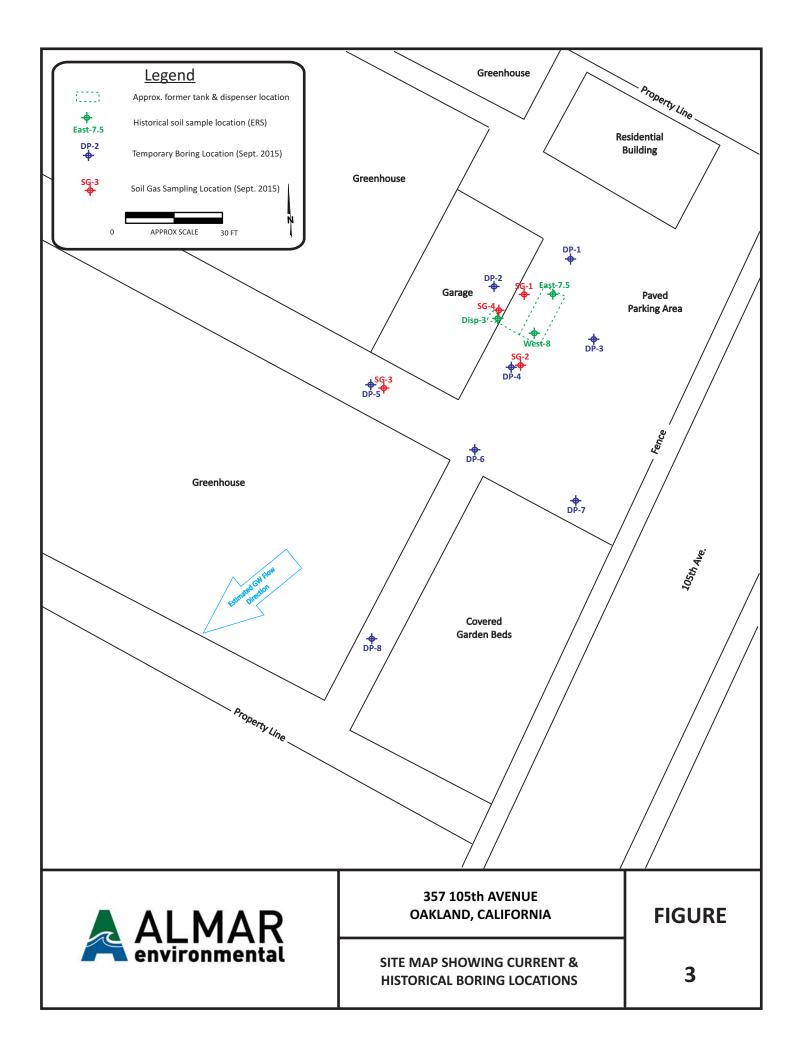


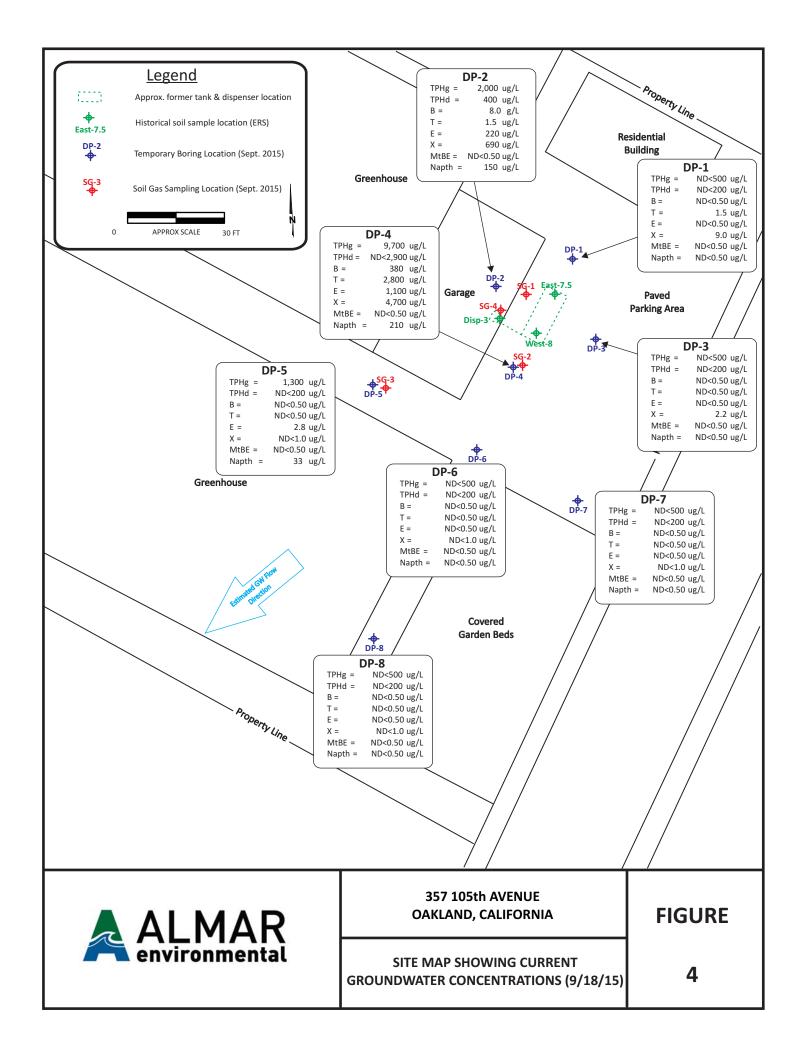


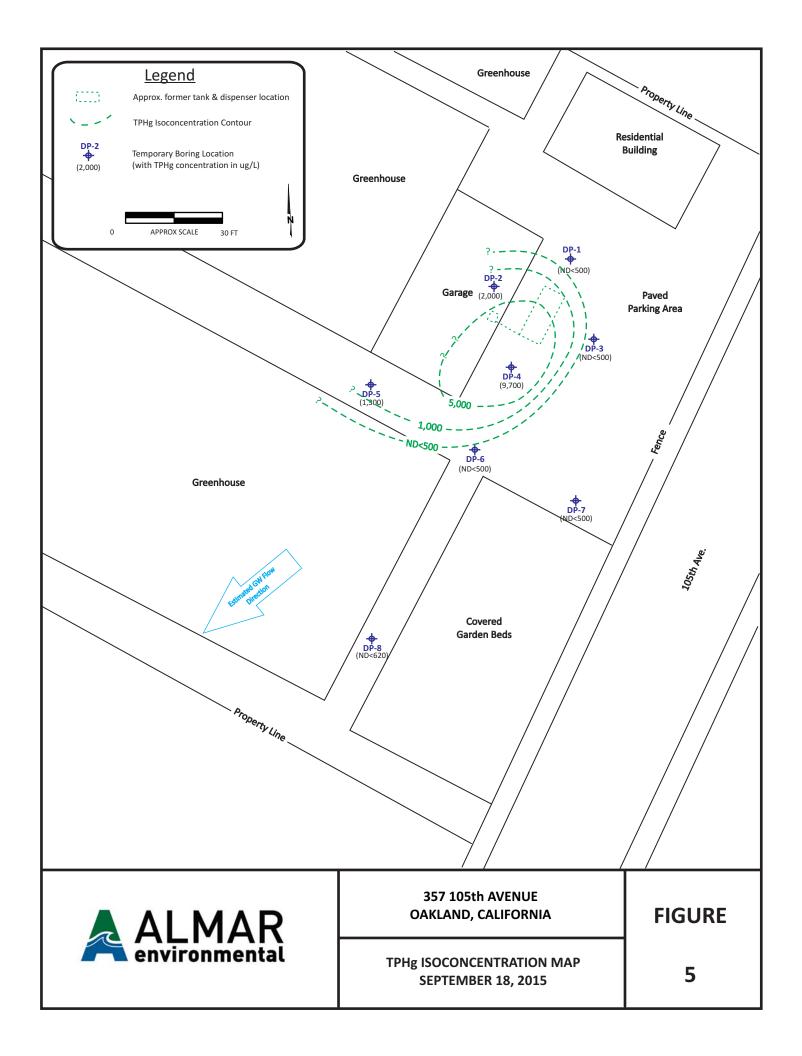
357 105th AVENUE OAKLAND, CALIFORNIA

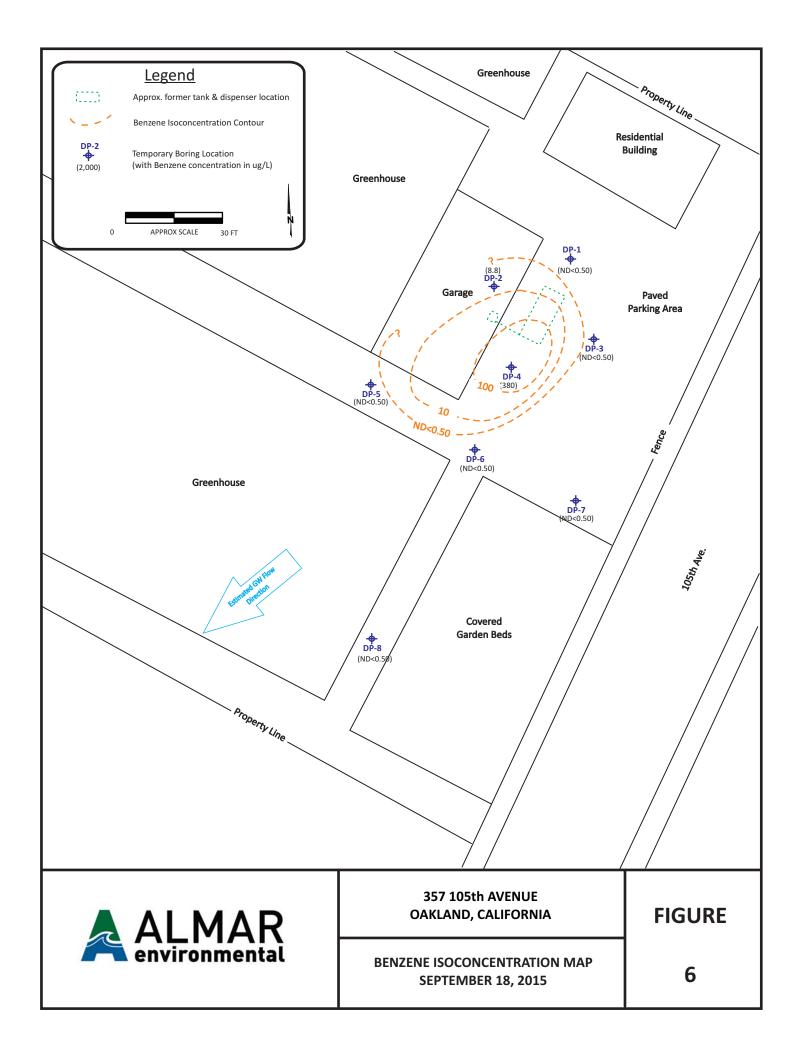
AERIAL PHOTOGRAPH OF SITE AREA **FIGURE** 

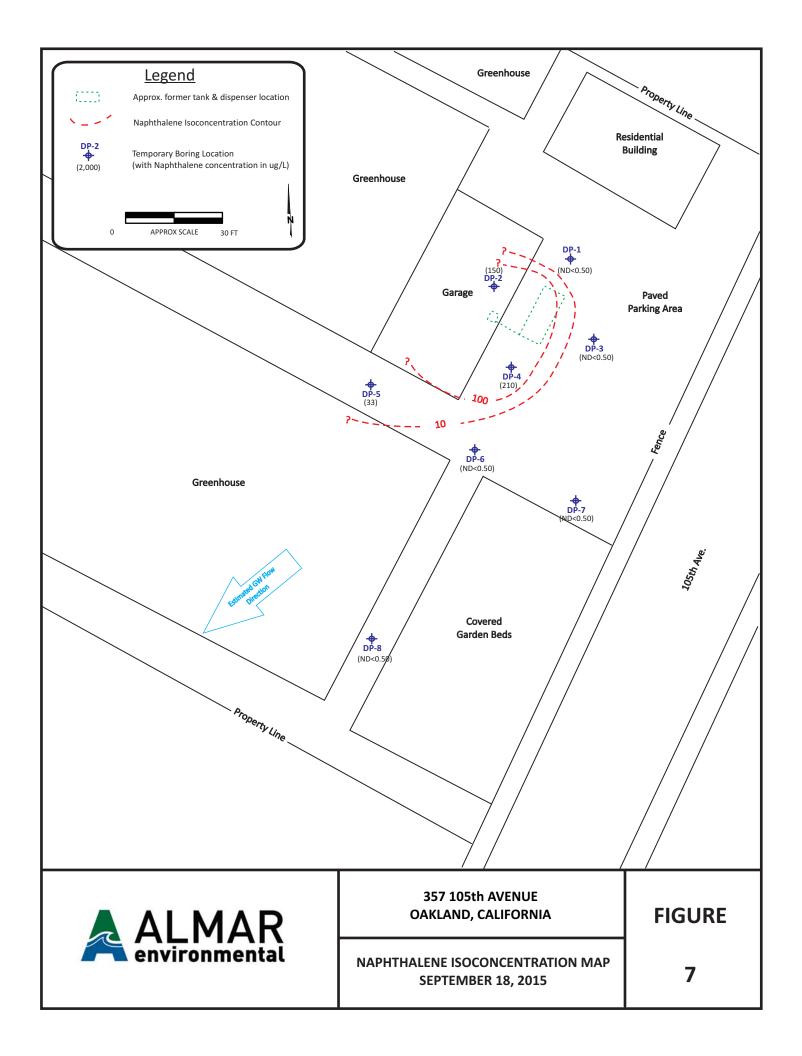
2

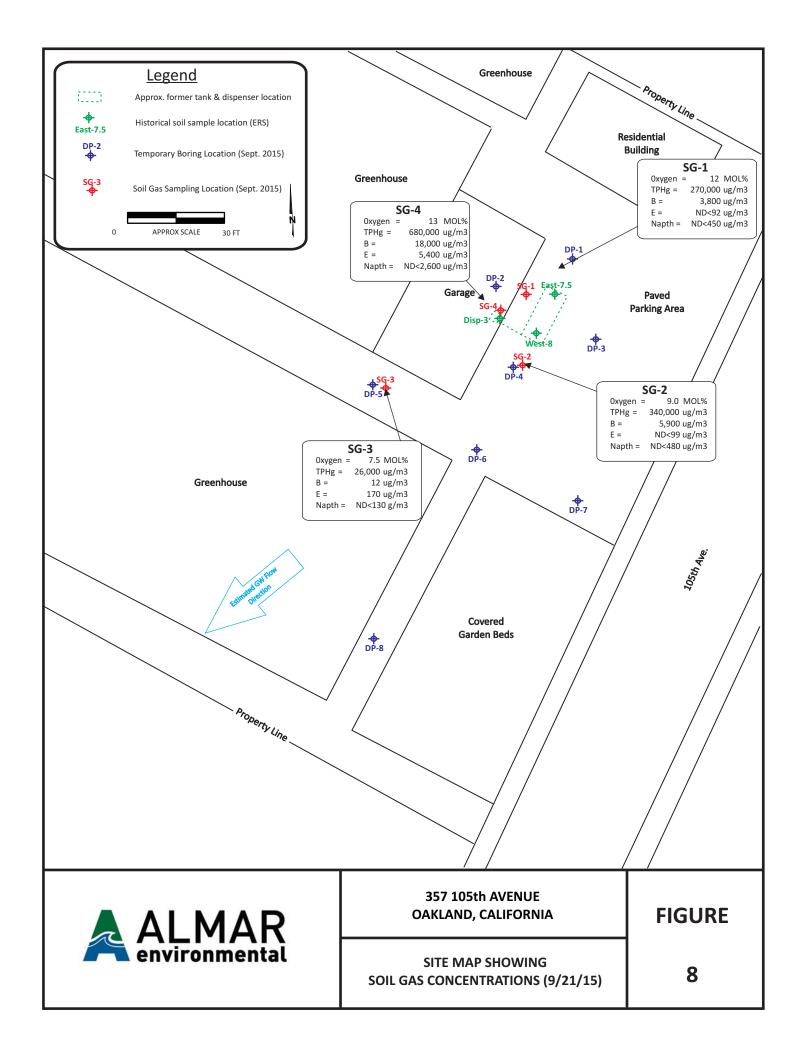












### **TABLES**



# TABLE 1 SUMMARY OF CURRENT SOIL ANALYTICAL DATA 359 105th Avenue Oakland, California

	•		1			1	1			
Sample ID	Sample	Sample	TPHg	TPHd	В	Т	E	Х	MtBE	Naphth.
Sample 15	Depth (ft.)	Date	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
DP-1d5.0	5.0	09/18/15	ND<20	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.010	ND<0.005	ND<0.005
DP-1d10.0	10.0	09/18/15	ND<20	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.010	ND<0.005	ND<0.005
DP-2d5.0	5.0	09/18/15	ND<20	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.010	ND<0.005	ND<0.005
DP-2d10.0	10.0	09/18/15	ND<20	ND<10	ND<0.005	ND<0.005	ND<0.005	0.016	ND<0.005	ND<0.005
DP-3d5.0	5.0	09/18/15	ND<20	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.010	ND<0.005	ND<0.005
DP-3d10.0	10.0	09/18/15	ND<20	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.010	ND<0.005	ND<0.005
DP-4d5.0	5.0	09/18/15	ND<20	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.010	ND<0.005	0.072
DP-4d10.0	10.0	09/18/15	ND<20	ND<10	0.049	1.6	1.7	8.2	ND<0.005	1.3
DP-5d5.0	5.0	09/18/15	ND<20	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.010	ND<0.005	ND<0.005
DP-5d10.0	10.0	09/18/15	ND<20	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.010	ND<0.005	0.045
DP-6d5.0	5.0	09/18/15	ND<20	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.010	ND<0.005	ND<0.005
DP-6d10.0	10.0	09/18/15	ND<20	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.010	ND<0.005	ND<0.005
DP-7d5.0	5.0	09/18/15	ND<20	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.010	ND<0.005	ND<0.005
DP-7d10.0	10.0	09/18/15	ND<20	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.010	ND<0.005	ND<0.005
DP-8d5.0	5.0	09/18/15	ND<20	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.010	ND<0.005	ND<0.005
DP-8d10.0	10.0	09/18/15	ND<20	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.010	ND<0.005	ND<0.005
	L Residential		100	100	0.044	2.9	3.3	2.3	0.023	1.2
LTCP Re	LTCP Residential (0' to 5')				1.9		21.0			9.7
LTCP Res	sidential (5' to	10')			2.8		32.0			9.7
			_		_	_	_		_	

#### Notes:

--- = Parameter not analyzed

<0.5 / ND = Not present at or above reporting detection limit

mg/Kg = milligrams per kilogram = parts per million = ppm

ESLs = RWQCB Environmental Screening Levels shallow soil (Table A: Potential source of drinking water)

LTCP = Low Threat Closure Policy - Table 1: Concentrations of Petroleum Constituents in soil

that will have no significant risk of adversly affecting human health

TPHg = Total Petroleum Hydrocarbons as gasoline

TPHd = Total Petroleum Hydrocarbons as diesel

B = Benzene Naphth. = Naphthalene **Bolded Value** =detected concentration

T = Toluene MtBE = Methyl-t-butyl ether Shaded Value = concentration excedes either ESL or LTCP value

E = Ethylbenzene

X = Total Xylenes



Page 1 of 1 Table 1

# TABLE 2 SUMMARY OF HISTORICAL SOIL ANALYTICAL DATA 359 105th Avenue Oakland, California

Sample ID	Sample	Sample	TPHg	В	T	E	Х	MtBE	DIPE	TAME	TBA	Lead
Sample 1D	Depth (ft.)	Date	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
EAST-7.5	7.5	11/25/14	497	ND<0.630	ND<0.630	10.6	48.3	ND<1.3	ND<0.630	ND<0.630	ND<13	5.1
WEST-8	8.0	11/25/14	165	ND<0.190	ND<0.190	2.12	9.92	ND<3.8	ND<0.190	ND<0.190	ND<3.80	7.2
DISP-3	3.0	11/25/14	ND<0.049	ND<0.0005	ND<0.0005	ND<0.0005	ND<0.001	ND<0.001	ND<0.0005	ND<0.0005	ND<0.01	6.2
ES	L Residential		100	0.044	2.9	3.3	2.3	0.023			0.075	80
	esidential (0' to			1.9		21.0						-
LTCP Res	sidential (5' to	10')		2.8		32.0						

Notes:

11/25/14 samples collected by ERS

--- = Parameter not analyzed

<0.5 / ND = Not present at or above reporting detection limit

mg/Kg = milligrams per kilogram = parts per million = ppm

ESLs = RWQCB Environmental Screening Levels shallow soil (Table A: Potential source of drinking water)

LTCP = Low Threat Closure Policy - Table 1: Concentrations of Petroleum Constituents in soil

that will have no significant risk of adversly affecting human health

TPHg = Total Petroleum Hydrocarbons as diesel

B = Benzene

DIPE = Di-isopropyl ether

T = Toluene DIPE = Di

E = Ethylbenzene TAME = Tert-Amyl Methyl ether

X = Total Xylenes TBA = Tert Butyl Alcohol

MtBE = Methyl-t-butyl ether

**Bolded Value** = detected concentration

**Shaded Value** = concentration excedes either ESL or LTCP value



Page 1 of 1 Table 2

# TABLE 3 SUMMARY OF CURRENT GROUNDWATER ANALYTICAL DATA 359 105th Avenue Oakland, California

Sample ID	Sample	TPHg	TPHd	В	T	E	Х	MtBE	Naphth.
Sample 1D	Date	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
DP-1	09/18/15	ND<500	ND<200	ND<0.50	1.5	ND<0.50	9.0	ND<0.50	ND<0.50
DP-2	09/18/15	2,000	400	8.8	15	220	690	ND<0.50	150
DP-3	09/18/15	ND<500	ND<200	ND<0.50	ND<0.50	ND<0.50	2.2	ND<0.50	ND<0.50
DP-4	09/18/15	9,700	ND<2,900	380	2,800	1,100	4,700	ND<0.50	210
DP-5	09/18/15	1,300	ND<200	ND<0.50	ND<0.50	2.8	ND<1.0	ND<0.50	33
DP-6	09/18/15	ND<500	ND<200	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50
DP-7	09/18/15	ND<500	ND<200	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50
DP-8	09/18/15	ND<620	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50
ESL Resid	ESL Residential		100	1.0	40.0	30.0	20.0	5.0	6.2

#### Notes

Samples DP-1 thru DP-8 collected as "grab" groundwater samples

--- = Parameter not analyzed

<0.5 / ND = Not present at or above reporting detection limit

ug/L = micrograms per Liter = parts per billioni = ppb

ESLs = RWQCB Environmental Screening Levels shallow soil (Table A: Potential source of drinking water)

LTCP = Low Threat Closure Policy - Table 1: Concentrations of Petroleum Constituents in soil

that will have no significant risk of adversly affecting human health

TPHg = Total Petroleum Hydrocarbons as gasoline

TPHd = Total Petroleum Hydrocarbons as diesel

B = Benzene Naphth. = Naphthalene **Bolded Value** =detected concentration

T = Toluene MtBE = Methyl-t-butyl ether Shaded Value = concentration excedes either ESL or LTCP value

E = Ethylbenzene

X = Total Xylenes



Page 1 of 1 Table 3

# TABLE 4 SUMMARY OF CURRENT SOIL GAS ANALYTICAL DATA 359 105th Avenue Oakland, California

SAMPLE ID	Sample Depth (ft.)	Sample Date	Oxygen (O <sub>2</sub> )	Melium	ள் அ Э Э ТРН8 (C6-C12)	M <sup>2</sup> /acrolin (πβ/m)	(mg/gm) Acetone	ක් ූ ය රූ	n-Hexane	<b>2-Butanone</b> (μg/μ)	Chloroform	Cyclohexane	Benzene (µg/m³)	n-Heptane	Toluene	Ethylbenzene	(m/g/m)/ Xylenes (total)	Naphthalene (%)	Other VOCs
SG-1	5.0	09/21/15	12	0.27	270,000	320	1,100	190	22,000	900	120	13,000	3,800	8,800	ND<80	ND<92	ND<184	ND<450	<mdl< td=""></mdl<>
SG-2	5.0	09/21/15	9.0	0.51	340,000	610	1,000	230	12,000	810	ND<120	25,000	5,900	3,600	100	ND<99	ND<198	ND<480	<mdl< th=""></mdl<>
SG-3	5.0	09/21/15	7.5	ND<0.21	26,000	68	320	140	78	230	42	99	12	78	24	170	537	ND<130	<mdl<sup>1</mdl<sup>
SG-4	5.0	09/21/15	13	0.33	680,000	ND<1100	ND<1200	ND<380	43,000	ND<360	ND<600	33,000	18,000	32,000	ND<470	5,400	1,600	ND<2600	<mdl< th=""></mdl<>
R	esidential ES	SL	NA	NA	150,000	NA	1.6E+07	NA	NA	NA	230	NA	42	NA	160,000	490	52,000	36	Varies
Residential CHHSL		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	85	NA	320,000	1,100	NA	93	Varies	
LTCP 1	w/Bioattenเ	uation	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	85,000	NA	NA	1,000,000	NA	93,000	Varies
LTCP w	ı/o Bioatten	uation	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	85	NA	NA	1,100	NA	93	Varies

Notes:

--- = Parameter not Sampled

NA = Not analyzed or Not established

<0.5 / ND = Not present at or above reporting detection limit

ug/m3 = micrograms per cubic meter = ppmv

ESLs = RWQCB established environmental screening levels, May 2013

CHHSL = California Human Health Screening Level - January 2005

LTCP = Low Threat Closure Policy (Appendix 4 - Scenerio 4)

<MDL<sup>1</sup> = 4-Methyl-2-Pentanone at 30 ug/m3

**Bold** = detected concentration

= value detected above corresponding ESL or CHHSL



### **APPENDIX A**

**Directive Letter** 



# ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY



ALEX BRISCOE, Director

ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

August 18, 2015

Neishi Brothers Nursery c/o: Dan S. Neishi Trust & Mitsugi Neishi Heirs of Estate et al. 357 105<sup>th</sup> Avenue Oakland, CA 94603

Subject: Work Plan Approval for Fuel Leak Case No. No. RO0003156 and GeoTracker Global ID T10000006426, Neishi Brothers Nursery, 357 105<sup>th</sup> Avenue, Oakland, CA 94603

Dear Neishi Brothers Nursery:

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the above referenced site including the recently submitted report entitled, "Revised Soil, Water, and Soil Gas Investigation Work Plan and Site Conceptual Model," dated July 20, 2015 (Revised Work Plan). The Work Plan, which was prepared on your behalf by Almar Environmental, presents plans for soil, groundwater, and soil gas sampling. The Revised Work Plan was prepared to address the technical comments in our June 10, 2015 directive letter.

The Revised Work Plan adequately addressed our technical comments and may be implemented as proposed. We request that you implement the Revised Work Plan and present the reports requested below.

#### **TECHNICAL REPORT REQUEST**

Please upload technical reports to the ACEH ftp site (Attention: Jerry Wickham), and to the State Water Resources Control Board's GeoTracker website according to the following schedule and file-naming convention:

December 11, 2015 – Site Investigation Report
 File to be named: SWI R yyyy-mm-dd RO3156

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

Responsible Parties RO0003156 August 18, 2015 Page 2

If you have any questions, please call me at 510-567-6791 or send me an electronic mail message at <a href="mailto:ierry.wickham@acgov.org">ierry.wickham@acgov.org</a>. Online case files are available for review at the following website: <a href="http://www.acgov.org/aceh/index.htm">http://www.acgov.org/aceh/index.htm</a>. If your email address does not appear on the cover page of this notification, ACEH is requesting you provide your email address so that we can correspond with you quickly and efficiently regarding your case.

Sincerely,

Jerry Wickham, California PG 3766, CEG 1177, and CHG 297 Senior Hazardous Materials Specialist

Attachments: Responsible Party(ies) Legal Requirements/Obligations

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Forrest Cook, Almar Environmental, 407 Almar Avenue, Santa Cruz, CA 95060 (Sent via E-mail to: cook.forrest@gmail.com)

Jerry Wickham, ACEH (Sent via E-mail to: jerry.wickham@acgov.org)

GeoTracker, eFile

#### Attachment 1

#### Responsible Party(ies) Legal Requirements / Obligations

#### REPORT REQUESTS

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

#### **ELECTRONIC SUBMITTAL OF REPORTS**

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please **SWRCB** visit the website for more information on these requirements (http://www.waterboards.ca.gov/water\_issues/programs/ust/electronic\_submittal/).

#### PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

#### PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

#### **UNDERGROUND STORAGE TANK CLEANUP FUND**

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

#### **AGENCY OVERSIGHT**

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to \$10,000 per day for each day of violation.

# Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)

**REVISION DATE:** May 15, 2014

ISSUE DATE: July 5, 2005

PREVIOUS REVISIONS: October 31, 2005;

December 16, 2005; March 27, 2009; July 8, 2010,

July 25, 2010

SECTION: Miscellaneous Administrative Topics & Procedures

**SUBJECT:** Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

#### **REQUIREMENTS**

- Please do not submit reports as attachments to electronic mail.
- Entire report including cover letter must be submitted to the ftp site as a single portable document format (PDF) with no password protection.
- It is preferable that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- Signature pages and perjury statements must be included and have either original or electronic signature.
- <u>Do not</u> password protect the document. Once indexed and inserted into the correct electronic case file, the
  document will be secured in compliance with the County's current security standards and a password. <u>Documents</u>
  with password protection will not be accepted.
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:

RO#\_Report Name\_Year-Month-Date (e.g., RO#5555\_WorkPlan\_2005-06-14)

#### **Submission Instructions**

- 1) Obtain User Name and Password
  - a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
    - i) Send an e-mail to deh.loptoxic@acgov.org
  - b) In the subject line of your request, be sure to include "ftp PASSWORD REQUEST" and in the body of your request, include the Contact Information, Site Addresses, and the Case Numbers (RO# available in Geotracker) you will be posting for.
- 2) Upload Files to the ftp Site
  - a) Using Internet Explorer (IE4+), go to <a href="ftp://alcoftp1.acgov.org">ftp://alcoftp1.acgov.org</a>
    - (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
  - b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
  - c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
  - d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
  - e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.
- 3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
  - a) Send email to deh.loptoxic@acgov.org notify us that you have placed a report on our ftp site.
  - b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
  - c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
  - d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

### **APPENDIX B**

**Drilling Permit - ACPWA** 



### 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: 07/22/2015 By jamesy

Permit Numbers: W2015-0642 Permits Valid from 07/27/2015 to 07/27/2015

Phone: 408-655-9434

City of Project Site: Oakland

Application Id: 1437076108754 Site Location: 357-359 105th Street

**Project Start Date:** Completion Date: 07/27/2015 07/27/2015 Assigned Inspector: Contact Lindsay Furuyama at (925) 956-2311 or Lfuruyama@groundzonees.com

**Applicant:** Environmental Restoration Services - Ben

Halsted

PO Box 2006, Menlo park, CA 94026

**Property Owner:** Dan Neishi Phone: 510-909-2112

1564 Darius Ct., San leandro, CA, CA 94577 Client: \*\* same as Property Owner \*

Phone: --Contact: Ben Halsted

Cell: 408-655-9434

Total Due: \$265.00

Receipt Number: WR2015-0359 **Total Amount Paid:** <u>\$265.00</u> **PAID IN FULL** Payer Name : Bennett T Halsted Paid By: VISA

#### **Works Requesting Permits:**

Borehole(s) for Geo Probes-Sampling 24 to 72 hours only - 10 Boreholes

Driller: Environmental Restoration Services - Lic #: 589652 - Method: DP Work Total: \$265.00

#### **Specifications**

Permit	Issued Dt	Expire Dt	#	Hole Diam	Max Depth
Number			Boreholes		
W2015-	07/22/2015	10/25/2015	10	2.00 in.	12.00 ft
0642					

#### **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.

#### **APPENDIX C**

**Boring Logs** 



		AL	onr	ner	ital		Г		BORING LOG			DP-1
		Λ١	M	۱۸	R			c	357 105th AVE AKLAND, CALIFO			BORING
Ва	ckfi	lled with ne	eat ce	ment	t (Portlan	d I/II)	_					
25 WELL / B	ORIN	G CONSTRU	CTION	DETA	ILS:							
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23					I							
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<u>—21</u>					ı							
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14—					ı							
13-					ı							
—12—						1./. //			BOH = 12'			
11							sc		SC): Dark grayish bro I loose, sand is fine,			
10		DP-1d10.0					] <u>z</u>	First encountered v				
— 9—												
8-					Backt							
7—					Backfilled with neat cement			Gradational colo	or change to Dark G	ray (5Y4/1).		
— 6—					vith ne			Increased moist	ure content with de	epth.		
5		DP-1d5.0			at cem							
4					ent				o firm, estimated m	iedium piastici	ıy. very expa	ansive.
3_							CL		Black (GLEY 1 2.5/N			ancia o
1-												
	53					///		2" Ashpalt	SOIL DESCR	AIT HUN		
Depth (Feet)	Sample	Sample ID	Blow Count	PID (ppm)	Well Const.	Lithology	USCS		Static SOIL DESCL	3.90'	Finish	
	DF AN	ILLING METHO ID EQUIPMENT	OD	Geop	robe w/macro		pler		WATER 1st Encountered	R LEVEL 10.5'	Start	TIME
								PAGE <u>1</u> OF <u>1</u>	SITE ADDRESS:  357 105th Ave., Oakla	nd, CA	LOGGED BY:	Forrest Cook PG#8201
										ros. Nursery I	ORILLER: ER	S (C-57 #589652)
	FIEL	D LOCATION (	OF BOR	ING:					PROJECT: No. 1076	С	OATES DRILLED: _	9/18/15

DP-2d10.0	CTION	DETAI		<u>:</u>			water = 10.0' CLAYEY SAND (SC): \( \) I loose, sand is fine,  BOH = 10'			(GLEY 1 6/1)).
DP-2d10.0			BŠ.	<u>: 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 </u>		Touched into a	CLAYEY SAND (SC): \ loose, sand is fine,			GLEY 1 6/1)).
DP-2d10.0			BŠ.	<u>: 1: 7: 7:</u>		Touched into a	CLAYEY SAND (SC): \ loose, sand is fine,			GLEY 1 6/1)).
DP-2d10.0			BŠ	<u>: 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 </u>		Touched into a	CLAYEY SAND (SC): \ loose, sand is fine,			GLEY 1 6/1)).
DP-2d10.0			BŠ	<u>: 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 </u>		Touched into a	CLAYEY SAND (SC): \ loose, sand is fine,			GLEY 1 6/1)).
DP-2d10.0			BŠ	<u>: 1: 7: 7:</u>		Touched into a	CLAYEY SAND (SC): \ loose, sand is fine,			GLEY 1 6/1)).
DP-2d10.0			BŠ	<u>:::::::::::::::::::::::::::::::::::::</u>		Touched into a	CLAYEY SAND (SC): \ loose, sand is fine,			GLEY 1 6/1)).
DP-2d10.0			BŠ	<u>:::::::::::::::::::::::::::::::::::::</u>		Touched into a	CLAYEY SAND (SC): \ loose, sand is fine,			GLEY 1 6/1)).
DP-2d10.0			BŠ	<u>:::::::::::::::::::::::::::::::::::::</u>		Touched into a	CLAYEY SAND (SC): \ loose, sand is fine,			(GLEY 1 6/1)).
DP-2d10.0			, BŠ	<u>:::::::::::::::::::::::::::::::::::::</u>		Touched into a	CLAYEY SAND (SC): \ loose, sand is fine,			(GLEY 1 6/1)).
DP-2d10.0			, BŠ	<u> </u>		Touched into a	CLAYEY SAND (SC): \ loose, sand is fine,			(GLEY 1 6/1)).
DP-2d10.0			, BŠ	<u> </u>		Touched into a	CLAYEY SAND (SC): \ loose, sand is fine,			(GLEY 1 6/1)).
DP-2d10.0			, BŠ	<u> </u>		Touched into a	CLAYEY SAND (SC): \ loose, sand is fine,			(GLEY 1 6/1)).
DP-2d10.0			- Bg	<u> </u>		Touched into a	CLAYEY SAND (SC): \ loose, sand is fine,			(GLEY 1 6/1)).
DP-2d10.0			B	\ \:\f\-\f\:\i		Touched into a	CLAYEY SAND (SC): \			(GLEY 1 6/1)).
DP-2d10.0			- B	<u> </u>		<u> </u>		Very dark gr	reenish grav	 (GLEY 1 6/1)).
			B			First encountered	water = 10.0'			
			Bé	I///						
			춫	V//						
			filled	<b>///</b>						
			with ne			Increased moist	ure content with de	epth.		
DP-2d5.0			eat cer							
			nent						, 2., 2.	
					CL					pansive.
						3" Slab on grade o	concrete, plus baser	ock.		
Sample ID	Blow Count		Well Const.	Lithol	USCS		SOIL DESCR	RIPTION	rinisi	·
		pre	377.37	logy			1st Encountered Static	10.0' 8.75'		
DRILLING METH	OD T·	Geopre	obe w/macro	o core sam	pler				_ LOGOED BT:	TIME
						PAGE <u>1</u> OF 1	SITE ADDRESS: 357 105th Ave., Oaklan	nd, CA	LOGGED RV	Forrest Cook PG#8201
							CLIENT: Neishi Br	ros. Nursery	DRILLER:	ERS (C-57 #589652)
	DRILLING METH AND EQUIPMENT Sample ID	DRILLING METHOD AND EQUIPMENT:  Sample ID Count	AND EQUIPMENT:  Sample ID Blow (ppm)	DRILLING METHOD AND EQUIPMENT:  Sample ID Count (ppm)  Geoprobe w/macro	DRILLING METHOD AND EQUIPMENT:  Sample ID Count (ppm)  Geoprobe w/macro core sam  Well Supply	DRILLING METHOD AND EQUIPMENT:  Sample ID Count (ppm) Const. USCS	DRILLING METHOD AND EQUIPMENT:    Sample   Blow   PID   Const.   Equipment   Sill   Si	DRILLING METHOD AND EQUIPMENT:    Sample ID   Count   (ppm)   Const.	DRILLING METHOD AND EQUIPMENT:  Sample ID Count (ppm) Well Static 8.75'  SOIL DESCRIPTION  3" Slab on grade concrete, plus baserock.  SITE ADDRESS: 357 105th Ave., Oakland, CA  WATER LEVEL  1st Encountered 10.0'  Static 8.75'  SOIL DESCRIPTION  3" Slab on grade concrete, plus baserock.	CLIENT: Neishi Bros. Nursery DRILLER: SITE ADDRESS: SITE ADDRESS: 357 105th Ave., Oakland, CA LOGGED BY:    MATER LEVEL

Ва	ackfi	lled with ne	eat ce	ment	t (Portlan	d I/II)						
25 WELL / B	ORIN	G CONSTRU	CTION	DETA	ILS:							
24	-											
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22	-											
20 21												
—19— —20—												
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——17—	-											
<del></del> 16	-											
<del></del> 15	-											
—14—												
—13—	-											
—12—	-							wet, estimate	BOH = 11'	e, well graded.	4	
11						<i>[</i>		CLAYEY SAND	(SC): Dark greenish			
— 9— —10—		DP-3d10.0						First encountered	water = 10 5'			
8-					Ba		,	Static water = 9.0'				
7-					ckfilled							
— 6—	-				Backfilled with neat cement			increased moist	cure content with de	eptn.		
5		DP-3d5.0			neat ce			Inoresed west	una aamkankudulala I			
4_	-				ment				,	, , , , , , , , , , , , , , , , , , ,	, ,	
3_	-						CL		Black (GLEY 1 2.5/N o firm, estimated m			ansive.
	0.1					-		2" Asphalt.	SOIL DESCH	GFIION		
Depth (Feet)	Sample	Sample ID	Blow Count	PID (ppm)	Well Const.	Lithology	USCS		Static SOIL DESCI	9.0'	Finish	
	DF AN	RILLING METHO ID EQUIPMENT	DD	Geop	robe w/macr		pler		WATEI	R LEVEL 10.5'	Start	TIME
								PAGE <u>1</u> OF <u>1</u>	SITE ADDRESS:  357 105th Ave., Oakla	nd, CA	LOGGED BY:	Forrest Cook PG#8201
										ros. Nursery I	ORILLER: ER	IS (C-57 #589652)
	FIEL	D LOCATION (	OF BOR	ING:					PROJECT: No. 1076	С Е	ATES DRILLED: _	9/18/15

						V//.						
2 —								CUTY CLAY (CL)	DI 1 (CLEV 4 2 5 /A			
— 3—							CL		Black (GLEY 1 2.5/N to firm, estimated m			sive.
— 4—					ment							
— 5—		DP-4d5.0			eat ce							
— 6—					with n			Increased mois	ture content with de	pth.		
7-					Backfilled with neat cement	<b>/</b> ///						
8-					Back		_	Static water = 8.27	,,			
— 9—												
—10—		DP-4d10.0							gray discoloration. H	ydrocarbon oc	lor.	
—11—						00000000000000000000000000000000000000	SW		LLY SAND (SW): Very	dark greenish	gray.	
—12—						55.05.19	300	Wet, estimated	BOH = 12'			
13									DOTT = 12			
14												
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21 22	-											
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—21— —22— —23— —24— —25— WELL / E		IG CONSTRU				d I/II)						
—21— —22— —23— —24— —25— WELL / E	ackfi	lled with ne	eat ce	ment	(Portlan	d I/II)			357 105th AVE			BORING
—21— —22— —23— —24— —25— WELL / E	ackfi		eat ce	ment	(Portlan	d I/II)		(	357 105th AVE DAKLAND, CALIFO			BORING DP-4

	FIEL	D LOCATION (	OF BOR	RING:					PROJECT: <b>No. 1076C</b>	: I	DATES DRILLED:	9/18/15
									CLIENT: Neishi Br	os. Nursery	DRILLER:E	RS (C-57 #589652)
									SITE ADDRESS:			
								PAGE <u>1</u> OF <u>1</u>	357 105th Ave., Oaklar		LOGGED BY: _	Forrest Cook PG#8201
	DR AN	ILLING METHO D EQUIPMENT	OD Γ:	Geop	robe w/macro	core sam	pler		WATER  1st Encountered	LEVEL	Start	TIME
Depth	)le	C	P.	PID	<b>3</b> 87. P	logy	***		Static	11.0′	Start	
(Feet)	Sample	Sample ID	Blow Count	(ppm)	Well Const.	Lithology	USCS		SOIL DESCR			
						///		2" Ashpalt				
1 —						<b>[///</b>						
2						V//						
							CL		Black (GLEY 1 2.5/N			
					ient	V//	1 -	estimated soft to	o firm, estimated m	edium plastici	ity. Very exp	ansive.
I 4 -					cem	<b>/</b> //						
<u> </u>		DP-5d5.0			neat	V//						
<u> </u>					with	V//		Increased moist	ure content with de	pth.		
7					illed							
					Backfilled with neat cement	V//	1					
— 8 —						<b>/</b> //						
— 9—						<b>[///</b>						
10		DP-5d10.0				<b>/</b> ///		Gradational col	or change to Greeni	sh Black (GLE	Y 1 2.5/1)	
11						<i>[///</i>	\ <u>.</u>	Static water = 11.0	,			
						<b>V</b> ///						
——12—						<i>\///</i>			,			
—13—						<u> </u>	1 -	First encountered v	water = 13.0'			
14									BOH = 13'			
15—												
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WELL / B		G CONSTRU										
Ва	ckfil	led with ne	eat ce	ment	t (Portlan	d I/II)						
									357 105th AVE.			BORING
		Λ١	N	۱۸	D			0	AKLAND, CALIFOR			
	1	AL	On:	ner mer	tal							DP-5
1		- 511711	J.11						BORING LOG			<b>2. 3</b>
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	FIEL	D LOCATION (	OF BOR	RING:					PROJECT: <b>No. 1076C</b>		OATES DRILLED: _	9/18/15
									CLIENT: Neishi Br	os. Nursery I	ORILLER:EF	S (C-57 #589652)
									SITE ADDRESS:			
								PAGE <u>1</u> OF <u>1</u>	357 105th Ave., Oaklar		LOGGED BY:	TIME
	AN	ILLING METHO ID EQUIPMENT	OD	Geop	robe w/macro		pler		WATER 1st Encountered	13.0'	Start	TIME
Depth	Sample	Sample	Blow	PID	Well	Lithology	USCS		Static	11.0′	Finish	
(Feet)	San	IĎ		(ppm)	Const.	Ē			SOIL DESCR	IPTION	-	
<b>l</b> .						///		2" Ashpalt				
						V//						
2												
<u> </u>							CL		Black (GLEY 1 2.5/N o firm, estimated m			ansive
4					ment	<b>Y</b> ///		estimated sort to	o mm, estimated m	edidili piastici	ty. Very expe	ansive.
· ·		DP-6d5.0			at cer							
<del></del>		D1 003.0			h ne	V//						
— 6—					d wit			micreased moist	ure content with de	pui.		
— 7—					Backfilled with neat cement	V//	1					
0					Back	<b>/</b> //						
0								Gradational colo	or change to Greenis	h Black (GLEV	1 2 5/1)	
— 9—						<i>\///</i>		Gradational Cold	n change to dieems	on Diack (GLEY	1 2.3/1)	
—10—		DP-6d10.0					_	Static water = 10	1.0'			
—11—												
12								First encountered v	water = 12.0'			
		_							BOH = 12'			
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25— WELL / B	ORIN	G CONSTRU	CTION	DETA	AILS:							
		lled with ne				d I/II)						
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		<b>A</b> 1		1 A	_			•	357 105th AVE. AKLAND, CALIFOR			BORING
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<b>1</b>		<b>envir</b>	oni	mer	ntal				BORING LOG			DP-6
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	FIEL	D LOCATION (	OF BOR	RING:					PROJECT: <b>No. 1076C</b>	: г	OATES DRILLED: _	9/18/15
									CLIENT: Neishi Br	os. Nursery I	ORILLER:EF	RS (C-57 #589652)
									SITE ADDRESS:			
								PAGE <u>1</u> OF <u>1</u>	357 105th Ave., Oaklar		LOGGED BY:	TIME
	AN	ILLING METHO ID EQUIPMENT	OD	Geop	robe w/macro		pler		WATER 1st Encountered	12.0'	Start	THE
Depth	Sample	Sample	Blow	PID	Well	Lithology	USCS		Static	11.0'	Finish	
(Feet)	San	IĎ		(ppm)	Const.	Ē			SOIL DESCR	IPTION	-	
<b>l</b> .						///		2" Ashpalt				
1 —						V//						
— 2 —												
<u> </u>							CL		Black (GLEY 1 2.5/N o firm, estimated m			ansive
4					ment	<b>Y</b> ///		estimated sort to	o mini, estimated m	edidili piastici	ty. Very expe	ansive.
· ·		DP-7d5.0			at cer							
<del></del>		D1 743.0			h ne	V//						
— 6—					d wit			micreased moist	ure content with de	pui.		
— 7—					Backfilled with neat cement	V//	1					
o					Bac	<b>/</b> //						
						V//		Gradational colo	or change to Greenis	sh Black (GLEV	1 2 5/1)	
— 9—								Gradational cold	or change to dreems	SII DIACK (OLL I	1 2.3/1)	
—10—		DP-7d10.0					_	Static water = 10	.0'			
—11—												
12								First encountered v	water = 12.0'			
12									BOH = 12'			
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—25 WELL / B	ORIN	IG CONSTRU	CTION	DETA	AILS:	1	1	1				
Ва	ckfi	lled with ne	eat ce	ment	t (Portlan	d I/II)						
							Т		357 105th AVE.		ı	DODING
		ΑI		IA	D			O	357 105th AVE. AKLAND, CALIFOR			BORING
	R	AL	.JV	IA	K		$\vdash$					DP-7
<b>1</b>		envir	oni	ner	ıtal				BORING LOG			DF-/

	FIEL	D LOCATION (	OF BOR	RING:					PROJECT: <b>No. 1076C</b>	: r	DATES DRILLED: _	9/18/15
									CLIENT: Neishi Br	os. Nursery I	ORILLER:EF	RS (C-57 #589652)
									SITE ADDRESS:			
								PAGE <u>1</u> OF <u>1</u>	357 105th Ave., Oaklar		LOGGED BY:	TIME
	AN	LILLING METHO ID EQUIPMENT	OD	Geop	robe w/macro		pler		WATER 1st Encountered	12.0'	Start	THE
Depth	Sample	Sample	Blow	PID	Well	Lithology	USCS		Static	11.0'	Finish	
(Feet)	San	IĎ		(ppm)	Const.	Ē			SOIL DESCR	RIPTION	-	+
<b>l</b> .						///		2" Ashpalt				
1 —						V//						
— 2 —												
<u> </u>							CL		Black (GLEY 1 2.5/N o firm, estimated m			ansive
4					ment	<b>Y</b> ///		estimated sort to	o mini, estimated m	edidili piastici	ty. Very exp	arisive.
· ·		DP-8d5.0			at cer							
<del></del>		D. 003.0			h ne	V//				ماهم		
— 6—					d wit			micreased moist	ure content with de	pui.		
— 7—					Backfilled with neat cement	V//	1					
0					Back	<b>/</b> //						
6								Gradational colo	or change to Greenis	sh Black (GLEV	1 2 5/11	
— 9—						<i>\///</i>		Gradational Cold	n change to dieems	אוי טומנוג (טבבו	1 2.3/1)	
—10—		DP-8d10.0					_	Static water = 10	.0'			
—11—												
12								First encountered v	water = 12.0'			
		_							BOH = 12'			
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25— WELL / B	ORIN	IG CONSTRU	CTION	DETA	AILS:							
		lled with ne				d I/II)						
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	_	<b>A</b> •			_			•	357 105th AVE. AKLAND, CALIFOF			BORING
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									200 200			

	FIELD	LOCATION	OF BOF	RING:					PROJECT: <b>No. 1076C</b>	. D	ATES DRILLED: _	9/18/15
									CLIENT: Neishi Br	os. Nursery D	RILLER:ERS	S (C-57 #589652)
									SITE ADDRESS:			
		, , n.o. remu	0.0					PAGE <u>1</u> OF <u>1</u>	357 105th Ave., Oaklar WATER		LOGGED BY:	Forrest Cook PG#8201 TIME
	ANI	LLING METH DEQUIPMENT	Г:	Geop	robe w/macro		oler		1st Encountered	NA	Start	
Depth (Feet)	Sample	Sample	Blow		Well	Lithology	USCS		Static	NA	Finish	
(1 cct)	Saı	ID	Count	(ppm)	Const.	Lit		2" A I	SOIL DESCR	RIPTION		
1_					W   W			2" Ashpalt				
							CI	SILTY CLAY (CL): I	Black (GLEY 1 2.5/N)	estimated da	mn	
3							CL		o firm, estimated me			nsive.
— 4—	-											
5												
						///						
— 6—									BOH = 5.5'			
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		ed with n				d I/II)						
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		A 1	<b>.</b>	. A	_			0	357 105th AVE. AKLAND, CALIFOR			BORING
	R	AL	.[V	IA	K		$\vdash$		ARLAND, CALIFOR	111A		CC 1
1		envii	oni	mer	ntal				BORING LOG			SG-1

	FIELD	LOCATION (	OF BOR	RING:					PROJECT: No. 10760	. D.	ATES DRILLED:	9/18/15
									CLIENT: Neishi Br	os. Nursery D	RILLER: ERS	(C-57 #589652)
1									SITE ADDRESS:			
								PAGE <u>1</u> OF <u>1</u>	357 105th Ave., Oaklar		LOGGED D1:	TIME
	ANI	LLING METH EQUIPMENT	OD Γ:	Geop	robe w/macro		oler	<u> </u>	WATER 1st Encountered	NA NA	Start	TIME
Depth	Sample	Sample	Blow	PID	Well	Lithology	USCS		Static	NA	Finish	
(Feet)	San	IĎ	Count	(ppm)	Const.	Litt			SOIL DESCR	IPTION	•	
11_					WW	///		2" Ashpalt				
2								SILTY CLAV (CL)	Black (GLEY 1 2.5/N)	estimated da	mn	
— з—							CL		o firm, estimated me			nsive.
4												
_												
5-												
— 6—									BOH = 5.5'			
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		1/200011							357 105th AVE.			BORING
10	A	AL	M	ΙΔ	$\mathbf{R}$		<u> </u>	O	AKLAND, CALIFOR	RNIA		
		envir	oni	ner	ital				BORING LOG			SG-2

	FIELD	LOCATION	OF BOR	RING:					PROJECT: No. 1076C	. D.	ATES DRILLED: _	9/18/15
									CLIENT: Neishi Br	os. Nursery D	RILLER: ER	S (C-57 #589652)
									SITE ADDRESS:			
	DDI	, , n.o. remu	0.0					PAGE <u>1</u> OF <u>1</u>	357 105th Ave., Oaklar	LEVEL	LOGGED BY:	Forrest Cook PG#8201 TIME
	ANI	LLING METH DEQUIPMENT	Г:	Geop	robe w/macro		oler		1st Encountered	NA	Start	
Depth (Feet)	Sample	Sample	Blow		Well	Lithology	USCS		Static	NA	Finish	
(100)	Saı	ID	Count	(ppm)	Const.	Lif		2" A I I	SOIL DESCR	RIPTION		•
1_					W   W			2" Ashpalt				
2-							CI	SILTY CLAY (CL): I	Black (GLEY 1 2.5/N)	. estimated da	mp.	
3							CL		firm, estimated me			nsive.
— 4 —												
5												
						///						
6-									BOH = 5.5'			
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WELL / B		CONSTRU				1.1.7						
Ва	ckfill	ed with n	eat ce	men	t (Portland	d I/II)						
									357 105th AVE.			BORING
	A	ΔΙ	M	۱۸	R			0	AKLAND, CALIFOR	RNIA		
		AL	oni	ner	ntal							SG-3
									BORING LOG			

	FIELD	LOCATION	OF BOF	RING:					PROJECT: <b>No. 1076C</b>	. D	ATES DRILLED: _	9/18/15
									CLIENT: Neishi Br	os. Nursery D	RILLER: ERS	S (C-57 #589652)
									SITE ADDRESS:			
	- DD	, , n.o. remu	0.0					PAGE <u>1</u> OF <u>1</u>	357 105th Ave., Oaklar WATER		LOGGED BY:	Forrest Cook PG#8201 TIME
	AN	LLING METH DEQUIPMENT	Г:	Geop	robe w/macro		oler		1st Encountered	NA	Start	
Depth (Feet)	Sample	Sample	Blow		Well	Lithology	USCS		Static	NA	Finish	
(1 cct)	Sai	ID	Count	(ppm)	Const.	Lit		2" A I I	SOIL DESCR	RIPTION		
1_					W   W			2" Ashpalt				
							CI	SILTY CLAY (CL)	Black (GLEY 1 2.5/N)	estimated da	mn	
3							CL		o firm, estimated me			nsive.
<u>          4                          </u>	-											
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25 WELL / B	ORIN	CONSTRU	CTION	DETA	ILS:			<u> </u>				
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		A I	<b>N</b> 4	IA	<b>D</b>			0	357 105th AVE. AKLAND, CALIFOR			BORING
	R	AL	. <b>M</b>	IA	Ķ		$\vdash$			41/ 1		SG /
1 4		envii	oni	mer	ital				BORING LOG			SG-4
I							1					

#### **APPENDIX D**

**Soil Gas Purge and Sampling Records** 





Well No.	
59-1	

Project Name No	ista Bros.		Project No. /	0766		Date	5-21-15		
Project Address, Ci	ty, County 357	105h A		k kind	1				
		PURC	GING AND SAI	MPLING INST	RUMENTATIO	N AND METHO	D		
Water Level Meter	(Model/ID)			Ir	nterface probe (M	odel/ID)			
Water Quality Mete	er (Model/ID)			D	econtamination N	Method			
Purging Method(s)		_X_s	Summa	Vac	euum Truck	S	ubmersible Pu	mp	Other
Sampling Method(s	3)	Summa Can	nister	Dispo	sal Bailer	0	ther		
	(5)				IG VOLUME IN				
Borehole Diameter	(Circle)	(2")	6" 8"		asing Diameter (C		(371		
	MONITORING	MEASUDEMI	ENITO	C	asing Multiplier (		5,4		
Depth to Free Produ		WIEASURENII		C	asing Volume (C		CALCULAT	UKS	
Depth to Water (DT					_	CM	CV	(mL) x 3.0 CV (	(mL)
Total Well Depth (V		.0'	110						
Water Column (WC		-			fuse	= 150	min		
Free Product Thickr				E	ree Product Purge				
root roudet rineki	1003 (1001)			PURGING		u (gai)			
Time (24 hr)	13:44	10:45	10:46	10:47	10:48				
mL Purged	8	150	700	450	600				
He Meter	31.8	34,4	36.0	36.8	35,6				
" out	-00.8	00.0	0.00	00.0	000				
Tire	10:48	10:56	11:01	11:07	1/2/3	11'10			
He in	37,9	24.2	17.5	76.7	27.7	16.3			
He ~	-30	-25	.10	-15	-10	-5			
3									
				Simy	e Time	11:25			
Other					山山井	a.			
Other				MEA	200	A0018.	5		
				SAMPLING					
Sample ID	Time	Quantity	Volume	Туре	Filtere	ed Prese	rved A	nalysis	
Field Technician Re	nresentative(s):	Security .		FIELD PER	SUBCONTRACTOR:				
	presentative(s).								
gnature					Date:				



Well No.

Project Name Ne	ish: Bo	٧-	Project No.	0760		Date	Date 5-21-15					
Project Address, City,		57 /00	- A Au	. 80	Selder D.	CA						
			ING AND SAM	PLING INSTR	UMENTATION	AND METH	OD					
Water Level Meter (N	/lodel/ID)			Inte	erface probe (Mo	odel/ID)						
Water Quality Meter	(Model/ID)			De	contamination M	lethod						
Purging Method(s)		Si	umma	Vacu	um Truck		Submersib	le Pump	Other .			
Sampling Method(s)		Summa Cani			al Bailer		Other					
D 11 D:	1. 1.	_	REHOLE AND					2				
Borehole Diameter (C	ircle)	2"	6" . 8"		sing Diameter (C			3/16"				
	MONITORING	MEACUDEME	NACC	Cas	sing Multiplier (C		C CALCE	5.42				
Depth to Free Product		MEASUREME	NIS	Car	sing Volume (CV		G CALCU	LATORS				
Depth to Water (DTW				Cas		CM		CV (mL) x 3.0 CV	7 (mL)			
Total Well Depth (WI		.0			DU	n1 =	157	Dar/m				
Water Column (WC)		,		Fee		-	1 4	1 M.	1			
Free Product I nicknes	ss (feet)			PURGING	e Product Purgeo	ı (gai)						
Time (24 hr)	12:03	12:04	12:05		17:07							
mL Purged	8	150	300	450	620							
He Meter	44.8	43.5	42.1	40.3	38.4							
al	-00,5	-00.6	-00.7	-30.7	-00.7							
Service			00.7		00, 1							
Time	12:07	12:12	17:16	12:20	12:25	17:3						
Ho 'a	38.4	25.3	22.4	21.3	34.2							
4. "	-30	-25	-20	-15	-10	-5						
13												
					Ssm	ple Tin	12	30				
Other					Can	ist #		0				
Other					Mai	r /	-	2002	4			
				SAMPLING	DATA							
Sample ID	Time	Quantity	Volume	Туре	Filtered	d Pre	served	Analysis				
				FIELD PERS								
Field Technician Repr	esentative(s):				Subcontractor:							
Signature					Date:							



Well No.

Project Name No	iti Br	S	Project No.	10760		Date	9-7	1-15	
Project Address, City	, County 3	57 /C	ING AND SAM	Le.	Oslelan	OC (X			
Water Level Meter (M	/lodel/ID)				nterface probe (M			- den	
Water Quality Meter	(Model/ID)	~		1	Decontamination N	Method		W C	
Purging Method(s)	74.4	X s	umma	V	acuum Truck		Submersible	e Pump	Other
Sampling Method(s)		Summa Can	ster	Disp	osal Bailer	(	Other		
		BO	REHOLE AND	WELL CASI	NG VOLUME IN	FORMATION			
Borehole Diameter (C	Circle)	2"	6" 8"	(	Casing Diameter (C	Circle)		3/16"	
					Casing Multiplier (			5.42	
Depth to Free Produc		MEASUREME	NTS		Casing Volume (C'	<del></del>	G CALCU	LATORS	
								CV (mL) x 3.0 CV	/ (mL)
Depth to Water (DTV								3	(112)
Total Well Depth (W		.0			Dura	2 = 15	30m	-/.	
Water Column (WC)		•						141	
Free Product Thickne	ss (feet)				Free Product Purge	d (gal)			
Time (24 hr)	17:37	17:38	12:31	PURGIN /2:4c		T			
mL Purged	0	150	200	450	620				
He Meter	37.4	40:9	42.1	35.2					
ابه	-22.8	-01.6	-01.5			1			
( )	-0.0	-01.6	-01.3	-01.5	010		1		
Zemple	17:41	12:112	12:143	1-2 / 1 / 1	1 17:11	12:47			
Time		12:42		12:44					
He in	487.9	-52	-22.3	31.3	79.1	76,0	-		
45	-30	- 63	-10	3	-10	7	1		
					0	-	1-11	110	
					Zempi	a Time	12:	78	
Other				·	Cam	Je #	127	100	
Other				SAMPLIN	C DATA	old #	10	0026	
Sample ID	Time	Quantity	Volume	Type	Filtere	ed Pres	erved	Analysis	
Marian III									
				FIELD PE	RSONNEL				
Field Technician Rep	resentative(s):				Subcontractor				
Signature	m	·			Date:				



Well No.

Project Name No	ish: Bre	5.	Project No. /	076C		Date	1-21.	-15	
Project Address, City									
		PURG	ING AND SAM	IPLING INSTR	RUMENTATION	AND METHO	D		
Water Level Meter (I	Model/ID)			Int	terface probe (Mod	el/ID)		****	
Water Quality Meter	(Model/ID)			De	econtamination Met	thod			
Purging Method(s)		X_s	umma	Vac	uum Truck	S	ubmersibl	e Pump	Othe
Sampling Method(s)	X	Summa Can			sal Bailer		ther		
5 5	21.1.				G VOLUME INFO				
Borehole Diameter (C	Circle)	2")	6" 8"		sing Diameter (Circ			3/16"	
	MONITORING	A SECUCION AND AND AND AND AND AND AND AND AND AN	The Tensor	Ca	sing Multiplier (CN			5.42	
Depth to Free Produc	MONITORING	MEASUREME	INTS	Co	sing Volume (CV)	PURGING	CALCU	LATORS	
				Ca				CV (mL) x 3.0 C	V (mL)
Depth to Water (DTV		-							
Total Well Depth (W		5.0			150	me/ -			
Water Column (WC)						MIN			
Free Product Thickne	ess (feet)				ee Product Purged (	(gal)			
Time (24 hr)	11:34	11:35	11 ' '8 1	PURGING	11:38				
mL Purged	4		11:36	11:37					
II- Mater	Ø	150	300	4570	600				
1	38.1	38.6	37.9	35.7	34,4				-
out	-00.4	- 903	-00,3	-00.3					
Sentle			1.1	11111	Luco I				
Time	11:38		11:43	11:47	11:48				
Ite in	34.4		25.4	71.4	25.8				
He	-25	-70	-15	-10	-5				
7									
					-smole	Time	113	50	
Other					Can	le #	33	7	
Other					Meni	de the		0040	
				SAMPLING	G DATA			7	
Sample ID	Time	Quantity	Volume	Туре	Filtered	Prese	rved	Analysis	
				FIELD PERS	SONNEL				
Field Technician Rep	resentative(s):				Subcontractor:				
Signature					Date:				

#### **APPENDIX E**

**Lab Data Sheets: Soil and Groundwater** 





Date of Report: 10/16/2015

Forrest Cook

Almar Environmental 407 Almar Avenue Santa Cruz, CA 95060

Client Project: 357 105th Ave
BCL Project: Soils/Waters
BCL Work Order: 1524165
Invoice ID: B215572

Enclosed are the results of analyses for samples received by the laboratory on 9/22/2015. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Vanessa Sandoval

Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101



#### **Table of Contents**

Sample Information	
Chain of Custody and Cooler Receipt form	4
Laboratory / Client Sample Cross Reference	
Sample Results	
1524165-01 - DP-1d5.0	
Volatile Organic Analysis (EPA Method 8260B)	18
Total Petroleum Hydrocarbons	
1524165-02 - DP-1d10.0	
Volatile Organic Analysis (EPA Method 8260B)	20
Total Petroleum Hydrocarbons	
1524165-03 - DP-2d5.0	
Volatile Organic Analysis (EPA Method 8260B)	22
Total Petroleum Hydrocarbons	
1524165-04 - DP-2d10.0	
Volatile Organic Analysis (EPA Method 8260B)	24
Total Petroleum Hydrocarbons	
1524165-05 - DP-3d5.0	
Volatile Organic Analysis (EPA Method 8260B)	26
Total Petroleum Hydrocarbons	
1524165-06 - DP-3d10.0	
Volatile Organic Analysis (EPA Method 8260B)	28
Total Petroleum Hydrocarbons	29
1524165-07 - DP-4d5.0	
Volatile Organic Analysis (EPA Method 8260B)	30
Total Petroleum Hydrocarbons	31
1524165-08 - DP-4d10.0	
Volatile Organic Analysis (EPA Method 8260B)	32
Total Petroleum Hydrocarbons	33
1524165-09 - DP-5d5.0	
Volatile Organic Analysis (EPA Method 8260B)	
Total Petroleum Hydrocarbons	35
1524165-10 - DP-5d10.0	
Volatile Organic Analysis (EPA Method 8260B)	
Total Petroleum Hydrocarbons	37
1524165-11 - DP-6d5.0	
Volatile Organic Analysis (EPA Method 8260B)	
Total Petroleum Hydrocarbons	39
1524165-12 - DP-6d10.0	
Volatile Organic Analysis (EPA Method 8260B)	
Total Petroleum Hydrocarbons	41
1524165-13 - DP-7d5.0	40
Volatile Organic Analysis (EPA Method 8260B)	
Total Petroleum Hydrocarbons	43
<b>1524165-14 - DP-7d10.0</b> Volatile Organic Analysis (EPA Method 8260B)	4.4
Total Petroleum Hydrocarbons	
1524165-15 - DP-8d5.0	45
Volatile Organic Analysis (EPA Method 8260B)	46
Total Petroleum Hydrocarbons	
1524165-16 - DP-8d10.0	41
Volatile Organic Analysis (EPA Method 8260B)	ΛΩ
Total Petroleum Hydrocarbons	
1524165-17 - DP-1	
Volatile Organic Analysis (EPA Method 8260B)	50

#### **Table of Contents**

	Total Petroleum Hydrocarbons	51
	1524165-18 - DP-2	
	Volatile Organic Analysis (EPA Method 8260B)	52
	Total Petroleum Hydrocarbons	
	1524165-19 - DP-3	
	Volatile Organic Analysis (EPA Method 8260B)	54
	Total Petroleum Hydrocarbons	55
	1524165-20 - DP-4	
	Volatile Organic Analysis (EPA Method 8260B)	56
	Total Petroleum Hydrocarbons	57
	1524165-21 - DP-5	
	Volatile Organic Analysis (EPA Method 8260B)	58
	Total Petroleum Hydrocarbons	59
	1524165-22 - DP-6	
	Volatile Organic Analysis (EPA Method 8260B)	60
	Total Petroleum Hydrocarbons	61
	1524165-23 - DP-7	
	Volatile Organic Analysis (EPA Method 8260B)	
	Total Petroleum Hydrocarbons	63
	1524165-24 - DP-8	
	Volatile Organic Analysis (EPA Method 8260B)	
	Total Petroleum Hydrocarbons	65
Quality	y Control Reports	
	Volatile Organic Analysis (EPA Method 8260B)	
	Method Blank Analysis	66
	Laboratory Control Sample	
	Precision and Accuracy	68
	Total Petroleum Hydrocarbons	
	Method Blank Analysis	
	Laboratory Control Sample	
	Precision and Accuracy	71
Notes		
	Notes and Definitions	72

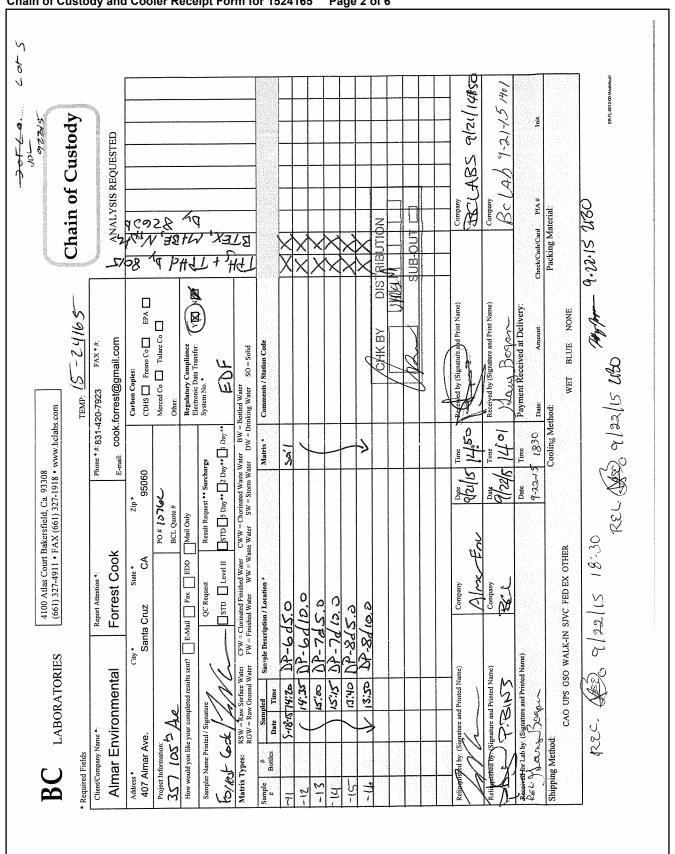
Report ID: 1000407972



Took of the Tr For the Tree to the total and		4100 Atlas Court Bakersfield, Ca. 93308 (661) 327-4911 • FAX (661) 327-1918 • www.bclabs.com	7.7.18
Post 1.20			Chain of Custody
Pot 10 766   Pandir Contrast(@gmall.com   St. Ant. 15 18 Ref. (Les) ED	port Attention *:	Phone * #:831-420-7923 FAX * #:	20
Pro # 10.76C	ollest cook	E-mail: COOK.Torrest@gmail.com	77
Date   Time   Date	State *	O60 CDHS Fresho Co	₹q.,
Mean of the company   Repaired Company Company Company Company   Result Request ** Surchasarge   Result Water   Day **-   Day	17 O1 # 04	Merced Co Tulare Co	Ø <sub>6</sub>
Result Request ** Surcharge  Superior No. — Day:  Superior S.W. = Comments / Station No.  Water S.W. = Storm Water D.W. = Daying Water So. = Solid  Water S.W. = Storm Water D.W. = Daying Water So. = Solid  Water S.W. = Storm Water D.W. = Daying Water So. = Solid  Water S.W. = Storm Water D.W. = Daying Water Solid  Water S.W. = Storm Water D.W. = Daying Water Solid  Water S.W. = Storm Water D.W. = Daying Water Solid  Water S.W. = Storm Water D.W. = Daying Water Solid  Water S.W. = Storm Water D.W. = Daying Water Solid  Water S.W. = Storm Water D.W. = Daying Water Solid  Water S.W. = Storm Water D.W. = Daying Water Solid  Water S.W. = Storm Water D.W. = Daying Water Solid  Water S.W. = Storm Water D.W. = Daying Water Solid  Water D.W. = Daying Water S	<u>ا</u> لــ	Regulatory Compliance	38t
Water SW=Storm Water BW= Berlied Water Water SW=Storm Water BW= Berlied Water Water SW=Storm Water BW= Berlied Water SO=Solid  Matrix: Comments / Surting Code    Date   Time   Comments / Surting Code   Date   Time   Company	quest	System No.*  Electronic Data Transfer: (VB) System No.*	4T+ ;
Marrix *   Comments / Station Cote	ed Finished Water CWW = Chorinal Water WW = Waste Water SW =	nated Waste Water BW = Bottled Water = Storm Water DW = Drinking Water SO = Solid	
Date Time Received by Signature and Print Name)    Date   Time   Received by Signature and Print Name)   Received by Signature	/ Location *	Matrix * Comments / Station Code	
Date Time Received by (Signature and Print Name)  All (S   (4)	0	) ;લ્ડ	
Date Time Payment Received by (Signature and Print Name) Pate Time Payment Received at Delivery: Date Time Payment Received at Delivery: Date Time Payment Received at Delivery: Date Time Payment Received by (Signature and Print Name) Packing Material:  Packing	0		XX
Date Time Received by (Signature and Print Name)    Part	0		XX
Date Time Received by (Signature and Print Name)    Part	1		
Date Time Received by Signature and Print Name)    All ( s	0		× ×
Date Time Received by Signature and Print Name)    Ald   G	2		× ×
Date Time Received by (Signature and Print Name)  Ala(S) [4]  Date Time Received by (Signature and Print Name)  Ala(S) [4]  Date Time Payment Received at Delivery:  Date Time Payment Received at Delivery:  Amount: Cooling Method:  WET BLUE NONE  Received by (Signature and Print Name)  And Ala (S) [4]  Annount: Received by (Signature and Print Name)  According Method:  WET BLUE NONE  Received by (Signature and Print Name)  Annount: Received by (Signature and Print Name)  According Method:  Received by (Signature and Print Name)  Annount: Received by (Signature and Print Name)  According Method:  Received by (Signature and Print Name)  Received by (Signature and Print Name)  According Method:  Received by (Signature and Print Name)  Received by (Signature an	0		×',×'
Date Time Received by Signature and Print Name)    All ( S	0.5		×3,
Date Time Time Received by (Signature and Print Name) Date Time Received by (Signature and Print Name)  PALL  PALL  PART  PART		>	2 y
Pate   Time   Received by (Signature and Print Name)   Company   Pate   Payment Received at Delivery:   Packing Material:	, 21	Received by Signature and Print Name)	Company
ALL (ASE) ALL BOTOMER NONE  ALL (ASE) ALL (ASE) ALL BOTOMER NONE  ALL (ASE)	2	Received by (Signature and Print Mane)	
Part Substitute Payment Received at Delivery:  Cooling Method:  WET BLUE NONE  REL. MEE 32   15	_	(40)	BCLAB 9-22-15 1401
Cooling Method:  WET BLUE NONE  REL. (1920   15	(830		
REL- (1826 9/32/15	FED EX OTHER		12
	08:81 51	BEOG	- 42215 USO
	REL		SP-FL-0012-00 Maselman



Chain of Custody and Cooler Receipt Form for 1524165 Page 2 of 6



4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com Report ID: 1000407972



Chain of Custody and Cooler Receipt Form for 1524165 Page 3 of 6 3045 Chain of Custody MANALYSIS REQUESTED Be LAB 9-22-15 U30 Z Z PIA# Packing Material: Check/Cash/Card S 3142-5 REL ( See 9 122/15 USG Received by (Signature and Print Name) Received by (Signature and Print Name EPA Payment Received at Delivery Merced Co cook.forrest@gmail.com CDHS | Fresno Co Regulatory Compliance Electronic Data Transfer: System No. \* Comments / Station Code GFW = Clotinated Finished Water CWW = Chorinated Waste Water 5W = Bottled Water FW = Finished Water WW = Waste Water SW = Storm Water DW = Drinking Water SO = Solid Carbon Copies: 公公 WET Phone \* #:831-420-7923 Other: 4100 Atlas Court Bakersfield, Ca. 93308 (661) 327-4911 • FAX (661) 327-1918 • www.bclabs.com Cooling Method STD S Day\*\* 2 Day\*\* 1 Day\* 3 257 Matrix \* 5 E-mail: Result Request \*\* Surcharge 9/22/rst Date 9(21/15 95060 PO# [07/6C 9/22/15 18:30 Zip \* BCL Quote # Mail Only State \* Forrest Cook CAO UPS GSO WALK-IN SIVC FED EX OTHER STD Level II Almo Report Attention \*; QC Request Sample Description / Location K 1830 Santa Cruz 4-324 LABORATORIES crived for Lab by: (Signature and Printed Name) RSW = Raw Surface Water RGW = Raw Ground Water Almar Environmental ripfed Name) ure and Printed Name 3.5 T.SS 9-18-15/14:00 ×.40 Beggin PBIN3 Sampler Name Printed / Signature Date Client/Company Name \*: 407 Almar Ave. Shipping Method Project Information \* Required Fields Matrix Types: -23 02-10 17 2

Report ID: 1000407972



Chain of Custody and Cooler Receipt Form for 1524165 Page 4 of 6

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BC LABORATORIES INC.			COOLER	RECEIPT	FORM			Pag	e (	0f		
Submission #: 15-24165							*					
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Fed Ex □ UPS □ Ontrac [	] Han	d Deliver	y 🗆		est 🛱		Box □	- 1	YES D	10 D		
BC Lab Field Service 🗵 Other I	☐ (Specify	y)		Other 🗆 Specify)					;			
				<u> </u>								
Refrigerant: Ice 🗵 Blue Ice 🗆			Other 🗆	<del></del>	ments:							
Custody Seals Ice Chest 🗓 .	Contain	ers 🗆 🕒	None	Com	ments:							
	ntact?:Yes	□ No □		`								
All samples received? Yes D No D A	II samples	container	s intact? Y	es 🗇 📈	ĺΠ.	Descri	otion(s) mat	ch COC?	Yes D No	. 1		
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QT EPA 1664	<b> </b>	ļ	·		<b> </b>	<del> </del>	<del> </del>	<b> </b>		1		
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oz EPA 548		1			T .							
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T EPA 8015M												
T EPA 8270												
)z/160z/32oz AMBER												
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Chain of Custody and Cooler Receipt Form for 1524165 Page 5 of 6

BC LABORATORIES INC.			COOLER	RECEIPT	FORM			Pag	e_Z(	Of		
Submission #: 15 - 24/65												
SHIPPING INFORM	JATION			s	HIPPING	CONTA	INER		FREE LIQ	UID		
Fed Ex  UPS  Ontrac		d Deliver	v 🗆	Ice Chest 🖄 None 🗆 Box 🗆					YES   NO			
BC Lab Field Service X Other I		r)			er □ (Sp	_						
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Refrigerant: Ice (X) Blue Ice □			Other 🗆		nents:	april 1						
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All samples received? Yes ☑ No □ A	All samples	container	s intact? Y	es 🖵 No		Descrip	otion(s) mat	tch COC? Y	es No	0		
COC Received Emi	ssivity: 🔘	.97	Container:	PE	Thermo	meter ID: _	208	Date/Tin	ne 9/22/	15		
A				•					Init KIB	201		
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Chain of Custody and Cooler Receipt Form for 1524165 Page 6 of 6

BC LABORATORIES INC.		<u>C</u>	OOLER	RECEIPT	FORM	T		Page	<u>3</u> c	)f_ <u>&gt;</u>
Submission #: 15-74165				7						
SHIPPING INFORM Fed Ex □ UPS □ Ontrac □ BC Lab Field Service ሺ Other □	] Han	d Delivery	, o	Ice Che	st 🖎	G CONTAIN None □ pecify)	Box □	12	FREE LIO	4.5
Refrigerant: Ice ☒ Blue Ice ☐	None	• 🗆 (	Other 🗆	Comr	nents:		1			
Custody Seals Ice Chest ☐ Intact? Yes □ No 1	Containe	CONTROL OF THE PARTY OF THE PAR	None	Com	ments:		i de la constanta de la consta			
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QT EPA 8015M	<u> </u>		<u> </u>		<u> </u>					<b></b>
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PLASTIC BAG	1									
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Reported: 10/16/2015 13:14 Project: Soils/Waters Project Number: 357 105th Ave Project Manager: Forrest Cook

#### **Laboratory / Client Sample Cross Reference**

Laboratory **Client Sample Information** 

1524165-01 COC Number:

> **Project Number:** Neishi Brothers Nursery

Sampling Location:

Sampling Point:

Sampled By:

DP-1d5.0

Forrest Cook of ALSC

09/22/2015 21:30 **Receive Date:** 

Sampling Date: 09/18/2015 08:55

Sample Depth: Lab Matrix: Solids Soil Sample Type:

Delivery Work Order: Global ID: T10000006426

Location ID (FieldPoint): DP-1d5.0

Matrix: SO

Sample QC Type (SACode): CS

Cooler ID:

1524165-02 **COC Number:** 

> **Project Number:** Neishi Brothers Nursery

Sampling Location:

DP-1d10.0 Sampling Point:

Sampled By:

Forrest Cook of ALSC

09/22/2015 21:30 Receive Date: 09/18/2015 09:20 Sampling Date:

Sample Depth: Solids Lab Matrix: Sample Type: Delivery Work Order:

Global ID: T10000006426 Location ID (FieldPoint): DP-1d10.0

Matrix: SO

Sample QC Type (SACode): CS

Cooler ID:

1524165-03 COC Number:

> Neishi Brothers Nursery **Project Number:**

Sampling Location:

DP-2d5.0 Sampling Point:

Sampled By:

Forrest Cook of ALSC

**Receive Date:** 09/22/2015 21:30

09/18/2015 10:10 Sampling Date:

Sample Depth: Solids Lab Matrix: Soil Sample Type: Delivery Work Order: Global ID: T10000006426

Location ID (FieldPoint): DP-2d5.0

Matrix: SO

Sample QC Type (SACode): CS

Cooler ID:

4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com Report ID: 1000407972 Page 10 of 72

Reported: 10/16/2015 13:14 Project: Soils/Waters Project Number: 357 105th Ave Project Manager: Forrest Cook

#### **Laboratory / Client Sample Cross Reference**

Laboratory **Client Sample Information** 

1524165-04 COC Number:

> **Project Number:** Neishi Brothers Nursery

Sampling Location:

Sampling Point: DP-2d10.0

Sampled By:

Forrest Cook of ALSC

09/22/2015 21:30 **Receive Date:** 

Sampling Date: 09/18/2015 10:20

Sample Depth: Lab Matrix: Solids Soil Sample Type:

Delivery Work Order: Global ID: T10000006426

Location ID (FieldPoint): DP-2d10.0

Matrix: SO

Sample QC Type (SACode): CS

Cooler ID:

1524165-05 **COC Number:** 

> **Project Number:** Neishi Brothers Nursery

**Sampling Location:** 

DP-3d5.0 Sampling Point:

Sampled By:

Forrest Cook of ALSC

09/22/2015 21:30 Receive Date: 09/18/2015 09:40 Sampling Date:

Sample Depth: Solids Lab Matrix: Sample Type: Delivery Work Order: Global ID: T10000006426

Location ID (FieldPoint): DP-3d5.0

Matrix: SO

Sample QC Type (SACode): CS

Cooler ID:

1524165-06 COC Number:

> Neishi Brothers Nursery **Project Number:**

Sampling Location:

DP-3d10.0 Sampling Point:

Sampled By:

Forrest Cook of ALSC

**Receive Date:** 

09/22/2015 21:30

Sampling Date:

09/18/2015 09:50

Sample Depth: Solids Lab Matrix: Soil Sample Type: Delivery Work Order: Global ID: T10000006426

Location ID (FieldPoint): DP-3d10.0

Matrix: SO

Sample QC Type (SACode): CS

Cooler ID:

Report ID: 1000407972

Page 11 of 72

Reported: 10/16/2015 13:14 Project: Soils/Waters Project Number: 357 105th Ave Project Manager: Forrest Cook

#### **Laboratory / Client Sample Cross Reference**

Laboratory **Client Sample Information** 

1524165-07 COC Number:

> **Project Number:** Neishi Brothers Nursery

**Sampling Location:** 

Sampling Point:

Sampled By:

DP-4d5.0

Forrest Cook of ALSC

**Receive Date:** 

09/22/2015 21:30

Sampling Date:

09/18/2015 11:10

Sample Depth:

Lab Matrix: Solids Soil Sample Type:

Delivery Work Order: Global ID: T10000006426

Location ID (FieldPoint): DP-4d5.0

Matrix: SO

Sample QC Type (SACode): CS

Cooler ID:

1524165-08 **COC Number:** 

> **Project Number:** Neishi Brothers Nursery

Sampling Location:

Sampling Point:

Sampled By:

DP-4d10.0

Forrest Cook of ALSC

Receive Date:

09/22/2015 21:30

Sampling Date:

09/18/2015 11:20

Sample Depth: Solids Lab Matrix: Sample Type: Delivery Work Order: Global ID: T10000006426

Location ID (FieldPoint): DP-4d10.0

Matrix: SO

Sample QC Type (SACode): CS

Cooler ID:

1524165-09 COC Number:

> Neishi Brothers Nursery **Project Number:**

Sampling Location:

DP-5d5.0 Sampling Point:

Sampled By:

Forrest Cook of ALSC

**Receive Date:** 

09/22/2015 21:30

Sampling Date:

09/18/2015 12:50

Sample Depth: Solids Lab Matrix: Soil Sample Type: Delivery Work Order:

Global ID: T10000006426

Location ID (FieldPoint): DP-5d5.0

Matrix: SO

Sample QC Type (SACode): CS

Cooler ID:

Report ID: 1000407972

4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com Page 12 of 72

Reported: 10/16/2015 13:14 Project: Soils/Waters Project Number: 357 105th Ave Project Manager: Forrest Cook

## **Laboratory / Client Sample Cross Reference**

Laboratory **Client Sample Information** 

1524165-10 COC Number:

> **Project Number:** Neishi Brothers Nursery

Sampling Location:

Sampling Point:

Sampled By:

DP-5d10.0

Forrest Cook of ALSC

09/22/2015 21:30 Receive Date: Sampling Date: 09/18/2015 12:55

Sample Depth: Lab Matrix: Solids

Soil Sample Type: Delivery Work Order: Global ID: T10000006426

Location ID (FieldPoint): DP-5d10.0

Matrix: SO

Sample QC Type (SACode): CS

Cooler ID:

1524165-11 **COC Number:** 

> **Project Number:** Neishi Brothers Nursery

**Sampling Location:** 

DP-6d5.0 Sampling Point:

Sampled By:

Forrest Cook of ALSC

09/22/2015 21:30 Receive Date: 09/18/2015 14:20 Sampling Date:

Sample Depth: Solids Lab Matrix: Sample Type: Delivery Work Order: Global ID: T10000006426

Location ID (FieldPoint): DP-6d5.0

Matrix: SO

Sample QC Type (SACode): CS

Cooler ID:

1524165-12 COC Number:

> Neishi Brothers Nursery **Project Number:**

Sampling Location:

DP-6d10.0 Sampling Point:

Sampled By:

Forrest Cook of ALSC

**Receive Date:** 

09/22/2015 21:30

Sampling Date:

09/18/2015 14:35

Sample Depth: Solids Lab Matrix: Soil Sample Type: Delivery Work Order: Global ID: T10000006426

Location ID (FieldPoint): DP-6d10.0

Matrix: SO

Sample QC Type (SACode): CS

Cooler ID:

Report ID: 1000407972

Reported: 10/16/2015 13:14 Project: Soils/Waters Project Number: 357 105th Ave Project Manager: Forrest Cook

#### **Laboratory / Client Sample Cross Reference**

Laboratory **Client Sample Information** 

1524165-13 COC Number:

> **Project Number:** Neishi Brothers Nursery

Sampling Location:

Sampling Point: DP-7d5.0

Sampled By:

Forrest Cook of ALSC

Receive Date:

09/22/2015 21:30

Sampling Date:

09/18/2015 15:00

Sample Depth:

Lab Matrix: Solids Soil Sample Type:

Delivery Work Order: Global ID: T10000006426

Location ID (FieldPoint): DP-7d5.0

Matrix: SO

Sample QC Type (SACode): CS

Cooler ID:

1524165-14 **COC Number:** 

> **Project Number:** Neishi Brothers Nursery

**Sampling Location:** 

Sampling Point:

Sampled By:

DP-7d10.0

Forrest Cook of ALSC

Receive Date:

09/22/2015 21:30

Sampling Date:

09/18/2015 15:15

Sample Depth: Solids Lab Matrix: Sample Type: Delivery Work Order: Global ID: T10000006426

Location ID (FieldPoint): DP-7d10.0

Matrix: SO

Sample QC Type (SACode): CS

Cooler ID:

1524165-15 COC Number:

> Neishi Brothers Nursery **Project Number:**

Sampling Location:

Sampling Point:

Sampled By:

DP-8d5.0

Forrest Cook of ALSC

**Receive Date:** 

09/22/2015 21:30

Sampling Date:

09/18/2015 13:40

Sample Depth: Solids Lab Matrix: Soil Sample Type: Delivery Work Order:

Global ID: T10000006426 Location ID (FieldPoint): DP-8d5.0

Matrix: SO

Sample QC Type (SACode): CS

Cooler ID:

Report ID: 1000407972

Page 14 of 72

Reported: 10/16/2015 13:14 Project: Soils/Waters Project Number: 357 105th Ave Project Manager: Forrest Cook

## **Laboratory / Client Sample Cross Reference**

Laboratory **Client Sample Information** 

1524165-16 COC Number:

> **Project Number:** Neishi Brothers Nursery

Sampling Location:

Sampling Point: DP-8d10.0

Sampled By:

Forrest Cook of ALSC

09/22/2015 21:30 Receive Date:

Sampling Date: 09/18/2015 13:50

Sample Depth: Lab Matrix: Solids Soil

Sample Type: Delivery Work Order: Global ID: T10000006426

Location ID (FieldPoint): DP-8d10.0

09/22/2015 21:30

09/18/2015 14:00

09/22/2015 21:30

09/18/2015 14:30

Water

Groundwater

Matrix: SO

Sample QC Type (SACode): CS

Cooler ID:

Receive Date:

Sampling Date:

1524165-17 **COC Number:** 

> **Project Number:** Neishi Brothers Nursery

**Sampling Location:** DP-1 Sampling Point:

Sampled By:

Sample Depth: Lab Matrix: Water Forrest Cook of ALSC

Groundwater Sample Type:

Delivery Work Order: Global ID: T10000006426 Location ID (FieldPoint): DP-1

Matrix: W

Sample QC Type (SACode): CS

Cooler ID:

**Receive Date:** 

Sampling Date:

1524165-18 COC Number:

> Neishi Brothers Nursery **Project Number:**

Sampling Location: DP-2 Sampling Point:

Sampled By:

Sample Depth: Lab Matrix: Forrest Cook of ALSC Sample Type:

> Delivery Work Order: Global ID: T10000006426 Location ID (FieldPoint): DP-2

Matrix: W

Sample QC Type (SACode): CS

Cooler ID:

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4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com Report ID: 1000407972

Reported: 10/16/2015 13:14
Project: Soils/Waters
Project Number: 357 105th Ave
Project Manager: Forrest Cook

## **Laboratory / Client Sample Cross Reference**

**Laboratory** Client Sample Information

1524165-19 COC Number: ---

Project Number: Neishi Brothers Nursery

Sampling Location: --Sampling Point: DP-3

Sampled By:

---

Forrest Cook of ALSC

Sampling Date: 09/18/2015 14:50
Sample Depth: ---

09/22/2015 21:30

Lab Matrix: Water
Sample Type: Groundwater

Delivery Work Order: Global ID: T10000006426 Location ID (FieldPoint): DP-3

Matrix: W

Receive Date:

Sample QC Type (SACode): CS

Cooler ID:

1524165-20 COC Number: ---

Project Number: Neishi Brothers Nursery

Sampling Location: --Sampling Point: DP-4

Sampled By:

Forrest Cook of ALSC

**Receive Date:** 09/22/2015 21:30 **Sampling Date:** 09/18/2015 16:00

Sample Depth: --Lab Matrix: Water
Sample Type: Groundwater

Delivery Work Order: Global ID: T10000006426 Location ID (FieldPoint): DP-4

Matrix: W

Sample QC Type (SACode): CS

Cooler ID:

1524165-21 COC Number: ---

Project Number: Neishi Brothers Nursery

Sampling Location: --Sampling Point: DP-5

Sampled By:

Forrest Cook of ALSC

**Receive Date:** 09/22/2015 21:30

**Sampling Date:** 09/18/2015 15:40

Sample Depth: --Lab Matrix: Water
Sample Type: Groundwater

Delivery Work Order: Global ID: T10000006426 Location ID (FieldPoint): DP-5

Matrix: W

Sample QC Type (SACode): CS

Cooler ID:

Report ID: 1000407972

Reported: 10/16/2015 13:14
Project: Soils/Waters
Project Number: 357 105th Ave
Project Manager: Forrest Cook

#### **Laboratory / Client Sample Cross Reference**

**Laboratory** Client Sample Information

1524165-22 COC Number: ---

Project Number: Neishi Brothers Nursery

Sampling Location: --Sampling Point: DP-6

Sampled By: Forrest Cook of ALSC

Sample Depth: --Lab Matrix: Water
Sample Type: Groundwater

09/22/2015 21:30

09/18/2015 16:10

Delivery Work Order: Global ID: T10000006426

Location ID (FieldPoint): DP-6 Matrix: W

Receive Date: Sampling Date:

Sample QC Type (SACode): CS

Cooler ID:

1524165-23 COC Number: ---

Project Number: Neishi Brothers Nursery

Sampling Location: --Sampling Point: DP-7

Sampled By: Forrest Cook of ALSC

**Receive Date:** 09/22/2015 21:30 **Sampling Date:** 09/18/2015 16:15

Sample Depth: --Lab Matrix: Water

Sample Type: Groundwater

Delivery Work Order: Global ID: T10000006426 Location ID (FieldPoint): DP-7

Matrix: W

Sample QC Type (SACode): CS

Cooler ID:

1524165-24 COC Number: ---

Project Number: Neishi Brothers Nursery

Sampling Location: --Sampling Point: DP-8

Sampled By: Forrest Cook of ALSC

**Receive Date:** 09/22/2015 21:30

**Sampling Date:** 09/18/2015 16:30

Sample Depth: --Lab Matrix: Water
Sample Type: Groundwater

Delivery Work Order: Global ID: T10000006426 Location ID (FieldPoint): DP-8

Matrix: W

Sample QC Type (SACode): CS

Cooler ID:

Report ID: 1000407972

Page 17 of 72

Almar Environmental
407 Almar Avenue

Santa Cruz, CA 95060

Reported: 10/16/2015 13:14

Project: Soils/Waters
Project Number: 357 105th Ave
Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-01	Client Sample	e Name:	Neishi Brothers Nurse	ery, DI	P-1d5.0, 9/18/2015	3:55:00AM, Forres	t Cook	
Constituent		Result	Units	PQL ME	DL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Ethylbenzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Methyl t-butyl ether		ND	mg/kg	0.0050		EPA-8260B	ND		1
Naphthalene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Toluene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Total Xylenes		ND	mg/kg	0.010		EPA-8260B	ND		1
p- & m-Xylenes		ND	mg/kg	0.0050		EPA-8260B	ND		1
o-Xylene		ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (S	Surrogate)	111	%	70 - 121 (LCL - UCL	_)	EPA-8260B			1
Toluene-d8 (Surrogate)		103	%	81 - 117 (LCL - UCL	_)	EPA-8260B			1
4-Bromofluorobenzene (S	Surrogate)	104	%	74 - 121 (LCL - UCL	_)	EPA-8260B			1

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/24/15 18:41	JPT	MS-V3	1	BYI2284	

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Reported: 10/16/2015 13:14 Project: Soils/Waters Project Number: 357 105th Ave Project Manager: Forrest Cook

#### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-01	Client Sampl	e Name:	Neishi Brothers N	Nursery, [	DP-1d5.0, 9/18/2015 8:	55:00AM, Forres	st Cook	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Gasoline		ND	mg/kg	20		EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)		ND	mg/kg	10		EPA-8015B/FFP	ND		1
Tetracosane (Surrogat	e)	61.8	%	20 - 145 (LCL -	UCL)	EPA-8015B/FFP			1

			Run				QC
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8015B/FFP	09/28/15	10/01/15 18:53	MWB	GC-2	0.987	BYI2879

Page 19 of 72 Report ID: 1000407972

Reported: 10/16/2015 13:14 Project: Soils/Waters

Project Number: 357 105th Ave
Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-02	Client Sample	e Name:	Neishi Brothers Nurse	ery, DI	P-1d10.0, 9/18/2015	9:20:00AM, Forre	est Cook	
Constituent		Result	Units	PQL MD	)L	Method	MB Bias	Lab Quals	Run #
Benzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Ethylbenzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Methyl t-butyl ether		ND	mg/kg	0.0050		EPA-8260B	ND		1
Naphthalene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Toluene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Total Xylenes		ND	mg/kg	0.010		EPA-8260B	ND		1
p- & m-Xylenes		ND	mg/kg	0.0050		EPA-8260B	ND		1
o-Xylene		ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Si	urrogate)	111	%	70 - 121 (LCL - UCL	-)	EPA-8260B			1
Toluene-d8 (Surrogate)		99.1	%	81 - 117 (LCL - UCL	.)	EPA-8260B			1
4-Bromofluorobenzene (S	Surrogate)	104	%	74 - 121 (LCL - UCL	.)	EPA-8260B			1

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/24/15 19:04	JPT	MS-V3	1	BYI2284	

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Reported: 10/16/2015 13:14 Project: Soils/Waters Project Number: 357 105th Ave Project Manager: Forrest Cook

#### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-02	Client Sampl	e Name:	Neishi Brothers N	Nursery, [	DP-1d10.0, 9/18/2015	:20:00AM, Forre	est Cook	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Gasoline		ND	mg/kg	20		EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)		ND	mg/kg	10		EPA-8015B/FFP	ND		1
Tetracosane (Surroga	re)	53.8	%	20 - 145 (LCL -	UCL)	EPA-8015B/FFP			1

			QC				
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8015B/FFP	09/28/15	10/01/15 19:16	MWB	GC-2	1	BYI2879

Page 21 of 72 Report ID: 1000407972

**Reported:** 10/16/2015 13:14

Project Number: 357 105th Ave
Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-03	Client Sampl	e Name:	Neishi Brothers Nurse	ery, D	P-2d5.0, 9/18/2015 1	0:10:00AM, Forre	st Cook	
Constituent		Result	Units	PQL ME	DL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Ethylbenzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Methyl t-butyl ether		ND	mg/kg	0.0050		EPA-8260B	ND		1
Naphthalene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Toluene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Total Xylenes		ND	mg/kg	0.010		EPA-8260B	ND		1
p- & m-Xylenes		ND	mg/kg	0.0050		EPA-8260B	ND		1
o-Xylene		ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (S	Surrogate)	105	%	70 - 121 (LCL - UCL	_)	EPA-8260B			1
Toluene-d8 (Surrogate)		104	%	81 - 117 (LCL - UCL	_)	EPA-8260B			1
4-Bromofluorobenzene (	Surrogate)	105	%	74 - 121 (LCL - UCL	_)	EPA-8260B			1

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/24/15 19:27	JPT	MS-V3	1	BYI2284	

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Reported: 10/16/2015 13:14 Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

#### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-03	Client Sampl	e Name:	Neishi Brothers	Nursery, [	P-2d5.0, 9/18/2015 10	:10:00AM, Forre	st Cook	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run#
TPH - Gasoline		ND	mg/kg	20		EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)		ND	mg/kg	10		EPA-8015B/FFP	ND		1
Tetracosane (Surrogat	e)	52.8	%	20 - 145 (LCL -	UCL)	EPA-8015B/FFP			1

			Run				QC
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8015B/FFP	09/28/15	10/01/15 19:38	MWB	GC-2	0.993	BYI2879

Page 23 of 72 Report ID: 1000407972

Reported: 10/16/2015 13:14
Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-04	Client Sample	e Name:	Neishi Brothers Nurse	ery, DP-2d10.0, 9/18/2015	5 10:20:00AM, Forr	est Cook	
Constituent		Result	Units	PQL ME	DL Method	MB Bias	Lab Quals	Run #
Benzene		ND	mg/kg	0.0050	EPA-8260B	ND		1
Ethylbenzene		ND	mg/kg	0.0050	EPA-8260B	ND		1
Methyl t-butyl ether		ND	mg/kg	0.0050	EPA-8260B	ND		1
Naphthalene		ND	mg/kg	0.0050	EPA-8260B	ND		1
Toluene		ND	mg/kg	0.0050	EPA-8260B	ND		1
Total Xylenes		0.016	mg/kg	0.010	EPA-8260B	ND		1
p- & m-Xylenes		0.013	mg/kg	0.0050	EPA-8260B	ND		1
o-Xylene		ND	mg/kg	0.0050	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Si	urrogate)	107	%	70 - 121 (LCL - UCL	) EPA-8260B			1
Toluene-d8 (Surrogate)		103	%	81 - 117 (LCL - UCL	) EPA-8260B			1
4-Bromofluorobenzene (S	surrogate)	103	%	74 - 121 (LCL - UCL	) EPA-8260B			1

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/24/15 19:51	JPT	MS-V3	1	BYI2284	

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Reported: 10/16/2015 13:14 Project: Soils/Waters Project Number: 357 105th Ave Project Manager: Forrest Cook

#### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-04	Client Sampl	e Name:	Neishi Brothers	Nursery, [	DP-2d10.0, 9/18/2015 1	0:20:00AM, Forr	est Cook	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run#
TPH - Gasoline		ND	mg/kg	20		EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)		ND	mg/kg	10		EPA-8015B/FFP	ND	A52	1
Tetracosane (Surrogat	te)	50.9	%	20 - 145 (LCL -	UCL)	EPA-8015B/FFP			1

			Run				QC
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8015B/FFP	09/28/15	10/01/15 20:01	MWB	GC-2	0.993	BYI2879

Report ID: 1000407972

Reported: 10/16/2015 13:14 Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-05	Client Sampl	e Name:	Neishi Brothers Nur	rsery, D	P-3d5.0, 9/18/2015	9:40:00AM, Forres	t Cook	
Constituent		Result	Units	PQL M	IDL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Ethylbenzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Methyl t-butyl ether		ND	mg/kg	0.0050		EPA-8260B	ND		1
Naphthalene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Toluene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Total Xylenes		ND	mg/kg	0.010		EPA-8260B	ND		1
p- & m-Xylenes		ND	mg/kg	0.0050		EPA-8260B	ND		1
o-Xylene		ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (S	urrogate)	109	%	70 - 121 (LCL - UC	CL)	EPA-8260B			1
Toluene-d8 (Surrogate)		99.7	%	81 - 117 (LCL - UC	CL)	EPA-8260B			1
4-Bromofluorobenzene (S	Surrogate)	103	%	74 - 121 (LCL - UC	CL)	EPA-8260B			1

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/24/15 20:14	JPT	MS-V3	1	BYI2284	

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Reported: 10/16/2015 13:14 Project: Soils/Waters Project Number: 357 105th Ave Project Manager: Forrest Cook

#### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-05	Client Sampl	e Name:	Neishi Brothers N	Nursery, [	DP-3d5.0, 9/18/2015 9:	40:00AM, Forres	st Cook	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Gasoline		ND	mg/kg	20		EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)		ND	mg/kg	10		EPA-8015B/FFP	ND	A52	1
Tetracosane (Surrogat	re)	57.2	%	20 - 145 (LCL -	UCL)	EPA-8015B/FFP			1

			QC				
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8015B/FFP	09/28/15	10/01/15 20:23	MWB	GC-2	1.007	BYI2879

Report ID: 1000407972

**Reported:** 10/16/2015 13:14

Project Number: 357 105th Ave
Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-06	Client Sample	e Name:	Neishi Brothers Nu	rsery, D	P-3d10.0, 9/18/2015	9:50:00AM, Forre	est Cook	
Constituent		Result	Units	PQL N	/IDL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Ethylbenzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Methyl t-butyl ether		ND	mg/kg	0.0050		EPA-8260B	ND		1
Naphthalene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Toluene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Total Xylenes		ND	mg/kg	0.010		EPA-8260B	ND		1
p- & m-Xylenes		ND	mg/kg	0.0050		EPA-8260B	ND		1
o-Xylene		ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (S	Surrogate)	110	%	70 - 121 (LCL - U	CL)	EPA-8260B			1
Toluene-d8 (Surrogate)		102	%	81 - 117 (LCL - U	CL)	EPA-8260B			1
4-Bromofluorobenzene (	Surrogate)	107	%	74 - 121 (LCL - U	CL)	EPA-8260B			1

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/24/15 20:37	JPT	MS-V3	1	BYI2284	

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Reported: 10/16/2015 13:14 Project: Soils/Waters Project Number: 357 105th Ave

Project Manager: Forrest Cook

#### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-06	Client Sampl	e Name:	Neishi Brothers N	Nursery, [	DP-3d10.0, 9/18/2015	:50:00AM, Forre	est Cook	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run#
TPH - Gasoline		ND	mg/kg	20		EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)		ND	mg/kg	10		EPA-8015B/FFP	ND	A52	1
Tetracosane (Surrogat	re)	45.3	%	20 - 145 (LCL -	UCL)	EPA-8015B/FFP			1

			Run				QC
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8015B/FFP	09/28/15	10/01/15 20:46	MWB	GC-2	0.997	BYI2879

Page 29 of 72 Report ID: 1000407972

Reported: 10/16/2015 13:14 Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-07	Client Sampl	e Name:	Neishi Brothers Nurse	ry, DP-4d5.0, 9/18/2015	5 11:10:00AM, Forre	st Cook	
Constituent		Result	Units	PQL MD	L Method	MB Bias	Lab Quals	Run #
Benzene		ND	mg/kg	0.0050	EPA-8260B	ND		1
Ethylbenzene		ND	mg/kg	0.0050	EPA-8260B	ND		1
Methyl t-butyl ether		ND	mg/kg	0.0050	EPA-8260B	ND		1
Naphthalene		0.072	mg/kg	0.0050	EPA-8260B	ND		1
Toluene		ND	mg/kg	0.0050	EPA-8260B	ND		1
Total Xylenes		ND	mg/kg	0.010	EPA-8260B	ND		1
p- & m-Xylenes		ND	mg/kg	0.0050	EPA-8260B	ND		1
o-Xylene		ND	mg/kg	0.0050	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (	(Surrogate)	99.3	%	70 - 121 (LCL - UCL	) EPA-8260B			1
Toluene-d8 (Surrogate)	1	103	%	81 - 117 (LCL - UCL	) EPA-8260B			1
4-Bromofluorobenzene	(Surrogate)	98.5	%	74 - 121 (LCL - UCL	) EPA-8260B			1

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/24/15 21:00	JPT	MS-V3	1	BYI2284	

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Santa Cruz, CA 95060

Almar Environmental Reported: 10/16/2015 13:14 Project: Soils/Waters 407 Almar Avenue

Project Number: 357 105th Ave Project Manager: Forrest Cook

#### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-07	Client Sampl	e Name:	Neishi Brothers N	Nursery, [	P-4d5.0, 9/18/2015 11	:10:00AM, Forre	st Cook	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Gasoline		ND	mg/kg	20		EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)		ND	mg/kg	10		EPA-8015B/FFP	ND		1
Tetracosane (Surrogat	re)	44.3	%	20 - 145 (LCL -	UCL)	EPA-8015B/FFP			1

	Run						QC				
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID				
1	EPA-8015B/FFP	09/28/15	10/01/15 22:15	MWB	GC-2	1.014	BYI2879				

Page 31 of 72 Report ID: 1000407972

Reported: 10/16/2015 13:14
Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-08	Client Sampl	e Name:	Neishi Brothe	rs Nursery, D	P-4d10.0, 9/18/2015	11:20:00AM, Forr	est Cook	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene		0.079	mg/kg	0.0050		EPA-8260B	ND		1
Ethylbenzene		1.7	mg/kg	0.12		EPA-8260B	ND	A01	2
Methyl t-butyl ether		ND	mg/kg	0.0050		EPA-8260B	ND		1
Naphthalene		1.3	mg/kg	0.025		EPA-8260B	ND	A01	3
Toluene		1.6	mg/kg	0.025		EPA-8260B	ND	A01	3
Total Xylenes		8.2	mg/kg	0.25		EPA-8260B	ND	A01	2
p- & m-Xylenes		6.2	mg/kg	0.12		EPA-8260B	ND	A01	2
o-Xylene		2.0	mg/kg	0.12		EPA-8260B	ND	A01	2
1,2-Dichloroethane-d4 (Su	rrogate)	93.5	%	70 - 121 (LCL	- UCL)	EPA-8260B			1
1,2-Dichloroethane-d4 (Su	rrogate)	98.7	%	70 - 121 (LCL	- UCL)	EPA-8260B			2
1,2-Dichloroethane-d4 (Su	rrogate)	91.4	%	70 - 121 (LCL	- UCL)	EPA-8260B			3
Toluene-d8 (Surrogate)		109	%	81 - 117 (LCL	- UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)		111	%	81 - 117 (LCL	- UCL)	EPA-8260B			2
Toluene-d8 (Surrogate)		104	%	81 - 117 (LCL	- UCL)	EPA-8260B			3
4-Bromofluorobenzene (Su	irrogate)	98.4	%	74 - 121 (LCL	- UCL)	EPA-8260B			1
4-Bromofluorobenzene (Su	irrogate)	103	%	74 - 121 (LCL	- UCL)	EPA-8260B			2
4-Bromofluorobenzene (Su	irrogate)	97.9	%	74 - 121 (LCI	- UCL)	EPA-8260B			3

			Run				QC
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8260B	09/24/15	09/24/15 21:23	JPT	MS-V3	1	BYI2284
2	EPA-8260B	09/24/15	09/28/15 12:19	ADC	MS-V3	25	BYI2284
3	EPA-8260B	09/24/15	09/25/15 13:43	JPT	MS-V3	5	BYI2284

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Report ID: 1000407972

Almar Environmental

407 Almar Avenue Santa Cruz, CA 95060 Reported: 10/16/2015 13:14 Project: Soils/Waters

> Project Number: 357 105th Ave Project Manager: Forrest Cook

#### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-08	Client Sampl	e Name:	Neishi Brothers	Nursery, [	DP-4d10.0, 9/18/2015 1	1:20:00AM, Forr	est Cook	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Gasoline		ND	mg/kg	20		EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)		ND	mg/kg	10		EPA-8015B/FFP	ND	A52	1
Tetracosane (Surrogat	re)	46.8	%	20 - 145 (LCL -	- UCL)	EPA-8015B/FFP			1

	Run						QC				
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID				
1	EPA-8015B/FFP	09/28/15	10/01/15 22:38	MWB	GC-2	1.007	BYI2879				

Report ID: 1000407972

Reported: 10/16/2015 13:14

Project: Soils/Waters
Project Number: 357 105th Ave
Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-09	Client Sampl	e Name:	Neishi Brothers Nui	rsery, D	P-5d5.0, 9/18/2015 1	2:50:00PM, Forre	st Cook	
Constituent		Result	Units	PQL N	1DL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Ethylbenzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Methyl t-butyl ether		ND	mg/kg	0.0050		EPA-8260B	ND		1
Naphthalene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Toluene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Total Xylenes		ND	mg/kg	0.010		EPA-8260B	ND		1
p- & m-Xylenes		ND	mg/kg	0.0050		EPA-8260B	ND		1
o-Xylene		ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Si	urrogate)	115	%	70 - 121 (LCL - UC	CL)	EPA-8260B			1
Toluene-d8 (Surrogate)		101	%	81 - 117 (LCL - UC	CL)	EPA-8260B			1
4-Bromofluorobenzene (S	urrogate)	98.1	%	74 - 121 (LCL - UC	CL)	EPA-8260B			1

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/28/15 16:11	ADC	MS-V3	1	BYI2284	

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Almar Environmental Reported: 10/16/2015 13:14 Project: Soils/Waters 407 Almar Avenue Santa Cruz, CA 95060 Project Number: 357 105th Ave

Project Manager: Forrest Cook

#### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-09	Client Sampl	e Name:	Neishi Brothers N	lursery, D	P-5d5.0, 9/18/2015 12	:50:00PM, Forre	est Cook	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Gasoline		ND	mg/kg	20		EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)		ND	mg/kg	10		EPA-8015B/FFP	ND		1
Tetracosane (Surroga	te)	46.8	%	20 - 145 (LCL - L	JCL)	EPA-8015B/FFP			1

	Run						QC				
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID				
1	EPA-8015B/FFP	09/28/15	10/01/15 23:00	MWB	GC-2	1.010	BYI2879				

Page 35 of 72 Report ID: 1000407972

**Reported:** 10/16/2015 13:14

Project: Soils/Waters
Project Number: 357 105th Ave
Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-10	Client Sample	e Name:	Neishi Brothers Nu	rsery, D	P-5d10.0, 9/18/2015	12:55:00PM, Form	est Cook	
Constituent		Result	Units	PQL N	/IDL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Ethylbenzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Methyl t-butyl ether		ND	mg/kg	0.0050		EPA-8260B	ND		1
Naphthalene		0.045	mg/kg	0.0050		EPA-8260B	ND		1
Toluene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Total Xylenes		ND	mg/kg	0.010		EPA-8260B	ND		1
p- & m-Xylenes		0.0059	mg/kg	0.0050		EPA-8260B	ND		1
o-Xylene		ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (S	Surrogate)	85.5	%	70 - 121 (LCL - U	CL)	EPA-8260B			1
Toluene-d8 (Surrogate)		106	%	81 - 117 (LCL - U	CL)	EPA-8260B			1
4-Bromofluorobenzene (	Surrogate)	104	%	74 - 121 (LCL - U	CL)	EPA-8260B			1

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/24/15 22:09	JPT	MS-V3	1	BYI2284	

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Reported: 10/16/2015 13:14 Project: Soils/Waters Project Number: 357 105th Ave Project Manager: Forrest Cook

# **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-10	Client Sampl	e Name:	Neishi Brothers	Nursery, [	DP-5d10.0, 9/18/2015 1	2:55:00PM, Forr	est Cook	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run#
TPH - Gasoline		ND	mg/kg	20		EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)		ND	mg/kg	10		EPA-8015B/FFP	ND		1
Tetracosane (Surrogat	re)	57.2	%	20 - 145 (LCL -	UCL)	EPA-8015B/FFP			1

			Run				QC
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8015B/FFP	09/28/15	10/01/15 23:22	MWB	GC-2	1.010	BYI2879

Page 37 of 72 Report ID: 1000407972

Reported: 10/16/2015 13:14
Project: Soils/Waters
Project Number: 357 105th Ave
Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-11	Client Sample	e Name:	Neishi Brothers Nur	rsery, DF	P-6d5.0, 9/18/2015	2:20:00PM, Forres	t Cook	
Constituent		Result	Units	PQL M	IDL	Method	MB Bias	Lab Quals	Run#
Benzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Ethylbenzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Methyl t-butyl ether		ND	mg/kg	0.0050		EPA-8260B	ND		1
Naphthalene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Toluene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Total Xylenes		ND	mg/kg	0.010		EPA-8260B	ND		1
p- & m-Xylenes		ND	mg/kg	0.0050		EPA-8260B	ND		1
o-Xylene		ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Su	urrogate)	108	%	70 - 121 (LCL - UC	CL)	EPA-8260B			1
Toluene-d8 (Surrogate)		101	%	81 - 117 (LCL - UC	CL)	EPA-8260B			1
4-Bromofluorobenzene (S	urrogate)	104	%	74 - 121 (LCL - UC	CL)	EPA-8260B			1

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/24/15 22:33	JPT	MS-V3	1	BYI2284	

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Reported: 10/16/2015 13:14 Project: Soils/Waters Project Number: 357 105th Ave Project Manager: Forrest Cook

#### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-11	Client Sampl	e Name:	Neishi Brothers N	Nursery, [	DP-6d5.0, 9/18/2015 2:	20:00PM, Forre	st Cook	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run#
TPH - Gasoline		ND	mg/kg	40		EPA-8015B/FFP	ND	A01	1
TPH - Diesel (FFP)		ND	mg/kg	20		EPA-8015B/FFP	ND	A01,A52	1
Tetracosane (Surrogat	e)	44.1	%	20 - 145 (LCL - I	UCL)	EPA-8015B/FFP		A01	1

			Run				QC
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8015B/FFP	09/28/15	10/01/15 23:45	MWB	GC-2	2.027	BYI2879

Page 39 of 72 Report ID: 1000407972

Reported: 10/16/2015 13:14 Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-12	Client Sample	e Name:	Neishi Brothers Nu	rsery, D	P-6d10.0, 9/18/2015	2:35:00PM, Forre	est Cook	
Constituent		Result	Units	PQL N	/IDL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Ethylbenzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Methyl t-butyl ether		ND	mg/kg	0.0050		EPA-8260B	ND		1
Naphthalene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Toluene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Total Xylenes		ND	mg/kg	0.010		EPA-8260B	ND		1
p- & m-Xylenes		ND	mg/kg	0.0050		EPA-8260B	ND		1
o-Xylene		ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (S	urrogate)	106	%	70 - 121 (LCL - U	CL)	EPA-8260B			1
Toluene-d8 (Surrogate)		103	%	81 - 117 (LCL - U	CL)	EPA-8260B			1
4-Bromofluorobenzene (S	Surrogate)	106	%	74 - 121 (LCL - U	CL)	EPA-8260B			1

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/24/15 22:56	JPT	MS-V3	1	BYI2284	

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Reported: 10/16/2015 13:14 Project: Soils/Waters Project Number: 357 105th Ave Project Manager: Forrest Cook

#### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-12	Client Sampl	e Name:	Neishi Brothers	Nursery, [	DP-6d10.0, 9/18/2015 2	2:35:00PM, Forre	est Cook	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run#
TPH - Gasoline		ND	mg/kg	20		EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)		ND	mg/kg	10		EPA-8015B/FFP	ND		1
Tetracosane (Surrogat	re)	46.7	%	20 - 145 (LCL -	- UCL)	EPA-8015B/FFP			1

			Run				QC
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8015B/FFP	09/28/15	10/02/15 00:08	MWB	GC-2	0.990	BYI2879

Page 41 of 72 Report ID: 1000407972

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Almar Environmental 407 Almar Avenue Santa Cruz, CA 95060 Reported: 10/16/2015 13:14
Project: Soils/Waters
Project Number: 357 105th Ave
Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-13	Client Sampl	e Name:	Neishi Brothers Nurse	ry, DP-7d5.0, 9/18/2015	3:00:00PM, Forres	st Cook	
Constituent		Result	Units	PQL MD	L Method	MB Bias	Lab Quals	Run #
Benzene		ND	mg/kg	0.0050	EPA-8260B	ND		1
Ethylbenzene		ND	mg/kg	0.0050	EPA-8260B	ND		1
Methyl t-butyl ether		ND	mg/kg	0.0050	EPA-8260B	ND		1
Naphthalene		ND	mg/kg	0.0050	EPA-8260B	ND		1
Toluene		ND	mg/kg	0.0050	EPA-8260B	ND		1
Total Xylenes		ND	mg/kg	0.010	EPA-8260B	ND		1
p- & m-Xylenes		ND	mg/kg	0.0050	EPA-8260B	ND		1
o-Xylene		ND	mg/kg	0.0050	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (	Surrogate)	107	%	70 - 121 (LCL - UCL	) EPA-8260B			1
Toluene-d8 (Surrogate)		103	%	81 - 117 (LCL - UCL	) EPA-8260B			1
4-Bromofluorobenzene	(Surrogate)	103	%	74 - 121 (LCL - UCL	) EPA-8260B			1

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/24/15 23:19	JPT	MS-V3	1	BYI2284	

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Reported: 10/16/2015 13:14 Project: Soils/Waters Project Number: 357 105th Ave Project Manager: Forrest Cook

#### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-13	Client Sampl	e Name:	Neishi Brothers	Nursery, [	DP-7d5.0, 9/18/2015 3:	00:00PM, Forres	st Cook	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Gasoline		ND	mg/kg	20		EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)		ND	mg/kg	10		EPA-8015B/FFP	ND		1
Tetracosane (Surrogat	e)	47.4	%	20 - 145 (LCL -	UCL)	EPA-8015B/FFP			1

	Run						QC				
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID				
1	EPA-8015B/FFP	09/28/15	10/02/15 00:30	MWB	GC-2	1.007	BYI2879				

Page 43 of 72 Report ID: 1000407972

Reported: 10/16/2015 13:14 Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-14	Client Sample	e Name:	Neishi Brothers Nurs	sery, DF	P-7d10.0, 9/18/2015	3:15:00PM, Forre	est Cook	
Constituent		Result	Units	PQL M	DL	Method	MB Bias	Lab Quals	Run#
Benzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Ethylbenzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Methyl t-butyl ether		ND	mg/kg	0.0050		EPA-8260B	ND		1
Naphthalene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Toluene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Total Xylenes		ND	mg/kg	0.010		EPA-8260B	ND		1
p- & m-Xylenes		ND	mg/kg	0.0050		EPA-8260B	ND		1
o-Xylene		ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Su	rrogate)	105	%	70 - 121 (LCL - UC	L)	EPA-8260B			1
Toluene-d8 (Surrogate)		99.4	%	81 - 117 (LCL - UC	L)	EPA-8260B			1
4-Bromofluorobenzene (Su	ırrogate)	107	%	74 - 121 (LCL - UC	L)	EPA-8260B			1

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/24/15 23:42	JPT	MS-V3	1	BYI2284	

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Reported: 10/16/2015 13:14 Project: Soils/Waters Project Number: 357 105th Ave Project Manager: Forrest Cook

# **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-14	Client Sampl	e Name:	Neishi Brothers N	Nursery, [	DP-7d10.0, 9/18/2015 3	:15:00PM, Forre	est Cook	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run#
TPH - Gasoline		ND	mg/kg	20		EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)		ND	mg/kg	10		EPA-8015B/FFP	ND	A52	1
Tetracosane (Surrogat	re)	48.0	%	20 - 145 (LCL - I	UCL)	EPA-8015B/FFP			1

	Run						QC				
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID				
1	EPA-8015B/FFP	09/28/15	10/02/15 00:52	MWB	GC-2	1.003	BYI2879				

Page 45 of 72 Report ID: 1000407972

Reported: 10/16/2015 13:14 Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-15	Client Sampl	e Name:	Neishi Brothers Nurse	ery, DP	P-8d5.0, 9/18/2015	1:40:00PM, Forres	st Cook	
Constituent		Result	Units	PQL MD	DL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Ethylbenzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Methyl t-butyl ether		ND	mg/kg	0.0050		EPA-8260B	ND		1
Naphthalene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Toluene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Total Xylenes		ND	mg/kg	0.010		EPA-8260B	ND		1
p- & m-Xylenes		ND	mg/kg	0.0050		EPA-8260B	ND		1
o-Xylene		ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Si	urrogate)	102	%	70 - 121 (LCL - UCL	_)	EPA-8260B			1
Toluene-d8 (Surrogate)		101	%	81 - 117 (LCL - UCL	_)	EPA-8260B			1
4-Bromofluorobenzene (S	urrogate)	99.7	%	74 - 121 (LCL - UCL	_)	EPA-8260B			1

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/25/15 00:05	JPT	MS-V3	1	BYI2284	

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Reported: 10/16/2015 13:14 Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

#### Almar Environmental 407 Almar Avenue Santa Cruz, CA 95060

#### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-15	Client Sampl	e Name:	Neishi Brothers N	Nursery, [	DP-8d5.0, 9/18/2015 1:	40:00PM, Forres	st Cook	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Gasoline		ND	mg/kg	20		EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)		ND	mg/kg	10		EPA-8015B/FFP	ND	A52	1
Tetracosane (Surrogat	re)	48.3	%	20 - 145 (LCL -	UCL)	EPA-8015B/FFP			1

			Run				QC
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8015B/FFP	09/28/15	10/02/15 01:15	MWB	GC-2	0.997	BYI2879

Page 47 of 72 Report ID: 1000407972

Reported: 10/16/2015 13:14 Project: Soils/Waters

Project Number: 357 105th Ave
Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-16	Client Sample	e Name:	Neishi Brothers Nurse	ery, DP-	-8d10.0, 9/18/2015	1:50:00PM, Forre	est Cook	
Constituent		Result	Units	PQL MI	DL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Ethylbenzene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Methyl t-butyl ether		ND	mg/kg	0.0050		EPA-8260B	ND		1
Naphthalene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Toluene		ND	mg/kg	0.0050		EPA-8260B	ND		1
Total Xylenes		ND	mg/kg	0.010		EPA-8260B	ND		1
p- & m-Xylenes		ND	mg/kg	0.0050		EPA-8260B	ND		1
o-Xylene		ND	mg/kg	0.0050		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Su	ırrogate)	110	%	70 - 121 (LCL - UCL	L)	EPA-8260B			1
Toluene-d8 (Surrogate)		101	%	81 - 117 (LCL - UCL	L)	EPA-8260B			1
4-Bromofluorobenzene (S	urrogate)	101	%	74 - 121 (LCL - UCL	L)	EPA-8260B			1

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/25/15 00:28	JPT	MS-V3	1	BYI2284	

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Reported: 10/16/2015 13:14 Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

#### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-16	Client Sampl	e Name:	Neishi Brothers I	Nursery, [	DP-8d10.0, 9/18/2015 1	:50:00PM, Forre	est Cook	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Gasoline		ND	mg/kg	20		EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)		ND	mg/kg	10		EPA-8015B/FFP	ND	A52	1
Tetracosane (Surrogat	re)	47.8	%	20 - 145 (LCL -	UCL)	EPA-8015B/FFP			1

			Run				QC
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8015B/FFP	09/28/15	10/02/15 01:38	MWB	GC-2	1.007	BYI2879

Page 49 of 72 Report ID: 1000407972

Reported: 10/16/2015 13:14 Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-17	Client Sampl	e Name:	Neishi Brothers Nurs	ery, DF	P-1, 9/18/2015 2:00:	00PM, Forrest Co	ok	
Constituent		Result	Units	PQL MI	DL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Ethylbenzene		1.5	ug/L	0.50		EPA-8260B	ND	Z2	1
Methyl t-butyl ether		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Naphthalene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Toluene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Total Xylenes		9.0	ug/L	1.0		EPA-8260B	ND	Z2	1
p- & m-Xylenes		6.3	ug/L	0.50		EPA-8260B	ND	<b>Z</b> 2	1
o-Xylene		2.6	ug/L	0.50		EPA-8260B	ND	Z2	1
1,2-Dichloroethane-d4 (Su	ırrogate)	99.8	%	75 - 125 (LCL - UCL	L)	EPA-8260B			1
Toluene-d8 (Surrogate)		100	%	80 - 120 (LCL - UCL	L)	EPA-8260B			1
4-Bromofluorobenzene (S	urrogate)	99.1	%	80 - 120 (LCL - UCL	L)	EPA-8260B			1

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/26/15 11:53	JMS	MS-V14	1	BYI2371	

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Reported: 10/16/2015 13:14 Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

Almar Environmental 407 Almar Avenue Santa Cruz, CA 95060

#### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-17	Client Sampl	e Name:	Neishi Brothers N	Nursery, D	P-1, 9/18/2015 2:00:0	0PM, Forrest Co	ook	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run#
TPH - Gasoline		ND	ug/L	500		EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)		ND	ug/L	200		EPA-8015B/FFP	ND		1
Tetracosane (Surrogat	e)	82.1	%	37 - 134 (LCL -	UCL)	EPA-8015B/FFP			1

			Run				QC
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8015B/FFP	09/25/15	10/02/15 12:49	MWB	GC-2	1	BYJ0084

Page 51 of 72 Report ID: 1000407972

Reported: 10/16/2015 13:14 Project: Soils/Waters Project Number: 357 105th Ave Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1	524165-18	Client Sampl	e Name:	Neishi Brothers	Nursery, D	P-2, 9/18/2015 2:30:	00PM, Forrest Co	ook	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene		8.8	ug/L	0.50		EPA-8260B	ND	Z2	1
Ethylbenzene		220	ug/L	2.5		EPA-8260B	ND	A01	2
Methyl t-butyl ether		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Naphthalene		150	ug/L	2.5		EPA-8260B	ND	A01	2
Toluene		15	ug/L	0.50		EPA-8260B	ND	<b>Z</b> 2	1
Total Xylenes		690	ug/L	5.0		EPA-8260B	ND	A01	2
p- & m-Xylenes		570	ug/L	2.5		EPA-8260B	ND	A01	2
o-Xylene		130	ug/L	2.5		EPA-8260B	ND	A01	2
1,2-Dichloroethane-d4 (Surr	rogate)	104	%	75 - 125 (LCL	- UCL)	EPA-8260B			1
1,2-Dichloroethane-d4 (Sur	rogate)	99.0	%	75 - 125 (LCL	- UCL)	EPA-8260B			2
Toluene-d8 (Surrogate)		98.6	%	80 - 120 (LCL	- UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)		97.3	%	80 - 120 (LCL	- UCL)	EPA-8260B			2
4-Bromofluorobenzene (Sur	rogate)	92.4	%	80 - 120 (LCL	- UCL)	EPA-8260B			1
4-Bromofluorobenzene (Sur	rogate)	96.7	%	80 - 120 (LCL	- UCL)	EPA-8260B			2

			Run					
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/25/15 12:36	JMS	MS-V14	1	BYI2371	
2	EPA-8260B	09/24/15	09/26/15 13:00	JMS	MS-V14	5	BYI2371	

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Reported: 10/16/2015 13:14 Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

Almar Environmental 407 Almar Avenue Santa Cruz, CA 95060

### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-18	Client Sampl	e Name:	Neishi Brothers	Neishi Brothers Nursery, DP-2, 9/18/2015 2:30:00PM, Forrest Cook							
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #			
TPH - Gasoline		2000	ug/L	830		EPA-8015B/FFP	ND		1			
TPH - Diesel (FFP)		400	ug/L	330		EPA-8015B/FFP	ND		1			
Tetracosane (Surrogat	re)	54.9	%	37 - 134 (LCL	- UCL)	EPA-8015B/FFP			1			

			Run		QC					
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID			
1	EPA-8015B/FFP	09/25/15	10/06/15 01:28	MWB	GC-13	1.667	BYJ0084			

Page 53 of 72 Report ID: 1000407972

**Reported:** 10/16/2015 13:14 Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-19	Client Sample	e Name:	Neishi Brothers Nu	ırsery, E	DP-3, 9/18/2015 2:50:	00PM, Forrest Co	ook	<u> </u>
Constituent		Result	Units	PQL N	MDL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Ethylbenzene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Methyl t-butyl ether		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Naphthalene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Toluene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Total Xylenes		2.2	ug/L	1.0		EPA-8260B	ND	Z2	1
p- & m-Xylenes		1.5	ug/L	0.50		EPA-8260B	ND	Z2	1
o-Xylene		0.74	ug/L	0.50		EPA-8260B	ND	Z2	1
1,2-Dichloroethane-d4 (Su	rrogate)	100	%	75 - 125 (LCL - U	CL)	EPA-8260B			1
Toluene-d8 (Surrogate)		102	%	80 - 120 (LCL - U	CL)	EPA-8260B			1
4-Bromofluorobenzene (Su	ırrogate)	100	%	80 - 120 (LCL - U	CL)	EPA-8260B			1

			Run					
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/26/15 12:15	JMS	MS-V14	1	BYI2371	

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Reported: 10/16/2015 13:14 Project: Soils/Waters Project Number: 357 105th Ave Project Manager: Forrest Cook

### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-19	Client Sampl	e Name:	Neishi Brothers	Neishi Brothers Nursery, DP-3, 9/18/2015 2:50:00PM, Forrest Cook						
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run#		
TPH - Gasoline		ND	ug/L	500		EPA-8015B/FFP	ND		1		
TPH - Diesel (FFP)		ND	ug/L	200		EPA-8015B/FFP	ND		1		
Tetracosane (Surrogate	e)	82.5	%	37 - 134 (LCL -	UCL)	EPA-8015B/FFP			1		

Run							QC
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8015B/FFP	09/25/15	10/02/15 13:34	MWB	GC-2	1	BYJ0084

Page 55 of 72 Report ID: 1000407972

Reported: 10/16/2015 13:14

Project: Soils/Waters Project Number: 357 105th Ave Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-20	Client Sample	e Name:	Neishi Broth	Neishi Brothers Nursery, DP-4, 9/18/2015 4:00:00PM, Forrest Cook							
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #			
Benzene		380	ug/L	12		EPA-8260B	ND	A01	1			
Ethylbenzene		1100	ug/L	12		EPA-8260B	ND	A01	1			
Methyl t-butyl ether		ND	ug/L	0.50		EPA-8260B	ND	Z2	2			
Naphthalene		210	ug/L	12		EPA-8260B	ND	A01	1			
Toluene		2800	ug/L	25		EPA-8260B	ND	A01	3			
Total Xylenes		4700	ug/L	25		EPA-8260B	ND	A01	1			
p- & m-Xylenes		3300	ug/L	12		EPA-8260B	ND	A01	1			
o-Xylene		1400	ug/L	12		EPA-8260B	ND	A01	1			
1,2-Dichloroethane-d4 (\$	Surrogate)	102	%	75 - 125 (LC	L - UCL)	EPA-8260B			1			
1,2-Dichloroethane-d4 (\$	Surrogate)	95.6	%	75 - 125 (LC	L - UCL)	EPA-8260B			2			
1,2-Dichloroethane-d4 (\$	Surrogate)	93.6	%	75 - 125 (LC	L - UCL)	EPA-8260B			3			
Toluene-d8 (Surrogate)		99.1	%	80 - 120 (LC	L - UCL)	EPA-8260B			1			
Toluene-d8 (Surrogate)		98.8	%	80 - 120 (LC	L - UCL)	EPA-8260B			2			
Toluene-d8 (Surrogate)		102	%	80 - 120 (LC	L - UCL)	EPA-8260B			3			
4-Bromofluorobenzene (	Surrogate)	97.2	%	80 - 120 (LC	L - UCL)	EPA-8260B			1			
4-Bromofluorobenzene (	Surrogate)	94.8	%	80 - 120 (LC	L - UCL)	EPA-8260B			2			
4-Bromofluorobenzene (	Surrogate)	96.1	%	80 - 120 (LC	L - UCL)	EPA-8260B			3			

			Run				QC
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8260B	09/24/15	09/26/15 13:23	JMS	MS-V14	25	BYI2371
2	EPA-8260B	09/24/15	09/25/15 12:59	JMS	MS-V14	1	BYI2371
3	EPA-8260B	09/24/15	09/29/15 03:24	JMS	MS-V14	50	BYI2371

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Reported: 10/16/2015 13:14 Project: Soils/Waters Project Number: 357 105th Ave Project Manager: Forrest Cook

### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-20	Client Sampl	le Name:	Neishi Brothers	Neishi Brothers Nursery, DP-4, 9/18/2015 4:00:00PM, Forrest Cook						
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run#		
TPH - Gasoline		9700	ug/L	7200		EPA-8015B/FFP	ND	A01	1		
TPH - Diesel (FFP)		ND	ug/L	2900		EPA-8015B/FFP	ND	A01	1		
Tetracosane (Surroga	te)	44.0	%	37 - 134 (LCL	- UCL)	EPA-8015B/FFP		A01	1		

			Run				QC
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8015B/FFP	09/25/15	10/06/15 01:51	MWB	GC-13	14.493	BYJ0084

Page 57 of 72 Report ID: 1000407972

Reported: 10/16/2015 13:14 Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-21	Client Sample	e Name:	Neishi Brothers N	ursery, D	P-5, 9/18/2015 3:40:	00PM, Forrest Co	ok	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Ethylbenzene		2.8	ug/L	0.50		EPA-8260B	ND	Z2	1
Methyl t-butyl ether		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Naphthalene		33	ug/L	0.50		EPA-8260B	ND	<b>Z</b> 2	1
Toluene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Total Xylenes		ND	ug/L	1.0		EPA-8260B	ND	Z2	1
p- & m-Xylenes		0.63	ug/L	0.50		EPA-8260B	ND	Z2	1
o-Xylene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
1,2-Dichloroethane-d4 (S	urrogate)	96.7	%	75 - 125 (LCL - U	JCL)	EPA-8260B			1
Toluene-d8 (Surrogate)		99.5	%	80 - 120 (LCL - L	JCL)	EPA-8260B			1
4-Bromofluorobenzene (S	Surrogate)	99.6	%	80 - 120 (LCL - L	JCL)	EPA-8260B			1

			Run					
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/25/15 11:06	JMS	MS-V14	1	BYI2371	

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Reported: 10/16/2015 13:14 Project: Soils/Waters Project Number: 357 105th Ave Project Manager: Forrest Cook

### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-21	Client Sampl	e Name:	Neishi Brothers Nursery, DP-5, 9/18/2015 3:40:00PM, Forrest Cook					
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run#
TPH - Gasoline		1300	ug/L	500		EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)		ND	ug/L	200		EPA-8015B/FFP	ND		1
Tetracosane (Surrogat	e)	75.5	%	37 - 134 (LCL	- UCL)	EPA-8015B/FFP			1

			Run				QC	
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8015B/FFP	09/25/15	10/02/15 14:19	MWB	GC-2	1	BYJ0084	

Page 59 of 72 Report ID: 1000407972

MILL

Almar Environmental 407 Almar Avenue Santa Cruz, CA 95060 Reported: 10/16/2015 13:14
Project: Soils/Waters
Project Number: 357 105th Ave
Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-22	Client Sampl	e Name:	Neishi Brothers N	lursery, [	P-6, 9/18/2015 4:10:	00PM, Forrest Co	ook	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Ethylbenzene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Methyl t-butyl ether		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Naphthalene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Toluene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Total Xylenes		ND	ug/L	1.0		EPA-8260B	ND	Z2	1
p- & m-Xylenes		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
o-Xylene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
1,2-Dichloroethane-d4 (S	urrogate)	100	%	75 - 125 (LCL - U	JCL)	EPA-8260B			1
Toluene-d8 (Surrogate)		98.4	%	80 - 120 (LCL - U	JCL)	EPA-8260B			1
4-Bromofluorobenzene (S	Surrogate)	102	%	80 - 120 (LCL - L	JCL)	EPA-8260B			1

			Run					
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/25/15 11:29	JMS	MS-V14	1	BYI2371	

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Reported: 10/16/2015 13:14 Project: Soils/Waters Project Number: 357 105th Ave Project Manager: Forrest Cook

### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-22	Client Sampl	e Name:	Neishi Brothers Nursery, DP-6, 9/18/2015 4:10:00PM, Forrest Cook						
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #	
TPH - Gasoline		ND	ug/L	500		EPA-8015B/FFP	ND		1	
TPH - Diesel (FFP)		ND	ug/L	200		EPA-8015B/FFP	ND		1	
Tetracosane (Surrogat	e)	78.2	%	37 - 134 (LCL	- UCL)	EPA-8015B/FFP			1	

			Run				QC
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8015B/FFP	09/25/15	10/02/15 14:41	MWB	GC-2	1	BYJ0084

Page 61 of 72 Report ID: 1000407972

Reported: 10/16/2015 13:14
Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-23	Client Sampl	e Name:	Neishi Brothers Nu	ırsery, D	P-7, 9/18/2015 4:15:	00PM, Forrest Co	ook	
Constituent		Result	Units	PQL N	/IDL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Ethylbenzene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Methyl t-butyl ether		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Naphthalene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Toluene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Total Xylenes		ND	ug/L	1.0		EPA-8260B	ND	Z2	1
p- & m-Xylenes		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
o-Xylene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
1,2-Dichloroethane-d4 (S	Surrogate)	101	%	75 - 125 (LCL - U	CL)	EPA-8260B			1
Toluene-d8 (Surrogate)		97.6	%	80 - 120 (LCL - U	CL)	EPA-8260B			1
4-Bromofluorobenzene (	Surrogate)	102	%	80 - 120 (LCL - U	CL)	EPA-8260B			1

			Run					
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/25/15 11:51	JMS	MS-V14	1	BYI2371	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Page 62 of 72

Reported: 10/16/2015 13:14 Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

Almar Environmental 407 Almar Avenue Santa Cruz, CA 95060

### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-23	Client Sampl	e Name:	Neishi Brothers	Nursery, D	, DP-7, 9/18/2015 4:15:00PM, Forrest Cook				
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #	
TPH - Gasoline		ND	ug/L	500		EPA-8015B/FFP	ND		1	
TPH - Diesel (FFP)		ND	ug/L	200		EPA-8015B/FFP	ND		1	
Tetracosane (Surrogate	e)	64.2	%	37 - 134 (LCL -	UCL)	EPA-8015B/FFP			1	

			Run				QC
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8015B/FFP	09/25/15	10/02/15 16:12	MWB	GC-2	1	BYJ0084

Page 63 of 72 Report ID: 1000407972

MU

Almar Environmental 407 Almar Avenue Santa Cruz, CA 95060 Reported: 10/16/2015 13:14
Project: Soils/Waters
Project Number: 357 105th Ave
Project Manager: Forrest Cook

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1524165-24	Client Sampl	e Name:	Neishi Brothers Nu	rsery, D	P-8, 9/18/2015 4:30:	00PM, Forrest Co	ook	
Constituent		Result	Units	PQL N	1DL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Ethylbenzene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Methyl t-butyl ether		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Naphthalene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Toluene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
Total Xylenes		ND	ug/L	1.0		EPA-8260B	ND	Z2	1
p- & m-Xylenes		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
o-Xylene		ND	ug/L	0.50		EPA-8260B	ND	Z2	1
1,2-Dichloroethane-d4 (S	urrogate)	96.3	%	75 - 125 (LCL - UC	CL)	EPA-8260B			1
Toluene-d8 (Surrogate)		102	%	80 - 120 (LCL - U	CL)	EPA-8260B			1
4-Bromofluorobenzene (S	surrogate)	99.3	%	80 - 120 (LCL - UC	CL)	EPA-8260B			1

			Run					
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	09/24/15	09/25/15 12:14	JMS	MS-V14	1	BYI2371	

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Almar Environmental

407 Almar Avenue Santa Cruz, CA 95060 Reported: 10/16/2015 13:14 Project: Soils/Waters

> Project Number: 357 105th Ave Project Manager: Forrest Cook

### **Total Petroleum Hydrocarbons**

BCL Sample ID:	1524165-24	Client Sampl	e Name:	Neishi Brothers	Nursery, D	DP-8, 9/18/2015 4:30:0	0PM, Forrest Co	ook	
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run#
TPH - Gasoline		ND	ug/L	620		EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)		ND	ug/L	250		EPA-8015B/FFP	ND		1
Tetracosane (Surrogat	re)	80.2	%	37 - 134 (LCL -	- UCL)	EPA-8015B/FFP			1

			Run				QC
Run#	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8015B/FFP	09/25/15	10/02/15 16:34	MWB	GC-2	1.250	BYJ0084

Page 65 of 72 Report ID: 1000407972

Reported: 10/16/2015 13:14 Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

### Volatile Organic Analysis (EPA Method 8260B)

#### **Quality Control Report - Method Blank Analysis**

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYI2284						
Benzene	BYI2284-BLK1	ND	mg/kg	0.0050		
Ethylbenzene	BYI2284-BLK1	ND	mg/kg	0.0050		
Methyl t-butyl ether	BYI2284-BLK1	ND	mg/kg	0.0050		
Naphthalene	BYI2284-BLK1	ND	mg/kg	0.0050		
Toluene	BYI2284-BLK1	ND	mg/kg	0.0050		
Total Xylenes	BYI2284-BLK1	ND	mg/kg	0.010		
p- & m-Xylenes	BYI2284-BLK1	ND	mg/kg	0.0050		
o-Xylene	BYI2284-BLK1	ND	mg/kg	0.0050		
1,2-Dichloroethane-d4 (Surrogate)	BYI2284-BLK1	105	%	70 - 12	1 (LCL - UCL)	
Toluene-d8 (Surrogate)	BYI2284-BLK1	103	%	81 - 11	7 (LCL - UCL)	
4-Bromofluorobenzene (Surrogate)	BYI2284-BLK1	100	%	74 - 12	1 (LCL - UCL)	
QC Batch ID: BYI2371						
Benzene	BYI2371-BLK1	ND	ug/L	0.50		
 Ethylbenzene	BYI2371-BLK1	ND	ug/L	0.50		
 Methyl t-butyl ether	BYI2371-BLK1	ND	ug/L	0.50		
Naphthalene	BYI2371-BLK1	ND	ug/L	0.50		
 Toluene	BYI2371-BLK1	ND	ug/L	0.50		
Total Xylenes	BYI2371-BLK1	ND	ug/L	1.0		
p- & m-Xylenes	BYI2371-BLK1	ND	ug/L	0.50		
o-Xylene	BYI2371-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane-d4 (Surrogate)	BYI2371-BLK1	106	%	75 - 12	5 (LCL - UCL)	
Toluene-d8 (Surrogate)	BYI2371-BLK1	95.8	%	80 - 12	0 (LCL - UCL)	
4-Bromofluorobenzene (Surrogate)	BYI2371-BLK1	102	%	80 - 12	0 (LCL - UCL)	

Report ID: 1000407972 4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com Page 66 of 72

Reported: 10/16/2015 13:14
Project: Soils/Waters
roject Number: 357 105th Ave

Project Number: 357 105th Ave Project Manager: Forrest Cook

### Volatile Organic Analysis (EPA Method 8260B)

#### **Quality Control Report - Laboratory Control Sample**

								Control L	imits	
Constituent	OC Samula ID	Tuna	Dogult	Spike	Umita	Percent	BBB	Percent	DDD	Lab
Constituent	QC Sample ID	Туре	Result	Level	Units	Recovery	RPD	Recovery	RPD	Quals
QC Batch ID: BYI2284										
Benzene	BYI2284-BS1	LCS	0.13189	0.12500	mg/kg	106		70 - 130		
Toluene	BYI2284-BS1	LCS	0.13587	0.12500	mg/kg	109		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYI2284-BS1	LCS	0.049660	0.050000	mg/kg	99.3		70 - 121		
Toluene-d8 (Surrogate)	BYI2284-BS1	LCS	0.049900	0.050000	mg/kg	99.8		81 - 117		
4-Bromofluorobenzene (Surrogate)	BYI2284-BS1	LCS	0.050990	0.050000	mg/kg	102		74 - 121		
QC Batch ID: BYI2371										
Benzene	BYI2371-BS1	LCS	24.924	25.000	ug/L	99.7		70 - 130		
Toluene	BYI2371-BS1	LCS	25.188	25.000	ug/L	101		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BYI2371-BS1	LCS	10.220	10.000	ug/L	102		75 - 125		
Toluene-d8 (Surrogate)	BYI2371-BS1	LCS	10.000	10.000	ug/L	100		80 - 120		
4-Bromofluorobenzene (Surrogate)	BYI2371-BS1	LCS	9.6100	10.000	ug/L	96.1		80 - 120		

Report ID: 1000407972 4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com Page 67 of 72

Reported: 10/16/2015 13:14 Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

#### Volatile Organic Analysis (EPA Method 8260B)

#### **Quality Control Report - Precision & Accuracy**

								Control Limits					
		Source	Source		Spike			Percent		Percent	Lab		
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals		
QC Batch ID: BYI2284	Use	d client samp	ole: N										
Benzene	<b>−</b> MS	1521506-70	ND	0.11824	0.12500	mg/kg		94.6		70 - 130			
	MSD	1521506-70	ND	0.12038	0.12500	mg/kg	1.8	96.3	20	70 - 130			
Toluene	MS	1521506-70	ND	0.11600	0.12500	mg/kg		92.8		70 - 130			
	MSD	1521506-70	ND	0.12657	0.12500	mg/kg	8.7	101	20	70 - 130			
1,2-Dichloroethane-d4 (Surrogate)	MS	1521506-70	ND	0.050370	0.050000	mg/kg		101		70 - 121			
	MSD	1521506-70	ND	0.049330	0.050000	mg/kg	2.1	98.7		70 - 121			
Toluene-d8 (Surrogate)	MS	1521506-70	ND	0.048070	0.050000	mg/kg		96.1		81 - 117			
	MSD	1521506-70	ND	0.051270	0.050000	mg/kg	6.4	103		81 - 117			
4-Bromofluorobenzene (Surrogate)	MS	1521506-70	ND	0.051390	0.050000	mg/kg		103		74 - 121			
	MSD	1521506-70	ND	0.048930	0.050000	mg/kg	4.9	97.9		74 - 121			
QC Batch ID: BYI2371	Use	d client samp	ole: N	<u> </u>		<u> </u>							
Benzene	<b>_</b> MS	1523812-02	ND	26.536	25.000	ug/L		106		70 - 130			
	MSD	1523812-02	ND	23.938	25.000	ug/L	10.3	95.8	20	70 - 130			
Toluene	MS	1523812-02	ND	27.338	25.000	ug/L		109		70 - 130			
	MSD	1523812-02	ND	24.959	25.000	ug/L	9.1	99.8	20	70 - 130			
1,2-Dichloroethane-d4 (Surrogate)	MS	1523812-02	ND	8.7800	10.000	ug/L		87.8		75 - 125			
	MSD	1523812-02	ND	8.3100	10.000	ug/L	5.5	83.1		75 - 125			
Toluene-d8 (Surrogate)	MS	1523812-02	ND	9.9400	10.000	ug/L		99.4		80 - 120			
	MSD	1523812-02	ND	9.9000	10.000	ug/L	0.4	99.0		80 - 120			
4-Bromofluorobenzene (Surrogate)	MS	1523812-02	ND	9.8000	10.000	ug/L		98.0		80 - 120			
	MSD	1523812-02	ND	9.8200	10.000	ug/L	0.2	98.2		80 - 120			

Report ID: 1000407972 4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com Page 68 of 72

Reported: 10/16/2015 13:14
Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

### **Total Petroleum Hydrocarbons**

#### **Quality Control Report - Method Blank Analysis**

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BYI2879						
TPH - Gasoline	BYI2879-BLK1	ND	mg/kg	20		
TPH - Diesel (FFP)	BYI2879-BLK1	ND	mg/kg	10		
Tetracosane (Surrogate)	BYI2879-BLK1	62.0	%	20 - 14	5 (LCL - UCL)	
QC Batch ID: BYJ0084						
TPH - Gasoline	BYJ0084-BLK1	ND	ug/L	500		
TPH - Diesel (FFP)	BYJ0084-BLK1	ND	ug/L	200		
Tetracosane (Surrogate)	BYJ0084-BLK1	75.5	%	37 - 13	4 (LCL - UCL)	

Report ID: 1000407972 4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com Page 69 of 72

Reported: 10/16/2015 13:14 Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

Almar Environmental 407 Almar Avenue Santa Cruz, CA 95060

### **Total Petroleum Hydrocarbons**

#### **Quality Control Report - Laboratory Control Sample**

								Control I	imits	
				Spike		Percent		Percent		Lab
Constituent	QC Sample ID	Туре	Result	Level	Units	Recovery	RPD	Recovery	RPD	Quals
QC Batch ID: BYI2879										
TPH - Diesel (FFP)	BYI2879-BS1	LCS	58.418	83.333	mg/kg	70.1		64 - 124		
Tetracosane (Surrogate)	BYI2879-BS1	LCS	1.9803	3.3957	mg/kg	58.3		20 - 145		
QC Batch ID: BYJ0084										
TPH - Diesel (FFP)	BYJ0084-BS1	LCS	2313.0	2500.0	ug/L	92.5		52 - 128		
Tetracosane (Surrogate)	BYJ0084-BS1	LCS	82.870	101.87	ug/L	81.3		37 - 134		

Report ID: 1000407972 4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com Page 70 of 72

Reported: 10/16/2015 13:14 Project: Soils/Waters

Project Number: 357 105th Ave Project Manager: Forrest Cook

#### **Total Petroleum Hydrocarbons**

#### **Quality Control Report - Precision & Accuracy**

						•	•	Cont	rol Limits		
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Type	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: BYI2879	Use	d client samp	le: N								
TPH - Diesel (FFP)	MS MS	1521506-70	ND	52.018	82.781	mg/kg		62.8		52 - 131	
	MSD	1521506-70	ND	59.216	83.333	mg/kg	12.9	71.1	30	52 - 131	
Tetracosane (Surrogate)	MS	1521506-70	ND	1.8081	3.3732	mg/kg		53.6		20 - 145	
	MSD	1521506-70	ND	2.0877	3.3957	mg/kg	14.4	61.5		20 - 145	
QC Batch ID: BYJ0084	Use	d client samp	le: N								
TPH - Diesel (FFP)	MS	1521506-86	ND	2120.9	2500.0	ug/L		84.8		50 - 127	
	MSD	1521506-86	ND	2481.3	2500.0	ug/L	15.7	99.3	24	50 - 127	
Tetracosane (Surrogate)	MS	1521506-86	ND	75.490	101.87	ug/L		74.1		37 - 134	
	MSD	1521506-86	ND	89.890	101.87	ug/L	17.4	88.2		37 - 134	

Page 71 of 72 Report ID: 1000407972

Reported: 10/16/2015 13:14
Project: Soils/Waters
Project Number: 357 105th Ave
Project Manager: Forrest Cook

#### **Notes And Definitions**

Almar Environmental

407 Almar Avenue Santa Cruz, CA 95060

ND Analyte Not Detected

PQL Practical Quantitation Limit

A01 Detection and quantitation limits are raised due to sample dilution.

A52 Chromatogram not typical of diesel.

Z2 Liquid was combined from 2 VOAs for testing due to the amount of solid material within each sample container

Report ID: 1000407972 4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com Page 72 of 72

#### **APPENDIX F**

Lab Data Sheets: Soil Gas







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

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

# Laboratory Job Number 269994 ANALYTICAL REPORT

Almar Environmental Project : 1067C

Location : Neishi Bros.

Level : II

Sample ID	<u>Lab ID</u>
SG-1	269994-001
SG-2	269994-002
SG-3	269994-003
SG-4	269994-004
SG-4	269994-004

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: \_\_\_

Will Rice Project Manager

Will Rice

will.rice@ctberk.com

CA ELAP# 2896, NELAP# 4044-001

Date: 09/28/2015



#### CASE NARRATIVE

Laboratory number: 269994

Client: Almar Environmental

Project: 1067C

Location: Neishi Bros.
Request Date: 09/21/15
Samples Received: 09/21/15

This data package contains sample and QC results for four air samples, requested for the above referenced project on 09/21/15. The samples were received intact.

#### Volatile Organics in Air by MS (EPA TO-15):

High responses were observed for 2-hexanone, m,p-xylenes, and o-xylene in the CCV analyzed 09/24/15 12:28; affected data was qualified with "b". High responses were observed for many analytes in the CCV analyzed 09/25/15 10:23; affected data was qualified with "b". Low responses were observed for bromoform in a number of CCVs; affected data was qualified with "b". Low recoveries were observed for bromoform in the BS/BSD for batch 227471; the associated RPD was within limits, and these low recoveries were not associated with any reported results. Low recoveries were observed for bromoform in the BS/BSD for batch 227528; the associated RPD was within limits, and these low recoveries were not associated with any reported results. High recoveries were observed for many analytes in the BS/BSD for batch 227529. High RPD was observed for naphthalene and 1,2,4-trichlorobenzene; these analytes were not detected at or above the RL in the associated sample. Low recoveries were observed for bromoform in the BS/BSD for batch 227579; the associated RPD was within limits, and these low recoveries were not associated with any reported results. High recoveries were observed for many analytes in the BS/BSD for batch 227580; these high recoveries were not associated with any reported results. High RPD was observed for naphthalene and 1,2,4-trichlorobenzene; the high RPD was not associated with any reported results. Low recoveries were observed for bromoform in the BS/BSD for batch 227645; the associated RPD was within limits, and these low recoveries were not associated with any reported results. SG-3 (lab # 269994-003) was diluted due to problematic matrix. No other analytical problems were encountered.

#### Volatile Organics in Air GC (ASTM D1946 and EPA TO-3):

No analytical problems were encountered.

							\	in.
								DATECTIME DATECTIME
Page / of /								Tarali 1
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TESTING CHAIN OF CUSTODY & PURCHASE ORDER	-인 '	N962P	+ 2497	<u>k</u>	אא	4		P21-byterfline >2 & DATE/TIME
HAIN (E ORDER	7	257	Sample Volume (Gauge	Ц	<u>ነ</u> ነ	1-1-		
TING C	C&T LOGIN# 269994		Flow	ADN RS-	40002	01,0004		RELIGUISHED BY:
-	# NISON		Canister (Bar Code	792 .	300	+		RELIGI
AIR	C&T	, , , , ,	nformation Time Collected	1.1	12.50	11:50		
		S. C. S. Rpt Level: II III IV A. Standard	Sampling Information Date Time Collected Collected	5-12-5	\ 	3		
Curtis & Tompkins, Ltd. Analytical Laboratory Since 1878 2323 Fifth Street	Berkeley, CA 94710 (510)486-0900 Phone (510)486-0532 Fax	Project No: IンGフC Project Name: <u>Neish</u> / 名みs. EDD Format: <u>ENF</u> Rpt Leve Turnaround Time: □RUSH	Sample ID.	1-95	56. t (6.3	h-95		
Curti Analyti 2323 F	Berkel (510)4 (510)4	Projec Projec EDD F	Lab No.		1 m	2		Notes:

COOLER RECEIPT CHECKLIST	Curtis & Tompkins, Ltd.
Login # 49994 Date Received 9/2/15 Client Project	Number of coolers O Neishi Bros.
Date Opened 4/2415 By (print) # (sign) Date Logged in By (print) (sign)_	advalled
1. Did cooler come with a shipping slip (airbill, etc)Shipping info	YES NO
2A. Were custody seals present? YES (circle) on coole  How many Name	Date
2B. Were custody seals intact upon arrival?  3. Were custody papers dry and intact when received?  4. Were custody papers filled out properly (ink, signed, etc)?  5. Is the project identifiable from custody papers? (If so fill out top 5. Indicate the packing in cooler: (if other, describe)	YES NO WA YES NO O of form) YES NO
☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ Cloth material ☐ Cardboard ☐ Styrofoam  7. Temperature documentation: * Notify PM if temperature e	☐ None ☐ Paper towels xceeds 6°C
Type of ice used: ☐ Wet ☐ Blue/Gel ☐ None	Temp(°C)
☐ Samples Received on ice & cold without a temperature 1	olank
☐ 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?	
P. Did all bottles arrive unbroken/unopened?	YES NO
9. Did all bottles arrive unbroken/unopened?	YES NO
O. Did all bottles arrive unbroken/unopened?  O. Are there any missing / extra samples?  O. Are samples in the appropriate containers for indicated tests?	YES NO
9. Did all bottles arrive unbroken/unopened? 10. Are there any missing / extra samples? 11. Are samples in the appropriate containers for indicated tests? 12. Are sample labels present, in good condition and complete?	YES NO YES NO
9. Did all bottles arrive unbroken/unopened? 10. Are there any missing / extra samples? 11. Are samples in the appropriate containers for indicated tests? 12. Are sample labels present, in good condition and complete? 13. Do the sample labels agree with custody papers?	YES NO YES NO YES NO YES NO
2. Did all bottles arrive unbroken/unopened?  10. Are there any missing / extra samples?  11. Are samples in the appropriate containers for indicated tests?  12. Are sample labels present, in good condition and complete?  13. Do the sample labels agree with custody papers?  14. Was sufficient amount of sample sent for tests requested?	YES NO YES NO YES NO YES NO YES NO
2. Are there any missing / extra samples?  1. Are samples in the appropriate containers for indicated tests?  1. Are sample labels present, in good condition and complete?  1. 3. Do the sample labels agree with custody papers?  1. 4. Was sufficient amount of sample sent for tests requested?  1. 5. Are the samples appropriately preserved?	YES NO
2. Did all bottles arrive unbroken/unopened?  10. Are there any missing / extra samples?  11. Are samples in the appropriate containers for indicated tests?  12. Are sample labels present, in good condition and complete?  13. Do the sample labels agree with custody papers?  14. Was sufficient amount of sample sent for tests requested?  15. Are the samples appropriately preserved?  16. Did you check preservatives for all bottles for each sample?  17. Did you document your preservative check?	YES NO WA YES NO WA YES NO WA
D. Did all bottles arrive unbroken/unopened?  10. Are there any missing / extra samples?  11. Are samples in the appropriate containers for indicated tests?  12. Are sample labels present, in good condition and complete?  13. Do the sample labels agree with custody papers?  14. Was sufficient amount of sample sent for tests requested?  15. Are the samples appropriately preserved?  16. Did you check preservatives for all bottles for each sample?  17. Did you document your preservative check?  18. Did you change the hold time in LIMS for unpreserved VOAs?	YES NO
Did all bottles arrive unbroken/unopened?  10. Are there any missing / extra samples?  11. Are samples in the appropriate containers for indicated tests?  12. Are sample labels present, in good condition and complete?  13. Do the sample labels agree with custody papers?  14. Was sufficient amount of sample sent for tests requested?  15. Are the samples appropriately preserved?  16. Did you check preservatives for all bottles for each sample?  17. Did you document your preservative check?  18. Did you change the hold time in LIMS for unpreserved VOAs?  19. Did you change the hold time in LIMS for preserved terracores	YES NO WA
Did all bottles arrive unbroken/unopened?  10. Are there any missing / extra samples?  11. Are samples in the appropriate containers for indicated tests?  12. Are sample labels present, in good condition and complete?  13. Do the sample labels agree with custody papers?  14. Was sufficient amount of sample sent for tests requested?  15. Are the samples appropriately preserved?  16. Did you check preservatives for all bottles for each sample?  17. Did you document your preservative check?  18. Did you change the hold time in LIMS for unpreserved VOAs?  19. Did you change the hold time in LIMS for preserved terracores are bubbles > 6mm absent in VOA samples?	YES NO WA
Did all bottles arrive unbroken/unopened?  10. Are there any missing / extra samples?  11. Are samples in the appropriate containers for indicated tests?  12. Are sample labels present, in good condition and complete?  13. Do the sample labels agree with custody papers?  14. Was sufficient amount of sample sent for tests requested?  15. Are the samples appropriately preserved?  16. Did you check preservatives for all bottles for each sample?  17. Did you document your preservative check?  18. Did you change the hold time in LIMS for unpreserved VOAs?  19. Did you change the hold time in LIMS for preserved terracores are bubbles > 6mm absent in VOA samples?	YES NO WA
Did all bottles arrive unbroken/unopened?  10. Are there any missing / extra samples?  11. Are samples in the appropriate containers for indicated tests?  12. Are sample labels present, in good condition and complete?  13. Do the sample labels agree with custody papers?  14. Was sufficient amount of sample sent for tests requested?  15. Are the samples appropriately preserved?  16. Did you check preservatives for all bottles for each sample?  17. Did you document your preservative check?  18. Did you change the hold time in LIMS for unpreserved VOAs?  19. Did you change the hold time in LIMS for preserved terracores	YES NO WA

Rev 9, 10/11



#### Detections Summary for 269994

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

Client : Almar Environmental

Project : 1067C

Location : Neishi Bros.

Client Sample ID : SG-1

Laboratory Sample ID :

269994-001

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Acrolein	140		85		ppbv	As Recd	42.60	EPA TO-15	METHOD
Acetone	440		85		ppbv	As Recd	42.60	EPA TO-15	METHOD
Carbon Disulfide	60		21		ppbv	As Recd	42.60	EPA TO-15	METHOD
n-Hexane	6,200		64		ppbv	As Recd	127.8	EPA TO-15	METHOD
2-Butanone	310		21		ppbv	As Recd	42.60	EPA TO-15	METHOD
Chloroform	24		21		ppbv	As Recd	42.60	EPA TO-15	METHOD
Cyclohexane	3,800		21		ppbv	As Recd	42.60	EPA TO-15	METHOD
Benzene	1,200		21		ppbv	As Recd	42.60	EPA TO-15	METHOD
n-Heptane	2,100		21		ppbv	As Recd	42.60	EPA TO-15	METHOD
Helium	2,700		2,100		ppmv	As Recd	2.130	ASTM D1946	METHOD
Oxygen	120,000		2,100		ppmv	As Recd	2.130	ASTM D1946	METHOD
Gasoline Range Organics C6-C12	65,000		2,100	240	ppbv	As Recd	42.60	EPA TO-3	METHOD

#### Client Sample ID : SG-2

#### Laboratory Sample ID:

269994-002

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Acrolein	270		92		ppbv	As Recd	45.80	EPA TO-15	METHOD
Acetone	420		92		ppbv	As Recd	45.80	EPA TO-15	METHOD
Carbon Disulfide	73		23		ppbv	As Recd	45.80	EPA TO-15	METHOD
n-Hexane	3,400		23		ppbv	As Recd	45.80	EPA TO-15	METHOD
2-Butanone	270		23		ppbv	As Recd	45.80	EPA TO-15	METHOD
Cyclohexane	7,200		46		ppbv	As Recd	91.60	EPA TO-15	METHOD
Benzene	1,800		23		ppbv	As Recd	45.80	EPA TO-15	METHOD
1,2-Dichloroethane	25		23		ppbv	As Recd	45.80	EPA TO-15	METHOD
n-Heptane	870		23		ppbv	As Recd	45.80	EPA TO-15	METHOD
Toluene	28		23		ppbv	As Recd	45.80	EPA TO-15	METHOD
Helium	5,100		2,300		ppmv	As Recd	2.290	ASTM D1946	METHOD
Oxygen	90,000		2,300		ppmv	As Recd	2.290	ASTM D1946	METHOD
Gasoline Range Organics C6-C12	83,000		2,300	260	ppbv	As Recd	45.80	EPA TO-3	METHOD

Page 1 of 2 27.0

5 of 61



#### Client Sample ID : SG-3 Laboratory Sample ID : 269994-003

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
Acrolein	30		12		ppbv	As Recd	6.210	EPA TO-15	METHOD
Acetone	140		12		ppbv	As Recd	6.210	EPA TO-15	METHOD
Carbon Disulfide	46		3.1		ppbv	As Recd	6.210	EPA TO-15	METHOD
n-Hexane	22		3.1		ppbv	As Recd	6.210	EPA TO-15	METHOD
2-Butanone	77		3.1		ppbv	As Recd	6.210	EPA TO-15	METHOD
Chloroform	8.5		3.1		ppbv	As Recd	6.210	EPA TO-15	METHOD
Cyclohexane	29		3.1		ppbv	As Recd	6.210	EPA TO-15	METHOD
Benzene	3.8		3.1		ppbv	As Recd	6.210	EPA TO-15	METHOD
n-Heptane	19		3.1		ppbv	As Recd	6.210	EPA TO-15	METHOD
4-Methyl-2-Pentanone	7.3		3.1		ppbv	As Recd	6.210	EPA TO-15	METHOD
Toluene	6.4		6.2		ppbv	As Recd	12.42	EPA TO-15	METHOD
Ethylbenzene	40		6.2		ppbv	As Recd	12.42	EPA TO-15	METHOD
m,p-Xylenes	100		6.2		ppbv	As Recd	12.42	EPA TO-15	METHOD
o-Xylene	20		6.2		ppbv	As Recd	12.42	EPA TO-15	METHOD
Oxygen	75,000		2,100		ppmv	As Recd	2.070	ASTM D1946	METHOD
Gasoline Range Organics C6-C12	6,400		100	12	ppbv	As Recd	2.070	EPA TO-3	METHOD

#### Client Sample ID : SG-4 Laboratory Sample ID : 269994-004

Analyte	Result	Flags	RL	MDL	Units	Basis	IDF	Method	Prep Method
n-Hexane	12,000		120		ppbv	As Recd	247.2	EPA TO-15	METHOD
Cyclohexane	9,700		120		ppbv	As Recd	247.2	EPA TO-15	METHOD
Benzene	5,700		120		ppbv	As Recd	247.2	EPA TO-15	METHOD
n-Heptane	7,800		120		ppbv	As Recd	247.2	EPA TO-15	METHOD
Ethylbenzene	1,300		120		ppbv	As Recd	247.2	EPA TO-15	METHOD
m,p-Xylenes	360		120		ppbv	As Recd	247.2	EPA TO-15	METHOD
Helium	3,300		2,100		ppmv	As Recd	2.060	ASTM D1946	METHOD
Oxygen	130,000		2,100		ppmv	As Recd	2.060	ASTM D1946	METHOD
Gasoline Range Organics C6-C12	170,000		2,100	230	ppbv	As Recd	41.20	EPA TO-3	METHOD

27.0 Page 2 of 2



	Volatile	e Organics in Ai	r	
Lab #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-15	
Field ID:	SG-1	Units (M):	ug/m3	
Lab ID:	269994-001	Sampled:	09/21/15	
Matrix:	Air	Received:	09/21/15	
Units (V):	ppbv			

Analyte	Result (V)	RL	Result	(M) RL	Diln Fac	Batch# Analyzed
Freon 12	ND	21	ND	110	42.60	227471 09/24/15
Freon 114	ND	21	ND	150	42.60	227471 09/24/15
Chloromethane	ND	21	ND	44	42.60	227471 09/24/15
Vinyl Chloride	ND	21	ND	54	42.60	227471 09/24/15
1,3-Butadiene	ND	21	ND	47	42.60	227471 09/24/15
Bromomethane	ND	21	ND	83	42.60	227471 09/24/15
Chloroethane	ND	21	ND	56	42.60	227471 09/24/15
Trichlorofluoromethane	ND	21	ND	120	42.60	227471 09/24/15
Acrolein	140	85	320	200	42.60	227471 09/24/15
1,1-Dichloroethene	ND	21	ND	84	42.60	227471 09/24/15
Freon 113	ND	21	ND	160	42.60	227471 09/24/15
Acetone	440	85	1,100	200	42.60	227471 09/24/15
Carbon Disulfide	60	21	190	66	42.60	227471 09/24/15
Isopropanol	ND	85	ND	210	42.60	227471 09/24/15
Methylene Chloride	ND	21	ND	74	42.60	227471 09/24/15
trans-1,2-Dichloroethene	ND	21	ND	84	42.60	227471 09/24/15
MTBE	ND	21	ND	77	42.60	227471 09/24/15
n-Hexane	6,200	64	22,000	230	127.8	227579 09/25/15
1,1-Dichloroethane	ND	21	ND	86	42.60	227471 09/24/15
Vinyl Acetate	ND	21	ND	75	42.60	227471 09/24/15
cis-1,2-Dichloroethene	ND	21	ND	84	42.60	227471 09/24/15
2-Butanone	310	21	900	63	42.60	227471 09/24/15
Ethyl Acetate	ND	21	ND	77	42.60	227471 09/24/15
Tetrahydrofuran	ND	21	ND	63	42.60	227471 09/24/15
Chloroform	24	21	120	100	42.60	227471 09/24/15
1,1,1-Trichloroethane	ND	21	ND	120	42.60	227471 09/24/15
Cyclohexane	3,800	21	13,000	73	42.60	227471 09/24/15
Carbon Tetrachloride	ND	21	ND	130	42.60	227471 09/24/15
Benzene	1,200	21	3,800	68	42.60	227471 09/24/15
1,2-Dichloroethane	ND	21	ND	86	42.60	227471 09/24/15
n-Heptane	2,100	21	8,800	87	42.60	227471 09/24/15
Trichloroethene	ND	21	ND	110	42.60	227471 09/24/15
1,2-Dichloropropane	ND	21	ND	98	42.60	227471 09/24/15
Bromodichloromethane	ND	21	ND	140	42.60	227471 09/24/15
cis-1,3-Dichloropropene	ND	21	ND	97	42.60	227471 09/24/15
4-Methyl-2-Pentanone	ND	21	ND	87	42.60	227471 09/24/15

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Page 1 of 2



	Volatile	e Organics in Ai	r	
Lab #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-15	
Field ID:	SG-1	Units (M):	ug/m3	
Lab ID:	269994-001	Sampled:	09/21/15	
Matrix:	Air	Received:	09/21/15	
Units (V):	ppbv			

Analyte	Result (V)	RL	Result	(M) RL	Diln Fac	Batch# Analyzed
Toluene	ND	21	ND	80	42.60	227471 09/24/15
trans-1,3-Dichloropropene	ND	21	ND	97	42.60	227471 09/24/15
1,1,2-Trichloroethane	ND	21	ND	120	42.60	227471 09/24/15
Tetrachloroethene	ND	21	ND	140	42.60	227471 09/24/15
2-Hexanone	ND	21	ND	87	42.60	227471 09/24/15
Dibromochloromethane	ND	21	ND	180	42.60	227471 09/24/15
1,2-Dibromoethane	ND	21	ND	160	42.60	227471 09/24/15
Chlorobenzene	ND	21	ND	98	42.60	227471 09/24/15
Ethylbenzene	ND	21	ND	92	42.60	227471 09/24/15
m,p-Xylenes	ND	21	ND	92	42.60	227471 09/24/15
o-Xylene	ND	21	ND	92	42.60	227471 09/24/15
Styrene	ND	21	ND	91	42.60	227471 09/24/15
Bromoform	ND	64	ND	660	127.8	227529 09/24/15
1,1,2,2-Tetrachloroethane	ND	21	ND	150	42.60	227471 09/24/15
4-Ethyltoluene	ND	21	ND	100	42.60	227471 09/24/15
1,3,5-Trimethylbenzene	ND	21	ND	100	42.60	227471 09/24/15
1,2,4-Trimethylbenzene	ND	21	ND	100	42.60	227471 09/24/15
1,3-Dichlorobenzene	ND	21	ND	130	42.60	227471 09/24/15
1,4-Dichlorobenzene	ND	21	ND	130	42.60	227471 09/24/15
Benzyl chloride	ND	21	ND	110	42.60	227471 09/24/15
1,2-Dichlorobenzene	ND	21	ND	130	42.60	227471 09/24/15
1,2,4-Trichlorobenzene	ND	21	ND	160	42.60	227471 09/24/15
Hexachlorobutadiene	ND	21	ND	230	42.60	227471 09/24/15
Naphthalene	ND	85	ND	450	42.60	227471 09/24/15

Surrogate	%REC	Limits	Diln Fac	Batch# Analyzed
Bromofluorobenzene	112	80-121	42.60	227471 09/24/15

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Page 2 of 2



Volatile Organics in Air						
Lab #:	269994	Location:	Neishi Bros.			
Client:	Almar Environmental	Prep:	METHOD			
Project#:	1067C	Analysis:	EPA TO-15			
Field ID:	SG-2	Units (M):	ug/m3			
Lab ID:	269994-002	Sampled:	09/21/15			
Matrix:	Air	Received:	09/21/15			
Units (V):	ppbv	Analyzed:	09/24/15			

Analyte	Result (V)	RL	Result (	M) RL	Diln Fac	Batch#
Freon 12	ND	23	ND	110	45.80	227471
Freon 114	ND	23	ND	160	45.80	227471
Chloromethane	ND	23	ND	47	45.80	227471
Vinyl Chloride	ND	23	ND	59	45.80	227471
1,3-Butadiene	ND	23	ND	51	45.80	227471
Bromomethane	ND	23	ND	89	45.80	227471
Chloroethane	ND	23	ND	60	45.80	227471
Trichlorofluoromethane	ND	23	ND	130	45.80	227471
Acrolein	270	92	610	210	45.80	227471
1,1-Dichloroethene	ND	23	ND	91	45.80	227471
Freon 113	ND	23	ND	180	45.80	227471
Acetone	420	92	1,000	220	45.80	227471
Carbon Disulfide	73	23	230	71	45.80	227471
Isopropanol	ND	92	ND	230	45.80	227471
Methylene Chloride	ND	23	ND	80	45.80	227471
trans-1,2-Dichloroethene	ND	23	ND	91	45.80	227471
MTBE	ND	23	ND	83	45.80	227471
n-Hexane	3,400	23	12,000	81	45.80	227471
1,1-Dichloroethane	ND	23	ND	93	45.80	227471
Vinyl Acetate	ND	23	ND	81	45.80	227471
cis-1,2-Dichloroethene	ND	23	ND	91	45.80	227471
2-Butanone	270	23	810	68	45.80	227471
Ethyl Acetate	ND	23	ND	83	45.80	227471
Tetrahydrofuran	ND	23	ND	68	45.80	227471
Chloroform	ND	23	ND	110	45.80	227471
1,1,1-Trichloroethane	ND	23	ND	120	45.80	227471
Cyclohexane	7,200	46	25,000	160	91.60	227529
Carbon Tetrachloride	ND	23	ND	140	45.80	227471
Benzene	1,800	23	5,900	73	45.80	227471
1,2-Dichloroethane	25	23	100	93	45.80	227471
n-Heptane	870	23	3,600	94	45.80	227471
Trichloroethene	ND	23	ND	120	45.80	227471
1,2-Dichloropropane	ND	23	ND	110	45.80	227471
Bromodichloromethane	ND	23	ND	150	45.80	227471
cis-1,3-Dichloropropene	ND	23	ND	100	45.80	227471
4-Methyl-2-Pentanone	ND	23	ND	94	45.80	227471

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Page 1 of 2



	Volatile	e Organics in Ai	r	
Lab #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-15	
Field ID:	SG-2	Units (M):	ug/m3	
Lab ID:	269994-002	Sampled:	09/21/15	
Matrix:	Air	Received:	09/21/15	
Units (V):	ppbv	Analyzed:	09/24/15	

Analyte	Result (V)	RL	Result	(M) RL	Diln Fac	Batch#
Toluene	28	23	100	86	45.80	227471
trans-1,3-Dichloropropene	ND	23	ND	100	45.80	227471
1,1,2-Trichloroethane	ND	23	ND	120	45.80	227471
Tetrachloroethene	ND	23	ND	160	45.80	227471
2-Hexanone	ND	23	ND	94	45.80	227471
Dibromochloromethane	ND	23	ND	200	45.80	227471
1,2-Dibromoethane	ND	23	ND	180	45.80	227471
Chlorobenzene	ND	23	ND	110	45.80	227471
Ethylbenzene	ND	23	ND	99	45.80	227471
m,p-Xylenes	ND	23	ND	99	45.80	227471
o-Xylene	ND	23	ND	99	45.80	227471
Styrene	ND	23	ND	98	45.80	227471
Bromoform	ND	46	ND	470	91.60	227529
1,1,2,2-Tetrachloroethane	ND	23	ND	160	45.80	227471
4-Ethyltoluene	ND	23	ND	110	45.80	227471
1,3,5-Trimethylbenzene	ND	23	ND	110	45.80	227471
1,2,4-Trimethylbenzene	ND	23	ND	110	45.80	227471
1,3-Dichlorobenzene	ND	23	ND	140	45.80	227471
1,4-Dichlorobenzene	ND	23	ND	140	45.80	227471
Benzyl chloride	ND	23	ND	120	45.80	227471
1,2-Dichlorobenzene	ND	23	ND	140	45.80	227471
1,2,4-Trichlorobenzene	ND	23	ND	170	45.80	227471
Hexachlorobutadiene	ND	23	ND	240	45.80	227471
Naphthalene	ND	92	ND	480	45.80	227471

Surrogate	%REC	Limits	Diln Fac	Batch#
Bromofluorobenzene	109	80-121	45.80	227471

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Page 2 of 2



	Volatile	e Organics in Ai	r	
Lab #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-15	
Field ID:	SG-3	Units (M):	ug/m3	
Lab ID:	269994-003	Sampled:	09/21/15	
Matrix:	Air	Received:	09/21/15	
Units (V):	ppbv			

Analyte	Result (V)	RL	Result	(M) RL	Diln Fac	Batch#	Analyzed
Freon 12	ND	3.1	ND	15	6.210	227528	09/24/15
Freon 114	ND	3.1	ND	22	6.210	227528	09/24/15
Chloromethane	ND	3.1	ND	6.4	6.210	227528	09/24/15
Vinyl Chloride	ND	3.1	ND	7.9	6.210	227528	09/24/15
1,3-Butadiene	ND	3.1	ND	6.9	6.210	227528	09/24/15
Bromomethane	ND	3.1	ND	12	6.210	227528	09/24/15
Chloroethane	ND	3.1	ND	8.2	6.210	227528	09/24/15
Trichlorofluoromethane	ND	3.1	ND	17	6.210	227528	09/24/15
Acrolein	30	12	68	28	6.210	227528	09/24/15
1,1-Dichloroethene	ND	3.1	ND	12	6.210	227528	09/24/15
Freon 113	ND	3.1	ND	24	6.210	227528	09/24/15
Acetone	140	12	320	30	6.210	227528	09/24/15
Carbon Disulfide	46	3.1	140	9.7	6.210	227528	09/24/15
Isopropanol	ND	12	ND	31	6.210	227528	09/24/15
Methylene Chloride	ND	3.1	ND	11	6.210	227528	09/24/15
trans-1,2-Dichloroethene	ND	3.1	ND	12	6.210	227528	09/24/15
MTBE	ND	3.1	ND	11	6.210	227528	09/24/15
n-Hexane	22	3.1	78	11	6.210	227528	09/24/15
1,1-Dichloroethane	ND	3.1	ND	13	6.210	227528	09/24/15
Vinyl Acetate	ND	3.1	ND	11	6.210	227528	09/24/15
cis-1,2-Dichloroethene	ND	3.1	ND	12	6.210	227528	09/24/15
2-Butanone	77	3.1	230	9.2	6.210		09/24/15
Ethyl Acetate	ND	3.1	ND	11	6.210	227528	09/24/15
Tetrahydrofuran	ND	3.1	ND	9.2	6.210	227528	09/24/15
Chloroform	8.5	3.1	42	15	6.210	227528	09/24/15
1,1,1-Trichloroethane	ND	3.1	ND	17	6.210		09/24/15
Cyclohexane	29	3.1	99	11	6.210	227528	09/24/15
Carbon Tetrachloride	ND	3.1	ND	20	6.210		09/24/15
Benzene	3.8	3.1	12	9.9	6.210	227528	09/24/15
1,2-Dichloroethane	ND	3.1	ND	13	6.210		09/24/15
n-Heptane	19	3.1	78	13	6.210	227528	09/24/15
Trichloroethene	ND	3.1	ND	17	6.210	227528	09/24/15
1,2-Dichloropropane	ND	3.1	ND	14	6.210	227528	09/24/15
Bromodichloromethane	ND	3.1	ND	21	6.210		09/24/15
cis-1,3-Dichloropropene	ND	3.1	ND	14	6.210		09/24/15
4-Methyl-2-Pentanone	7.3	3.1	30	13	6.210	227528	09/24/15

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Page 1 of 2



	Volatil	e Organics in Ai	r	
Lab #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-15	
Field ID:	SG-3	Units (M):	ug/m3	
Lab ID:	269994-003	Sampled:	09/21/15	
Matrix:	Air	Received:	09/21/15	
Units (V):	ppbv			

Analyte	Result (V)	RL	Result	(M) RL	Diln Fac	Batch#	Analyzed
Toluene	6.4	6.2	24	23	12.42	227579	09/25/15
trans-1,3-Dichloropropene	ND	3.1	ND	14	6.210	227528	09/24/15
1,1,2-Trichloroethane	ND	6.2	ND	34	12.42	227579	09/25/15
Tetrachloroethene	ND	6.2	ND	42	12.42	227579	09/25/15
2-Hexanone	ND	6.2	ND	25	12.42	227579	09/25/15
Dibromochloromethane	ND	6.2	ND	53	12.42	227579	09/25/15
1,2-Dibromoethane	ND	6.2	ND	48	12.42	227579	09/25/15
Chlorobenzene	ND	6.2	ND	29	12.42	227579	09/25/15
Ethylbenzene	40	6.2	170	27	12.42	227579	09/25/15
m,p-Xylenes	100	6.2	450	27	12.42	227579	09/25/15
o-Xylene	20	6.2	87	27	12.42	227579	09/25/15
Styrene	ND	6.2	ND	26	12.42	227579	09/25/15
Bromoform	ND	6.2	ND	64	12.42	227580	09/25/15
1,1,2,2-Tetrachloroethane	ND	6.2	ND	43	12.42	227579	09/25/15
4-Ethyltoluene	ND	6.2	ND	31	12.42	227579	09/25/15
1,3,5-Trimethylbenzene	ND	6.2	ND	31	12.42	227579	09/25/15
1,2,4-Trimethylbenzene	ND	6.2	ND	31	12.42	227579	09/25/15
1,3-Dichlorobenzene	ND	6.2	ND	37	12.42	227579	09/25/15
1,4-Dichlorobenzene	ND	6.2	ND	37	12.42	227579	09/25/15
Benzyl chloride	ND	6.2	ND	32	12.42	227579	09/25/15
1,2-Dichlorobenzene	ND	6.2	ND	37	12.42	227579	09/25/15
1,2,4-Trichlorobenzene	ND	6.2	ND	46	12.42	227579	09/25/15
Hexachlorobutadiene	ND	6.2	ND	66	12.42	227579	09/25/15
Naphthalene	ND	25	ND	130	12.42	227579	09/25/15

Surrogate	%REC	Limits	Diln Fac	Batch# Analyzed
Bromofluorobenzene	112	80-121	12.42	227579 09/25/15

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Page 2 of 2



	Volatile	e Organics in Ai	r	
Lab #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-15	
Field ID:	SG-4	Units (M):	ug/m3	
Lab ID:	269994-004	Diln Fac:	247.2	
Matrix:	Air	Sampled:	09/21/15	
Units (V):	ppbv	Received:	09/21/15	

Analyte	Result (V)	RL	Result (	-	Batch# Analyzed
Freon 12	ND	120	ND	610	227529 09/24/15
Freon 114	ND	120	ND	860	227529 09/24/15
Chloromethane	ND	120	ND	260	227529 09/24/15
Vinyl Chloride	ND	120	ND	320	227529 09/24/15
1,3-Butadiene	ND	120	ND	270	227529 09/24/15
Bromomethane	ND	120	ND	480	227529 09/24/15
Chloroethane	ND	120	ND	330	227529 09/24/15
Trichlorofluoromethane	ND	120	ND	690	227529 09/24/15
Acrolein	ND	490	ND	1,100	227529 09/24/15
1,1-Dichloroethene	ND	120	ND	490	227529 09/24/15
Freon 113	ND	120	ND	950	227529 09/24/15
Acetone	ND	490	ND	1,200	227529 09/24/15
Carbon Disulfide	ND	120	ND	380	227529 09/24/15
Isopropanol	ND	490	ND	1,200	227529 09/24/15
Methylene Chloride	ND	120	ND	430	227529 09/24/15
trans-1,2-Dichloroethene	ND	120	ND	490	227529 09/24/15
MTBE	ND	120	ND	450	227529 09/24/15
n-Hexane	12,000	120	43,000	440	227529 09/24/15
1,1-Dichloroethane	ND	120	ND	500	227529 09/24/15
Vinyl Acetate	ND	120	ND	440	227529 09/24/15
cis-1,2-Dichloroethene	ND	120	ND	490	227529 09/24/15
2-Butanone	ND	120	ND	360	227529 09/24/15
Ethyl Acetate	ND	120	ND	450	227529 09/24/15
Tetrahydrofuran	ND	120	ND	360	227529 09/24/15
Chloroform	ND	120	ND	600	227529 09/24/15
1,1,1-Trichloroethane	ND	120	ND	670	227529 09/24/15
Cyclohexane	9,700	120	33,000	430	227529 09/24/15
Carbon Tetrachloride	ND	120	ND	780	227529 09/24/15
Benzene	5,700	120	18,000	390	227529 09/24/15
1,2-Dichloroethane	ND	120	ND	500	227529 09/24/15
n-Heptane	7,800	120	32,000	510	227529 09/24/15
Trichloroethene	ND	120	ND	660	227529 09/24/15
1,2-Dichloropropane	ND	120	ND	570	227529 09/24/15
Bromodichloromethane	ND	120	ND	830	227529 09/24/15
cis-1,3-Dichloropropene	ND	120	ND	560	227529 09/24/15
4-Methyl-2-Pentanone	ND	120	ND	510	227529 09/24/15

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Page 1 of 2



	Volatile	e Organics in Ai	r	
Lab #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-15	
Field ID:	SG-4	Units (M):	ug/m3	
Lab ID:	269994-004	Diln Fac:	247.2	
Matrix:	Air	Sampled:	09/21/15	
Units (V):	ppbv	Received:	09/21/15	

Analyte	Result (V)	RL	Result	(M) RL	Batch# Analyzed
Toluene	ND	120	ND	470	227529 09/24/15
trans-1,3-Dichloropropene	ND	120	ND	560	227529 09/24/15
1,1,2-Trichloroethane	ND	120	ND	670	227529 09/24/15
Tetrachloroethene	ND	120	ND	840	227529 09/24/15
2-Hexanone	ND	120	ND	510	227529 09/24/15
Dibromochloromethane	ND	120	ND	1,100	227529 09/24/15
1,2-Dibromoethane	ND	120	ND	950	227529 09/24/15
Chlorobenzene	ND	120	ND	570	227529 09/24/15
Ethylbenzene	1,300	120	5,400	540	227529 09/24/15
m,p-Xylenes	360	120	1,600	540	227645 09/28/15
o-Xylene	ND	120	ND	540	227529 09/24/15
Styrene	ND	120	ND	530	227529 09/24/15
Bromoform	ND	120	ND	1,300	227529 09/24/15
1,1,2,2-Tetrachloroethane	ND	120	ND	850	227529 09/24/15
4-Ethyltoluene	ND	120	ND	610	227529 09/24/15
1,3,5-Trimethylbenzene	ND	120	ND	610	227529 09/24/15
1,2,4-Trimethylbenzene	ND	120	ND	610	227529 09/24/15
1,3-Dichlorobenzene	ND	120	ND	740	227529 09/24/15
1,4-Dichlorobenzene	ND	120	ND	740	227529 09/24/15
Benzyl chloride	ND	120	ND	640	227529 09/24/15
1,2-Dichlorobenzene	ND	120	ND	740	227529 09/24/15
1,2,4-Trichlorobenzene	ND	120	ND	920	227529 09/24/15
Hexachlorobutadiene	ND	120	ND	1,300	227529 09/24/15
Naphthalene	ND	490	ND	2,600	227529 09/24/15

Surrogate	%REC	Limits	Batch# Analyzed
Bromofluorobenzene	94	80-121	227529 09/24/15

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Page 2 of 2



	Volatil	e Organics in Ai	r	
Lab #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-15	
Matrix:	Air	Batch#:	227471	
Units (V):	ppbv	Analyzed:	09/23/15	
Diln Fac:	1.000			

Type: BS Lab ID: QC804844

Analyte	Spiked	Result (V)	%REC	Limits
Freon 12	10.00	9.811	98	70-130
Freon 114	10.00	9.864	99	70-130
Chloromethane	10.00	9.802	98	70-130
Vinyl Chloride	10.00	9.555	96	70-130
1,3-Butadiene	10.00	9.141	91	70-130
Bromomethane	10.00	10.13	101	70-130
Chloroethane	10.00	9.226	92	70-130
Trichlorofluoromethane	10.00	9.503	95	70-130
Acrolein	10.00	8.630	86	70-130
1,1-Dichloroethene	10.00	9.079	91	70-130
Freon 113	10.00	9.472	95	70-130
Acetone	10.00	8.969	90	70-130
Carbon Disulfide	10.00	8.497	85	70-130
Isopropanol	10.00	8.432	84	70-130
Methylene Chloride	10.00	8.653	87	70-130
trans-1,2-Dichloroethene	10.00	9.039	90	70-130
MTBE	10.00	9.073	91	70-130
n-Hexane	10.00	8.144	81	70-130
1,1-Dichloroethane	10.00	9.004	90	70-130
Vinyl Acetate	10.00	8.578	86	70-130
cis-1,2-Dichloroethene	10.00	8.735	87	70-130
2-Butanone	10.00	9.528	95	70-130
Ethyl Acetate	10.00	9.753	98	70-130
Tetrahydrofuran	10.00	11.30	113	70-130
Chloroform	10.00	9.172	92	70-130
1,1,1-Trichloroethane	10.00	10.30	103	70-130
Cyclohexane	10.00	9.658	97	70-130
Carbon Tetrachloride	10.00	8.699	87	70-130
Benzene	10.00	9.107	91	70-130
1,2-Dichloroethane	10.00	9.432	94	70-130
n-Heptane	10.00	9.279	93	70-130
Trichloroethene	10.00	9.322	93	70-130

<sup>\*=</sup> Value outside of QC limits; see narrative

Page 1 of 4

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



	Volatil	e Organics in Ai	.r	
Lab #: Client: Project#:	269994 Almar Environmental 1067C	Location: Prep: Analysis:	Neishi Bros. METHOD EPA TO-15	
Matrix: Units (V): Diln Fac:	Air ppbv 1.000	Batch#: Analyzed:	227471 09/23/15	

Analyte	Spiked	Result (V)	%REC	Limits
1,2-Dichloropropane	10.00	9.838	98	70-130
Bromodichloromethane	10.00	9.595	96	70-130
cis-1,3-Dichloropropene	10.00	9.047	90	70-130
4-Methyl-2-Pentanone	10.00	10.40	104	70-130
Toluene	10.00	9.337	93	70-130
trans-1,3-Dichloropropene	10.00	8.982	90	70-130
1,1,2-Trichloroethane	10.00	10.65	106	70-130
Tetrachloroethene	10.00	9.587	96	70-130
2-Hexanone	10.00	9.407	94	70-130
Dibromochloromethane	10.00	9.162	92	70-130
1,2-Dibromoethane	10.00	9.853	99	70-130
Chlorobenzene	10.00	9.086	91	70-130
Ethylbenzene	10.00	9.020	90	70-130
m,p-Xylenes	20.00	19.97	100	70-130
o-Xylene	10.00	10.11	101	70-130
Styrene	10.00	10.01	100	70-130
Bromoform	10.00	6.112 b	61 *	70-130
1,1,2,2-Tetrachloroethane	10.00	9.384	94	70-130
4-Ethyltoluene	10.00	11.06	111	70-130
1,3,5-Trimethylbenzene	10.00	10.44	104	70-130
1,2,4-Trimethylbenzene	10.00	11.23	112	70-130
1,3-Dichlorobenzene	10.00	10.19	102	70-130
1,4-Dichlorobenzene	10.00	10.20	102	70-130
Benzyl chloride	10.00	9.459	95	70-130
1,2-Dichlorobenzene	10.00	9.710	97	70-130
1,2,4-Trichlorobenzene	10.00	8.616	86	70-130
Hexachlorobutadiene	10.00	7.942	79	70-130
Naphthalene	10.00	8.187	82	70-130

Surrogate	%REC	Limits
Bromofluorobenzene	100	70-130

<sup>\*=</sup> Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



Volatile Organics in Air					
Lab #:	269994	Location:	Neishi Bros.		
Client:	Almar Environmental	Prep:	METHOD		
Project#:	1067C	Analysis:	EPA TO-15		
Matrix:	Air	Batch#:	227471		
Units (V):	ppbv	Analyzed:	09/23/15		
Diln Fac:	1.000				

Type: BSD Lab ID: QC804845

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
Freon 12	10.00	9.487	95	70-130	3	25
Freon 114	10.00	9.496	95	70-130	4	25
Chloromethane	10.00	9.212	92	70-130	6	25
Vinyl Chloride	10.00	9.343	93	70-130	2	25
1,3-Butadiene	10.00	8.896	89	70-130	3	25
Bromomethane	10.00	9.893	99	70-130	2	25
Chloroethane	10.00	8.699	87	70-130	6	25
Trichlorofluoromethane	10.00	9.404	94	70-130	1	25
Acrolein	10.00	8.586	86	70-130	1	25
1,1-Dichloroethene	10.00	9.062	91	70-130	0	25
Freon 113	10.00	9.313	93	70-130	2	25
Acetone	10.00	8.823	88	70-130	2	25
Carbon Disulfide	10.00	8.444	84	70-130	1	25
Isopropanol	10.00	8.903	89	70-130	5	25
Methylene Chloride	10.00	8.404	84	70-130	3	25
trans-1,2-Dichloroethene	10.00	9.219	92	70-130	2	25
MTBE	10.00	9.097	91	70-130	0	25
n-Hexane	10.00	8.264	83	70-130	1	25
1,1-Dichloroethane	10.00	8.957	90	70-130	1	25
Vinyl Acetate	10.00	8.429	84	70-130	2	25
cis-1,2-Dichloroethene	10.00	8.779	88	70-130	1	25
2-Butanone	10.00	9.538	95	70-130	0	25
Ethyl Acetate	10.00	9.420	94	70-130	3	25
Tetrahydrofuran	10.00	11.60	116	70-130	3	25
Chloroform	10.00	9.123	91	70-130	1	25
1,1,1-Trichloroethane	10.00	10.43	104	70-130	1	25
Cyclohexane	10.00	9.685	97	70-130	0	25
Carbon Tetrachloride	10.00	8.659	87	70-130	0	25
Benzene	10.00	9.214	92	70-130	1	25
1,2-Dichloroethane	10.00	9.350	94	70-130	1	25
n-Heptane	10.00	9.325	93	70-130	0	25
Trichloroethene	10.00	9.383	94	70-130	1	25

<sup>\*=</sup> Value outside of QC limits; see narrative

Page 3 of 4

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



	Volatile C	rganics in Air	
Lab #:	269994	Location:	Neishi Bros.
Client:	Almar Environmental	Prep:	METHOD
Project#:	1067C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	227471
Units (V):	ppbv	Analyzed:	09/23/15
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
1,2-Dichloropropane	10.00	10.04	100	70-130	2	25
Bromodichloromethane	10.00	9.703	97	70-130	1	25
cis-1,3-Dichloropropene	10.00	9.375	94	70-130	4	25
4-Methyl-2-Pentanone	10.00	10.73	107	70-130	3	25
Toluene	10.00	9.088	91	70-130	3	25
trans-1,3-Dichloropropene	10.00	8.931	89	70-130	1	25
1,1,2-Trichloroethane	10.00	10.51	105	70-130	1	25
Tetrachloroethene	10.00	9.438	94	70-130	2	25
2-Hexanone	10.00	9.167	92	70-130	3	25
Dibromochloromethane	10.00	8.987	90	70-130	2	25
1,2-Dibromoethane	10.00	9.914	99	70-130	1	25
Chlorobenzene	10.00	8.662	87	70-130	5	25
Ethylbenzene	10.00	8.645	86	70-130	4	25
m,p-Xylenes	20.00	18.45	92	70-130	8	25
o-Xylene	10.00	9.487	95	70-130	6	25
Styrene	10.00	9.590	96	70-130	4	25
Bromoform	10.00	6.109 b	61 *	70-130	0	25
1,1,2,2-Tetrachloroethane	10.00	9.051	91	70-130	4	25
4-Ethyltoluene	10.00	10.57	106	70-130	5	25
1,3,5-Trimethylbenzene	10.00	10.17	102	70-130	3	25
1,2,4-Trimethylbenzene	10.00	10.48	105	70-130	7	25
1,3-Dichlorobenzene	10.00	9.726	97	70-130	5	25
1,4-Dichlorobenzene	10.00	9.625	96	70-130	6	25
Benzyl chloride	10.00	9.163	92	70-130	3	25
1,2-Dichlorobenzene	10.00	9.558	96	70-130	2	25
1,2,4-Trichlorobenzene	10.00	8.250	83	70-130	4	25
Hexachlorobutadiene	10.00	7.517	75	70-130	5	25
Naphthalene	10.00	8.065	81	70-130	2	25

Surrogate	%REC	Limits
Bromofluorobenzene	101	70-130

Page 4 of 4

<sup>\*=</sup> Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



Volatile Organics in Air					
Lab #:	269994	Location:	Neishi Bros.		
Client:	Almar Environmental	Prep:	METHOD		
Project#:	1067C	Analysis:	EPA TO-15		
Type:	BLANK	Units (M):	ug/m3		
Lab ID:	QC804846	Diln Fac:	1.000		
Matrix:	Air	Batch#:	227471		
Units (V):	ppbv	Analyzed:	09/23/15		

2 m a l verto	Result (V)	RL	Result	t (M) RL
Analyte Freon 12		0.50		2.5
	ND		ND	
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

Page 1 of 2



	Volatile	e Organics in Ai	r	
Lab #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-15	
Type:	BLANK	Units (M):	ug/m3	
Lab ID:	QC804846	Diln Fac:	1.000	
Matrix:	Air	Batch#:	227471	
Units (V):	ppbv	Analyzed:	09/23/15	

Analyte	Result (V)	RL	Resu	lt (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	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 #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-15	
Matrix:	Air	Batch#:	227528	
Units (V):	ppbv	Analyzed:	09/24/15	
Diln Fac:	1.000			

Type: BS Lab ID: QC805046

Analyte	Spiked	Result (V)	%REC	Limits
Freon 12	10.00	9.728	97	70-130
Freon 114	10.00	9.870	99	70-130
Chloromethane	10.00	9.580	96	70-130
Vinyl Chloride	10.00	9.612	96	70-130
1,3-Butadiene	10.00	8.966	90	70-130
Bromomethane	10.00	9.937	99	70-130
Chloroethane	10.00	8.597	86	70-130
Trichlorofluoromethane	10.00	9.593	96	70-130
Acrolein	10.00	8.783	88	70-130
1,1-Dichloroethene	10.00	8.895	89	70-130
Freon 113	10.00	9.835	98	70-130
Acetone	10.00	8.983	90	70-130
Carbon Disulfide	10.00	8.397	84	70-130
Isopropanol	10.00	8.484	85	70-130
Methylene Chloride	10.00	8.409	84	70-130
trans-1,2-Dichloroethene	10.00	9.057	91	70-130
MTBE	10.00	9.626	96	70-130
n-Hexane	10.00	9.423	94	70-130
1,1-Dichloroethane	10.00	9.078	91	70-130
Vinyl Acetate	10.00	8.640	86	70-130
cis-1,2-Dichloroethene	10.00	8.735	87	70-130
2-Butanone	10.00	9.842	98	70-130
Ethyl Acetate	10.00	9.819	98	70-130
Tetrahydrofuran	10.00	11.23	112	70-130
Chloroform	10.00	9.205	92	70-130
1,1,1-Trichloroethane	10.00	10.43	104	70-130
Cyclohexane	10.00	10.13	101	70-130
Carbon Tetrachloride	10.00	8.482	85	70-130
Benzene	10.00	9.280	93	70-130
1,2-Dichloroethane	10.00	9.049	90	70-130
n-Heptane	10.00	9.986	100	70-130
Trichloroethene	10.00	9.158	92	70-130

<sup>\*=</sup> Value outside of QC limits; see narrative

Page 1 of 4 15.0

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



	Volatil	e Organics in Ai	r	
Lab #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-15	
Matrix:	Air	Batch#:	227528	
Units (V):	ppbv	Analyzed:	09/24/15	
Diln Fac:	1.000			

Analyte	Spiked	Result (V)	%REC	Limits
1,2-Dichloropropane	10.00	10.04	100	70-130
Bromodichloromethane	10.00	9.329	93	70-130
cis-1,3-Dichloropropene	10.00	8.891	89	70-130
4-Methyl-2-Pentanone	10.00	10.76	108	70-130
Toluene	10.00	9.358	94	70-130
trans-1,3-Dichloropropene	10.00	9.048	90	70-130
1,1,2-Trichloroethane	10.00	10.48	105	70-130
Tetrachloroethene	10.00	9.200	92	70-130
2-Hexanone	10.00	8.939	89	70-130
Dibromochloromethane	10.00	8.638	86	70-130
1,2-Dibromoethane	10.00	9.523	95	70-130
Chlorobenzene	10.00	8.657	87	70-130
Ethylbenzene	10.00	8.486	85	70-130
m,p-Xylenes	20.00	18.29	91	70-130
o-Xylene	10.00	9.228	92	70-130
Styrene	10.00	9.191	92	70-130
Bromoform	10.00	5.982 b	60 *	70-130
1,1,2,2-Tetrachloroethane	10.00	9.130	91	70-130
4-Ethyltoluene	10.00	10.26	103	70-130
1,3,5-Trimethylbenzene	10.00	9.494	95	70-130
1,2,4-Trimethylbenzene	10.00	10.31	103	70-130
1,3-Dichlorobenzene	10.00	9.389	94	70-130
1,4-Dichlorobenzene	10.00	9.213	92	70-130
Benzyl chloride	10.00	8.849	88	70-130
1,2-Dichlorobenzene	10.00	9.133	91	70-130
1,2,4-Trichlorobenzene	10.00	7.922	79	70-130
Hexachlorobutadiene	10.00	7.020	70	70-130
Naphthalene	10.00	7.503	75	70-130

Surrogate	%REC	Limits
Bromofluorobenzene	99	70-130

<sup>\*=</sup> Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



	Volatil	e Organics in Ai	r	
Lab #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-15	
Matrix:	Air	Batch#:	227528	
Units (V):	ppbv	Analyzed:	09/24/15	
Diln Fac:	1.000			

Type: BSD Lab ID: QC805047

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
Freon 12	10.00	9.731	97	70-130	0	25
Freon 114	10.00	9.833	98	70-130	0	25
Chloromethane	10.00	9.634	96	70-130	1	25
Vinyl Chloride	10.00	9.462	95	70-130	2	25
1,3-Butadiene	10.00	8.767	88	70-130	2	25
Bromomethane	10.00	10.03	100	70-130	1	25
Chloroethane	10.00	8.592	86	70-130	0	25
Trichlorofluoromethane	10.00	9.583	96	70-130	0	25
Acrolein	10.00	8.350	84	70-130	5	25
1,1-Dichloroethene	10.00	8.812	88	70-130	1	25
Freon 113	10.00	9.593	96	70-130	2	25
Acetone	10.00	8.828	88	70-130	2	25
Carbon Disulfide	10.00	8.191	82	70-130	2	25
Isopropanol	10.00	8.716	87	70-130	3	25
Methylene Chloride	10.00	8.434	84	70-130	0	25
trans-1,2-Dichloroethene	10.00	9.011	90	70-130	1	25
MTBE	10.00	9.221	92	70-130	4	25
n-Hexane	10.00	8.840	88	70-130	6	25
1,1-Dichloroethane	10.00	8.966	90	70-130	1	25
Vinyl Acetate	10.00	8.567	86	70-130	1	25
cis-1,2-Dichloroethene	10.00	8.405	84	70-130	4	25
2-Butanone	10.00	9.729	97	70-130	1	25
Ethyl Acetate	10.00	9.825	98	70-130	0	25
Tetrahydrofuran	10.00	11.33	113	70-130	1	25
Chloroform	10.00	9.109	91	70-130	1	25
1,1,1-Trichloroethane	10.00	10.35	103	70-130	1	25
Cyclohexane	10.00	9.959	100	70-130	2	25
Carbon Tetrachloride	10.00	8.567	86	70-130	1	25
Benzene	10.00	9.220	92	70-130	1	25
1,2-Dichloroethane	10.00	9.199	92	70-130	2	25
n-Heptane	10.00	10.12	101	70-130	1	25
Trichloroethene	10.00	9.423	94	70-130	3	25

<sup>\*=</sup> Value outside of QC limits; see narrative

Page 3 of 4 15.0

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



	Volatile Or	ganics in Air	
Lab #:	269994	Location:	Neishi Bros.
Client:	Almar Environmental	Prep:	METHOD
Project#:	1067C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	227528
Units (V):	ppbv	Analyzed:	09/24/15
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
1,2-Dichloropropane	10.00	9.887	99	70-130	2	25
Bromodichloromethane	10.00	9.538	95	70-130	2	25
cis-1,3-Dichloropropene	10.00	9.295	93	70-130	4	25
4-Methyl-2-Pentanone	10.00	11.08	111	70-130	3	25
Toluene	10.00	9.464	95	70-130	1	25
trans-1,3-Dichloropropene	10.00	9.129	91	70-130	1	25
1,1,2-Trichloroethane	10.00	10.28	103	70-130	2	25
Tetrachloroethene	10.00	9.690	97	70-130	5	25
2-Hexanone	10.00	9.426	94	70-130	5	25
Dibromochloromethane	10.00	8.757	88	70-130	1	25
1,2-Dibromoethane	10.00	9.554	96	70-130	0	25
Chlorobenzene	10.00	9.140	91	70-130	5	25
Ethylbenzene	10.00	9.028	90	70-130	6	25
m,p-Xylenes	20.00	19.26	96	70-130	5	25
o-Xylene	10.00	9.632	96	70-130	4	25
Styrene	10.00	9.810	98	70-130	7	25
Bromoform	10.00	5.907 b	59 *	70-130	1	25
1,1,2,2-Tetrachloroethane	10.00	9.400	94	70-130	3	25
4-Ethyltoluene	10.00	10.50	105	70-130	2	25
1,3,5-Trimethylbenzene	10.00	10.22	102	70-130	7	25
1,2,4-Trimethylbenzene	10.00	10.77	108	70-130	4	25
1,3-Dichlorobenzene	10.00	10.09	101	70-130	7	25
1,4-Dichlorobenzene	10.00	9.836	98	70-130	7	25
Benzyl chloride	10.00	9.388	94	70-130	6	25
1,2-Dichlorobenzene	10.00	9.582	96	70-130	5	25
1,2,4-Trichlorobenzene	10.00	8.138	81	70-130	3	25
Hexachlorobutadiene	10.00	7.712	77	70-130	9	25
Naphthalene	10.00	7.748	77	70-130	3	25

Page 4 of 4

<sup>\*=</sup> Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



Volatile Organics in Air					
Lab #:	269994	Location:	Neishi Bros.		
Client:	Almar Environmental	Prep:	METHOD		
Project#:	1067C	Analysis:	EPA TO-15		
Type:	BLANK	Units (M):	ug/m3		
Lab ID:	QC805048	Diln Fac:	1.000		
Matrix:	Air	Batch#:	227528		
Units (V):	ppbv	Analyzed:	09/24/15		

·	()			- ()
Analyte	Result (V)	RL	Resul	
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

Page 1 of 2



Volatile Organics in Air					
Lab #:	269994	Location:	Neishi Bros.		
Client:	Almar Environmental	Prep:	METHOD		
Project#:	1067C	Analysis:	EPA TO-15		
Type:	BLANK	Units (M):	ug/m3		
Lab ID:	QC805048	Diln Fac:	1.000		
Matrix:	Air	Batch#:	227528		
Units (V):	ppbv	Analyzed:	09/24/15		

Analyte	Result (V)	RL	Resu	lt (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

Page 2 of 2



Volatile Organics in Air						
Lab #:	269994	Location:	Neishi Bros.			
Client:	Almar Environmental	Prep:	METHOD			
Project#:	1067C	Analysis:	EPA TO-15			
Matrix:	Air	Batch#:	227529			
Units (V):	ppbv	Analyzed:	09/24/15			
Diln Fac:	1.000					

Type: BS Lab ID: QC805049

Analyte	Spiked	Result (V)	%REC	Limits
Freon 12	5.000	4.737	95	70-130
Freon 114	5.000	5.037	101	70-130
Chloromethane	5.000	5.277	106	70-130
Vinyl Chloride	5.000	4.766	95	70-130
1,3-Butadiene	5.000	4.657	93	70-130
Bromomethane	5.000	4.869	97	70-130
Chloroethane	5.000	3.939	79	70-130
Trichlorofluoromethane	5.000	4.901	98	70-130
Acrolein	5.000	4.099	82	70-130
1,1-Dichloroethene	5.000	5.069	101	70-130
Freon 113	5.000	5.384	108	70-130
Acetone	5.000	4.229	85	70-130
Carbon Disulfide	5.000	5.127	103	70-130
Isopropanol	5.000	3.703	74	70-130
Methylene Chloride	5.000	4.830	97	70-130
trans-1,2-Dichloroethene	5.000	5.797	116	70-130
MTBE	5.000	5.340	107	70-130
n-Hexane	5.000	5.352	107	70-130
1,1-Dichloroethane	5.000	5.068	101	70-130
Vinyl Acetate	5.000	4.798	96	70-130
cis-1,2-Dichloroethene	5.000	5.785	116	70-130
2-Butanone	5.000	4.744	95	70-130
Ethyl Acetate	5.000	5.512	110	70-130
Tetrahydrofuran	5.000	5.447	109	70-130
Chloroform	5.000	5.254	105	70-130
1,1,1-Trichloroethane	5.000	5.532	111	70-130
Cyclohexane	5.000	5.176	104	70-130
Carbon Tetrachloride	5.000	4.646	93	70-130
Benzene	5.000	5.436	109	70-130
1,2-Dichloroethane	5.000	5.274	105	70-130
n-Heptane	5.000	5.684	114	70-130
Trichloroethene	5.000	5.270	105	70-130

<sup>\*=</sup> Value outside of QC limits; see narrative

Page 1 of 4

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



	Volatil	e Organics in Ai	.r	
Lab #: Client: Project#:	269994 Almar Environmental 1067C	Location: Prep: Analysis:	Neishi Bros. METHOD EPA TO-15	
Matrix: Units (V): Diln Fac:	Air ppbv 1.000	Batch#: Analyzed:	227529 09/24/15	

Analyte	Spiked	Result (V)	%REC	Limits
1,2-Dichloropropane	5.000	5.750	115	70-130
Bromodichloromethane	5.000	5.319	106	70-130
cis-1,3-Dichloropropene	5.000	5.522	110	70-130
4-Methyl-2-Pentanone	5.000	6.020	120	70-130
Toluene	5.000	6.383	128	70-130
trans-1,3-Dichloropropene	5.000	5.537	111	70-130
1,1,2-Trichloroethane	5.000	6.477	130	70-130
Tetrachloroethene	5.000	6.423	128	70-130
2-Hexanone	5.000	7.495 b	150 *	70-130
Dibromochloromethane	5.000	5.663	113	70-130
1,2-Dibromoethane	5.000	5.945	119	70-130
Chlorobenzene	5.000	6.324	126	70-130
Ethylbenzene	5.000	6.427	129	70-130
m,p-Xylenes	10.00	13.39 b	134 *	70-130
o-Xylene	5.000	6.729 b	135 *	70-130
Styrene	5.000	5.959	119	70-130
Bromoform	5.000	5.987	120	70-130
1,1,2,2-Tetrachloroethane	5.000	6.336	127	70-130
4-Ethyltoluene	5.000	6.117	122	70-130
1,3,5-Trimethylbenzene	5.000	5.557	111	70-130
1,2,4-Trimethylbenzene	5.000	5.453	109	70-130
1,3-Dichlorobenzene	5.000	5.804	116	70-130
1,4-Dichlorobenzene	5.000	5.462	109	70-130
Benzyl chloride	5.000	5.910	118	70-130
1,2-Dichlorobenzene	5.000	5.628	113	70-130
1,2,4-Trichlorobenzene	5.000	3.807	76	70-130
Hexachlorobutadiene	5.000	5.250	105	70-130
Naphthalene	5.000	4.011	80	70-130

Bromofluorobenzene 91 70-130	Surrogate %REC	Limits
Jenzene 91 /0-130	penzene 91	

<sup>\*=</sup> Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



Volatile Organics in Air						
Lab #:	269994	Location:	Neishi Bros.			
Client:	Almar Environmental	Prep:	METHOD			
Project#:	1067C	Analysis:	EPA TO-15			
Matrix:	Air	Batch#:	227529			
Units (V):	ppbv	Analyzed:	09/24/15			
Diln Fac:	1.000					

Type: BSD Lab ID: QC805050

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
Freon 12	5.000	4.819	96	70-130	2	25
Freon 114	5.000	5.104	102	70-130	1	25
Chloromethane	5.000	4.488	90	70-130	16	25
Vinyl Chloride	5.000	4.754	95	70-130	0	25
1,3-Butadiene	5.000	4.545	91	70-130	2	25
Bromomethane	5.000	4.923	98	70-130	1	25
Chloroethane	5.000	3.684	74	70-130	7	25
Trichlorofluoromethane	5.000	4.729	95	70-130	4	25
Acrolein	5.000	4.221	84	70-130	3	25
1,1-Dichloroethene	5.000	4.952	99	70-130	2	25
Freon 113	5.000	5.311	106	70-130	1	25
Acetone	5.000	3.859	77	70-130	9	25
Carbon Disulfide	5.000	5.196	104	70-130	1	25
Isopropanol	5.000	3.727	75	70-130	1	25
Methylene Chloride	5.000	4.726	95	70-130	2	25
trans-1,2-Dichloroethene	5.000	5.696	114	70-130	2	25
MTBE	5.000	5.600	112	70-130	5	25
n-Hexane	5.000	5.293	106	70-130	1	25
1,1-Dichloroethane	5.000	5.198	104	70-130	3	25
Vinyl Acetate	5.000	4.920	98	70-130	3	25
cis-1,2-Dichloroethene	5.000	5.914	118	70-130	2	25
2-Butanone	5.000	5.092	102	70-130	7	25
Ethyl Acetate	5.000	5.666	113	70-130	3	25
Tetrahydrofuran	5.000	5.529	111	70-130	1	25
Chloroform	5.000	5.314	106	70-130	1	25
1,1,1-Trichloroethane	5.000	5.501	110	70-130	1	25
Cyclohexane	5.000	5.399	108	70-130	4	25
Carbon Tetrachloride	5.000	4.717	94	70-130	2	25
Benzene	5.000	5.410	108	70-130	0	25
1,2-Dichloroethane	5.000	5.335	107	70-130	1	25
n-Heptane	5.000	5.865	117	70-130	3	25
Trichloroethene	5.000	5.341	107	70-130	1	25

<sup>\*=</sup> Value outside of QC limits; see narrative

Page 3 of 4

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



	Volatile Or	rganics in Air	
Lab #:	269994	Location:	Neishi Bros.
Client:	Almar Environmental	Prep:	METHOD
Project#:	1067C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	227529
Units (V):	ppbv	Analyzed:	09/24/15
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
1,2-Dichloropropane	5.000	5.805	116	70-130	1	25
Bromodichloromethane	5.000	5.393	108	70-130	1	25
cis-1,3-Dichloropropene	5.000	5.653	113	70-130	2	25
4-Methyl-2-Pentanone	5.000	6.126	123	70-130	2	25
Toluene	5.000	6.799	136 *	70-130	6	25
trans-1,3-Dichloropropene	5.000	5.561	111	70-130	0	25
1,1,2-Trichloroethane	5.000	6.677	134 *	70-130	3	25
Tetrachloroethene	5.000	6.848	137 *	70-130	6	25
2-Hexanone	5.000	8.163 b	163 *	70-130	9	25
Dibromochloromethane	5.000	6.096	122	70-130	7	25
1,2-Dibromoethane	5.000	6.341	127	70-130	6	25
Chlorobenzene	5.000	6.675	134 *	70-130	5	25
Ethylbenzene	5.000	6.945	139 *	70-130	8	25
m,p-Xylenes	10.00	14.34 b	143 *	70-130	7	25
o-Xylene	5.000	7.231 b	145 *	70-130	7	25
Styrene	5.000	6.213	124	70-130	4	25
Bromoform	5.000	6.372	127	70-130	6	25
1,1,2,2-Tetrachloroethane	5.000	6.855	137 *	70-130	8	25
4-Ethyltoluene	5.000	6.630	133 *	70-130	8	25
1,3,5-Trimethylbenzene	5.000	6.271	125	70-130	12	25
1,2,4-Trimethylbenzene	5.000	6.638	133 *	70-130	20	25
1,3-Dichlorobenzene	5.000	6.851	137 *	70-130	17	25
1,4-Dichlorobenzene	5.000	6.068	121	70-130	11	25
Benzyl chloride	5.000	6.515	130	70-130	10	25
1,2-Dichlorobenzene	5.000	6.513	130	70-130	15	25
1,2,4-Trichlorobenzene	5.000	6.094	122	70-130	46 *	25
Hexachlorobutadiene	5.000	6.762	135 *	70-130	25	25
Naphthalene	5.000	6.556	131 *	70-130	48 *	25

Bromofluorobenzene 91 70-130	Surrogate %REC	Limits
Jenzene 91 /0-130	penzene 91	

Page 4 of 4

<sup>\*=</sup> Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



	Volatile	Organics in Ai	r
Lab #:	269994	Location:	Neishi Bros.
Client:	Almar Environmental	Prep:	METHOD
Project#:	1067C	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC805051	Diln Fac:	1.000
Matrix:	Air	Batch#:	227529
Units (V):	ppbv	Analyzed:	09/24/15

Analyte	Result (V)	RL	Resul	
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

Page 1 of 2



Volatile Organics in Air				
Lab #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-15	
Type:	BLANK	Units (M):	ug/m3	
Lab ID:	QC805051	Diln Fac:	1.000	
Matrix:	Air	Batch#:	227529	
Units (V):	ppbv	Analyzed:	09/24/15	

Analyte	Result (V)	RL	Resu	lt (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	85	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

Page 2 of 2



Volatile Organics in Air				
Lab #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-15	
Matrix:	Air	Batch#:	227579	
Units (V):	ppbv	Analyzed:	09/25/15	
Diln Fac:	1.000			

Type: BS Lab ID: QC805253

Analyte	Spiked	Result (V)	%REC	Limits
Freon 12	10.00	9.946	99	70-130
Freon 114	10.00	10.02	100	70-130
Chloromethane	10.00	9.437	94	70-130
Vinyl Chloride	10.00	9.648	96	70-130
1,3-Butadiene	10.00	9.057	91	70-130
Bromomethane	10.00	10.11	101	70-130
Chloroethane	10.00	9.092	91	70-130
Trichlorofluoromethane	10.00	9.628	96	70-130
Acrolein	10.00	8.400	84	70-130
1,1-Dichloroethene	10.00	8.921	89	70-130
Freon 113	10.00	9.603	96	70-130
Acetone	10.00	9.086	91	70-130
Carbon Disulfide	10.00	8.449	84	70-130
Isopropanol	10.00	8.537	85	70-130
Methylene Chloride	10.00	8.425	84	70-130
trans-1,2-Dichloroethene	10.00	9.224	92	70-130
MTBE	10.00	9.435	94	70-130
n-Hexane	10.00	8.891	89	70-130
1,1-Dichloroethane	10.00	8.980	90	70-130
Vinyl Acetate	10.00	8.748	87	70-130
cis-1,2-Dichloroethene	10.00	8.794	88	70-130
2-Butanone	10.00	9.875	99	70-130
Ethyl Acetate	10.00	9.900	99	70-130
Tetrahydrofuran	10.00	11.26	113	70-130
Chloroform	10.00	9.230	92	70-130
1,1,1-Trichloroethane	10.00	10.28	103	70-130
Cyclohexane	10.00	9.890	99	70-130
Carbon Tetrachloride	10.00	8.415	84	70-130
Benzene	10.00	9.111	91	70-130
1,2-Dichloroethane	10.00	9.246	92	70-130
n-Heptane	10.00	9.678	97	70-130
Trichloroethene	10.00	9.240	92	70-130

<sup>\*=</sup> Value outside of QC limits; see narrative

Page 1 of 4

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



Volatile Organics in Air				
Lab #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-15	
Matrix:	Air	Batch#:	227579	
Units (V):	ppbv	Analyzed:	09/25/15	
Diln Fac:	1.000			

Analyte	Spiked	Result (V)	%REC	Limits
1,2-Dichloropropane	10.00	10.08	101	70-130
Bromodichloromethane	10.00	9.315	93	70-130
cis-1,3-Dichloropropene	10.00	9.153	92	70-130
4-Methyl-2-Pentanone	10.00	10.87	109	70-130
Toluene	10.00	9.241	92	70-130
trans-1,3-Dichloropropene	10.00	9.037	90	70-130
1,1,2-Trichloroethane	10.00	10.63	106	70-130
Tetrachloroethene	10.00	9.256	93	70-130
2-Hexanone	10.00	9.295	93	70-130
Dibromochloromethane	10.00	9.014	90	70-130
1,2-Dibromoethane	10.00	9.582	96	70-130
Chlorobenzene	10.00	8.885	89	70-130
Ethylbenzene	10.00	8.843	88	70-130
m,p-Xylenes	20.00	19.17	96	70-130
o-Xylene	10.00	9.592	96	70-130
Styrene	10.00	9.705	97	70-130
Bromoform	10.00	5.824 b	58 *	70-130
1,1,2,2-Tetrachloroethane	10.00	9.306	93	70-130
4-Ethyltoluene	10.00	10.50	105	70-130
1,3,5-Trimethylbenzene	10.00	10.06	101	70-130
1,2,4-Trimethylbenzene	10.00	10.88	109	70-130
1,3-Dichlorobenzene	10.00	9.906	99	70-130
1,4-Dichlorobenzene	10.00	9.620	96	70-130
Benzyl chloride	10.00	9.607	96	70-130
1,2-Dichlorobenzene	10.00	9.608	96	70-130
1,2,4-Trichlorobenzene	10.00	8.156	82	70-130
Hexachlorobutadiene	10.00	7.454	75	70-130
Naphthalene	10.00	7.948	79	70-130

Surrogate	%REC	Limits	
Bromofluorobenzene	100	70-130	

<sup>\*=</sup> Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



	Volatile Or	ganics in Air	
Lab #:	269994	Location:	Neishi Bros.
Client:	Almar Environmental	Prep:	METHOD
Project#:	1067C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	227579
Units (V):	ppbv	Analyzed:	09/25/15
Diln Fac:	1.000		

Type: BSD Lab ID: QC805254

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
Freon 12	10.00	9.958	100	70-130	0	25
Freon 114	10.00	9.981	100	70-130	0	25
Chloromethane	10.00	9.333	93	70-130	1	25
Vinyl Chloride	10.00	9.503	95	70-130	2	25
1,3-Butadiene	10.00	8.794	88	70-130	3	25
Bromomethane	10.00	9.943	99	70-130	2	25
Chloroethane	10.00	9.058	91	70-130	0	25
Trichlorofluoromethane	10.00	9.739	97	70-130	1	25
Acrolein	10.00	8.214	82	70-130	2	25
1,1-Dichloroethene	10.00	8.840	88	70-130	1	25
Freon 113	10.00	9.679	97	70-130	1	25
Acetone	10.00	8.941	89	70-130	2	25
Carbon Disulfide	10.00	8.253	83	70-130	2	25
Isopropanol	10.00	9.028	90	70-130	6	25
Methylene Chloride	10.00	8.360	84	70-130	1	25
trans-1,2-Dichloroethene	10.00	8.928	89	70-130	3	25
MTBE	10.00	9.141	91	70-130	3	25
n-Hexane	10.00	8.533	85	70-130	4	25
1,1-Dichloroethane	10.00	8.978	90	70-130	0	25
Vinyl Acetate	10.00	8.426	84	70-130	4	25
cis-1,2-Dichloroethene	10.00	8.485	85	70-130	4	25
2-Butanone	10.00	9.699	97	70-130	2	25
Ethyl Acetate	10.00	9.571	96	70-130	3	25
Tetrahydrofuran	10.00	11.73	117	70-130	4	25
Chloroform	10.00	9.050	91	70-130	2	25
1,1,1-Trichloroethane	10.00	10.50	105	70-130	2	25
Cyclohexane	10.00	9.877	99	70-130	0	25
Carbon Tetrachloride	10.00	8.573	86	70-130	2	25
Benzene	10.00	9.266	93	70-130	2	25
1,2-Dichloroethane	10.00	9.249	92	70-130	0	25
n-Heptane	10.00	9.751	98	70-130	1	25
Trichloroethene	10.00	9.408	94	70-130	2	25

<sup>\*=</sup> Value outside of QC limits; see narrative

Page 3 of 4

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



	Volatil	e Organics in Ai	r	
Lab #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-15	
Matrix:	Air	Batch#:	227579	
Units (V):	ppbv	Analyzed:	09/25/15	
Diln Fac:	1.000			

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
1,2-Dichloropropane	10.00	10.14	101	70-130	1	25
Bromodichloromethane	10.00	9.477	95	70-130	2	25
cis-1,3-Dichloropropene	10.00	9.239	92	70-130	1	25
4-Methyl-2-Pentanone	10.00	11.02	110	70-130	1	25
Toluene	10.00	9.045	90	70-130	2	25
trans-1,3-Dichloropropene	10.00	9.152	92	70-130	1	25
1,1,2-Trichloroethane	10.00	10.12	101	70-130	5	25
Tetrachloroethene	10.00	9.134	91	70-130	1	25
2-Hexanone	10.00	9.205	92	70-130	1	25
Dibromochloromethane	10.00	8.516	85	70-130	6	25
1,2-Dibromoethane	10.00	9.494	95	70-130	1	25
Chlorobenzene	10.00	8.941	89	70-130	1	25
Ethylbenzene	10.00	8.895	89	70-130	1	25
m,p-Xylenes	20.00	19.07	95	70-130	1	25
o-Xylene	10.00	9.859	99	70-130	3	25
Styrene	10.00	10.09	101	70-130	4	25
Bromoform	10.00	5.672 b	57 *	70-130	3	25
1,1,2,2-Tetrachloroethane	10.00	9.046	90	70-130	3	25
4-Ethyltoluene	10.00	10.52	105	70-130	0	25
1,3,5-Trimethylbenzene	10.00	10.15	102	70-130	1	25
1,2,4-Trimethylbenzene	10.00	10.97	110	70-130	1	25
1,3-Dichlorobenzene	10.00	10.14	101	70-130	2	25
1,4-Dichlorobenzene	10.00	9.850	99	70-130	2	25
Benzyl chloride	10.00	9.696	97	70-130	1	25
1,2-Dichlorobenzene	10.00	9.865	99	70-130	3	25
1,2,4-Trichlorobenzene	10.00	8.353	84	70-130	2	25
Hexachlorobutadiene	10.00	7.767	78	70-130	4	25
Naphthalene	10.00	8.034	80	70-130	1	25

Page 4 of 4

<sup>\*=</sup> Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



	Volatile Or	ganics in Air	
Lab #:	269994	Location:	Neishi Bros.
Client:	Almar Environmental	Prep:	METHOD
Project#:	1067C	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC805255	Diln Fac:	1.000
Matrix:	Air	Batch#:	227579
Units (V):	ppbv	Analyzed:	09/25/15

Analyte	Result (V)	RL	Resul	
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

Page 1 of 2



	Volatil	e Organics in Ai	r	
Lab #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-15	
Type:	BLANK	Units (M):	ug/m3	
Lab ID:	QC805255	Diln Fac:	1.000	
Matrix:	Air	Batch#:	227579	
Units (V):	ppbv	Analyzed:	09/25/15	

Analyte	Result (V)	RL	Resu]	Lt (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	96	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 #:	269994	Location:	Neishi Bros.		
Client:	Almar Environmental	Prep:	METHOD		
Project#:	1067C	Analysis:	EPA TO-15		
Matrix:	Air	Batch#:	227580		
Units (V):	ppbv	Analyzed:	09/25/15		
Diln Fac:	1.000				

Type: BS Lab ID: QC805256

Analyte	Spiked	Result (V)	%REC	Limits
Freon 12	5.000	4.833	97	70-130
Freon 114	5.000	5.173	103	70-130
Chloromethane	5.000	5.072	101	70-130
Vinyl Chloride	5.000	4.822	96	70-130
1,3-Butadiene	5.000	4.622	92	70-130
Bromomethane	5.000	4.927	99	70-130
Chloroethane	5.000	3.947	79	70-130
Trichlorofluoromethane	5.000	4.968	99	70-130
Acrolein	5.000	4.080	82	70-130
1,1-Dichloroethene	5.000	5.180	104	70-130
Freon 113	5.000	5.334	107	70-130
Acetone	5.000	4.183	84	70-130
Carbon Disulfide	5.000	5.231	105	70-130
Isopropanol	5.000	3.728	75	70-130
Methylene Chloride	5.000	4.851	97	70-130
trans-1,2-Dichloroethene	5.000	5.847	117	70-130
MTBE	5.000	5.636	113	70-130
n-Hexane	5.000	5.373	107	70-130
1,1-Dichloroethane	5.000	5.282	106	70-130
Vinyl Acetate	5.000	4.828	97	70-130
cis-1,2-Dichloroethene	5.000	5.906	118	70-130
2-Butanone	5.000	4.918	98	70-130
Ethyl Acetate	5.000	5.742	115	70-130
Tetrahydrofuran	5.000	5.452	109	70-130
Chloroform	5.000	5.438	109	70-130
1,1,1-Trichloroethane	5.000	5.453	109	70-130
Cyclohexane	5.000	5.288	106	70-130
Carbon Tetrachloride	5.000	4.496	90	70-130
Benzene	5.000	5.497	110	70-130
1,2-Dichloroethane	5.000	5.277	106	70-130
n-Heptane	5.000	5.638	113	70-130
Trichloroethene	5.000	5.141	103	70-130

<sup>\*=</sup> Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units

Page 1 of 4



Volatile Organics in Air					
Lab #:	269994	Location:	Neishi Bros.		
Client:	Almar Environmental	Prep:	METHOD		
Project#:	1067C	Analysis:	EPA TO-15		
Matrix:	Air	Batch#:	227580		
Units (V):	ppbv	Analyzed:	09/25/15		
Diln Fac:	1.000				

Analyte	Spiked	Result (V)	%REC	Limits
1,2-Dichloropropane	5.000	5.682	114	70-130
Bromodichloromethane	5.000	5.402	108	70-130
cis-1,3-Dichloropropene	5.000	5.405	108	70-130
4-Methyl-2-Pentanone	5.000	6.036	121	70-130
Toluene	5.000	6.665 b	133 *	70-130
trans-1,3-Dichloropropene	5.000	5.439	109	70-130
1,1,2-Trichloroethane	5.000	6.702 b	134 *	70-130
Tetrachloroethene	5.000	6.722 b	134 *	70-130
2-Hexanone	5.000	7.814 b	156 *	70-130
Dibromochloromethane	5.000	6.047	121	70-130
1,2-Dibromoethane	5.000	6.234	125	70-130
Chlorobenzene	5.000	6.362	127	70-130
Ethylbenzene	5.000	6.739 b	135 *	70-130
m,p-Xylenes	10.00	13.95 b	139 *	70-130
o-Xylene	5.000	6.944 b	139 *	70-130
Styrene	5.000	6.120	122	70-130
Bromoform	5.000	6.232	125	70-130
1,1,2,2-Tetrachloroethane	5.000	6.666 b	133 *	70-130
4-Ethyltoluene	5.000	6.626 b	133 *	70-130
1,3,5-Trimethylbenzene	5.000	5.878	118	70-130
1,2,4-Trimethylbenzene	5.000	6.007	120	70-130
1,3-Dichlorobenzene	5.000	6.094	122	70-130
1,4-Dichlorobenzene	5.000	5.847	117	70-130
Benzyl chloride	5.000	6.360	127	70-130
1,2-Dichlorobenzene	5.000	6.062	121	70-130
1,2,4-Trichlorobenzene	5.000	5.179	104	70-130
Hexachlorobutadiene	5.000	6.345	127	70-130
Naphthalene	5.000	6.010	120	70-130

Surrogate	%REC	Limits
Bromofluorobenzene	93	70-130

<sup>\*=</sup> Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



	Volatile Or	ganics in Air	
Lab #:	269994	Location:	Neishi Bros.
Client:	Almar Environmental	Prep:	METHOD
Project#:	1067C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	227580
Units (V):	ppbv	Analyzed:	09/25/15
Diln Fac:	1.000		

Type: BSD Lab ID: QC805257

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
Freon 12	5.000	4.772	95	70-130	1	25
Freon 114	5.000	5.129	103	70-130	1	25
Chloromethane	5.000	4.694	94	70-130	8	25
Vinyl Chloride	5.000	4.767	95	70-130	1	25
1,3-Butadiene	5.000	4.642	93	70-130	0	25
Bromomethane	5.000	4.890	98	70-130	1	25
Chloroethane	5.000	3.897	78	70-130	1	25
Trichlorofluoromethane	5.000	4.921	98	70-130	1	25
Acrolein	5.000	4.157	83	70-130	2	25
1,1-Dichloroethene	5.000	5.117	102	70-130	1	25
Freon 113	5.000	5.385	108	70-130	1	25
Acetone	5.000	4.248	85	70-130	2	25
Carbon Disulfide	5.000	5.140	103	70-130	2	25
Isopropanol	5.000	3.581	72	70-130	4	25
Methylene Chloride	5.000	4.786	96	70-130	1	25
trans-1,2-Dichloroethene	5.000	5.657	113	70-130	3	25
MTBE	5.000	5.482	110	70-130	3	25
n-Hexane	5.000	5.304	106	70-130	1	25
1,1-Dichloroethane	5.000	5.176	104	70-130	2	25
Vinyl Acetate	5.000	4.793	96	70-130	1	25
cis-1,2-Dichloroethene	5.000	5.811	116	70-130	2	25
2-Butanone	5.000	4.811	96	70-130	2	25
Ethyl Acetate	5.000	5.673	113	70-130	1	25
Tetrahydrofuran	5.000	5.607	112	70-130	3	25
Chloroform	5.000	5.279	106	70-130	3	25
1,1,1-Trichloroethane	5.000	5.565	111	70-130	2	25
Cyclohexane	5.000	5.455	109	70-130	3	25
Carbon Tetrachloride	5.000	4.635	93	70-130	3	25
Benzene	5.000	5.525	111	70-130	1	25
1,2-Dichloroethane	5.000	5.353	107	70-130	1	25
n-Heptane	5.000	5.817	116	70-130	3	25
Trichloroethene	5.000	5.337	107	70-130	4	25

<sup>\*=</sup> Value outside of QC limits; see narrative

Page 3 of 4 21.0

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



	Volatil	e Organics in Ai	r	
Lab #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-15	
Matrix:	Air	Batch#:	227580	
Units (V):	ppbv	Analyzed:	09/25/15	
Diln Fac:	1.000			

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
1,2-Dichloropropane	5.000	5.888	118	70-130	4	25
Bromodichloromethane	5.000	5.410	108	70-130	0	25
cis-1,3-Dichloropropene	5.000	5.458	109	70-130	1	25
4-Methyl-2-Pentanone	5.000	6.221	124	70-130	3	25
Toluene	5.000	6.467 b	129	70-130	3	25
trans-1,3-Dichloropropene	5.000	5.630	113	70-130	3	25
1,1,2-Trichloroethane	5.000	6.551 b	131 *	70-130	2	25
Tetrachloroethene	5.000	6.434 b	129	70-130	4	25
2-Hexanone	5.000	7.666 b	153 *	70-130	2	25
Dibromochloromethane	5.000	5.952	119	70-130	2	25
1,2-Dibromoethane	5.000	5.944	119	70-130	5	25
Chlorobenzene	5.000	6.270	125	70-130	1	25
Ethylbenzene	5.000	6.529 b	131 *	70-130	3	25
m,p-Xylenes	10.00	14.10 b	141 *	70-130	1	25
o-Xylene	5.000	6.906 b	138 *	70-130	1	25
Styrene	5.000	5.943	119	70-130	3	25
Bromoform	5.000	6.087	122	70-130	2	25
1,1,2,2-Tetrachloroethane	5.000	6.470 b	129	70-130	3	25
4-Ethyltoluene	5.000	6.660 b	133 *	70-130	1	25
1,3,5-Trimethylbenzene	5.000	6.562	131 *	70-130	11	25
1,2,4-Trimethylbenzene	5.000	6.488	130	70-130	8	25
1,3-Dichlorobenzene	5.000	6.226	125	70-130	2	25
1,4-Dichlorobenzene	5.000	6.020	120	70-130	3	25
Benzyl chloride	5.000	6.234	125	70-130	2	25
1,2-Dichlorobenzene	5.000	5.981	120	70-130	1	25
1,2,4-Trichlorobenzene	5.000	6.888	138 *	70-130	28 *	25
Hexachlorobutadiene	5.000	6.537	131 *	70-130	3	25
Naphthalene	5.000	7.949	159 *	70-130	28 *	25

Surrogate	%REC	Limits
Bromofluorobenzene	94	70-130

Page 4 of 4

<sup>\*=</sup> Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



Volatile Organics in Air						
Lab #:	269994	Location:	Neishi Bros.			
Client:	Almar Environmental	Prep:	METHOD			
Project#:	1067C	Analysis:	EPA TO-15			
Type:	BLANK	Units (M):	ug/m3			
Lab ID:	QC805258	Diln Fac:	1.000			
Matrix:	Air	Batch#:	227580			
Units (V):	ppbv	Analyzed:	09/25/15			

·	()			- ()
Analyte	Result (V)	RL	Resul	
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

Page 1 of 2



	Volatile Or	ganics in Air	
Lab #:	269994	Location:	Neishi Bros.
Client:	Almar Environmental	Prep:	METHOD
Project#:	1067C	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC805258	Diln Fac:	1.000
Matrix:	Air	Batch#:	227580
Units (V):	ppbv	Analyzed:	09/25/15

Analyte	Result (V)	RL	Resul	t (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	86	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 #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-15	
Matrix:	Air	Batch#:	227645	
Units (V):	ppbv	Analyzed:	09/28/15	
Diln Fac:	1.000			

Type: BS Lab ID: QC805532

Analyte	Spiked	Result (V)	%REC	Limits
Freon 12	10.00	9.417	94	70-130
Freon 114	10.00	9.625	96	70-130
Chloromethane	10.00	9.048	90	70-130
Vinyl Chloride	10.00	9.426	94	70-130
1,3-Butadiene	10.00	8.747	87	70-130
Bromomethane	10.00	9.846	98	70-130
Chloroethane	10.00	9.247	92	70-130
Trichlorofluoromethane	10.00	9.447	94	70-130
Acrolein	10.00	8.067	81	70-130
1,1-Dichloroethene	10.00	8.896	89	70-130
Freon 113	10.00	9.973	100	70-130
Acetone	10.00	8.946	89	70-130
Carbon Disulfide	10.00	8.300	83	70-130
Isopropanol	10.00	8.483	85	70-130
Methylene Chloride	10.00	8.346	83	70-130
trans-1,2-Dichloroethene	10.00	9.100	91	70-130
MTBE	10.00	9.682	97	70-130
n-Hexane	10.00	8.681	87	70-130
1,1-Dichloroethane	10.00	9.025	90	70-130
Vinyl Acetate	10.00	8.576	86	70-130
cis-1,2-Dichloroethene	10.00	8.540	85	70-130
2-Butanone	10.00	9.736	97	70-130
Ethyl Acetate	10.00	9.884	99	70-130
Tetrahydrofuran	10.00	11.57	116	70-130
Chloroform	10.00	9.076	91	70-130
1,1,1-Trichloroethane	10.00	10.76	108	70-130
Cyclohexane	10.00	10.68	107	70-130
Carbon Tetrachloride	10.00	8.220	82	70-130
Benzene	10.00	9.159	92	70-130
1,2-Dichloroethane	10.00	9.368	94	70-130
n-Heptane	10.00	10.07	101	70-130
Trichloroethene	10.00	9.678	97	70-130

<sup>\*=</sup> Value outside of QC limits; see narrative

Page 1 of 4 23.0

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



	Volatil	e Organics in Ai	r	
Lab #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-15	
Matrix:	Air	Batch#:	227645	
Units (V):	ppbv	Analyzed:	09/28/15	
Diln Fac:	1.000			

Analyte	Spiked	Result (V)	%REC	Limits
1,2-Dichloropropane	10.00	10.46	105	70-130
Bromodichloromethane	10.00	9.510	95	70-130
cis-1,3-Dichloropropene	10.00	9.377	94	70-130
4-Methyl-2-Pentanone	10.00	11.68	117	70-130
Toluene	10.00	9.299	93	70-130
trans-1,3-Dichloropropene	10.00	9.233	92	70-130
1,1,2-Trichloroethane	10.00	10.95	110	70-130
Tetrachloroethene	10.00	9.825	98	70-130
2-Hexanone	10.00	9.317	93	70-130
Dibromochloromethane	10.00	8.684	87	70-130
1,2-Dibromoethane	10.00	9.965	100	70-130
Chlorobenzene	10.00	9.120	91	70-130
Ethylbenzene	10.00	9.123	91	70-130
m,p-Xylenes	20.00	18.99	95	70-130
o-Xylene	10.00	9.574	96	70-130
Styrene	10.00	9.871	99	70-130
Bromoform	10.00	5.667 b	57 *	70-130
1,1,2,2-Tetrachloroethane	10.00	9.847	98	70-130
4-Ethyltoluene	10.00	10.49	105	70-130
1,3,5-Trimethylbenzene	10.00	9.912	99	70-130
1,2,4-Trimethylbenzene	10.00	10.51	105	70-130
1,3-Dichlorobenzene	10.00	9.748	97	70-130
1,4-Dichlorobenzene	10.00	9.595	96	70-130
Benzyl chloride	10.00	9.482	95	70-130
1,2-Dichlorobenzene	10.00	9.294	93	70-130
1,2,4-Trichlorobenzene	10.00	8.210	82	70-130
Hexachlorobutadiene	10.00	7.485	75	70-130
Naphthalene	10.00	7.773	78	70-130

Surrogate	%REC	Limits
Bromofluorobenzene	99	70-130

<sup>\*=</sup> Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



	Volatile	Organics in Ai	r
Lab #:	269994	Location:	Neishi Bros.
Client:	Almar Environmental	Prep:	METHOD
Project#:	1067C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	227645
Units (V):	ppbv	Analyzed:	09/28/15
Diln Fac:	1.000		

Type: BSD Lab ID: QC805533

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
Freon 12	10.00	9.697	97	70-130	3	25
Freon 114	10.00	9.829	98	70-130	2	25
Chloromethane	10.00	9.300	93	70-130	3	25
Vinyl Chloride	10.00	9.519	95	70-130	1	25
1,3-Butadiene	10.00	8.961	90	70-130	2	25
Bromomethane	10.00	10.08	101	70-130	2	25
Chloroethane	10.00	9.661	97	70-130	4	25
Trichlorofluoromethane	10.00	9.598	96	70-130	2	25
Acrolein	10.00	8.069	81	70-130	0	25
1,1-Dichloroethene	10.00	9.011	90	70-130	1	25
Freon 113	10.00	9.986	100	70-130	0	25
Acetone	10.00	9.172	92	70-130	2	25
Carbon Disulfide	10.00	8.446	84	70-130	2	25
Isopropanol	10.00	9.193	92	70-130	8	25
Methylene Chloride	10.00	8.476	85	70-130	2	25
trans-1,2-Dichloroethene	10.00	9.173	92	70-130	1	25
MTBE	10.00	9.700	97	70-130	0	25
n-Hexane	10.00	8.830	88	70-130	2	25
1,1-Dichloroethane	10.00	9.201	92	70-130	2	25
Vinyl Acetate	10.00	8.688	87	70-130	1	25
cis-1,2-Dichloroethene	10.00	8.719	87	70-130	2	25
2-Butanone	10.00	10.00	100	70-130	3	25
Ethyl Acetate	10.00	10.05	101	70-130	2	25
Tetrahydrofuran	10.00	11.56	116	70-130	0	25
Chloroform	10.00	9.252	93	70-130	2	25
1,1,1-Trichloroethane	10.00	10.92	109	70-130	1	25
Cyclohexane	10.00	10.56	106	70-130	1	25
Carbon Tetrachloride	10.00	8.341	83	70-130	1	25
Benzene	10.00	9.235	92	70-130	1	25
1,2-Dichloroethane	10.00	9.315	93	70-130	1	25
n-Heptane	10.00	9.760	98	70-130	3	25
Trichloroethene	10.00	9.455	95	70-130	2	25

<sup>\*=</sup> Value outside of QC limits; see narrative

Page 3 of 4

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



	Volatile (	rganics in Air	
Lab #:	269994	Location:	Neishi Bros.
Client:	Almar Environmental	Prep:	METHOD
Project#:	1067C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	227645
Units (V):	ppbv	Analyzed:	09/28/15
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
1,2-Dichloropropane	10.00	10.53	105	70-130	1	25
Bromodichloromethane	10.00	9.687	97	70-130	2	25
cis-1,3-Dichloropropene	10.00	9.284	93	70-130	1	25
4-Methyl-2-Pentanone	10.00	11.54	115	70-130	1	25
Toluene	10.00	9.242	92	70-130	1	25
trans-1,3-Dichloropropene	10.00	9.215	92	70-130	0	25
1,1,2-Trichloroethane	10.00	10.66	107	70-130	3	25
Tetrachloroethene	10.00	9.751	98	70-130	1	25
2-Hexanone	10.00	9.812	98	70-130	5	25
Dibromochloromethane	10.00	8.860	89	70-130	2	25
1,2-Dibromoethane	10.00	10.06	101	70-130	1	25
Chlorobenzene	10.00	9.038	90	70-130	1	25
Ethylbenzene	10.00	8.873	89	70-130	3	25
m,p-Xylenes	20.00	19.16	96	70-130	1	25
o-Xylene	10.00	9.850	99	70-130	3	25
Styrene	10.00	9.956	100	70-130	1	25
Bromoform	10.00	5.573 b	56 *	70-130	2	25
1,1,2,2-Tetrachloroethane	10.00	9.610	96	70-130	2	25
4-Ethyltoluene	10.00	10.28	103	70-130	2	25
1,3,5-Trimethylbenzene	10.00	9.900	99	70-130	0	25
1,2,4-Trimethylbenzene	10.00	10.50	105	70-130	0	25
1,3-Dichlorobenzene	10.00	10.02	100	70-130	3	25
1,4-Dichlorobenzene	10.00	9.773	98	70-130	2	25
Benzyl chloride	10.00	9.276	93	70-130	2	25
1,2-Dichlorobenzene	10.00	9.595	96	70-130	3	25
1,2,4-Trichlorobenzene	10.00	8.200	82	70-130	0	25
Hexachlorobutadiene	10.00	7.600	76	70-130	2	25
Naphthalene	10.00	8.253	83	70-130	6	25

Surrogate	%REC	Limits
Bromofluorobenzene	95	70-130

Page 4 of 4

<sup>\*=</sup> Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



	Volatil	e Organics in Ai	r	
Lab #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-15	
Type:	BLANK	Units (M):	ug/m3	
Lab ID:	QC805534	Diln Fac:	1.000	
Matrix:	Air	Batch#:	227645	
Units (V):	ppbv	Analyzed:	09/28/15	

Analyte	Result (V)	RL	Result	t (M) RL
Freon 12	ND	0.50	ND	2.5
Freon 114	ND ND	0.50	ND ND	3.5
Chloromethane	ND ND	0.50	ND 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

Page 1 of 2



	Volatile Or	ganics in Air	
Lab #:	269994	Location:	Neishi Bros.
Client:	Almar Environmental	Prep:	METHOD
Project#:	1067C	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC805534	Diln Fac:	1.000
Matrix:	Air	Batch#:	227645
Units (V):	ppbv	Analyzed:	09/28/15

Analyte	Result (V)	RL	Result	t (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	89	70-130	

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units



Fixed Gas Analysis Lab #: 269994 Location: Neishi Bros. Almar Environmental Client: Prep: METHOD ASTM D1946 Project#: 1067C Analysis: 09/21/15 09/21/15 Matrix: Air Sampled: Units: ppmv Received: Units (Mol %): MOL % Analyzed: 09/22/15 Batch#: 227432

Field ID: SG-1 SAMPLE Type:

Lab ID: 269994-001

Diln Fac: 2.130

Result (Mol %) Analyte Result RL RL2,100 2,100 Helium 2,700 0.27 120,000 12 0.21 Oxygen

269994-002 Field ID: SG-2 Lab ID:

Type: SAMPLE Diln Fac: 2.290

Analyte Result (Mol %) RL Result 2,300 2,300 5,100 90,000 0.23 Helium 0.51 0.23 Oxygen 9.0

Field ID: SG-3 Lab ID: 269994-003 Type: SAMPLE Diln Fac: 2.070

Analyte Result RL Result (Mol Helium 2,100 0.21 ND 75,000 2,100 7.5 0.21 Oxygen

Field ID: SG-4 Lab ID: 269994-004 2.060 SAMPLE Diln Fac: Type:

RL Analyte Result Result (Mol %) RLHelium 3,300 2,100 130,000 2,100 13 0.21 Oxygen

BLANK Diln Fac: 1.000 Type: Lab ID: QC804703

Analyte Result RL Result (Mol %) RL Helium 1,000 ND 0.10 ND Oxygen ND 1,000 ND 0.10

ND= Not Detected RL= Reporting Limit Result Mol %= Result in Mole Percent

Page 1 of 1



	Aromatic / Petrole	eum Hydrocarbo	ns in Air	
Lab #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	EPA TO-3	
Analyte:	Gasoline Range Organics C6-C12	Batch#:	227468	
Matrix:	Air	Sampled:	09/21/15	
Units (V):	ppbv	Received:	09/21/15	
Units (M):	ug/m3	Analyzed:	09/23/15	

Field ID	Type	Lab ID	Result (V)	RL	MDL	Result (M)	RL	MDL	Diln Fac
SG-1	SAMPLE	269994-001	65,000	2,100	240	270,000	8,700	970	42.60
SG-2	SAMPLE	269994-002	83,000	2,300	260	340,000	9,400	1,000	45.80
SG-3	SAMPLE	269994-003	6,400	100	12	26,000	420	47	2.070
SG-4	SAMPLE	269994-004	170,000	2,100	230	680,000	8,400	940	41.20
	BLANK	QC804834	ND	50	5.6	ND	200	23	1.000

ND= Not Detected RL= Reporting Limit

MDL= Method Detection Limit

Result M= Result in mass units Result V= Result in volume units

Page 1 of 1



	Fixed	d Gas Analysis	
Lab #:	269994	Location:	Neishi Bros.
Client:	Almar Environmental	Prep:	METHOD
Project#:	1067C	Analysis:	ASTM D1946
Matrix:	Air	Batch#:	227432
Units:	ppmv	Analyzed:	09/22/15
Diln Fac:	1.000		

Type: BS

Lab ID: QC804700

Analyte	Spiked	Result	%REC	Limits
Helium	100,000	96,090	96	70-130
Oxygen		NA		

Type: BSD Lab ID: QC804701

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Helium	100,000	95,720	96	70-130	0	30
Oxygen		NA				



	Fixed	d Gas Analysis		
Lab #:	269994	Location:	Neishi Bros.	
Client:	Almar Environmental	Prep:	METHOD	
Project#:	1067C	Analysis:	ASTM D1946	
Type:	LCS	Diln Fac:	1.000	
Lab ID:	QC804702	Batch#:	227432	
Matrix:	Air	Analyzed:	09/22/15	
Units:	ppmv			

Ana	alyte Spiked	l Result	%REC	Limits
Helium		NA		
Oxygen	2,000	1,831	92	70-130



Fixed Gas Analysis					
Lab #:	269994	Location:	Neishi Bros.		
Client:	Almar Environmental	Prep:	METHOD		
Project#:	1067C	Analysis:	ASTM D1946		
Field ID:	SG-1	Units (Mol %):	MOL %		
Type:	SDUP	Diln Fac:	2.130		
MSS Lab ID:	269994-001	Batch#:	227432		
Lab ID:	QC804704	Sampled:	09/21/15		
Matrix:	Air	Received:	09/21/15		
Units:	ppmv	Analyzed:	09/22/15		

Analyte	MSS Result	Result	RL	Result (M	Mol %)	RL	RPD	Lim
Helium	2,683	2,685	2,130	0.2685		0.2130	0	30
Oxygen	123,600	123,600	2,130	12.36		0.2130	0	30

RL= Reporting Limit

RPD= Relative Percent Difference

Result Mol %= Result in Mole Percent

Page 1 of 1



Aromatic / Petroleum Hydrocarbons in Air					
Lab #:	269994	Location:	Neishi Bros.		
Client:	Almar Environmental	Prep:	METHOD		
Project#:	1067C	Analysis:	EPA TO-3		
Analyte:	Gasoline Range Organics C6-C12	Diln Fac:	1.000		
Matrix:	Air	Batch#:	227468		
Units (V):	ppbv	Analyzed:	09/23/15		

Type	Lab ID	Spiked	Result (V)	%REC	Limits	RPD	Lim
BS	QC804832	210.0	149.9	71	70-130		
BSD	QC804833	210.0	150.0	71	70-130	0	25

Page: 1 of 1

Sample ID: 269994-001,227468

Data File: c:\varianws\data\092315\266\_009.run

 Sample List:
 c:\varianws\\092315.smp

 Method:
 c:\varianws\\to3\_103114.mth

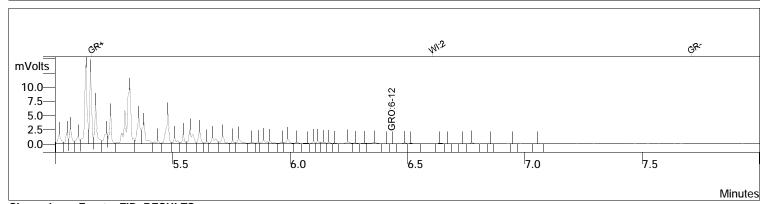
 Acquisition Date:
 09/23/2015 13:41:27

 Calculation Date:
 09/23/2015 13:53:29

Instrument ID: MSAIR03 Operator: TO-3

Injection Notes: 42.6x,c00274=c00262/20

Multiplier: 1.000 Divisor: 1.000



Channel: Front = FID RESULTS

#	RT (min)	Peak Name	Area	Result (ppbv)
1	6.431	GRO:6-12	56709	1526.474
		Totals	56709	1526.474

Integration ParametersInitial Tangent %:0Initial Peak Width (sec):4Initial Peak Reject Value:50.000

5

#### **Data Handling Time Events**

(min)	Event
0.009 4.801	
5.155	GR on
6.607	WI 2.0 sec
7 708	GR off

Initial S/N Ratio:

Page: 1 of 1

Sample ID: 269994-002,227468

Data File: c:\varianws\data\092315\266\_010.run

 Sample List:
 c:\varianws\092315.smp

 Method:
 c:\varianws\to3\_103114.mth

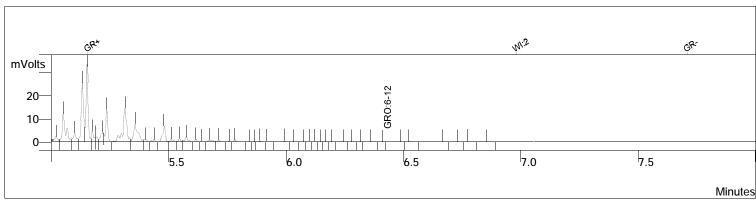
 Acquisition Date:
 09/23/2015 13:57:51

 Calculation Date:
 09/23/2015 14:09:53

Instrument ID: MSAIR03 Operator: TO-3

Injection Notes: 45.8x,c00187=c00080/20

Multiplier: 1.000 Divisor: 1.000



Channel: Front = FID RESULTS

#	RT (min)	Peak Name	Area	Result (ppbv)	
1	6.431	GRO:6-12	67695	1822.200	
		Totals	67695	1822.200	

**Integration Parameters** 

Initial Tangent %:0Initial Peak Width (sec):4Initial Peak Reject Value:50.000Initial S/N Ratio:5

(min)	Event
0.009 4.801	
5.155	GR on
6.980	WI 2.0 sec
7.708	GR off

Page: 1 of 1

Sample ID: 269994-003,227468

Data File: c:\varianws\data\092315\266\_011.run

 Sample List:
 c:\varianws\092315.smp

 Method:
 c:\varianws\to3\_103114.mth

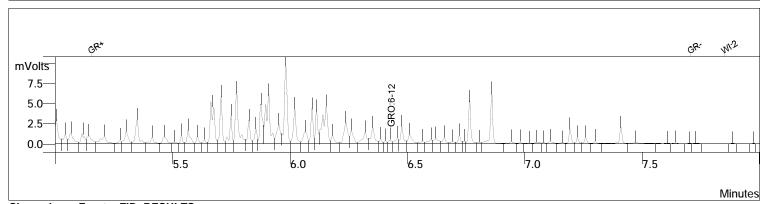
 Acquisition Date:
 09/23/2015 14:14:02

 Calculation Date:
 09/23/2015 14:26:04

Instrument ID: MSAIR03 Operator: TO-3

Injection Notes: 2.07x,c00257

Multiplier: 1.000 Divisor: 1.000



Channel: Front = FID RESULTS

#	RT (min)	Peak Name	Area	Result (ppbv)
1	6.431	GRO:6-12	113985	3068.220
		Totals	113985	3068.220

**Integration Parameters** 

Initial Tangent %:0Initial Peak Width (sec):4Initial Peak Reject Value:50.000Initial S/N Ratio:5

(min)	Event
0.009	II on
4.801	II off
5.155	GR on
7.708	GR off
7 852	WI 2.0 sec

Page: 1 of 1

Sample ID: 269994-004,227468

Data File: c:\varianws\data\092315\266\_012.run

 Sample List:
 c:\varianws\092315.smp

 Method:
 c:\varianws\to3\_103114.mth

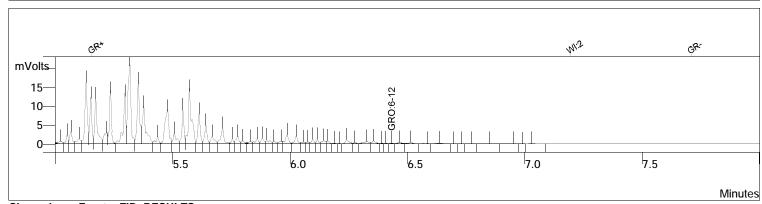
 Acquisition Date:
 09/23/2015 14:29:57

 Calculation Date:
 09/23/2015 14:41:58

Instrument ID: MSAIR03 Operator: TO-3

Injection Notes: 41.2x,c00378=c00337/20

Multiplier: 1.000 Divisor: 1.000



Channel: Front = FID RESULTS

#	RT (min)	Peak Name	Area	Result (ppbv)	
1	6.431	GRO:6-12	150903	4061.977	
		Totals	150903	4061.977	

Integration Parameters

Initial Tangent %: 0
Initial Peak Width (sec): 4
Initial Peak Reject Value: 50.000
Initial S/N Ratio: 5

Time (min)	Event
0.009	II on
4.801	II off
5.155	GR on
7.193	WI 2.0 sec
7.708	GR off

Page: 1 of 1

Sample ID: ccv/bs,qc804832

Data File: c:\varianws\data\092315\266\_001.run

 Sample List:
 c:\varianws\\092315.smp

 Method:
 c:\varianws\\to3\_103114.mth

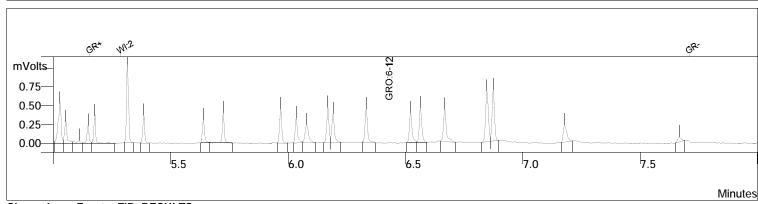
 Acquisition Date:
 09/23/2015 11:34:35

 Calculation Date:
 09/23/2015 11:46:37

Instrument ID: MSAIR03 Operator: TO-3

Injection Notes: 227468,s28015,1x

Multiplier: 1.000 Divisor: 1.000



Channel: Front = FID RESULTS

#	RT (min)	Peak Name	Area	Result (ppbv)
1	6.431	GRO:6-12	5567	149.839
		Totals	5567	149.839

**Integration Parameters** 

Initial Tangent %: 0
Initial Peak Width (sec): 4
Initial Peak Reject Value: 50.000
Initial S/N Ratio: 5

Time (min)	Event
0.009	II on
4.801	II off
5.155	GR on
5.287	WI 2.0 sec
7.708	GR off