



Air Quality Attribution Study Report

City Terrace
East Los Angeles, California

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County of Los Angeles

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Executive Summary

Roux Associates, Inc. (Roux) has prepared this Air Quality Attribution Study Report (Report) on behalf of the County of Los Angeles (County) to measure ambient/outdoor air quality in and around the City Terrace Community (Community) in East Los Angeles, Los Angeles County, California, and evaluate potential sources of certain volatile organic compounds (VOCs) and methane in indoor and outdoor air within the Community (Figure 1).

Ambient/outdoor air conditions were previously investigated in the Community by Roux in the City Terrace Soil Gas and Indoor Air Sampling Report (Roux, 2023) and by consultant Citadel EHS (Citadel), in their Sampling Data Report (Citadel, 2023). These reports document elevated concentrations of certain VOCs, particularly benzene in ambient/outdoor air. Concentrations of benzene in ambient/outdoor air detected were consistent throughout the Community and are comparable to benzene levels measured throughout the greater Los Angeles area. The relative consistency of the concentrations measured at different locations and the lack of significantly elevated concentrations “hot spots” in any particular area of the Community suggest that the benzene levels are not associated with a particular point source, either within the Community or in the immediate vicinity of the Community, prompting this attribution study to better understand the relationship between the ambient/outdoor air quality and potential sources of VOCs (primarily benzene) and methane.

The Community is situated in close proximity to two major freeways, two former landfills, and several gasoline service stations/diesel fueling facilities. An evaluation of each of these potential sources of VOCs and methane in the Community was addressed by this attribution investigation via three distinct studies with objectives and scopes as summarized below.

- **Peak/Minimum Traffic Study:** To evaluate the effect that traffic and variation of traffic volume have on VOC and methane in ambient/outdoor air within the Community, a total of 26 ambient/outdoor air samples were collected over three rounds of sampling at the following four locations: adjacent to 710 Freeway, adjacent to 10 Freeway, adjacent to 10/710 Freeway intersection, and within the Community.
- **Lateral Variation Study:** To evaluate the effect that distance from the former nearby landfills and freeways has on VOC and methane concentrations in ambient/outdoor air in the Community, a total of 32 ambient/outdoor air samples were collected over the course of three rounds of sampling at 10 locations. The sampled locations were adjacent to former Cogen Landfill, adjacent to former Blanchard Landfill, intersection of the 710 and 10 Freeways, 0.125 miles from nearest freeway, 0.25 miles from nearest freeway, 0.50 miles from nearest freeway, 0.75 miles from nearest freeway, 0.25 miles from the 10 Freeway, 0.5 miles from the 10 Freeway, and 0.75 miles from the 10 Freeway.
- **Gasoline Service Station / Fueling Facilities Study:** To evaluate the effect that nearby active fueling facilities/gasoline service stations have on VOCs and methane in ambient/outdoor air in the Community. A total of six ambient/outdoor air samples (five primary and one duplicate) were collected at the following five locations: four fueling sites and one location in the Community distant from the gas stations/fueling facilities.

As with previous investigations, VOCs and methane were detected throughout the Community in ambient/outdoor air. In particular, benzene exceeded residential screening levels (SLs) in nearly all of the

samples collected. While other VOCs and methane were detected in the samples, there were far fewer screening level exceedances, and detections were typically isolated and not indicative of a significant release. A summary of the results and conclusions is provided below.

- **Benzene:** Benzene was detected in all of the ambient/outdoor air samples collected and analyzed in the study, with all concentrations exceeding the residential SL of 0.097 $\mu\text{g}/\text{m}^3$ (DTSC, rev. 2022), indicating widespread and consistent distribution of benzene throughout the Community. The range of concentrations were consistent with, or lower than, established background conditions throughout the greater Los Angeles area. These concentrations are primarily from vehicle exhaust (typical daily benzene concentrations in Los Angeles Air Basin ambient/outdoor air range from 0.73 to 1.25 $\mu\text{g}/\text{m}^3$, with a Basin-wide average of 0.92 $\mu\text{g}/\text{m}^3$).¹

Benzene concentrations are generally elevated in close proximity to freeways. Increased traffic volume is correlated with higher concentrations of benzene in ambient/outdoor air. Locations in close proximity to a freeway (within 500 feet) have modestly elevated benzene concentrations compared to the wider Los Angeles ambient/outdoor air. To the contrary, County fueling facilities, nearby privately operated gasoline service stations, and the downwind former landfills do not have any measurable effect on benzene concentrations within the Community.

- **Other VOCs:** Along with benzene, the other BTEX compounds (toluene, ethylbenzene, and xylenes) commonly associated with petroleum products were detected in all ambient/outdoor air samples collected, but at concentrations lower than the corresponding SLs. Three additional VOCs, chloroform, methylene chloride, and trichloroethene (TCE), were detected in exceedance of one or more applicable SL in ambient/outdoor air samples over the course of the investigation. However, these analytes were only detected in a small subset of the samples; they were not consistently detected throughout the investigation and are thus not considered to be contaminants of concern in ambient/outdoor air.
- **Methane:** Methane was detected in the majority of samples, but below the methane Lower Explosive Limit (LEL) of 50,000 parts per million by volume (ppmv) by multiple orders of magnitude and is thus not considered to be a contaminant of concern in ambient/outdoor air.

¹ <http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v/mates-v-air-monitoring-dashboard>

1. Introduction

Roux Associates, Inc. (Roux) has prepared this *Air Quality Attribution Study Report* (Report) on behalf of the County of Los Angeles (County) to document an evaluation of the ambient/outdoor air quality in and around the City Terrace Community (Community) in East Los Angeles, Los Angeles County, California (Figure 1). The evaluation included sampling and analysis of ambient/outdoor air associated with nearby features including interstate freeways, landfills, and fueling facilities. Ambient/outdoor air conditions were previously investigated in the Community by Roux, as described in the *City Terrace Soil Gas and Indoor Air Sampling Report* (Roux, 2023) and by consultant Citadel EHS (Citadel), as presented in their *City Terrace/Former Cogen Landfill Property Sampling Data Report* (Citadel, 2023). Elevated detections of certain volatile organic compounds (VOCs), particularly benzene, were identified in ambient/outdoor air.

The Community is in close proximity to two major freeways, two former landfills, and several gasoline service stations/diesel fueling facilities. Freeways are known to be a source of VOCs, particularly benzene, toluene, ethylbenzene, and xylenes (BTEX compounds), due to fuel exhaust from vehicles, and historical landfills have the potential to contribute methane and VOCs to ambient/outdoor air conditions as a result of the natural attenuation of organic waste. Gasoline service stations/diesel fueling facilities are also known to be a source of VOCs due to emissions of vapors during fuel dispensing, as well as the presence of underground storage tanks (USTs) and/or aboveground storage tanks (ASTs) that contain the petroleum products.

1.1 Objectives

Due to elevated detections in previous investigations of VOCs, particularly benzene, the County contracted Roux to investigate ambient/outdoor air conditions in proximity to potential sources of VOCs (primarily benzene) and methane within the Community. The attribution investigation documented in this report included three distinct studies with objectives as summarized below:

- **Peak/Minimum Traffic Study:** Evaluate the effect that traffic and variation of traffic volume have on VOC and methane impacts to ambient/outdoor air within the Community;
- **Lateral Variation Study:** Evaluate the effect that horizontal distance from the former Cogen Landfill and nearby freeways has on VOC and methane impacts to ambient/outdoor air within the Community; and,
- **Gasoline Service Station / Fueling Facilities Study:** Evaluate the effect that nearby active fueling facilities/gasoline service stations have on VOC and methane impacts to ambient/outdoor air within the Community.

1.2 Scope of Work

The scope of work completed by Roux for this investigation is summarized below. Investigation activities included the collection of limited-duration ambient/outdoor air samples as well as 24-hour ambient/outdoor air samples to evaluate the objectives described above. The areas of investigation and sampling locations within the vicinity of the Community are shown in Figure 3.

Roux collected a total of 63 ambient/outdoor air samples (57 primary and six duplicate samples) as part of this investigation. These three data sets were used to evaluate the ambient/outdoor air quality (VOCs and methane) during peak and minimum traffic periods, with distance from the nearby freeways and landfill, and in the vicinity of local fueling facilities.

2. Background

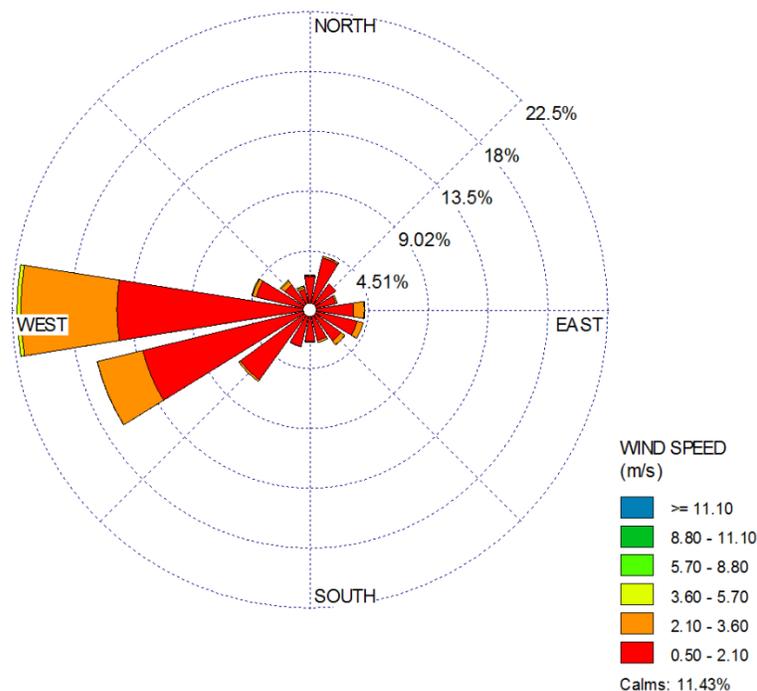
2.1 Study Area Description

For the purposes of this Attribution Study Report, the Study Area is considered to be the residential portion of the Community within approximately 1,000 feet of the former Cogen Landfill as well as the surrounding area generally bound by the San Bernardino (I-10) Freeway to the north and the Long Beach (I-710) Freeway to the east (Figures 1 and 2).

The Community is an unincorporated community of East Los Angeles within Los Angeles County, California. The Community is bounded to the north by East City Terrace Drive, to the west by North Eastern Avenue, to the south by Hauck Street, and to the east by Rollins Drive/Sheriff Road. The Study Area includes sampling locations along public rights of way, along I-10 / I-710 on-ramps, and on County property between the eastern boundary of City Terrace and the I-710 Freeway (Figure 3).

Two historical landfills, the former Cogen Landfill and the former Blanchard Landfill, both of which were privately owned and operated by the BKK Corporation, ceased operations in 1958, and are located to the southeast of the Community.

The prevailing wind direction within the study area has been documented to be blowing west to east. This is supported through data collected from the USC/Downtown weather station by the South Coast Air Quality Management District (SCAQMD) and represented by wind rose reproduced below. Where appropriate, the studies conducted herein were undertaken only when the forecast wind direction was aligned with the prevailing direction (west to east) or when conditions were considered to be calm (i.e., no wind).



2.2 Previous Investigations

In 2021, soil gas sampling and ambient/outdoor air sampling were conducted within the Community by Citadel at the direction of the County. A total of 67 soil gas samples and 26 ambient/outdoor air samples were collected in the vicinity of 27 residential properties and two additional locations in an alleyway. These samples were analyzed for the presence of VOCs and methane. The results of the investigation identified elevated concentrations of VOCs, particularly benzene.

In February and March 2023, Roux performed an additional assessment of soil gas, indoor air, and ambient/outdoor air in the Community. The assessment was performed at all 23 of the residences included in the earlier Citadel investigation that agreed to have additional testing performed (Roux, 2023). Numerous VOCs and methane were detected across the Community in soil gas, indoor air, and ambient/outdoor air. While VOCs other than benzene were detected (along with methane), there were far fewer screening level exceedances, and detections were typically isolated and not indicative of a broad release across the community. In contrast, benzene exceeded residential screening levels (SLs) for indoor air in virtually all of the samples collected.

Concentrations of benzene in ambient/outdoor air were consistent across the Community, ranging from 0.40 to 1.1 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), in line with benzene levels experienced throughout the greater Los Angeles area.² The spatial distribution and lack of significantly elevated concentrations in any particular area of the Community suggest that the benzene impacts are not associated with a particular point source, either within the Community or immediate vicinity, prompting this attribution study to better understand the relationship between the ambient/outdoor air quality, the former Cogen and Blanchard Landfills, the nearby interstate freeways, and the various nearby gasoline service stations/fueling facilities.

² Typical daily benzene concentrations in Los Angeles Air Basin ambient/outdoor air range from 0.73 to 1.25 $\mu\text{g}/\text{m}^3$, with a Basin-wide average of 0.92 $\mu\text{g}/\text{m}^3$ (2018-2019) <http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v/mates-v-air-monitoring-dashboard>

3. Attribution Study Implementation

This attribution study was performed on behalf of the County to investigate the effect that traffic and variation of traffic volume, distance from the nearby freeways and landfill properties, and nearby active fueling facilities have on ambient/outdoor air quality, specifically VOCs and methane, in the vicinity of the Community. The field activities were completed between April 7 and May 11, 2023. All work described in this report was conducted under the direction of a California-registered Professional Civil Engineer.

3.1 Pre-Field Activities

No subsurface work was carried out during the implementation of this fieldwork; thus, no permits were required. Where necessary, access to sampling locations on County property was coordinated with Los Angeles County Fleet Management and the Los Angeles County Fire Department.

3.1.1 Health and Safety Plan

Prior to the start of field activities, Roux reviewed and updated the Site-specific HASP dated February 17, 2023, to ensure worker safety (Roux, 2023). All fieldwork associated with the investigation was performed in accordance with the Site-specific HASP. The HASP identified the potential physical and chemical hazards at the Site that could present a potential threat to workers during the authorized scope of work. The HASP also identified best practices related to the reduction of risk due to the COVID-19 virus. Field workers acknowledged their familiarity with all safety procedures and indicated their intent to follow the HASP by signing the HASP after the tailgate safety meeting, which took place at the beginning of each field day.

3.2 Peak/Minimum Traffic Study

To evaluate the effects of traffic and variation of traffic volume on VOCs and methane in ambient/outdoor air, Roux collected limited-duration (approximately three-hour) ambient/outdoor air samples during periods of peak traffic flow (between 07:00 and 10:00 a.m.) and minimum traffic flow (between 01:00 and 04:00 a.m.) at four sample locations (shown in Figure 3).

The four sampling locations were as:

- Adjacent to the 710 Freeway,
- Adjacent to the 10 Freeway,
- At the intersection of the 710 and 10 Freeways, and
- At a location central to the Community.

To aggregate varying traffic patterns, Roux conducted three rounds of sampling on (non-repeated) weekdays on April 7, April 12, April 18, and April 26, 2023 (see Section 3.2.2 for details). Sampling and analysis procedures are discussed in the following sections.

3.2.1 Areas of Investigation

The Peak/Minimum Traffic Study was conducted at four locations in the public right of way (as shown in Figure 3).

Areas of Investigation – Peak/Minimum Traffic Study			
Location Description	Approximate Location	Approximate Coordinates	Associated Sample IDs
Adjacent to 710 Freeway	North Shoulder of I-710 NB Exit 21 Off-Ramp	34.057627, -118.164829	AA-710-20230407-0058 AA-710-20230412-0105 AA-710-20230418-0104 AA-710-20230407-0700 AA-710-20230407-0700-D AA-710-20230418-0707 AA-710-20230426-0700
Adjacent to 10 Freeway	3912 Perry Street, Los Angeles, CA	34.056696, -118.181205	AA-10-20230407-0108 AA-10-20230412-0110 AA-10-20230418-0105 AA-10-20230407-0705 AA-10-20230418-0704 AA-10-20230426-0645
Adjacent to 10/710 Freeway Intersection	North Shoulder of I-710 NB Ramp to I-10 WB	34.061136, -118.163911	AA-710/10-20230407-0110 AA-710/10-20230412-0100 AA-710/10-20230418-0057 AA-710/10-20230418-0057-D AA-710/10-20230407-0651 AA-710/10-20230418-0656 AA-710/10-20230426-0705
Community	4350 Hauck Street, Los Angeles, CA	34.054414, -118.170938	AA-CT-20230407-0100 AA-CT-20230412-0055 AA-CT-20230418-0055 AA-CT-20230407-0655 AA-CT-20230418-0655 AA-CT-20230426-0650

3.2.2 Sampling – Peak/Minimum Traffic Study

During this portion of the study, Roux collected a total of 26 ambient/outdoor air samples (24 primary and two duplicate). Samples were collected in individually certified six-liter SUMMA® canisters with three-hour flow controllers at a height of approximately four to six feet above the ground at locations in the public right of way.

On April 12, 2023, sample collection during peak traffic hours was prevented due to defective flow controllers. Replacement samples were collected during peak traffic hours on April 26.

Samples were labeled, logged on a chain of custody form, and transported to a California certified laboratory, Pace Analytical Environmental Sciences, for analysis. The samples were analyzed for VOCs using USEPA Method TO-15 (SIM) and methane using ASTM Method D1946.

3.3 Lateral Variation Study

The lateral variation portion of the study was intended to evaluate the relationship between VOC and methane impacts to ambient/outdoor air, prevailing wind direction, and lateral distance from potential sources. The potential sources consisted of the I-710 Freeway, the I-10 Freeway, the former Cogen Landfill, and the former Blanchard Landfill. This portion of the study was implemented across three 24-hour sampling events initiated on April 17, April 19, and April 27, 2023.

3.3.1 Areas of Investigation

The lateral variation portion of the study was conducted along two distinct (but intersecting) transects (Figure 5).

The first transect was positioned in alignment with the prevailing wind direction (Prevailing Wind Sampling Transect). Collection of 24-hour ambient/outdoor air samples was carried out at four sample locations spaced 0.25 miles apart along a west-east transect (the direction of prevailing wind) starting at the I-10 Freeway to the west and ending within the Community vicinity to the east. Concurrent 24-hour ambient/outdoor air samples were also collected adjacent to the former Cogen Landfill and former Blanchard Landfill to determine any possible influence from the former solid waste facilities. This portion of the study was implemented on days with neutral wind conditions or where wind direction was forecast to be in the prevailing direction (west to east), consistent with normal conditions.

The second transect was positioned to evaluate VOC and methane impacts in ambient/outdoor air against overall lateral distance from the nearby freeways (Separation Sampling Transect). Collection of 24-hour ambient/outdoor air samples was carried out at five sample locations: one at the I-10 / I-710 interchange and then at approximately 0.125, 0.25, 0.5, and 0.75 miles from any freeway.

It is noted that a reasonable distance to consider as the near source zone for traffic impacts is thought to be approximately 500 meters (0.3 miles)^{3,4,5}. This is consistent with the USEPA guidance on the influence of roadways on air quality, which references 500 to 600 feet ⁶ (0.095 to 0.114 miles) as a reasonable distance to observe influence on air quality for particulates (non-particulates, including VOCs and methane, have the potential to impact a greater distance due to their gaseous state).

An overview of the Lateral Variation Study sampling locations and sample IDs is illustrated in Figure 5 and provided in the table below.

³ M Johnson, V Asakov, J S Touma, S Mukerjee, H Ozkaynak, *Evaluation of Land-Use Regression Models Used to Predict Air Quality Concentrations in an Urban Area*, Atmospheric Environment, September 2010.

⁴ J Kim, S Smorodinsky, M Lipsett, B C Singer, A T Hodgson, B Ostro, *Traffic-related Air Pollution near Busy Roads, The East Bay Children's Respiratory Health Study*, American Journal of Respiratory and Critical Care Medicine, May 2004.

⁵ Y Zhu, W Hinds, S Kim, C Sioutas, *Concentration and Size Distribution of Ultrafine Particles Near a Major Highway*, Journal of the Air & Waste Management Association, 52:9, 1032-1042, DOI: 10.1080/10473289.2002.10470842, September 2002.

⁶ *Near Roadway Air Pollution and Health: Frequently Asked Questions*, Office of Transportation and Air Quality, August 2014

Areas of Investigation – Lateral Variation Study			
Location Description	Approximate Location	Approximate Coordinates	Associated Sample IDs
Separation Sampling Transect			
Adjacent to former Cogen Landfill	1198 Sheriff Road, Monterey Park	34.055052, -118.168696	AA-CL-20230417 AA-CL-20230419 AA-CL-20230427
Adjacent to former Blanchard Landfill	1158 Sheriff Road, Monterey Park	34.050492, -118.169277	AA-BL-20230417 AA-BL-20230419 AA-BL-20230427
710/10 Intersection	South shoulder of on ramp from West Ramona Blvd to I-710 Southbound	34.060392, -118.166019	AA-710/10-20230417 AA-710/10-20230419 AA-710/10-20230427 AA-710/10-20230427-D
0.125 miles from Nearest Freeway	600 Centre Plaza Drive, Monterey Park	34.059674, -118.166640	AA-0.125MI-20230417 AA-0.125MI-20230417-D AA-0.125MI-20230419 AA-0.125MI-20230427
0.25 miles from Nearest Freeway	1452 Volney Drive, Los Angeles	34.057115, -118.169291	AA-0.25MI-20230417 AA-0.25MI-20230419 AA-0.25MI-20230427
0.50 miles from Nearest Freeway	1126 North Hazard Avenue, Los Angeles	34.050260, -118.177912	AA-0.5MI-20230417 AA-0.5MI-20230419 AA-0.5MI-20230427
0.75 miles from Nearest Freeway	3822 Folsom Street, Los Angeles	34.044893, -118.184159	AA-0.75MI-20230417 AA-0.75MI-20230419 AA-0.75MI-20230419-D AA-0.75MI-20230427
Prevailing Wind Sampling Transect			
0.25 miles from 10 Freeway	3828 City Terrace Drive, Los Angeles	34.055647, -118.182434	AA-PW1-20230417* AA-PW1-20230419 AA-PW1-20230427
0.5 miles from 10 Freeway	4026 City Terrace Drive, Los Angeles	34.055504, -118.178360	AA-PW2-20230417 AA-PW2-20230419 AA-PW2-20230427
0.75 miles from 10 Freeway	4243 Woolwine Drive, Los Angeles	34.056270, -118.174257	AA-PW3-20230417 AA-PW3-20230419 AA-PW3-20230427

* AA-PW1-20230417 could not be collected due to SUMMA canister theft during deployment.

3.3.2 Sampling – Lateral Variation Study

Over the course of the Lateral Variation Study, Roux collected a total of 32 ambient/outdoor air samples (29 primary and three duplicate). Samples were collected and analyzed using the same methods described in Section 3.2.2.

3.4 Gasoline Service Station / Fueling Facilities Study

To evaluate the effects of nearby gasoline service stations/fueling facilities (including USTs/ASTs) on VOCs and methane in ambient/outdoor air, Roux collected 24-hour ambient/outdoor air samples at four active petroleum product fueling locations. For comparison, a 24-hour ambient/outdoor air sample was also collected at a location within the Community not in the vicinity of the gasoline service stations for comparison, concurrent with the fueling facility samples. Sample locations are shown in Figure 6. Sampling and analysis procedures are discussed in the following sections.

3.4.1 Access and Areas of Investigation

The investigation was conducted at five sample locations (shown in Figure 6).

Areas of Investigation – Fueling Facilities Study			
Location Description	Approximate Location	Approximate Coordinates	Associated Sample IDs
Fueling Facilities			
Fueling Site A (UST-A)	1600 North Eastern Avenue	34.060074, -118.172971	AA-UST-A-20230511
Fueling Site B (UST-B)	1535 North Eastern Avenue	34.059105, -118.172852	AA-UST-B-20230511
Fueling Site C (UST-C)	1104 North Eastern Avenue	34.049719, -118.171566	AA-UST-C-20230511 AA-UST-C-20230511-D
Fueling Site D (UST-D)	1108 Sheriff Road	34.050054, -118.170863	AA-UST-D-20230511
Community Comparison Sample			
Community	4342-4398 Hauck Street	34.054567, -118.170549	AA-CT-20230511

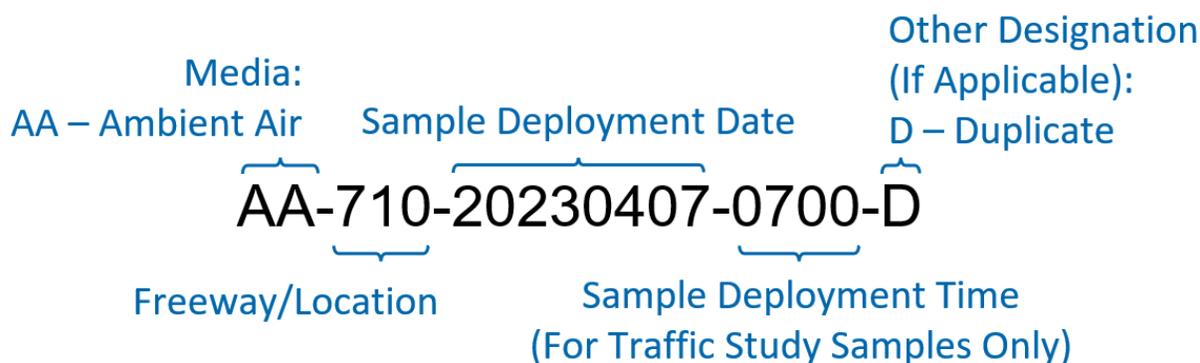
Fueling Site A and Fueling Site B are self-service gasoline service stations operated by Mobil and Chevron, respectively. Fueling Site C is the location of a self-service fueling facility operated by Los Angeles County Fleet Management, and it is the primary fueling facility for the Sheriff’s Department. Fueling Sites A, B, and C are suspected to operate at least one gasoline UST. Fueling Site D is the location of a single self-service diesel fuel dispenser and associated AST operated by Los Angeles County Fire Station #1. Each of these fueling facilities are active fueling operations with continuous daily use.

3.4.2 Sampling – Fueling Facilities Study

Over the course of this phase of the investigation, Roux collected a total of six ambient/outdoor air samples (five primary and one duplicate). Samples were collected and analyzed using the same methods described in Section 3.2.2.

3.5 Sample Identification

Samples collected were designated with a unique identifier using the following format:



The above example represents a duplicate ambient/outdoor air sample collected at 07:00 a.m. from the Peak/Minimum Traffic Study at the sample location adjacent to the 710 Freeway. Ambient/outdoor air samples collected for the Lateral Variation Study and Fueling Facilities Study omit the sample deployment time.

3.6 Field Sampling Quality Control

Field quality assurance/quality control samples were collected during the investigation to assess whether reported concentrations of chemicals identified through analytical testing were of acceptable quality. Six ambient/outdoor air sample field duplicates were collected to check for sampling and analytical precision. The six duplicate ambient/outdoor air samples were collected, labeled (all duplicate sample IDs end with a “-D” designation), and stored in the same manner as the primary samples. The duplicates were analyzed for the same analytes according to the same methods as the primary samples.

No significant anomalies were observed between primary and duplicate samples with respect to VOCs. The average relative percentage difference (RPD) between primary and duplicate ambient/outdoor air sample pairs for benzene was 3.4%. All primary and duplicate sample pairs had an RPD below 50% for benzene, in accordance with USEPA guidance (USEPA, 2020).

4. Analytical Results

Ambient/outdoor air results were evaluated in the context of the following screening levels (SLs), where applicable:

- California Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Notes 3 and 5 Screening Levels (SLs) for Residential Air (DTSC, rev. 2022)
- If DTSC HERO HHRA SLs were unavailable for a given chemical, United States Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) for Residential Air THQ = 1.0 (USEPA, rev. 2022) were used for comparison
- If neither DTSC SLs nor USEPA RSLs were available for a given chemical, San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) Environmental Screening Levels (ESLs) for Indoor Air (SFBRWQCB, rev. 2019) were used for comparison.
- Methane results are evaluated according to the Lower Explosive Limit (LEL) for methane (50,000 parts per million by volume [ppmv]).⁷

The following section summarizes the laboratory analytical results of the ambient/outdoor air samples. Full copies of the laboratory reports are provided in Appendix A.

4.1 Analytical Results – Peak/Minimum Traffic Study

4.1.1 VOCs in Ambient/Outdoor Air

A total of 26 ambient/outdoor air samples were collected during the Peak/Minimum Traffic Study and were analyzed for VOCs using USEPA Method TO-15 SIM. A total of 13 VOC analytes were detected above the laboratory practical quantitation limit (PQL) in one or more of the ambient/outdoor air samples. Certain VOCs (acetone, dichlorodifluoromethane, trichlorofluoromethane, 1,1,2-trichloro-1,2,2-trifluoromethane, and BTEX compounds) were detected in all of the samples analyzed during the study (Table 1).

Two of the 13 analytes detected, benzene and methylene chloride, were reported at concentrations that exceeded their corresponding SLs for residential air. A summary of these detections is presented below:

- **Benzene** was detected in exceedance of the laboratory PQL in all 25 of the ambient/outdoor air samples at concentrations ranging from 0.33 $\mu\text{g}/\text{m}^3$ (AA-710-20230412-0105) to 1.9 $\mu\text{g}/\text{m}^3$ (AA-710/10-20230407-0651). All 25 detections exceeded the DTSC HERO HHRA Note 3 SL of 0.097 $\mu\text{g}/\text{m}^3$.
- **Methylene chloride** was detected in exceedance of the laboratory PQL in two of the ambient/outdoor air samples at concentrations ranging from 4.9 $\mu\text{g}/\text{m}^3$ (AA-710/10-20230426-0705) to 8.3 $\mu\text{g}/\text{m}^3$ (AA-CT-20230418-0655). These two detections exceeded the DTSC HERO HHRA Note 3 SL of 1.0 $\mu\text{g}/\text{m}^3$.

⁷ Methane is non-toxic and creates no hazard when inhaled in limited quantities; however, if large quantities of natural gas or methane is allowed to displace air, lack of oxygen may result in suffocation. Methane concentrations identified throughout this study are several orders of magnitude below the levels that could cause this condition.

4.1.2 Methane in Ambient/Outdoor Air

Methane was detected in all 26 ambient/outdoor air samples in exceedance of the laboratory PQL, with concentrations ranging from 1.8 ppmv (AA-10-20230418-0105) to 67 ppmv (AA-710/10-20230418-0057-D). None of the 26 methane detections exceeded the LEL of methane at 50,000 ppmv (Table 1).

4.2 Analytical Results – Lateral Variation Study

4.2.1 VOCs in Ambient/Outdoor Air

A total of 32 ambient/outdoor air samples were collected during the Lateral Variation Study and were analyzed for VOCs using USEPA Method TO-15 SIM. A total of 14 VOC analytes were detected above the laboratory PQL in one or more of the ambient/outdoor air samples. Certain VOCs (acetone, dichlorodifluoromethane, 1,1-difluoroethane [1,1-DFA], trichlorofluoromethane, 1,1,2-trichloro-1,2,2-trifluoromethane, and BTEX compounds) were detected in all of the samples analyzed during the study (Table 2).

Three of the 14 analytes, benzene, chloroform, and trichloroethene, were reported at concentrations that exceeded their corresponding SLs for residential air. A summary of these results is presented below:

- **Benzene** was detected in exceedance of the laboratory PQL in 32 of the 32 ambient/outdoor air samples at concentrations ranging from 0.45 $\mu\text{g}/\text{m}^3$ (AA-CL-20230417) to 1.8 $\mu\text{g}/\text{m}^3$ (AA-PW1-20230427). All 32 detections exceeded the DTSC HERO HHRA Note 3 SL of 0.097 $\mu\text{g}/\text{m}^3$.
- **Chloroform** was detected in exceedance of the laboratory PQL in two of the 32 ambient/outdoor air samples at concentrations ranging from 0.27 $\mu\text{g}/\text{m}^3$ (AA-CL-20230417) to 0.31 $\mu\text{g}/\text{m}^3$ (AA-0.125MI-20230417). Both detections exceeded the USEPA RSL for Residential Air (THQ = 1.0) of 0.12 $\mu\text{g}/\text{m}^3$.
- **Trichloroethene (TCE)** was detected in exceedance of the laboratory PQL in 11 of the 25 ambient/outdoor air samples at concentrations ranging from 0.57 $\mu\text{g}/\text{m}^3$ (AA-0.75MI-20230419-D) to 4.5 $\mu\text{g}/\text{m}^3$ (AA-0.75MI-20230419). Nine of the 25 detections exceeded the DTSC HERO HHRA Note 5 Screening Level for Residential Air for Trichloroethylene (August 2014) of 3.0 $\mu\text{g}/\text{m}^3$.

The two chloroform detections were isolated to AA-CL-20230417 and AA-0.125MI-20230417 and are not indicative of a widespread contaminant of concern. TCE detections occurred in all samples gathered on April 19, 2023 as part of this portion of the investigation and appear to reflect some activity specific to that day and does not appear to represent an ongoing or widespread contaminant of concern. No detections were reported in other sampling rounds as part of this portion of the investigation.

4.2.2 Methane in Ambient/Outdoor Air

Methane was detected in 25 of the 32 ambient/outdoor air samples in exceedance of the laboratory PQL, with concentrations ranging from 1.9 ppmv (AA-BL-20230417 and AA-0.5MI-20230417) to 80 ppmv (AA-0.5MI-20230417). None of the 25 methane detections exceeded the LEL of methane at 50,000 ppmv (Table 2).

4.3 Analytical Results – Fueling Facilities Study

4.3.1 VOCs in Ambient/Outdoor Air

A total of six ambient/outdoor air samples were collected during the gasoline service station/fueling facilities study and were analyzed for VOCs using USEPA Method TO-15 SIM. A total of 11 VOC analytes were detected above the PQL in one or more ambient/outdoor air samples. Certain VOCs (acetone, dichlorodifluoromethane, 1,1-DFA, trichlorofluoromethane, 1,1,2-trichloro-1,2,2-trifluoromethane, and BTEX compounds) were detected in all of the samples analyzed during the study (Table 3).

One of the 11 analytes, only benzene was reported at concentrations exceeding the corresponding SL for residential air. Benzene was detected in exceedance of the laboratory PQL in all six of the six ambient/outdoor air samples at concentrations ranging from 0.59 $\mu\text{g}/\text{m}^3$ (AA-CT-20230511) to 1.2 $\mu\text{g}/\text{m}^3$ (AA-UST-A-20230511 and AA-UST-B-20230511). All six detections exceeded the DTSC HERO HHRA Note 3 SL of 0.097 $\mu\text{g}/\text{m}^3$.

4.3.2 Methane in Ambient/Outdoor Air

Methane was detected in all six of the ambient/outdoor air samples in exceedance of the laboratory PQL, with concentrations ranging from 2.9 J ppmv (AA-UST-A-20230511) to 4.0 ppmv (AA-CT-20230511). None of the six methane detections exceeded the LEL of methane at 50,000 ppmv (Table 3).

5. Analysis and Conclusions

As expected, benzene was detected in all 57 of the ambient/outdoor air samples collected and analyzed during this study, with all concentrations exceeding the DTSC residential SL for residential air, indicating widespread and consistent distribution of benzene throughout the Study Area. Although all benzene concentrations in ambient/outdoor air exceeded the SL, the range of concentrations were consistent with, or lower than, established background conditions throughout the greater Los Angeles area (typical daily benzene concentrations in Los Angeles Air Basin ambient/outdoor air range from 0.73 to 1.25 $\mu\text{g}/\text{m}^3$, with a Basin-wide average of 0.92 $\mu\text{g}/\text{m}^3$).⁸ The distribution of benzene in ambient/outdoor air for each phase of the study is illustrated in Figures 4, 5, and 6.

Throughout this section, Roux performed a series of statistical analyses using the Student's t-Test. This statistical test is commonly used to determine whether mean average values between data sets are significantly different from one another. Considering the limited size of the data sets, Roux has used a p-value of 0.01 as a conservative measure of statistical significance. If the calculated Student's t-Test p-value is less than 0.01, the data sets are considered to be significantly different from one another. Overall, benzene concentrations in ambient/outdoor air across the City Terrace Community (for all data collected by Roux in 2023; average = 0.65 $\mu\text{g}/\text{m}^3$) are significantly different (lower) than the greater Los Angeles Air Basin in 2018/2019 (average = 0.92 $\mu\text{g}/\text{m}^3$), with a p-value of 0.0016.

Methane was detected above the laboratory PQL in the majority of samples, but below the methane LEL by multiple orders of magnitude and is thus not considered to be a contaminant of concern in ambient/outdoor air. Along with benzene, the other BTEX compounds (toluene, ethylbenzene, and xylenes) were detected in all ambient/outdoor air samples collected, albeit at concentrations lower than the corresponding SLs. Three additional VOCs, chloroform, methylene chloride, and TCE, were detected in exceedance of one or more applicable SL in ambient/outdoor air samples over the course of the investigation. However, these analytes were only detected in a small subset of the samples; they were not consistently detected throughout the investigation and are thus not considered to be contaminants of concern in ambient/outdoor air.

The following sections discuss benzene concentrations and trends for each of the three ambient/outdoor air studies included in this Report. Supporting calculations for the Student's t-Test analyses is provided in Appendix B.

5.1 Peak/Minimum Traffic Study

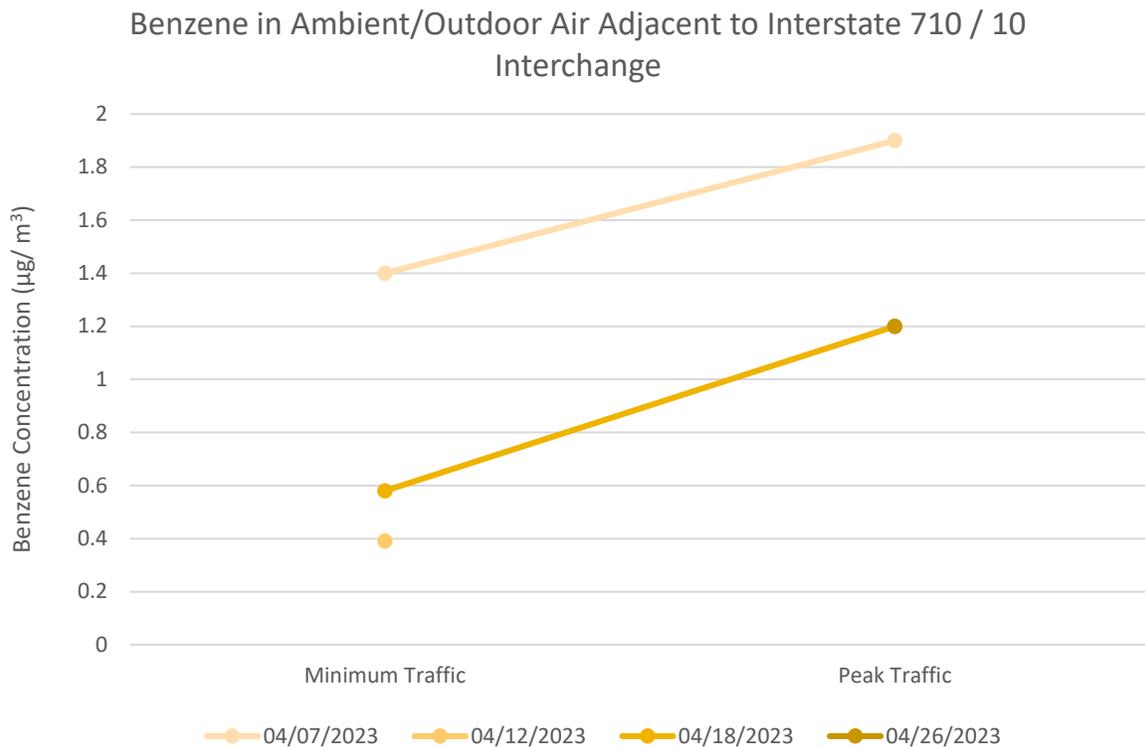
Benzene detections during peak and minimum traffic conditions were variable, ranging from 0.33 $\mu\text{g}/\text{m}^3$ to 1.9 $\mu\text{g}/\text{m}^3$. Benzene detections were found to be lower during minimum traffic conditions (01:00 to 04:00 a.m.) compared to peak traffic conditions (07:00 to 10:00 a.m.); only one minimum traffic sample had a benzene concentration that exceeded its corresponding peak traffic sample (AA-10-20230407-0108 and AA-10-20230407-0705). It is suspected that this sample may have been influenced by a nearby point source such as an idling vehicle. In general, Benzene detections for both peak and minimum traffic conditions were considerably higher on April 7, 2023 compared to the other days, with an average concentration of 1.4 $\mu\text{g}/\text{m}^3$.

⁸ <http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v/mates-v-air-monitoring-dashboard>

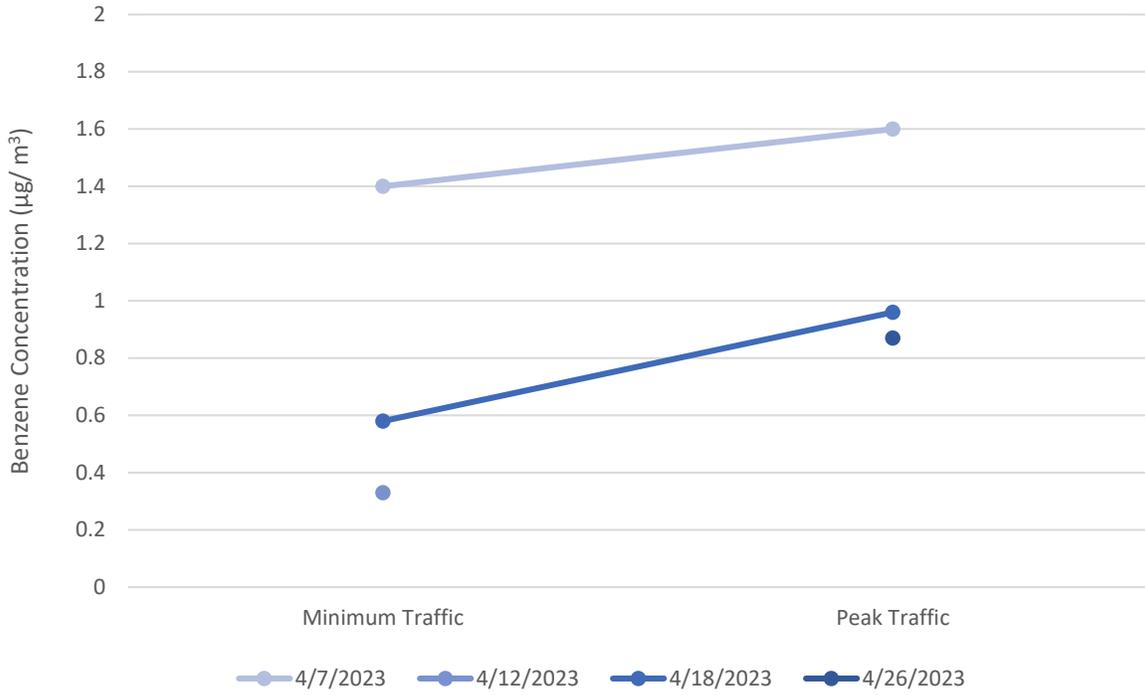
It is suspected that differential environmental conditions (e.g., air quality, windspeed) influenced benzene concentrations on that day.

Ambient/outdoor air results from within the Community showed consistently higher benzene concentrations during peak traffic hours when compared to the corresponding minimum traffic periods. Excluding the data collected on April 7, 2023, benzene concentrations were significantly different between peak and minimum traffic conditions when comparing results for freeway-adjacent samples and Community samples, with Student t-Test calculated p-values of 2.2×10^{-5} and 0.005, respectively. This suggests that the variation is not limited to areas immediately adjacent to the freeways and could be partially attributed to time of day / outdoor temperature. The trend indicating higher benzene concentrations during peak traffic conditions is illustrated in the four charts below.

The trend indicates that increased traffic volume is correlated with higher concentrations of benzene in ambient/outdoor air and that heavy traffic should be considered the most likely contributor to benzene concentrations within the Community and the Los Angeles Basin in general.

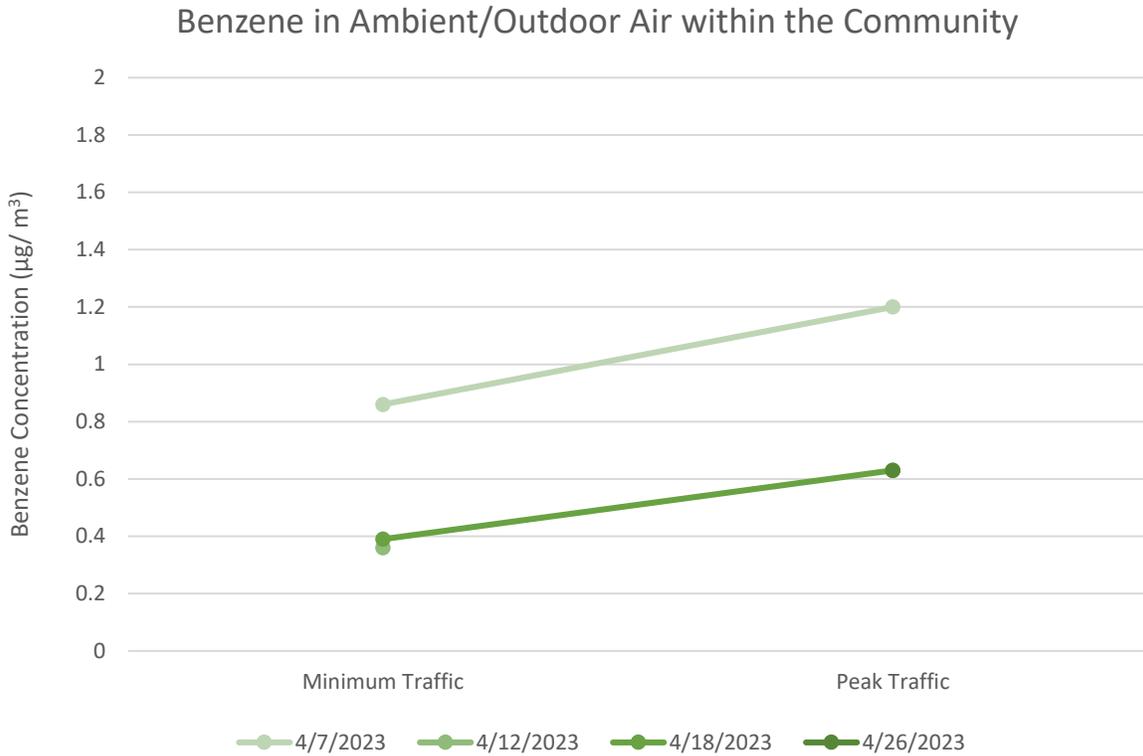


Benzene in Ambient/Outdoor Air Adjacent to Interstate 710



Benzene in Ambient/Outdoor Air Adjacent to Interstate 10

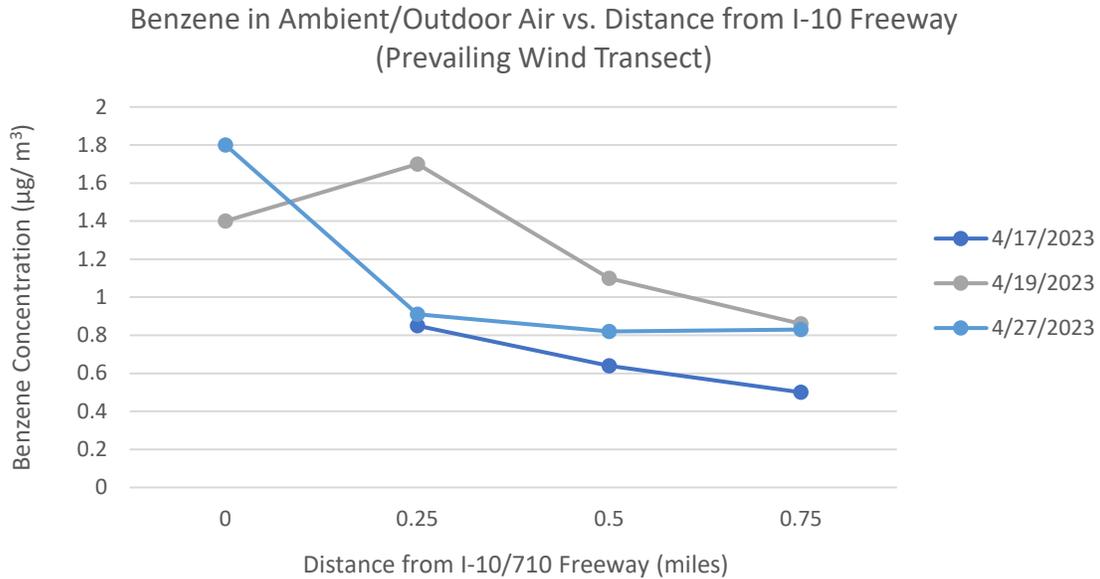




Benzene detections in ambient/outdoor air were also generally lower in the Community compared to those near the freeways during both minimum and peak traffic conditions. Benzene detections on average were approximately 51% higher near the freeways during minimum traffic conditions and approximately 49% higher during peak traffic conditions compared to detections recorded in the Community. This trend is further discussed in Section 5.2.

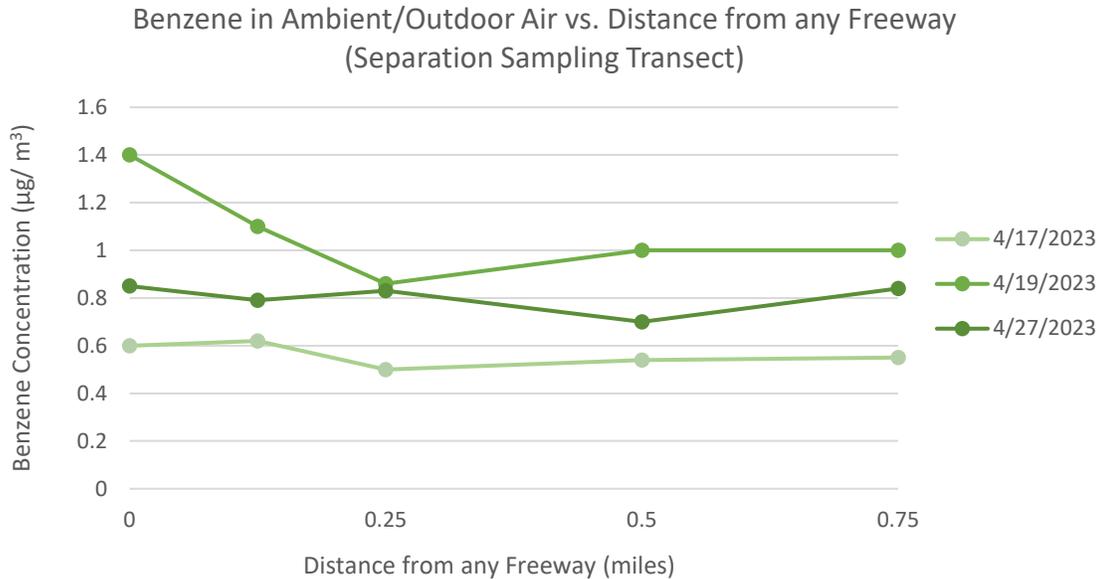
5.2 Lateral Variation Study

Benzene concentrations along the Prevailing Wind Transect were variable, ranging from 0.64 to 1.8 µg/m³. This detection range is consistent with the benzene detection ranges reported in the Peak/Minimum Traffic Study, as well as the average benzene levels recorded across the greater Los Angeles Area. Average benzene concentrations recorded during the Lateral Variation Study were not significantly different than benzene concentrations recorded across the greater Los Angeles Area in 2018/2019 (p-value = 0.87). The highest benzene concentrations were recorded at the location immediately adjacent to the I-10 Freeway. Across the three sampling events, benzene concentrations generally decreased with distance from the freeway in the prevailing wind direction, as shown in the chart below. The orientation of the Prevailing Wind Transect is highlighted in pink in Figure 5.



Benzene concentrations along the Separation Sampling Transect were also variable, ranging from 0.50 µg/m³ to 1.4 µg/m³. On average, the highest benzene concentrations along the Separation Sampling Transect were recorded at the sample adjacent to the 710/10 Freeway interchange (zero-mile location). Benzene concentrations generally decreased with distance from the freeways, as shown in the chart below. The orientation of the Prevailing Wind Transect is highlighted in light blue in Figure 5.

The results of the lateral variation study indicate that proximity to the freeways is loosely correlated with higher concentrations of benzene in ambient/outdoor air. Benzene concentrations in ambient/outdoor air samples collected more than 0.125 miles away from any freeway were not significantly different than samples collected in the Community (p-value = 0.02). However, benzene concentrations in ambient/outdoor air samples collected adjacent to and within 0.125 miles of any freeway were significantly different (higher) than samples collected in the Community (p-value = 6.8 x 10⁻⁵). Ambient/outdoor air samples collected immediately adjacent to the former landfills did not exhibit elevated concentrations of benzene. On the basis of the data collected, the former landfills do not appear to be contributing to benzene in ambient/outdoor air.



5.3 Gasoline Service Station / Fueling Facilities Study

Benzene concentrations detected in the Fueling Facilities Study ranged from 0.61 $\mu\text{g}/\text{m}^3$ to 1.2 $\mu\text{g}/\text{m}^3$ and were generally consistent with those detected in the Peak/Minimum Traffic Study and Lateral Variation Study, as well as consistent with, or lower than, the average benzene levels in the greater Los Angeles Area.

The highest benzene detections were recorded at the Fueling Site A and Fueling Site B; both locations are adjacent to private gasoline service stations and are in close proximity to the I-10 Freeway (AA-UST-A; AA-UST-B). Benzene concentrations at Fueling Site A and Fueling Site B were not significantly different than concentrations adjacent to the freeways (p -value = 0.72). The lowest benzene concentration encountered during the fueling facilities study was detected within the Community sample (AA-CT-20230511). The benzene concentrations detected at Fueling Site C (AA-UST-C) and Fueling Site D (AA-UST-D) were not significantly different than the concentrations in the Community (p -value = 0.93).

The results of the fueling facilities study indicate that the nearby private gasoline service stations do not appear to be a measurable contributor to benzene concentrations in the Community ambient/outdoor air. Benzene concentrations in ambient/outdoor air at County fueling facilities (typically less utilized than the private gasoline service stations) were consistent with the benzene concentrations within the Community and also do not appear to be a measurable contributor to the benzene concentrations in the Community ambient/outdoor air.

5.4 Conclusions

Benzene concentrations across all three studies were generally consistent with, or lower than, average benzene concentrations in the greater Los Angeles area sourced primarily from vehicle exhaust. This consistency is indicative of widespread elevated benzene concentrations in the greater Los Angeles area that are not unique to the Community. Results from each phase of this study indicate that benzene concentrations are generally elevated nearest to freeways. Locations in close proximity to the freeway (within

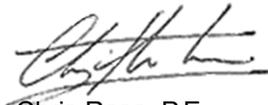
500 feet) have modestly elevated benzene concentrations compared to the wider Los Angeles ambient/outdoor air, whereas fueling facilities do not appear to have any measurable impacts to the nearby community. Similarly, there was no indication that any of the benzene in the ambient/outdoor air originated from nearby gasoline service stations or the downwind former landfill properties.

Respectfully submitted,

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6. References

- California Department of Toxic Substances Control Office of Human and Ecological Risk. *Human Health Risk Assessment Note 5*. August 23, 2014.
- California Department of Toxic Substances Control Office of Human and Ecological Risk. *Human Health Risk Assessment Note 3*. June 2020. Revised May 2022.
- Citadel EHS. *Sampling Data Report, City Terrace/Former Cogen Landfill Property. CITADEL Project No. 0018.1138.0*. May 2023.
- Roux Associates, Inc (Roux). *Site-Specific Health and Safety Plan: City Terrace Community*. February 2023.
- Roux. *Preliminary Attribution Study Workplan*. April 2023.
- Roux. *DRAFT Soil Gas and Indoor Air Sampling Report: City Terrace Community*. May 2023.
- San Francisco Bay Regional Water Quality Control Board. *Environmental Screening Levels*. May 2022.
- United States Environmental Protection Agency. *Regional Screening Levels*. May 2023.
- United States Environmental Protection Agency. *Environmental Data Review Supplement for Region 1 Data Review Elements and Superfund Specific Guidance/Procedures*. September 2020.

1. Selected Volatile Organic Compounds (VOCs) Peak/Minimum Traffic Study
2. Selected Volatile Organic Compounds (VOCs) Lateral Variation Study
3. Selected Volatile Organic Compounds (VOCs) Fueling Facilities Study

Table 1 - Selected Volatile Organic Compounds (VOCs) Peak/Minimum Traffic Study
City Terrace Neighborhood, Los Angeles County, California

Location	Peak or Minimum Traffic	Time Sampled	Date Sampled	Sample ID	Acetone	Benzene	1,4-Dichlorobenzene	Dichlorodifluoromethane	1,1-Difluoroethane	Ethylbenzene	Methylene chloride	Toluene	Trichlorofluoromethane	1,1,2-Trichloro-1,2,2-trifluoroethane	p- & m-Xylenes	o-Xylene	Total Xylenes	Methane (CH4)	
					Units: micrograms per cubic meter (µg/m ³)														ppmv
Analytical Method					USEPA Method TO-15 SIM														ASTM-D1946
DTSC HERO HHRA Note 3 SL, Unless Otherwise Noted					32,000 [^]	0.097	0.26 [*]	100 [*]	42,000 [*]	1.1 [*]	1.0	310	1,300	5,200 [*]	100 [*]	100 [*]	100 [*]	50,000 ^{***}	
710 Adjacent	Minimum Traffic	1:00am-4:00am	4/7/2023	AA-710-20230407-0058	11	1.4	<0.20	2.9	1.3 J	0.56	<0.20	2.9	1.5	0.66	2.4	0.81	3.2	31	
			4/12/2023	AA-710-20230412-0105	9.8	0.33	<0.20	2.4	<5.0	0.17	<0.20	0.95	1.5	0.67	0.53	0.20	0.73	18	
			4/18/2023	AA-710-20230418-0104	3.4	0.58	<0.20	2.1	0.52 J	0.15	<0.20	1.6	1.3	0.59	0.59	0.19	0.78	23	
	Peak Traffic	7:00am-10:00am	4/7/2023	AA-710-20230407-0700	15	1.6	<0.20	2.9	1.3 J	0.80	<0.20	3.9	1.4	0.64	3.3	1.1	4.4	19	
			4/18/2023	AA-710-20230418-0707	4.8 J	0.96	<0.20	2.2	<5.0	0.48	<0.2	3.2	1.3	0.60	1.8	0.65	2.4	2.1	
			4/26/2023	AA-710-20230426-0700	7.8	0.87	<0.20	1.4	0.93 J	0.35	<0.2	1.6	1.4	0.61	1.1	0.44	1.6	3.8	
10 Adjacent	Minimum Traffic	1:00am-4:00am	4/7/2023	AA-10-20230407-0108	29	1.8	<0.20	3.2	1.8 J	1.0	<0.20	5.3	1.5	0.66	4.4	1.4	5.9	2.3	
			4/12/2023	AA-10-20230412-0110	4.9	0.39	<0.20	2.5	<5.0	0.18	<0.20	1.0	1.5	0.69	0.58	0.22	0.80	2.1	
			4/18/2023	AA-10-20230418-0105	5.9	0.44	<0.20	2.1	0.73 J	0.14	<0.20	1.6	1.3	0.60	0.54	0.17	0.71	1.8 J	
	Peak Traffic	7:00am-10:00am	4/7/2023	AA-10-20230407-0705	18	1.4	<0.20	3.3	3.6 J	0.63	<0.20	3.6	1.5	0.64	2.5	0.86	3.4	29	
			4/18/2023	AA-10-20230418-0704	5.5 J	1.1	<0.20	2.1	0.55 J	0.62	<0.20	3.5	1.3	0.60	2.3	0.87	3.2	4.7	
			4/26/2023	AA-10-20230426-0645	56	0.85	0.19 J	2.7	4.5 J	0.43	<0.20	1.9	1.4	0.60	1.5	0.61	2.1	50	
710/10 Intersection	Minimum Traffic	1:00am-4:00am	4/7/2023	AA-710/10-20230407-0110	13	1.4	<0.20	2.8	1.9 J	0.70	<0.20	3.5	1.4	0.63	2.8	0.90	3.7	6.0	
			4/12/2023	AA-710/10-20230412-0100	9.3	0.39	<0.20	2.4	<5.0	0.19	<0.20	1.1	1.5	0.68	0.65	0.24	0.89	3.0	
			4/18/2023	AA-710/10-20230418-0057	4.3	0.58	<0.20	2.1	0.58 J	0.16	<0.20	1.5	1.3	0.60	0.64	0.21	0.86	4.3	
	Peak Traffic	7:00am-10:00am	4/7/2023	AA-710/10-20230407-0651	15	1.9	<0.20	3.0	1.3 J	0.82	<0.20	4.0	1.6	0.64	3.3	1.1	4.4	2.3	
			4/18/2023	AA-710/10-20230418-0656	4.9 J	1.2	<0.20	2.2	0.52 J	0.66	<0.20	3.3	1.3	0.59	2.5	0.95	3.4	6.1	
			4/26/2023	AA-710/10-20230426-0705	9.1	1.2	<0.20	1.6	1.6 J	0.68	4.9	1.6	1.4	0.60	2.7	0.99	3.7	2.9	
City Terrace Neighborhood	Minimum Traffic	1:00am-4:00am	4/7/2023	AA-CT-20230407-0100	15	0.86	<0.20	2.8	1.2 J	0.40	<0.20	2.0	1.5	0.66	1.6	0.54	2.1	5.2	
			4/12/2023	AA-CT-20230412-0055	5.5	0.36	<0.20	2.4	<5.0	0.20	<0.20	1.6	1.5	0.70	0.69	0.24	0.93	11	
			4/18/2023	AA-CT-20230418-0055	3.9	0.39	<0.20	2.1	0.66 J	0.14	<0.20	1.5	1.3	0.61	0.53	0.16	0.69	5.0	
	Peak Traffic	7:00am-10:00am	4/7/2023	AA-CT-20230407-0655	19	1.2	<0.20	3.4	1.3 J	0.46	<0.20	2.9	1.5	0.63	1.7	0.60	2.3	5.2	
			4/18/2023	AA-CT-20230418-0655	8.9 J	0.65	<0.20	2.1	1.0 J	0.41	8.3	2.8	1.3	0.64	1.6	0.55	2.1	21	
			4/26/2023	AA-CT-20230426-0650	13	0.63	<0.20	1.4	1.7 J	0.35	<0.2	1.6	1.4	0.63	1.2	0.45	1.6	3.3	

Notes:
 Only analytes with one or more detections are included in this table.
 ppmv = parts per million volume
 USEPA = United States Environmental Protection Agency
 DTSC HERO HHRA Note 3 SL for Residential Air = California Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note 3 Screening Level (SL) for Residential Air (updated May 2022)
 SFBRWQCB ESLs for Indoor Air = San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels for Indoor Air (2019, Revision 2)
[^] = Screening level references SFBRWQCB ESLs for Indoor air (2019, Revision 2) because USEPA Regional Screening Levels and DTSC HERO HHRA Note 3 Screening Levels not available for selected analyte.
^{*} = Screening level references USEPA Regional Screening Level for Residential Air THQ = 1.0 (May 2022) because DTSC HERO HHRA Note 3 SL not available for the selected analyte.
^{***} = 100% of the Lower Explosive Limit (LEL) for Methane
Italics indicate a duplicate sample
 Yellow highlight indicates concentration exceeds SL
 Concentrations detected above the method detection limit are in **bold**
 <X = analyte not detected above the laboratory practical quantitation limit (X)
 J = flag indicates detection is below the reporting limit/practical quantitation limit and is an estimated concentration

Table 2 - Selected Volatile Organic Compounds (VOCs) Lateral Variation Study
City Terrace Neighborhood, Los Angeles County, California

Location	Date Sampled	Sample ID	Acetone	Benzene	Chloroform	Dichlorodifluoromethane	1,1-Difluoroethane	Ethylbenzene	Methylene chloride	Toluene	Trichloroethene	Trichlorofluoromethane	1,1,2-Trichloro-1,2,2-trifluoroethane	p- & m-Xylenes	o-Xylene	Total Xylenes	Methane (CH4)
			Units: micrograms per cubic meter (µg/m ³)														ppmv
Analytical Method			USEPA Method TO-15 SIM														ASTM-D1946
DTSC HERO HHRA Note 3 SL, Unless Otherwise Noted			32,000 [^]	0.097	0.12 [*]	100 [*]	42,000 [*]	1.1 [*]	1.0	310	2.0 ^{**}	1,300	5,200 [*]	100 [*]	100 [*]	100 [*]	50,000 ^{***}
Cogen Landfill Adjacent	4/17/2023	AA-CL-20230417	4.7 J	0.45	0.27	2.2	0.54 J	0.20	<0.2	1.7	<0.1	1.4	0.65	0.75	0.24	0.99	33
	4/19/2023	AA-CL-20230419	7.1	0.96	<0.1	2.1	0.76 J	0.39	<0.2	1.9	3.4	1.3	0.61	1.4	0.49	1.9	63
	4/27/2023	AA-CL-20230427	13	0.75	<0.1	2.8	0.73 J	0.36	0.77	2.0	<0.1	1.4	0.59	1.2	0.45	1.7	64
Blanchard Landfill Adjacent	4/17/2023	AA-BL-20230417	5.4	0.50	<0.1	2.2	0.37 J	0.32	<0.2	1.9	<0.1	1.4	0.65	1.1	0.32	1.4	1.9 J
	4/19/2023	AA-BL-20230419	8.5	0.88	<0.1	2.1	0.66 J	0.43	<0.2	1.9	0.93	1.3	0.61	1.6	0.52	2.1	<2.0
	4/27/2023	AA-BL-20230427	15	0.75	<0.1	3.2	0.78 J	0.40	<0.2	2.5	<0.1	1.3	0.59	1.4	0.50	1.9	2.2
710/10 Intersection	4/17/2023	AA-710/10-20230417	7.1	0.60	<0.1	2.1	0.56 J	0.28	<0.2	1.9	<0.1	1.4	0.65	1.0	0.38	1.4	5.3
	4/19/2023	AA-710/10-20230419	7.3	1.4	<0.1	2.0	0.78 J	0.65	<0.2	2.6	2.2	1.2	0.57	2.3	0.90	3.2	<2.0
	4/27/2023	AA-710/10-20230427	10	0.85	<0.1	2.8	0.78 J	0.42	<0.2	2.0	<0.1	1.4	0.61	1.5	0.53	2.0	2.2
0.125 miles from freeways and landfills	4/17/2023	AA-0.125MI-20230417	5.3	0.62	0.31	2.0	1.3 J	0.25	<0.2	1.8	<0.1	1.4	0.65	0.92	0.32	1.2	7.6
	4/17/2023	AA-0.125MI-20230417-D	4.9 J	0.56	<0.1	2.4	0.70 J	0.26	<0.2	1.8	<0.1	1.4	0.65	0.97	0.32	1.3	2.1
	4/19/2023	AA-0.125MI-20230419	8.3	1.1	<0.1	2.1	1.1 J	0.59	<0.2	2.5	2.6	1.3	0.61	2.1	0.77	2.8	<2.0
0.25 miles from freeways and landfills	4/17/2023	AA-0.25MI-20230417	11	0.50	<0.1	2.3	0.48 J	0.26	<0.2	1.8	<0.1	1.4	0.66	0.92	0.32	1.2	80
	4/19/2023	AA-0.25MI-20230419	8.0	0.86	<0.1	2.2	0.73 J	0.46	<0.2	1.8	2.7	1.3	0.61	1.7	0.58	2.2	<2.0
	4/27/2023	AA-0.25MI-20230427	16	0.83	<0.1	3.2	0.83 J	0.50	<0.2	2.6	<0.1	1.4	0.59	1.8	0.66	2.5	3.9
0.5 miles from freeway and landfills	4/17/2023	AA-0.5MI-20230417	5.2	0.54	<0.1	2.2	0.44 J	0.23	<0.2	1.9	<0.1	1.4	0.65	0.87	0.28	1.1	1.9 J
	4/19/2023	AA-0.5MI-20230419	10	1.0	<0.1	2.1	1.0 J	0.52	<0.2	2.2	3.6	1.3	0.60	1.9	0.67	2.6	12
	4/27/2023	AA-0.5MI-20230427	10	0.70	<0.1	2.8	0.95 J	0.36	<0.2	1.8	<0.1	1.4	0.59	1.3	0.45	1.7	5.1
0.75 miles from freeways and landfills	4/17/2023	AA-0.75MI-20230417	8.2	0.55	<0.1	2.3	1.3 J	0.29	<0.2	2.2	<0.1	1.4	0.66	1.1	0.36	1.5	5.6
	4/19/2023	AA-0.75MI-20230419	7.7	1.0	<0.1	2.1	1.1 J	0.54	<0.2	2.2	4.5	1.3	0.61	1.9	0.68	2.6	<2.0
	4/19/2023	AA-0.75MI-20230419-D	7.6	1.1	<0.1	2.1	1.3 J	0.51	<0.2	2.2	0.57	1.3	0.59	1.9	0.65	2.5	<2.0
Prevailing wind sample 1	4/27/2023	AA-0.75MI-20230427	14	0.84	<0.1	2.8	0.96 J	0.45	<0.2	2.2	<0.1	1.4	0.60	1.6	0.57	2.1	4.2
	4/17/2023	AA-PW1-20230417	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/19/2023	AA-PW1-20230419	14	1.4	<0.1	2.0	1.1 J	0.86	<0.2	2.9	4.3	1.2	0.58	3.0	1.2	4.1	2.1
Prevailing wind sample 2	4/27/2023	AA-PW1-20230427	23	1.8	<0.2	4.4	2.1 J	1.0	<0.8	6.0	<0.4	2.4	1.0	3.3	1.3	4.6	6.4
	4/17/2023	AA-PW2-20230417	7.4	0.85	<0.1	2.2	1.4 J	0.43	<0.2	2.6	<0.1	1.4	0.64	1.6	0.56	2.1	22
	4/19/2023	AA-PW2-20230419	14	1.7	<0.1	2.0	1.2 J	0.88	<0.2	3.6	3.9	1.3	0.58	3.0	1.2	4.2	55
Prevailing wind sample 3	4/27/2023	AA-PW2-20230427	12	0.91	<0.1	2.7	0.86 J	0.47	<0.2	2.4	<0.1	1.3	0.57	1.7	0.60	2.3	3.1
	4/17/2023	AA-PW3-20230417	5.3	0.64	<0.1	2.2	0.61 J	0.33	<0.2	2.1	<0.1	1.4	0.66	1.2	0.37	1.6	40
	4/19/2023	AA-PW3-20230419	8.3	1.1	<0.1	2.0	0.76 J	0.54	<0.2	2.4	3.7	1.3	0.58	1.9	0.69	2.6	<2.0
	4/27/2023	AA-PW3-20230427	10	0.82	<0.1	2.6	0.76 J	0.42	<0.2	2.1	<0.1	1.3	0.58	1.5	0.54	2.1	2.2

Notes:

Only analytes with one or more detections are included in this table.

ppmv = parts per million volume

USEPA = United States Environmental Protection Agency

DTSC HERO HHRA Note 3 SL for Residential Air = California Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note 3 Screening Level (SL) for Residential Air (updated May 2022)

SFBRWQCB ESLs for Indoor Air = San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels for Indoor Air (2019, Revision 2)

[^] = Screening level references SFBRWQCB ESLs for Indoor air (2019, Revision 2) because USEPA Regional Screening Levels and DTSC HERO HHRA Note 3 Screening Levels not available for selected analyte.

^{*} = Screening level references USEPA Regional Screening Level for Residential Air THQ = 1.0 (May 2022) because DTSC HERO HHRA Note 3 SL not available for the selected analyte.

^{**} = Screening level references DTSC HERO HHRA Note 5 Screening Level for Residential Air for Trichloroethylene (August 2014)

^{***} = 100% of the Lower Explosive Limit (LEL) for Methane

Italics indicate a duplicate sample

Yellow highlight indicates concentration exceeds SL

Concentrations detected above the method detection limit are in **bold**

NA = not analyzed

<X = analyte not detected above the laboratory practical quantitation limit (X)

J = flag indicates detection is below the reporting limit/practical quantitation limit and is an estimated concentration

Sample AA-PW1-20230417 could not be collected due to SUMMA canister theft during deployment.

Table 3 - Selected Volatile Organic Compounds (VOCs) Fueling Facilities Study
City Terrace Neighborhood, Los Angeles County, California

Location	Date Sampled	Sample ID	Acetone	Benzene	Dichlorodifluoromethane	1,1-Difluoroethane	Ethylbenzene	Toluene	Trichlorofluoromethane	1,1,2-Trichloro-1,2,2-trifluoroethane	p- & m-Xylenes	o-Xylene	Total Xylenes	Methane (CH4)
Method			USEPA Method TO-15 SIM											ASTM-D1946
DTSC HERO HHRA Note 3 SL, Unless Otherwise Noted			32,000 [^]	0.097	100 [*]	42,000 [*]	1.1 [*]	310	1,300	5,200 [*]	100 [*]	100 [*]	100 [*]	50,000 ^{***}
UST/Fueling Site A - 1600 N Eastern	5/11/2023	AA-UST-A-20230511	3.5	1.2	2.9	0.98 J	0.57	2.4	1.4	0.61	2.4	0.81	3.2	2.9 J
UST/Fueling Site B - 1535 N Eastern	5/11/2023	AA-UST-B-20230511	4.4	1.2	2.9	1.9 J	0.71	2.9	1.4	0.61	3.2	1.1	4.3	3.3
UST/Fueling Site C - 1104 N Eastern	5/11/2023	AA-UST-C-20230511	5.4	0.61	2.9	0.47 J	0.35	1.7	1.4	0.62	1.4	0.50	1.9	3.0 J
		AA-UST-C-20230511-D	3.5	0.65	2.8	0.47 J	0.34	1.6	1.4	0.62	1.4	0.47	1.8	3.3
UST/Fueling Site D - 1108 Sheriff	5/11/2023	AA-UST-D-20230511	2.8	0.66	2.8	0.42 J	0.31	1.5	1.4	0.62	1.2	0.43	1.6	3.5
City Terrace Neighborhood Sample	5/11/2023	AA-CT-20230511	2.4	0.59	2.7	0.47 J	0.26	1.1	1.4	0.61	0.94	0.33	1.3	4.0

Notes:

Only analytes with one or more detections are included in this table.

UST = underground storage tank

ppmv = parts per million volume

USEPA = United States Environmental Protection Agency

DTSC HERO HHRA Note 3 SL for Residential Air = California Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note 3 Screening Level (SL) for Residential Air (updated May 20:

SFBRWQCB ESLs for Indoor Air = San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels for Indoor Air (2019, Revision 2)

[^] = Screening level references SFBRWQCB ESLs for Indoor air (2019, Revision 2) because USEPA Regional Screening Levels and DTSC HERO HHRA Note 3 Screening Levels not available for selected analyte.

^{*} = Screening level references USEPA Regional Screening Level for Residential Air THQ = 1.0 (May 2022) because DTSC HERO HHRA Note 3 SL not available for the selected analyte.

^{**} = Screening level references DTSC HERO HHRA Note 5 Screening Level for Residential Air for Trichloroethylene (August 2014)

^{***} = 100% of the Lower Explosive Limit (LEL) for Methane

Italics indicate a duplicate sample

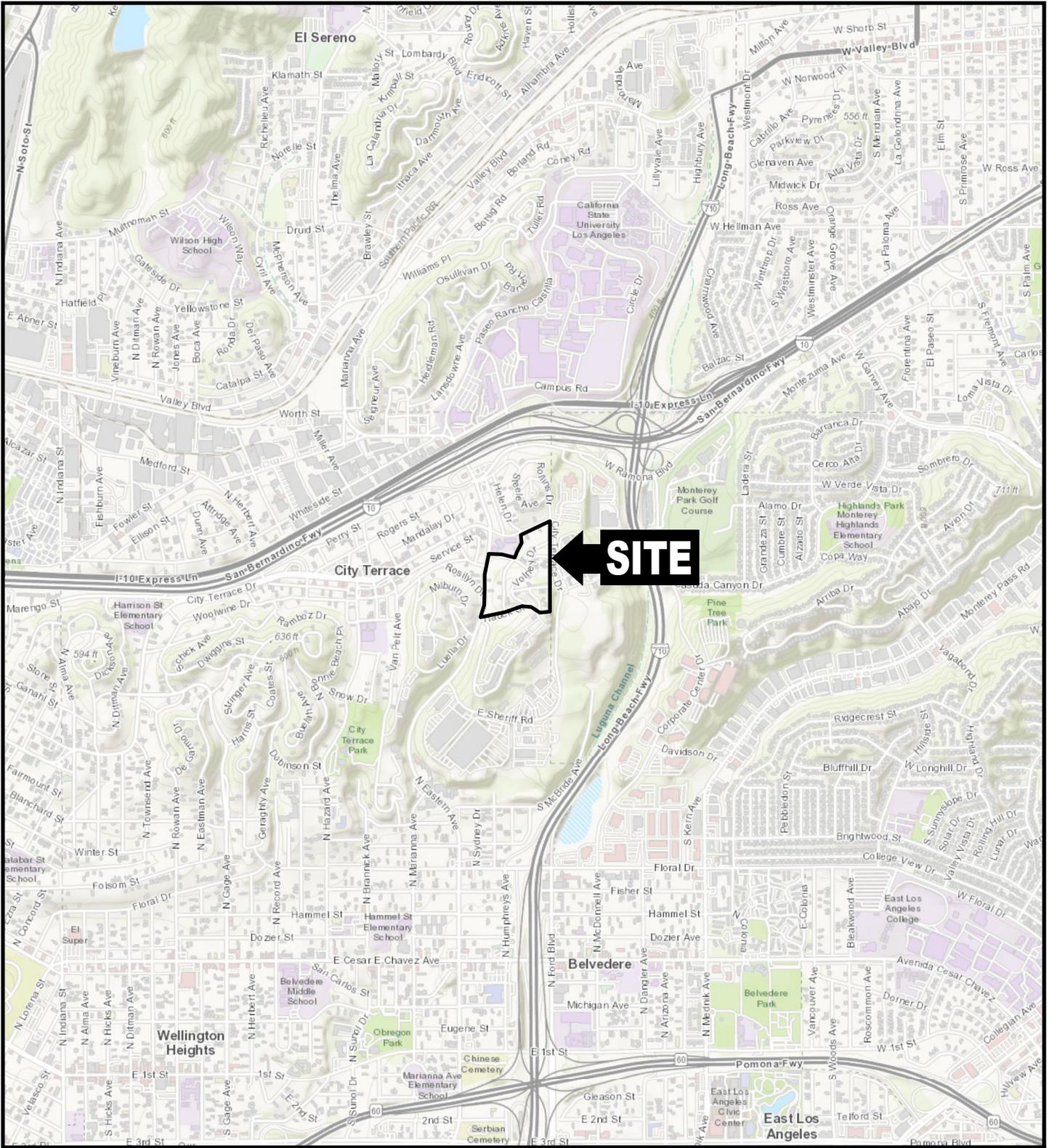
Yellow highlight indicates concentration exceeds SL

Concentrations detected above the method detection limit are in **bold**

<X = analyte not detected above the laboratory practical quantitation limit (X)

J = flag indicates detection is below the reporting limit/practical quantitation limit and is an estimated concentration

1. Site Location Map
2. Site and Vicinity
3. Air Quality Attribution Study Sample Locations
4. Peak/Minimum Traffic Study Benzene Concentrations
5. Lateral Variation Study Benzene Concentrations
6. Fueling Facilities Study Benzene Concentrations



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QUADRANGLE LOCATION



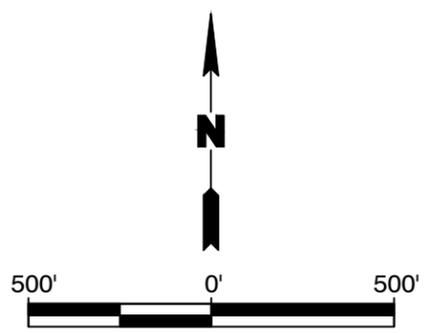
Title:		
SITE LOCATION MAP		
CITY TERRACE COMMUNITY LOS ANGELES, CALIFORNIA 90063		
Prepared for:		
COUNTY OF LOS ANGELES		
ROUX	Compiled by: T.C.	Date: 8 JUNE 2023
	Prepared by: T.C.	Scale: AS SHOWN
	Project Mgr: A.M.	Project: 2855.0004L
	File: SiteLocationTemplateWithPolygon.mxd	
		FIGURE
		1

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LEGEND

-  CITY TERRACE COMMUNITY BOUNDARY
-  APPROXIMATE EXTENTS OF FREEWAYS
-  APPROXIMATE EXTENTS OF FORMER COGEN LANDFILL
-  APPROXIMATE EXTENTS OF FORMER BLANCHARD LANDFILL



Title:

SITE AND VICINITY

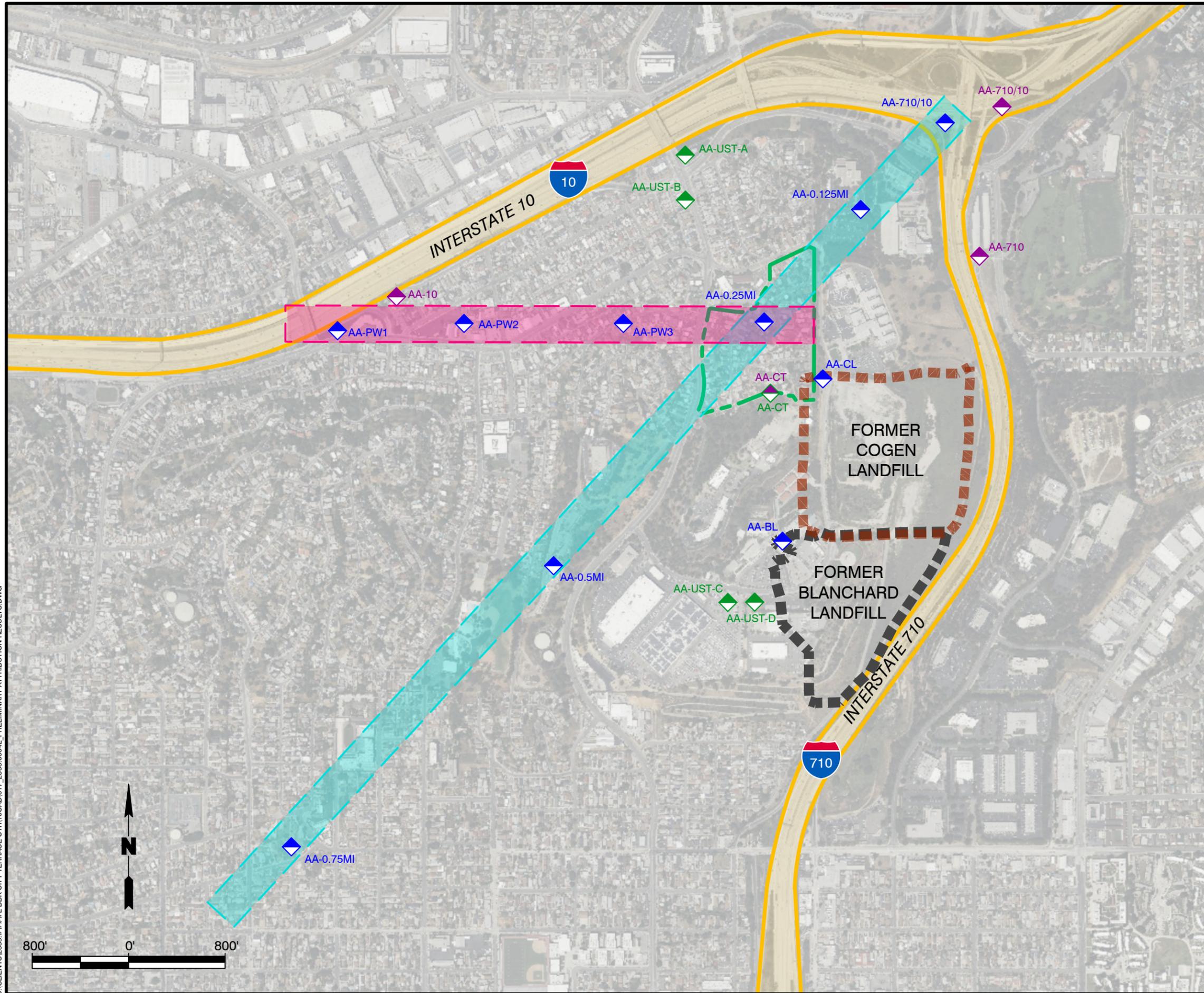
CITY TERRACE COMMUNITY
LOS ANGELES, CALIFORNIA 90063

Prepared for:

COUNTY OF LOS ANGELES

	Compiled by: C.J.	Date: 8 JUNE 2023	FIGURE 2
	Prepared by: M.B.	Scale: 1" = 500'	
	Project Mgr: A.M.	Project: 2855.0004L	
	File: 020_2855.0004L_SITE AND VICINITY.DWG		

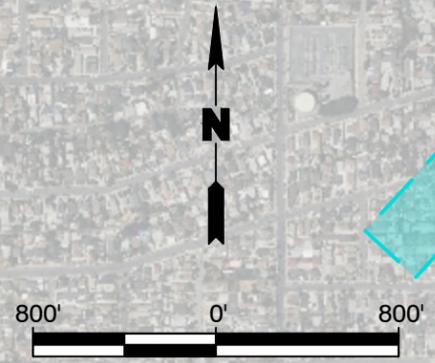
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LEGEND

- CITY TERRACE COMMUNITY BOUNDARY
- APPROXIMATE EXTENTS OF FREEWAYS
- SEPARATION SAMPLING TRANSECT
- PREVAILING WIND SAMPLING TRANSECT
- APPROXIMATE EXTENTS OF FORMER COGEN LANDFILL
- APPROXIMATE EXTENTS OF FORMER BLANCHARD LANDFILL
- AMBIENT/OUTDOOR AIR SAMPLING LOCATION (PEAK/MINIMUM TRAFFIC STUDY)
- AMBIENT/OUTDOOR AIR SAMPLING LOCATION (LATERAL VARIATION STUDY)
- AMBIENT/OUTDOOR AIR SAMPLING LOCATION (FUELING FACILITIES STUDY)

- NOTES**
1. ALL SAMPLE LOCATIONS ARE APPROXIMATE
 2. AA = AMBIENT/OUTDOOR AIR
 3. AA-710/10 HAS THE SAME SAMPLE ID FOR TWO LOCATIONS AS PART OF THIS INVESTIGATION. AA-710/10 TO THE WEST IS THE SAMPLE LOCATION FOR THE LATERAL VARIATION STUDY. AA-710/10 TO THE EAST IS THE SAMPLE LOCATION FOR THE PEAK AND MINIMUM TRAFFIC STUDY.
 4. AA-CT IS THE SAME SAMPLE LOCATION FOR THE TRAFFIC STUDY AND THE FUELING STATION/UST STUDY



Title:

AIR QUALITY ATTRIBUTION STUDY SAMPLE LOCATIONS

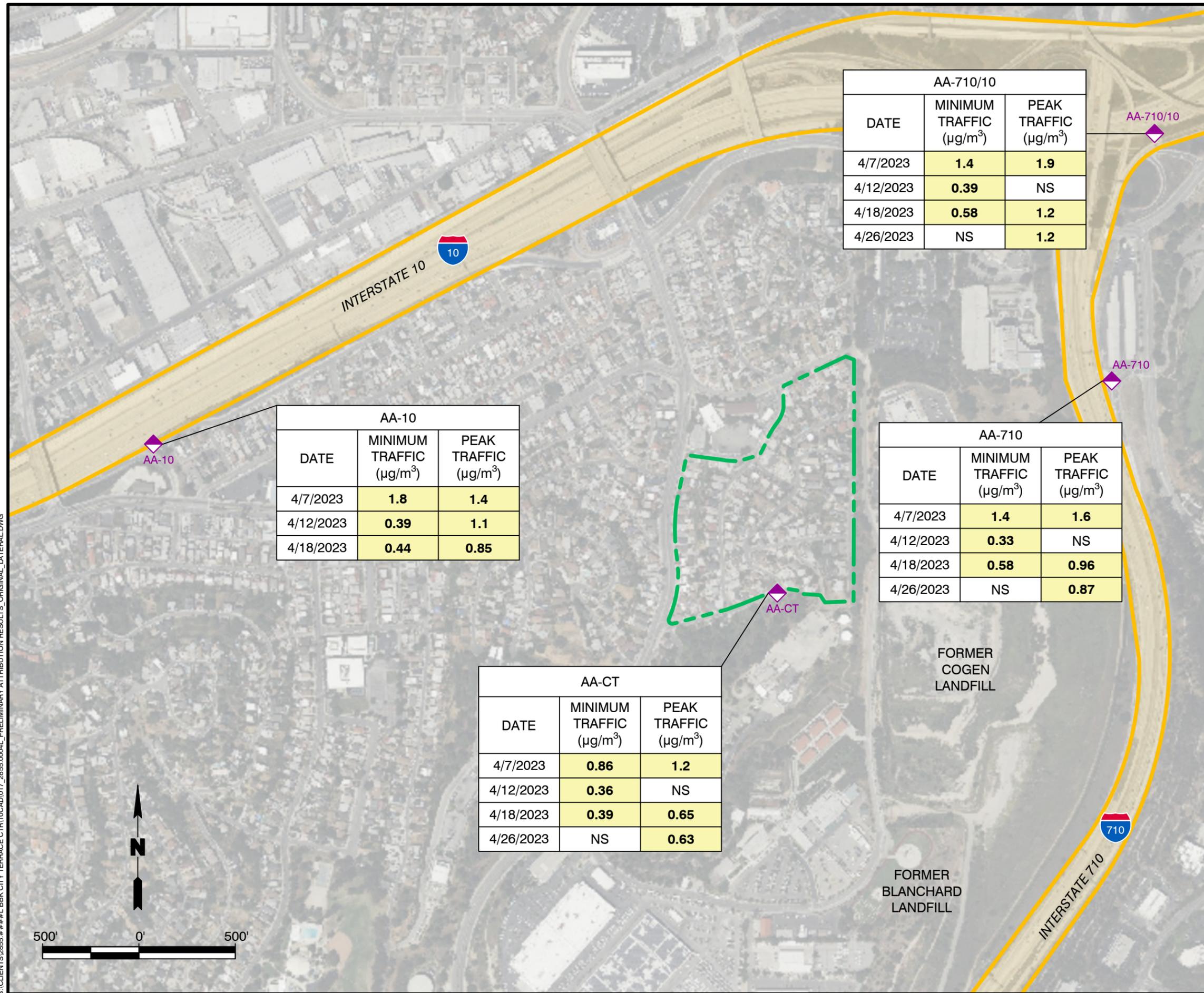
CITY TERRACE COMMUNITY
LOS ANGELES, CALIFORNIA 90063

Prepared for:

COUNTY OF LOS ANGELES

	Compiled by: C.J.	Date: 8 JUNE 2023	FIGURE 3
	Prepared by: T.C.	Scale: 1" = 800'	
	Project Mgr: A.M.	Project: 2855.0004	
	File: 017_2855.0004L_PRELIMINARY ATTRIBUTION RESULTS.DWG		

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AA-710/10		
DATE	MINIMUM TRAFFIC ($\mu\text{g}/\text{m}^3$)	PEAK TRAFFIC ($\mu\text{g}/\text{m}^3$)
4/7/2023	1.4	1.9
4/12/2023	0.39	NS
4/18/2023	0.58	1.2
4/26/2023	NS	1.2

AA-10		
DATE	MINIMUM TRAFFIC ($\mu\text{g}/\text{m}^3$)	PEAK TRAFFIC ($\mu\text{g}/\text{m}^3$)
4/7/2023	1.8	1.4
4/12/2023	0.39	1.1
4/18/2023	0.44	0.85

AA-710		
DATE	MINIMUM TRAFFIC ($\mu\text{g}/\text{m}^3$)	PEAK TRAFFIC ($\mu\text{g}/\text{m}^3$)
4/7/2023	1.4	1.6
4/12/2023	0.33	NS
4/18/2023	0.58	0.96
4/26/2023	NS	0.87

AA-CT		
DATE	MINIMUM TRAFFIC ($\mu\text{g}/\text{m}^3$)	PEAK TRAFFIC ($\mu\text{g}/\text{m}^3$)
4/7/2023	0.86	1.2
4/12/2023	0.36	NS
4/18/2023	0.39	0.65
4/26/2023	NS	0.63

- LEGEND**
- - - CITY TERRACE COMMUNITY BOUNDARY
 - APPROXIMATE EXTENTS OF FREEWAYS
 - ◆ PEAK/MINIMUM TRAFFIC STUDY AMBIENT/OUTDOOR AIR SAMPLING LOCATION

- NOTES**
1. ALL SAMPLES COLLECTED OVER AN APPROXIMATELY THREE-HOUR PERIOD
 2. AA = AMBIENT/OUTDOOR AIR
 3. ALL SAMPLE LOCATIONS ARE APPROXIMATE
 4. ALL UNITS IN MICROGRAMS PER CUBIC METER ($\mu\text{g}/\text{m}^3$)
 5. CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL (DTSC) HUMAN AND ECOLOGICAL RISK OFFICE (HERO) HUMAN HEALTH RISK ASSESSMENT (HHRA) NOTE 3 SCREENING LEVEL (SL) FOR RESIDENTIAL AIR (UPDATED MAY 2022) FOR BENZENE = $0.097 \mu\text{g}/\text{m}^3$
 6. YELLOW HIGHLIGHT INDICATES CONCENTRATION EXCEEDS SL
 7. CONCENTRATIONS DETECTED ABOVE PRACTICAL QUANTITATION LIMIT ARE IN BOLD
 8. NS = NOT SAMPLED
 9. PEAK TRAFFIC DATA WAS UNABLE TO BE COLLECTED ON 4/12/2023 DUE TO QUALITY CONTROL ISSUES WITH LABORATORY ISSUED FLOW CONTROLLERS. PEAK TRAFFIC SAMPLES WERE COLLECTED ON 04/26/2023.

Title:

PEAK/MINIMUM TRAFFIC STUDY BENZENE CONCENTRATIONS

CITY TERRACE COMMUNITY
LOS ANGELES, CALIFORNIA 90063

Prepared for:

COUNTY OF LOS ANGELES

ROUX	Compiled by: C.J.	Date: 8 JUNE 2023	FIGURE 4
	Prepared by: T.C.	Scale: 1" = 500'	
	Project Mgr: A.M.	Project: 2855.0004	
	File: 017_2855.0004L_PRELIMINARY ATTRIBUTION RESULTS.DWG		

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AA-PW1	
DATE	BENZENE (µg/m³)
4/17/2023	NS
4/19/2023	1.4
4/27/2023	1.8

AA-PW2	
DATE	BENZENE (µg/m³)
4/17/2023	0.85
4/19/2023	1.7
4/27/2023	0.91

AA-710/10	
DATE	BENZENE (µg/m³)
4/17/2023	0.60
4/19/2023	1.4
4/27/2023	0.85

AA-PW3	
DATE	BENZENE (µg/m³)
4/17/2023	0.64
4/19/2023	1.1
4/27/2023	0.82

AA-0.125MI	
DATE	BENZENE (µg/m³)
4/17/2023	0.62
4/19/2023	1.1
4/27/2023	0.79

AA-0.25MI	
DATE	BENZENE (µg/m³)
4/17/2023	0.50
4/19/2023	0.86
4/27/2023	0.83

AA-0.5MI	
DATE	BENZENE (µg/m³)
4/17/2023	0.54
4/19/2023	1.0
4/27/2023	0.70

AA-BL	
DATE	BENZENE (µg/m³)
4/17/2023	0.50
4/19/2023	0.88
4/27/2023	0.75

AA-CL	
DATE	BENZENE (µg/m³)
4/17/2023	0.45
4/19/2023	0.96
4/27/2023	0.75

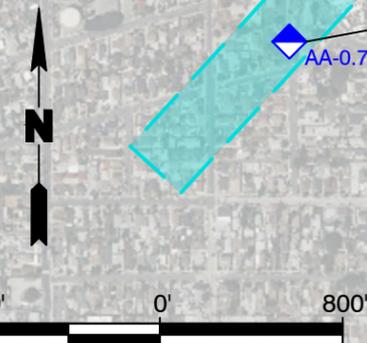
AA-0.75MI	
DATE	BENZENE (µg/m³)
4/17/2023	0.55
4/19/2023	1.0
4/27/2023	0.84

LEGEND

- CITY TERRACE COMMUNITY BOUNDARY
- APPROXIMATE EXTENTS OF FREEWAYS
- SEPARATION SAMPLING TRANSECT
- PREVAILING WIND SAMPLING TRANSECT
- APPROXIMATE EXTENTS OF FORMER COGEN LANDFILL
- APPROXIMATE EXTENTS OF FORMER BLANCHARD LANDFILL
- AMBIENT/OUTDOOR AIR SAMPLING LOCATION

NOTES

1. ALL SAMPLES LOCATIONS ARE APPROXIMATE
2. AA = AMBIENT/OUTDOOR AIR
3. SAMPLES COLLECTED OVER AN APPROXIMATELY 24-HOUR PERIOD
4. µg/m³ = MICROGRAMS PER CUBIC METER
5. CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL (DTSC) HUMAN AND ECOLOGICAL RISK OFFICE (HERO) HUMAN HEALTH RISK ASSESSMENT (HHRA) NOTE 3 SCREENING LEVEL (SL) FOR RESIDENTIAL AIR (UPDATED MAY 2022) FOR BENZENE = 0.097 µg/m³
6. YELLOW HIGHLIGHT INDICATES CONCENTRATION EXCEEDS SL
7. CONCENTRATIONS DETECTED ABOVE PRACTICAL QUANTITATION LIMIT ARE IN BOLD
8. NS = NOT SAMPLED
9. AA-PW1 DATA FROM 4/17/2023 UNAVAILABLE DUE TO STOLEN EQUIPMENT

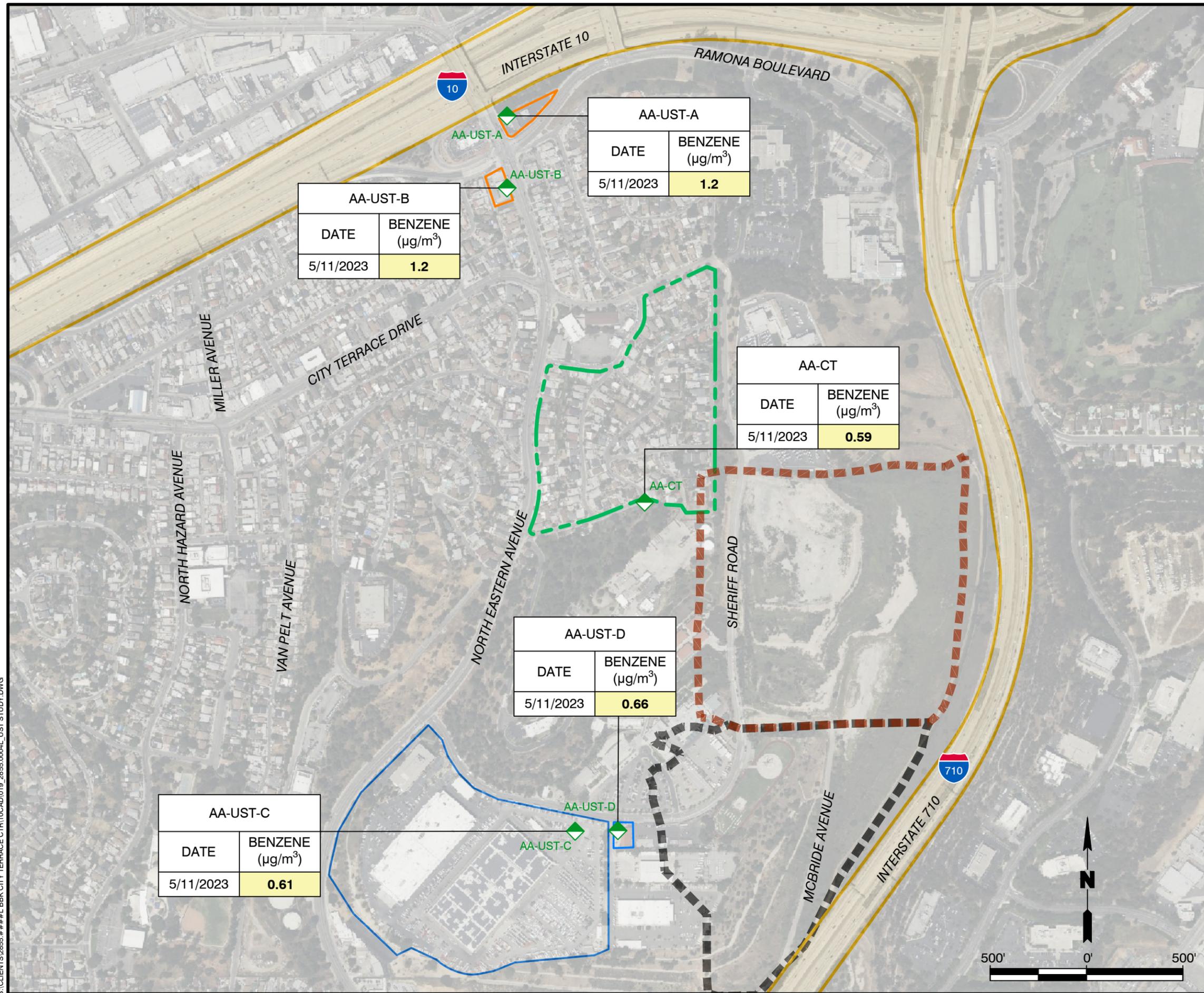


Title: **LATERAL VARIATION STUDY BENZENE CONCENTRATIONS**
 CITY TERRACE COMMUNITY
 LOS ANGELES, CALIFORNIA 90063

Prepared for: COUNTY OF LOS ANGELES

	Compiled by: C.J.	Date: 8 JUN 2023	FIGURE 5
	Prepared by: T.C.	Scale: AS SHOWN	
	Project Mgr: A.M.	Project: 2855.0004	
	File: 017_2855.0004L_PRELIMINARY ATTRIBUTION RESULTS_ORIGINAL.DWG		

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LEGEND

- CITY TERRACE COMMUNITY BOUNDARY
- APPROXIMATE LOCATION OF COUNTY PROPERTY WITH FUELING FACILITIES
- GASOLINE SERVICE STATION
- APPROXIMATE EXTENTS OF FREEWAYS
- APPROXIMATE EXTENTS OF FORMER COGEN LANDFILL
- APPROXIMATE EXTENTS OF FORMER BLANCHARD LANDFILL
- FUELING FACILITIES STUDY AMBIENT AIR SAMPLE LOCATION

NOTES

- ALL SAMPLES LOCATIONS ARE APPROXIMATE
- AA = AMBIENT/OUTDOOR AIR
- SAMPLES COLLECTED OVER AN APPROXIMATELY 24-HOUR PERIOD
- $\mu\text{g}/\text{m}^3$ = MICROGRAMS PER CUBIC METER
- CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL (DTSC) HUMAN AND ECOLOGICAL RISK OFFICE (HERO) HUMAN HEALTH RISK ASSESSMENT (HHRA) NOTE 3 SCREENING LEVEL (SL) FOR RESIDENTIAL AIR (UPDATED MAY 2022) FOR BENZENE = $0.097 \mu\text{g}/\text{m}^3$
- ITALICS* INDICATE A DUPLICATE SAMPLE
- YELLOW HIGHLIGHT INDICATES CONCENTRATION EXCEEDS SL
- CONCENTRATIONS DETECTED ABOVE PRACTICAL QUANTITATION LIMIT ARE IN BOLD

Title:

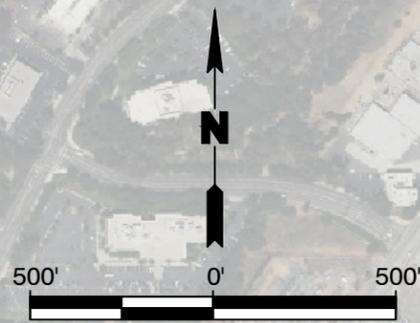
FUELING FACILITIES STUDY BENZENE CONCENTRATIONS

CITY TERRACE COMMUNITY
LOS ANGELES, CALIFORNIA 90063

Prepared for:

COUNTY OF LOS ANGELES

	Compiled by: C.J.	Date: 8 JUNE 2023	FIGURE 6
	Prepared by: T.C.	Scale: 1" = 500'	
	Project Mgr: A.M.	Project: 2855.0004L	
	File: 019_2855.0004L_UST STUDY.DWG		



- A. Analytical Laboratory Reports
- B. Student's t-Test Calculations

Analytical Laboratory Reports



Date of Report: 04/24/2023

April McGuire

Roux Associates, Inc -Long Beach
5150 E. Pacific Coast Hwy, Suite 450
Long Beach, CA 90804

Client Project: 2855
BCL Project: City Terrace
BCL Work Order: 2307058
Invoice ID: B474166

Enclosed are the results of analyses for samples received by the laboratory on 4/8/2023. If you have any questions concerning this report, please feel free to contact me.

Revised Report: This report supercedes Report ID 1001417795

Sincerely,

Contact Person: Brianna Schutte
Client Services Rep

Stuart Buttram
Operations Manager

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

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2307058

AIR: CHAIN-OF-CUSTODY / Analytical
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed.

Section A Required Client Information:
Company: ROUX
Address: 5150 E PCH, STE 450
LONG BEACH, CA 90804
Email To: AMCGUIRE@ROUXINC.COM
Phone: 562-445-8824 Fax:
Requested Due Date/TAT: Standard

Section B Required Project Information:
Report To: A. MCGUIRE
Copy To:
Purchase Order No.:
Project Name: CITY TERRACE
Project Number: 2855

Section C Invoice Information:
Attention: ROUXAP@ROUXINC.COM
Company Name: ROUX
Address: 5150 E PCH #450, LONG BEACH, CA 90804
Pace Quote Reference: 00132481
Pace Project Manager/Sales Rep: DAVAN GIBBIOR
Pace Profile #:

Program:
 UST Superfund Emissions Clean Air Act
 Voluntary Clean Up Dry Clean RCRA Other

Location of Sampling by State: California
Method: PM10
Report Level: IL BL TV Other

ITEM #	AIR SAMPLE ID Sample ID# MUST BE UNIQUE	COLLECTED		Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Summa Can Number	Flow Control Number	METHANE (ppm)	TO-15 (ppm)	TO-14 (ppm)	TO-13 (ppm)	TO-11 (ppm)	TO-5 (ppm)	Methane (ppm)	Temp in °C	Received on Box	Custody Sealed Cooker	Samples Intact	
		DATE	TIME																
1	AA-710-20230407-0100	04/07/23	0655	-29	-9	0790	17511	X	X										
2	AA-10-20230407-0100	04/07/23	0658	-29	-7	5646	17512												
3	AA-710-20230407-0110	04/07/23	0110	-29	-8	811	18900												
4	AA-CT-20230407-0100	04/07/23	0100	-30	-6	062105	9814												
5	AA-710-20230407-0100	04/07/23	0700	-30	-5	068700	024												
6	AA-710-20230407-0100-D	04/07/23	0700	-29	-6	079510	001												
7	AA-10-20230407-0100	04/07/23	0657	-30	-7	883420	014												
8	AA-710-20230407-0651	04/07/23	0651	-29	-5	016917	513												
9	AA-CT-20230407-0655	04/07/23	0655	-29	-7	083405	17509												

Comments: methene in ppm units

RELINQUISHED BY / AFFILIATION: Jonathan Cameron (Roux) 04/08/23 DATE: 4/8/23 TIME: 0930

ACCEPTED BY / AFFILIATION: [Signature] DATE: 04/07/2023 TIME: 0930

SAMPLER NAME AND SIGNATURE: Jonathan Cameron DATE: 04/07/2023

CHK BY: JCV DISTRIBUTION: INH SUB OUT: □

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PACE ANALYTICAL COOLER RECEIPT FORM Page 1 Of 1

Submission #: 23-07058

SHIPPING INFORMATION: Fed Ex UPS GSO / GLS Hand Delivery Pace Lab Field Service Other (Specify) _____

SHIPPING CONTAINER: Ice Chest None Box Other (Specify) _____

FREE LIQUID YES NO W / S

Refrigerant: Ice Blue Ice None Other Comments: _____

Custody Seals: Ice Chest Containers None Comments: _____
Intact? Yes No Intact? Yes No

All samples received? Yes No All samples containers intact? Yes No Description(s) match COC? Yes No

COC Received YES NO Emissivity: _____ Container: SUNMA Thermometer ID: _____ Date/Time: 4/8/23
Temperature: (A) Room °C / (C) Temp °C Analyst Init: JCN 0930

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr*										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664R										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 508/608 / 8081A										
QT EPA 515.1/8151A										
QT EPA 525.2										
QT EPA 525.2 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548.1										
QT EPA 549.2										
QT EPA 8015b1										
QT EPA 8270C										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOH SLEEVE										
PCII VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUNMA CANISTER	<u>GL</u>	<u>A</u>								

Comments: _____
 Sample Numbering Completed By: JCN Date/Time: 4/8/23 1020
 A = Actual / C = Corrected

Rev 23 05/20/22
 [S:\VFD\Doc\Word\Patrol\LAB_DOC\FORMS\BAIR\RC\civ 24]



Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	
2307058-01	COC Number:	---		04/08/2023	09:30
	Project Number:	---		Sampling Date:	04/07/2023 03:58
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-710-20230407-0058		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2307058-02	COC Number:	---		04/08/2023	09:30
	Project Number:	---		Sampling Date:	04/07/2023 04:08
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-10-20230407-0108		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2307058-03	COC Number:	---		04/08/2023	09:30
	Project Number:	---		Sampling Date:	04/07/2023 04:10
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-710/10-20230407-0110		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2307058-04	COC Number:	---		04/08/2023	09:30
	Project Number:	---		Sampling Date:	04/07/2023 04:00
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-CT-20230407-0100		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2307058-05	COC Number:	---		04/08/2023	09:30
	Project Number:	---		Sampling Date:	04/07/2023 10:00
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-710-20230407-0700		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2307058-06	COC Number:	---		04/08/2023	09:30
	Project Number:	---		Sampling Date:	04/07/2023 10:00
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-710-20230407-0700-D		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2307058-07	COC Number:	---		04/08/2023	09:30
	Project Number:	---		Sampling Date:	04/07/2023 10:05
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-10-20230407-0705		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2307058-08	COC Number:	---	Receive Date:	04/08/2023 09:30
	Project Number:	---	Sampling Date:	04/07/2023 09:51
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-710/10-20230407-0651	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air
2307058-09	COC Number:	---	Receive Date:	04/08/2023 09:30
	Project Number:	---	Sampling Date:	04/07/2023 09:55
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-CT-20230407-0655	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307058-01		Client Sample Name: AA-710-20230407-0058, 4/7/2023 3:58:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	11	ug/m3	10	0.075	EPA-TO-15-SIM	ND	A01	1
Benzene	1.4	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.9	ug/m3	0.50	0.052	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	1.3	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.56	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.9	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.5	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.66	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	2.4	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.81	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	3.2	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	90.8	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	106	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/24/2023 10:54
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307058-01		Client Sample Name: AA-710-20230407-0058, 4/7/2023 3:58:00AM, Client							
DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID		
1	EPA-TO-15-SIM	04/10/23 13:17	04/11/23 03:12	BEP	MS-A1	10	B163730	EPA TO-15	
2	EPA-TO-15-SIM	04/10/23 13:17	04/10/23 21:50	BEP	MS-A1	1	B163730	EPA TO-15	

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307058-01	Client Sample Name: AA-710-20230407-0058, 4/7/2023 3:58:00AM, Client
----------------------------------	-----------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	31	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/10/23 08:04	04/10/23 17:01	RMK	GC-A1	1	B163715	No Prep

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307058-02		Client Sample Name: AA-10-20230407-0108, 4/7/2023 4:08:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	29	ug/m3	10	0.075	EPA-TO-15-SIM	ND	A01	1
Benzene	1.8	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	3.2	ug/m3	0.50	0.052	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	1.8	ug/m3	50	0.027	EPA-TO-15-SIM	ND	J,A01	1
Ethylbenzene	1.0	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	5.3	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.5	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.66	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	4.4	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	1.4	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	5.9	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	93.9	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	105	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/24/2023 10:54
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307058-02	Client Sample Name: AA-10-20230407-0108, 4/7/2023 4:08:00AM, Client								
DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID		
1	EPA-TO-15-SIM	04/10/23 13:17	04/11/23 03:42	BEP	MS-A1	10	B163730	EPA TO-15	
2	EPA-TO-15-SIM	04/10/23 13:17	04/10/23 22:26	BEP	MS-A1	1	B163730	EPA TO-15	

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307058-02	Client Sample Name: AA-10-20230407-0108, 4/7/2023 4:08:00AM, Client
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	2.3	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/10/23 08:04	04/10/23 17:21	RMK	GC-A1	1	B163715	No Prep

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 Long Beach, CA 90804

Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307058-03		Client Sample Name: AA-710/10-20230407-0110, 4/7/2023 4:10:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	13	ug/m3	10	0.075	EPA-TO-15-SIM	ND	A01	1
Benzene	1.4	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.8	ug/m3	0.50	0.052	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	1.9	ug/m3	50	0.027	EPA-TO-15-SIM	ND	J,A01	1
Ethylbenzene	0.70	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	3.5	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.63	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	2.8	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.90	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	3.7	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	89.7	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	103	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/24/2023 10:54
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307058-03		Client Sample Name: AA-710/10-20230407-0110, 4/7/2023 4:10:00AM, Client							
DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID		
1	EPA-TO-15-SIM	04/10/23 13:17	04/11/23 04:13	BEP	MS-A1	10	B163730	EPA TO-15	
2	EPA-TO-15-SIM	04/10/23 13:17	04/10/23 23:03	BEP	MS-A1	1	B163730	EPA TO-15	

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Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307058-03	Client Sample Name: AA-710/10-20230407-0110, 4/7/2023 4:10:00AM, Client
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	6.0	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/10/23 08:04	04/10/23 17:41	RMK	GC-A1	1	B163715	No Prep

DCN = Data Continuation Number

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Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307058-04		Client Sample Name: AA-CT-20230407-0100, 4/7/2023 4:00:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	15	ug/m3	10	0.075	EPA-TO-15-SIM	ND	A01	1
Benzene	0.86	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.8	ug/m3	0.50	0.052	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	1.2	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.40	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	2.0	0.077	EPA-TO-15-SIM	ND	A01	1
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.0	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.5	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.66	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.6	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.54	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	2.1	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	90.5	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	109	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/24/2023 10:54
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307058-04		Client Sample Name: AA-CT-20230407-0100, 4/7/2023 4:00:00AM, Client							
DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID		
1	EPA-TO-15-SIM	04/10/23 13:17	04/11/23 04:43	BEP	MS-A1	10	B163730	EPA TO-15	
2	EPA-TO-15-SIM	04/10/23 13:17	04/10/23 23:39	BEP	MS-A1	1	B163730	EPA TO-15	

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 Long Beach, CA 90804

Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307058-04	Client Sample Name: AA-CT-20230407-0100, 4/7/2023 4:00:00AM, Client
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	5.2	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/10/23 08:04	04/10/23 18:02	RMK	GC-A1	1	B163715	No Prep

DCN = Data Continuation Number

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Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307058-05		Client Sample Name: AA-710-20230407-0700, 4/7/2023 10:00:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	15	ug/m3	10	0.075	EPA-TO-15-SIM	ND	A01	1
Benzene	1.6	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.9	ug/m3	0.50	0.052	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	1.3	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.80	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	3.9	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.64	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	3.3	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	1.1	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	4.4	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	92.7	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	111	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Reported: 04/24/2023 10:54
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307058-05		Client Sample Name: AA-710-20230407-0700, 4/7/2023 10:00:00AM, Client							
DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID		
1	EPA-TO-15-SIM	04/10/23 13:17	04/11/23 05:13	BEP	MS-A1	10	B163730	EPA TO-15	
2	EPA-TO-15-SIM	04/10/23 13:17	04/11/23 00:16	BEP	MS-A1	1	B163730	EPA TO-15	

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Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307058-05	Client Sample Name: AA-710-20230407-0700, 4/7/2023 10:00:00AM, Client
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	19	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/10/23 08:04	04/10/23 18:22	RMK	GC-A1	1	B163715	No Prep

DCN = Data Continuation Number

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Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307058-06		Client Sample Name: AA-710-20230407-0700-D, 4/7/2023 10:00:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	20	ug/m3	10	0.075	EPA-TO-15-SIM	ND	A01	1
Benzene	1.6	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.9	ug/m3	0.50	0.052	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	1.6	ug/m3	50	0.027	EPA-TO-15-SIM	ND	J,A01	1
Ethylbenzene	0.82	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	2.0	0.077	EPA-TO-15-SIM	ND	A01	1
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	4.4	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.63	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	3.4	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	1.1	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	4.5	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	89.9	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	112	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/24/2023 10:54
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307058-06	Client Sample Name: AA-710-20230407-0700-D, 4/7/2023 10:00:00AM, Client								
DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID		
1	EPA-TO-15-SIM	04/10/23 13:17	04/11/23 05:44	BEP	MS-A1	10	B163730	EPA TO-15	
2	EPA-TO-15-SIM	04/10/23 13:17	04/11/23 00:52	BEP	MS-A1	1	B163730	EPA TO-15	

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307058-06	Client Sample Name: AA-710-20230407-0700-D, 4/7/2023 10:00:00AM, Client
----------------------------------	--------------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	2.2	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/10/23 08:04	04/10/23 18:42	RMK	GC-A1	1	B163715	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307058-07		Client Sample Name: AA-10-20230407-0705, 4/7/2023 10:05:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	18	ug/m3	10	0.075	EPA-TO-15-SIM	ND	A01	1
Benzene	1.4	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	3.3	ug/m3	0.50	0.052	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	3.6	ug/m3	50	0.027	EPA-TO-15-SIM	ND	J,A01	1
Ethylbenzene	0.63	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	3.6	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.5	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.64	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	2.5	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.86	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	3.4	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	90.5	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	108	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/24/2023 10:54
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307058-07		Client Sample Name: AA-10-20230407-0705, 4/7/2023 10:05:00AM, Client							
DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID		
1	EPA-TO-15-SIM	04/10/23 13:17	04/11/23 06:13	BEP	MS-A1	10	B163730	EPA TO-15	
2	EPA-TO-15-SIM	04/10/23 13:17	04/11/23 01:29	BEP	MS-A1	1	B163730	EPA TO-15	

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 Long Beach, CA 90804

Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307058-07	Client Sample Name: AA-10-20230407-0705, 4/7/2023 10:05:00AM, Client
----------------------------------	-----------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	29	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/10/23 08:04	04/10/23 19:42	RMK	GC-A1	1	B163715	No Prep

DCN = Data Continuation Number

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Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307058-08		Client Sample Name: AA-710/10-20230407-0651, 4/7/2023 9:51:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	15	ug/m3	10	0.075	EPA-TO-15-SIM	ND	A01	1
Benzene	1.9	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	3.0	ug/m3	0.50	0.052	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	1.3	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.82	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	4.0	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.6	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.64	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	3.3	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	1.1	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	4.4	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	93.6	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	109	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/24/2023 10:54
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307058-08		Client Sample Name: AA-710/10-20230407-0651, 4/7/2023 9:51:00AM, Client							
DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID		
1	EPA-TO-15-SIM	04/10/23 13:17	04/11/23 06:43	BEP	MS-A1	10	B163730	EPA TO-15	
2	EPA-TO-15-SIM	04/10/23 13:17	04/11/23 02:06	BEP	MS-A1	1	B163730	EPA TO-15	

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 Long Beach, CA 90804

Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307058-08	Client Sample Name: AA-710/10-20230407-0651, 4/7/2023 9:51:00AM, Client
----------------------------------	--------------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	2.3	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/10/23 08:04	04/10/23 20:03	RMK	GC-A1	1	B163715	No Prep

DCN = Data Continuation Number

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Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307058-09		Client Sample Name: AA-CT-20230407-0655, 4/7/2023 9:55:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	19	ug/m3	10	0.075	EPA-TO-15-SIM	ND	A01	1
Benzene	1.2	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	3.4	ug/m3	0.50	0.052	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	1.3	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.46	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.9	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.5	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.63	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.7	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.60	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	2.3	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	91.1	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	105	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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 Long Beach, CA 90804

Reported: 04/24/2023 10:54
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307058-09		Client Sample Name: AA-CT-20230407-0655, 4/7/2023 9:55:00AM, Client							
DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID		
1	EPA-TO-15-SIM	04/10/23 13:17	04/11/23 07:14	BEP	MS-A1	10	B163730	EPA TO-15	
2	EPA-TO-15-SIM	04/10/23 13:17	04/11/23 02:43	BEP	MS-A1	1	B163730	EPA TO-15	

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307058-09	Client Sample Name: AA-CT-20230407-0655, 4/7/2023 9:55:00AM, Client
----------------------------------	----------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	5.2	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/10/23 08:04	04/10/23 20:23	RMK	GC-A1	1	B163715	No Prep

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B163730							
Acetone	B163730-BLK1	ND	ug/m3	1.0	0.0075		1
Benzene	B163730-BLK1	ND	ug/m3	0.050	0.0032		1
Benzyl chloride	B163730-BLK1	ND	ug/m3	0.50	0.0052		1
Carbon tetrachloride	B163730-BLK1	ND	ug/m3	0.20	0.0063		1
Chlorobenzene	B163730-BLK1	ND	ug/m3	0.10	0.0079		1
Chloroform	B163730-BLK1	ND	ug/m3	0.050	0.0058		1
1,2-Dibromoethane	B163730-BLK1	ND	ug/m3	0.20	0.014		1
1,2-Dichlorobenzene	B163730-BLK1	ND	ug/m3	0.20	0.011		1
1,3-Dichlorobenzene	B163730-BLK1	ND	ug/m3	0.20	0.013		1
1,4-Dichlorobenzene	B163730-BLK1	ND	ug/m3	0.20	0.016		1
Dichlorodifluoromethane	B163730-BLK1	ND	ug/m3	0.050	0.0052		1
1,1-Dichloroethane	B163730-BLK1	ND	ug/m3	0.050	0.0041		1
1,2-Dichloroethane	B163730-BLK1	ND	ug/m3	0.10	0.0046		1
1,1-Dichloroethene	B163730-BLK1	ND	ug/m3	0.050	0.0078		1
cis-1,2-Dichloroethene	B163730-BLK1	ND	ug/m3	0.050	0.0044		1
trans-1,2-Dichloroethene	B163730-BLK1	ND	ug/m3	0.050	0.0075		1
trans-1,3-Dichloropropene	B163730-BLK1	ND	ug/m3	0.050	0.013		1
1,1-Difluoroethane	B163730-BLK1	ND	ug/m3	5.0	0.0027		1
Ethylbenzene	B163730-BLK1	ND	ug/m3	0.050	0.017		1
Methylene chloride	B163730-BLK1	ND	ug/m3	0.20	0.0077		1
Tetrachloroethene	B163730-BLK1	ND	ug/m3	0.10	0.011		1
Toluene	B163730-BLK1	ND	ug/m3	0.10	0.0062		1
1,1,1-Trichloroethane	B163730-BLK1	ND	ug/m3	0.10	0.0055		1
1,1,2-Trichloroethane	B163730-BLK1	ND	ug/m3	0.10	0.0055		1
Trichloroethene	B163730-BLK1	ND	ug/m3	0.10	0.0095		1
Trichlorofluoromethane	B163730-BLK1	ND	ug/m3	0.050	0.0057		1
1,1,2-Trichloro-1,2,2-trifluoroethane	B163730-BLK1	ND	ug/m3	0.10	0.0078		1
Vinyl chloride	B163730-BLK1	ND	ug/m3	0.020	0.0046		1
p- & m-Xylenes	B163730-BLK1	ND	ug/m3	0.050	0.0082		1
o-Xylene	B163730-BLK1	ND	ug/m3	0.050	0.0044		1
Total Xylenes	B163730-BLK1	ND	ug/m3	0.10	0.013		1
4-Bromofluorobenzene (Surrogate)	B163730-BLK1	82.5	%	50 - 150 (LCL - UCL)			1

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Run #
								Percent Recovery	RPD		
QC Batch ID: B163730											
Benzene	B163730-BS1	LCS	0.27015	0.31948	ug/m3	84.6		70 - 130			1
	B163730-BSD1	LCSD	0.26513	0.31948	ug/m3	83.0	1.9	70 - 130	30		2
Benzyl chloride	B163730-BS1	LCS	0.42427	0.51772	ug/m3	82.0		70 - 130		J	1
	B163730-BSD1	LCSD	0.40211	0.51772	ug/m3	77.7	5.4	70 - 130	30	J	2
Carbon tetrachloride	B163730-BS1	LCS	0.53048	0.62913	ug/m3	84.3		70 - 130			1
	B163730-BSD1	LCSD	0.53678	0.62913	ug/m3	85.3	1.2	70 - 130	30		2
Chlorobenzene	B163730-BS1	LCS	0.40161	0.46036	ug/m3	87.2		70 - 130			1
	B163730-BSD1	LCSD	0.40244	0.46036	ug/m3	87.4	0.2	70 - 130	30		2
Chloroform	B163730-BS1	LCS	0.42800	0.48825	ug/m3	87.7		70 - 130			1
	B163730-BSD1	LCSD	0.42595	0.48825	ug/m3	87.2	0.5	70 - 130	30		2
1,2-Dibromoethane	B163730-BS1	LCS	0.66193	0.76835	ug/m3	86.1		70 - 130			1
	B163730-BSD1	LCSD	0.67084	0.76835	ug/m3	87.3	1.3	70 - 130	30		2
1,2-Dichlorobenzene	B163730-BS1	LCS	0.55987	0.60124	ug/m3	93.1		70 - 130			1
	B163730-BSD1	LCSD	0.54273	0.60124	ug/m3	90.3	3.1	70 - 130	30		2
1,3-Dichlorobenzene	B163730-BS1	LCS	0.54556	0.60124	ug/m3	90.7		70 - 130			1
	B163730-BSD1	LCSD	0.52145	0.60124	ug/m3	86.7	4.5	70 - 130	30		2
1,4-Dichlorobenzene	B163730-BS1	LCS	0.55121	0.60124	ug/m3	91.7		70 - 130			1
	B163730-BSD1	LCSD	0.51394	0.60124	ug/m3	85.5	7.0	70 - 130	30		2
1,1-Dichloroethane	B163730-BS1	LCS	0.34711	0.40474	ug/m3	85.8		70 - 130			1
	B163730-BSD1	LCSD	0.34192	0.40474	ug/m3	84.5	1.5	70 - 130	30		2
1,2-Dichloroethane	B163730-BS1	LCS	0.33472	0.40474	ug/m3	82.7		70 - 130			1
	B163730-BSD1	LCSD	0.33209	0.40474	ug/m3	82.0	0.8	70 - 130	30		2
1,1-Dichloroethene	B163730-BS1	LCS	0.33932	0.39649	ug/m3	85.6		70 - 130			1
	B163730-BSD1	LCSD	0.34463	0.39649	ug/m3	86.9	1.6	70 - 130	30		2
cis-1,2-Dichloroethene	B163730-BS1	LCS	0.31474	0.39649	ug/m3	79.4		70 - 130			1
	B163730-BSD1	LCSD	0.31942	0.39649	ug/m3	80.6	1.5	70 - 130	30		2
Methylene chloride	B163730-BS1	LCS	0.29878	0.34737	ug/m3	86.0		70 - 130			1
	B163730-BSD1	LCSD	0.30527	0.34737	ug/m3	87.9	2.2	70 - 130	30		2
Tetrachloroethene	B163730-BS1	LCS	0.60276	0.67825	ug/m3	88.9		70 - 130			1
	B163730-BSD1	LCSD	0.59435	0.67825	ug/m3	87.6	1.4	70 - 130	30		2
Toluene	B163730-BS1	LCS	0.30743	0.37684	ug/m3	81.6		70 - 130			1
	B163730-BSD1	LCSD	0.30717	0.37684	ug/m3	81.5	0.1	70 - 130	30		2
1,1,1-Trichloroethane	B163730-BS1	LCS	0.47753	0.54562	ug/m3	87.5		70 - 130			1
	B163730-BSD1	LCSD	0.47289	0.54562	ug/m3	86.7	1.0	70 - 130	30		2
1,1,2-Trichloroethane	B163730-BS1	LCS	0.47174	0.54562	ug/m3	86.5		70 - 130			1
	B163730-BSD1	LCSD	0.46896	0.54562	ug/m3	86.0	0.6	70 - 130	30		2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Run #
								Percent Recovery	RPD		
QC Batch ID: B163730											
Trichloroethene	B163730-BS1	LCS	0.45655	0.53737	ug/m3	85.0		70 - 130			1
	B163730-BSD1	LCSD	0.46209	0.53737	ug/m3	86.0	1.2	70 - 130		30	2
Vinyl chloride	B163730-BS1	LCS	0.21441	0.25562	ug/m3	83.9		70 - 130			1
	B163730-BSD1	LCSD	0.21438	0.25562	ug/m3	83.9	0.0	70 - 130		30	2
p- & m-Xylenes	B163730-BS1	LCS	0.69548	0.86843	ug/m3	80.1		70 - 130			1
	B163730-BSD1	LCSD	0.69570	0.86843	ug/m3	80.1	0.0	70 - 130		30	2
o-Xylene	B163730-BS1	LCS	0.35245	0.43421	ug/m3	81.2		70 - 130			1
	B163730-BSD1	LCSD	0.35288	0.43421	ug/m3	81.3	0.1	70 - 130		30	2
Total Xylenes	B163730-BS1	LCS	1.0479	1.3026	ug/m3	80.4		70 - 130			1
	B163730-BSD1	LCSD	1.0486	1.3026	ug/m3	80.5	0.1	70 - 130		30	2
4-Bromofluorobenzene (Surrogate)	B163730-BS1	LCS	3.63	3.58	ug/m3	101		50 - 150			1
	B163730-BSD1	LCSD	3.52	3.58	ug/m3	98.2	3.2	50 - 150			2

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 Long Beach, CA 90804

Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
2	B163730-BSD1	LCSD	EPA-TO-15-SIM	04/10/23	04/10/23 19:47	BEP	MS-A1	1
2	B163730-BSD1	LCSD	EPA-TO-15-SIM	04/10/23	04/10/23 19:47	BEP	MS-A1	1
2	B163730-BSD1	LCSD	EPA-TO-15-SIM	04/10/23	04/10/23 19:47	BEP	MS-A1	1
2	B163730-BSD1	LCSD	EPA-TO-15-SIM	04/10/23	04/10/23 19:47	BEP	MS-A1	1
2	B163730-BSD1	LCSD	EPA-TO-15-SIM	04/10/23	04/10/23 19:47	BEP	MS-A1	1
2	B163730-BSD1	LCSD	EPA-TO-15-SIM	04/10/23	04/10/23 19:47	BEP	MS-A1	1
2	B163730-BSD1	LCSD	EPA-TO-15-SIM	04/10/23	04/10/23 19:47	BEP	MS-A1	1
2	B163730-BSD1	LCSD	EPA-TO-15-SIM	04/10/23	04/10/23 19:47	BEP	MS-A1	1
2	B163730-BSD1	LCSD	EPA-TO-15-SIM	04/10/23	04/10/23 19:47	BEP	MS-A1	1
2	B163730-BSD1	LCSD	EPA-TO-15-SIM	04/10/23	04/10/23 19:47	BEP	MS-A1	1
2	B163730-BSD1	LCSD	EPA-TO-15-SIM	04/10/23	04/10/23 19:47	BEP	MS-A1	1
2	B163730-BSD1	LCSD	EPA-TO-15-SIM	04/10/23	04/10/23 19:47	BEP	MS-A1	1
2	B163730-BSD1	LCSD	EPA-TO-15-SIM	04/10/23	04/10/23 19:47	BEP	MS-A1	1
2	B163730-BSD1	LCSD	EPA-TO-15-SIM	04/10/23	04/10/23 19:47	BEP	MS-A1	1
2	B163730-BSD1	LCSD	EPA-TO-15-SIM	04/10/23	04/10/23 19:47	BEP	MS-A1	1
2	B163730-BSD1	LCSD	EPA-TO-15-SIM	04/10/23	04/10/23 19:47	BEP	MS-A1	1
2	B163730-BSD1	LCSD	EPA-TO-15-SIM	04/10/23	04/10/23 19:47	BEP	MS-A1	1
2	B163730-BSD1	LCSD	EPA-TO-15-SIM	04/10/23	04/10/23 19:47	BEP	MS-A1	1
2	B163730-BSD1	LCSD	EPA-TO-15-SIM	04/10/23	04/10/23 19:47	BEP	MS-A1	1
2	B163730-BSD1	LCSD	EPA-TO-15-SIM	04/10/23	04/10/23 19:47	BEP	MS-A1	1

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
-------------	--------------	-----------	-------	-----	-----	-----------	-------

QC Batch ID: B163715

Methane (CH4)	B163715-BLK1	ND	ppmv	2.0	1.8		1
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Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B163715-BLK1	PB	ASTM-D1946	04/10/23	04/10/23 16:41	RMK	GC-A1	1

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/24/2023 10:54
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Run #
								Percent Recovery	RPD		
QC Batch ID: B163715											
Methane (CH4)	B163715-BS1	LCS	19508	18000	ppmv	108		70 - 130			1
	B163715-BSD1	LCSD	19422	18000	ppmv	108	0.4	70 - 130	30		2

Run #	QC Sample ID	QC Type	Method	Prep Date	Run		Analyst	Instrument	Dilution
					Date	Time			
1	B163715-BS1	LCS	ASTM-D1946	04/10/23	04/10/23	16:00	RMK	GC-A1	1
2	B163715-BSD1	LCSD	ASTM-D1946	04/10/23	04/10/23	16:21	RMK	GC-A1	1

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5150 E. Pacific Coast Hwy, Suite 450
Long Beach, CA 90804

Reported: 04/24/2023 10:54
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Notes And Definitions

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A01 Detection and quantitation limits are raised due to sample dilution.



Date of Report: 05/02/2023

April McGuire

Roux Associates, Inc -Long Beach
5150 E. Pacific Coast Hwy, Suite 450
Long Beach, CA 90804

Client Project: 2855
BCL Project: City Terrace
BCL Work Order: 2307358
Invoice ID: B474860

Enclosed are the results of analyses for samples received by the laboratory on 4/13/2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Brianna Schutte
Client Services Rep

Stuart Buttram
Operations Manager

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

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2307358

AIR: CHAIN-OF-CUSTODY / Analytical Request
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

Program
 UST Superfund Emissions Clean Air Act
 Voluntary Clean Up Dry Clean RCRA Other

Location of Sampling by State: CA
 State FPMV FPMV FPMV FPMV FPMV

Report Level: II III IV Other

Invoice Information:
 Attention: ROUX ACCOUNTS PAYABLE (ROUXAP@ROUXINC.COM)
 Company Name: ROUX
 Address: 5150 E PCH #450, LONG BEACH, CA 90804
 PACE Quote Reference: 001-35148
 PACE Project Manager/Sales Rep: BRIANNA SCHUTTE / (HAWN GIRROR)
 PACE Profile #:

Section B Required Project Information:
 Report To: A. MCGUIRE
 Copy To:
 Purchase Order No.:
 Project Name: CITY TERRACE
 Project Number: 2855

Section A Required Client Information:
 Company: ROUX
 Address: 5150 E PCH, STE 450
LONG BEACH, CA 90804
 Email To: AMCGUIRE@ROUXINC.COM
 Phone: 562-445-8624 Fax:
 Requested Due Date/TIME: 5/10/13

ITEM #	AIR SAMPLE ID Sample IDs MUST BE UNIQUE	TOTAL VOLUME COLLECTED Media Code	COLLECTED		Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Summa Can Number	Flow Control Number	Face Lab ID
			DATE	TIME					
1	AA-710-20230412-0105	6LC	4/12/13	0105	-24	-3	0680	1389	X
2	AA-10-20230412-0110	6LL	4/12/13	0110	-30	-5	0748	1751	X
3	AA-710-20230412-0100	6LL	4/12/13	0100	-29	-4	389	1369	X
4	AA-2410-20230412-0100	6LL	4/12/13	0357	-24	-8	2752	1751	X
5	AA-CT-20230412-0055	6LL	4/12/13	0745	-30	-27	0575	0598	X
6	AA-710-20230412-0745-02	6LL	4/12/13	0705	-30	-6	0679	1751	X
7	AA-10-20230412-0705	6LL	4/12/13	0750	-30	-17	2753	0601	X
8	AA-710-20230412-0750-02	6LL	4/12/13	0655	-29	-14	2776	0175	X
9	AA-CT-20230412-0655	6LL	4/12/13	1035	-30	-27	0575	0598	X
10									
11									
12									

RELINQUISHED BY / AFFILIATION: Frank Lee ROUX DATE: 4/12/13 TIME: 1135

ACCEPTED BY / AFFILIATION: Ameyus DATE: 4-13-13 TIME: 1020

SAMPLER NAME AND SIGNATURE: Travis Clay

DATE: 4/12/13

CHK BY: [Signature] DISTRIBUTION: [Signature] SUB-OUT:

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414 Air Technical Phone: 612.607.6386

FC046Rev.01, 03F.eb2010

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PACE ANALYTICAL		COOLER RECEIPT FORM		Page 1 Of 3								
Submission #: <u>23-07358</u>												
SHIPPING INFORMATION Fed Ex <input checked="" type="checkbox"/> UPS <input type="checkbox"/> GSO / GLS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> Pace Lab Field Service <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			SHIPPING CONTAINER Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		FREE LIQUID YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> W / S							
Refrigerant: Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None <input checked="" type="checkbox"/> Other <input type="checkbox"/> Comments: _____												
Custody Seals: Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Comments: _____												
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Description(s) match COC? Yes <input type="checkbox"/> No <input type="checkbox"/>												
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: _____ Container: <u>Sunma</u> Thermometer ID: _____		Date/Time <u>4-13-23</u>								
		Temperature: (A) <u>Room</u> °C / (C) <u>Temp</u> °C		Analyst Init <u>SP4H 1070</u>								
SAMPLE CONTAINERS			SAMPLE NUMBERS									
			1	2	3	4	5	6	7	8	9	10
QT PE UNPRES												
4oz / Box / 16oz PE UNPRES												
2oz Cr ⁴												
QT INORGANIC CHEMICAL METALS												
INORGANIC CHEMICAL METALS 4oz / Box / 16oz												
PT CYANIDE												
PT NITROGEN FORMS												
PT TOTAL SULFIDE												
2oz NITRATE / NITRITE												
PT TOTAL ORGANIC CARBON												
PT CHEMICAL OXYGEN DEMAND												
PcA PHENOLICS												
40ml VOA VIAL TRAVEL BLANK												
40ml VOA VIAL												
QT EPA 1664B												
PT ODOR												
RADIOLOGICAL												
BACTERIOLOGICAL												
40 ml VOA VIAL- 501												
QT EPA 505/605, 3/8051A												
QT EPA 515, 1/8151A												
QT EPA 525.2												
QT EPA 515.2 TRAVEL BLANK												
40ml EPA 547												
40ml EPA 531.1												
8oz EPA 548.1												
QT EPA 549.2												
QT EPA 8015M												
QT EPA 8270C												
3oz / 16oz / 32oz AMBER												
Box / 16oz / 32oz JAR												
SOIL SLEEVE												
PCB VIAL												
PLASTIC BAG												
TEDLAR BAG												
FERROUS IRON												
ENCORE												
SMART KIT												
SUNMA CANISTER			<u>6L</u>	<u>A</u>	<u>A</u>	<u>A</u>						

Comments: _____
 Sample Numbering Completed By: SP4H Date/Time: 4-13-23 1000
 A = Actual / C = Corrected

PACE ANALYTICAL		COOLER RECEIPT FORM		Page <u>X of 3</u> <u>2 of 3</u>	
Submission #: <u>23-07358</u>					
SHIPPING INFORMATION			SHIPPING CONTAINER		FREE LIQUID
Fed Ex <input checked="" type="checkbox"/> UPS <input type="checkbox"/> GSO / GLS <input type="checkbox"/> Hand Delivery <input type="checkbox"/>			Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input checked="" type="checkbox"/>		YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
Pace Lab Field Service <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			Other <input type="checkbox"/> (Specify) _____		W / S
Refrigerant: Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None <input checked="" type="checkbox"/> Other <input type="checkbox"/> Comments: _____					
Custody Seals Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: _____					
Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>					
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Description(s) match COC? Yes <input type="checkbox"/> No <input type="checkbox"/>					
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: _____ Container: <u>Summa</u> Thermometer ID: _____		Date/Time: <u>4-13-23</u>	
		Temperature: (A) <u>Room</u> °C / (C) <u>Temp</u> °C		Analyst Init: <u>SMA 1020</u>	

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
7oz Cr ⁴										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / Box / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
3oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664B										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- SB4										
QT EPA 503/508.3/001A										
QT EPA 515.1/0151A										
QT EPA 525.2										
QT EPA 525.2 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
3oz EPA 548.1										
QT EPA 549.2										
QT EPA 8015M										
QT EPA 8270C										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCR VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER	<u>6L</u>	<u>A</u>			<u>A</u>					

Comments: _____
 Sample Numbering Completed By: gth Date/Time: 4-13-23 1100
 A = Actual / C = Corrected

PACE ANALYTICAL		COOLER RECEIPT FORM		Page 2 of 3								
Submission #: <u>23-07358</u>												
SHIPPING INFORMATION Fed Ex <input checked="" type="checkbox"/> - UPS <input type="checkbox"/> GSO / GLS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> Pace Lab Field Service <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			SHIPPING CONTAINER Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		FREE LIQUID YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> W / S							
Refrigerant: Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None <input checked="" type="checkbox"/> Other <input type="checkbox"/> Comments: _____												
Custody Seals: Ice Chest <input type="checkbox"/>		Containers <input type="checkbox"/>		None <input checked="" type="checkbox"/> Comments: _____								
Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>		Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>										
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>								
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: _____ Containers <u>Summa</u> Thermometer ID: _____		Date/Time <u>4-13-23</u>								
		Temperature: (A) <u>Room</u> °C / (C) <u>Temp</u> °C		Analyst Init <u>SMH/1020</u>								
SAMPLE CONTAINERS			SAMPLE NUMBERS									
			1	2	3	4	5	6	7	8	9	10
QT PE UNPRES												
4oz / 8oz / 16oz PE UNPRES												
2oz Cr ⁶⁺												
QT INORGANIC CHEMICAL METALS												
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz												
PT CYANIDE												
PT NITROGEN FORMS												
PT TOTAL SULFIDE												
2oz. NITRATE / NITRITE												
PT TOTAL ORGANIC CARBON												
PT CHEMICAL OXYGEN DEMAND												
PA PHENOLICS												
50ml VOA VIAL TRAVEL BLANK												
40ml VOA VIAL												
QT EPA 1661B												
PT DOOR												
RADIOLOGICAL												
BACTERIOLOGICAL												
40 ml VOA VIAL-504												
QT EPA 505/605/30051A												
QT EPA 515.1/8151A												
QT EPA 525.2												
QT EPA 525.2 TRAVEL BLANK												
40ml EPA 547												
40ml EPA 531.1												
8oz EPA 548.1												
QT EPA 549.2												
QT EPA 8015M												
QT EPA 8270C												
8oz / 16oz / 32oz AMBER												
8oz / 16oz / 32oz JAR												
SOIL SLEEVE												
PCB VIAL												
PLASTIC BAG												
TPELAR BAG												
FERROUS IRON												
ENCORE												
SMART KIT												
SUMMA CANISTER			<u>6L</u>		<u>A</u>		<u>A</u>	<u>A</u>				

Comments: _____
 Sample Numbering Completed By: PAZ Date/Time: 4-13-23 1100
 A = Actual / C = Corrected

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/02/2023 8:27
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	
2307358-01	COC Number:	---		04/13/2023	10:20
	Project Number:	---		Sampling Date:	04/12/2023 04:04
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-710-20230412-0105		Lab Matrix:	Air
	Sampled By:	Travis Clow		Sample Type:	Vapor or Air
2307358-02	COC Number:	---		04/13/2023	10:20
	Project Number:	---		Sampling Date:	04/12/2023 04:10
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-10-20230412-0110		Lab Matrix:	Air
	Sampled By:	Travis Clow		Sample Type:	Vapor or Air
2307358-03	COC Number:	---		04/13/2023	10:20
	Project Number:	---		Sampling Date:	04/12/2023 03:57
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-710/10-20230412-0100		Lab Matrix:	Air
	Sampled By:	Travis Clow		Sample Type:	Vapor or Air
2307358-04	COC Number:	---		04/13/2023	10:20
	Project Number:	---		Sampling Date:	04/12/2023 03:55
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-CT-20230412-0055		Lab Matrix:	Air
	Sampled By:	Travis Clow		Sample Type:	Vapor or Air
2307358-05	COC Number:	---		04/13/2023	10:20
	Project Number:	---		Sampling Date:	04/12/2023 10:25
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-710-20230412-0745-R		Lab Matrix:	Air
	Sampled By:	Travis Clow		Sample Type:	Vapor or Air
2307358-06	COC Number:	---		04/13/2023	10:20
	Project Number:	---		Sampling Date:	04/12/2023 10:05
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-10-20230412-0705		Lab Matrix:	Air
	Sampled By:	Travis Clow		Sample Type:	Vapor or Air
2307358-07	COC Number:	---		04/13/2023	10:20
	Project Number:	---		Sampling Date:	04/12/2023 10:32
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-710/10-20230412-0750-R		Lab Matrix:	Air
	Sampled By:	Travis Clow		Sample Type:	Vapor or Air

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/02/2023 8:27
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2307358-08	COC Number:	---	Receive Date:	04/13/2023 10:20
	Project Number:	---	Sampling Date:	04/12/2023 10:35
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-CT-20230412-0655	Lab Matrix:	Air
	Sampled By:	Travis Clow	Sample Type:	Vapor or Air

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 Long Beach, CA 90804

Reported: 05/02/2023 8:27
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307358-01		Client Sample Name: AA-710-20230412-0105, 4/12/2023 4:04:00AM, Travis Clow						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	9.8	ug/m3	1.0	0.0075	EPA-TO-15-SIM	ND		1
Benzene	0.33	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		1
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		1
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		1
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		1
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		1
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		1
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		1
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		1
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		1
Dichlorodifluoromethane	2.4	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		1
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		1
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		1
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		1
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		1
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		1
1,1-Difluoroethane	ND	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND		1
Ethylbenzene	0.17	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		1
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		1
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		1
Toluene	0.95	ug/m3	0.10	0.0062	EPA-TO-15-SIM	ND		1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		1
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		1
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		1
Trichlorofluoromethane	1.5	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.67	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		1
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		1
p- & m-Xylenes	0.53	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		1
o-Xylene	0.20	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		1
Total Xylenes	0.73	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		1
4-Bromofluorobenzene (Surrogate)	101	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/02/2023 8:27
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307358-01	Client Sample Name: AA-710-20230412-0105, 4/12/2023 4:04:00AM, Travis Clow
----------------------------------	-----------------------------------------------------------------------------------

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-TO-15-SIM	04/18/23 13:28	04/19/23 01:50	BEP	MS-A2	1	B164390 EPA TO-15

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/02/2023 8:27
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307358-01	Client Sample Name: AA-710-20230412-0105, 4/12/2023 4:04:00AM, Travis Clow
----------------------------------	-----------------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	18	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	ASTM-D1946	05/01/23 08:47	05/01/23 14:29		RMK	GC-A1	1	B165213	No Prep

DCN = Data Continuation Number

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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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/02/2023 8:27
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307358-02		Client Sample Name: AA-10-20230412-0110, 4/12/2023 4:10:00AM, Travis Clow						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	4.9	ug/m3	1.0	0.0075	EPA-TO-15-SIM	ND		1
Benzene	0.39	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		1
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		1
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		1
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		1
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		1
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		1
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		1
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		1
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		1
Dichlorodifluoromethane	2.5	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		1
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		1
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		1
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		1
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		1
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		1
1,1-Difluoroethane	ND	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND		1
Ethylbenzene	0.18	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		1
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		1
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		1
Toluene	1.0	ug/m3	0.10	0.0062	EPA-TO-15-SIM	ND		1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		1
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		1
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		1
Trichlorofluoromethane	1.5	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.69	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		1
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		1
p- & m-Xylenes	0.58	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		1
o-Xylene	0.22	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		1
Total Xylenes	0.80	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		1
4-Bromofluorobenzene (Surrogate)	98.9	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/02/2023 8:27
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307358-02	Client Sample Name: AA-10-20230412-0110, 4/12/2023 4:10:00AM, Travis Clow
----------------------------------	----------------------------------------------------------------------------------

DCN	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	
1	EPA-TO-15-SIM	04/18/23 13:28	04/19/23 02:33		BEP	MS-A2	1	B164390	EPA TO-15

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/02/2023 8:27
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307358-02	Client Sample Name: AA-10-20230412-0110, 4/12/2023 4:10:00AM, Travis Clow
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	2.1	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	ASTM-D1946	05/01/23 08:47	05/01/23 14:49		RMK	GC-A1	1	B165213	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/02/2023 8:27
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID:	2307358-03		Client Sample Name:	AA-710/10-20230412-0100, 4/12/2023 3:57:00AM, Travis Clow				
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	9.3	ug/m3	1.0	0.0075	EPA-TO-15-SIM	ND		1
Benzene	0.39	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		1
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		1
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		1
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		1
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		1
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		1
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		1
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		1
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		1
Dichlorodifluoromethane	2.4	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		1
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		1
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		1
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		1
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		1
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		1
1,1-Difluoroethane	ND	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND		1
Ethylbenzene	0.19	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		1
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		1
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		1
Toluene	1.1	ug/m3	0.10	0.0062	EPA-TO-15-SIM	ND		1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		1
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		1
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		1
Trichlorofluoromethane	1.5	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.68	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		1
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		1
p- & m-Xylenes	0.65	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		1
o-Xylene	0.24	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		1
Total Xylenes	0.89	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		1
4-Bromofluorobenzene (Surrogate)	101	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1

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Roux Associates, Inc -Long Beach
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 Long Beach, CA 90804

Reported: 05/02/2023 8:27
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307358-03	Client Sample Name: AA-710/10-20230412-0100, 4/12/2023 3:57:00AM, Travis Clow
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DCN	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	
1	EPA-TO-15-SIM	04/18/23 13:28	04/19/23 03:16		BEP	MS-A2	1	B164390	EPA TO-15

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/02/2023 8:27
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307358-03	Client Sample Name: AA-710/10-20230412-0100, 4/12/2023 3:57:00AM, Travis Clow
----------------------------------	--------------------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	3.0	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/01/23 08:47	05/01/23 15:09	RMK	GC-A1	1	B165213	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/02/2023 8:27
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID:	2307358-04	Client Sample Name:	AA-CT-20230412-0055, 4/12/2023 3:55:00AM, Travis Clow					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	5.5	ug/m3	1.0	0.0075	EPA-TO-15-SIM	ND		1
Benzene	0.36	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		1
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		1
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		1
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		1
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		1
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		1
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		1
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		1
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		1
Dichlorodifluoromethane	2.4	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		1
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		1
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		1
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		1
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		1
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		1
1,1-Difluoroethane	ND	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND		1
Ethylbenzene	0.20	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		1
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		1
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		1
Toluene	1.6	ug/m3	0.10	0.0062	EPA-TO-15-SIM	ND		1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		1
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		1
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		1
Trichlorofluoromethane	1.5	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.70	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		1
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		1
p- & m-Xylenes	0.69	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		1
o-Xylene	0.24	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		1
Total Xylenes	0.93	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		1
4-Bromofluorobenzene (Surrogate)	95.5	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1

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Roux Associates, Inc -Long Beach
5150 E. Pacific Coast Hwy, Suite 450
Long Beach, CA 90804

Reported: 05/02/2023 8:27
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307358-04	Client Sample Name: AA-CT-20230412-0055, 4/12/2023 3:55:00AM, Travis Clow
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DCN	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	
1	EPA-TO-15-SIM	04/18/23 13:28	04/19/23	04:01	BEP	MS-A2	1	B164390	EPA TO-15

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/02/2023 8:27
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307358-04	Client Sample Name: AA-CT-20230412-0055, 4/12/2023 3:55:00AM, Travis Clow
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	11	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/01/23 08:47	05/01/23 15:30	RMK	GC-A1	1	B165213	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/02/2023 8:27
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307358-06		Client Sample Name: AA-10-20230412-0705, 4/12/2023 10:05:00AM, Travis Clow						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	6.1	ug/m3	10	0.075	EPA-TO-15-SIM	ND	J,A01	1
Benzene	0.73	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.4	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	ND	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND		2
Ethylbenzene	0.54	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.2	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.5	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.69	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	2.4	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.79	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	3.2	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	89.9	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	106	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/02/2023 8:27
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307358-06	Client Sample Name: AA-10-20230412-0705, 4/12/2023 10:05:00AM, Travis Clow								
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/18/23 13:28	04/20/23	21:13	BEP	MS-A2	10	B164390	EPA TO-15
2	EPA-TO-15-SIM	04/18/23 13:28	04/19/23	04:45	BEP	MS-A2	1	B164390	EPA TO-15

DCN = Data Continuation Number

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Reported: 05/02/2023 8:27
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307358-06	Client Sample Name: AA-10-20230412-0705, 4/12/2023 10:05:00AM, Travis Clow
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	32	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/01/23 08:47	05/01/23 15:50	RMK	GC-A1	1	B165213	No Prep

DCN = Data Continuation Number

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Reported: 05/02/2023 8:27
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B164390							
Acetone	B164390-BLK1	ND	ug/m3	1.0	0.0075		1
Benzene	B164390-BLK1	ND	ug/m3	0.050	0.0032		1
Benzyl chloride	B164390-BLK1	ND	ug/m3	0.50	0.0052		1
Carbon tetrachloride	B164390-BLK1	ND	ug/m3	0.20	0.0063		1
Chlorobenzene	B164390-BLK1	ND	ug/m3	0.10	0.0079		1
Chloroform	B164390-BLK1	ND	ug/m3	0.050	0.0058		1
1,2-Dibromoethane	B164390-BLK1	ND	ug/m3	0.20	0.014		1
1,2-Dichlorobenzene	B164390-BLK1	ND	ug/m3	0.20	0.011		1
1,3-Dichlorobenzene	B164390-BLK1	ND	ug/m3	0.20	0.013		1
1,4-Dichlorobenzene	B164390-BLK1	ND	ug/m3	0.20	0.016		1
Dichlorodifluoromethane	B164390-BLK1	ND	ug/m3	0.050	0.0052		1
1,1-Dichloroethane	B164390-BLK1	ND	ug/m3	0.050	0.0041		1
1,2-Dichloroethane	B164390-BLK1	ND	ug/m3	0.10	0.0046		1
1,1-Dichloroethene	B164390-BLK1	ND	ug/m3	0.050	0.0078		1
cis-1,2-Dichloroethene	B164390-BLK1	ND	ug/m3	0.050	0.0044		1
trans-1,2-Dichloroethene	B164390-BLK1	ND	ug/m3	0.050	0.0075		1
trans-1,3-Dichloropropene	B164390-BLK1	ND	ug/m3	0.050	0.013		1
1,1-Difluoroethane	B164390-BLK1	ND	ug/m3	5.0	0.0027		1
Ethylbenzene	B164390-BLK1	ND	ug/m3	0.050	0.017		1
Methylene chloride	B164390-BLK1	ND	ug/m3	0.20	0.0077		1
Tetrachloroethene	B164390-BLK1	ND	ug/m3	0.10	0.011		1
Toluene	B164390-BLK1	ND	ug/m3	0.10	0.0062		1
1,1,1-Trichloroethane	B164390-BLK1	ND	ug/m3	0.10	0.0055		1
1,1,2-Trichloroethane	B164390-BLK1	ND	ug/m3	0.10	0.0055		1
Trichloroethene	B164390-BLK1	ND	ug/m3	0.10	0.0095		1
Trichlorofluoromethane	B164390-BLK1	ND	ug/m3	0.050	0.0057		1
1,1,2-Trichloro-1,2,2-trifluoroethane	B164390-BLK1	ND	ug/m3	0.10	0.0078		1
Vinyl chloride	B164390-BLK1	ND	ug/m3	0.020	0.0046		1
p- & m-Xylenes	B164390-BLK1	ND	ug/m3	0.050	0.0082		1
o-Xylene	B164390-BLK1	ND	ug/m3	0.050	0.0044		1
Total Xylenes	B164390-BLK1	ND	ug/m3	0.10	0.013		1
4-Bromofluorobenzene (Surrogate)	B164390-BLK1	67.6	%	50 - 150 (LCL - UCL)			1

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Roux Associates, Inc -Long Beach
5150 E. Pacific Coast Hwy, Suite 450
Long Beach, CA 90804

Reported: 05/02/2023 8:27
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B164390-BLK1	PB	EPA-TO-15-SIM	04/18/23	04/18/23 22:35	BEP	MS-A2	1

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/02/2023 8:27
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals	Run #
								Percent Recovery	RPD		
QC Batch ID: B164390											
Benzene	B164390-BS1	LCS	0.29318	0.31948	ug/m3	91.8		70 - 130			1
	B164390-BSD1	LCSD	0.29146	0.31948	ug/m3	91.2	0.6	70 - 130	30		2
Benzyl chloride	B164390-BS1	LCS	0.57679	0.51772	ug/m3	111		70 - 130			1
	B164390-BSD1	LCSD	0.57483	0.51772	ug/m3	111	0.3	70 - 130	30		2
Carbon tetrachloride	B164390-BS1	LCS	0.63593	0.62913	ug/m3	101		70 - 130			1
	B164390-BSD1	LCSD	0.63951	0.62913	ug/m3	102	0.6	70 - 130	30		2
Chlorobenzene	B164390-BS1	LCS	0.48121	0.46036	ug/m3	105		70 - 130			1
	B164390-BSD1	LCSD	0.48637	0.46036	ug/m3	106	1.1	70 - 130	30		2
Chloroform	B164390-BS1	LCS	0.49758	0.48825	ug/m3	102		70 - 130			1
	B164390-BSD1	LCSD	0.49455	0.48825	ug/m3	101	0.6	70 - 130	30		2
1,2-Dibromoethane	B164390-BS1	LCS	0.81745	0.76835	ug/m3	106		70 - 130			1
	B164390-BSD1	LCSD	0.82321	0.76835	ug/m3	107	0.7	70 - 130	30		2
1,2-Dichlorobenzene	B164390-BS1	LCS	0.57346	0.60124	ug/m3	95.4		70 - 130			1
	B164390-BSD1	LCSD	0.56107	0.60124	ug/m3	93.3	2.2	70 - 130	30		2
1,3-Dichlorobenzene	B164390-BS1	LCS	0.59372	0.60124	ug/m3	98.7		70 - 130			1
	B164390-BSD1	LCSD	0.56841	0.60124	ug/m3	94.5	4.4	70 - 130	30		2
1,4-Dichlorobenzene	B164390-BS1	LCS	0.55145	0.60124	ug/m3	91.7		70 - 130			1
	B164390-BSD1	LCSD	0.57033	0.60124	ug/m3	94.9	3.4	70 - 130	30		2
1,1-Dichloroethane	B164390-BS1	LCS	0.40725	0.40474	ug/m3	101		70 - 130			1
	B164390-BSD1	LCSD	0.40442	0.40474	ug/m3	99.9	0.7	70 - 130	30		2
1,2-Dichloroethane	B164390-BS1	LCS	0.39863	0.40474	ug/m3	98.5		70 - 130			1
	B164390-BSD1	LCSD	0.40138	0.40474	ug/m3	99.2	0.7	70 - 130	30		2
1,1-Dichloroethene	B164390-BS1	LCS	0.37433	0.39649	ug/m3	94.4		70 - 130			1
	B164390-BSD1	LCSD	0.36672	0.39649	ug/m3	92.5	2.1	70 - 130	30		2
cis-1,2-Dichloroethene	B164390-BS1	LCS	0.37346	0.39649	ug/m3	94.2		70 - 130			1
	B164390-BSD1	LCSD	0.36727	0.39649	ug/m3	92.6	1.7	70 - 130	30		2
Methylene chloride	B164390-BS1	LCS	0.36151	0.34737	ug/m3	104		70 - 130			1
	B164390-BSD1	LCSD	0.35964	0.34737	ug/m3	104	0.5	70 - 130	30		2
Tetrachloroethene	B164390-BS1	LCS	0.71312	0.67825	ug/m3	105		70 - 130			1
	B164390-BSD1	LCSD	0.72254	0.67825	ug/m3	107	1.3	70 - 130	30		2
Toluene	B164390-BS1	LCS	0.36369	0.37684	ug/m3	96.5		70 - 130			1
	B164390-BSD1	LCSD	0.35992	0.37684	ug/m3	95.5	1.0	70 - 130	30		2
1,1,1-Trichloroethane	B164390-BS1	LCS	0.54955	0.54562	ug/m3	101		70 - 130			1
	B164390-BSD1	LCSD	0.55009	0.54562	ug/m3	101	0.1	70 - 130	30		2
1,1,2-Trichloroethane	B164390-BS1	LCS	0.59702	0.54562	ug/m3	109		70 - 130			1
	B164390-BSD1	LCSD	0.59904	0.54562	ug/m3	110	0.3	70 - 130	30		2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/02/2023 8:27
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Run #
								Percent Recovery	RPD		
QC Batch ID: B164390											
Trichloroethene	B164390-BS1	LCS	0.55822	0.53737	ug/m3	104		70 - 130			1
	B164390-BSD1	LCSD	0.55543	0.53737	ug/m3	103	0.5	70 - 130	30		2
Vinyl chloride	B164390-BS1	LCS	0.23775	0.25562	ug/m3	93.0		70 - 130			1
	B164390-BSD1	LCSD	0.24516	0.25562	ug/m3	95.9	3.1	70 - 130	30		2
p- & m-Xylenes	B164390-BS1	LCS	0.77338	0.86843	ug/m3	89.1		70 - 130			1
	B164390-BSD1	LCSD	0.75149	0.86843	ug/m3	86.5	2.9	70 - 130	30		2
o-Xylene	B164390-BS1	LCS	0.39270	0.43421	ug/m3	90.4		70 - 130			1
	B164390-BSD1	LCSD	0.38575	0.43421	ug/m3	88.8	1.8	70 - 130	30		2
Total Xylenes	B164390-BS1	LCS	1.1661	1.3026	ug/m3	89.5		70 - 130			1
	B164390-BSD1	LCSD	1.1372	1.3026	ug/m3	87.3	2.5	70 - 130	30		2
4-Bromofluorobenzene (Surrogate)	B164390-BS1	LCS	3.80	3.58	ug/m3	106		50 - 150			1
	B164390-BSD1	LCSD	3.69	3.58	ug/m3	103	3.0	50 - 150			2

Run #	QC Sample ID	QC Type	Method	Prep Date	Run		Analyst	Instrument	Dilution
					Date	Time			
1	B164390-BS1	LCS	EPA-TO-15-SIM	04/18/23	04/18/23	21:21	BEP	MS-A2	1
2	B164390-BSD1	LCSD	EPA-TO-15-SIM	04/18/23	04/18/23	22:00	BEP	MS-A2	1

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/02/2023 8:27
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B165213							
Methane (CH4)	B165213-BLK1	ND	ppmv	2.0	1.8		1

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B165213-BLK1	PB	ASTM-D1946	05/01/23	05/01/23 14:08	RMK	GC-A1	1

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/02/2023 8:27
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Run #
								Percent Recovery	RPD		
QC Batch ID: B165213											
Methane (CH4)	B165213-BS1	LCS	20026	18000	ppmv	111		70 - 130			1
	B165213-BSD1	LCSD	19976	18000	ppmv	111	0.3	70 - 130	30		2

Run #	QC Sample ID	QC Type	Method	Prep Date	Run		Analyst	Instrument	Dilution
					Date	Time			
1	B165213-BS1	LCS	ASTM-D1946	05/01/23	05/01/23	13:28	RMK	GC-A1	1
2	B165213-BSD1	LCSD	ASTM-D1946	05/01/23	05/01/23	13:48	RMK	GC-A1	1

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Roux Associates, Inc -Long Beach
5150 E. Pacific Coast Hwy, Suite 450
Long Beach, CA 90804

Reported: 05/02/2023 8:27
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Notes And Definitions

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A01 Detection and quantitation limits are raised due to sample dilution.



Date of Report: 05/01/2023

April McGuire

Roux Associates, Inc -Long Beach
5150 E. Pacific Coast Hwy, Suite 450
Long Beach, CA 90804

Client Project: 2855
BCL Project: City Terrace
BCL Work Order: 2307790
Invoice ID: B474804

Enclosed are the results of analyses for samples received by the laboratory on 4/19/2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "BS", is positioned above a horizontal line.

Contact Person: Brianna Schutte
Client Services Rep

A handwritten signature in black ink, appearing to read "Stuart Buttram", is positioned above a horizontal line.

Stuart Buttram
Operations Manager

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

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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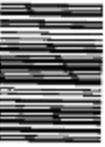
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AIR: CHAIN-OF-CUSTODY / Analytical
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed.

2307790

Section A Required Client Information:

Company: ROUX
Address: 5150 E PCH, STE 450
LONG BEACH, CA 90804
E-mail To: ANCGUIRE@OUNINC.COM
Phone: 562-445-0024 Fax:
Requestor: Dina DOROTAP, J. Garcia

Section B Required Project Information:

Report To: A. MCGUIRE
Company Name: ROUX
Address: 5150 E PCH #450, LONG BEACH, CA 90804
Pace Quote Reference: 00139545
Pace Project Manager/Sales Rep: BRIVANNA SCHUTTE / DAWN GIBBORD
Pace Profile #:

Section C Invoice Information:

Invoice: ROUX ACCOUNTS PAYABLE (ROUXAP@OUNINC.COM)
Company Name: ROUX
Address: 5150 E PCH #450, LONG BEACH, CA 90804
Pace Quote Reference: 00139545
Pace Project Manager/Sales Rep: BRIVANNA SCHUTTE / DAWN GIBBORD
Pace Profile #:

Section D Required Client Information

AIR SAMPLE ID
Sample IDs MUST BE UNIQUE

ITEM #	Sample ID	Flow Control Number	Summa Can Number	Collector Pressure (psig)	Filter Pressure (psig)	DATE	TIME	REQUISITION BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
1	AA-CL-20230417	-1	076206015	-30.5	-30.5	4/17/23	1035	Jonathan Cameron	4/18/23	1225	Jonathan Cameron	4/18/23	1225
2	AA-BL-20230417	-2	39305982	-30.7	-30.7	4/17/23	1030	Jonathan Cameron	4/18/23	1225	Jonathan Cameron	4/18/23	1225
3	AA-710/10-20230417	-3	079306031	-30.7	-30.7	4/17/23	1207	Jonathan Cameron	4/18/23	1245	Jonathan Cameron	4/18/23	1057
4	AA-0-125MI-20230417	-4	80613689	-30.9	-30.9	4/17/23	1147	Jonathan Cameron	4/18/23	1245	Jonathan Cameron	4/18/23	1057
5	AA-0-25MI-20230417	-5	3542603805	-30.4	-30.4	4/17/23	1015	Jonathan Cameron	4/18/23	1245	Jonathan Cameron	4/18/23	1057
6	AA-0-5MI-20230417	-6	42613690	-30.7	-30.7	4/17/23	1157	Jonathan Cameron	4/18/23	1245	Jonathan Cameron	4/18/23	1057
7	AA-0-75MI-20230417	-7	346206019	-30.6	-30.6	4/17/23	1016	Jonathan Cameron	4/18/23	1245	Jonathan Cameron	4/18/23	1057
8	AA-PW1-20230417	-8	805806021	-30	-30	4/17/23	1029	Jonathan Cameron	4/18/23	1245	Jonathan Cameron	4/18/23	1057
9	AA-PW2-20230417	-8	805806021	-30.6	-30.6	4/17/23	1029	Jonathan Cameron	4/18/23	1245	Jonathan Cameron	4/18/23	1057
10	AA-PW3-20230417	-9	057605274	-30.5	-30.5	4/17/23	1037	Jonathan Cameron	4/18/23	1245	Jonathan Cameron	4/18/23	1057
11	AA-0-125MI-20230417-D	-10	73103890	-30.4	-30.4	4/17/23	1147	Jonathan Cameron	4/18/23	1245	Jonathan Cameron	4/18/23	1057

Comments:
Methane in PMN
7:15 am in PMN
Sample AA-PW1-20230417
lost, stolen overnight,
NO SUMMA/PC received

REINQUIRED BY / AFFILIATION Jonathan Cameron
DATE 4/18/23
TIME 1245

ACCEPTED BY / AFFILIATION Jonathan Cameron
DATE 4/18/23
TIME 1057

Temp In °C _____
Received on Ice YN N
Custody Sealed Cooler YN N
Samples intact YN N

FC048Rev.01, 03Feb2010

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414 Air Technical Phone: 612.607.8386

PACE ANALYTICAL		COOLER RECEIPT FORM		Page () Of ()	
Submission #: <u>23-07790</u>					
SHIPPING INFORMATION Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> GSO / GLS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> Pace Lab Field Service <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			SHIPPING CONTAINER Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		FREE LIQUID YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> W / S
Refrigerant: Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None <input checked="" type="checkbox"/> Other <input type="checkbox"/> Comments: _____					
Custody Seals Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>			Comments: _____		
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: _____ Container: <u>Sunma</u> Thermometer ID: _____ Temperature: (A) <u>Room</u> °C / (C) <u>Temp</u> °C		Date/Time <u>4/19/23</u> Analyst Init <u>SMIT 1039</u>	

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr ⁶										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664B										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 5H										
QT EPA 508/608, J3031A										
QT EPA 515, J18151A										
QT EPA 525.2										
QT EPA 525.2 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548.1										
QT EPA 549.2										
QT EPA 8015M										
QT EPA 8270C										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUNMA CANISTER	<u>6L</u>	<u>A</u>								

CHECKS IN PRODUCTION
 SJE OUT
 300

Comments: _____
 Sample Numbering Completed By: _____ Date/Time: 4/14/23 1150
 A = Actual / C = Corrected



Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information				
2307790-01	COC Number:	---		Receive Date:	04/19/2023 10:37
	Project Number:	---		Sampling Date:	04/18/2023 10:35
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-CL-20230417		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2307790-02	COC Number:	---		Receive Date:	04/19/2023 10:37
	Project Number:	---		Sampling Date:	04/18/2023 10:30
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-BL-20230417		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2307790-03	COC Number:	---		Receive Date:	04/19/2023 10:37
	Project Number:	---		Sampling Date:	04/18/2023 12:07
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-710/10-20230417		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2307790-04	COC Number:	---		Receive Date:	04/19/2023 10:37
	Project Number:	---		Sampling Date:	04/18/2023 11:47
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-0.125MI-20230417		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2307790-05	COC Number:	---		Receive Date:	04/19/2023 10:37
	Project Number:	---		Sampling Date:	04/18/2023 10:45
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-0.25MI-20230417		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2307790-06	COC Number:	---		Receive Date:	04/19/2023 10:37
	Project Number:	---		Sampling Date:	04/18/2023 11:52
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-0.5MI-20230417		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2307790-07	COC Number:	---		Receive Date:	04/19/2023 10:37
	Project Number:	---		Sampling Date:	04/18/2023 10:15
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-0.75MI-20230417		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air

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 Long Beach, CA 90804

Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2307790-08	COC Number:	---	Receive Date:	04/19/2023 10:37
	Project Number:	---	Sampling Date:	04/18/2023 10:29
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-PW2-20230417	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air
2307790-09	COC Number:	---	Receive Date:	04/19/2023 10:37
	Project Number:	---	Sampling Date:	04/18/2023 10:37
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-PW3-20230417	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air
2307790-10	COC Number:	---	Receive Date:	04/19/2023 10:37
	Project Number:	---	Sampling Date:	04/18/2023 11:47
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-0.125MI-20230417-D	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air

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Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307790-01		Client Sample Name: AA-CL-20230417, 4/18/2023 10:35:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	4.7	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	J,A01	1
Benzene	0.45	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	0.27	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.2	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.54	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.20	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	1.7	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.65	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	0.75	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.24	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	0.99	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	116	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	90.5	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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 Long Beach, CA 90804

Reported: 05/01/2023 14:46
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307790-01	Client Sample Name: AA-CL-20230417, 4/18/2023 10:35:00AM, Client								
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/24/23 13:09	04/24/23	22:45	BEP	MS-A1	5	B164737	EPA TO-15
2	EPA-TO-15-SIM	04/24/23 13:09	04/24/23	14:49	BEP	MS-A1	1	B164737	EPA TO-15

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307790-01	Client Sample Name: AA-CL-20230417, 4/18/2023 10:35:00AM, Client
----------------------------------	-------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	33	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/26/23 08:19	04/26/23 14:49	RMK	GC-A1	1	B164949	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID:	2307790-02							
Client Sample Name:	AA-BL-20230417, 4/18/2023 10:30:00AM, Client							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	5.4	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1
Benzene	0.50	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.2	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.37	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.32	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	1.9	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.65	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.1	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.32	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	1.4	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	91.9	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	90.5	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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 Long Beach, CA 90804

Reported: 05/01/2023 14:46
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307790-02		Client Sample Name: AA-BL-20230417, 4/18/2023 10:30:00AM, Client							
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/24/23 13:09	04/24/23	23:23	BEP	MS-A1	5	B164737	EPA TO-15
2	EPA-TO-15-SIM	04/24/23 13:09	04/24/23	15:32	BEP	MS-A1	1	B164737	EPA TO-15

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307790-02	Client Sample Name: AA-BL-20230417, 4/18/2023 10:30:00AM, Client
----------------------------------	-------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	1.9	ppmv	2.0	1.8	ASTM-D1946	ND	J	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/26/23 08:19	04/26/23 15:09	RMK	GC-A1	1	B164949	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307790-03		Client Sample Name: AA-710/10-20230417, 4/18/2023 12:07:00PM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	7.1	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1
Benzene	0.60	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.1	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.56	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.28	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	1.9	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.65	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.0	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.38	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	1.4	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	87.2	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	103	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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 Long Beach, CA 90804

Reported: 05/01/2023 14:46
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307790-03		Client Sample Name: AA-710/10-20230417, 4/18/2023 12:07:00PM, Client							
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/24/23 13:09	04/25/23	00:00	BEP	MS-A1	5	B164737	EPA TO-15
2	EPA-TO-15-SIM	04/24/23 13:09	04/24/23	16:17	BEP	MS-A1	1	B164737	EPA TO-15

DCN = Data Continuation Number

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Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307790-03	Client Sample Name: AA-710/10-20230417, 4/18/2023 12:07:00PM, Client
----------------------------------	-----------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	5.3	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/26/23 08:19	04/26/23 15:29	RMK	GC-A1	1	B164949	No Prep

DCN = Data Continuation Number

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Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID:	2307790-04							
Client Sample Name:	AA-0.125MI-20230417, 4/18/2023 11:47:00AM, Client							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	5.3	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1
Benzene	0.62	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	0.31	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.0	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	1.3	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.25	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	1.8	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.65	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	0.92	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.32	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	1.2	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	92.2	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	97.5	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/01/2023 14:46
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307790-04	Client Sample Name: AA-0.125MI-20230417, 4/18/2023 11:47:00AM, Client								
DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID		
1	EPA-TO-15-SIM	04/24/23 13:09	04/25/23 00:38	BEP	MS-A1	5	B164737	EPA TO-15	
2	EPA-TO-15-SIM	04/24/23 13:09	04/24/23 17:03	BEP	MS-A1	1	B164737	EPA TO-15	

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 Long Beach, CA 90804

Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307790-04	Client Sample Name: AA-0.125MI-20230417, 4/18/2023 11:47:00AM, Client
----------------------------------	------------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	7.6	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/26/23 08:19	04/26/23 15:49	RMK	GC-A1	1	B164949	No Prep

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 Long Beach, CA 90804

Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307790-05		Client Sample Name: AA-0.25MI-20230417, 4/18/2023 10:45:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	11	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1
Benzene	0.50	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.3	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.48	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.26	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	1.8	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.66	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	0.92	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.32	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	1.2	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	91.3	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	98.9	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/01/2023 14:46
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307790-05		Client Sample Name: AA-0.25MI-20230417, 4/18/2023 10:45:00AM, Client							
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/24/23 13:09	04/25/23	01:15	BEP	MS-A1	5	B164737	EPA TO-15
2	EPA-TO-15-SIM	04/24/23 13:09	04/24/23	17:47	BEP	MS-A1	1	B164737	EPA TO-15

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 Long Beach, CA 90804

Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307790-05	Client Sample Name: AA-0.25MI-20230417, 4/18/2023 10:45:00AM, Client
----------------------------------	-----------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	80	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/26/23 08:19	04/26/23 16:09	RMK	GC-A1	1	B164949	No Prep

DCN = Data Continuation Number

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Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307790-06		Client Sample Name: AA-0.5MI-20230417, 4/18/2023 11:52:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	5.2	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1
Benzene	0.54	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.2	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.44	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.23	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	1.9	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.65	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	0.87	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.28	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	1.1	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	86.9	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	95.5	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/01/2023 14:46
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307790-06		Client Sample Name: AA-0.5MI-20230417, 4/18/2023 11:52:00AM, Client							
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/24/23 13:09	04/25/23	01:53	BEP	MS-A1	5	B164737	EPA TO-15
2	EPA-TO-15-SIM	04/24/23 13:09	04/24/23	18:30	BEP	MS-A1	1	B164737	EPA TO-15

DCN = Data Continuation Number

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307790-06	Client Sample Name: AA-0.5MI-20230417, 4/18/2023 11:52:00AM, Client
----------------------------------	----------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	1.9	ppmv	2.0	1.8	ASTM-D1946	ND	J	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/26/23 08:19	04/26/23 16:29	RMK	GC-A1	1	B164949	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307790-07		Client Sample Name: AA-0.75MI-20230417, 4/18/2023 10:15:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	8.2	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1
Benzene	0.55	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.3	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	1.3	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.29	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.2	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.66	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.1	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.36	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	1.5	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	90.8	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	102	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
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 Long Beach, CA 90804

Reported: 05/01/2023 14:46
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307790-07	Client Sample Name: AA-0.75MI-20230417, 4/18/2023 10:15:00AM, Client								
DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID		
1	EPA-TO-15-SIM	04/24/23 13:09	04/25/23 02:30	BEP	MS-A1	5	B164737	EPA TO-15	
2	EPA-TO-15-SIM	04/24/23 13:09	04/24/23 19:14	BEP	MS-A1	1	B164737	EPA TO-15	

DCN = Data Continuation Number

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Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307790-07	Client Sample Name: AA-0.75MI-20230417, 4/18/2023 10:15:00AM, Client
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	5.6	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/26/23 08:19	04/26/23 16:49	RMK	GC-A1	1	B164949	No Prep

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307790-08		Client Sample Name: AA-PW2-20230417, 4/18/2023 10:29:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	7.4	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1
Benzene	0.85	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.2	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	1.4	ug/m3	25	0.014	EPA-TO-15-SIM	ND	J,A01	1
Ethylbenzene	0.43	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.6	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.64	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.6	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.56	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	2.1	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	95.3	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	104	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/01/2023 14:46
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307790-08		Client Sample Name: AA-PW2-20230417, 4/18/2023 10:29:00AM, Client							
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/24/23 13:09	04/25/23	03:07	BEP	MS-A1	5	B164737	EPA TO-15
2	EPA-TO-15-SIM	04/24/23 13:09	04/24/23	19:58	BEP	MS-A1	1	B164737	EPA TO-15

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 Long Beach, CA 90804

Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307790-08	Client Sample Name: AA-PW2-20230417, 4/18/2023 10:29:00AM, Client
----------------------------------	--------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	22	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/26/23 08:19	04/26/23 17:50	RMK	GC-A1	1	B164949	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307790-09		Client Sample Name: AA-PW3-20230417, 4/18/2023 10:37:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	5.3	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1
Benzene	0.64	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.2	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.61	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.33	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.1	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.66	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.2	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.37	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	1.6	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	86.9	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	91.1	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/01/2023 14:46
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307790-09	Client Sample Name: AA-PW3-20230417, 4/18/2023 10:37:00AM, Client								
DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID		
1	EPA-TO-15-SIM	04/24/23 13:09	04/25/23 03:45	BEP	MS-A1	5	B164737	EPA TO-15	
2	EPA-TO-15-SIM	04/24/23 13:09	04/24/23 20:43	BEP	MS-A1	1	B164737	EPA TO-15	

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307790-09	Client Sample Name: AA-PW3-20230417, 4/18/2023 10:37:00AM, Client
----------------------------------	--------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	40	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/26/23 08:19	04/26/23 18:10	RMK	GC-A1	1	B164949	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307790-10		Client Sample Name: AA-0.125MI-20230417-D, 4/18/2023 11:47:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	4.9	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	J,A01	1
Benzene	0.56	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.4	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.70	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.26	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	1.8	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.65	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	0.97	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.32	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	1.3	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	92.7	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	93.9	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/01/2023 14:46
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307790-10	Client Sample Name: AA-0.125MI-20230417-D, 4/18/2023 11:47:00AM, Client								
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/24/23 13:09	04/25/23	04:22	BEP	MS-A1	5	B164737	EPA TO-15
2	EPA-TO-15-SIM	04/24/23 13:09	04/24/23	21:26	BEP	MS-A1	1	B164737	EPA TO-15

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307790-10	Client Sample Name: AA-0.125MI-20230417-D, 4/18/2023 11:47:00AM, Client
----------------------------------	--------------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	2.1	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/26/23 08:19	04/26/23 18:30	RMK	GC-A1	1	B164949	No Prep

DCN = Data Continuation Number

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Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B164737							
Acetone	B164737-BLK1	ND	ug/m3	1.0	0.0075		1
Benzene	B164737-BLK1	ND	ug/m3	0.050	0.0032		1
Benzyl chloride	B164737-BLK1	ND	ug/m3	0.50	0.0052		1
Carbon tetrachloride	B164737-BLK1	ND	ug/m3	0.20	0.0063		1
Chlorobenzene	B164737-BLK1	ND	ug/m3	0.10	0.0079		1
Chloroform	B164737-BLK1	ND	ug/m3	0.050	0.0058		1
1,2-Dibromoethane	B164737-BLK1	ND	ug/m3	0.20	0.014		1
1,2-Dichlorobenzene	B164737-BLK1	ND	ug/m3	0.20	0.011		1
1,3-Dichlorobenzene	B164737-BLK1	ND	ug/m3	0.20	0.013		1
1,4-Dichlorobenzene	B164737-BLK1	ND	ug/m3	0.20	0.016		1
Dichlorodifluoromethane	B164737-BLK1	ND	ug/m3	0.050	0.0052		1
1,1-Dichloroethane	B164737-BLK1	ND	ug/m3	0.050	0.0041		1
1,2-Dichloroethane	B164737-BLK1	ND	ug/m3	0.10	0.0046		1
1,1-Dichloroethene	B164737-BLK1	ND	ug/m3	0.050	0.0078		1
cis-1,2-Dichloroethene	B164737-BLK1	ND	ug/m3	0.050	0.0044		1
trans-1,2-Dichloroethene	B164737-BLK1	ND	ug/m3	0.050	0.0075		1
trans-1,3-Dichloropropene	B164737-BLK1	ND	ug/m3	0.050	0.013		1
1,1-Difluoroethane	B164737-BLK1	ND	ug/m3	5.0	0.0027		1
Ethylbenzene	B164737-BLK1	ND	ug/m3	0.050	0.017		1
Methylene chloride	B164737-BLK1	ND	ug/m3	0.20	0.0077		1
Tetrachloroethene	B164737-BLK1	ND	ug/m3	0.10	0.011		1
Toluene	B164737-BLK1	ND	ug/m3	0.10	0.0062		1
1,1,1-Trichloroethane	B164737-BLK1	ND	ug/m3	0.10	0.0055		1
1,1,2-Trichloroethane	B164737-BLK1	ND	ug/m3	0.10	0.0055		1
Trichloroethene	B164737-BLK1	ND	ug/m3	0.10	0.0095		1
Trichlorofluoromethane	B164737-BLK1	ND	ug/m3	0.050	0.0057		1
1,1,2-Trichloro-1,2,2-trifluoroethane	B164737-BLK1	ND	ug/m3	0.10	0.0078		1
Vinyl chloride	B164737-BLK1	ND	ug/m3	0.020	0.0046		1
p- & m-Xylenes	B164737-BLK1	ND	ug/m3	0.050	0.0082		1
o-Xylene	B164737-BLK1	ND	ug/m3	0.050	0.0044		1
Total Xylenes	B164737-BLK1	ND	ug/m3	0.10	0.013		1
4-Bromofluorobenzene (Surrogate)	B164737-BLK1	87.0	%	50 - 150 (LCL - UCL)			1

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Roux Associates, Inc -Long Beach
5150 E. Pacific Coast Hwy, Suite 450
Long Beach, CA 90804

Reported: 05/01/2023 14:46
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Run #	QC Sample ID	QC Type	Method	Prep Date	Run		Analyst	Instrument	Dilution
					Date	Time			
1	B164737-BLK1	PB	EPA-TO-15-SIM	04/24/23	04/24/23	14:03	BEP	MS-A1	1

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Run #
								Percent Recovery	RPD		
QC Batch ID: B164737											
Benzene	B164737-BS1	LCS	0.25753	0.31948	ug/m3	80.6		70 - 130			1
	B164737-BSD1	LCSD	0.25938	0.31948	ug/m3	81.2	0.7	70 - 130	30		2
Benzyl chloride	B164737-BS1	LCS	0.48914	0.51772	ug/m3	94.5		70 - 130		J	1
	B164737-BSD1	LCSD	0.53160	0.51772	ug/m3	103	8.3	70 - 130	30		2
Carbon tetrachloride	B164737-BS1	LCS	0.60133	0.62913	ug/m3	95.6		70 - 130			1
	B164737-BSD1	LCSD	0.60460	0.62913	ug/m3	96.1	0.5	70 - 130	30		2
Chlorobenzene	B164737-BS1	LCS	0.47734	0.46036	ug/m3	104		70 - 130			1
	B164737-BSD1	LCSD	0.48393	0.46036	ug/m3	105	1.4	70 - 130	30		2
Chloroform	B164737-BS1	LCS	0.49592	0.48825	ug/m3	102		70 - 130			1
	B164737-BSD1	LCSD	0.49475	0.48825	ug/m3	101	0.2	70 - 130	30		2
1,2-Dibromoethane	B164737-BS1	LCS	0.85348	0.76835	ug/m3	111		70 - 130			1
	B164737-BSD1	LCSD	0.85817	0.76835	ug/m3	112	0.5	70 - 130	30		2
1,2-Dichlorobenzene	B164737-BS1	LCS	0.67885	0.60124	ug/m3	113		70 - 130			1
	B164737-BSD1	LCSD	0.64290	0.60124	ug/m3	107	5.4	70 - 130	30		2
1,3-Dichlorobenzene	B164737-BS1	LCS	0.69695	0.60124	ug/m3	116		70 - 130			1
	B164737-BSD1	LCSD	0.68469	0.60124	ug/m3	114	1.8	70 - 130	30		2
1,4-Dichlorobenzene	B164737-BS1	LCS	0.70381	0.60124	ug/m3	117		70 - 130			1
	B164737-BSD1	LCSD	0.68246	0.60124	ug/m3	114	3.1	70 - 130	30		2
1,1-Dichloroethane	B164737-BS1	LCS	0.39276	0.40474	ug/m3	97.0		70 - 130			1
	B164737-BSD1	LCSD	0.39142	0.40474	ug/m3	96.7	0.3	70 - 130	30		2
1,2-Dichloroethane	B164737-BS1	LCS	0.38345	0.40474	ug/m3	94.7		70 - 130			1
	B164737-BSD1	LCSD	0.38624	0.40474	ug/m3	95.4	0.7	70 - 130	30		2
1,1-Dichloroethene	B164737-BS1	LCS	0.33175	0.39649	ug/m3	83.7		70 - 130			1
	B164737-BSD1	LCSD	0.33532	0.39649	ug/m3	84.6	1.1	70 - 130	30		2
cis-1,2-Dichloroethene	B164737-BS1	LCS	0.33658	0.39649	ug/m3	84.9		70 - 130			1
	B164737-BSD1	LCSD	0.34313	0.39649	ug/m3	86.5	1.9	70 - 130	30		2
Methylene chloride	B164737-BS1	LCS	0.36408	0.34737	ug/m3	105		70 - 130			1
	B164737-BSD1	LCSD	0.37072	0.34737	ug/m3	107	1.8	70 - 130	30		2
Tetrachloroethene	B164737-BS1	LCS	0.75110	0.67825	ug/m3	111		70 - 130			1
	B164737-BSD1	LCSD	0.75618	0.67825	ug/m3	111	0.7	70 - 130	30		2
Toluene	B164737-BS1	LCS	0.36064	0.37684	ug/m3	95.7		70 - 130			1
	B164737-BSD1	LCSD	0.36245	0.37684	ug/m3	96.2	0.5	70 - 130	30		2
1,1,1-Trichloroethane	B164737-BS1	LCS	0.52821	0.54562	ug/m3	96.8		70 - 130			1
	B164737-BSD1	LCSD	0.52434	0.54562	ug/m3	96.1	0.7	70 - 130	30		2
1,1,2-Trichloroethane	B164737-BS1	LCS	0.64672	0.54562	ug/m3	119		70 - 130			1
	B164737-BSD1	LCSD	0.64923	0.54562	ug/m3	119	0.4	70 - 130	30		2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Run #
								Percent Recovery	RPD		
QC Batch ID: B164737											
Trichloroethene	B164737-BS1	LCS	0.57859	0.53737	ug/m3	108		70 - 130			1
	B164737-BSD1	LCSD	0.58375	0.53737	ug/m3	109	0.9	70 - 130	30		2
Vinyl chloride	B164737-BS1	LCS	0.26973	0.25562	ug/m3	106		70 - 130			1
	B164737-BSD1	LCSD	0.27632	0.25562	ug/m3	108	2.4	70 - 130	30		2
p- & m-Xylenes	B164737-BS1	LCS	0.89265	0.86843	ug/m3	103		70 - 130			1
	B164737-BSD1	LCSD	0.87685	0.86843	ug/m3	101	1.8	70 - 130	30		2
o-Xylene	B164737-BS1	LCS	0.39387	0.43421	ug/m3	90.7		70 - 130			1
	B164737-BSD1	LCSD	0.38940	0.43421	ug/m3	89.7	1.1	70 - 130	30		2
Total Xylenes	B164737-BS1	LCS	1.2865	1.3026	ug/m3	98.8		70 - 130			1
	B164737-BSD1	LCSD	1.2663	1.3026	ug/m3	97.2	1.6	70 - 130	30		2
4-Bromofluorobenzene (Surrogate)	B164737-BS1	LCS	3.68	3.58	ug/m3	103		50 - 150			1
	B164737-BSD1	LCSD	3.66	3.58	ug/m3	102	0.5	50 - 150			2

Run #	QC Sample ID	QC Type	Method	Prep Date	Run		Analyst	Instrument	Dilution
					Date	Time			
1	B164737-BS1	LCS	EPA-TO-15-SIM	04/24/23	04/24/23	12:48	BEP	MS-A1	1
2	B164737-BSD1	LCSD	EPA-TO-15-SIM	04/24/23	04/24/23	13:27	BEP	MS-A1	1

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 Long Beach, CA 90804

Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
-------------	--------------	-----------	-------	-----	-----	-----------	-------

QC Batch ID: B164949

Methane (CH4)	B164949-BLK1	ND	ppmv	2.0	1.8		1
---------------	--------------	----	------	-----	-----	--	---

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B164949-BLK1	PB	ASTM-D1946	04/26/23	04/26/23 14:28	RMK	GC-A1	1

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 Long Beach, CA 90804

Reported: 05/01/2023 14:46
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Run #
								Percent Recovery	RPD		
QC Batch ID: B164949											
Methane (CH4)	B164949-BS1	LCS	18969	18000	ppmv	105		70 - 130			1
	B164949-BSD1	LCSD	18846	18000	ppmv	105	0.7	70 - 130	30		2

Run #	QC Sample ID	QC Type	Method	Prep Date	Run		Analyst	Instrument	Dilution
					Date	Time			
1	B164949-BS1	LCS	ASTM-D1946	04/26/23	04/26/23	13:48	RMK	GC-A1	1
2	B164949-BSD1	LCSD	ASTM-D1946	04/26/23	04/26/23	14:08	RMK	GC-A1	1

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5150 E. Pacific Coast Hwy, Suite 450
Long Beach, CA 90804

Reported: 05/01/2023 14:46
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Notes And Definitions

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A01 Detection and quantitation limits are raised due to sample dilution.



Date of Report: 04/26/2023

April McGuire

Roux Associates, Inc -Long Beach
5150 E. Pacific Coast Hwy, Suite 450
Long Beach, CA 90804

Client Project: 2855
BCL Project: City Terrace
BCL Work Order: 2307789
Invoice ID: B474479

Enclosed are the results of analyses for samples received by the laboratory on 4/19/2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "BS", is positioned above a horizontal line.

Contact Person: Brianna Schutte
Client Services Rep

A handwritten signature in black ink, appearing to read "Stuart Buttram", is positioned above a horizontal line.

Stuart Buttram
Operations Manager

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

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PACE ANALYTICAL		COOLER RECEIPT FORM		Page <u>1</u> Of <u>1</u>	
Submission #: <u>23-07789</u>					
SHIPPING INFORMATION Fed Ex <input checked="" type="checkbox"/> UPS <input type="checkbox"/> GSO / GLS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> Pace Lab Field Service <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			SHIPPING CONTAINER Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		FREE LIQUID YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> W / S
Refrigerant: Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None <input checked="" type="checkbox"/> Other <input type="checkbox"/> Comments: _____					
Custody Seals: Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Comments: _____					
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: _____ Container <u>Summa</u> Thermometer ID: _____		Date/Time <u>4.19.23</u>	
		Temperature: (A) <u>Room</u> °C / (C) <u>Temp</u> °C		Analyst Init <u>SMH/1037</u>	

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr ⁶										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664B										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 508/608.3/8081A										
QT EPA 515.1/8151A										
QT EPA 525.2										
QT EPA 525.2 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548.1										
QT EPA 549.2										
QT EPA 8015M										
QT EPA 8270C										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER	<u>GL</u>	<u>A</u>								

CHK BY: SMH
 DISTRIBUTION
 DATE: 4/19/23
 SUBMITTED BY: SMH

Comments: _____
 Sample Numbering Completed By: _____ Date/Time: 4/19/23 1150
 A = Actual / C = Corrected

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information				
2307789-01	COC Number:	---		Receive Date:	04/19/2023 10:37
	Project Number:	---		Sampling Date:	04/18/2023 04:01
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-710-20230418-0104		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
	<hr/>				
2307789-02	COC Number:	---		Receive Date:	04/19/2023 10:37
	Project Number:	---		Sampling Date:	04/18/2023 04:05
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-10-20230418-0105		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
	<hr/>				
2307789-03	COC Number:	---		Receive Date:	04/19/2023 10:37
	Project Number:	---		Sampling Date:	04/18/2023 03:52
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-710/10-20230418-0057		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
	<hr/>				
2307789-04	COC Number:	---		Receive Date:	04/19/2023 10:37
	Project Number:	---		Sampling Date:	04/18/2023 03:55
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-CT-20230418-0055		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
	<hr/>				
2307789-05	COC Number:	---		Receive Date:	04/19/2023 10:37
	Project Number:	---		Sampling Date:	04/18/2023 03:52
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-710/10-20230418-0057-D		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
	<hr/>				
2307789-06	COC Number:	---		Receive Date:	04/19/2023 10:37
	Project Number:	---		Sampling Date:	04/18/2023 10:17
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-710-20230418-0707		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
	<hr/>				
2307789-07	COC Number:	---		Receive Date:	04/19/2023 10:37
	Project Number:	---		Sampling Date:	04/18/2023 10:04
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-10-20230418-0704		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
	<hr/>				

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2307789-08	COC Number:	---	Receive Date:	04/19/2023 10:37
	Project Number:	---	Sampling Date:	04/18/2023 10:06
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-710/10-20230418-0656	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air
	<hr/>			
2307789-09	COC Number:	---	Receive Date:	04/19/2023 10:37
	Project Number:	---	Sampling Date:	04/18/2023 09:55
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-CT-20230418-0655	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air
	<hr/>			

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 Long Beach, CA 90804

Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307789-01		Client Sample Name: AA-710-20230418-0104, 4/18/2023 4:01:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	3.4	ug/m3	1.0	0.0075	EPA-TO-15-SIM	ND		1
Benzene	0.58	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		1
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		1
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		1
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		1
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		1
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		1
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		1
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		1
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		1
Dichlorodifluoromethane	2.1	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		1
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		1
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		1
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		1
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		1
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		1
1,1-Difluoroethane	0.52	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	1
Ethylbenzene	0.15	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		1
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		1
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		1
Toluene	1.6	ug/m3	0.10	0.0062	EPA-TO-15-SIM	ND		1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		1
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		1
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		1
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.59	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		1
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		1
p- & m-Xylenes	0.59	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		1
o-Xylene	0.19	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		1
Total Xylenes	0.78	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		1
4-Bromofluorobenzene (Surrogate)	98.9	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/26/2023 12:44
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307789-01	Client Sample Name: AA-710-20230418-0104, 4/18/2023 4:01:00AM, Client
----------------------------------	------------------------------------------------------------------------------

DCN	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	
1	EPA-TO-15-SIM	04/19/23 13:39	04/20/23 12:40		BEP	MS-A2	1	B164497	EPA TO-15

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307789-01	Client Sample Name: AA-710-20230418-0104, 4/18/2023 4:01:00AM, Client							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	23	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/24/23 08:03	04/24/23 13:23	RMK	GC-A1	1	B164745	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307789-02		Client Sample Name: AA-10-20230418-0105, 4/18/2023 4:05:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	5.9	ug/m3	1.0	0.0075	EPA-TO-15-SIM	ND		1
Benzene	0.44	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		1
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		1
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		1
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		1
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		1
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		1
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		1
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		1
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		1
Dichlorodifluoromethane	2.1	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		1
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		1
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		1
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		1
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		1
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		1
1,1-Difluoroethane	0.73	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	1
Ethylbenzene	0.14	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		1
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		1
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		1
Toluene	1.6	ug/m3	0.10	0.0062	EPA-TO-15-SIM	ND		1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		1
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		1
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		1
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.60	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		1
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		1
p- & m-Xylenes	0.54	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		1
o-Xylene	0.17	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		1
Total Xylenes	0.71	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		1
4-Bromofluorobenzene (Surrogate)	102	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1

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 Long Beach, CA 90804

Reported: 04/26/2023 12:44
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307789-02	Client Sample Name: AA-10-20230418-0105, 4/18/2023 4:05:00AM, Client
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DCN	Method	Prep Date		Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/19/23	13:39	04/20/23	14:02	BEP	MS-A2	1	B164497	EPA TO-15

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307789-02	Client Sample Name: AA-10-20230418-0105, 4/18/2023 4:05:00AM, Client
----------------------------------	-----------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	1.8	ppmv	2.0	1.8	ASTM-D1946	ND	J	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/24/23 08:03	04/24/23 13:43	RMK	GC-A1	1	B164745	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307789-03		Client Sample Name: AA-710/10-20230418-0057, 4/18/2023 3:52:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	4.3	ug/m3	1.0	0.0075	EPA-TO-15-SIM	ND		1
Benzene	0.58	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		1
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		1
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		1
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		1
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		1
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		1
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		1
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		1
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		1
Dichlorodifluoromethane	2.1	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		1
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		1
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		1
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		1
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		1
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		1
1,1-Difluoroethane	0.58	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	1
Ethylbenzene	0.16	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		1
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		1
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		1
Toluene	1.5	ug/m3	0.10	0.0062	EPA-TO-15-SIM	ND		1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		1
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		1
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		1
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.60	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		1
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		1
p- & m-Xylenes	0.64	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		1
o-Xylene	0.21	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		1
Total Xylenes	0.86	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		1
4-Bromofluorobenzene (Surrogate)	98.0	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/26/2023 12:44
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307789-03	Client Sample Name: AA-710/10-20230418-0057, 4/18/2023 3:52:00AM, Client
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DCN	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	
1	EPA-TO-15-SIM	04/19/23 13:39	04/20/23	14:46	BEP	MS-A2	1	B164497	EPA TO-15

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307789-03	Client Sample Name: AA-710/10-20230418-0057, 4/18/2023 3:52:00AM, Client							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	4.3	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/24/23 08:03	04/24/23 14:03	RMK	GC-A1	1	B164745	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307789-04		Client Sample Name: AA-CT-20230418-0055, 4/18/2023 3:55:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	3.9	ug/m3	1.0	0.0075	EPA-TO-15-SIM	ND		1
Benzene	0.39	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		1
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		1
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		1
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		1
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		1
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		1
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		1
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		1
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		1
Dichlorodifluoromethane	2.1	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		1
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		1
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		1
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		1
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		1
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		1
1,1-Difluoroethane	0.66	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	1
Ethylbenzene	0.14	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		1
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		1
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		1
Toluene	1.5	ug/m3	0.10	0.0062	EPA-TO-15-SIM	ND		1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		1
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		1
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		1
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.61	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		1
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		1
p- & m-Xylenes	0.53	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		1
o-Xylene	0.16	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		1
Total Xylenes	0.69	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		1
4-Bromofluorobenzene (Surrogate)	97.5	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1

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Reported: 04/26/2023 12:44
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307789-04	Client Sample Name: AA-CT-20230418-0055, 4/18/2023 3:55:00AM, Client
----------------------------------	-----------------------------------------------------------------------------

DCN	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	
1	EPA-TO-15-SIM	04/19/23 13:39	04/20/23	15:29	BEP	MS-A2	1	B164497	EPA TO-15

DCN = Data Continuation Number

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Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307789-04	Client Sample Name: AA-CT-20230418-0055, 4/18/2023 3:55:00AM, Client
----------------------------------	-----------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	5.0	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/24/23 08:03	04/24/23 14:23	RMK	GC-A1	1	B164745	No Prep

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307789-05		Client Sample Name: AA-710/10-20230418-0057-D, 4/18/2023 3:52:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	5.6	ug/m3	1.0	0.0075	EPA-TO-15-SIM	ND		1
Benzene	0.47	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		1
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		1
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		1
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		1
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		1
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		1
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		1
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		1
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		1
Dichlorodifluoromethane	2.2	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		1
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		1
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		1
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		1
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		1
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		1
1,1-Difluoroethane	0.66	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	1
Ethylbenzene	0.17	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		1
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		1
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		1
Toluene	1.5	ug/m3	0.10	0.0062	EPA-TO-15-SIM	ND		1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		1
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		1
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		1
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.60	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		1
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		1
p- & m-Xylenes	0.68	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		1
o-Xylene	0.21	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		1
Total Xylenes	0.89	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		1
4-Bromofluorobenzene (Surrogate)	101	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1

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 Long Beach, CA 90804

Reported: 04/26/2023 12:44
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307789-05	Client Sample Name: AA-710/10-20230418-0057-D, 4/18/2023 3:52:00AM, Client
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DCN	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	
1	EPA-TO-15-SIM	04/19/23 13:39	04/20/23 16:12		BEP	MS-A2	1	B164497	EPA TO-15

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307789-05	Client Sample Name: AA-710/10-20230418-0057-D, 4/18/2023 3:52:00AM, Client
----------------------------------	-----------------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	67	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/24/23 08:03	04/24/23 15:19	RMK	GC-A1	1	B164745	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307789-06		Client Sample Name: AA-710-20230418-0707, 4/18/2023 10:17:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	4.8	ug/m3	10	0.075	EPA-TO-15-SIM	ND	J,A01	1
Benzene	0.96	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.2	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	ND	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND		2
Ethylbenzene	0.48	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	3.2	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.60	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.8	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.65	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	2.4	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	101	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	98.0	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/26/2023 12:44
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307789-06	Client Sample Name: AA-710-20230418-0707, 4/18/2023 10:17:00AM, Client								
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/19/23 13:39	04/20/23	22:03	BEP	MS-A2	10	B164497	EPA TO-15
2	EPA-TO-15-SIM	04/19/23 13:39	04/20/23	16:57	BEP	MS-A2	1	B164497	EPA TO-15

DCN = Data Continuation Number

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307789-06	Client Sample Name: AA-710-20230418-0707, 4/18/2023 10:17:00AM, Client
----------------------------------	-------------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	2.1	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/24/23 08:03	04/24/23 15:39	RMK	GC-A1	1	B164745	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307789-07		Client Sample Name: AA-10-20230418-0704, 4/18/2023 10:04:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	5.5	ug/m3	10	0.075	EPA-TO-15-SIM	ND	J,A01	1
Benzene	1.1	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.1	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.55	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.62	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	3.5	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.60	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	2.3	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.87	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	3.2	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	80.7	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	105	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Reported: 04/26/2023 12:44
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307789-07		Client Sample Name: AA-10-20230418-0704, 4/18/2023 10:04:00AM, Client							
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/19/23 13:39	04/20/23	22:42	BEP	MS-A2	10	B164497	EPA TO-15
2	EPA-TO-15-SIM	04/19/23 13:39	04/20/23	17:41	BEP	MS-A2	1	B164497	EPA TO-15

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Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307789-07	Client Sample Name: AA-10-20230418-0704, 4/18/2023 10:04:00AM, Client
----------------------------------	------------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	4.7	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/24/23 08:03	04/24/23 16:00	RMK	GC-A1	1	B164745	No Prep

DCN = Data Continuation Number

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Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307789-08		Client Sample Name: AA-710/10-20230418-0656, 4/18/2023 10:06:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	4.9	ug/m3	10	0.075	EPA-TO-15-SIM	ND	J,A01	1
Benzene	1.2	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.2	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.52	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.66	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	3.3	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.59	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	2.5	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.95	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	3.4	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	88.5	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	108	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/26/2023 12:44
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307789-08	Client Sample Name: AA-710/10-20230418-0656, 4/18/2023 10:06:00AM, Client								
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/19/23 13:39	04/20/23	23:19	BEP	MS-A2	10	B164497	EPA TO-15
2	EPA-TO-15-SIM	04/19/23 13:39	04/20/23	18:24	BEP	MS-A2	1	B164497	EPA TO-15

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307789-08	Client Sample Name: AA-710/10-20230418-0656, 4/18/2023 10:06:00AM, Client
----------------------------------	----------------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	6.1	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/24/23 08:03	04/24/23 17:00	RMK	GC-A1	1	B164745	No Prep

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
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 Long Beach, CA 90804

Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307789-09		Client Sample Name: AA-CT-20230418-0655, 4/18/2023 9:55:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	8.9	ug/m3	10	0.075	EPA-TO-15-SIM	ND	J,A01	1
Benzene	0.65	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.1	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	1.0	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.41	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	8.3	ug/m3	2.0	0.077	EPA-TO-15-SIM	ND	A01	1
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.8	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.64	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.6	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.55	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	2.1	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	89.1	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	111	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/26/2023 12:44
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2307789-09		Client Sample Name: AA-CT-20230418-0655, 4/18/2023 9:55:00AM, Client							
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/19/23 13:39	04/20/23	23:56	BEP	MS-A2	10	B164497	EPA TO-15
2	EPA-TO-15-SIM	04/19/23 13:39	04/20/23	19:07	BEP	MS-A2	1	B164497	EPA TO-15

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2307789-09	Client Sample Name: AA-CT-20230418-0655, 4/18/2023 9:55:00AM, Client
----------------------------------	-----------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	21	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	04/24/23 08:03	04/24/23 17:20	RMK	GC-A1	1	B164745	No Prep

DCN = Data Continuation Number

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Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B164497							
Acetone	B164497-BLK1	ND	ug/m3	1.0	0.0075		1
Benzene	B164497-BLK1	ND	ug/m3	0.050	0.0032		1
Benzyl chloride	B164497-BLK1	ND	ug/m3	0.50	0.0052		1
Carbon tetrachloride	B164497-BLK1	ND	ug/m3	0.20	0.0063		1
Chlorobenzene	B164497-BLK1	ND	ug/m3	0.10	0.0079		1
Chloroform	B164497-BLK1	ND	ug/m3	0.050	0.0058		1
1,2-Dibromoethane	B164497-BLK1	ND	ug/m3	0.20	0.014		1
1,2-Dichlorobenzene	B164497-BLK1	ND	ug/m3	0.20	0.011		1
1,3-Dichlorobenzene	B164497-BLK1	ND	ug/m3	0.20	0.013		1
1,4-Dichlorobenzene	B164497-BLK1	ND	ug/m3	0.20	0.016		1
Dichlorodifluoromethane	B164497-BLK1	ND	ug/m3	0.050	0.0052		1
1,1-Dichloroethane	B164497-BLK1	ND	ug/m3	0.050	0.0041		1
1,2-Dichloroethane	B164497-BLK1	ND	ug/m3	0.10	0.0046		1
1,1-Dichloroethene	B164497-BLK1	ND	ug/m3	0.050	0.0078		1
cis-1,2-Dichloroethene	B164497-BLK1	ND	ug/m3	0.050	0.0044		1
trans-1,2-Dichloroethene	B164497-BLK1	ND	ug/m3	0.050	0.0075		1
trans-1,3-Dichloropropene	B164497-BLK1	ND	ug/m3	0.050	0.013		1
1,1-Difluoroethane	B164497-BLK1	ND	ug/m3	5.0	0.0027		1
Ethylbenzene	B164497-BLK1	ND	ug/m3	0.050	0.017		1
Methylene chloride	B164497-BLK1	ND	ug/m3	0.20	0.0077		1
Tetrachloroethene	B164497-BLK1	ND	ug/m3	0.10	0.011		1
Toluene	B164497-BLK1	ND	ug/m3	0.10	0.0062		1
1,1,1-Trichloroethane	B164497-BLK1	ND	ug/m3	0.10	0.0055		1
1,1,2-Trichloroethane	B164497-BLK1	ND	ug/m3	0.10	0.0055		1
Trichloroethene	B164497-BLK1	ND	ug/m3	0.10	0.0095		1
Trichlorofluoromethane	B164497-BLK1	ND	ug/m3	0.050	0.0057		1
1,1,2-Trichloro-1,2,2-trifluoroethane	B164497-BLK1	ND	ug/m3	0.10	0.0078		1
Vinyl chloride	B164497-BLK1	ND	ug/m3	0.020	0.0046		1
p- & m-Xylenes	B164497-BLK1	ND	ug/m3	0.050	0.0082		1
o-Xylene	B164497-BLK1	ND	ug/m3	0.050	0.0044		1
Total Xylenes	B164497-BLK1	ND	ug/m3	0.10	0.013		1
4-Bromofluorobenzene (Surrogate)	B164497-BLK1	67.5	%	50 - 150 (LCL - UCL)			1

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Roux Associates, Inc -Long Beach
5150 E. Pacific Coast Hwy, Suite 450
Long Beach, CA 90804

Reported: 04/26/2023 12:44
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Run #	QC Sample ID	QC Type	Method	Prep Date	Run		Analyst	Instrument	Dilution
					Date	Time			
1	B164497-BLK1	PB	EPA-TO-15-SIM	04/19/23	04/20/23	01:55	BEP	MS-A2	1

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals	Run #
								Percent Recovery	RPD		
QC Batch ID: B164497											
Benzene	B164497-BS1	LCS	0.29261	0.31948	ug/m3	91.6		70 - 130			1
	B164497-BSD1	LCSD	0.28957	0.31948	ug/m3	90.6	1.0	70 - 130	30		2
Benzyl chloride	B164497-BS1	LCS	0.54604	0.51772	ug/m3	105		70 - 130			1
	B164497-BSD1	LCSD	0.51565	0.51772	ug/m3	99.6	5.7	70 - 130	30		2
Carbon tetrachloride	B164497-BS1	LCS	0.59478	0.62913	ug/m3	94.5		70 - 130			1
	B164497-BSD1	LCSD	0.59623	0.62913	ug/m3	94.8	0.2	70 - 130	30		2
Chlorobenzene	B164497-BS1	LCS	0.44958	0.46036	ug/m3	97.7		70 - 130			1
	B164497-BSD1	LCSD	0.45561	0.46036	ug/m3	99.0	1.3	70 - 130	30		2
Chloroform	B164497-BS1	LCS	0.47229	0.48825	ug/m3	96.7		70 - 130			1
	B164497-BSD1	LCSD	0.47531	0.48825	ug/m3	97.4	0.6	70 - 130	30		2
1,2-Dibromoethane	B164497-BS1	LCS	0.76113	0.76835	ug/m3	99.1		70 - 130			1
	B164497-BSD1	LCSD	0.77157	0.76835	ug/m3	100	1.4	70 - 130	30		2
1,2-Dichlorobenzene	B164497-BS1	LCS	0.56787	0.60124	ug/m3	94.4		70 - 130			1
	B164497-BSD1	LCSD	0.57616	0.60124	ug/m3	95.8	1.5	70 - 130	30		2
1,3-Dichlorobenzene	B164497-BS1	LCS	0.58663	0.60124	ug/m3	97.6		70 - 130			1
	B164497-BSD1	LCSD	0.61320	0.60124	ug/m3	102	4.4	70 - 130	30		2
1,4-Dichlorobenzene	B164497-BS1	LCS	0.62727	0.60124	ug/m3	104		70 - 130			1
	B164497-BSD1	LCSD	0.64981	0.60124	ug/m3	108	3.5	70 - 130	30		2
1,1-Dichloroethane	B164497-BS1	LCS	0.38697	0.40474	ug/m3	95.6		70 - 130			1
	B164497-BSD1	LCSD	0.38361	0.40474	ug/m3	94.8	0.9	70 - 130	30		2
1,2-Dichloroethane	B164497-BS1	LCS	0.37880	0.40474	ug/m3	93.6		70 - 130			1
	B164497-BSD1	LCSD	0.38005	0.40474	ug/m3	93.9	0.3	70 - 130	30		2
1,1-Dichloroethene	B164497-BS1	LCS	0.36743	0.39649	ug/m3	92.7		70 - 130			1
	B164497-BSD1	LCSD	0.36664	0.39649	ug/m3	92.5	0.2	70 - 130	30		2
cis-1,2-Dichloroethene	B164497-BS1	LCS	0.37564	0.39649	ug/m3	94.7		70 - 130			1
	B164497-BSD1	LCSD	0.36656	0.39649	ug/m3	92.4	2.4	70 - 130	30		2
Methylene chloride	B164497-BS1	LCS	0.34595	0.34737	ug/m3	99.6		70 - 130			1
	B164497-BSD1	LCSD	0.35186	0.34737	ug/m3	101	1.7	70 - 130	30		2
Tetrachloroethene	B164497-BS1	LCS	0.65723	0.67825	ug/m3	96.9		70 - 130			1
	B164497-BSD1	LCSD	0.66638	0.67825	ug/m3	98.2	1.4	70 - 130	30		2
Toluene	B164497-BS1	LCS	0.35469	0.37684	ug/m3	94.1		70 - 130			1
	B164497-BSD1	LCSD	0.35521	0.37684	ug/m3	94.3	0.1	70 - 130	30		2
1,1,1-Trichloroethane	B164497-BS1	LCS	0.51861	0.54562	ug/m3	95.0		70 - 130			1
	B164497-BSD1	LCSD	0.51817	0.54562	ug/m3	95.0	0.1	70 - 130	30		2
1,1,2-Trichloroethane	B164497-BS1	LCS	0.53596	0.54562	ug/m3	98.2		70 - 130			1
	B164497-BSD1	LCSD	0.54131	0.54562	ug/m3	99.2	1.0	70 - 130	30		2

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 Long Beach, CA 90804

Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Run #
								Percent Recovery	RPD		
QC Batch ID: B164497											
Trichloroethene	B164497-BS1	LCS	0.51636	0.53737	ug/m3	96.1		70 - 130			1
	B164497-BSD1	LCSD	0.52002	0.53737	ug/m3	96.8	0.7	70 - 130	30		2
Vinyl chloride	B164497-BS1	LCS	0.22934	0.25562	ug/m3	89.7		70 - 130			1
	B164497-BSD1	LCSD	0.25066	0.25562	ug/m3	98.1	8.9	70 - 130	30		2
p- & m-Xylenes	B164497-BS1	LCS	0.84737	0.86843	ug/m3	97.6		70 - 130			1
	B164497-BSD1	LCSD	0.87086	0.86843	ug/m3	100	2.7	70 - 130	30		2
o-Xylene	B164497-BS1	LCS	0.38410	0.43421	ug/m3	88.5		70 - 130			1
	B164497-BSD1	LCSD	0.39587	0.43421	ug/m3	91.2	3.0	70 - 130	30		2
Total Xylenes	B164497-BS1	LCS	1.2315	1.3026	ug/m3	94.5		70 - 130			1
	B164497-BSD1	LCSD	1.2667	1.3026	ug/m3	97.2	2.8	70 - 130	30		2
4-Bromofluorobenzene (Surrogate)	B164497-BS1	LCS	3.72	3.58	ug/m3	104		50 - 150			1
	B164497-BSD1	LCSD	3.64	3.58	ug/m3	102	2.4	50 - 150			2

Run #	QC Sample ID	QC Type	Method	Prep Date	Run		Analyst	Instrument	Dilution
					Date	Time			
1	B164497-BS1	LCS	EPA-TO-15-SIM	04/19/23	04/20/23	00:41	BEP	MS-A2	1
2	B164497-BSD1	LCSD	EPA-TO-15-SIM	04/19/23	04/20/23	01:20	BEP	MS-A2	1

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 Long Beach, CA 90804

Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
-------------	--------------	-----------	-------	-----	-----	-----------	-------

QC Batch ID: B164745

Methane (CH4)	B164745-BLK1	ND	ppmv	2.0	1.8		1
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Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B164745-BLK1	PB	ASTM-D1946	04/24/23	04/24/23 13:03	RMK	GC-A1	1

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Reported: 04/26/2023 12:44
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Run #
								Percent Recovery	RPD		
QC Batch ID: B164745											
Methane (CH4)	B164745-BS1	LCS	19083	18000	ppmv	106		70 - 130			1
	B164745-BSD1	LCSD	19015	18000	ppmv	106	0.4	70 - 130	30		2

Run #	QC Sample ID	QC Type	Method	Prep Date	Run		Analyst	Instrument	Dilution
					Date	Time			
1	B164745-BS1	LCS	ASTM-D1946	04/24/23	04/24/23	12:22	RMK	GC-A1	1
2	B164745-BSD1	LCSD	ASTM-D1946	04/24/23	04/24/23	12:42	RMK	GC-A1	1

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Roux Associates, Inc -Long Beach
5150 E. Pacific Coast Hwy, Suite 450
Long Beach, CA 90804

Reported: 04/26/2023 12:44
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Notes And Definitions

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A01 Detection and quantitation limits are raised due to sample dilution.



Date of Report: 05/10/2023

April McGuire

Roux Associates, Inc -Long Beach
5150 E. Pacific Coast Hwy, Suite 450
Long Beach, CA 90804

Client Project: 2855
BCL Project: City Terrace
BCL Work Order: 2308087
Invoice ID: B475603

Enclosed are the results of analyses for samples received by the laboratory on 4/22/2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "BS", is positioned above a horizontal line.

Contact Person: Brianna Schutte
Client Services Rep

A handwritten signature in black ink, appearing to read "Stuart Buttram", is positioned above a horizontal line.

Stuart Buttram
Operations Manager

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

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PACE ANALYTICAL COOLER RECEIPT FORM

Submission #: 23-08087

SHIPPING INFORMATION Fed Ex <input checked="" type="checkbox"/> UPS <input type="checkbox"/> GSO / GLS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> Pace Lab Field Service <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		SHIPPING CONTAINER Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____	FREE LIQUID YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> W / S
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------

Refrigerant: Ice Blue Ice None Other Comments: _____

Custody Seals: Ice Chest Containers None Intact? Yes No Intact? Yes No Comments: _____

All samples received? Yes No All samples containers intact? Yes No Description(s) match COC? Yes No

COC Received YES NO

Emissivity: _____ Container: Swiss Thermometer ID: _____ Date/Time: 4/22/23
 Temperature: (A) Room °C / (C) Temp °C Analyst Init: JCD OAZD

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr ⁴⁺										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664B										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608.3/8081A										
QT EPA 515.1/8151A										
QT EPA 525.2										
QT EPA 525.2 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 543.1										
QT EPA 549.2										
QT EPA 8015M										
QT EPA 8170C										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER	<u>6L</u>	<u>A</u>								

Comments: _____ Date/Time: 4/22/23 1000 Rev 23 05/20/22
 Sample Numbering Completed By: JCD
 A = Actual / C = Corrected [S:\IT\Dev\Word\Perfor\LAB_DOC\CFOR\MSA\CFR\Doc 23]

PACE ANALYTICAL		COOLER RECEIPT FORM		Page <u>2</u> Of <u>2</u>	
Submission #: <u>23-08087</u>					
SHIPPING INFORMATION Fed Ex <input checked="" type="checkbox"/> UPS <input type="checkbox"/> GSO / GLS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> Pace Lab Field Service <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			SHIPPING CONTAINER Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		FREE LIQUID YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> W / S
Refrigerant: Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None <input checked="" type="checkbox"/> Other <input type="checkbox"/> Comments:					
Custody Seals Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>					
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: _____ Container: <u>Seam</u> Thermometer ID: _____		Date/Time <u>4/22/23</u>	
		Temperature: (A) <u>Room</u> °C / (C) <u>Temp</u> °C		Analyst Init <u>JCO 0920</u>	

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / Box / 16oz PE UNPRES										
2oz Cr ⁶										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664B										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/603, 3/3051A										
QT EPA 515.1/8151A										
QT EPA 525.2										
QT EPA 525.2 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
3oz EPA 548.1										
QT EPA 549.2										
QT EPA 801SM										
QT EPA 8279C										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz IAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: _____
 Sample Numbering Completed By: JCO Date/Time: 4/22/23 1000
 A = Actual / C = Corrected Rev 23 06/20/22
25:\WP\Doc\Files\PerfectLAB_DOC\FORMS\SAMPLECD Rev 26



Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2308087-01	COC Number:	---	Receive Date:	04/22/2023 09:20
	Project Number:	---	Sampling Date:	04/20/2023 10:51
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-CL-20230419	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air
2308087-02	COC Number:	---	Receive Date:	04/22/2023 09:20
	Project Number:	---	Sampling Date:	04/20/2023 10:56
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-BL-20230419	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air
2308087-03	COC Number:	---	Receive Date:	04/22/2023 09:20
	Project Number:	---	Sampling Date:	04/20/2023 09:18
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-0.125MI-20230419	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air
2308087-04	COC Number:	---	Receive Date:	04/22/2023 09:20
	Project Number:	---	Sampling Date:	04/20/2023 09:29
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-0.25MI-20230419	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air
2308087-05	COC Number:	---	Receive Date:	04/22/2023 09:20
	Project Number:	---	Sampling Date:	04/20/2023 09:47
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-0.5MI-20230419	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air
2308087-06	COC Number:	---	Receive Date:	04/22/2023 09:20
	Project Number:	---	Sampling Date:	04/20/2023 09:58
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-0.75MI-20230419	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air
2308087-07	COC Number:	---	Receive Date:	04/22/2023 09:20
	Project Number:	---	Sampling Date:	04/20/2023 09:58
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-0.75MI-20230419-D	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		Receive Date:	
2308087-08	COC Number:	---	Receive Date:	04/22/2023 09:20
	Project Number:	---	Sampling Date:	04/20/2023 10:12
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-PW1-20230419	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air
2308087-09	COC Number:	---	Receive Date:	04/22/2023 09:20
	Project Number:	---	Sampling Date:	04/20/2023 10:18
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-PW2-20230419	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air
2308087-10	COC Number:	---	Receive Date:	04/22/2023 09:20
	Project Number:	---	Sampling Date:	04/20/2023 11:05
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-PW3-20230419	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air
2308087-11	COC Number:	---	Receive Date:	04/22/2023 09:20
	Project Number:	---	Sampling Date:	04/20/2023 10:35
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-710/10-20230419	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308087-01		Client Sample Name: AA-CL-20230419, 4/20/2023 10:51:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	7.1	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1
Benzene	0.96	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND	V11	2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.1	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.76	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.39	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	1.9	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	3.4	ug/m3	0.50	0.048	EPA-TO-15-SIM	ND	A01	1
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.61	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.4	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.49	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	1.9	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	95.0	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	103	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308087-01	Client Sample Name: AA-CL-20230419, 4/20/2023 10:51:00AM, Client								
DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID		
1	EPA-TO-15-SIM	04/25/23 13:30	04/26/23 13:32	BEP	MS-A2	5	B164877	EPA TO-15	
2	EPA-TO-15-SIM	04/25/23 13:30	04/26/23 02:02	BEP	MS-A2	1	B164877	EPA TO-15	

DCN = Data Continuation Number

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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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308087-01	Client Sample Name: AA-CL-20230419, 4/20/2023 10:51:00AM, Client
----------------------------------	-------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	63	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	ASTM-D1946	05/01/23 10:47	05/01/23 16:50		RMK	GC-A1	1	B165213	No Prep

DCN = Data Continuation Number

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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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID:	2308087-02		Client Sample Name:	AA-BL-20230419, 4/20/2023 10:56:00AM, Client					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN	
Acetone	8.5	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1	
Benzene	0.88	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2	
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2	
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2	
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2	
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2	
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2	
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2	
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND	V11	2	
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2	
Dichlorodifluoromethane	2.1	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2	
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2	
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2	
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2	
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2	
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2	
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2	
1,1-Difluoroethane	0.66	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2	
Ethylbenzene	0.43	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2	
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2	
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2	
Toluene	1.9	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1	
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2	
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2	
Trichloroethene	0.93	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2	
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.61	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2	
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2	
p- & m-Xylenes	1.6	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2	
o-Xylene	0.52	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2	
Total Xylenes	2.1	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2	
4-Bromofluorobenzene (Surrogate)	92.5	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1	
4-Bromofluorobenzene (Surrogate)	94.1	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2	

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308087-02	Client Sample Name: AA-BL-20230419, 4/20/2023 10:56:00AM, Client								
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/25/23 13:30	04/26/23	14:09	BEP	MS-A2	5	B164877	EPA TO-15
2	EPA-TO-15-SIM	04/25/23 13:30	04/26/23	02:45	BEP	MS-A2	1	B164877	EPA TO-15

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308087-02	Client Sample Name: AA-BL-20230419, 4/20/2023 10:56:00AM, Client
----------------------------------	-------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	ND	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/01/23 10:47	05/01/23 17:11	RMK	GC-A1	1	B165213	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308087-03		Client Sample Name: AA-0.125MI-20230419, 4/20/2023 9:18:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	8.3	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1
Benzene	1.1	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND	V11	2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.1	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	1.1	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.59	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.5	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	2.6	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.61	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	2.1	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.77	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	2.8	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	86.9	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	105	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308087-03		Client Sample Name: AA-0.125MI-20230419, 4/20/2023 9:18:00AM, Client							
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/25/23 13:30	04/26/23	14:49	BEP	MS-A2	5	B164877	EPA TO-15
2	EPA-TO-15-SIM	04/25/23 13:30	04/26/23	03:29	BEP	MS-A2	1	B164877	EPA TO-15

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 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308087-03	Client Sample Name: AA-0.125MI-20230419, 4/20/2023 9:18:00AM, Client
----------------------------------	-----------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	ND	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/01/23 10:47	05/01/23 17:31	RMK	GC-A1	1	B165213	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308087-04		Client Sample Name: AA-0.25MI-20230419, 4/20/2023 9:29:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	8.0	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1
Benzene	0.86	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND	V11	2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.2	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.73	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.46	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	1.8	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	2.7	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.61	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.7	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.58	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	2.2	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	91.1	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	104	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308087-04	Client Sample Name: AA-0.25MI-20230419, 4/20/2023 9:29:00AM, Client								
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/25/23 13:30	04/26/23	15:26	BEP	MS-A2	5	B164877	EPA TO-15
2	EPA-TO-15-SIM	04/25/23 13:30	04/26/23	04:12	BEP	MS-A2	1	B164877	EPA TO-15

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308087-04	Client Sample Name: AA-0.25MI-20230419, 4/20/2023 9:29:00AM, Client
----------------------------------	----------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	ND	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/01/23 10:47	05/01/23 17:51	RMK	GC-A1	1	B165213	No Prep

DCN = Data Continuation Number

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Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308087-05		Client Sample Name: AA-0.5MI-20230419, 4/20/2023 9:47:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	10	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1
Benzene	1.0	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND	V11	2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.1	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	1.0	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.52	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.2	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	3.6	ug/m3	0.50	0.048	EPA-TO-15-SIM	ND	A01	1
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.60	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.9	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.67	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	2.6	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	87.2	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	101	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308087-05		Client Sample Name: AA-0.5MI-20230419, 4/20/2023 9:47:00AM, Client							
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/25/23 13:30	04/26/23	16:05	BEP	MS-A2	5	B164877	EPA TO-15
2	EPA-TO-15-SIM	04/25/23 13:30	04/26/23	04:57	BEP	MS-A2	1	B164877	EPA TO-15

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308087-05	Client Sample Name: AA-0.5MI-20230419, 4/20/2023 9:47:00AM, Client
----------------------------------	---------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	12	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/01/23 10:47	05/01/23 18:11	RMK	GC-A1	1	B165213	No Prep

DCN = Data Continuation Number

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308087-06		Client Sample Name: AA-0.75MI-20230419, 4/20/2023 9:58:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	7.7	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1
Benzene	1.0	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND	V11	2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.1	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	1.1	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.54	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.2	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	4.5	ug/m3	0.50	0.048	EPA-TO-15-SIM	ND	A01	1
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.61	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.9	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.68	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	2.6	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	92.2	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	99.7	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308087-06	Client Sample Name: AA-0.75MI-20230419, 4/20/2023 9:58:00AM, Client								
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/25/23 13:30	04/26/23	16:43	BEP	MS-A2	5	B164877	EPA TO-15
2	EPA-TO-15-SIM	04/25/23 13:30	04/26/23	05:40	BEP	MS-A2	1	B164877	EPA TO-15

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308087-06	Client Sample Name: AA-0.75MI-20230419, 4/20/2023 9:58:00AM, Client
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	ND	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/01/23 08:02	05/01/23 19:31	RMK	GC-A1	1	B165241	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308087-07		Client Sample Name: AA-0.75MI-20230419-D, 4/20/2023 9:58:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	7.6	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1
Benzene	1.1	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND	V11	2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.1	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	1.3	ug/m3	25	0.014	EPA-TO-15-SIM	ND	J,A01	1
Ethylbenzene	0.51	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.2	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	0.57	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.59	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.9	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.65	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	2.5	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	89.9	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	106	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308087-07	Client Sample Name: AA-0.75MI-20230419-D, 4/20/2023 9:58:00AM, Client								
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/25/23 13:30	04/26/23	17:21	BEP	MS-A2	5	B164877	EPA TO-15
2	EPA-TO-15-SIM	04/25/23 13:30	04/26/23	06:23	BEP	MS-A2	1	B164877	EPA TO-15

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308087-07	Client Sample Name: AA-0.75MI-20230419-D, 4/20/2023 9:58:00AM, Client
----------------------------------	------------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	ND	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/01/23 08:02	05/01/23 19:51	RMK	GC-A1	1	B165241	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308087-08		Client Sample Name: AA-PW1-20230419, 4/20/2023 10:12:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	14	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1
Benzene	1.4	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND	V11	2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.0	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	1.1	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.86	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.9	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	4.3	ug/m3	0.50	0.048	EPA-TO-15-SIM	ND	A01	1
Trichlorofluoromethane	1.2	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.58	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	3.0	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	1.2	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	4.1	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	91.1	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	119	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Reported: 05/10/2023 15:58
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308087-08		Client Sample Name: AA-PW1-20230419, 4/20/2023 10:12:00AM, Client							
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/25/23 13:30	04/26/23	17:59	BEP	MS-A2	5	B164877	EPA TO-15
2	EPA-TO-15-SIM	04/25/23 13:30	04/26/23	07:07	BEP	MS-A2	1	B164877	EPA TO-15

DCN = Data Continuation Number

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Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308087-08	Client Sample Name: AA-PW1-20230419, 4/20/2023 10:12:00AM, Client
----------------------------------	--------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	2.1	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/01/23 08:02	05/01/23 20:52	RMK	GC-A1	1	B165241	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308087-09		Client Sample Name: AA-PW2-20230419, 4/20/2023 10:18:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	14	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1
Benzene	1.7	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND	V11	2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.0	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	1.2	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.88	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	3.6	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	3.9	ug/m3	0.50	0.048	EPA-TO-15-SIM	ND	A01	1
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.58	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	3.0	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	1.2	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	4.2	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	90.8	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	112	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308087-09	Client Sample Name: AA-PW2-20230419, 4/20/2023 10:18:00AM, Client								
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/25/23 13:30	04/26/23	18:36	BEP	MS-A2	5	B164877	EPA TO-15
2	EPA-TO-15-SIM	04/25/23 13:30	04/26/23	07:50	BEP	MS-A2	1	B164877	EPA TO-15

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308087-09	Client Sample Name: AA-PW2-20230419, 4/20/2023 10:18:00AM, Client
----------------------------------	--------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	55	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/01/23 08:02	05/01/23 21:12	RMK	GC-A1	1	B165241	No Prep

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308087-10		Client Sample Name: AA-PW3-20230419, 4/20/2023 11:05:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	8.3	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1
Benzene	1.1	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND	V11	2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.0	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.76	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.54	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.4	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	3.7	ug/m3	0.50	0.048	EPA-TO-15-SIM	ND	A01	1
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.58	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.9	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.69	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	2.6	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	89.4	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	108	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308087-10		Client Sample Name: AA-PW3-20230419, 4/20/2023 11:05:00AM, Client							
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/25/23 13:30	04/26/23	19:14	BEP	MS-A2	5	B164877	EPA TO-15
2	EPA-TO-15-SIM	04/25/23 13:30	04/26/23	08:36	BEP	MS-A2	1	B164877	EPA TO-15

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308087-10	Client Sample Name: AA-PW3-20230419, 4/20/2023 11:05:00AM, Client
----------------------------------	--------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	ND	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/01/23 08:02	05/01/23 21:32	RMK	GC-A1	1	B165241	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308087-11		Client Sample Name: AA-710/10-20230419, 4/20/2023 10:35:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	7.3	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1
Benzene	1.4	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND	V11	2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.0	ug/m3	0.050	0.0052	EPA-TO-15-SIM	ND		2
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.78	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.65	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.6	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	2.2	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.2	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.57	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	2.3	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.90	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	3.2	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	92.5	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	109	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308087-11		Client Sample Name: AA-710/10-20230419, 4/20/2023 10:35:00AM, Client							
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	04/25/23 13:30	04/26/23	19:51	BEP	MS-A2	5	B164877	EPA TO-15
2	EPA-TO-15-SIM	04/25/23 13:30	04/26/23	09:21	BEP	MS-A2	1	B164877	EPA TO-15

DCN = Data Continuation Number

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308087-11	Client Sample Name: AA-710/10-20230419, 4/20/2023 10:35:00AM, Client
----------------------------------	-----------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	ND	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/01/23 08:02	05/01/23 21:53	RMK	GC-A1	1	B165241	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B164877							
Acetone	B164877-BLK1	ND	ug/m3	1.0	0.0075		1
Benzene	B164877-BLK1	ND	ug/m3	0.050	0.0032		1
Benzyl chloride	B164877-BLK1	ND	ug/m3	0.50	0.0052		1
Carbon tetrachloride	B164877-BLK1	ND	ug/m3	0.20	0.0063		1
Chlorobenzene	B164877-BLK1	ND	ug/m3	0.10	0.0079		1
Chloroform	B164877-BLK1	ND	ug/m3	0.050	0.0058		1
1,2-Dibromoethane	B164877-BLK1	ND	ug/m3	0.20	0.014		1
1,2-Dichlorobenzene	B164877-BLK1	ND	ug/m3	0.20	0.011		1
1,3-Dichlorobenzene	B164877-BLK1	ND	ug/m3	0.20	0.013		1
1,4-Dichlorobenzene	B164877-BLK1	ND	ug/m3	0.20	0.016		1
Dichlorodifluoromethane	B164877-BLK1	ND	ug/m3	0.050	0.0052		1
1,1-Dichloroethane	B164877-BLK1	ND	ug/m3	0.050	0.0041		1
1,2-Dichloroethane	B164877-BLK1	ND	ug/m3	0.10	0.0046		1
1,1-Dichloroethene	B164877-BLK1	ND	ug/m3	0.050	0.0078		1
cis-1,2-Dichloroethene	B164877-BLK1	ND	ug/m3	0.050	0.0044		1
trans-1,2-Dichloroethene	B164877-BLK1	ND	ug/m3	0.050	0.0075		1
trans-1,3-Dichloropropene	B164877-BLK1	ND	ug/m3	0.050	0.013		1
1,1-Difluoroethane	B164877-BLK1	ND	ug/m3	5.0	0.0027		1
Ethylbenzene	B164877-BLK1	ND	ug/m3	0.050	0.017		1
Methylene chloride	B164877-BLK1	ND	ug/m3	0.20	0.0077		1
Tetrachloroethene	B164877-BLK1	ND	ug/m3	0.10	0.011		1
Toluene	B164877-BLK1	ND	ug/m3	0.10	0.0062		1
1,1,1-Trichloroethane	B164877-BLK1	ND	ug/m3	0.10	0.0055		1
1,1,2-Trichloroethane	B164877-BLK1	ND	ug/m3	0.10	0.0055		1
Trichloroethene	B164877-BLK1	ND	ug/m3	0.10	0.0095		1
Trichlorofluoromethane	B164877-BLK1	ND	ug/m3	0.050	0.0057		1
1,1,2-Trichloro-1,2,2-trifluoroethane	B164877-BLK1	ND	ug/m3	0.10	0.0078		1
Vinyl chloride	B164877-BLK1	ND	ug/m3	0.020	0.0046		1
p- & m-Xylenes	B164877-BLK1	ND	ug/m3	0.050	0.0082		1
o-Xylene	B164877-BLK1	ND	ug/m3	0.050	0.0044		1
Total Xylenes	B164877-BLK1	ND	ug/m3	0.10	0.013		1
4-Bromofluorobenzene (Surrogate)	B164877-BLK1	62.3	%	50 - 150 (LCL - UCL)			1

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals	Run #
								Percent Recovery	RPD		
QC Batch ID: B164877											
Benzene	B164877-BS1	LCS	0.25820	0.31948	ug/m3	80.8		70 - 130			1
	B164877-BSD1	LCSD	0.26753	0.31948	ug/m3	83.7	3.5	70 - 130	30		2
Benzyl chloride	B164877-BS1	LCS	0.52549	0.51772	ug/m3	102		70 - 130			1
	B164877-BSD1	LCSD	0.61014	0.51772	ug/m3	118	14.9	70 - 130	30		2
Carbon tetrachloride	B164877-BS1	LCS	0.62240	0.62913	ug/m3	98.9		70 - 130			1
	B164877-BSD1	LCSD	0.64102	0.62913	ug/m3	102	2.9	70 - 130	30		2
Chlorobenzene	B164877-BS1	LCS	0.50105	0.46036	ug/m3	109		70 - 130			1
	B164877-BSD1	LCSD	0.50450	0.46036	ug/m3	110	0.7	70 - 130	30		2
Chloroform	B164877-BS1	LCS	0.50520	0.48825	ug/m3	103		70 - 130			1
	B164877-BSD1	LCSD	0.51447	0.48825	ug/m3	105	1.8	70 - 130	30		2
1,2-Dibromoethane	B164877-BS1	LCS	0.89620	0.76835	ug/m3	117		70 - 130			1
	B164877-BSD1	LCSD	0.92010	0.76835	ug/m3	120	2.6	70 - 130	30		2
1,2-Dichlorobenzene	B164877-BS1	LCS	0.65036	0.60124	ug/m3	108		70 - 130			1
	B164877-BSD1	LCSD	0.71607	0.60124	ug/m3	119	9.6	70 - 130	30		2
1,3-Dichlorobenzene	B164877-BS1	LCS	0.69749	0.60124	ug/m3	116		70 - 130			1
	B164877-BSD1	LCSD	0.77078	0.60124	ug/m3	128	10.0	70 - 130	30		2
1,4-Dichlorobenzene	B164877-BS1	LCS	0.68998	0.60124	ug/m3	115		70 - 130			1
	B164877-BSD1	LCSD	0.77427	0.60124	ug/m3	129	11.5	70 - 130	30		2
1,1-Dichloroethane	B164877-BS1	LCS	0.39964	0.40474	ug/m3	98.7		70 - 130			1
	B164877-BSD1	LCSD	0.41122	0.40474	ug/m3	102	2.9	70 - 130	30		2
1,2-Dichloroethane	B164877-BS1	LCS	0.38782	0.40474	ug/m3	95.8		70 - 130			1
	B164877-BSD1	LCSD	0.39818	0.40474	ug/m3	98.4	2.6	70 - 130	30		2
1,1-Dichloroethene	B164877-BS1	LCS	0.33524	0.39649	ug/m3	84.6		70 - 130			1
	B164877-BSD1	LCSD	0.35209	0.39649	ug/m3	88.8	4.9	70 - 130	30		2
cis-1,2-Dichloroethene	B164877-BS1	LCS	0.33472	0.39649	ug/m3	84.4		70 - 130			1
	B164877-BSD1	LCSD	0.34463	0.39649	ug/m3	86.9	2.9	70 - 130	30		2
Methylene chloride	B164877-BS1	LCS	0.36954	0.34737	ug/m3	106		70 - 130			1
	B164877-BSD1	LCSD	0.38715	0.34737	ug/m3	111	4.7	70 - 130	30		2
Tetrachloroethene	B164877-BS1	LCS	0.78250	0.67825	ug/m3	115		70 - 130			1
	B164877-BSD1	LCSD	0.80047	0.67825	ug/m3	118	2.3	70 - 130	30		2
Toluene	B164877-BS1	LCS	0.37537	0.37684	ug/m3	99.6		70 - 130			1
	B164877-BSD1	LCSD	0.37628	0.37684	ug/m3	99.8	0.2	70 - 130	30		2
1,1,1-Trichloroethane	B164877-BS1	LCS	0.53804	0.54562	ug/m3	98.6		70 - 130			1
	B164877-BSD1	LCSD	0.55670	0.54562	ug/m3	102	3.4	70 - 130	30		2
1,1,2-Trichloroethane	B164877-BS1	LCS	0.68333	0.54562	ug/m3	125		70 - 130			1
	B164877-BSD1	LCSD	0.70036	0.54562	ug/m3	128	2.5	70 - 130	30		2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Run #
								Percent Recovery	RPD		
QC Batch ID: B164877											
Trichloroethene	B164877-BS1	LCS	0.60702	0.53737	ug/m3	113		70 - 130			1
	B164877-BSD1	LCSD	0.62325	0.53737	ug/m3	116	2.6	70 - 130	30		2
Vinyl chloride	B164877-BS1	LCS	0.28417	0.25562	ug/m3	111		70 - 130			1
	B164877-BSD1	LCSD	0.27100	0.25562	ug/m3	106	4.7	70 - 130	30		2
p- & m-Xylenes	B164877-BS1	LCS	0.90555	0.86843	ug/m3	104		70 - 130			1
	B164877-BSD1	LCSD	0.94888	0.86843	ug/m3	109	4.7	70 - 130	30		2
o-Xylene	B164877-BS1	LCS	0.40890	0.43421	ug/m3	94.2		70 - 130			1
	B164877-BSD1	LCSD	0.42457	0.43421	ug/m3	97.8	3.8	70 - 130	30		2
Total Xylenes	B164877-BS1	LCS	1.3144	1.3026	ug/m3	101		70 - 130			1
	B164877-BSD1	LCSD	1.3735	1.3026	ug/m3	105	4.4	70 - 130	30		2
4-Bromofluorobenzene (Surrogate)	B164877-BS1	LCS	3.69	3.58	ug/m3	103		50 - 150			1
	B164877-BSD1	LCSD	3.76	3.58	ug/m3	105	1.9	50 - 150			2

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Roux Associates, Inc -Long Beach
5150 E. Pacific Coast Hwy, Suite 450
Long Beach, CA 90804

Reported: 05/10/2023 15:58
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
2	B164877-BSD1	LCSD	EPA-TO-15-SIM	04/25/23	04/25/23 21:50	BEP	MS-A2	1
2	B164877-BSD1	LCSD	EPA-TO-15-SIM	04/25/23	04/25/23 21:50	BEP	MS-A2	1
2	B164877-BSD1	LCSD	EPA-TO-15-SIM	04/25/23	04/25/23 21:50	BEP	MS-A2	1
2	B164877-BSD1	LCSD	EPA-TO-15-SIM	04/25/23	04/25/23 21:50	BEP	MS-A2	1
2	B164877-BSD1	LCSD	EPA-TO-15-SIM	04/25/23	04/25/23 21:50	BEP	MS-A2	1
2	B164877-BSD1	LCSD	EPA-TO-15-SIM	04/25/23	04/25/23 21:50	BEP	MS-A2	1
2	B164877-BSD1	LCSD	EPA-TO-15-SIM	04/25/23	04/25/23 21:50	BEP	MS-A2	1
2	B164877-BSD1	LCSD	EPA-TO-15-SIM	04/25/23	04/25/23 21:50	BEP	MS-A2	1
2	B164877-BSD1	LCSD	EPA-TO-15-SIM	04/25/23	04/25/23 21:50	BEP	MS-A2	1
2	B164877-BSD1	LCSD	EPA-TO-15-SIM	04/25/23	04/25/23 21:50	BEP	MS-A2	1
2	B164877-BSD1	LCSD	EPA-TO-15-SIM	04/25/23	04/25/23 21:50	BEP	MS-A2	1
2	B164877-BSD1	LCSD	EPA-TO-15-SIM	04/25/23	04/25/23 21:50	BEP	MS-A2	1
2	B164877-BSD1	LCSD	EPA-TO-15-SIM	04/25/23	04/25/23 21:50	BEP	MS-A2	1
2	B164877-BSD1	LCSD	EPA-TO-15-SIM	04/25/23	04/25/23 21:50	BEP	MS-A2	1
2	B164877-BSD1	LCSD	EPA-TO-15-SIM	04/25/23	04/25/23 21:50	BEP	MS-A2	1
2	B164877-BSD1	LCSD	EPA-TO-15-SIM	04/25/23	04/25/23 21:50	BEP	MS-A2	1
2	B164877-BSD1	LCSD	EPA-TO-15-SIM	04/25/23	04/25/23 21:50	BEP	MS-A2	1

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
-------------	--------------	-----------	-------	-----	-----	-----------	-------

QC Batch ID: B165213

Methane (CH4)	B165213-BLK1	ND	ppmv	2.0	1.8		1
---------------	--------------	----	------	-----	-----	--	---

QC Batch ID: B165241

Methane (CH4)	B165241-BLK1	ND	ppmv	2.0	1.8		2
---------------	--------------	----	------	-----	-----	--	---

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B165213-BLK1	PB	ASTM-D1946	05/01/23	05/01/23 14:08	RMK	GC-A1	1
2	B165241-BLK1	PB	ASTM-D1946	05/02/23	05/01/23 19:11	RMK	GC-A1	1

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Roux Associates, Inc -Long Beach
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 Long Beach, CA 90804

Reported: 05/10/2023 15:58
 Project: City Terrace
 Project Number: 2855
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Run #
								Percent Recovery	RPD		
QC Batch ID: B165213											
Methane (CH4)	B165213-BS1	LCS	20026	18000	ppmv	111		70 - 130			1
	B165213-BSD1	LCSD	19976	18000	ppmv	111	0.3	70 - 130	30		2
QC Batch ID: B165241											
Methane (CH4)	B165241-BS1	LCS	18638	18000	ppmv	104		70 - 130			3
	B165241-BSD1	LCSD	18600	18000	ppmv	103	0.2	70 - 130	30		4

Run #	QC Sample ID	QC Type	Method	Prep Date	Run		Analyst	Instrument	Dilution
					Date	Time			
1	B165213-BS1	LCS	ASTM-D1946	05/01/23	05/01/23	13:28	RMK	GC-A1	1
2	B165213-BSD1	LCSD	ASTM-D1946	05/01/23	05/01/23	13:48	RMK	GC-A1	1
3	B165241-BS1	LCS	ASTM-D1946	05/02/23	05/01/23	18:31	RMK	GC-A1	1
4	B165241-BSD1	LCSD	ASTM-D1946	05/02/23	05/01/23	18:51	RMK	GC-A1	1

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Roux Associates, Inc -Long Beach
5150 E. Pacific Coast Hwy, Suite 450
Long Beach, CA 90804

Reported: 05/10/2023 15:58
Project: City Terrace
Project Number: 2855
Project Manager: April McGuire

Notes And Definitions

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A01 Detection and quantitation limits are raised due to sample dilution.
- V11 The Continuing Calibration Verification (CCV) recovery was not within established control limits.



Date of Report: 05/10/2023

April McGuire

Roux Associates, Inc -Long Beach
5150 E. Pacific Coast Hwy, Suite 450
Long Beach, CA 90804

Client Project: 36908
BCL Project: City Terrace
BCL Work Order: 2308332
Invoice ID: B475571

Enclosed are the results of analyses for samples received by the laboratory on 4/27/2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "BS", is written over a horizontal line.

Contact Person: Brianna Schutte
Client Services Rep

A handwritten signature in black ink, appearing to read "Stuart Buttram", is written over a horizontal line.

Stuart Buttram
Operations Manager

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

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2308332

AIR: CHAIN-OF-CUSTODY / Analytical
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed.

Page: 1 of 1

Program: UST Superfund Emissions Clean Air Act Voluntary Clean Up Dry Clean RCRA Other

Location of Sampling by State: AL AR CA CO CT DC FL GA HI IL IN IA KS KY LA MA MD ME MI MN MO MS MT NC ND NH NJ NM NV NY OH OK OR PA RI SC SD TN TX VA VT WA WI WY

Report Level: I, II, III, IV, Other

Section C Invoice Information

Client: ROUX ACCOUNTS PAYABLE (ROUXAP@ROUXINC.COM)

Company Name: ROUX

Address: 5150 E PCH #450, LONG BEACH, CA 90804

Phone: 562-445-8024 | Fax: 562-445-8025

Project Name: CITY TERRACE

Project Number: 2855

Section B Required Project Information

Report To: A. MCCUIRE

Copy To:

Purchase Order No.:

Project Name: CITY TERRACE

Project Number: 2855

ITEM #	*Section D Required Client Information		AIR SAMPLE ID		Sample IDs MUST BE UNIQUE	MEDA CODE	PID Reading (Client only)	COLLECTED		Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Summa Can Number	Flow Control Number	Method:
	DATE	TIME	DATE	TIME										
1	AA-10-2023-0426-0645	-1	04/26/23	0645	622			04/26/23	0645	-30	-5	620	05981	PM10
2	AA-CT-2023-0426-0650	-2	04/26/23	0650				04/26/23	0650	-30	-5	08016	6014	PM10
3	AA-710-2023-0426-0700	-3	04/26/23	0700				04/26/23	0700	-30	-3	06231	7515	PM10
4	AA-710/10-2023-0426-0705	-4	04/26/23	0705				04/26/23	0705	-30	-7	07891	3894	PM10

CHK BY: [Signature] DATE: 4/27/23 TIME: 0944

DISTRIBUTION: [Signature]

SUB OUT: [Signature]

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS									
Tommy Joe ROUX	04/26/23	1100	Emerging Inc.	4/27/23	0944	Temp in C	Received on Ice	Custody Sealed Cooler	Samples Intact	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N
SAMPLER NAME AND SIGNATURE															
Tommy Joe ROUX															
Tommy Joe															

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PACE ANALYTICAL		COOLER RECEIPT FORM		Page <u> </u> Of <u> </u>						
Submission #: <u>23-08332</u>										
SHIPPING INFORMATION Fed Ex <input checked="" type="checkbox"/> UPS <input type="checkbox"/> GSO / GLS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> Pace Lab Field Service <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			SHIPPING CONTAINER Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		FREE LIQUID YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> W / S					
Refrigerant: Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None <input checked="" type="checkbox"/> Other <input type="checkbox"/> Comments: _____										
Custody Seals Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: _____										
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>										
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: _____ Container: <u>Summa</u> Thermometer ID: _____		Date/Time <u>4-27-23</u>						
		Temperature: (A) <u>Room</u> °C / (C) <u>Temp</u> °C		Analyst Init <u>SMH 0944</u>						
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / Box / 16oz PE UNPRES										
2oz Cr ⁶										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / Box / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664B										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
60 ml VOA VIAL- 504										
QT EPA 503/603.1/603.1A										
QT EPA 515.1/815.1A										
QT EPA 525.1										
QT EPA 525.2 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548.1										
QT EPA 549.2										
QT EPA 5015M										
QT EPA 5270C										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER	A	A	A	A						

Comments: _____
 Sample Numbering Completed By: MAJ Date/Time: 4/27/23 1110 Rev 23 06/20/22
 A = Actual / C = Corrected (S:\IT\Doc\7904\PerfectLAB_DOC\FORMS\ISAR\REC rev 20)



Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 11:03
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		Receive Date:	
2308332-01	COC Number:	---	Receive Date:	04/27/2023 09:44
	Project Number:	---	Sampling Date:	04/26/2023 09:35
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-10-20230426-0645	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air
2308332-02	COC Number:	---	Receive Date:	04/27/2023 09:44
	Project Number:	---	Sampling Date:	04/26/2023 09:43
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-CT-20230426-0650	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air
2308332-03	COC Number:	---	Receive Date:	04/27/2023 09:44
	Project Number:	---	Sampling Date:	04/26/2023 09:52
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-710-20230426-0700	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air
2308332-04	COC Number:	---	Receive Date:	04/27/2023 09:44
	Project Number:	---	Sampling Date:	04/26/2023 10:05
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-710/10-20230426-0705	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 11:03
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308332-01		Client Sample Name: AA-10-20230426-0645, 4/26/2023 9:35:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	56	ug/m3	10	0.075	EPA-TO-15-SIM	ND	A01	1
Benzene	0.85	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	0.19	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND	J	2
Dichlorodifluoromethane	2.7	ug/m3	0.50	0.052	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	4.5	ug/m3	50	0.027	EPA-TO-15-SIM	ND	J,A01	1
Ethylbenzene	0.43	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	1.9	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.60	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.5	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.61	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	2.1	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	92.7	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	106	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 11:03
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308332-01		Client Sample Name: AA-10-20230426-0645, 4/26/2023 9:35:00AM, Client							
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	05/05/23 12:29	05/08/23	18:05	BEP	MS-A1	10	B165619	EPA TO-15
2	EPA-TO-15-SIM	05/05/23 12:29	05/08/23	18:43	BEP	MS-A1	1	B165619	EPA TO-15

DCN = Data Continuation Number

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 11:03
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308332-01	Client Sample Name: AA-10-20230426-0645, 4/26/2023 9:35:00AM, Client
----------------------------------	-----------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	50	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/09/23 08:02	05/09/23 12:20	RMK	GC-A1	1	B165689	No Prep

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 Long Beach, CA 90804

Reported: 05/10/2023 11:03
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308332-02		Client Sample Name: AA-CT-20230426-0650, 4/26/2023 9:43:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	13	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1
Benzene	0.63	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	1.4	ug/m3	0.25	0.026	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	1.7	ug/m3	25	0.014	EPA-TO-15-SIM	ND	J,A01	1
Ethylbenzene	0.35	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	1.6	ug/m3	0.10	0.0062	EPA-TO-15-SIM	ND		2
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.63	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.2	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.45	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	1.6	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	84.1	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	103	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 11:03
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308332-02		Client Sample Name: AA-CT-20230426-0650, 4/26/2023 9:43:00AM, Client							
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	05/05/23 12:29	05/08/23	19:14	BEP	MS-A1	5	B165619	EPA TO-15
2	EPA-TO-15-SIM	05/05/23 12:29	05/08/23	19:52	BEP	MS-A1	1	B165619	EPA TO-15

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/10/2023 11:03
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308332-02	Client Sample Name: AA-CT-20230426-0650, 4/26/2023 9:43:00AM, Client
----------------------------------	-----------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	3.3	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/09/23 08:02	05/09/23 12:40	RMK	GC-A1	1	B165689	No Prep

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
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 Long Beach, CA 90804

Reported: 05/10/2023 11:03
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308332-03		Client Sample Name: AA-710-20230426-0700, 4/26/2023 9:52:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	7.8	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1
Benzene	0.87	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	1.4	ug/m3	0.25	0.026	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.93	ug/m3	25	0.014	EPA-TO-15-SIM	ND	J,A01	1
Ethylbenzene	0.35	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	1.6	ug/m3	0.10	0.0062	EPA-TO-15-SIM	ND		2
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.61	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.1	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.44	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	1.6	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	84.1	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	99.4	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 11:03
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308332-03		Client Sample Name: AA-710-20230426-0700, 4/26/2023 9:52:00AM, Client							
DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID		
1	EPA-TO-15-SIM	05/05/23 12:29	05/08/23 20:23	BEP	MS-A1	5	B165619	EPA TO-15	
2	EPA-TO-15-SIM	05/05/23 12:29	05/08/23 21:01	BEP	MS-A1	1	B165619	EPA TO-15	

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/10/2023 11:03
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308332-03	Client Sample Name: AA-710-20230426-0700, 4/26/2023 9:52:00AM, Client
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	3.8	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	ASTM-D1946	05/09/23 08:02	05/09/23 13:00		RMK	GC-A1	1	B165689	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/10/2023 11:03
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308332-04		Client Sample Name: AA-710/10-20230426-0705, 4/26/2023 10:05:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	9.1	ug/m3	5.0	0.038	EPA-TO-15-SIM	ND	A01	1
Benzene	1.2	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	1.6	ug/m3	0.25	0.026	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	1.6	ug/m3	25	0.014	EPA-TO-15-SIM	ND	J,A01	1
Ethylbenzene	0.68	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	4.9	ug/m3	1.0	0.038	EPA-TO-15-SIM	ND	A01	1
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	1.6	ug/m3	0.50	0.031	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.60	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	2.7	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.99	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	3.7	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	82.7	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	107	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 11:03
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308332-04	Client Sample Name: AA-710/10-20230426-0705, 4/26/2023 10:05:00AM, Client								
DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID		
1	EPA-TO-15-SIM	05/05/23 12:29	05/08/23 21:32	BEP	MS-A1	5	B165619	EPA TO-15	
2	EPA-TO-15-SIM	05/05/23 12:29	05/08/23 22:10	BEP	MS-A1	1	B165619	EPA TO-15	

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/10/2023 11:03
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308332-04	Client Sample Name: AA-710/10-20230426-0705, 4/26/2023 10:05:00AM, Client
----------------------------------	----------------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	2.9	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/09/23 08:02	05/09/23 13:20	RMK	GC-A1	1	B165689	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/10/2023 11:03
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B165619							
Acetone	B165619-BLK1	ND	ug/m3	1.0	0.0075		1
Benzene	B165619-BLK1	ND	ug/m3	0.050	0.0032		1
Benzyl chloride	B165619-BLK1	ND	ug/m3	0.50	0.0052		1
Carbon tetrachloride	B165619-BLK1	ND	ug/m3	0.20	0.0063		1
Chlorobenzene	B165619-BLK1	ND	ug/m3	0.10	0.0079		1
Chloroform	B165619-BLK1	ND	ug/m3	0.050	0.0058		1
1,2-Dibromoethane	B165619-BLK1	ND	ug/m3	0.20	0.014		1
1,2-Dichlorobenzene	B165619-BLK1	ND	ug/m3	0.20	0.011		1
1,3-Dichlorobenzene	B165619-BLK1	ND	ug/m3	0.20	0.013		1
1,4-Dichlorobenzene	B165619-BLK1	ND	ug/m3	0.20	0.016		1
Dichlorodifluoromethane	B165619-BLK1	ND	ug/m3	0.050	0.0052		1
1,1-Dichloroethane	B165619-BLK1	ND	ug/m3	0.050	0.0041		1
1,2-Dichloroethane	B165619-BLK1	ND	ug/m3	0.10	0.0046		1
1,1-Dichloroethene	B165619-BLK1	ND	ug/m3	0.050	0.0078		1
cis-1,2-Dichloroethene	B165619-BLK1	ND	ug/m3	0.050	0.0044		1
trans-1,2-Dichloroethene	B165619-BLK1	ND	ug/m3	0.050	0.0075		1
trans-1,3-Dichloropropene	B165619-BLK1	ND	ug/m3	0.050	0.013		1
1,1-Difluoroethane	B165619-BLK1	ND	ug/m3	5.0	0.0027		1
Ethylbenzene	B165619-BLK1	ND	ug/m3	0.050	0.017		1
Methylene chloride	B165619-BLK1	ND	ug/m3	0.20	0.0077		1
Tetrachloroethene	B165619-BLK1	ND	ug/m3	0.10	0.011		1
Toluene	B165619-BLK1	ND	ug/m3	0.10	0.0062		1
1,1,1-Trichloroethane	B165619-BLK1	ND	ug/m3	0.10	0.0055		1
1,1,2-Trichloroethane	B165619-BLK1	ND	ug/m3	0.10	0.0055		1
Trichloroethene	B165619-BLK1	ND	ug/m3	0.10	0.0095		1
Trichlorofluoromethane	B165619-BLK1	ND	ug/m3	0.050	0.0057		1
1,1,2-Trichloro-1,2,2-trifluoroethane	B165619-BLK1	ND	ug/m3	0.10	0.0078		1
Vinyl chloride	B165619-BLK1	ND	ug/m3	0.020	0.0046		1
p- & m-Xylenes	B165619-BLK1	ND	ug/m3	0.050	0.0082		1
o-Xylene	B165619-BLK1	ND	ug/m3	0.050	0.0044		1
Total Xylenes	B165619-BLK1	ND	ug/m3	0.10	0.013		1
4-Bromofluorobenzene (Surrogate)	B165619-BLK1	80.8	%	50 - 150 (LCL - UCL)			1

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 11:03
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Run #
								Percent Recovery	RPD		
QC Batch ID: B165619											
Benzene	B165619-BS1	LCS	0.31114	0.31948	ug/m3	97.4		70 - 130			1
	B165619-BSD1	LCSD	0.30877	0.31948	ug/m3	96.7	0.8	70 - 130	30		2
Benzyl chloride	B165619-BS1	LCS	0.48122	0.51772	ug/m3	93.0		70 - 130		J	1
	B165619-BSD1	LCSD	0.53227	0.51772	ug/m3	103	10.1	70 - 130	30		2
Carbon tetrachloride	B165619-BS1	LCS	0.68859	0.62913	ug/m3	109		70 - 130			1
	B165619-BSD1	LCSD	0.68305	0.62913	ug/m3	109	0.8	70 - 130	30		2
Chlorobenzene	B165619-BS1	LCS	0.46321	0.46036	ug/m3	101		70 - 130			1
	B165619-BSD1	LCSD	0.46758	0.46036	ug/m3	102	0.9	70 - 130	30		2
Chloroform	B165619-BS1	LCS	0.52673	0.48825	ug/m3	108		70 - 130			1
	B165619-BSD1	LCSD	0.51940	0.48825	ug/m3	106	1.4	70 - 130	30		2
1,2-Dibromoethane	B165619-BS1	LCS	0.81414	0.76835	ug/m3	106		70 - 130			1
	B165619-BSD1	LCSD	0.81714	0.76835	ug/m3	106	0.4	70 - 130	30		2
1,2-Dichlorobenzene	B165619-BS1	LCS	0.62174	0.60124	ug/m3	103		70 - 130			1
	B165619-BSD1	LCSD	0.65925	0.60124	ug/m3	110	5.9	70 - 130	30		2
1,3-Dichlorobenzene	B165619-BS1	LCS	0.53330	0.60124	ug/m3	88.7		70 - 130			1
	B165619-BSD1	LCSD	0.64296	0.60124	ug/m3	107	18.6	70 - 130	30		2
1,4-Dichlorobenzene	B165619-BS1	LCS	0.58693	0.60124	ug/m3	97.6		70 - 130			1
	B165619-BSD1	LCSD	0.59294	0.60124	ug/m3	98.6	1.0	70 - 130	30		2
1,1-Dichloroethane	B165619-BS1	LCS	0.42255	0.40474	ug/m3	104		70 - 130			1
	B165619-BSD1	LCSD	0.42218	0.40474	ug/m3	104	0.1	70 - 130	30		2
1,2-Dichloroethane	B165619-BS1	LCS	0.41203	0.40474	ug/m3	102		70 - 130			1
	B165619-BSD1	LCSD	0.40871	0.40474	ug/m3	101	0.8	70 - 130	30		2
1,1-Dichloroethene	B165619-BS1	LCS	0.40466	0.39649	ug/m3	102		70 - 130			1
	B165619-BSD1	LCSD	0.40062	0.39649	ug/m3	101	1.0	70 - 130	30		2
cis-1,2-Dichloroethene	B165619-BS1	LCS	0.39546	0.39649	ug/m3	99.7		70 - 130			1
	B165619-BSD1	LCSD	0.39404	0.39649	ug/m3	99.4	0.4	70 - 130	30		2
Methylene chloride	B165619-BS1	LCS	0.40921	0.34737	ug/m3	118		70 - 130			1
	B165619-BSD1	LCSD	0.40726	0.34737	ug/m3	117	0.5	70 - 130	30		2
Tetrachloroethene	B165619-BS1	LCS	0.73034	0.67825	ug/m3	108		70 - 130			1
	B165619-BSD1	LCSD	0.73814	0.67825	ug/m3	109	1.1	70 - 130	30		2
Toluene	B165619-BS1	LCS	0.36788	0.37684	ug/m3	97.6		70 - 130			1
	B165619-BSD1	LCSD	0.36916	0.37684	ug/m3	98.0	0.3	70 - 130	30		2
1,1,1-Trichloroethane	B165619-BS1	LCS	0.58349	0.54562	ug/m3	107		70 - 130			1
	B165619-BSD1	LCSD	0.57928	0.54562	ug/m3	106	0.7	70 - 130	30		2
1,1,2-Trichloroethane	B165619-BS1	LCS	0.58861	0.54562	ug/m3	108		70 - 130			1
	B165619-BSD1	LCSD	0.58894	0.54562	ug/m3	108	0.1	70 - 130	30		2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 11:03
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Run #
								Percent Recovery	RPD		
QC Batch ID: B165619											
Trichloroethene	B165619-BS1	LCS	0.57230	0.53737	ug/m3	106		70 - 130			1
	B165619-BSD1	LCSD	0.57564	0.53737	ug/m3	107	0.6	70 - 130	30		2
Vinyl chloride	B165619-BS1	LCS	0.29521	0.25562	ug/m3	115		70 - 130			1
	B165619-BSD1	LCSD	0.29135	0.25562	ug/m3	114	1.3	70 - 130	30		2
p- & m-Xylenes	B165619-BS1	LCS	0.85410	0.86843	ug/m3	98.4		70 - 130			1
	B165619-BSD1	LCSD	0.86204	0.86843	ug/m3	99.3	0.9	70 - 130	30		2
o-Xylene	B165619-BS1	LCS	0.42892	0.43421	ug/m3	98.8		70 - 130			1
	B165619-BSD1	LCSD	0.43795	0.43421	ug/m3	101	2.1	70 - 130	30		2
Total Xylenes	B165619-BS1	LCS	1.2830	1.3026	ug/m3	98.5		70 - 130			1
	B165619-BSD1	LCSD	1.3000	1.3026	ug/m3	99.8	1.3	70 - 130	30		2
4-Bromofluorobenzene (Surrogate)	B165619-BS1	LCS	3.42	3.58	ug/m3	95.5		50 - 150			1
	B165619-BSD1	LCSD	3.47	3.58	ug/m3	96.9	1.5	50 - 150			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 11:03
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
-------------	--------------	-----------	-------	-----	-----	-----------	-------

QC Batch ID: B165689

Methane (CH4)	B165689-BLK1	ND	ppmv	2.0	1.8		1
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Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B165689-BLK1	PB	ASTM-D1946	05/09/23	05/09/23 11:39	RMK	GC-A1	1

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/10/2023 11:03
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Run #
								Percent Recovery	RPD		
QC Batch ID: B165689											
Methane (CH4)	B165689-BS1	LCS	20435	18000	ppmv	114		70 - 130			1
	B165689-BSD1	LCSD	20514	18000	ppmv	114	0.4	70 - 130	30		2

Run #	QC Sample ID	QC Type	Method	Prep Date	Run		Analyst	Instrument	Dilution
					Date	Time			
1	B165689-BS1	LCS	ASTM-D1946	05/09/23	05/09/23	10:59	RMK	GC-A1	1
2	B165689-BSD1	LCSD	ASTM-D1946	05/09/23	05/09/23	11:19	RMK	GC-A1	1

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Roux Associates, Inc -Long Beach
5150 E. Pacific Coast Hwy, Suite 450
Long Beach, CA 90804

Reported: 05/10/2023 11:03
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Notes And Definitions

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A01 Detection and quantitation limits are raised due to sample dilution.



Date of Report: 05/15/2023

April McGuire

Roux Associates, Inc -Long Beach
5150 E. Pacific Coast Hwy, Suite 450
Long Beach, CA 90804

Client Project: 36908
BCL Project: City Terrace
BCL Work Order: 2308505
Invoice ID: B476010

Enclosed are the results of analyses for samples received by the laboratory on 4/29/2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Brianna Schutte
Client Services Rep

Stuart Buttram
Operations Manager

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

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2308505

AIR: CHAIN-OF-CUSTODY / Analytical

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed.

Section A Required Client Information:

Company: ROUX
 Address: 5150 E PCH, STE 450
 LONG BEACH, CA 90804
 Email To: AMCGUIRE@ROUXINC.COM
 Phone: 562-445-9624 Fax:
 Requested Due Date/TIME: 04/28/23

Section B Required Project Information:

Report To: A. MCGUIRE
 Copy To:
 Purchase Order No.:
 Project Name: CITY TERRACE
 Project Number: 2855

Section C Invoice Information:

Attention: ROUX ACCOUNTS PAYABLE (ROUXAP@ROUXINC.COM)
 Company Name: ROUX
 Address: 5150 E PCH #450, LONG BEACH, CA 90804
 Pace Ductile Reference: 00135946
 Pace Project Manager/Sales Rep: BRIANNA SCHUTTE / DAWN GRIFFOR
 Pace Profile #:

Page: 1 of 1

Program

UST Superfund Emissions Clean Air Act
 Voluntary Clean Up Dry Clean RCRA Other

Location of Sampling by State: _____
 Standard Units: _____
 mg/m³ ppmV ppmV-X₁ (for methane) Other

Report Level: I. _____ II. _____ III. _____ IV. _____

Method:

Method	TO-3	TO-3M (Mannan)	TO-13 (PM10)	TO-14	TO-15 (PM10)	TO-15M (PM10)	PM10
MC - Fixed Gas (%)							
TO-3							
TO-3M (Mannan)							
TO-13 (PM10)							
TO-14							
TO-15 (PM10)							
TO-15M (PM10)							
PM10							

ITEM #	RELINQUISHED BY / AFFILIATION		COLLECTED		ACCEPTED BY / AFFILIATION		SAMPLE CONDITIONS	
	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME
1	04/27/23	14:20	04/28/23	12:17	04/28/23	14:15	04/28/23	10:30
2	04/27/23	14:10	04/28/23	13:26	04/28/23	14:15	04/28/23	10:30
3	04/27/23	14:05	04/28/23	11:05	04/28/23	14:15	04/28/23	10:30
4	04/27/23	14:05	04/28/23	12:00	04/28/23	14:15	04/28/23	10:30
5	04/27/23	14:00	04/28/23	13:16	04/28/23	14:15	04/28/23	10:30
6	04/27/23	13:50	04/28/23	11:15	04/28/23	14:15	04/28/23	10:30
7	04/27/23	13:40	04/28/23	13:40	04/28/23	14:15	04/28/23	10:30
8	04/27/23	13:35	04/28/23	13:55	04/28/23	14:15	04/28/23	10:30
9	04/27/23	13:45	04/28/23	13:05	04/28/23	14:15	04/28/23	10:30
10	04/27/23	13:45	04/28/23	10:20	04/28/23	14:15	04/28/23	10:30
11	04/27/23	13:45	04/28/23	10:20	04/28/23	14:15	04/28/23	10:30
12								

Comments: *Sample for Port*

RELINQUISHED BY / AFFILIATION: *James Law Post*

DATE: 04/28/23 TIME: 14:15

ACCEPTED BY / AFFILIATION: *AP/ML*

DATE: 04/28/23 TIME: 10:30

Temp in °C: _____

Received on Ice: _____

Custody Sealed Cooler: _____

Samples Intact: _____

CHK 9V DISTRIBUTION

SUB-OUT

SAMPLER NAME AND SIGNATURE: *James Law Post*

PRINT Name of SAMPLER: JAMES LAW POST

SIGNATURE OF SAMPLER: *James Law Post*

DATE Signed (MM/DD/YYYY): 04/28/23

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PACE ANALYTICAL		COOLER RECEIPT FORM		Page <u>1</u> Of <u>2</u>						
Submission #: <u>23-08505</u>										
Fed Ex <input checked="" type="checkbox"/> UPS <input type="checkbox"/> GSO / GLS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> Pace Lab Field Service <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		SHIPPING CONTAINER Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		- FREE LIQUID YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> W / S						
Refrigerant: Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None <input checked="" type="checkbox"/> Other <input type="checkbox"/> Comments: _____										
Custody Seals Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>		Comments: _____								
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input type="checkbox"/> No <input type="checkbox"/>						
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>—</u> Container: <u>Summa</u> Thermometer ID: <u>337</u> Temperature: (A) <u>Room</u> °C / (C) <u>Temp</u> °C		Date/Time <u>4/29/23</u> Analyst Init. <u>KD 1030</u>						
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr ⁶⁺										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664B										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
49 ml VOA VIAL-504										
QT EPA 508603.38081A										
QT EPA 515.1/8151A										
QT EPA 525.2										
QT EPA 525.2 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548.1										
QT EPA 549.2										
QT EPA 8015M										
QT EPA 8270C										
3oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER	<u>6L</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>	<u>A</u>

Comments: _____
 Sample Numbering Completed By: PHO Date/Time: 4/29/23 1100 Rev 23 06/10/22
 A = Actual / C = Corrected

(B:\P\Doc\Work\Part\LAB_DOCS\FORMS\COORREC\Free 23)

PAGE ANALYTICAL		COOLER RECEIPT FORM		Page <u>2</u> Of <u>2</u>							
Submission #: <u>23-08505</u>											
SHIPPING INFORMATION Fed Ex <input checked="" type="checkbox"/> UPS <input type="checkbox"/> GSO / GLS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> Pace Lab Field Service <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			SHIPPING CONTAINER Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		-FREE LIQUID YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> W / S						
Refrigerant: Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None <input checked="" type="checkbox"/> Other <input type="checkbox"/> Comments: _____											
Custody Seals Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: _____											
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>											
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: _____ Container: <u>Summa</u> Thermometer ID: <u>337</u> Temperature: (A) <u>Room</u> °C / (C) <u>Temp</u> °C		Date/Time <u>4/24/23</u> Analyst Init. <u>KD</u> <u>1030</u>							
SAMPLE CONTAINERS		SAMPLE NUMBERS									
		1	2	3	4	5	6	7	8	9	10
QT PE UNPRES											
4oz / Box / 16oz PE UNPRES											
2oz Cr*											
QT INORGANIC CHEMICAL METALS											
INORGANIC CHEMICAL METALS 4oz / Box / 16oz											
PT CYANIDE											
PT NITROGEN FORMS											
PT TOTAL SULFIDE											
2oz. NITRATE / NITRITE											
PT TOTAL ORGANIC CARBON											
PT CHEMICAL OXYGEN DEMAND											
PIA PHENOLICS											
40ml VOA VIAL TRAVEL BLANK											
40ml VOA VIAL											
QT EPA 1664B											
PT ODOR											
RADIOLOGICAL											
BACTERIOLOGICAL											
40 ml VOA VIAL- 504											
QT EPA 408/608 3/8081A											
QT EPA 415.1/8151A											
QT EPA 525.2											
QT EPA 525.2 TRAVEL BLANK											
40ml EPA 547											
40ml EPA 531.1											
8oz EPA 548.1											
QT EPA 549.2											
QT EPA 8015M											
QT EPA 8220C											
8oz / 16oz / 32oz AMBER											
8oz / 16oz / 32oz JAR											
SOIL SLEEVE											
PCB VIAL											
PLASTIC BAG											
TEDLAR BAG											
FERROUS IRON											
ENCORE											
SMART KIT											
SUMMA CANISTER											

Comments: _____
 Sample Numbering Completed By: VW Date/Time: 4/24/23 1100
 A = Actual / C = Corrected



Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information				
2308505-01	COC Number:	---		Receive Date:	04/29/2023 10:30
	Project Number:	---		Sampling Date:	04/27/2023 12:17
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-CL-20230427		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2308505-02	COC Number:	---		Receive Date:	04/29/2023 10:30
	Project Number:	---		Sampling Date:	04/27/2023 13:20
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-BL-20230427		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2308505-03	COC Number:	---		Receive Date:	04/29/2023 10:30
	Project Number:	---		Sampling Date:	04/27/2023 11:05
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-710/10-20230427		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2308505-04	COC Number:	---		Receive Date:	04/29/2023 10:30
	Project Number:	---		Sampling Date:	04/27/2023 11:05
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-710/10-20230427-D		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2308505-05	COC Number:	---		Receive Date:	04/29/2023 10:30
	Project Number:	---		Sampling Date:	04/27/2023 12:00
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-0.125MI-20230427		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2308505-06	COC Number:	---		Receive Date:	04/29/2023 10:30
	Project Number:	---		Sampling Date:	04/27/2023 13:10
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-0.25MI-20230427		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2308505-07	COC Number:	---		Receive Date:	04/29/2023 10:30
	Project Number:	---		Sampling Date:	04/27/2023 11:15
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-0.5MI-20230427		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2308505-08	COC Number:	---	Receive Date:	04/29/2023 10:30
	Project Number:	---	Sampling Date:	04/27/2023 13:40
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-0.75MI-20230427	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air
2308505-09	COC Number:	---	Receive Date:	04/29/2023 10:30
	Project Number:	---	Sampling Date:	04/27/2023 13:35
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-PW1-20230427	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air
2308505-10	COC Number:	---	Receive Date:	04/29/2023 10:30
	Project Number:	---	Sampling Date:	04/27/2023 12:08
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-PW2-20230427	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air
2308505-11	COC Number:	---	Receive Date:	04/29/2023 10:30
	Project Number:	---	Sampling Date:	04/27/2023 10:20
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	AA-PW3-20230427	Lab Matrix:	Air
	Sampled By:	Client	Sample Type:	Vapor or Air

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 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-01		Client Sample Name: AA-CL-20230427, 4/27/2023 12:17:00PM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	13	ug/m3	10	0.075	EPA-TO-15-SIM	ND	A01	1
Benzene	0.75	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.8	ug/m3	0.50	0.052	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.73	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.36	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	0.77	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.0	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.59	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.2	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.45	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	1.7	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	88.0	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	105	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-01	Client Sample Name: AA-CL-20230427, 4/27/2023 12:17:00PM, Client								
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	05/05/23 12:29	05/07/23	03:16	BEP	MS-A1	10	B165569	EPA TO-15
2	EPA-TO-15-SIM	05/05/23 12:29	05/06/23	19:27	BEP	MS-A1	1	B165569	EPA TO-15

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308505-01	Client Sample Name: AA-CL-20230427, 4/27/2023 12:17:00PM, Client							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	64	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/09/23 08:02	05/09/23 13:41	RMK	GC-A1	1	B165689	No Prep

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
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 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-02		Client Sample Name: AA-BL-20230427, 4/27/2023 1:20:00PM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	15	ug/m3	10	0.075	EPA-TO-15-SIM	ND	A01	1
Benzene	0.75	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	3.2	ug/m3	0.50	0.052	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.78	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.40	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.5	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.59	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.4	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.50	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	1.9	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	86.0	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	104	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-02	Client Sample Name: AA-BL-20230427, 4/27/2023 1:20:00PM, Client								
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	05/05/23 12:29	05/07/23	03:47	BEP	MS-A1	10	B165569	EPA TO-15
2	EPA-TO-15-SIM	05/05/23 12:29	05/06/23	20:04	BEP	MS-A1	1	B165569	EPA TO-15

DCN = Data Continuation Number

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308505-02	Client Sample Name: AA-BL-20230427, 4/27/2023 1:20:00PM, Client
----------------------------------	------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	2.2	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/09/23 08:02	05/09/23 14:01	RMK	GC-A1	1	B165689	No Prep

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
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 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-03		Client Sample Name: AA-710/10-20230427, 4/27/2023 11:05:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	10	ug/m3	10	0.075	EPA-TO-15-SIM	ND	A01	1
Benzene	0.85	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.8	ug/m3	0.50	0.052	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.78	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.42	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.0	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.61	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.5	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.53	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	2.0	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	87.4	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	102	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-03	Client Sample Name: AA-710/10-20230427, 4/27/2023 11:05:00AM, Client						
DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-TO-15-SIM	05/05/23 12:29	05/07/23 04:18	BEP	MS-A1	10	B165569 EPA TO-15
2	EPA-TO-15-SIM	05/05/23 12:29	05/06/23 20:42	BEP	MS-A1	1	B165569 EPA TO-15

DCN = Data Continuation Number

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308505-03	Client Sample Name: AA-710/10-20230427, 4/27/2023 11:05:00AM, Client
----------------------------------	-----------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	2.2	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/09/23 08:02	05/09/23 15:01	RMK	GC-A1	1	B165689	No Prep

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-04		Client Sample Name: AA-710/10-20230427-D, 4/27/2023 11:05:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	16	ug/m3	10	0.075	EPA-TO-15-SIM	ND	A01	1
Benzene	0.82	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	3.2	ug/m3	0.50	0.052	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.71	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.40	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.4	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.59	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.4	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.52	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	1.9	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	87.7	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	109	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-04	Client Sample Name: AA-710/10-20230427-D, 4/27/2023 11:05:00AM, Client								
DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID		
1	EPA-TO-15-SIM	05/05/23 12:29	05/07/23 04:49	BEP	MS-A1	10	B165569	EPA TO-15	
2	EPA-TO-15-SIM	05/05/23 12:29	05/06/23 21:19	BEP	MS-A1	1	B165569	EPA TO-15	

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308505-04	Client Sample Name: AA-710/10-20230427-D, 4/27/2023 11:05:00AM, Client
----------------------------------	-------------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	2.1	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/09/23 08:02	05/09/23 15:22	RMK	GC-A1	1	B165689	No Prep

DCN = Data Continuation Number

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Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-05		Client Sample Name: AA-0.125MI-20230427, 4/27/2023 12:00:00PM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	12	ug/m3	10	0.075	EPA-TO-15-SIM	ND	A01	1
Benzene	0.79	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.9	ug/m3	0.50	0.052	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.84	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.37	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	1.9	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.58	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.3	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.47	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	1.8	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	86.6	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	106	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-05	Client Sample Name: AA-0.125MI-20230427, 4/27/2023 12:00:00PM, Client								
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	05/05/23 12:29	05/07/23	05:20	BEP	MS-A1	10	B165569	EPA TO-15
2	EPA-TO-15-SIM	05/05/23 12:29	05/06/23	21:57	BEP	MS-A1	1	B165569	EPA TO-15

DCN = Data Continuation Number

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308505-05	Client Sample Name: AA-0.125MI-20230427, 4/27/2023 12:00:00PM, Client
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	28	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/09/23 08:02	05/09/23 15:58	RMK	GC-A1	1	B165689	No Prep

DCN = Data Continuation Number

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Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-06		Client Sample Name: AA-0.25MI-20230427, 4/27/2023 1:10:00PM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	16	ug/m3	10	0.075	EPA-TO-15-SIM	ND	A01	1
Benzene	0.83	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	3.2	ug/m3	0.50	0.052	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.83	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.50	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.6	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.59	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.8	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.66	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	2.5	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	85.5	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	108	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Reported: 05/15/2023 16:55
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-06	Client Sample Name: AA-0.25MI-20230427, 4/27/2023 1:10:00PM, Client								
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	05/05/23 12:29	05/07/23	05:51	BEP	MS-A1	10	B165569	EPA TO-15
2	EPA-TO-15-SIM	05/05/23 12:29	05/06/23	22:34	BEP	MS-A1	1	B165569	EPA TO-15

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308505-06	Client Sample Name: AA-0.25MI-20230427, 4/27/2023 1:10:00PM, Client
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	3.9	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/09/23 08:03	05/09/23 17:17	RMK	GC-A1	1	B165690	No Prep

DCN = Data Continuation Number

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-07		Client Sample Name: AA-0.5MI-20230427, 4/27/2023 11:15:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	10	ug/m3	10	0.075	EPA-TO-15-SIM	ND	A01	1
Benzene	0.70	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.8	ug/m3	0.50	0.052	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.95	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.36	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	1.8	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.59	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.3	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.45	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	1.7	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	85.2	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	104	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-07	Client Sample Name: AA-0.5MI-20230427, 4/27/2023 11:15:00AM, Client								
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	05/05/23 12:29	05/07/23	06:22	BEP	MS-A1	10	B165569	EPA TO-15
2	EPA-TO-15-SIM	05/05/23 12:29	05/06/23	23:12	BEP	MS-A1	1	B165569	EPA TO-15

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308505-07	Client Sample Name: AA-0.5MI-20230427, 4/27/2023 11:15:00AM, Client
----------------------------------	----------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	5.1	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/09/23 08:03	05/09/23 17:37	RMK	GC-A1	1	B165690	No Prep

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-08		Client Sample Name: AA-0.75MI-20230427, 4/27/2023 1:40:00PM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	14	ug/m3	10	0.075	EPA-TO-15-SIM	ND	A01	1
Benzene	0.84	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.8	ug/m3	0.50	0.052	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.96	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.45	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.2	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.4	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.60	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.6	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.57	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	2.1	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	86.3	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	109	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-08	Client Sample Name: AA-0.75MI-20230427, 4/27/2023 1:40:00PM, Client								
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	05/05/23 12:29	05/07/23	06:53	BEP	MS-A1	10	B165569	EPA TO-15
2	EPA-TO-15-SIM	05/05/23 12:29	05/06/23	23:50	BEP	MS-A1	1	B165569	EPA TO-15

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308505-08	Client Sample Name: AA-0.75MI-20230427, 4/27/2023 1:40:00PM, Client
----------------------------------	----------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	4.2	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/09/23 08:03	05/09/23 17:58	RMK	GC-A1	1	B165690	No Prep

DCN = Data Continuation Number

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Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-09		Client Sample Name: AA-PW1-20230427, 4/27/2023 1:35:00PM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	23	ug/m3	13	0.098	EPA-TO-15-SIM	ND	A01	1
Benzene	1.8	ug/m3	0.21	0.013	EPA-TO-15-SIM	ND	A01	2
Benzyl chloride	ND	ug/m3	2.1	0.021	EPA-TO-15-SIM	ND	A01	2
Carbon tetrachloride	ND	ug/m3	0.82	0.026	EPA-TO-15-SIM	ND	A01	2
Chlorobenzene	ND	ug/m3	0.41	0.033	EPA-TO-15-SIM	ND	A01	2
Chloroform	ND	ug/m3	0.21	0.024	EPA-TO-15-SIM	ND	A01	2
1,2-Dibromoethane	ND	ug/m3	0.82	0.058	EPA-TO-15-SIM	ND	A01	2
1,2-Dichlorobenzene	ND	ug/m3	0.82	0.045	EPA-TO-15-SIM	ND	A01	2
1,3-Dichlorobenzene	ND	ug/m3	0.82	0.054	EPA-TO-15-SIM	ND	A01	2
1,4-Dichlorobenzene	ND	ug/m3	0.82	0.066	EPA-TO-15-SIM	ND	A01	2
Dichlorodifluoromethane	4.4	ug/m3	0.21	0.021	EPA-TO-15-SIM	ND	A01	2
1,1-Dichloroethane	ND	ug/m3	0.21	0.017	EPA-TO-15-SIM	ND	A01	2
1,2-Dichloroethane	ND	ug/m3	0.41	0.019	EPA-TO-15-SIM	ND	A01	2
1,1-Dichloroethene	ND	ug/m3	0.21	0.032	EPA-TO-15-SIM	ND	A01	2
cis-1,2-Dichloroethene	ND	ug/m3	0.21	0.018	EPA-TO-15-SIM	ND	A01	2
trans-1,2-Dichloroethene	ND	ug/m3	0.21	0.031	EPA-TO-15-SIM	ND	A01	2
trans-1,3-Dichloropropene	ND	ug/m3	0.21	0.054	EPA-TO-15-SIM	ND	A01	2
1,1-Difluoroethane	2.1	ug/m3	21	0.011	EPA-TO-15-SIM	ND	J,A01	2
Ethylbenzene	1.0	ug/m3	0.21	0.070	EPA-TO-15-SIM	ND	A01	2
Methylene chloride	ND	ug/m3	0.82	0.032	EPA-TO-15-SIM	ND	A01	2
Tetrachloroethene	ND	ug/m3	0.41	0.045	EPA-TO-15-SIM	ND	A01	2
Toluene	6.0	ug/m3	0.41	0.026	EPA-TO-15-SIM	ND	A01	2
1,1,1-Trichloroethane	ND	ug/m3	0.41	0.023	EPA-TO-15-SIM	ND	A01	2
1,1,2-Trichloroethane	ND	ug/m3	0.41	0.023	EPA-TO-15-SIM	ND	A01	2
Trichloroethene	ND	ug/m3	0.41	0.039	EPA-TO-15-SIM	ND	A01	2
Trichlorofluoromethane	2.4	ug/m3	0.21	0.023	EPA-TO-15-SIM	ND	A01	2
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	ug/m3	0.41	0.032	EPA-TO-15-SIM	ND	A01	2
Vinyl chloride	ND	ug/m3	0.082	0.019	EPA-TO-15-SIM	ND	A01	2
p- & m-Xylenes	3.3	ug/m3	0.21	0.034	EPA-TO-15-SIM	ND	A01	2
o-Xylene	1.3	ug/m3	0.21	0.018	EPA-TO-15-SIM	ND	A01	2
Total Xylenes	4.6	ug/m3	0.41	0.054	EPA-TO-15-SIM	ND	A01	2
4-Bromofluorobenzene (Surrogate)	88.5	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	97.2	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-09		Client Sample Name: AA-PW1-20230427, 4/27/2023 1:35:00PM, Client							
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	05/05/23 12:29	05/07/23	07:25	BEP	MS-A1	13	B165569	EPA TO-15
2	EPA-TO-15-SIM	05/05/23 12:29	05/08/23	22:54	BEP	MS-A1	4.120	B165619	EPA TO-15

DCN = Data Continuation Number

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308505-09	Client Sample Name: AA-PW1-20230427, 4/27/2023 1:35:00PM, Client							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	6.4	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/09/23 08:03	05/09/23 18:18	RMK	GC-A1	1	B165690	No Prep

DCN = Data Continuation Number

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Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-10		Client Sample Name: AA-PW2-20230427, 4/27/2023 12:08:00PM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	12	ug/m3	10	0.075	EPA-TO-15-SIM	ND	A01	1
Benzene	0.91	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.7	ug/m3	0.50	0.052	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.86	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.47	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.4	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.57	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.7	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.60	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	2.3	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	86.9	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	107	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Reported: 05/15/2023 16:55
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-10		Client Sample Name: AA-PW2-20230427, 4/27/2023 12:08:00PM, Client							
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	05/05/23 12:29	05/07/23	07:56	BEP	MS-A1	10	B165569	EPA TO-15
2	EPA-TO-15-SIM	05/05/23 12:29	05/07/23	01:06	BEP	MS-A1	1	B165569	EPA TO-15

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308505-10	Client Sample Name: AA-PW2-20230427, 4/27/2023 12:08:00PM, Client
----------------------------------	--------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	3.1	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/09/23 08:03	05/09/23 19:18	RMK	GC-A1	1	B165690	No Prep

DCN = Data Continuation Number

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Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-11		Client Sample Name: AA-PW3-20230427, 4/27/2023 10:20:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	10	ug/m3	10	0.075	EPA-TO-15-SIM	ND	A01	1
Benzene	0.82	ug/m3	0.050	0.0032	EPA-TO-15-SIM	ND		2
Benzyl chloride	ND	ug/m3	0.50	0.0052	EPA-TO-15-SIM	ND		2
Carbon tetrachloride	ND	ug/m3	0.20	0.0063	EPA-TO-15-SIM	ND		2
Chlorobenzene	ND	ug/m3	0.10	0.0079	EPA-TO-15-SIM	ND		2
Chloroform	ND	ug/m3	0.050	0.0058	EPA-TO-15-SIM	ND		2
1,2-Dibromoethane	ND	ug/m3	0.20	0.014	EPA-TO-15-SIM	ND		2
1,2-Dichlorobenzene	ND	ug/m3	0.20	0.011	EPA-TO-15-SIM	ND		2
1,3-Dichlorobenzene	ND	ug/m3	0.20	0.013	EPA-TO-15-SIM	ND		2
1,4-Dichlorobenzene	ND	ug/m3	0.20	0.016	EPA-TO-15-SIM	ND		2
Dichlorodifluoromethane	2.6	ug/m3	0.50	0.052	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.050	0.0041	EPA-TO-15-SIM	ND		2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0046	EPA-TO-15-SIM	ND		2
1,1-Dichloroethene	ND	ug/m3	0.050	0.0078	EPA-TO-15-SIM	ND		2
cis-1,2-Dichloroethene	ND	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
trans-1,2-Dichloroethene	ND	ug/m3	0.050	0.0075	EPA-TO-15-SIM	ND		2
trans-1,3-Dichloropropene	ND	ug/m3	0.050	0.013	EPA-TO-15-SIM	ND		2
1,1-Difluoroethane	0.76	ug/m3	5.0	0.0027	EPA-TO-15-SIM	ND	J	2
Ethylbenzene	0.42	ug/m3	0.050	0.017	EPA-TO-15-SIM	ND		2
Methylene chloride	ND	ug/m3	0.20	0.0077	EPA-TO-15-SIM	ND		2
Tetrachloroethene	ND	ug/m3	0.10	0.011	EPA-TO-15-SIM	ND		2
Toluene	2.1	ug/m3	1.0	0.062	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0055	EPA-TO-15-SIM	ND		2
Trichloroethene	ND	ug/m3	0.10	0.0095	EPA-TO-15-SIM	ND		2
Trichlorofluoromethane	1.3	ug/m3	0.050	0.0057	EPA-TO-15-SIM	ND		2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.58	ug/m3	0.10	0.0078	EPA-TO-15-SIM	ND		2
Vinyl chloride	ND	ug/m3	0.020	0.0046	EPA-TO-15-SIM	ND		2
p- & m-Xylenes	1.5	ug/m3	0.050	0.0082	EPA-TO-15-SIM	ND		2
o-Xylene	0.54	ug/m3	0.050	0.0044	EPA-TO-15-SIM	ND		2
Total Xylenes	2.1	ug/m3	0.10	0.013	EPA-TO-15-SIM	ND		2
4-Bromofluorobenzene (Surrogate)	85.8	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	103	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2308505-11		Client Sample Name: AA-PW3-20230427, 4/27/2023 10:20:00AM, Client							
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	05/05/23 12:29	05/07/23	08:28	BEP	MS-A1	10	B165569	EPA TO-15
2	EPA-TO-15-SIM	05/05/23 12:29	05/07/23	01:44	BEP	MS-A1	1	B165569	EPA TO-15

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 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2308505-11	Client Sample Name: AA-PW3-20230427, 4/27/2023 10:20:00AM, Client
----------------------------------	--------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	2.2	ppmv	2.0	1.8	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/09/23 08:03	05/09/23 19:38	RMK	GC-A1	1	B165690	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B165569							
Acetone	B165569-BLK1	ND	ug/m3	1.0	0.0075		1
Benzene	B165569-BLK1	ND	ug/m3	0.050	0.0032		1
Benzyl chloride	B165569-BLK1	ND	ug/m3	0.50	0.0052		1
Carbon tetrachloride	B165569-BLK1	ND	ug/m3	0.20	0.0063		1
Chlorobenzene	B165569-BLK1	ND	ug/m3	0.10	0.0079		1
Chloroform	B165569-BLK1	ND	ug/m3	0.050	0.0058		1
1,2-Dibromoethane	B165569-BLK1	ND	ug/m3	0.20	0.014		1
1,2-Dichlorobenzene	B165569-BLK1	ND	ug/m3	0.20	0.011		1
1,3-Dichlorobenzene	B165569-BLK1	ND	ug/m3	0.20	0.013		1
1,4-Dichlorobenzene	B165569-BLK1	ND	ug/m3	0.20	0.016		1
Dichlorodifluoromethane	B165569-BLK1	ND	ug/m3	0.050	0.0052		1
1,1-Dichloroethane	B165569-BLK1	ND	ug/m3	0.050	0.0041		1
1,2-Dichloroethane	B165569-BLK1	ND	ug/m3	0.10	0.0046		1
1,1-Dichloroethene	B165569-BLK1	ND	ug/m3	0.050	0.0078		1
cis-1,2-Dichloroethene	B165569-BLK1	ND	ug/m3	0.050	0.0044		1
trans-1,2-Dichloroethene	B165569-BLK1	ND	ug/m3	0.050	0.0075		1
trans-1,3-Dichloropropene	B165569-BLK1	ND	ug/m3	0.050	0.013		1
1,1-Difluoroethane	B165569-BLK1	ND	ug/m3	5.0	0.0027		1
Ethylbenzene	B165569-BLK1	ND	ug/m3	0.050	0.017		1
Methylene chloride	B165569-BLK1	ND	ug/m3	0.20	0.0077		1
Tetrachloroethene	B165569-BLK1	ND	ug/m3	0.10	0.011		1
Toluene	B165569-BLK1	ND	ug/m3	0.10	0.0062		1
1,1,1-Trichloroethane	B165569-BLK1	ND	ug/m3	0.10	0.0055		1
1,1,2-Trichloroethane	B165569-BLK1	ND	ug/m3	0.10	0.0055		1
Trichloroethene	B165569-BLK1	ND	ug/m3	0.10	0.0095		1
Trichlorofluoromethane	B165569-BLK1	ND	ug/m3	0.050	0.0057		1
1,1,2-Trichloro-1,2,2-trifluoroethane	B165569-BLK1	ND	ug/m3	0.10	0.0078		1
Vinyl chloride	B165569-BLK1	ND	ug/m3	0.020	0.0046		1
p- & m-Xylenes	B165569-BLK1	ND	ug/m3	0.050	0.0082		1
o-Xylene	B165569-BLK1	ND	ug/m3	0.050	0.0044		1
Total Xylenes	B165569-BLK1	ND	ug/m3	0.10	0.013		1
4-Bromofluorobenzene (Surrogate)	B165569-BLK1	77.6	%	50 - 150 (LCL - UCL)			1
QC Batch ID: B165619							

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B165619							
Benzene	B165619-BLK1	ND	ug/m3	0.050	0.0032		2
Benzyl chloride	B165619-BLK1	ND	ug/m3	0.50	0.0052		2
Carbon tetrachloride	B165619-BLK1	ND	ug/m3	0.20	0.0063		2
Chlorobenzene	B165619-BLK1	ND	ug/m3	0.10	0.0079		2
Chloroform	B165619-BLK1	ND	ug/m3	0.050	0.0058		2
1,2-Dibromoethane	B165619-BLK1	ND	ug/m3	0.20	0.014		2
1,2-Dichlorobenzene	B165619-BLK1	ND	ug/m3	0.20	0.011		2
1,3-Dichlorobenzene	B165619-BLK1	ND	ug/m3	0.20	0.013		2
1,4-Dichlorobenzene	B165619-BLK1	ND	ug/m3	0.20	0.016		2
Dichlorodifluoromethane	B165619-BLK1	ND	ug/m3	0.050	0.0052		2
1,1-Dichloroethane	B165619-BLK1	ND	ug/m3	0.050	0.0041		2
1,2-Dichloroethane	B165619-BLK1	ND	ug/m3	0.10	0.0046		2
1,1-Dichloroethene	B165619-BLK1	ND	ug/m3	0.050	0.0078		2
cis-1,2-Dichloroethene	B165619-BLK1	ND	ug/m3	0.050	0.0044		2
trans-1,2-Dichloroethene	B165619-BLK1	ND	ug/m3	0.050	0.0075		2
trans-1,3-Dichloropropene	B165619-BLK1	ND	ug/m3	0.050	0.013		2
1,1-Difluoroethane	B165619-BLK1	ND	ug/m3	5.0	0.0027		2
Ethylbenzene	B165619-BLK1	ND	ug/m3	0.050	0.017		2
Methylene chloride	B165619-BLK1	ND	ug/m3	0.20	0.0077		2
Tetrachloroethene	B165619-BLK1	ND	ug/m3	0.10	0.011		2
Toluene	B165619-BLK1	ND	ug/m3	0.10	0.0062		2
1,1,1-Trichloroethane	B165619-BLK1	ND	ug/m3	0.10	0.0055		2
1,1,2-Trichloroethane	B165619-BLK1	ND	ug/m3	0.10	0.0055		2
Trichloroethene	B165619-BLK1	ND	ug/m3	0.10	0.0095		2
Trichlorofluoromethane	B165619-BLK1	ND	ug/m3	0.050	0.0057		2
1,1,2-Trichloro-1,2,2-trifluoroethane	B165619-BLK1	ND	ug/m3	0.10	0.0078		2
Vinyl chloride	B165619-BLK1	ND	ug/m3	0.020	0.0046		2
p- & m-Xylenes	B165619-BLK1	ND	ug/m3	0.050	0.0082		2
o-Xylene	B165619-BLK1	ND	ug/m3	0.050	0.0044		2
Total Xylenes	B165619-BLK1	ND	ug/m3	0.10	0.013		2
4-Bromofluorobenzene (Surrogate)	B165619-BLK1	80.8	%	50 - 150 (LCL - UCL)			2

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Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals	Run #
								Percent Recovery	RPD		
QC Batch ID: B165569											
Benzene	B165569-BS1	LCS	0.27989	0.31948	ug/m3	87.6		70 - 130			1
	B165569-BSD1	LCSD	0.28299	0.31948	ug/m3	88.6	1.1	70 - 130	30		2
Benzyl chloride	B165569-BS1	LCS	0.49934	0.51772	ug/m3	96.4		70 - 130		J	1
	B165569-BSD1	LCSD	0.49650	0.51772	ug/m3	95.9	0.6	70 - 130	30	J	2
Carbon tetrachloride	B165569-BS1	LCS	0.56792	0.62913	ug/m3	90.3		70 - 130			1
	B165569-BSD1	LCSD	0.57522	0.62913	ug/m3	91.4	1.3	70 - 130	30		2
Chlorobenzene	B165569-BS1	LCS	0.42652	0.46036	ug/m3	92.6		70 - 130			1
	B165569-BSD1	LCSD	0.42670	0.46036	ug/m3	92.7	0.0	70 - 130	30		2
Chloroform	B165569-BS1	LCS	0.44778	0.48825	ug/m3	91.7		70 - 130			1
	B165569-BSD1	LCSD	0.44768	0.48825	ug/m3	91.7	0.0	70 - 130	30		2
1,2-Dibromoethane	B165569-BS1	LCS	0.71579	0.76835	ug/m3	93.2		70 - 130			1
	B165569-BSD1	LCSD	0.71664	0.76835	ug/m3	93.3	0.1	70 - 130	30		2
1,2-Dichlorobenzene	B165569-BS1	LCS	0.56991	0.60124	ug/m3	94.8		70 - 130			1
	B165569-BSD1	LCSD	0.58188	0.60124	ug/m3	96.8	2.1	70 - 130	30		2
1,3-Dichlorobenzene	B165569-BS1	LCS	0.62967	0.60124	ug/m3	105		70 - 130			1
	B165569-BSD1	LCSD	0.56684	0.60124	ug/m3	94.3	10.5	70 - 130	30		2
1,4-Dichlorobenzene	B165569-BS1	LCS	0.54839	0.60124	ug/m3	91.2		70 - 130			1
	B165569-BSD1	LCSD	0.61116	0.60124	ug/m3	102	10.8	70 - 130	30		2
1,1-Dichloroethane	B165569-BS1	LCS	0.37115	0.40474	ug/m3	91.7		70 - 130			1
	B165569-BSD1	LCSD	0.37094	0.40474	ug/m3	91.6	0.1	70 - 130	30		2
1,2-Dichloroethane	B165569-BS1	LCS	0.36593	0.40474	ug/m3	90.4		70 - 130			1
	B165569-BSD1	LCSD	0.36471	0.40474	ug/m3	90.1	0.3	70 - 130	30		2
1,1-Dichloroethene	B165569-BS1	LCS	0.35689	0.39649	ug/m3	90.0		70 - 130			1
	B165569-BSD1	LCSD	0.35696	0.39649	ug/m3	90.0	0.0	70 - 130	30		2
cis-1,2-Dichloroethene	B165569-BS1	LCS	0.35970	0.39649	ug/m3	90.7		70 - 130			1
	B165569-BSD1	LCSD	0.35566	0.39649	ug/m3	89.7	1.1	70 - 130	30		2
Methylene chloride	B165569-BS1	LCS	0.34696	0.34737	ug/m3	99.9		70 - 130			1
	B165569-BSD1	LCSD	0.34515	0.34737	ug/m3	99.4	0.5	70 - 130	30		2
Tetrachloroethene	B165569-BS1	LCS	0.62922	0.67825	ug/m3	92.8		70 - 130			1
	B165569-BSD1	LCSD	0.62772	0.67825	ug/m3	92.6	0.2	70 - 130	30		2
Toluene	B165569-BS1	LCS	0.34093	0.37684	ug/m3	90.5		70 - 130			1
	B165569-BSD1	LCSD	0.34240	0.37684	ug/m3	90.9	0.4	70 - 130	30		2
1,1,1-Trichloroethane	B165569-BS1	LCS	0.49499	0.54562	ug/m3	90.7		70 - 130			1
	B165569-BSD1	LCSD	0.49455	0.54562	ug/m3	90.6	0.1	70 - 130	30		2
1,1,2-Trichloroethane	B165569-BS1	LCS	0.50415	0.54562	ug/m3	92.4		70 - 130			1
	B165569-BSD1	LCSD	0.50443	0.54562	ug/m3	92.5	0.1	70 - 130	30		2

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Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals	Run #
								Percent Recovery	RPD		
QC Batch ID: B165569											
Trichloroethene	B165569-BS1	LCS	0.49798	0.53737	ug/m3	92.7		70 - 130			1
	B165569-BSD1	LCSD	0.49884	0.53737	ug/m3	92.8	0.2	70 - 130	30		2
Vinyl chloride	B165569-BS1	LCS	0.24186	0.25562	ug/m3	94.6		70 - 130			1
	B165569-BSD1	LCSD	0.24473	0.25562	ug/m3	95.7	1.2	70 - 130	30		2
p- & m-Xylenes	B165569-BS1	LCS	0.79140	0.86843	ug/m3	91.1		70 - 130			1
	B165569-BSD1	LCSD	0.79496	0.86843	ug/m3	91.5	0.4	70 - 130	30		2
o-Xylene	B165569-BS1	LCS	0.39309	0.43421	ug/m3	90.5		70 - 130			1
	B165569-BSD1	LCSD	0.39587	0.43421	ug/m3	91.2	0.7	70 - 130	30		2
Total Xylenes	B165569-BS1	LCS	1.1845	1.3026	ug/m3	90.9		70 - 130			1
	B165569-BSD1	LCSD	1.1908	1.3026	ug/m3	91.4	0.5	70 - 130	30		2
4-Bromofluorobenzene (Surrogate)	B165569-BS1	LCS	3.59	3.58	ug/m3	100		50 - 150			1
	B165569-BSD1	LCSD	3.57	3.58	ug/m3	99.7	0.7	50 - 150			2
QC Batch ID: B165619											
Benzene	B165619-BS1	LCS	0.31114	0.31948	ug/m3	97.4		70 - 130			3
	B165619-BSD1	LCSD	0.30877	0.31948	ug/m3	96.7	0.8	70 - 130	30		4
Benzyl chloride	B165619-BS1	LCS	0.48122	0.51772	ug/m3	93.0		70 - 130		J	3
	B165619-BSD1	LCSD	0.53227	0.51772	ug/m3	103	10.1	70 - 130	30		4
Carbon tetrachloride	B165619-BS1	LCS	0.68859	0.62913	ug/m3	109		70 - 130			3
	B165619-BSD1	LCSD	0.68305	0.62913	ug/m3	109	0.8	70 - 130	30		4
Chlorobenzene	B165619-BS1	LCS	0.46321	0.46036	ug/m3	101		70 - 130			3
	B165619-BSD1	LCSD	0.46758	0.46036	ug/m3	102	0.9	70 - 130	30		4
Chloroform	B165619-BS1	LCS	0.52673	0.48825	ug/m3	108		70 - 130			3
	B165619-BSD1	LCSD	0.51940	0.48825	ug/m3	106	1.4	70 - 130	30		4
1,2-Dibromoethane	B165619-BS1	LCS	0.81414	0.76835	ug/m3	106		70 - 130			3
	B165619-BSD1	LCSD	0.81714	0.76835	ug/m3	106	0.4	70 - 130	30		4
1,2-Dichlorobenzene	B165619-BS1	LCS	0.62174	0.60124	ug/m3	103		70 - 130			3
	B165619-BSD1	LCSD	0.65925	0.60124	ug/m3	110	5.9	70 - 130	30		4
1,3-Dichlorobenzene	B165619-BS1	LCS	0.53330	0.60124	ug/m3	88.7		70 - 130			3
	B165619-BSD1	LCSD	0.64296	0.60124	ug/m3	107	18.6	70 - 130	30		4
1,4-Dichlorobenzene	B165619-BS1	LCS	0.58693	0.60124	ug/m3	97.6		70 - 130			3
	B165619-BSD1	LCSD	0.59294	0.60124	ug/m3	98.6	1.0	70 - 130	30		4
1,1-Dichloroethane	B165619-BS1	LCS	0.42255	0.40474	ug/m3	104		70 - 130			3
	B165619-BSD1	LCSD	0.42218	0.40474	ug/m3	104	0.1	70 - 130	30		4
1,2-Dichloroethane	B165619-BS1	LCS	0.41203	0.40474	ug/m3	102		70 - 130			3
	B165619-BSD1	LCSD	0.40871	0.40474	ug/m3	101	0.8	70 - 130	30		4
1,1-Dichloroethene	B165619-BS1	LCS	0.40466	0.39649	ug/m3	102		70 - 130			3
	B165619-BSD1	LCSD	0.40062	0.39649	ug/m3	101	1.0	70 - 130	30		4

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals	Run #
								Percent Recovery	RPD		
QC Batch ID: B165619											
cis-1,2-Dichloroethene	B165619-BS1	LCS	0.39546	0.39649	ug/m3	99.7		70 - 130			3
	B165619-BSD1	LCSD	0.39404	0.39649	ug/m3	99.4	0.4	70 - 130	30		4
Methylene chloride	B165619-BS1	LCS	0.40921	0.34737	ug/m3	118		70 - 130			3
	B165619-BSD1	LCSD	0.40726	0.34737	ug/m3	117	0.5	70 - 130	30		4
Tetrachloroethene	B165619-BS1	LCS	0.73034	0.67825	ug/m3	108		70 - 130			3
	B165619-BSD1	LCSD	0.73814	0.67825	ug/m3	109	1.1	70 - 130	30		4
Toluene	B165619-BS1	LCS	0.36788	0.37684	ug/m3	97.6		70 - 130			3
	B165619-BSD1	LCSD	0.36916	0.37684	ug/m3	98.0	0.3	70 - 130	30		4
1,1,1-Trichloroethane	B165619-BS1	LCS	0.58349	0.54562	ug/m3	107		70 - 130			3
	B165619-BSD1	LCSD	0.57928	0.54562	ug/m3	106	0.7	70 - 130	30		4
1,1,2-Trichloroethane	B165619-BS1	LCS	0.58861	0.54562	ug/m3	108		70 - 130			3
	B165619-BSD1	LCSD	0.58894	0.54562	ug/m3	108	0.1	70 - 130	30		4
Trichloroethene	B165619-BS1	LCS	0.57230	0.53737	ug/m3	106		70 - 130			3
	B165619-BSD1	LCSD	0.57564	0.53737	ug/m3	107	0.6	70 - 130	30		4
Vinyl chloride	B165619-BS1	LCS	0.29521	0.25562	ug/m3	115		70 - 130			3
	B165619-BSD1	LCSD	0.29135	0.25562	ug/m3	114	1.3	70 - 130	30		4
p- & m-Xylenes	B165619-BS1	LCS	0.85410	0.86843	ug/m3	98.4		70 - 130			3
	B165619-BSD1	LCSD	0.86204	0.86843	ug/m3	99.3	0.9	70 - 130	30		4
o-Xylene	B165619-BS1	LCS	0.42892	0.43421	ug/m3	98.8		70 - 130			3
	B165619-BSD1	LCSD	0.43795	0.43421	ug/m3	101	2.1	70 - 130	30		4
Total Xylenes	B165619-BS1	LCS	1.2830	1.3026	ug/m3	98.5		70 - 130			3
	B165619-BSD1	LCSD	1.3000	1.3026	ug/m3	99.8	1.3	70 - 130	30		4
4-Bromofluorobenzene (Surrogate)	B165619-BS1	LCS	3.42	3.58	ug/m3	95.5		50 - 150			3
	B165619-BSD1	LCSD	3.47	3.58	ug/m3	96.9	1.5	50 - 150			4

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
-------------	--------------	-----------	-------	-----	-----	-----------	-------

QC Batch ID: B165689

Methane (CH4)	B165689-BLK1	ND	ppmv	2.0	1.8		1
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QC Batch ID: B165690

Methane (CH4)	B165690-BLK1	ND	ppmv	2.0	1.8		2
---------------	--------------	----	------	-----	-----	--	---

Run #	QC Sample ID	QC Type	Method	Prep Date	Run		Analyst	Instrument	Dilution
					Date	Time			
1	B165689-BLK1	PB	ASTM-D1946	05/09/23	05/09/23	11:39	RMK	GC-A1	1
2	B165690-BLK1	PB	ASTM-D1946	05/09/23	05/09/23	16:57	RMK	GC-A1	1

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/15/2023 16:55
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Run #
								Percent Recovery	RPD		
QC Batch ID: B165689											
Methane (CH4)	B165689-BS1	LCS	20435	18000	ppmv	114		70 - 130			1
	B165689-BSD1	LCSD	20514	18000	ppmv	114	0.4	70 - 130	30		2
QC Batch ID: B165690											
Methane (CH4)	B165690-BS1	LCS	21482	18000	ppmv	119		70 - 130			3
	B165690-BSD1	LCSD	21352	18000	ppmv	119	0.6	70 - 130	30		4

Run #	QC Sample ID	QC Type	Method	Prep Date	Run		Analyst	Instrument	Dilution
					Date	Time			
1	B165689-BS1	LCS	ASTM-D1946	05/09/23	05/09/23	10:59	RMK	GC-A1	1
2	B165689-BSD1	LCSD	ASTM-D1946	05/09/23	05/09/23	11:19	RMK	GC-A1	1
3	B165690-BS1	LCS	ASTM-D1946	05/09/23	05/09/23	16:18	RMK	GC-A1	1
4	B165690-BSD1	LCSD	ASTM-D1946	05/09/23	05/09/23	16:37	RMK	GC-A1	1

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Roux Associates, Inc -Long Beach
5150 E. Pacific Coast Hwy, Suite 450
Long Beach, CA 90804

Reported: 05/15/2023 16:55
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Notes And Definitions

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A01 Detection and quantitation limits are raised due to sample dilution.



Date of Report: 05/17/2023

April McGuire

Roux Associates, Inc -Long Beach
5150 E. Pacific Coast Hwy, Suite 450
Long Beach, CA 90804

Client Project: 36908
BCL Project: City Terrace
BCL Work Order: 2309559
Invoice ID: B476283

Enclosed are the results of analyses for samples received by the laboratory on 5/13/2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "BS", is written over a horizontal line.

Contact Person: Brianna Schutte
Client Services Rep

A handwritten signature in black ink, appearing to read "Stuart Buttram", is written over a horizontal line.

Stuart Buttram
Operations Manager

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

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2309559

AIR: CHAIN-OF-CUSTODY / Analytical

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed.

Section A Required Client Information: Company: ROUX Address: 5150 E PCH, STE 450 LONG BEACH, CA 90804 Email To: AMCCOURE@ROUXINC.COM Phone: 562-445-8624 Fax: Business Date: 05/11/23		Section B Required Project Information: Report To: A. MCGUIRE Copy To: Purchase Order No.: Project Name: CITY TERRACE Project Number: 2855		Section C Invoice Information: Attention: ROUX ACCOUNTS PAYABLE (ROUXAP@ROUXINC.COM) Company Name: ROUX Address: 5150 E PCH #450, LONG BEACH, CA 90804 Pace Quote Reference: 00135946 Pace Project Manager/Sales Rep: BRIVANNA SCHUTTE / DAWN GERRON Pace Profile #:		Page: _____ of _____ Program <input type="checkbox"/> UST <input type="checkbox"/> Superfund <input type="checkbox"/> Emissions <input type="checkbox"/> Clean Air Act <input type="checkbox"/> Voluntary Clean-Up <input type="checkbox"/> Dry Clean <input type="checkbox"/> RCRA <input type="checkbox"/> Other Location of Sampling by State: _____ Method: _____ Report Level: I, II, III, IV, Other: _____																													
Section D Required Client Information AIR SAMPLE ID Sample IDs MUST BE UNIQUE AA-UST-A-20230511 AA-UST-B-20230511 AA-UST-C-20230511 AA-UST-D-20230511-D AA-UST-D-20230511 AA-CT-20230511		Used Name Code: MEDIA 1 Liter Surber Can T/C 4 Liter Surber Can R/C Low Volume Part LVP High Volume Part HVP Other		COLLECTED <table border="1"> <thead> <tr> <th>DATE</th> <th>TIME</th> <th>DATE</th> <th>TIME</th> </tr> </thead> <tbody> <tr> <td>05/11/23</td> <td>1455</td> <td>05/12/23</td> <td>1215</td> </tr> <tr> <td></td> <td>1440</td> <td></td> <td>1440</td> </tr> <tr> <td></td> <td>1430</td> <td></td> <td>1205</td> </tr> <tr> <td></td> <td>1454</td> <td></td> <td>1205</td> </tr> <tr> <td></td> <td>1455</td> <td></td> <td>1240</td> </tr> <tr> <td></td> <td>1445</td> <td></td> <td>1115</td> </tr> </tbody> </table>		DATE	TIME	DATE	TIME	05/11/23	1455	05/12/23	1215		1440		1440		1430		1205		1454		1205		1455		1240		1445		1115	PFD Reading (Client only): MEDIA CODE: 6LC Flow Control Number: 07921, 01681, 06726, 8021, 07961, 81437, 98	
DATE	TIME	DATE	TIME																																
05/11/23	1455	05/12/23	1215																																
	1440		1440																																
	1430		1205																																
	1454		1205																																
	1455		1240																																
	1445		1115																																
Centister Pressure (Initial Field - psig): 30, 30, 30, 30, 29, 29 Centister Pressure (Final Field - psig): -5, -5, -4, -6, -5, -4		Summa Can Number: 07921, 01681, 06726, 8021, 07961, 81437, 98		Pace Lab ID:																															
RE-INDUISHED BY: <i>Amc Guire/Dox</i> DATE: 5/12/23 TIME: 0915		ACCEPTED BY: <i>Jeff Dale</i> DATE: 5/12/23 TIME: 0915		SAMPLE CONDITIONS Temp in °C: _____ Received on Ice: Y/N Sealed Cooler: Y/N Samples Intact: Y/N																															
COMMENTS:		SIGNATURE OF SAMPLER: <i>Travis Clab</i> DATE SIGNED: 05/12/23		SIGNATURE OF ANALYST: _____ DATE SIGNED: _____																															

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PACE ANALYTICAL		COOLER RECEIPT FORM		Page <u>1</u> Of <u>1</u>							
Submission #: <u>23-09559</u>											
SHIPPING INFORMATION Fed Ex <input checked="" type="checkbox"/> UPS <input type="checkbox"/> GSO / GLS <input type="checkbox"/> Hand Delivery <input type="checkbox"/> Pace Lab Field Service <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			SHIPPING CONTAINER Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		FREE LIQUID YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> W / S						
Refrigerant: Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None <input checked="" type="checkbox"/> Other <input type="checkbox"/> Comments:											
Custody Seals: Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments:											
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>											
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: _____ Container: _____ Thermometer ID: _____		Date/Time <u>5/13/23</u>							
		Temperature: (A) <u>Room</u> °C / (C) <u>Temp</u> °C		Analyst Init <u>JCN 0915</u>							
SAMPLE CONTAINERS		SAMPLE NUMBERS									
		1	2	3	4	5	6	7	8	9	10
QT PE UNPRES											
4oz / 8oz / 16oz PE UNPRES											
2oz Cr ⁴											
QT INORGANIC CHEMICAL METALS											
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz											
PT CYANIDE											
PT NITROGEN FORMS											
PT TOTAL SULFIDE											
2oz. NITRATE / NITRITE											
PT TOTAL ORGANIC CARBON											
PT CHEMICAL OXYGEN DEMAND											
PIA PHENOLICS											
40ml VOA VIAL TRAVEL BLANK											
40ml VOA VIAL											
QT EPA 1664B											
PT ODOR											
RADIOLOGICAL											
BACTERIOLOGICAL											
40 ml VOA VIAL- 504											
QT EPA 508/508.3/8081A											
QT EPA 515.1/8151A											
QT EPA 525.2											
QT EPA 525.2 TRAVEL BLANK											
40ml EPA 547											
40ml EPA 531.1											
8oz EPA 548.1											
QT EPA 549.2											
QT EPA 8015M											
QT EPA 8270C											
8oz / 16oz / 32oz AMBER											
8oz / 16oz / 32oz JAR											
SOIL SLEEVE											
PCB VIAL											
PLASTIC BAG											
TEDLAR BAG											
FERROUS IRON											
ENCORE											
SMART KIT											
SUMMA CANISTER		A	A	A	A	A	A				

Comments: _____
 Sample Numbering Completed By: JCN Date/Time: 5/13/23 1020
 A = Actual / C = Corrected



Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/17/2023 18:06
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information				
2309559-01	COC Number:	---		Receive Date:	05/13/2023 09:15
	Project Number:	---		Sampling Date:	05/11/2023 12:15
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-UST-A-20230511		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2309559-02	COC Number:	---		Receive Date:	05/13/2023 09:15
	Project Number:	---		Sampling Date:	05/11/2023 11:40
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-UST-B-20230511		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2309559-03	COC Number:	---		Receive Date:	05/13/2023 09:15
	Project Number:	---		Sampling Date:	05/11/2023 12:25
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-UST-C-20230511		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2309559-04	COC Number:	---		Receive Date:	05/13/2023 09:15
	Project Number:	---		Sampling Date:	05/11/2023 12:25
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-UST-C-20230511-D		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2309559-05	COC Number:	---		Receive Date:	05/13/2023 09:15
	Project Number:	---		Sampling Date:	05/11/2023 12:40
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-UST-D-20230511		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air
2309559-06	COC Number:	---		Receive Date:	05/13/2023 09:15
	Project Number:	---		Sampling Date:	05/11/2023 11:15
	Sampling Location:	---		Sample Depth:	---
	Sampling Point:	AA-CT-20230511		Lab Matrix:	Air
	Sampled By:	Client		Sample Type:	Vapor or Air

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/17/2023 18:06
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2309559-01		Client Sample Name: AA-UST-A-20230511, 5/11/2023 12:15:00PM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	3.5	ug/m3	3.2	0.024	EPA-TO-15-SIM	ND	A01,V11	1
Benzene	1.2	ug/m3	0.054	0.0034	EPA-TO-15-SIM	ND	A01	2
Benzyl chloride	ND	ug/m3	0.54	0.0056	EPA-TO-15-SIM	ND	A01	2
Carbon tetrachloride	ND	ug/m3	0.21	0.0067	EPA-TO-15-SIM	ND	A01	2
Chlorobenzene	ND	ug/m3	0.11	0.0085	EPA-TO-15-SIM	ND	A01	2
Chloroform	ND	ug/m3	0.054	0.0062	EPA-TO-15-SIM	ND	A01	2
1,2-Dibromoethane	ND	ug/m3	0.21	0.015	EPA-TO-15-SIM	ND	A01	2
1,2-Dichlorobenzene	ND	ug/m3	0.21	0.012	EPA-TO-15-SIM	ND	A01	2
1,3-Dichlorobenzene	ND	ug/m3	0.21	0.014	EPA-TO-15-SIM	ND	A01	2
1,4-Dichlorobenzene	ND	ug/m3	0.21	0.017	EPA-TO-15-SIM	ND	A01	2
Dichlorodifluoromethane	2.9	ug/m3	0.16	0.017	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.054	0.0044	EPA-TO-15-SIM	ND	A01	2
1,2-Dichloroethane	ND	ug/m3	0.11	0.0049	EPA-TO-15-SIM	ND	A01	2
1,1-Dichloroethene	ND	ug/m3	0.054	0.0083	EPA-TO-15-SIM	ND	A01	2
cis-1,2-Dichloroethene	ND	ug/m3	0.054	0.0047	EPA-TO-15-SIM	ND	A01	2
trans-1,2-Dichloroethene	ND	ug/m3	0.054	0.0080	EPA-TO-15-SIM	ND	A01	2
trans-1,3-Dichloropropene	ND	ug/m3	0.054	0.014	EPA-TO-15-SIM	ND	A01	2
1,1-Difluoroethane	0.98	ug/m3	5.4	0.0029	EPA-TO-15-SIM	ND	J,A01	2
Ethylbenzene	0.57	ug/m3	0.054	0.018	EPA-TO-15-SIM	ND	A01	2
Methylene chloride	ND	ug/m3	0.21	0.0082	EPA-TO-15-SIM	ND	A01	2
Tetrachloroethene	ND	ug/m3	0.11	0.012	EPA-TO-15-SIM	ND	A01	2
Toluene	2.4	ug/m3	0.32	0.020	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.11	0.0059	EPA-TO-15-SIM	ND	A01	2
1,1,2-Trichloroethane	ND	ug/m3	0.11	0.0059	EPA-TO-15-SIM	ND	A01	2
Trichloroethene	ND	ug/m3	0.11	0.010	EPA-TO-15-SIM	ND	A01	2
Trichlorofluoromethane	1.4	ug/m3	0.054	0.0061	EPA-TO-15-SIM	ND	A01	2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.61	ug/m3	0.11	0.0083	EPA-TO-15-SIM	ND	A01	2
Vinyl chloride	ND	ug/m3	0.021	0.0049	EPA-TO-15-SIM	ND	A01	2
p- & m-Xylenes	2.4	ug/m3	0.054	0.0088	EPA-TO-15-SIM	ND	A01	2
o-Xylene	0.81	ug/m3	0.054	0.0047	EPA-TO-15-SIM	ND	A01	2
Total Xylenes	3.2	ug/m3	0.11	0.014	EPA-TO-15-SIM	ND	A01	2
4-Bromofluorobenzene (Surrogate)	99.7	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	112	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/17/2023 18:06
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2309559-01		Client Sample Name: AA-UST-A-20230511, 5/11/2023 12:15:00PM, Client							
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	05/15/23 13:13	05/15/23	23:25	RMK	MS-A1	3.210	B166092	EPA TO-15
2	EPA-TO-15-SIM	05/15/23 13:13	05/15/23	19:30	RMK	MS-A1	1.070	B166092	EPA TO-15

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/17/2023 18:06
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2309559-01	Client Sample Name: AA-UST-A-20230511, 5/11/2023 12:15:00PM, Client
----------------------------------	----------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	2.9	ppmv	3.2	2.9	ASTM-D1946	ND	J	1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/16/23 16:00	05/16/23 20:59	RMK	GC-A1	1.610	B166202	No Prep

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
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 Long Beach, CA 90804

Reported: 05/17/2023 18:06
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2309559-02		Client Sample Name: AA-UST-B-20230511, 5/11/2023 11:40:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	4.4	ug/m3	3.3	0.025	EPA-TO-15-SIM	ND	A01,V11	1
Benzene	1.2	ug/m3	0.056	0.0036	EPA-TO-15-SIM	ND	A01	2
Benzyl chloride	ND	ug/m3	0.56	0.0058	EPA-TO-15-SIM	ND	A01	2
Carbon tetrachloride	ND	ug/m3	0.22	0.0070	EPA-TO-15-SIM	ND	A01	2
Chlorobenzene	ND	ug/m3	0.11	0.0088	EPA-TO-15-SIM	ND	A01	2
Chloroform	ND	ug/m3	0.056	0.0064	EPA-TO-15-SIM	ND	A01	2
1,2-Dibromoethane	ND	ug/m3	0.22	0.016	EPA-TO-15-SIM	ND	A01	2
1,2-Dichlorobenzene	ND	ug/m3	0.22	0.012	EPA-TO-15-SIM	ND	A01	2
1,3-Dichlorobenzene	ND	ug/m3	0.22	0.014	EPA-TO-15-SIM	ND	A01	2
1,4-Dichlorobenzene	ND	ug/m3	0.22	0.018	EPA-TO-15-SIM	ND	A01	2
Dichlorodifluoromethane	2.9	ug/m3	0.17	0.017	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.056	0.0046	EPA-TO-15-SIM	ND	A01	2
1,2-Dichloroethane	ND	ug/m3	0.11	0.0051	EPA-TO-15-SIM	ND	A01	2
1,1-Dichloroethene	ND	ug/m3	0.056	0.0087	EPA-TO-15-SIM	ND	A01	2
cis-1,2-Dichloroethene	ND	ug/m3	0.056	0.0049	EPA-TO-15-SIM	ND	A01	2
trans-1,2-Dichloroethene	ND	ug/m3	0.056	0.0083	EPA-TO-15-SIM	ND	A01	2
trans-1,3-Dichloropropene	ND	ug/m3	0.056	0.014	EPA-TO-15-SIM	ND	A01	2
1,1-Difluoroethane	1.9	ug/m3	5.6	0.0030	EPA-TO-15-SIM	ND	J,A01	2
Ethylbenzene	0.71	ug/m3	0.056	0.019	EPA-TO-15-SIM	ND	A01	2
Methylene chloride	ND	ug/m3	0.22	0.0085	EPA-TO-15-SIM	ND	A01	2
Tetrachloroethene	ND	ug/m3	0.11	0.012	EPA-TO-15-SIM	ND	A01	2
Toluene	2.9	ug/m3	0.33	0.021	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.11	0.0061	EPA-TO-15-SIM	ND	A01	2
1,1,2-Trichloroethane	ND	ug/m3	0.11	0.0061	EPA-TO-15-SIM	ND	A01	2
Trichloroethene	ND	ug/m3	0.11	0.011	EPA-TO-15-SIM	ND	A01	2
Trichlorofluoromethane	1.4	ug/m3	0.056	0.0063	EPA-TO-15-SIM	ND	A01	2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.61	ug/m3	0.11	0.0087	EPA-TO-15-SIM	ND	A01	2
Vinyl chloride	ND	ug/m3	0.022	0.0051	EPA-TO-15-SIM	ND	A01	2
p- & m-Xylenes	3.2	ug/m3	0.056	0.0091	EPA-TO-15-SIM	ND	A01	2
o-Xylene	1.1	ug/m3	0.056	0.0049	EPA-TO-15-SIM	ND	A01	2
Total Xylenes	4.3	ug/m3	0.11	0.014	EPA-TO-15-SIM	ND	A01	2
4-Bromofluorobenzene (Surrogate)	96.4	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	107	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/17/2023 18:06
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2309559-02		Client Sample Name: AA-UST-B-20230511, 5/11/2023 11:40:00AM, Client							
DCN	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15-SIM	05/15/23 13:13	05/15/23	23:59	RMK	MS-A1	3.330	B166092	EPA TO-15
2	EPA-TO-15-SIM	05/15/23 13:13	05/15/23	20:10	RMK	MS-A1	1.110	B166092	EPA TO-15

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/17/2023 18:06
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2309559-02	Client Sample Name: AA-UST-B-20230511, 5/11/2023 11:40:00AM, Client
----------------------------------	----------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	3.3	ppmv	3.3	3.0	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	ASTM-D1946	05/16/23 16:00	05/16/23	21:19	RMK	GC-A1	1.660	B166202	No Prep

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/17/2023 18:06
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2309559-03		Client Sample Name: AA-UST-C-20230511, 5/11/2023 12:25:00PM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	5.4	ug/m3	3.2	0.024	EPA-TO-15-SIM	ND	A01,V11	1
Benzene	0.61	ug/m3	0.052	0.0034	EPA-TO-15-SIM	ND	A01	2
Benzyl chloride	ND	ug/m3	0.52	0.0055	EPA-TO-15-SIM	ND	A01	2
Carbon tetrachloride	ND	ug/m3	0.21	0.0066	EPA-TO-15-SIM	ND	A01	2
Chlorobenzene	ND	ug/m3	0.10	0.0083	EPA-TO-15-SIM	ND	A01	2
Chloroform	ND	ug/m3	0.052	0.0061	EPA-TO-15-SIM	ND	A01	2
1,2-Dibromoethane	ND	ug/m3	0.21	0.015	EPA-TO-15-SIM	ND	A01	2
1,2-Dichlorobenzene	ND	ug/m3	0.21	0.012	EPA-TO-15-SIM	ND	A01	2
1,3-Dichlorobenzene	ND	ug/m3	0.21	0.014	EPA-TO-15-SIM	ND	A01	2
1,4-Dichlorobenzene	ND	ug/m3	0.21	0.017	EPA-TO-15-SIM	ND	A01	2
Dichlorodifluoromethane	2.9	ug/m3	0.16	0.016	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.052	0.0043	EPA-TO-15-SIM	ND	A01	2
1,2-Dichloroethane	ND	ug/m3	0.10	0.0048	EPA-TO-15-SIM	ND	A01	2
1,1-Dichloroethene	ND	ug/m3	0.052	0.0082	EPA-TO-15-SIM	ND	A01	2
cis-1,2-Dichloroethene	ND	ug/m3	0.052	0.0046	EPA-TO-15-SIM	ND	A01	2
trans-1,2-Dichloroethene	ND	ug/m3	0.052	0.0079	EPA-TO-15-SIM	ND	A01	2
trans-1,3-Dichloropropene	ND	ug/m3	0.052	0.014	EPA-TO-15-SIM	ND	A01	2
1,1-Difluoroethane	0.47	ug/m3	5.2	0.0028	EPA-TO-15-SIM	ND	J,A01	2
Ethylbenzene	0.35	ug/m3	0.052	0.018	EPA-TO-15-SIM	ND	A01	2
Methylene chloride	ND	ug/m3	0.21	0.0081	EPA-TO-15-SIM	ND	A01	2
Tetrachloroethene	ND	ug/m3	0.10	0.012	EPA-TO-15-SIM	ND	A01	2
Toluene	1.7	ug/m3	0.10	0.0065	EPA-TO-15-SIM	ND	A01	2
1,1,1-Trichloroethane	ND	ug/m3	0.10	0.0058	EPA-TO-15-SIM	ND	A01	2
1,1,2-Trichloroethane	ND	ug/m3	0.10	0.0058	EPA-TO-15-SIM	ND	A01	2
Trichloroethene	ND	ug/m3	0.10	0.010	EPA-TO-15-SIM	ND	A01	2
Trichlorofluoromethane	1.4	ug/m3	0.052	0.0060	EPA-TO-15-SIM	ND	A01	2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.62	ug/m3	0.10	0.0082	EPA-TO-15-SIM	ND	A01	2
Vinyl chloride	ND	ug/m3	0.021	0.0048	EPA-TO-15-SIM	ND	A01	2
p- & m-Xylenes	1.4	ug/m3	0.052	0.0086	EPA-TO-15-SIM	ND	A01	2
o-Xylene	0.50	ug/m3	0.052	0.0046	EPA-TO-15-SIM	ND	A01	2
Total Xylenes	1.9	ug/m3	0.10	0.014	EPA-TO-15-SIM	ND	A01	2
4-Bromofluorobenzene (Surrogate)	96.4	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1
4-Bromofluorobenzene (Surrogate)	110	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/17/2023 18:06
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2309559-03	Client Sample Name: AA-UST-C-20230511, 5/11/2023 12:25:00PM, Client								
DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID		
1	EPA-TO-15-SIM	05/15/23 13:13	05/16/23 00:33	RMK	MS-A1	3.150	B166092	EPA TO-15	
2	EPA-TO-15-SIM	05/15/23 13:13	05/15/23 20:51	RMK	MS-A1	1.050	B166092	EPA TO-15	

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 Long Beach, CA 90804

Reported: 05/17/2023 18:06
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2309559-03	Client Sample Name: AA-UST-C-20230511, 5/11/2023 12:25:00PM, Client
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Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	3.0	ppmv	3.2	2.8	ASTM-D1946	ND	J	1

DCN	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	ASTM-D1946	05/16/23 16:00	05/16/23	21:39	RMK	GC-A1	1.580	B166202	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/17/2023 18:06
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2309559-04		Client Sample Name: AA-UST-C-20230511-D, 5/11/2023 12:25:00PM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	3.5	ug/m3	1.1	0.0083	EPA-TO-15-SIM	ND	A01,V11	1
Benzene	0.65	ug/m3	0.056	0.0036	EPA-TO-15-SIM	ND	A01	1
Benzyl chloride	ND	ug/m3	0.56	0.0058	EPA-TO-15-SIM	ND	A01	1
Carbon tetrachloride	ND	ug/m3	0.22	0.0070	EPA-TO-15-SIM	ND	A01	1
Chlorobenzene	ND	ug/m3	0.11	0.0088	EPA-TO-15-SIM	ND	A01	1
Chloroform	ND	ug/m3	0.056	0.0064	EPA-TO-15-SIM	ND	A01	1
1,2-Dibromoethane	ND	ug/m3	0.22	0.016	EPA-TO-15-SIM	ND	A01	1
1,2-Dichlorobenzene	ND	ug/m3	0.22	0.012	EPA-TO-15-SIM	ND	A01	1
1,3-Dichlorobenzene	ND	ug/m3	0.22	0.014	EPA-TO-15-SIM	ND	A01	1
1,4-Dichlorobenzene	ND	ug/m3	0.22	0.018	EPA-TO-15-SIM	ND	A01	1
Dichlorodifluoromethane	2.8	ug/m3	0.056	0.0058	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.056	0.0046	EPA-TO-15-SIM	ND	A01	1
1,2-Dichloroethane	ND	ug/m3	0.11	0.0051	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethene	ND	ug/m3	0.056	0.0087	EPA-TO-15-SIM	ND	A01	1
cis-1,2-Dichloroethene	ND	ug/m3	0.056	0.0049	EPA-TO-15-SIM	ND	A01	1
trans-1,2-Dichloroethene	ND	ug/m3	0.056	0.0083	EPA-TO-15-SIM	ND	A01	1
trans-1,3-Dichloropropene	ND	ug/m3	0.056	0.014	EPA-TO-15-SIM	ND	A01	1
1,1-Difluoroethane	0.47	ug/m3	5.6	0.0030	EPA-TO-15-SIM	ND	J,A01	1
Ethylbenzene	0.34	ug/m3	0.056	0.019	EPA-TO-15-SIM	ND	A01	1
Methylene chloride	ND	ug/m3	0.22	0.0085	EPA-TO-15-SIM	ND	A01	1
Tetrachloroethene	ND	ug/m3	0.11	0.012	EPA-TO-15-SIM	ND	A01	1
Toluene	1.6	ug/m3	0.11	0.0069	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.11	0.0061	EPA-TO-15-SIM	ND	A01	1
1,1,2-Trichloroethane	ND	ug/m3	0.11	0.0061	EPA-TO-15-SIM	ND	A01	1
Trichloroethene	ND	ug/m3	0.11	0.011	EPA-TO-15-SIM	ND	A01	1
Trichlorofluoromethane	1.4	ug/m3	0.056	0.0063	EPA-TO-15-SIM	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.62	ug/m3	0.11	0.0087	EPA-TO-15-SIM	ND	A01	1
Vinyl chloride	ND	ug/m3	0.022	0.0051	EPA-TO-15-SIM	ND	A01	1
p- & m-Xylenes	1.4	ug/m3	0.056	0.0091	EPA-TO-15-SIM	ND	A01	1
o-Xylene	0.47	ug/m3	0.056	0.0049	EPA-TO-15-SIM	ND	A01	1
Total Xylenes	1.8	ug/m3	0.11	0.014	EPA-TO-15-SIM	ND	A01	1
4-Bromofluorobenzene (Surrogate)	105	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/17/2023 18:06
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2309559-04	Client Sample Name: AA-UST-C-20230511-D, 5/11/2023 12:25:00PM, Client
----------------------------------	------------------------------------------------------------------------------

DCN	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	
1	EPA-TO-15-SIM	05/15/23 13:13	05/15/23 21:31		RMK	MS-A1	1.110	B166092	EPA TO-15

DCN = Data Continuation Number

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/17/2023 18:06
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2309559-04	Client Sample Name: AA-UST-C-20230511-D, 5/11/2023 12:25:00PM, Client
----------------------------------	------------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	3.3	ppmv	3.3	3.0	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	ASTM-D1946	05/16/23 16:00	05/16/23	22:00	RMK	GC-A1	1.660	B166202	No Prep

DCN = Data Continuation Number

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/17/2023 18:06
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2309559-05		Client Sample Name: AA-UST-D-20230511, 5/11/2023 12:40:00PM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	2.8	ug/m3	1.1	0.0085	EPA-TO-15-SIM	ND	A01,V11	1
Benzene	0.66	ug/m3	0.056	0.0036	EPA-TO-15-SIM	ND	A01	1
Benzyl chloride	ND	ug/m3	0.56	0.0059	EPA-TO-15-SIM	ND	A01	1
Carbon tetrachloride	ND	ug/m3	0.23	0.0071	EPA-TO-15-SIM	ND	A01	1
Chlorobenzene	ND	ug/m3	0.11	0.0089	EPA-TO-15-SIM	ND	A01	1
Chloroform	ND	ug/m3	0.056	0.0066	EPA-TO-15-SIM	ND	A01	1
1,2-Dibromoethane	ND	ug/m3	0.23	0.016	EPA-TO-15-SIM	ND	A01	1
1,2-Dichlorobenzene	ND	ug/m3	0.23	0.012	EPA-TO-15-SIM	ND	A01	1
1,3-Dichlorobenzene	ND	ug/m3	0.23	0.015	EPA-TO-15-SIM	ND	A01	1
1,4-Dichlorobenzene	ND	ug/m3	0.23	0.018	EPA-TO-15-SIM	ND	A01	1
Dichlorodifluoromethane	2.8	ug/m3	0.056	0.0059	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.056	0.0046	EPA-TO-15-SIM	ND	A01	1
1,2-Dichloroethane	ND	ug/m3	0.11	0.0052	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethene	ND	ug/m3	0.056	0.0088	EPA-TO-15-SIM	ND	A01	1
cis-1,2-Dichloroethene	ND	ug/m3	0.056	0.0050	EPA-TO-15-SIM	ND	A01	1
trans-1,2-Dichloroethene	ND	ug/m3	0.056	0.0085	EPA-TO-15-SIM	ND	A01	1
trans-1,3-Dichloropropene	ND	ug/m3	0.056	0.015	EPA-TO-15-SIM	ND	A01	1
1,1-Difluoroethane	0.42	ug/m3	5.6	0.0031	EPA-TO-15-SIM	ND	J,A01	1
Ethylbenzene	0.31	ug/m3	0.056	0.019	EPA-TO-15-SIM	ND	A01	1
Methylene chloride	ND	ug/m3	0.23	0.0087	EPA-TO-15-SIM	ND	A01	1
Tetrachloroethene	ND	ug/m3	0.11	0.012	EPA-TO-15-SIM	ND	A01	1
Toluene	1.5	ug/m3	0.11	0.0070	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.11	0.0062	EPA-TO-15-SIM	ND	A01	1
1,1,2-Trichloroethane	ND	ug/m3	0.11	0.0062	EPA-TO-15-SIM	ND	A01	1
Trichloroethene	ND	ug/m3	0.11	0.011	EPA-TO-15-SIM	ND	A01	1
Trichlorofluoromethane	1.4	ug/m3	0.056	0.0064	EPA-TO-15-SIM	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.62	ug/m3	0.11	0.0088	EPA-TO-15-SIM	ND	A01	1
Vinyl chloride	ND	ug/m3	0.023	0.0052	EPA-TO-15-SIM	ND	A01	1
p- & m-Xylenes	1.2	ug/m3	0.056	0.0093	EPA-TO-15-SIM	ND	A01	1
o-Xylene	0.43	ug/m3	0.056	0.0050	EPA-TO-15-SIM	ND	A01	1
Total Xylenes	1.6	ug/m3	0.11	0.015	EPA-TO-15-SIM	ND	A01	1
4-Bromofluorobenzene (Surrogate)	112	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/17/2023 18:06
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2309559-05	Client Sample Name: AA-UST-D-20230511, 5/11/2023 12:40:00PM, Client
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DCN	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	
1	EPA-TO-15-SIM	05/15/23 13:13	05/15/23 22:11		RMK	MS-A1	1.130	B166092	EPA TO-15

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/17/2023 18:06
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2309559-05	Client Sample Name: AA-UST-D-20230511, 5/11/2023 12:40:00PM, Client
----------------------------------	----------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	3.5	ppmv	3.2	2.9	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/16/23 16:00	05/16/23 22:20	RMK	GC-A1	1.610	B166202	No Prep

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/17/2023 18:06
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2309559-06		Client Sample Name: AA-CT-20230511, 5/11/2023 11:15:00AM, Client						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Acetone	2.4	ug/m3	1.1	0.0082	EPA-TO-15-SIM	ND	A01,V11	1
Benzene	0.59	ug/m3	0.055	0.0035	EPA-TO-15-SIM	ND	A01	1
Benzyl chloride	ND	ug/m3	0.55	0.0057	EPA-TO-15-SIM	ND	A01	1
Carbon tetrachloride	ND	ug/m3	0.22	0.0069	EPA-TO-15-SIM	ND	A01	1
Chlorobenzene	ND	ug/m3	0.11	0.0087	EPA-TO-15-SIM	ND	A01	1
Chloroform	ND	ug/m3	0.055	0.0064	EPA-TO-15-SIM	ND	A01	1
1,2-Dibromoethane	ND	ug/m3	0.22	0.015	EPA-TO-15-SIM	ND	A01	1
1,2-Dichlorobenzene	ND	ug/m3	0.22	0.012	EPA-TO-15-SIM	ND	A01	1
1,3-Dichlorobenzene	ND	ug/m3	0.22	0.014	EPA-TO-15-SIM	ND	A01	1
1,4-Dichlorobenzene	ND	ug/m3	0.22	0.018	EPA-TO-15-SIM	ND	A01	1
Dichlorodifluoromethane	2.7	ug/m3	0.055	0.0057	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	0.055	0.0045	EPA-TO-15-SIM	ND	A01	1
1,2-Dichloroethane	ND	ug/m3	0.11	0.0051	EPA-TO-15-SIM	ND	A01	1
1,1-Dichloroethene	ND	ug/m3	0.055	0.0086	EPA-TO-15-SIM	ND	A01	1
cis-1,2-Dichloroethene	ND	ug/m3	0.055	0.0048	EPA-TO-15-SIM	ND	A01	1
trans-1,2-Dichloroethene	ND	ug/m3	0.055	0.0082	EPA-TO-15-SIM	ND	A01	1
trans-1,3-Dichloropropene	ND	ug/m3	0.055	0.014	EPA-TO-15-SIM	ND	A01	1
1,1-Difluoroethane	0.47	ug/m3	5.5	0.0030	EPA-TO-15-SIM	ND	J,A01	1
Ethylbenzene	0.26	ug/m3	0.055	0.019	EPA-TO-15-SIM	ND	A01	1
Methylene chloride	ND	ug/m3	0.22	0.0085	EPA-TO-15-SIM	ND	A01	1
Tetrachloroethene	ND	ug/m3	0.11	0.012	EPA-TO-15-SIM	ND	A01	1
Toluene	1.1	ug/m3	0.11	0.0068	EPA-TO-15-SIM	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	0.11	0.0060	EPA-TO-15-SIM	ND	A01	1
1,1,2-Trichloroethane	ND	ug/m3	0.11	0.0060	EPA-TO-15-SIM	ND	A01	1
Trichloroethene	ND	ug/m3	0.11	0.010	EPA-TO-15-SIM	ND	A01	1
Trichlorofluoromethane	1.4	ug/m3	0.055	0.0063	EPA-TO-15-SIM	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.61	ug/m3	0.11	0.0086	EPA-TO-15-SIM	ND	A01	1
Vinyl chloride	ND	ug/m3	0.022	0.0051	EPA-TO-15-SIM	ND	A01	1
p- & m-Xylenes	0.94	ug/m3	0.055	0.0090	EPA-TO-15-SIM	ND	A01	1
o-Xylene	0.33	ug/m3	0.055	0.0048	EPA-TO-15-SIM	ND	A01	1
Total Xylenes	1.3	ug/m3	0.11	0.014	EPA-TO-15-SIM	ND	A01	1
4-Bromofluorobenzene (Surrogate)	99.7	%	50 - 150 (LCL - UCL)		EPA-TO-15-SIM			1

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/17/2023 18:06
Project: City Terrace
Project Number: 36908
Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2309559-06	Client Sample Name: AA-CT-20230511, 5/11/2023 11:15:00AM, Client
----------------------------------	-------------------------------------------------------------------------

DCN	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	
1	EPA-TO-15-SIM	05/15/23 13:13	05/15/23 22:51		RMK	MS-A1	1.100	B166092	EPA TO-15

DCN = Data Continuation Number

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 Long Beach, CA 90804

Reported: 05/17/2023 18:06
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Fixed Gases by GC/TCD (ASTM D1946)

BCL Sample ID: 2309559-06	Client Sample Name: AA-CT-20230511, 5/11/2023 11:15:00AM, Client
----------------------------------	-------------------------------------------------------------------------

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	DCN
Methane (CH4)	4.0	ppmv	3.2	2.9	ASTM-D1946	ND		1

DCN	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	ASTM-D1946	05/16/23 16:00	05/16/23 22:40	RMK	GC-A1	1.610	B166202	No Prep

DCN = Data Continuation Number

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/17/2023 18:06
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
QC Batch ID: B166092							
Acetone	B166092-BLK1	ND	ug/m3	1.0	0.0075		1
Benzene	B166092-BLK1	ND	ug/m3	0.050	0.0032		1
Benzyl chloride	B166092-BLK1	ND	ug/m3	0.50	0.0052		1
Carbon tetrachloride	B166092-BLK1	ND	ug/m3	0.20	0.0063		1
Chlorobenzene	B166092-BLK1	ND	ug/m3	0.10	0.0079		1
Chloroform	B166092-BLK1	ND	ug/m3	0.050	0.0058		1
1,2-Dibromoethane	B166092-BLK1	ND	ug/m3	0.20	0.014		1
1,2-Dichlorobenzene	B166092-BLK1	ND	ug/m3	0.20	0.011		1
1,3-Dichlorobenzene	B166092-BLK1	ND	ug/m3	0.20	0.013		1
1,4-Dichlorobenzene	B166092-BLK1	ND	ug/m3	0.20	0.016		1
Dichlorodifluoromethane	B166092-BLK1	ND	ug/m3	0.050	0.0052		1
1,1-Dichloroethane	B166092-BLK1	ND	ug/m3	0.050	0.0041		1
1,2-Dichloroethane	B166092-BLK1	ND	ug/m3	0.10	0.0046		1
1,1-Dichloroethene	B166092-BLK1	ND	ug/m3	0.050	0.0078		1
cis-1,2-Dichloroethene	B166092-BLK1	ND	ug/m3	0.050	0.0044		1
trans-1,2-Dichloroethene	B166092-BLK1	ND	ug/m3	0.050	0.0075		1
trans-1,3-Dichloropropene	B166092-BLK1	ND	ug/m3	0.050	0.013		1
1,1-Difluoroethane	B166092-BLK1	ND	ug/m3	5.0	0.0027		1
Ethylbenzene	B166092-BLK1	ND	ug/m3	0.050	0.017		1
Methylene chloride	B166092-BLK1	ND	ug/m3	0.20	0.0077		1
Tetrachloroethene	B166092-BLK1	ND	ug/m3	0.10	0.011		1
Toluene	B166092-BLK1	ND	ug/m3	0.10	0.0062		1
1,1,1-Trichloroethane	B166092-BLK1	ND	ug/m3	0.10	0.0055		1
1,1,2-Trichloroethane	B166092-BLK1	ND	ug/m3	0.10	0.0055		1
Trichloroethene	B166092-BLK1	ND	ug/m3	0.10	0.0095		1
Trichlorofluoromethane	B166092-BLK1	ND	ug/m3	0.050	0.0057		1
1,1,2-Trichloro-1,2,2-trifluoroethane	B166092-BLK1	ND	ug/m3	0.10	0.0078		1
Vinyl chloride	B166092-BLK1	ND	ug/m3	0.020	0.0046		1
p- & m-Xylenes	B166092-BLK1	ND	ug/m3	0.050	0.0082		1
o-Xylene	B166092-BLK1	ND	ug/m3	0.050	0.0044		1
Total Xylenes	B166092-BLK1	ND	ug/m3	0.10	0.013		1
4-Bromofluorobenzene (Surrogate)	B166092-BLK1	80.1	%	50 - 150 (LCL - UCL)			1

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 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/17/2023 18:06
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals	Run #
								Percent Recovery	RPD		
QC Batch ID: B166092											
Benzene	B166092-BS1	LCS	0.30120	0.31948	ug/m3	94.3		70 - 130			1
	B166092-BSD1	LCSD	0.30596	0.31948	ug/m3	95.8	1.6	70 - 130	30		2
Benzyl chloride	B166092-BS1	LCS	0.56261	0.51772	ug/m3	109		70 - 130			1
	B166092-BSD1	LCSD	0.57700	0.51772	ug/m3	111	2.5	70 - 130	30		2
Carbon tetrachloride	B166092-BS1	LCS	0.57761	0.62913	ug/m3	91.8		70 - 130			1
	B166092-BSD1	LCSD	0.59239	0.62913	ug/m3	94.2	2.5	70 - 130	30		2
Chlorobenzene	B166092-BS1	LCS	0.45060	0.46036	ug/m3	97.9		70 - 130			1
	B166092-BSD1	LCSD	0.45313	0.46036	ug/m3	98.4	0.6	70 - 130	30		2
Chloroform	B166092-BS1	LCS	0.47531	0.48825	ug/m3	97.4		70 - 130			1
	B166092-BSD1	LCSD	0.48484	0.48825	ug/m3	99.3	2.0	70 - 130	30		2
1,2-Dibromoethane	B166092-BS1	LCS	0.73692	0.76835	ug/m3	95.9		70 - 130			1
	B166092-BSD1	LCSD	0.73907	0.76835	ug/m3	96.2	0.3	70 - 130	30		2
1,2-Dichlorobenzene	B166092-BS1	LCS	0.64134	0.60124	ug/m3	107		70 - 130			1
	B166092-BSD1	LCSD	0.64645	0.60124	ug/m3	108	0.8	70 - 130	30		2
1,3-Dichlorobenzene	B166092-BS1	LCS	0.62913	0.60124	ug/m3	105		70 - 130			1
	B166092-BSD1	LCSD	0.64783	0.60124	ug/m3	108	2.9	70 - 130	30		2
1,4-Dichlorobenzene	B166092-BS1	LCS	0.71276	0.60124	ug/m3	119		70 - 130			1
	B166092-BSD1	LCSD	0.71204	0.60124	ug/m3	118	0.1	70 - 130	30		2
1,1-Dichloroethane	B166092-BS1	LCS	0.39292	0.40474	ug/m3	97.1		70 - 130			1
	B166092-BSD1	LCSD	0.39762	0.40474	ug/m3	98.2	1.2	70 - 130	30		2
1,2-Dichloroethane	B166092-BS1	LCS	0.39049	0.40474	ug/m3	96.5		70 - 130			1
	B166092-BSD1	LCSD	0.39159	0.40474	ug/m3	96.7	0.3	70 - 130	30		2
1,1-Dichloroethene	B166092-BS1	LCS	0.38064	0.39649	ug/m3	96.0		70 - 130			1
	B166092-BSD1	LCSD	0.39324	0.39649	ug/m3	99.2	3.3	70 - 130	30		2
cis-1,2-Dichloroethene	B166092-BS1	LCS	0.37568	0.39649	ug/m3	94.8		70 - 130			1
	B166092-BSD1	LCSD	0.38777	0.39649	ug/m3	97.8	3.2	70 - 130	30		2
Methylene chloride	B166092-BS1	LCS	0.38576	0.34737	ug/m3	111		70 - 130			1
	B166092-BSD1	LCSD	0.38968	0.34737	ug/m3	112	1.0	70 - 130	30		2
Tetrachloroethene	B166092-BS1	LCS	0.67208	0.67825	ug/m3	99.1		70 - 130			1
	B166092-BSD1	LCSD	0.67839	0.67825	ug/m3	100	0.9	70 - 130	30		2
Toluene	B166092-BS1	LCS	0.35510	0.37684	ug/m3	94.2		70 - 130			1
	B166092-BSD1	LCSD	0.36000	0.37684	ug/m3	95.5	1.4	70 - 130	30		2
1,1,1-Trichloroethane	B166092-BS1	LCS	0.51910	0.54562	ug/m3	95.1		70 - 130			1
	B166092-BSD1	LCSD	0.52767	0.54562	ug/m3	96.7	1.6	70 - 130	30		2
1,1,2-Trichloroethane	B166092-BS1	LCS	0.52259	0.54562	ug/m3	95.8		70 - 130			1
	B166092-BSD1	LCSD	0.52292	0.54562	ug/m3	95.8	0.1	70 - 130	30		2

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Roux Associates, Inc -Long Beach
 5150 E. Pacific Coast Hwy, Suite 450
 Long Beach, CA 90804

Reported: 05/17/2023 18:06
 Project: City Terrace
 Project Number: 36908
 Project Manager: April McGuire

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Run #
								Percent Recovery	RPD		
QC Batch ID: B166092											
Trichloroethene	B166092-BS1	LCS	0.51174	0.53737	ug/m3	95.2		70 - 130			1
	B166092-BSD1	LCSD	0.51163	0.53737	ug/m3	95.2	0.0	70 - 130	30		2
Vinyl chloride	B166092-BS1	LCS	0.25953	0.25562	ug/m3	102		70 - 130			1
	B166092-BSD1	LCSD	0.27688	0.25562	ug/m3	108	6.5	70 - 130	30		2
p- & m-Xylenes	B166092-BS1	LCS	0.83074	0.86843	ug/m3	95.7		70 - 130			1
	B166092-BSD1	LCSD	0.82713	0.86843	ug/m3	95.2	0.4	70 - 130	30		2
o-Xylene	B166092-BS1	LCS	0.41485	0.43421	ug/m3	95.5		70 - 130			1
	B166092-BSD1	LCSD	0.41307	0.43421	ug/m3	95.1	0.4	70 - 130	30		2
Total Xylenes	B166092-BS1	LCS	1.2456	1.3026	ug/m3	95.6		70 - 130			1
	B166092-BSD1	LCSD	1.2402	1.3026	ug/m3	95.2	0.4	70 - 130	30		2
4-Bromofluorobenzene (Surrogate)	B166092-BS1	LCS	3.65	3.58	ug/m3	102		50 - 150			1
	B166092-BSD1	LCSD	3.65	3.58	ug/m3	102	0.0	50 - 150			2

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Quality Control Report - Laboratory Control Sample

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
2	B166092-BSD1	LCSD	EPA-TO-15-SIM	05/15/23	05/15/23 17:43	RMK	MS-A1	1
2	B166092-BSD1	LCSD	EPA-TO-15-SIM	05/15/23	05/15/23 17:43	RMK	MS-A1	1
2	B166092-BSD1	LCSD	EPA-TO-15-SIM	05/15/23	05/15/23 17:43	RMK	MS-A1	1
2	B166092-BSD1	LCSD	EPA-TO-15-SIM	05/15/23	05/15/23 17:43	RMK	MS-A1	1
2	B166092-BSD1	LCSD	EPA-TO-15-SIM	05/15/23	05/15/23 17:43	RMK	MS-A1	1
2	B166092-BSD1	LCSD	EPA-TO-15-SIM	05/15/23	05/15/23 17:43	RMK	MS-A1	1
2	B166092-BSD1	LCSD	EPA-TO-15-SIM	05/15/23	05/15/23 17:43	RMK	MS-A1	1
2	B166092-BSD1	LCSD	EPA-TO-15-SIM	05/15/23	05/15/23 17:43	RMK	MS-A1	1
2	B166092-BSD1	LCSD	EPA-TO-15-SIM	05/15/23	05/15/23 17:43	RMK	MS-A1	1
2	B166092-BSD1	LCSD	EPA-TO-15-SIM	05/15/23	05/15/23 17:43	RMK	MS-A1	1
2	B166092-BSD1	LCSD	EPA-TO-15-SIM	05/15/23	05/15/23 17:43	RMK	MS-A1	1
2	B166092-BSD1	LCSD	EPA-TO-15-SIM	05/15/23	05/15/23 17:43	RMK	MS-A1	1
2	B166092-BSD1	LCSD	EPA-TO-15-SIM	05/15/23	05/15/23 17:43	RMK	MS-A1	1
2	B166092-BSD1	LCSD	EPA-TO-15-SIM	05/15/23	05/15/23 17:43	RMK	MS-A1	1
2	B166092-BSD1	LCSD	EPA-TO-15-SIM	05/15/23	05/15/23 17:43	RMK	MS-A1	1
2	B166092-BSD1	LCSD	EPA-TO-15-SIM	05/15/23	05/15/23 17:43	RMK	MS-A1	1
2	B166092-BSD1	LCSD	EPA-TO-15-SIM	05/15/23	05/15/23 17:43	RMK	MS-A1	1
2	B166092-BSD1	LCSD	EPA-TO-15-SIM	05/15/23	05/15/23 17:43	RMK	MS-A1	1
2	B166092-BSD1	LCSD	EPA-TO-15-SIM	05/15/23	05/15/23 17:43	RMK	MS-A1	1
2	B166092-BSD1	LCSD	EPA-TO-15-SIM	05/15/23	05/15/23 17:43	RMK	MS-A1	1

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Fixed Gases by GC/TCD (ASTM D1946)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	Run #
-------------	--------------	-----------	-------	-----	-----	-----------	-------

QC Batch ID: B166202

Methane (CH4)	B166202-BLK1	ND	ppmv	2.0	1.8		1
---------------	--------------	----	------	-----	-----	--	---

Run #	QC Sample ID	QC Type	Method	Prep Date	Run Date Time	Analyst	Instrument	Dilution
1	B166202-BLK1	PB	ASTM-D1946	05/16/23	05/16/23 20:39	RMK	GC-A1	1

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Fixed Gases by GC/TCD (ASTM D1946)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Run #
								Percent Recovery	RPD		
QC Batch ID: B166202											
Methane (CH4)	B166202-BS1	LCS	21574	18000	ppmv	120		70 - 130			1
	B166202-BSD1	LCSD	21352	18000	ppmv	119	1.0	70 - 130	30		2

Run #	QC Sample ID	QC Type	Method	Prep Date	Run		Analyst	Instrument	Dilution
					Date	Time			
1	B166202-BS1	LCS	ASTM-D1946	05/16/23	05/16/23	19:58	RMK	GC-A1	1
2	B166202-BSD1	LCSD	ASTM-D1946	05/16/23	05/16/23	20:18	RMK	GC-A1	1

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Notes And Definitions

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A01 Detection and quantitation limits are raised due to sample dilution.
- V11 The Continuing Calibration Verification (CCV) recovery was not within established control limits.

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Student's t-Test Calculations

APPENDIX B STUDENT'S t-TEST CALCULATIONS

This appendix has been prepared to document the procedures that were used to determine whether mean average benzene values between ambient/outdoor air data sets are significantly different from one another. A series of statistical analyses were carried out in Microsoft Excel using the Student's t-Test functionality (*T.TEST*), which calculates the probability (p-value) associated with a Student's t-Test to determine whether two groups of samples are likely to have come from the same two underlying populations that have the same mean. The Excel function returns a p-value which is compared against a conservative reference significance value of 0.01 to determine if there is a significant difference between the two groups of samples. If the calculated Student's t-Test p-value is less than 0.01, there is a significant difference between the two groups of samples, and vice versa if the calculated p-value is greater than 0.01.

SYNTAX

Each calculation was performed using the following syntax in Microsoft Excel:

```
=T.TEST(array1,array2,2,2)
```

Where array1 = the first data set, array 2 = the second data set, the first '2' = the number of distribution tails (two), and the second '2' = the type of t-Test being performed (two-sample equal variance [homoscedastic]). A two-tailed test is used because a significant difference between two groups of samples can occur in either direction (i.e., one group can have a significantly different mean that is greater than, or less than, the other group). A two-sample equal variance t-Test is performed because the sample groups being compared are not paired (i.e., correlated) and have similar variances within each group.

GROUPS OF DATA

Sample groups were arranged according to their respective study (i.e., Peak/Minimum Traffic Study, Lateral Variation Study, Gasoline Service Station / Fueling Facilities Study) and/or location (i.e., Freeway (within 0.125 miles), Non-Highway (greater than 0.125 miles), City Terrace Community (including samples from Roux's *Soil Gas and Indoor Air Sampling Report*, dated June 2023¹), Greater Los Angeles Air Basin (data from AQMD's Mates V Air Monitoring Dashboard²).

No duplicates were included in any analysis. Except for comparisons within the Peak/Minimum Traffic Study, in which ambient/outdoor air samples were collected over three-hour intervals, all ambient/outdoor air sample groups for the Lateral Variation Study and Gasoline Service Station / Fueling Facilities Study, as well as the City Terrace Community sample group, were collected over 24-hour intervals. Data from the April 7 Peak/Minimum Traffic Study were considered outliers and were excluded from the Student t-Test calculation, where applicable

The Greater Los Angeles Air Basin ambient/outdoor air sample data represents the average benzene concentrations recorded from 2018 – 2019 at the following locations: Burbank, Central LA, Compton, Huntington Park, Inland Valley San Bernadino, Long Beach, Pico Riviera, Rubidoux, and West Long Beach.

¹ Roux. *Soil Gas and Indoor Air Sampling Report: City Terrace Community*. June 2023.

² <http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v/mates-v-air-monitoring-dashboard>

COMPARISONS

Student t-Test Excel calculations were performed for the following sample groups:

- City Terrace Community (n=24) vs. Greater Los Angeles Air Basin (n=9)
- Peak/Minimum Traffic Study (3-hour collection time)
 - Freeway Adjacent Peak Traffic (n=6) vs. Freeway Adjacent Minimum Traffic (n=6)
 - Non-Freeway Adjacent Peak Traffic (n=2) vs. Non-Freeway Adjacent Minimum Traffic (n=2)
- Lateral Variation Study
 - Lateral Variation Study (n=29) vs. Greater Los Angeles Air Basin (n=9)
 - Freeway Adjacent (n=8) vs. City Terrace Community (n=24)
 - Non-Freeway Adjacent (n=21) vs. City Terrace Community (n=24)
- Gasoline Service Station / Fueling Facilities Study
 - Fueling Sites A and B (n=2) vs. Freeway Adjacent (n=8)
 - Fueling Sites C and D (n=2) vs. City Terrace Community (n=24)

RESULTS

The following sample groups were calculated to be **significantly different** from each other (i.e., the calculated Student t-Test p-value was less than 0.01):

- City Terrace Community vs. Greater Los Angeles Air Basin
 - p-value = 0.0016
- Freeway Adjacent Peak Traffic vs. Freeway Adjacent Minimum Traffic
 - p-value = 2.2×10^{-5}
- Non-Freeway Adjacent Peak Traffic vs. Non-Freeway Adjacent Minimum Traffic
 - p-value = 0.005
- Lateral Variation Freeway Adjacent vs. City Terrace Community
 - p-value = 6.8×10^{-5}

The following sample groups were calculated to **not be significantly different** from each other (i.e., the calculated Student t-Test p-value was greater than 0.01):

- Lateral Variation Study vs. Greater Los Angeles Air Basin
 - p-value = 0.97
- Lateral Variation Non-Freeway Adjacent vs. City Terrace Community
 - p-value = 0.02
- Gasoline Service Station / Fueling Facilities Study Fueling Sites A and B vs. Freeway Adjacent
 - p-value = 0.72
- Gasoline Service Station / Fueling Facilities Study Fueling Sites C and D vs. City Terrace Community
 - p-value = 0.93