

**ODOR IMPACTS ASSESSMENT OF  
CHIQUITA CANYON LANDFILL  
ELEVATED TEMPERATURE LANDFILL EVENT**

Prepared for:

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## DEFINITIONS

**Adverse health effect** – "a change in body function or cell structure that might lead to disease or health problems" (ATSDR, 2018).

**Anosmia** – complete or severe loss of the subjective sense of smell (NLM, 2021).

**Hedonic tone** – the relative pleasantness or unpleasantness of the odor (AIHA, 2024; USEPA, 1992).

**Hyperosmia** – hypersensitivity to smell (USEPA, 1992).

**Hyposmia** – the partial loss of smell (USEPA, 1992).

**Irritation threshold** – the estimated concentration and duration of specific chemical below which most people report no sensory irritation in controlled studies (AIHA, 2024).

**Level of distinct odor awareness (LOA)** – the concentration above which it is predicted that more than half the exposed population will experience at least a distinct odor intensity, and about 10% of the population will experience a strong odor intensity (NRC, 2010).

**Normosmia** – the normal sense of smell (AIHA, 2024).

**Odor** – the perception of sensation evoked by chemosensory stimulation (Pellegrino et al., 2017).

**Odorant** – the chemical compound or molecule evoking an odor (Pellegrino et al., 2017).

**Odorant detectability (threshold)** – the theoretical minimum concentration of odorant stimulus necessary for detection in some specified percentage of the population (USEPA, 1992).

**Odor character** – what the odorant "smells like" (e.g., fishy, hay, nutty, creosote, rancid, sewer, rotten eggs, ammonia) (AIHA, 2024; USEPA, 1992).

**Odor detection threshold** – the lowest concentration of odorant that will elicit an olfactory response without reference to odor quality in 50% of odor panel subjects measured in a laboratory setting (AIHA, 2024; USEPA, 1992).

**Odor intensity** – the perceived strength of the odor sensation. Intensity increases as a function of concentration and may also be impacted by an individual's subjective perception and expectations (AIHA, 2024; USEPA, 1992).

**Odor plume** – odor molecules released from a source and moved by the wind (Young et al., 2020).

**Odor recognition threshold** – the minimum concentration that is recognized as having a characteristic odor quality by a specific percentage (usually 50%) of panel subjects and is typically measured in a laboratory setting (USEPA, 1992).

**Parosmia** – a distorted sense of smell (AIHA, 2024).

**Pathology** – the branch of medicine concerned with the nature and cause of disease as expressed by changes in cellular or tissue structure and function caused by the disease process (NLM, 2019a).

**Pathological effect** – a change in cellular or tissue structure and function as an effect of the disease process.

**Phantosmia** – the sensation of smell in absence of an odorant, or the sensation of "phantom" odors (AIHA, 2024).

**Physiology** – the biological science concerned with the life-supporting properties, functions, and processes of living organisms or their parts (NLM, 2019b).

**Physiological response** – an organism's automatic, instinctive, unlearned response to internal or external stimuli (e.g., increased heart rate, change in respiration).

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## EXECUTIVE SUMMARY

An elevated temperature event has been identified at Chiquita Canyon Landfill (CCL), a 639-acre municipal solid waste landfill owned and operated by Chiquita Canyon, LLC (Chiquita). This event caused an increase in CCL's generation of landfill gas. Residents in nearby residential communities, such as Val Verde, Live Oak, Hasley Hills, and other nearby neighborhoods, have reported that odors they attribute to CCL have caused them to experience, among other things, nausea, headache, difficulty breathing, and nose bleeds. In response to this event and the concerns of the residents, I, Richard C. Pleus, Ph.D., M.S., Founder, Managing Director, and Chief Toxicologist at Intertox Inc. ("Intertox"), with assistance from my team (herein referred to as "we"), was asked to fulfill the role of a public health member of the Reaction Committee to "evaluate the potential health impacts of odorants emitted by the Chiquita Canyon Landfill elevated temperature event" (Mod. Stip. Order of Abatement Case No. 6177-4, March 2024). This Odor Impacts Assessment report presents the results of my assessment.

Foul odors can trigger physiological responses that can cause a person to feel unwell (e.g., for example, with a headache, nasal congestion, dizziness, or watery eyes) or affect their quality of life and sense of well-being. Feeling unwell as a result of exposure to air contaminants can be due to: (1) adverse health effects that result if an individual is exposed to sufficient concentrations of specific chemicals for sufficient periods of time (i.e., toxicological assessment) (2) sporadic non-toxic stimulation of certain nerves in the head (cranial nerves) due to exposure to sufficient concentrations of specific chemicals (i.e., physiological response assessment); or (3) psychological responses to odors. CTEH has conducted a toxicological assessment of chemicals of interest at the CCL pursuant to Condition 12(g)(vi) of the Stipulated Order for Abatement, addressing item 1 (toxicological assessment). This Odor Impacts Report Assessment is being submitted concurrently with CTEH's report and evaluates item 2 (physiological response assessment). Item 3 (psychological assessment) is outside the scope of either report, although it is discussed briefly herein.

Physiological symptoms, such as headache, nasal congestion, dizziness, and watery eyes, can also result from direct stimulation of cranial nerves when chemicals such as odorants bind to nerve receptors at sufficient concentrations. Two systems for detecting and responding to odorants have been described in our eyes, nose, and oral cavity. One is via interactions between olfactory receptors in the nose and the brain, which interprets the odors (a system known as olfaction). Olfactory receptors that are embedded in the roof of the nose (in the olfactory epithelium) combine to form the olfactory nerve (cranial nerve I); if an odorant is present at high enough concentrations in the air, the odorant binds to the olfactory receptors and sends a signal to the brain to produce the sensation of odor (which, for example, can be interpreted in a variety of ways such as smoky, earthy, fruity). When the brain receives the signal from the olfactory receptors, a bodily reaction (i.e., a physiological

response) can occur, if the odorant is present at sufficient concentration, based on the nature of the odor and a person's experience with the odorant.

A second system for the physiological response to odor is the stimulation of specific facial, nose, mouth, and upper respiratory tract nerves by the odorant. The primary nerve involved in this response is the trigeminal nerve (also known as cranial nerve V). Irritation in the lower respiratory tract can also be triggered by C-fibers (also known as Group C nerve fibers) of the vagus nerve (cranial nerve X). Stimulation of C-fibers in the trigeminal or vagus nerve can trigger nerve impulses that cause sneezing, nasal stuffiness, rhinorrhea, facial pain, eye irritation, watery eyes, headache, sinus congestion, cough, throat irritation, and wheezing. A person senses these stimuli as irritation (e.g., tingling, burning, cooling/warming).

The human sensory perception of odors is typically described using four primary measures of odor: odor threshold (or concentration), intensity (or strength), character, and hedonic tone. In addition, odorants' irritancy potential provides an important measure of potential physiological response to odors. In this assessment, we apply these measures to assess the potential impact of odors on residents of the neighborhoods (e.g., Val Verde, Live Oak, Hasley Hills) surrounding CCL.

To conduct our odor assessment, we reviewed multiple sources of chemical and odor data, including:

- Chemical concentrations measured in air samples collected by SCS Engineers and CTEH (in the 28-day air quality study), which were used by CTEH to assess whether constituents in the air are above health-protective levels and, if so, to understand what warrants further investigation. We used these data to identify odorous chemicals (odorants) detected in air samples collected in the neighborhoods (e.g., Val Verde, Live Oak, Hasley Hills) surrounding CCL.
- Odor complaint data reported to AQMD and in public meetings. We used these data to identify the types of odors and physiological effects that have been reported by impacted residents, and to help identify areas that have been reported as impacted by odors.
- CCL odor patrol surveys. We used these surveys to help identify where odors have been detected most frequently and with higher subjective (vs objective) intensities.

In addition, in June 2024 Intertox conducted a 7-day odor study to collect air samples for chemical analysis (herein referred to as odor assessment samples) the same time that odor was measured using odor samplers that met certain characteristics of "odorous" (i.e., using the Nasal Ranger® instrument, the odor was measured at or above 7 dilutions to thresholds (7 D/T), a relatively common regulatory standard for determining "nuisance" odor by multiple state agencies). The objective of this study was to identify odorous chemicals that were

present above odor detection thresholds. In this assessment, we used the lowest odor detection thresholds identified in guidance documents and peer-reviewed literature to ensure that the assessment is relevant to individuals with higher sensitivity to odors (e.g., hyperosmic, pregnant women, and children).

To understand the potential physiological effects of exposure to odorants in the neighborhoods surrounding CCL, we identified which odorants were detected at or above the lowest odor detection threshold. We then identified which odorants have the potential to cause irritation through stimulation of the cranial nerves (i.e., trigeminal or vagus nerves) and compared detected concentrations to irritation thresholds available from authoritative agencies and organizations or described in the peer-reviewed literature.

To characterize odor experience, we compared odor intensities measured by odor samplers to 7 D/T (as mentioned above), and identified and evaluated the odors' character and hedonic tone when the odor intensity exceeded 7 D/T.

We found that several odorants were detected at or above the lowest odor detection threshold at off-site sample locations in grab air samples collected when an odor was detected above 7 D/T by Intertox during the June 2024 odor study. The odorants that were detected at or above the lowest odor detection threshold, as well as their frequencies of detection above the lowest odor detection thresholds and common odor descriptors, include:

- Hydrogen sulfide, which has a "rotten egg" odor, was detected at or above the lowest odor detection threshold in 42% of Intertox air samples from the June 2024 odor study.
- Dimethyl disulfide, which has a "rotten cabbage" odor, was detected at or above the lowest odor detection threshold in 95% of the Intertox air samples from the June 2024 odor study.
- Dimethyl sulfide, which has a disagreeable, asparagus, or putrid odor, was detected at or above the lowest odor detection threshold in 22% of Intertox air samples from the June 2024 odor study.
- Methyl mercaptan, which has a "rotten cabbage" odor, was detected at or above the lowest odor detection threshold in 32% of the Intertox air samples from the June 2024 odor study.
- Propylene dichloride, which has a chloroform-like odor, was detected at or above the lowest odor detection threshold in 95% of the Intertox air samples from the June 2024 odor study.
- Propyl mercaptan, which has a cabbage, natural gas-type odor, was detected at or above the lowest odor detection threshold in 84% of the Intertox air samples from the June 2024 odor study.

- Ethyl mercaptan, which has a vegetable sulfurous-type odor, was detected at or above the lowest odor detection threshold in 63% of the Intertox air samples from the June 2024 odor study.
- Acrolein, which has a pungent, disagreeable almond- or cherry-like odor, was detected at or above the lowest odor detection threshold in 37% of the Intertox air samples from the June 2024 odor study.
- Butyl mercaptan, which has a skunk-like odor, was detected at or above the lowest odor detection threshold in 17% of the Intertox air samples from the June 2024 odor study.
- tert-Butyl mercaptan, which has a foul-smelling odor, was detected at or above the lowest odor detection threshold in 17% of the Intertox air samples from the June 2024 odor study.
- Ethanol with an ethereal, vinous alcohol odor was detected at or above the lowest odor detection threshold in 5% of the CTEH samples from the June 2024 odor study and was not tested for by Intertox.

CTEH also collected air samples during the June 2024 odor study and, except for hydrogen sulfide, Intertox and CTEH detected similar chemicals, however, Intertox detected those chemicals more frequently in Tedlar bag air samples. Differences in detection frequency between Intertox and CTEH samples were likely due to differences in detection limits based on the type of analytical equipment used to measure the concentration of the chemicals detected in the air samples.

Analysis of the results of the Intertox odor study conducted in June 2024 suggests:

- If an odor is detected in the neighborhoods surrounding CCL, it is most likely caused by hydrogen sulfide and/or dimethyl sulfide. These pungent chemicals have the lowest odor detection thresholds and were the most frequently detected chemicals at or above the lowest odor detection threshold.
- Odor intensities at or above 7 D/T were recorded less than 2.5% of the time we tested in the June 2024 study.
- Odors with intensities at or above 7 D/T and a negative hedonic tone were characterized as garbage, manure, and tar/asphalt.
- If an odor at or above 7 D/T is detected in the neighborhoods surrounding CCL, people likely detected individual or combinations of sulfides (hydrogen sulfide and dimethyl disulfide), propylene dichloride, and/or mercaptans (butyl mercaptan, tert-butyl mercaptan, propyl mercaptan, ethyl mercaptan, and methyl mercaptan), because these chemicals were detected in the study at or above their average odor detection thresholds.

Previous sampling efforts were conducted by SCS Engineers (off-site, weekly grab air samples collected throughout 2023 and 2024) and CTEH (28-day air quality study using the PTR-MS mobile van air sampling). There is a difference in their collection techniques. Air samples collected by SCS Engineers and during CTEH's 28-day air quality study were not collected simultaneously with Nasal Ranger® odor samples; therefore, air samples did not necessarily coincide with the occurrence of strong ( $\geq 7$  D/T) environmental odors. These sampling efforts also detected the following odorants at or above the minimum odor detection threshold:

- Hydrogen sulfide in 6% by SCS Engineers and 0.05% of CTEH samples.
- Dimethyl disulfide in 6% of SCS Engineers and <0.01% of CTEH samples.
- Dimethyl sulfide in 0.8% of SCS Engineers and 23.5% of CTEH samples.
- Ethanol in 0.8% of SCS Engineers' samples.

SCS Engineers sampling detected toluene with a pungent, paint-thinner-type odor in 2% of the samples above the lowest odor detection threshold. Styrene, which has a sharp, solvent-like odor, was detected above the lowest odor detection threshold in PTR-MS mobile van air sampling conducted by CTEH in 0.01% of samples. Although toluene and styrene were not detected in the June 2024 odor study, we still considered these in our assessment.

Hydrogen sulfide, styrene, and acrolein have been identified as chemicals that stimulate the trigeminal nerve, resulting in sensory irritation when above certain thresholds. In addition, irritation thresholds for ethyl mercaptan and ethanol have also been reported in the scientific literature or by authoritative agencies. Irritation thresholds for these compounds and whether they were detected at or above these thresholds follow:

- Hydrogen sulfide: The irritation threshold is 5–10 ppm (or 5,000–10,000 ppb). Hydrogen sulfide was not detected at or above this threshold during any sampling. The maximum hydrogen sulfide concentration detected in grab air samples was 0.205 ppm (or 205 ppb).
- Ethyl mercaptan: The irritation threshold is 1 ppm (or 1,000 ppb). Ethyl mercaptan was not detected at or above this threshold during any sampling. The maximum concentration of ethyl mercaptan detected in grab air samples was 0.003 ppm (or 3 ppb).
- Acrolein: The irritation threshold is 0.03–0.55 ppm (or 30–550 ppb). Acrolein was not detected at or above this threshold during any sampling. The maximum concentration of styrene detected in grab air samples was 0.007 ppm (or 7 ppb).
- Ethanol: The irritation threshold is 5,042 ppm (or 5,042,000 ppb). Ethanol was not detected at or above this threshold during any sampling. The maximum concentration of ethanol detected in grab air samples was 0.108 ppm (or 108 ppb).



- Styrene: The irritation threshold is 20 ppm (or 20,000 ppb). Styrene was not detected at or above this threshold during any sampling. The maximum concentration of styrene detected in grab air samples was 0.037 ppm (or 37.0 ppb).

Our evaluation confirms that odorants of the type detected in the neighborhoods surrounding CCL have the ability to cause physiological irritation when an individual is exposed to sufficient concentrations of compounds over a sufficient duration. The scientific literature supports that some of the detected chemicals can bind to nerve endings, which may result in short-term physiological responses such as eye tearing and nasal or respiratory irritation if an individual is exposed to sufficient concentrations over a sufficient duration. When concentrations are high enough, these odorants can also trigger short-term physiological responses such as headaches, nausea, or lightheadedness.

Although sampling indicates that chemicals were present when odors were detected in the neighborhoods surrounding CCL, they were not detected above irritation thresholds. These air samples represent a snapshot of odor exposure; therefore, it is possible that residents may encounter short-term exposures to odorants in sufficient concentrations to cause a physiological response, however, exposures to these chemical odorants are transient, and physiological responses should resolve after exposure has ceased.

## 1.0 PURPOSE

In our assessment, we identify odorants capable of causing physiological responses as opposed to pathological effects—an analysis of pathological effects is provided in the CTEH portion of this report. A physiological response is defined as an organism's automatic, instinctive, unlearned response (e.g., increased heart rate, change in respiration, sweating) to internal (e.g., hunger) or external stimuli (e.g., odor), and such responses are typically resolved once the stimuli are removed. In contrast, a toxicological assessment is one which investigates adverse effects due to a significant change in cellular or tissue structure (e.g., pathology), and function (e.g., biochemical function) as to cause an adverse effect.

To evaluate the potential physiological responses to odorants detected during toxicological and odor assessment sampling:

- We reviewed air quality and odor data obtained and prepared a list of chemicals reported as detected in the air and odor monitoring data. These data include chemicals and measured air concentrations, odor descriptions (e.g., in odor complaints reported during public meetings), and measurements of odor (e.g., Nasal Ranger measurements from various sampling events).
- We compiled odor thresholds and descriptors for chemicals identified in the sampling and odor analyses conducted by SCS engineers, CTEH, and Intertox. We focused our assessment on chemical odorants with measured air concentrations that exceeded odor thresholds and that have odor characteristics described as foul or unpleasant.
- We obtained scientific studies that describe the binding of the chemicals identified through Chiquita's Enhanced Air Monitoring Program to olfactory, facial, trigeminal, and/or vagal nerve end receptors. We focused on chemicals that can bind to pressure, irritation, or pain receptors, a normal physiological response by the body that results in nonpermanent effects.
- For chemicals that have been characterized as potentially binding to nerve end receptors, we compared air concentrations on days when odors were detected at or above 7 D/T to concentrations associated with binding to pressure, irritation, or pain receptors.

In our assessment, we evaluated chemical odorants to assess whether each odorant is 1) measured at concentrations near or above published odor thresholds, 2) has odor characteristics that match those identified in the air quality and odor data collected by CTEH (during 28-day air quality study) and Intertox (during June 2024 odor study), and 3) is known to bind to nerve receptors and cause irritation when present in sufficient concentrations. We assess a range of potential physiological responses that may occur as a result of the binding of these chemicals to olfactory, facial, trigeminal, and vagus nerve end receptors at measured concentrations.

## 2.0 QUALIFICATIONS

I, Richard C. Pleus, am the Founder, Managing Director, and Chief Toxicologist at Intertox in Seattle, Washington. Intertox is a toxicology and environmental health consulting firm with expertise in risk assessment, scientific research and communication, business strategy, global regulatory compliance, and design and process evaluation. As a toxicologist, I have 40 years of experience working on landfill projects, composting facilities, wastewater facilities, agricultural facilities, industrial facilities, vehicles, consumer products, medical products, and drugs, all related to human health risk assessments concerning human exposures in consumer, residential, and occupational settings. A copy of my curriculum vitae is attached to this assessment as Appendix A.

## 3.0 BACKGROUND

Chiquita Canyon Landfill (CCL) is a 639-acre municipal solid waste landfill owned and operated by Chiquita Canyon, LLC (Chiquita) (DTSC, 2024; USEPA, 2024). CCL is located in Castaic, CA (approximately 3 miles west of Interstate 5 on State Route 126 in the Santa Clarita Valley) and provides waste disposal services to Santa Clarita Valley and surrounding Los Angeles County (LA County) communities (DTSC, 2024). CCL has served the LA County area since 1972, operating for over 50 years (USEPA, 2024; Chiquita, 2024). Types of waste accepted at CCL include municipal solid waste, residential and commercial waste, yard and green waste (for composting and recycling), clean fill soil, and debris from construction and demolition (Chiquita, 2024). CCL is the second largest landfill in the county (Briscoe, 2024a).

The normal decomposition of wastes within a multi-acre area in the northwest portion of the Landfill was interrupted due to an elevated temperature event. USEPA (2024) describes an elevated temperature event as "a subsurface reaction that typically occurs when oxygen intrudes below the landfill cover and results in extreme temperature increases, excessive leachate production, and a change in composition of landfill gas." The elevated temperature event resulted in the impediment of the regular function of the gas collection and control system, producing an increase in odors, carbon monoxide, hydrogen sulfide, and volatile organics, while methane (the expected product of functional operation) was decreased (USEPA, 2024). The reaction area is currently estimated to occupy approximately 30 to 35 acres in the northwest section of CCL (USEPA, 2024).

According to USEPA, impediment of CCL's gas collection and control system has caused a substantial increase in odors associated with the facility<sup>1</sup> (USEPA, 2024). California's South Coast Air Quality Management District (South Coast AQMD), has numerous issued violations in regards to public nuisance due to odors.

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<sup>1</sup> According to the USEPA (2024), approximately 6,800 odor complaints were reported in 2023.

Residents in Val Verde, Live Oak, Hasley Hills, and other nearby neighborhoods have reported that odors have caused them to experience nausea, headache, difficulty breathing, and nose bleeds (Briscoe, 2024b). In response to resident concerns, Roux Associates conducted "an independent health risk evaluation of the short- and potential long-term health impacts to nearby residents from exposure to landfill gases created by the odor incident at Chiquita Canyon Landfill" on behalf of LA County (LACDPH, 2024). The evaluation found that "the community is exposed to intermittent, unpleasant, and sometimes strong odors."

Sulfur compounds may cause odors from landfills. The short-term bodily effects from exposure to odors in sufficient concentrations include headaches, nasal congestion, eye, nose, and throat irritation, hoarseness/sore throat, cough, chest tightness, shortness of breath, wheezing, heart palpitations, nausea, drowsiness, and mental depression. These effects are not permanent and do not lead to long-term disease, but they may be unpleasant and may make some people feel unwell or temporarily exacerbate existing health conditions.

Roux Associates' health risk evaluation also found that "the air quality in the community is similar to that of Los Angeles County." It noted that while concentrations of two volatile organic compounds (VOCs)—benzene and carbon tetrachloride—were elevated, the levels detected were comparable to those throughout LA County. The evaluation thus concluded that the potential health risks could be ascribed to the larger-scale air quality issue in LA County (LACDPH, 2024).

From January through September 2023, South Coast AQMD received over 2,100 complaints regarding odor nuisance, with CCL alleged as the source. South Coast AQMD issued CCL 58 Notices of Violation (NOVs) between May and September 5, 2023, for violating South Coast AQMD Rule 402 and H&S Code § 41700. On September 6, 2023, the South Coast AQMD Hearing Board adopted a *Stipulated Order for Abatement* for CCL, which stipulated that CCL implement measures to mitigate the elevated temperature event that has caused an increase in landfill gas and fugitive emissions. On January 17, 2024, South Coast AQMD Hearing Board modified the *Stipulated Order for Abatement* requiring CCL to "organize a committee (the 'Reaction Committee') consisting of subject matter experts to aid in the investigation, impact assessment, and remediation of the ongoing landfill reaction and resultant odors..." (*Condition 12*), "include in any human health screening evaluation an odor assessment evaluating the potential health impact of exposure to odorants..." (*Condition 12(a)(iv)*), and produce "a report of the health impacts from ongoing and long-term (e.g., greater than one year) exposure" (*Condition 12(g)(vi)*).

#### **4.0 FACTORS INFLUENCING ODOR AND ODOR PERCEPTION**

Odors often alert people to chemicals that are deemed to cause adverse health effects. However, the chemicals that produce odors are frequently found at concentrations below harmful levels. Malodors may trigger an emotional and physiological response that can cause

a person to feel that their quality of life and sense of well-being is decreased or that they feel unwell (e.g., headache, nasal congestion, dizziness, watery eyes). However, toxic effects of chemicals are differentiated from the physiological responses to odorants. A physiological response is a complex process involving interactions between the olfactory receptors in the nose and interpretation by the brain, that sets up a bodily reaction.

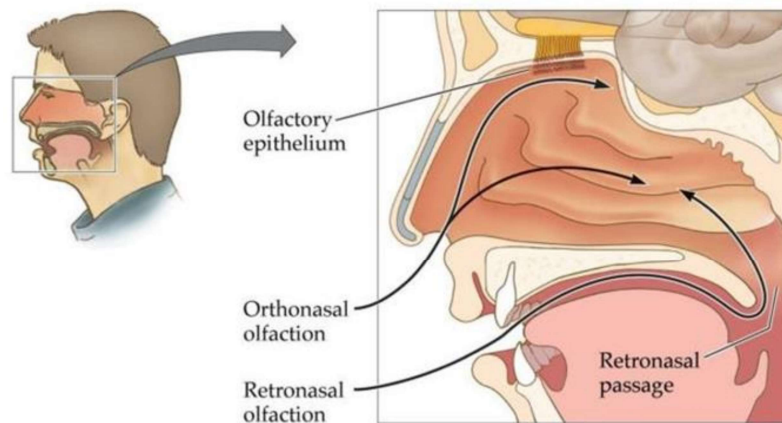
This section provides an overview of the human and environmental factors that influence odor and odor perception.

## **4.1 Human factors**

In this section, we provide an overview of the neuroanatomy of olfaction. Specifically, we describe the critical roles of chemical exposure, neurobiology, and interpretation of odors. We discuss the neuroanatomy of the nerves and the components of the human brain involved in detecting, analyzing, and characterizing odors. We discuss the effects of odors on normal physiology and how they can influence behavior. For example, the chemical that causes the strong odor of a fresh cut onion (the naturally occurring sulfur-containing chemical propanethial-S-oxide) reacts with moisture in the eye, resulting in tearing. Importantly, these physiological responses are distinct from pathological effects (such as adverse health effects assessed in CTEH's toxicology assessment) that can occur with exposures to specific chemicals at sufficient doses and exposure durations.

### ***4.1.1 Olfactory anatomy and physiology***

Humans have relatively simple noses with breathing as the primary function. The arrangement of the nasal and oral cavities allows for both nasal and oral breathing (Harkema et al., 2006). Airborne odorant molecules enter through the orthonasal pathway (passing directly through the nasal cavity via airflow) or the retronasal pathway, as shown in Figure 1 (Burdach and Doty, 1987). The molecules then interact with olfactory receptors at the ends of olfactory sensory neurons (OSNs). The OSNs, as a group, combine to form the olfactory nerve (cranial nerve I) in a layer called the olfactory epithelium that is found in the interior of the nose (Purves et al., 2001).



**Figure 1. Orthonasal and retronasal pathways (from Wolfe et al., 2015)**

Humans have an estimated 10 to 20 million OSNs, each OSN expressing only one type of olfactory receptor gene that can produce only one type of olfactory receptor (Buck and Axel, 1991). In humans, the olfactory receptor gene family is the largest group of genes specific to one function (Shadravan, 2013). Of the 800 known olfactory receptor genes, only about 400 are intact and capable of producing odorant receptors. Approximately 30% of those intact genes differ between individuals (Mainland et al., 2014). Multiples of each type of odorant receptor are found throughout the nasal epithelium as opposed to being present in the same area (Ressler et al., 1993; Saladin, 2012).

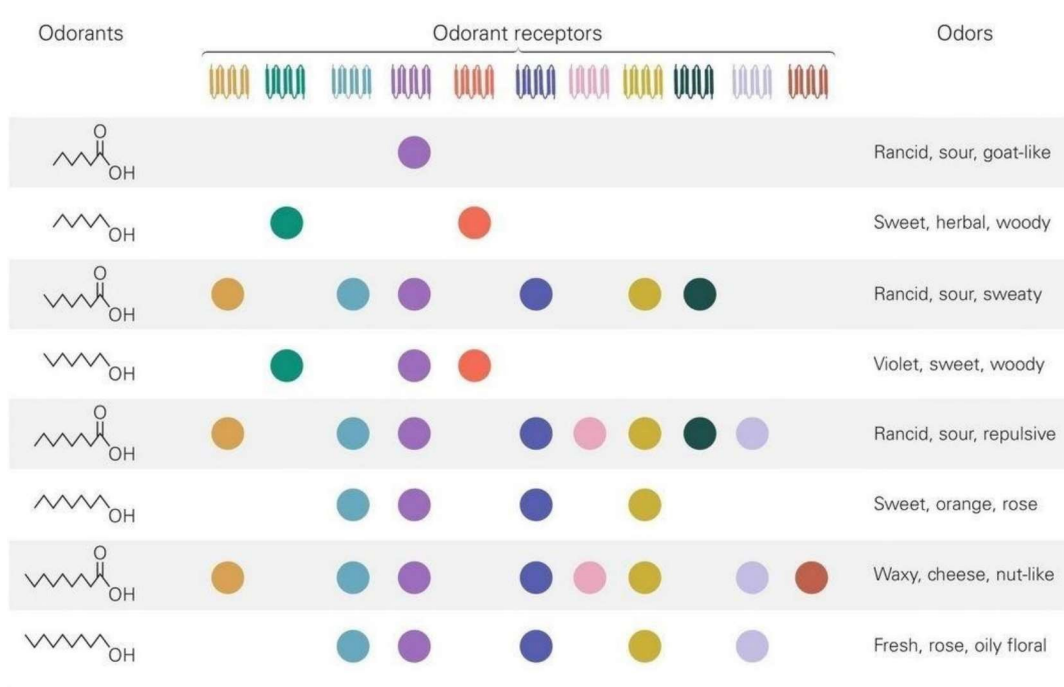
#### 4.1.1.1 Olfaction

Olfactory receptors on OSNs are the first contact point between a chemical (e.g., an odor stimulus) and the olfactory system. When an odorant molecule binds to its corresponding receptor, it triggers a signaling cascade, ultimately sending an electrical signal to the brain. The brain then interprets the combination of signals from different types of receptors to identify the specific smell (Kandel et al., 2013).

Different odorants bind to various receptors, triggering different signal patterns. Even if an odorant binds to multiple types of receptors, the combination of signals is unique to that odorant. The combination of odorants binding to olfactory receptors allows people to distinguish between many different smells.

The olfactory system can discriminate between odorants with similar chemical structures (Malnic et al., 1999). Different types of chemical odorants can have different odor characteristics depending on their chemical structure. Figure 2 shows chemical structures corresponding to different odorants. Slight changes to an odorant's chemical structure can result in different types of odor perception (described for the illustrated structures in the far right "Odors" column). For example, the first odorant shown contains a "carboxylic acid" group, which is represented in the simplified structure drawing with a double-bonded oxygen (=O) and a hydroxyl (-OH) group (also described as an R-COOH group). The odor of

this chemical is described as rancid, sour, or goat-like. The second odorant shown lacks the double-bonded oxygen but retains the hydroxy group. The odor of this chemical is described as sweet, herbal, or woody. Table 1 illustrates key components of chemical structures that can contribute to triggering different olfactory receptors. These structural components are "shorthand" for the individual atoms that make up a chemical, which, for the various odorants shown, consist of a combination of carbon (C), hydrogen (H), and oxygen (O) atoms. The presence of different chemical components results in the activation of different combinations of olfactory receptors, which the brain translates as different odors.



**Figure 2. Different chemical structures result in the activation of different combinations of olfactory receptors on OSNs to allow the perception of odorants (Kandel et al., 2013)**

**Table 1. Key to Chemical Structural Components**

Component	Description	Image
Alkyl Group	Each "point" indicates a carbon (C) with hydrogens attached	
Alcohol/Hydroxyl Group	Oxygen with hydrogen attached	$\text{—OH}$
Carboxylic Acid Group	Hydroxyl group bonded to a carbon that is double-bonded to oxygen	



#### 4.1.1.2 Odor detection thresholds

An odor detection threshold is typically established at the concentration at which fifty percent (50%) of a group of individuals (an odor panel) with a normal sense of smell (also called normosmia) can detect an odor (more specifically, detect that there is something other than blank air within a sample). A range of ability to detect smell exists outside of normosmia—put simply, sensitivity to odors is generally individualized and varies widely. For example, a subset of the population has a loss of ability to detect smell (also called anosmia, which can be permanent or temporary, as with some cases of COVID-19) for certain or all odors (the latter is rare) (Hernandez et al., 2023). Hyperosmia, or a heightened ability to detect smell, is on the other end of the spectrum and reflects a high sensitivity to odors. As a result, detection thresholds vary between chemicals and individuals, as shown by the range of odor detection thresholds for several common odorant chemicals in Table 2.

**Table 2. Odor detection threshold ranges for select chemicals (from AIHA, 2024)**

Odorant	Concentration Range (ppb in air)
Hydrogen Sulfide	0.047-72
Dimethyl Disulfide	0.29-20.2
Dimethyl Sulfide	0.12-63

Several factors contribute to variability in odor detection among populations, including smoking status (smokers are less sensitive to odors), age, sex, other chemical exposures, and various illnesses (nasal congestion can decrease the ability to detect an odor). The ability to detect odors declines with age, with children having lower detection thresholds than adults (AIHA, 2024). For example, in a group of subjects (age range 22–59 years) tested with four different odorants (1-butanol, isoamyl butyrate, phenylethylmethylethyl carbinol, and pyridine diluted in mineral oil), increasing age was correlated with higher odor detection thresholds, which ranged over approximately two orders of magnitude for each chemical (Doty et al., 1985, Gilbert et al., 1989, Segal et al., 1992). Sex differences appear to depend upon the odorant. For example, no sex differences were found for the odors of safrole (spicy/woody), guaiacol (smoky/vanilla), amyl salicylate (woody), eucalyptus (minty/camphorous), and thibetolide (a musk odor) (Amoore et al., 1968), but females reportedly have increased olfactory sensitivity to some odors, including mercaptans (sulfur odor found in natural gas) and rose (Doty and Cameron, 2009).

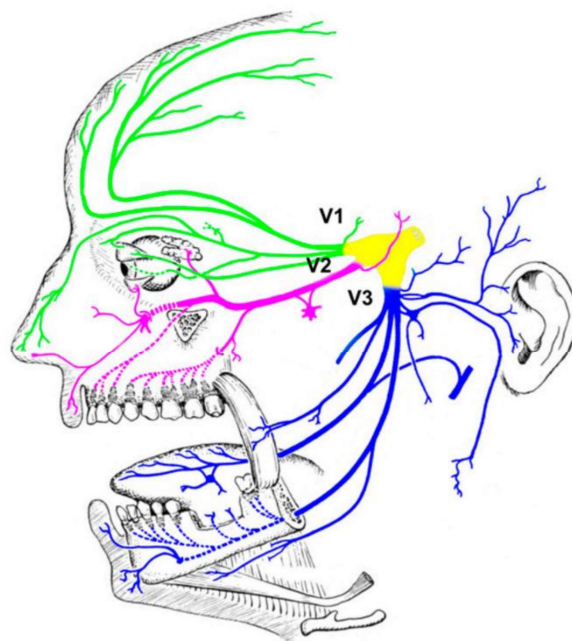
#### 4.1.1.3 Irritation

Although the same chemicals can stimulate olfaction and irritation, the irritation response is separate from olfaction (AIHA, 2024). Some, but not all, odorants may also produce an irritation response by activating free nerve endings of some nerves, which may include sensations of temporary burning, stinging, tingling, or painful sensations in the eyes and respiratory tract (Dalton, 2003). For example, hydrogen sulfide can cause irritation when



present at sufficient concentrations (i.e., above the irritation threshold, discussed in Section 4.1.1.4). The concentration at which an irritation response is elicited varies by chemical. A comparison of values for chemicals of interest can be found in Section **Error! Reference source not found.**

Irritation in the upper respiratory tract (nasal region, for example) is primarily triggered by the trigeminal nerve (cranial nerve X), a nerve with three major branches (V1 ophthalmic, V2 maxillary, and V3 mandibular branches), as shown in Figure 3. In the lower respiratory tract, irritation occurs in C-fibers of the vagus nerve (cranial nerve V) and can trigger a cough reflex (Pauluhn and Whalan, 2021, Polverino et al., 2012).



**Figure 3. Trigeminal nerve branches (adapted from Mercante et al., 2023)**

Various transient receptor potential (TRP) ion channels are key molecular sensors that allow detection and response to the chemical environment. They convert chemical stimuli into electrical signals that the nervous system can understand. Of the six families of TRP channels, three families are relevant to chemical detection, including ankyrin (TRPA), vanilloid (TRPV), and melastatin (TRPM) (Mickle et al., 2016).

Sensory irritation is mediated mainly by the TRPA1 receptor on free nerve endings of the trigeminal nerve, found in the upper respiratory tract and the eye (Bessac and Jordt, 2010; Doty et al., 2004; Mangelsdorf et al., 2021). Other physiological responses also occur with TRPA1 activation, including lacrimation (eye watering), eye blinking, reduced respiratory rate, and reduced nasal flow (Martinez and Eling, 2019). Numerous chemicals can activate TRPA1, including mustard oils and wasabi (Song and Yuan, 2010).

Another ion channel, TRPV1, is involved in the irritation response following hydrogen sulfide inhalation (Armstrong and Herr, 2023). TRPM channels are activated by specific odorants at high concentrations, including citral (citrus odor), nicotine, ethyl propionate (pineapple odor), and valeric acid (pungent odor found in cheese and fermented foods) (Lin et al., 2008).

#### ***4.1.1.4 Irritation thresholds***

In addition to odor detection thresholds, some chemicals that induce irritation may also have a known irritation threshold. The irritation threshold refers to the concentration of a substance in the air below which most people are unlikely to experience sensory irritation, such as eye, nose, or throat irritation. The irritation threshold is typically at a higher concentration than the odor detection threshold for the same chemical (Dalton, 2003). For example, the range of odor detection thresholds for hydrogen sulfide is 0.047–72 ppb, whereas the range of irritation thresholds is 5,000–10,000 ppb (ATSDR, 2016; Ruth, 1986).

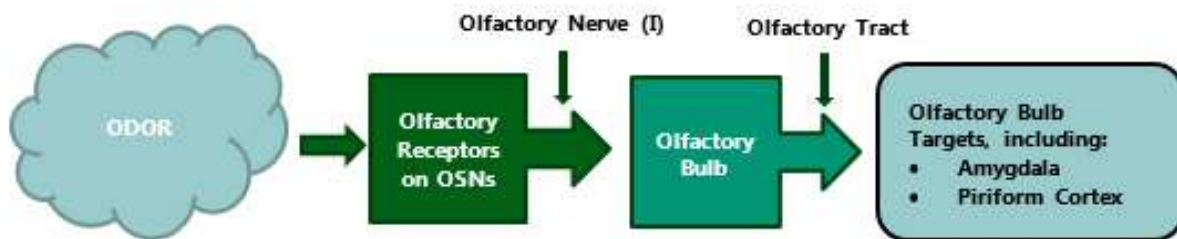
It is important to note that not all odors, even those that can trigger either irritation or pain, have adverse health effects. For example, the odor from cutting an onion can be aversive and cause lacrimation (eye watering), and eye, nose, and throat irritation, but while the odor is an indicator of exposure, it does not typically result in adverse health effects.

#### ***4.1.2 Neuroprocessing and response to odors and irritation***

In general, once an odor is detected (i.e., the chemical is present above the detection threshold) or irritation sensation is experienced (dependent on whether the chemical is an irritant as well as whether it is present above the irritation threshold) by neurons, a communication process is initiated sending a signal up the OSN along a lengthy cellular extension called an axon. It is possible that an odor can be detected but not stimulate neuronal receptors without a higher air concentration; however, we consider a more conservative approach by using odor detection thresholds.

These axons collectively form the olfactory nerve, leading to the olfactory bulb in the brain (Ronnett and Moon, 2002). From there, communication continues from the olfactory tract to the piriform cortex and the amygdala, a key part of the brain in regulating emotions. This

direct connection to the amygdala is unique to olfaction and indicates that emotion plays a role in the sense of smell. This flow of information is illustrated in Figure 4<sup>2</sup>.



**Figure 4. Olfactory pathway from odorant detection in the nose to the brain (modified from Purves et al., 2001)**

#### 4.1.2.1 Odor habituation

Odor perception by the olfactory system plays an essential role in human evaluation of our environment. As previously mentioned, the ability to detect odors varies significantly between individuals. The olfactory system can also adapt to repeated or prolonged exposure to a given odorant, reducing sensitivity (Dalton, 2000). Habituation, also referred to as "odor fatigue," is a decreased behavioral response resulting from repeated exposure to a given odor, while adaptation relates to the neural processes that lead to a decrease in a behavioral response (Pellegrino et al., 2017). As the olfactory system continually encounters various

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<sup>2</sup> A more detailed physiological process of how smells are detected and interpreted by the brain:

- Odorant binding: Odor molecules in the air bind to specific olfactory receptors on the surface of olfactory sensory neurons (OSNs) in the nasal cavity. Each type of receptor is sensitive to a particular type of odorant.
- Signal transduction: This binding triggers a signaling cascade inside the OSN, ultimately leading to a change in the electrical properties of the neuron. This is known as a receptor potential.
- Action potential: If the receptor potential is strong enough, it triggers an action potential (an electrical impulse) in the OSN.
- Transmission to the olfactory bulb: The action potential travels along the long process (axon) of the OSN to the olfactory bulb, the part of the brain that processes smells.
- Processing in the olfactory bulb: The signals from the OSNs are processed and organized in the olfactory bulb. Mitral cells and tufted cells are the main output neurons of the olfactory bulb. They send the processed information to other parts of the brain.
- Higher-level processing: The information is further processed in other parts of the brain, such as the piriform cortex (primary olfactory cortex), the amygdala, and the orbitofrontal cortex. This is where we become consciously aware of the smell and associate it with specific meanings or memories.

odorants, these mechanisms prevent the olfactory system from being overwhelmed. Repeated exposure to an odor will decrease responses or cause odor fatigue, but withholding the odor will lead to recovery. If frequent exposure to the odor occurs, habituation also increases, with increased exposure length and shorter intervals between exposure resulting in faster habituation rates. Weaker odors also lead to more rapid habituation, although with substantial concentrations of an odor, recognizing it as a strong or intense odor may diminish, but the perception of the odor may not completely disappear (Pellegrino et al., 2017).

For example, workers with frequent or daily exposure to a given airborne chemical can become habituated to the odor of that chemical (Pellegrino et al., 2017). Habituation also occurs in individuals who receive daily exposure to an air-freshener-type fragrance, over time developing a persistent loss of sensitivity to the odor as well as a decrease in their perception of the odor's intensity, e.g., in their home, demonstrating that habituation occurs even with odors that are deemed positive or pleasant (Dalton and Wysocki, 1996).

#### *4.1.2.2 Emotions and odor perception*

Odor perception is very subjective between individuals: a particular odor may be viewed as disagreeable to one person, neutral to another, and agreeable to another—emotions and experience may impact response. Any of these emotional responses can affect the behavior of a person. Hedonic tone (or valance) relates to an individual's judgment of a given odor's relative pleasantness or unpleasantness (Brudack-Frietag et al., 2017). The hedonic tone is influenced by previous experiences and the odor's frequency, duration, and intensity. As a result of the direct link between the nose and the amygdala, the critical brain region involved in emotions, odors can influence mood and thoughts (Sarafoleanu et al., 2009). This influence even occurs in the absence of conscious awareness of the odor, with even faint odors having the capacity to influence mood states positively or negatively (Kadohisa, 2013; Kontaris et al., 2020; Sarafoleanu et al., 2009; Zucco et al., 2009). For example, soldiers with battlefield PTSD can experience anxiety, fear, flight, and panic responses when exposed to odors associated with that setting (Daniels and Vermetten, 2016). This emotional layer may alter an individual's perception of "chemicals" regardless of whether the exposure could cause adverse health effects. Stress has also been shown to increase odor sensitivity, while anger has been shown to decrease sensitivity to odors (Hoenen et al., 2017; Parma et al., 2017).

#### *4.1.2.3 Health risk perception*

Health risk perception involves subjective judgments about the likelihood of injury or illness resulting from chemical exposure. Two components are involved: cognitive—the knowledge and understanding of a given risk—and emotional—the feelings evoked when presented with an odor that may be associated with bad memories or negative emotions (Daniels and Vermetten, 2016).

Some people report experiencing health symptoms not as a consequence of inhaling a toxic chemical but in response to the perception of essentially harmless odors with which they have a negative association (Bulsing et al., 2009). Perceived annoyance is another component of health risk perception. For example, women who identified as highly anxious reported increased smell annoyance, mucous membrane irritation, fatigue, and environmental annoyance to toluene and n-butyl acetate (Orbaek et al., 2005). Interestingly, a highly anxious male group in this study reported only increased environmental annoyance. Exposure to ammonia vapors in male subjects with negative mood states resulted in significantly more reported olfactory and respiratory symptoms (Ihrig et al., 2006). Additionally, ascribing a negative label to an odor can cause individuals to have considerably higher intensity ratings (experience the odor as stronger) and lower ratings of pleasantness compared to positive or neutral odor labels.

Emotions and experiences with odors, along with increased media coverage of chemical exposure, can lead to public concern (Rosenkranz and Cunningham, 2003). This concern is often exacerbated by media reports that lack appropriate context, such as the assumption that any exposure to any chemical at any concentration results in possible adverse health effects. This lack of context can lead to misattribution of risk and health concern to an odor at a level that may not cause any adverse health effects. Therefore, it is crucial to understand that the general public may have inherent bias and concern when health risks are not clearly communicated. This underscores the importance of clear and accurate risk communication.

While the general public tends to evaluate risks based on subjective perceptions, intuitive judgments, and limited information, experts base risk perceptions more on scientific findings and evidence, including assessing chemical risks by considering the dose and duration of exposure along with whether the chemical in question poses a health hazard under those conditions. Overall, the experience of an odor is highly individualized and likely to result in a broad spectrum of responses, based on a person's unique physiology, psychology, and genetics.

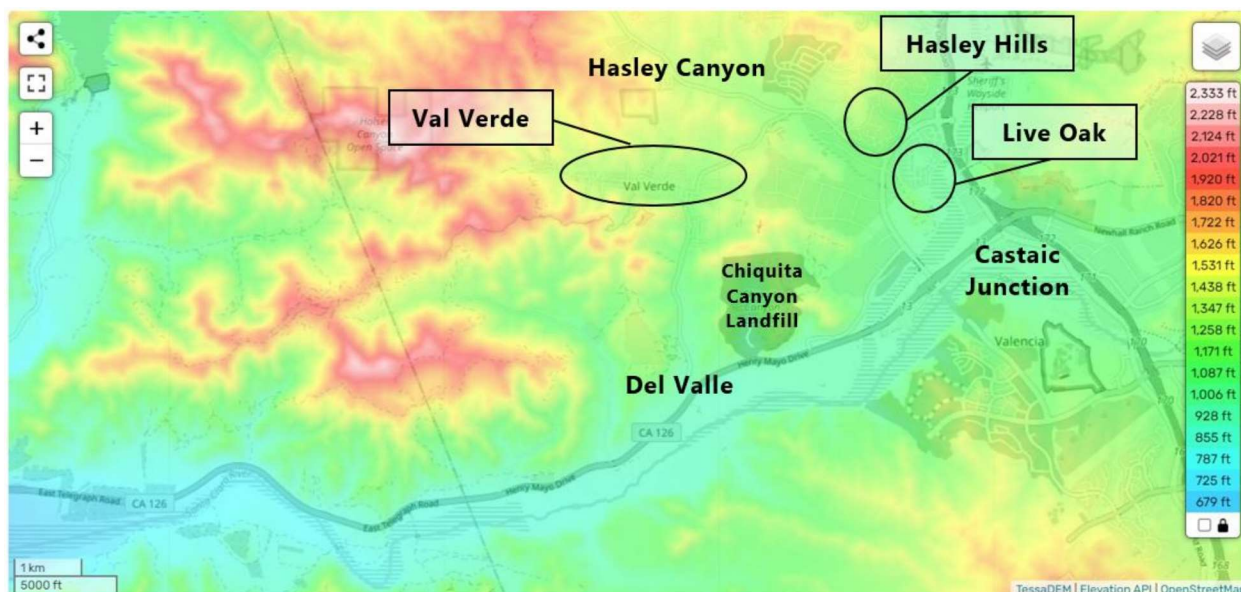
## **4.2 Environmental factors**

Environmental factors (e.g., weather conditions and topography) influence the dispersion and retention of odors. The following section discusses how environmental factors may impact odor dispersion and retention in surrounding neighborhoods near CCL (e.g., Val Verde, Live Oak, Hasley Hills).

Under low wind and clear sky conditions, the area around CLL can be impacted by a weather phenomenon known as a temperature inversion, which can limit odor dispersion by trapping odorants near the ground (Purdue, 2023). In standard, non-inverted conditions, as air rises into the atmosphere, the air becomes colder as elevation increases, with air closest to the ground being warmest and air highest in the atmosphere being coolest. During a temperature inversion, this cooling trend is interrupted, and instead, a layer of warm air rises

and traps a layer of cold air underneath, acting like a cap (NOAA, no date (n.d.)). This phenomenon occurs because warmer aloft air retains heat longer than air near the ground, which cools more quickly. The result is a layer of warm air higher in the atmosphere, capping the cold air and any odorants present and close to the ground (NOAA, n.d.). Temperature inversions only last for a few hours and can be resolved by increased wind mixing the cold and warm layers or the sun over time, warming the cool layer (Wake County, 2022). Temperature inversions are most likely to occur near dawn and dusk on days with little wind. During temperature inversions, residents may notice increased odors (Wake County, 2022).

Topography may also physically contribute to the intensity of odors. CCL and the surrounding area comprise unique topographical features, including canyons and mountainous, hilly terrain (see Figure 5) that may impact meteorological conditions. The residential communities (e.g., Val Verde, Live Oak, Hasley Hills) are located at lower or similar elevations to the surrounding area.



**Figure 5. Topography of region surrounding Chiquita Canyon Landfill and neighboring communities (approximate locations defined in open circles) (source: topographic-map.com)**

Canyons and other topographic obstacles present in the region surrounding CCL and the neighboring communities, such as mountains and hills, can substantially affect the dispersal of odorants (Yeo et al., 2020; Hamilton and Carlson, 2019). Odorants may travel by wind via odor plumes. Odor plumes are odor molecules released from their source and moved by the wind (Young et al., 2020). One way to visualize an odor plume is to consider a smoke plume that becomes dispersed and less concentrated when affected by wind, or remains concentrated when there is little wind (Hamilton and Carlson, 2019). Modeling suggests that odor plumes have greater dispersal distances regardless of other variables when no high-altitude obstacles are present to influence the plume (Yeo et al., 2020). However, when a



high-altitude obstacle (e.g., canyon peaks or hills) is present, the odor plume disperses less, and odors remain localized (Yeo et al., 2020).

Additionally, when conditions permit a temperature inversion, a phenomenon known as cold air drainage may impact odor dispersal. Cold air drainage is characterized by cold, dense air close to the ground being pulled towards warmer, less dense air, so the cold air displaces the warm air (Levenson and Matthai, 1975). Cold air drainage tends to settle in low-elevation areas, particularly when odorant molecules have a greater density than air (Hamilton and Carlson, 2019). Gravity additionally exhibits a down-slope effect on odorants and pulls the odorants into pockets of low elevation, such as valleys (Hamilton and Carlson, 2019).

## **5.0 ODOR IMPACTS ASSESSMENT METHODOLOGY**

In this section, we describe the four major dimensions of human sensory perception of odorants to characterize the potential impact of odors (AIHA, 2024; EPA, 1992):

- 1) Odor detection threshold: the lowest concentration of odorant that elicits an olfactory response without reference to odor quality in 50% of odor panel subjects measured in a laboratory setting;
- 2) Odor intensity: the perceived or measured strength of an odor (e.g., dilution to threshold ratio);
- 3) Odor character: what the odorant or mixture smells like; and
- 4) Hedonic tone: the relative pleasantness or unpleasantness of an odor.

In this section, we also discuss the potential for odorants to cause irritation (or the irritancy potential of odorants).

The four major dimensions of human sensory perception of odorants and the irritancy potential of odorants form the foundation for our evaluation of the potential impact of odors on residents of the neighborhoods (e.g., Val Verde, Live Oak, Hasley Hills) surrounding CCL. In addition to how odors are perceived, the odor experience for an individual is influenced by the duration and frequency of exposures. Each parameter is measured or characterized to evaluate environmental odors. Note that this approach does not include an evaluation of the potential psychological impacts on odor perception, as such factors are highly individualized (attitude, expectations, beliefs about the odor) and outside the scope of this Odor Impacts Assessment.

We describe each of these dimensions of human sensory perception of odorants in further detail below.

## 5.1 Odor detection threshold

Researchers have identified an odor detection threshold for many chemicals that have distinct odors. An odor detection threshold is the lowest concentration of odorant that will elicit an olfactory response but at concentrations too small to identify the type or characteristic of the odor that is evaluated in a clean laboratory setting (AIHA, 2024). Odor detection thresholds are often reported in ranges because of the variability in detection. The odor detection threshold should not be confused with the odor *recognition* threshold, which is the level at which the odor can be identified, and is typically higher than (sometimes three to ten times) the odor *detection* threshold (Wise, Soreth, & Dalton, 2018). Moreover, given these varying thresholds, the “Level of Distinct Odor Awareness” (LOA) has been derived to describe the concentration of an odor at which more than half an exposed population senses a distinct odor.

Numerous agencies and organizations have evaluated and published peer-reviewed literature that reports odor detection thresholds for chemical odorants, such as the United States Environmental Protection Agency (USEPA) and the American Industrial Hygiene Association (AIHA). Odor detection thresholds reported in the peer-reviewed literature can vary significantly (USEPA, 1992). Variations are due to numerous factors, including the type of data source, differences in experimental methodology, and the interindividual variability across human olfactory response (AIHA, 2024; USEPA, 1992).

For this evaluation, we only considered odor threshold sources that specifically identify an odor *detection* threshold. Using the odor detection threshold results in a conservative assessment because it is set under laboratory conditions rather than real world conditions (which are less well controlled) and it is typically lower than the concentration at which an odor can be recognized (the recognition threshold) or at which more than half the population would recognize a distinct odor (the level of distinct odor awareness). Due to the variability in reported odor detection thresholds, we used a tiered approach to identify an odor detection threshold for use in our assessment for each odorant of interest. If an odor detection threshold was not listed in the first-tier source, a threshold from the second-tier source was selected if available, and so on.

Odor detection thresholds were identified from the following sources in order, if available:

- 1) AIHA (2024) *Odor Thresholds for Chemicals with Established Health Standards, 4<sup>th</sup> Edition*
- 2) USEPA (1992) *Reference Guide to Odor Thresholds for Hazardous Air Pollutants Listed in the Clean Air Act Amendments of 1990*
- 3) Other sources such as chemical profiles from other authoritative agencies or organizations (e.g., Agency for Toxic Substances and Disease Registry (ATSDR)),



primary peer-reviewed literature where available, and online sources (e.g., PubChem).

The AIHA document *Odor Thresholds for Chemicals with Established Health Standards, 4<sup>th</sup> Edition* (AIHA, 2024) was selected as the first tier for identifying odor detection thresholds because it is the most recent and most extensive publication that reports odor detection thresholds for chemical odorants. AIHA (2024) also provides clear criteria for evaluating each study that it considers when identifying thresholds<sup>3</sup>.

USEPA's *Reference Guide to Odor Thresholds for Hazardous Air Pollutants Listed in the Clean Air Act Amendments of 1990* (USEPA, 1992) was selected as the second tier for identifying an odor detection threshold because of it applies a robust set of criteria to evaluate the experimental design of each study<sup>4</sup>. This list, however, is not extensive and contains many data gaps due to the age of the publication and the limited number of chemicals evaluated.

If an odor detection threshold could not be identified for an odorant of interest in the AIHA (2024) or USEPA (1992) documents, a third tier considered was other sources such as chemical profiles from other authoritative agencies or organizations (e.g., Agency for Toxic Substances and Disease Registry (ATSDR)), primary peer-reviewed literature, or online sources (e.g., PubChem).

If available, the lowest reported odor detection threshold within a tier was selected as a screening value to evaluate chemical data (i.e., if the maximum-detected chemical concentration was below the screening threshold value, the chemical was removed from our odor assessment). Using the lowest reported odor detection threshold is justified because it is assumed to reflect the most sensitive individuals (e.g., hyperosmic, pregnant women, children). Notably, the lowest odor detection thresholds are typically quite low. For example, the lowest odor detection threshold for hydrogen sulfide is 0.047 parts per billion, while

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<sup>3</sup> The set of criteria includes a panel size of at least six per group, panelist selection based on odor sensitivity, panel calibration, consideration of vapor modality (air or water), diluent (i.e., the substance used to dilute the compound) in accord with compounds, presentation mode that minimizes additional dilution (ambient) air intake, analytical measurement of odorant concentration, calibration of flow rate and face velocity (for olfactometers), consideration of threshold type (detection or recognition), presentation series that reduces olfactory fatigue, repeated trials, forced-choice procedure, and concentration step increasing by no more than a factor of three.

<sup>4</sup> The set of criteria includes a panel size of at least six per group, panelist selection based on odor sensitivity, panel calibration, consideration of vapor modality (air or water), diluent in accord with compounds, presentation mode that minimizes additional dilution (ambient) air intake, analytical measurement of odorant concentration, calibration of flow rate and face velocity (for olfactometers), consideration of threshold type (detection or recognition), presentation series that reduces olfactory fatigue, repeated trials, forced-choice procedure, and concentration step increasing by a factor of two or three. If a study did not account for these criteria, the study was not accepted.

background concentrations of hydrogen sulfide around CCL were measured at 1 part per billion.

## 5.2 Odor intensity

Multiple methods can be used to measure and characterize odor strength or intensity (McGinley, 2002; Brattoli et al., 2011). Two primary methodologies exist for assessing odor intensity: 1) Collection of odorous air samples that are then evaluated by odor panelists in a laboratory for odor parameters (e.g., intensity, hedonic tone, character) using standard practices published by the American Society of Testing and Materials (ASTM E679 and E544) and the European Union (European Normalization Standard, EN 13725); and 2) Measuring and quantifying odor in ambient air using a dynamic field olfactometer (e.g., Nasal Ranger®)<sup>5</sup> (McGinley, 2002; Brattoli et al., 2011).

Odor intensity testing is commonly used to quantify the strength of an odor or odors in ambient air (Brattoli et al., 2011; McGinley, 2002; McGinley & McGinley, 2000; McGinley & McGinley, 2004; St. Croix Sensory, Inc., 2005). The strength, or intensity, of an odor in ambient air, can be measured and quantified by trained inspectors using a field olfactometer, such as the Nasal Ranger® (McGinley, 2002; McGinley & McGinley, 2000; McGinley & McGinley, 2004; St. Croix Sensory, Inc., 2005). CTEH personnel were trained to use the Nasal Ranger® Field Olfactometer, a portable hand-held tool for quantifying odor intensity by measuring odor concentration, and collected data that is used for this assessment (the data collected using this method is summarized in Section 7.2).

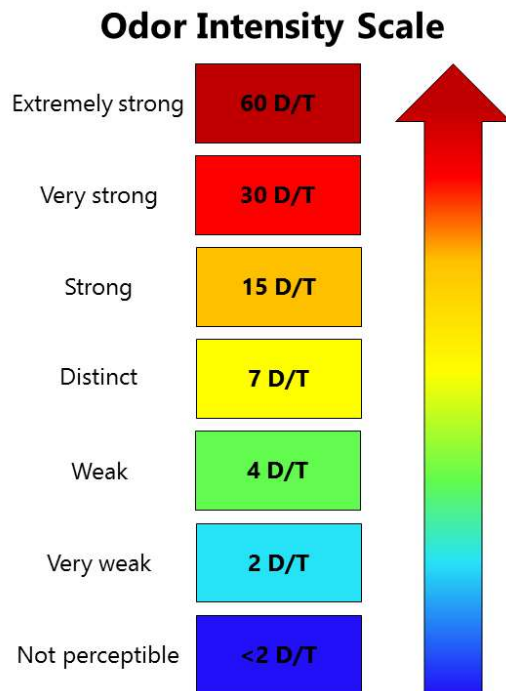
Odor intensity is measured using standardized units, called odor units (OUs), presented as dilution to threshold (D/T). The field olfactometer measures D/T by mixing two "volumes" of carbon-filtered air with specific "volumes" of odorous ambient air, as calculated by:

$$\frac{D}{T} = \frac{\text{Volume of Carbon – Filtered Air}}{\text{Volume of odorous air}}$$

The operator of the Nasal Ranger® reports the D/T value at which an odor is distinguishable while breathing at a specified rate through the instrument. This D/T value is the strength or intensity of the odor. Figure 6 illustrates the odor intensity scale as measured using the Nasal Ranger®.

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<sup>5</sup> The Nasal Ranger is a portable olfactometer designed for measuring and quantifying odor strength in the ambient air. The device, and similar devices, function as the olfactory equivalent of a megaphone that connects to your nose. *See, e.g.*, <https://www.fivesenses.com/equipment/nasalranger/nasalranger/>.



**Figure 6. Odor intensity scale of the Nasal Ranger® Field Olfactometer**

Some states and municipalities in the United States have established fixed ambient odor D/T limits to regulate off-site odor emissions. For example, the state of Colorado (Regulation No. 2 Odor Emissions, 5 CCR 1001-4) states that the maximum allowable odor concentration is 7 D/T for areas used predominantly for residential or commercial purposes and 15 D/T for all other land uses (Brancher et al., 2017; CAQCC, 2013.). The states of Nevada and Illinois use 8 D/T as the threshold for regulating off-site odor emissions (State of Nevada, 2018; State of Illinois, 1972). The Bay Area Air Quality Management District's limit on odorous substances (Regulation 7 Odorous Substances) at or beyond a property line states, "a person shall not discharge any odorous substance which causes the ambient air at or beyond the property line of such person to be odorous and to remain odorous after dilution with four parts of odor-free air" (BAAQMD, 1982).

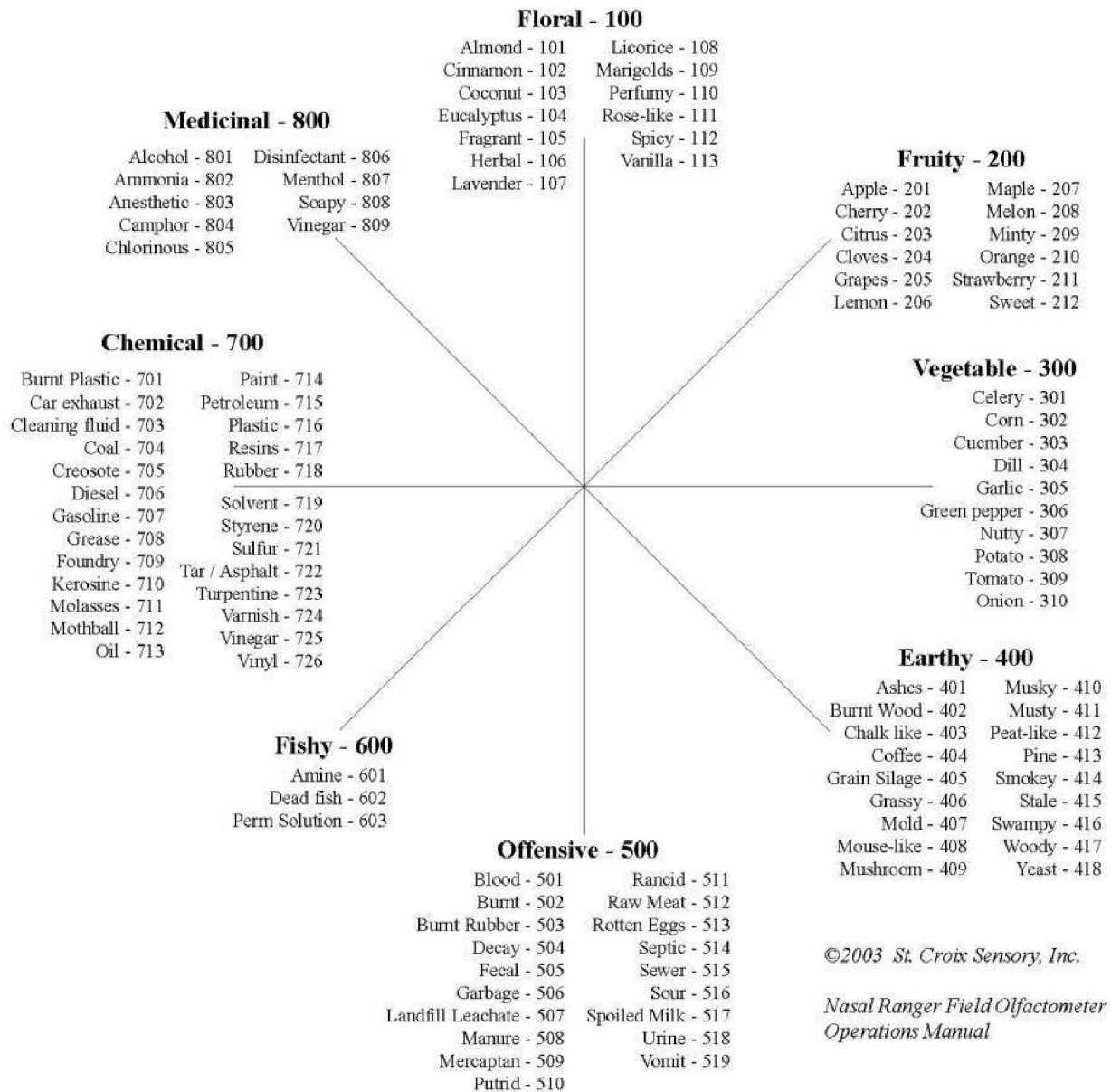
Each state generally has a different method for evaluating whether an odor exceedance has occurred. Regulatory odor standards range from 4 to 24 D/T. The most common maximum odor concentration for residential receptor areas is 7 D/T. Additionally, Huey et al. (1960), in discussing the Scentometer,<sup>6</sup> stated that ambient odors above 7 D/T would probably cause complaints, while those measuring 31 D/T could be described as a serious nuisance if they persisted for a considerable length of time (USEPA, 1970).

<sup>6</sup> The Scentometer is used for field odor measurements and consists of a plastic box equipped with air inlets and sniffing ports.

### **5.3 Odor character and hedonic tone**

Odor character (what an odorant or mixture smells like) and hedonic tone (the relative pleasantness or unpleasantness of an odor) are closely related parameters because both are subjective and highly influenced by external factors (e.g., emotions, previous experience or exposure) (AIHA, 2024; USEPA, 1992).

In some circumstances, an odor character can help assessors identify the potential source of an odor in the field. Although odor character is subjective, resources such as the odor wheel are commonly used by odor assessors in the field to help standardize odor descriptors. An example of an odor wheel is displayed in Figure 7.



**Figure 7. Odor wheel with odor descriptors (Source: St. Croix Sensory, Inc., 2003)**

Odors with "offensive" character, such as garbage, landfill leachate, sewer, etc., are generally associated with a negative hedonic tone. A hedonic tone is typically reported on a scale from -10 to 10, where -10 represents a highly unpleasant odor, 10 represents a delightful odor, and 0 is neutral or no perceptible odor.

## 5.4 Odor irritation potential

As described in Sections 4.1.1.3 and 4.1.1.4, odor perception and irritancy are different sensations that may occur when different cranial nerve networks are activated. Even brief

exposure to an odorant with irritation potential at a sufficient concentration and over a sufficient period of time can cause transient physiological responses such as respiratory irritation or nasal chemesthesis (e.g., burning, stinging, irritation, itching, and pain of the nasal cavity) (Wolkoff and Nielsen, 2017, as cited in AIHA, 2024).

Irritation caused by exposure to an odorant present at a concentration above the irritation threshold may result in non-adverse sensory trigeminal innervation (detection of painful stimuli, e.g., caused by exposure to heat, cold, chemical, which is also called nociceptive response) and stimulation of the vagal nerve (Pauluhn and Whalan, 2021). Innervation of the trigeminal nerve can cause upper respiratory irritation or nasal chemesthesis (Wolkoff and Nielsen, 2017, as cited in AIHA, 2024). The vagal nerve can trigger lower respiratory irritation when stimulated by compounds such as ozone or phosgene (Pauluhn and Whalan, 2021). For certain chemicals, such as hydrogen sulfide and other sulfur compounds, the irritation threshold is many magnitudes higher than that compound’s odor detection threshold. For other chemicals, such as ammonia, the irritation threshold and odor detection threshold are much closer in range.

While irritation thresholds have not been identified for all chemicals, some values for chemicals of interest are noted in Table 3. USEPA has developed guidance for acute exposure levels (AEGs), or exposure levels below which adverse health effects are not likely to occur, for the general public and are applicable to emergency exposures ranging from 10 minutes (min) to 8 h. The first level, the AEGL-1, is the airborne concentration (in ppm or mg/m<sup>3</sup>) of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic non-sensory effects. Where noted in the supporting documentation, the basis for these effects is noted as well.

**Table 3. Irritation Thresholds for Odorants of Interest**

<b>Chemical</b>	<b>Irritation Threshold (ppm)</b>	<b>Basis of Value</b>	<b>Reference</b>
Acrolein	0.03	Slight eye irritation	EPA AEGL-1
	0.55	Not specified	Ruth, 1986
Hydrogen Sulfide	5	Upper/lower respiratory	ATSDR, 2016
	10	Not specified	Ruth, 1986
Styrene	20	“Marginal” irritation	EPA AEGL-1
	50	Eye/nose irritation	
	101	Not specified (inhibited)	Ruth, 1986
	1010	Not specified (uninhibited)	
Ethyl mercaptan	1	Irritation	EPA AEGL-1
Ethanol	5,042	Not specified	Ruth, 1986

As previously mentioned, responses to odor and irritation are separate physiological phenomenon. With respect to irritation responses, C-fibers located in the trigeminal and vagal nerves transmit action potentials related to thermal and painful stimuli (DaSilva and DosSantos, 2012). When C-fibers are stimulated in the trigeminal or vagal nerve, they can release substance P and other neuropeptides. The release of substance P can induce a neurogenic inflammatory response, which can produce vasodilation (i.e., the widening of blood vessels) and neurogenic inflammation (i.e., inflammation of the peripheral and central nervous system caused by activation of C-fibers) (Sullivan, 2001, as cited in AIHA, 2024; Ramanlal and Gupta, 2023; Baldwin et al., 2000). This complex process can cause "sneezing, nasal stuffiness, rhinorrhea, facial pain, eye irritation, watery eyes, headache, sinus congestion, cough, throat irritation, and wheezing" (Sullivan, 2001, as cited in AIHA, 2024).

When an odor stimulus is removed, the neural networks involved in processing the odor stimulus will experience reduced activity as the sensory input is no longer present. This reduction in neural activity decreases associated physiological responses (Bear et al., 2016).

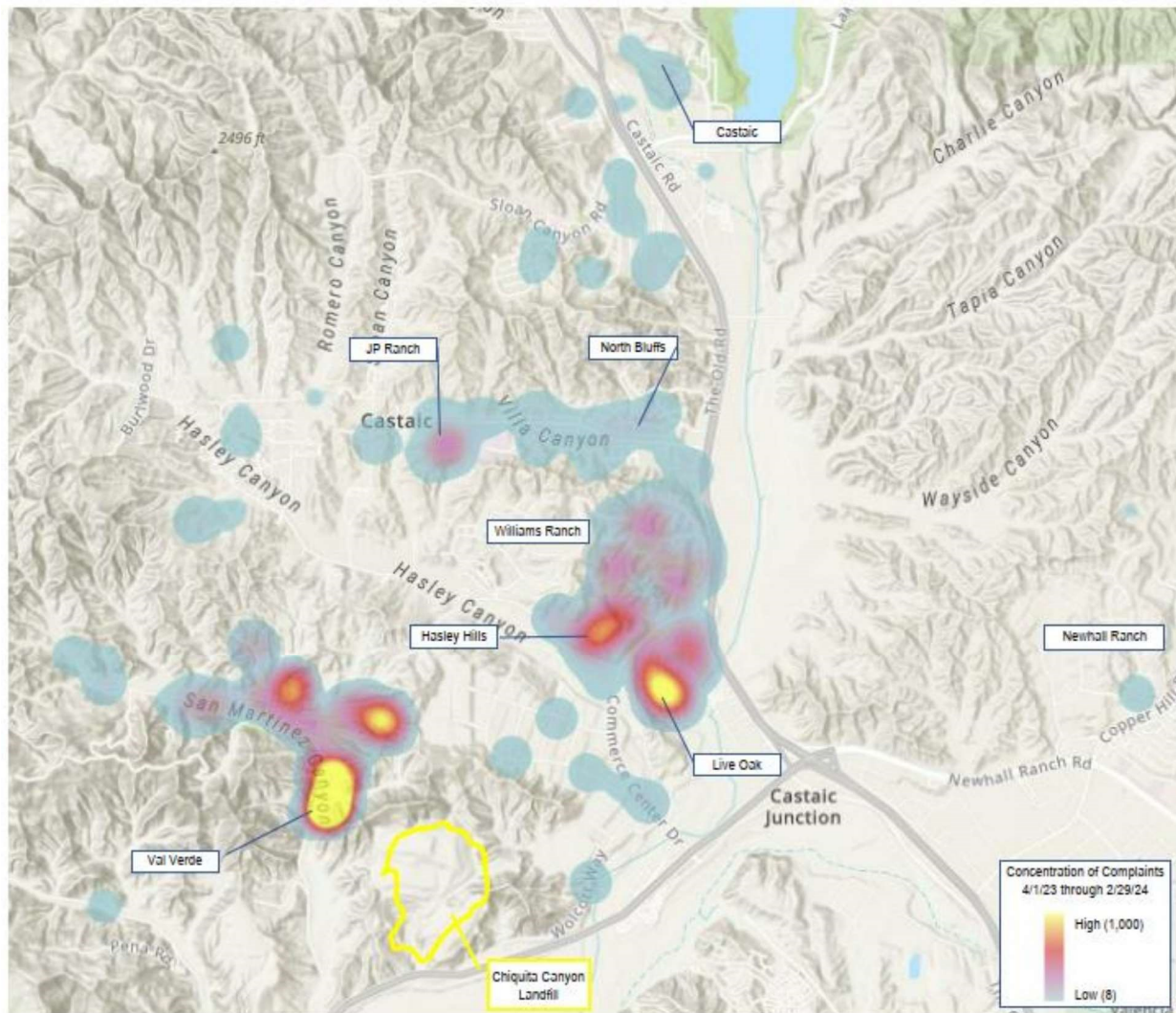
## **6.0 AIR AND ODOR SAMPLE AND DATA COLLECTION METHODS**

In this section, we summarize the methods used to collect air and odor data by SCS Engineers, CTEH, and Intertox. We also describe how we used the different data sources to identify relevant data to assess the potential impacts of odors related to CCL on the surrounding neighborhoods.

### **6.1 Air quality data collection methods**

Air quality samples were collected by SCS Engineers, CTEH, and Intertox at sites located in the Val Verde, Live Oak, and Hasley Hills neighborhoods. Specific locations were selected based on their proximity to CCL and the high density of odor complaints received for CCL between April 2023 and February 2024 at these locations, after the approximate date that elevated odor complaints began to occur (Figure 8). In this section, we briefly describe the air quality sampling methods used by SCS Engineers, CTEH, and Intertox (e.g., how samples were collected, what instruments were used, and analytical methods).





**Figure 8. Heat map of odor complaints received between April 1, 2023, and February 29, 2024, for CCL. Approximately 9,200 odor complaints were received during this timeframe. Note: Map only reflects odor complaints received with sufficient address information (source: South Coast AQMD)**

### **6.1.1 SCS Engineers' air quality data**

SCS Engineers collected air quality data from sampling locations on- (within the property of CCL) and off-site (outside the property of CCL) (see Figure 9). In brief, SCS Engineers collected:

- Continuous, 24-hour air monitoring data for hydrogen sulfide, PM<sub>10</sub> (particulate matter that is 10 micrometers (µm) or less in diameter), and PM<sub>2.5</sub> (particulate matter that is 2.5 µm or less in diameter) at five on-site (MS-01 through MS-05) and seven off-site (MS-06 through MS-12) locations using a combined gas analyzer and nephelometer, the Aeroqual AQM 65.



- Continuous, 24-hour air monitoring data for benzene, toluene, ethylbenzene, and xylenes (BTEX), total reduced sulfurs (TRS), and sulfur oxides (SO<sub>x</sub>) at one on-site (MS-04) and one off-site location (MS-12). BTEX and SO<sub>x</sub> were measured using the Aeroqual AQM 65 and TRS with Thermo Scientific Model 43i, with CD NOVA Thermal Oxidizer.
- Weekly, discrete (grab) air samples analyzed for sulfurs (using South Coast AQMD District Method 307.91: Total reduced sulfur compounds) and volatile organic compounds (VOCs) (using USEPA Method Total Organics-15 (TO-15): Determination of VOCs in Air) at eight on-site (MS-01 through MS-05 and 1150.1 Downwind) and ten off-site locations (MS-06 through MS-12, SCV, Chiquito Canyon Rd, and South end of Lincoln Ave).
- 24-hour air samples three days per week analyzed for sulfurs (using South Coast AQMD District Method 307.91: Total reduced sulfur compounds) and volatile organic compounds (VOCs) (using USEPA Method Total Organics-15 (TO-15): Determination of VOCs in Air) at seven off-site (MS-06 through MS-12) locations.

SCS Engineers recently installed Micro GC instruments at two off-site locations (MS-10 and MS-12) which were fully deployed in May 2024 for measuring sulfur and VOCs; however, at the time of this evaluation, they were undergoing startup, testing, and calibration and were on temporary power. Additional Micro GC instruments will be installed at a later date at four on-site (MS-01, MS-02, MS-03 and MS-04) and four additional off-site locations (MS-06, MS-07, MS-08, and MS-11).

We use the data collected by SCS Engineers to identify what odorants were being sampled for and detected at off-site sample locations in the neighborhoods surrounding CCL. This informed our approach to collect additional air quality data for our odor assessment.



tetrahydrofuran, and xylenes for 8 hours per day on an established route throughout the neighborhoods near CCL between March 4–31, 2024.

- Continuous, fixed-location air samples (24-hour evacuated canister samples) for VOCs (using USEPA Method TO-15, Sim), TRS (using VOC Sulfurs by TO-15, Wet in Air), and DMDS (using USEPA Method TO-15, Wet in Air (USEPA TO-15M)) at eleven (11) off-site locations between March 4–31, 2024.
- Short-term air samples (1-hour evacuated canister samples) collected "when an action level exceedance of benzene is observed by real-time air monitoring personnel" (CTEH, 2024) between March 4–31, 2024.
- Grab air samples (evacuated canister samples) collected daily at a background (location upwind of CCL) and at off-site sample locations when an odor was detected at or above 7 D/T using the Nasal Ranger® Field Olfactometer then analyzed using USEPA Method TO-15 between June 11-18, 2024.

We use the data collected in CTEH's 28-day air quality study to identify odorants that were detected at off-site sample locations in the neighborhoods surrounding CCL. This informed our approach to collect additional air quality data for the Intertox odor assessment.

### **6.1.3 Intertox's odor study**

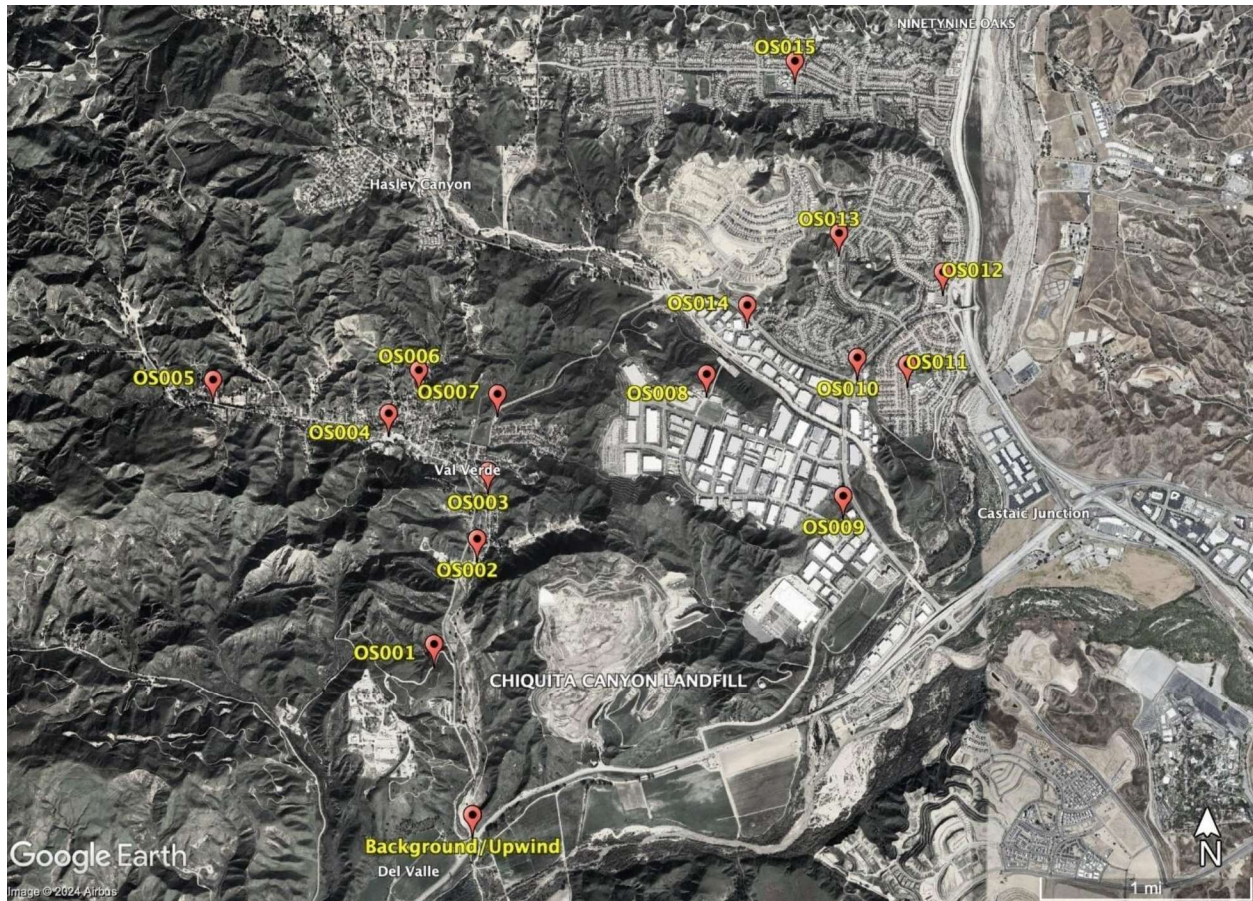
Intertox and CTEH conducted a 7-day air quality study in conjunction with the odor study conducted by CTEH (described in Section 6.2.1, below) between June 11–18, 2024 during 4-hour periods between approximately 7 am–11 am and 1 pm–5 pm or 9 am–1 pm and 3 pm–7 pm on alternating days during the study period.<sup>7</sup>

Air samples were collected in Tedlar bags using a vacuum chamber and in MiniCans™ (evacuated canisters) at sample sites located within the Val Verde, Live Oak, and Hasley Hills neighborhoods, as well as a background sample site located upwind (SSW) of CCL (Figure 10). An air sample was collected when an odor was detected at or above seven (7) D/T on the Nasal Ranger® Field Olfactometer (described in Section 6.2, below). For a more detailed description of the sampling and analysis plan, see Appendix B.

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<sup>7</sup> Air sample collection was limited to weekdays due to shipping limitations and short (30-hour) sample hold times.





**Figure 10. Map of approximate Intertox air and CTEH odor study sample locations, June 11–18, 2024**

## 6.2 Odor data collection methods

SCS Engineers and CTEH collected or measured odor samples at sites in the Val Verde, Live Oak, and Hasley Hills neighborhoods. In this section, we briefly describe the odor sampling methods (e.g., how samples were collected, instruments, and parameters measured) used by SCS Engineers and CTEH.

### 6.2.1 SCS Engineers odor data

SCS Engineers deployed the Scentroid SS400 Six Station Portable Olfactometer (SS400) to collect weekly grab samples at on- and off-site locations compliant with the European Standard EN 13725/2003 and ASTM E679-04.

SCS Engineers collected odor samples in conjunction with air quality samples; however, because the method used, EN 13725/2003 and ASTM E679-04, is recommended for quantifying on-site odor intensity for a point emission source, it is not appropriate for assessing odors in ambient air at off-site locations and is not considered in our evaluation.

### **6.2.2 CTEH odor data**

CTEH conducted an odor survey using dynamic field olfactometers (Nasal Ranger®) to measure odors at off-site locations in the communities surrounding CCL. CTEH personnel conducted the odor survey to "characterize the frequency, strength [expressed in dilution to threshold (D/T)], hedonic tone, and character of odors in ambient air throughout the Val Verde and Castaic Junction communities surrounding the Chiquita Canyon Landfill (CCL)" (CTEH, 2024). They deployed trained odor samplers to collect odor measurements using the St. Croix Sensory Nasal Ranger® at fifteen off-site locations throughout the Val Verde and Castaic Junction communities throughout the day, daily from March 11–29, 2024 and June 11–17, 2024.

CTEH odor samplers also measured environmental parameters (e.g., temperature, wind speed, direction, relative humidity, barometric pressure) concurrent with odor samples. For a more detailed description of CTEH's Odor Survey Evaluation Protocol, refer to Appendix C.

## **7.0 EVALUATION OF DATA**

This section describes how we evaluated the air quality and odor data described in Section 6.0 as part of the Odor Impacts Assessment. For each data type, we identify the limitations and parameters for exclusion of air quality and odor data, evaluate the data to characterize the four dimensions of human sensory perception of odorants that contribute to odor response, identify the potential odorants of interest, and discuss the irritation pathways and thresholds for the potential odorants of interest.

### **7.1 Air quality data**

We evaluated the air quality data to characterize odor concentration relative to odor thresholds. Concentrations of chemicals detected in air samples at sample sites located within the neighborhoods surrounding CCL were compared against the lowest odor detection thresholds published in the peer-reviewed literature (refer to Section 5.1 for criteria to select odor detection thresholds) to identify which odorants are present in the neighborhoods at detectable levels. We also compared concentrations of chemicals detected within the neighborhoods against the average odor detection thresholds for each chemical published in the peer-reviewed literature to contextualize how the average person may potentially respond to odorants detected in the air, recognizing that these odor detection thresholds are not recognition thresholds and were developed in clean laboratory environments, not outdoor air. This results in a conservative assessment of potential odor impacts.

For our evaluation, we limited our analysis of the air quality data, summarized in Table 4, to only include SCS Engineers' off-site, weekly grab sample data, CTEH's PTR-MS Mobile Monitoring data, and Intertox's odor study data for the following reasons:

- SCS Engineers' continuous air monitoring data for particulate matter was excluded because particulate matter is not odorous.
- SCS Engineers' continuous air monitoring data for hydrogen sulfide, an odorous chemical with the distinct smell of rotten eggs, collected using the Aeroqual AQM 65 was excluded because the Aeroqual AQM 65 is "known to exhibit a spike in apparent hydrogen sulfide levels upon startup after a power-down period" and "other gasses in the environment may also cause a response from the hydrogen sulfide module" which can also result in false hydrogen sulfide readings (SCS Engineers, 2024).
- SCS Engineers' continuous air monitoring data for BTEX, TRS, and SO<sub>x</sub> was excluded because data were collected at only one off-site location. Additionally, BTEX, TRS, and SO<sub>x</sub> reflect total concentrations of multiple chemicals, whereas odors cannot be evaluated for mixtures because they cannot be compared against chemical-specific odor detection thresholds.
- CTEH's PTR-MS data for methyl ethyl ketone + tetrahydrofuran and xylenes + ethylbenzene were excluded because odors cannot be evaluated for mixtures as they cannot be compared against chemical-specific odor detection thresholds.
- SCS Engineers' and CTEH's 24-hour and 1-hour air samples were excluded because 24-hour and 1-hour air samples represent the total amount of chemicals captured at a given sample site over an entire 24-hour or 1-hour period and thus, on a mass basis, are overestimates of the air concentration at any given time during the day. While these data might be averaged against the duration of the capture to estimate air concentrations at any given time, such estimates may not represent short-term spikes in odiferous chemical concentrations brought on by any number of factors, including changes in temperature, wind speed, and direction, precipitation, or movement of material into or around CCL.

**Table 4. Summary of air quality monitoring data, determination of whether the data were included in the odor impact assessment, and justification for exclusion**

Sampling team	Monitoring duration and type	Instrument or Analysis Method	Analytes	Locations	Dates	Included in odor impact assessment (Y/N)	Justification for exclusion
SCS Engineers	Continuous, 24-hour air monitoring	Aeroqual AQM 65*	Hydrogen sulfide	5 on-site	9/5/2023	N	a, b
			PM <sub>10</sub> PM <sub>2.5</sub>	7 off-site	- 4/29/2024		
SCS Engineers	Continuous, 24-hour air monitoring	Aeroqual AQM 65	BTEX	1 on-site	9/5/2023	N	c, d
		Thermo Scientific Model 43i with CD	TRS	1 off-site	-		
		NOVA Thermal Oxidizer	SO <sub>x</sub>		4/29/2024		
SCS Engineers	Weekly, discrete (grab) air samples	South Coast AQMD District Method	Sulfurs	8 on-site	9/5/2023	Y	N/A
		307.91: Total reduced sulfur compounds USEPA Method Total Organics-15 (TO-15): Determination of VOCs in Air	VOCs	10 off-site	- 4/23/2024		
SCS Engineers	24-hour air samples three days per week	South Coast AQMD District Method	Sulfurs	7 off-site	9/5/2023	N	e
		307.91: Total reduced sulfur compounds USEPA Method Total Organics-15 (TO-15): Determination of VOCs in Air	VOCs		- 4/29/2024		

Sampling team	Monitoring duration and type	Instrument or Analysis Method	Analytes	Locations	Dates	Included in odor impact assessment (Y/N)	Justification for exclusion
CTEH	Real-time air monitoring	RAE Systems MultiRAE Pro handheld device UltraRAE handheld device	tVOCs Benzene Hydrogen sulfide	See CTEH report	3/4/2024-3/31/2024	N	d, f
CTEH	Mobile monitoring	Proton Transfer Reaction-Mass Spectrometry (PTR-MS)	Benzene Dimethyl disulfide Dimethyl sulfide Hydrogen sulfide Propene Styrene Tetrachloroethylene MEK + Tetrahydrofuran Xylenes + Ethylbenzene	See CTEH report	3/4/2024-3/31/2024	Y**	g**
CTEH	Continuous, fixed-location air samples (24-hour evacuated canister)	USEPA Method TO-15, Sim VOC Sulfurs by TO-15, Wet in Air USEPA Method TO-15, Wet in Air	VOCs TRS Dimethyl disulfide	11 off-site	3/4/2024-3/31/2024	N	e



Sampling team	Monitoring duration and type	Instrument or Analysis Method	Analytes	Locations	Dates	Included in odor impact assessment (Y/N)	Justification for exclusion
CTEH	Short-term air samples (1-hour evacuated canister)	USEPA Method TO-15	Sulfurs VOCs	15 off-site if/ when an action level exceedance of benzene is observed by real-time air monitoring personnel	3/4/2024- 3/31/2024	N	N/A
CTEH	Grab air samples (evacuated canister)	USEPA Method TO-15	Sulfurs VOCs	1 background 15 off-site if/ when an odor was detected at or above 7 D/T using the Nasal Ranger® Field Olfactometer	6/11/2024 - 6/18/2024	Y	N/A

Sampling team	Monitoring duration and type	Instrument or Analysis Method	Analytes	Locations	Dates	Included in odor impact assessment (Y/N)	Justification for exclusion
Intertox	Grab air samples (10-liter Tedlar bags using a vacuum chamber)	USEPA Method TO-17 modified for selected-ion flow-tube (SIFT)-mass spectrometry	Sulfurs VOCs	1 background 15 off-site if/when an odor was detected at or above 7 D/T using the Nasal Ranger® Field Olfactometer	6/11/2024 - 6/14/2024 and 6/18/2024	Y	N/A

PM<sub>10</sub>: particulate matter that is 10 micrometers (µm) or less in diameter; PM<sub>2.5</sub>: particulate matter that is 2.5 µm or less in diameter; BTEX: benzene, toluene, ethylbenzene, and xylenes; TRS: total reduced sulfurs; SO<sub>x</sub>: sulfur oxides; MEK: methyl ethyl ketone; VOCs: volatile organic compounds

\* combined gas analyzer and nephelometer

\*\* MEK+tetrahydrofuran and xylenes + ethylbenzene was not included (see g)

<sup>a</sup> Particulate matter was excluded because particulate matter is not odorous

<sup>b</sup> Aeroqual AQM 65 is "known to exhibit a spike in apparent hydrogen sulfide levels upon startup after a power-down period" and "other gasses in the environment may also cause a response from the hydrogen sulfide module" which can also result in false hydrogen sulfide readings

<sup>c</sup> Data was collected at only one off-site location

<sup>d</sup> BTEX, TRS, and SO<sub>x</sub> are total concentrations of multiple chemicals, and odors cannot be evaluated for mixtures

- <sup>e</sup> 24-hour air samples represent the total amount of chemicals captured at a given sample site over an entire 24-hour period and thus are overestimates of the air concentration at any given time during the day. While these data might be averaged against the duration of the capture to estimate air concentrations at any given time, such estimates may not represent short-term spikes in odiferous chemical concentrations brought on by any number of factors, including changes in temperature, wind speed, and direction, precipitation, or movement of material into or around CCL.
- <sup>f</sup> The detection limit of hydrogen sulfide was greater than the odor detection threshold and was not detected off-site by Ultra or Multi RAEs
- <sup>g</sup> MEK + tetrahydrofuran and xylenes + ethylbenzene was excluded because odors cannot be evaluated for mixtures

### **7.1.1 Identification of odorants detected at or above lowest odor detection thresholds**

To identify odorants detected at off-site locations (in the neighborhoods surrounding CCL) at or above the lowest odor detection thresholds, we evaluated weekly air quality data collected by SCS Engineers, off-site grab sample data, data from CTEH's 28-day air quality study, and data from Intertox's odor study. Comparing detected concentrations to lowest odor detection thresholds is highly conservative but accounts for potentially sensitive individuals (e.g., hyperosmics, pregnant women, children). We also compare detected concentrations to the level of distinct odor awareness (LOA)<sup>8</sup>, where available, or average odor detection thresholds, to better understand the magnitude of detected concentrations compared to odor detection thresholds as well as the magnitude of difference between the lowest and average odor detection thresholds or LOA published in the literature.

Several chemicals were detected at off-site locations at or above the lowest odor detection threshold (Table 5). Hydrogen sulfide, dimethyl disulfide, and dimethyl sulfide were detected at or above the lowest odor detection thresholds in all the air quality data evaluated. Several odorants were also detected at or above the lowest odor detection threshold that were either not sampled for or not detected in all sampling, including ethanol, toluene, styrene, methyl mercaptan, carbon disulfide, propylene dichloride, butyl mercaptan, tert-butyl mercaptan, propyl mercaptan, ethyl mercaptan, thiophene, and acrolein.

For several of the tested chemicals, sampling methods had limits of quantitation (LOQs)<sup>9</sup> or method detection limits (MDLs)<sup>10</sup> that exceeded the lowest odor detection thresholds (see Appendix D for a list of these compounds and their corresponding LOQs and odor detection thresholds). In addition, odors cannot be evaluated for mixtures tested for by SCS Engineers and CTEH (e.g., methyl ethyl ketone + tetrahydrofuran and xylenes + ethylbenzene, total reduced sulfurs) because mixture concentrations cannot be compared against chemical-specific odor detection thresholds. Some of these compounds were quantified together because they are isomers (compounds, radicals, or ions that contain the same number of atoms of the same elements but differ in structural arrangement and properties (methyl ethyl

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<sup>8</sup> The level of distinct odor awareness (LOA) is defined by the National Research Council (NRC) as "the concentration above which it is predicted that more than half the exposed population will experience at least a distinct odor intensity, and about 10% of the population will experience a strong odor intensity" (NRC, 2010). The LOA is used by "chemical emergency responders in assessing public awareness of the exposure due to odor perception" (NRC, 2010).

<sup>9</sup> Lowest amount of analyte that can be measured with acceptable precision and accuracy as required by data quality objectives (USEPA, 2012).

<sup>10</sup> The minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results (USEPA, 2023).

ketone and tetrahydrofuran, and xylenes and ethylbenzene, for example) (Merriam-Webster, n.d.) and their mass-to-charge ratios measured by the mass spectrometer instrument could not be distinguished from one another for quantification.

**Table 5. Summary of off-site air sample results from the Intertox odor study, CTEH PTR-MS 28-day air quality study mobile data, and SCS Engineers weekly off-site grab samples compared against lowest and average odor detection thresholds.**

Analyte	Off-site air sample result range (min. – max.) by study (ppb)						Odor detection threshold (ODT)
	(% detection ≥ lowest ODT)						
Intertox odor study Tedlar bag samples <sup>a</sup> (Background samples) <sup>b</sup>	Intertox odor study MiniCan™ samples <sup>c</sup> (Background samples) <sup>d</sup>	CTEH 28-day study PTR-MS mobile samples <sup>e</sup>	SCS Engineers weekly, off-site grab samples <sup>f</sup>	Lowest ODT (ppb)	Average ODT (ppb)	Source(s)	
Hydrogen sulfide	1 (42%) (1)	10.1–205 (14.3–84)	4.93–11.2 (0.05%)	5–61 (6%)	0.0047	10 <sup>g</sup> AIHA, 2024; NRC, 2010	
Dimethyl sulfide	273–482 (95%) (289–637)	15.7 (ND)	0.04–6.51 (23.5%)	0.74–0.99 (0.8%) <sup>h</sup>	0.12	63 AIHA, 2024; PubChem, 2024b	
Dimethyl disulfide	1–2 (22%) (ND)	23 (ND)	0.03–1.90 (<0.01%)	64 (0.3%)	0.29	3.6 AIHA, 2024; PubChem, 2024c	
Ethanol	N/A	3.53–108 (2.81–37.2)	N/A	3.11–981 (0.8%)	90	84,000 AIHA, 2024; NJ DOH, 2016	
Toluene	ND	N/A	N/A	4.28–91.3 (2%)	32	2,800 AIHA, 2024; USEPA, 1992	
Styrene	N/A	N/A	0.02–37.0 (0.01%)	N/A	16	150 AIHA, 2024; USEPA, 1992	

Analyte	Off-site air sample result range (min. – max.) by study (ppb)				Odor detection threshold (ODT)		
	Intertox odor study Tedlar bag samples <sup>a</sup> (Background samples) <sup>b</sup>	Intertox odor study MiniCan™ samples <sup>c</sup> (Background samples) <sup>d</sup>	CTEH 28-day study PTR-MS mobile samples <sup>e</sup>	SCS Engineers weekly, off-site grab samples <sup>f</sup>	Lowest ODT (ppb)	Average ODT (ppb)	Source(s)
Methyl mercaptan	1 (32%)	19.6 (ND)	N/A	N/A	0.0002	0.54	AIHA, 2024; PubChem, 2024e
Carbon disulfide	ND	0.6-14.9 (0.59-23)	N/A	N/A	22	NA	AIHA, 2024
1,2-Dichloropropane (propylene dichloride)	419-739 (95%) (457-985)	N/A	N/A	N/A	260 <sup>h</sup>	260 <sup>h</sup>	AIHA, 2024; USEPA, 1992
1-Butanethiol (butyl mercaptan)	1-3 (17%) (1)	N/A	N/A	N/A	0.0027	1	AIHA, 2024; PubChem, 2024a
2-methyl-2-propanethiol (tert-butyl mercaptan)	6-17 (17%) (4)	N/A	N/A	N/A	0.029	0.81	AIHA, 2024; PubChem, 2024g
1-propanethiol (propyl mercaptan)	1-4 (84%) (1-2)	N/A	N/A	N/A	0.013	1.6	AIHA, 2024; PubChem, 2024f

<b>Analyte</b>	<b>Off-site air sample result range (min. – max.) by study (ppb)</b>				<b>Odor detection threshold (ODT)</b>		
	<i>(% detection ≥ lowest ODT)</i>						
	<b>Intertox odor study Tedlar bag samples<sup>a</sup> (Background samples)<sup>b</sup></b>	<b>Intertox odor study MiniCan™ samples<sup>c</sup> (Background samples)<sup>d</sup></b>	<b>CTEH 28-day study PTR-MS mobile samples<sup>e</sup></b>	<b>SCS Engineers weekly, off-site grab samples<sup>f</sup></b>	<b>Lowest ODT (ppb)</b>	<b>Average ODT (ppb)</b>	<b>Source(s)</b>
Ethyl mercaptan	1-3 (63%) (1-3)	N/A	N/A	N/A	0.0052	0.35	AIHA, 2024; PubChem, 2024d
Thiophene	1 (21%) <sup>h</sup> (ND)	N/A	N/A	N/A	0.56	NA	AIHA, 2024
Acrolein	1-7 (37%) (2-7)	N/A	N/A	N/A	3.6	1800	AIHA, 2024; USEPA, 1992

min. = minimum; max. = maximum; ppb = parts per billion; ODT = odor detection threshold; N/A = not available (chemical not sampled for); ND = not detected

<sup>a</sup> Total number of Intertox odor study off-site Tedlar bag samples =

<sup>b</sup> Total number of Intertox odor study background Tedlar bag samples = 6

<sup>c</sup> Total number of Intertox odor study off-site MiniCan™ samples =

<sup>d</sup> Total number of Intertox odor study background MiniCan™ samples =

<sup>e</sup> Total number of CTEH PTR-MS mobile samples collected between March 4-31, 2024 = 160,710

<sup>f</sup> Total number of SCS Engineers weekly, off-site grab samples collected between September 5, 2023 – April 23, 2024 = 383

<sup>g</sup> Level of distinct odor awareness (LOA) for hydrogen sulfide (hydrogen sulfide) is used for the average odor detection threshold for hydrogen sulfide (NRC, 2010)

<sup>h</sup> All detections reported were below MDL (1.4-1.43 ppb)



### **7.1.2 Evaluation of air quality data**

Chemical concentrations in air samples collected by SCS Engineers and CTEH (in the 28-day air quality study) were used by CTEH to assess whether constituents in air are above health-protective levels, and if so, to understand which compounds warrant further investigation. These data were not targeted to support an odor assessment; therefore, we used these data to identify the odorous chemicals (odorants) that were detected in air samples collected in the neighborhoods (e.g., Val Verde, Live Oak, Hasley Hills) surrounding CCL and inform the approach taken in the Intertox odor study conducted between June 11–17, 2024.

For our odor assessment, Intertox collected air samples when an odor was measured by odor samplers using the Nasal Ranger® at or above 7 dilutions to thresholds (7 D/T, a relatively common regulatory standard for determining “nuisance” by multiple state agencies) to identify which odorous chemicals were above odor detection thresholds (see Section 6.1.3). We used the lowest odor detection thresholds identified in guidance documents and peer-reviewed literature to ensure we captured data that may be relevant to individuals that may have higher sensitivity to odors (e.g., hyperosmics, pregnant women, children).

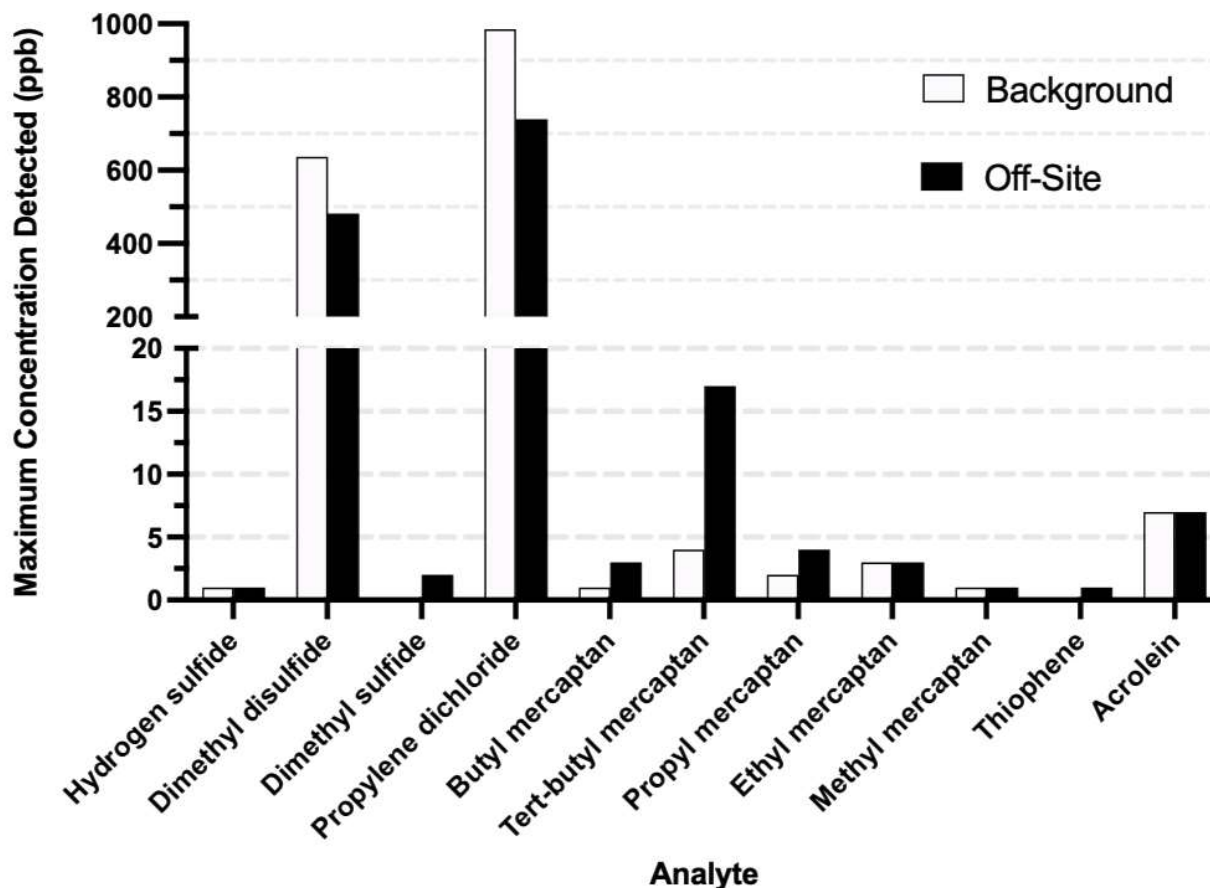
We found that several odorants were detected at or above the lowest odor detection threshold at off-site sample locations in grab air samples collected when a strong odor was detected ( $\geq 7$  D/T) by Intertox during the June 2024 odor study (Table 5).

CTEH also collected air samples during the June 2024 odor study and, except for hydrogen sulfide, Intertox and CTEH detected similar chemicals; however, Intertox detected chemicals more frequently. Differences in detection frequency between Intertox and CTEH samples were likely due to differences in detection limits based on the type of analytical equipment used to measure the concentration of the chemicals detected in the air samples. Thiophene was also detected at or above the lowest odor detection threshold in the Intertox samples from the June 2024 odor study; however, it was only detected in samples that exceeded the laboratory sample hold time requirements.<sup>11</sup> This means that the chemical was likely a degradation product (a chemical that is formed when a substance breaks down or decomposes) that formed in the air sample. We include this odorant in our evaluation out of an abundance of caution. The full analytical results of Intertox and CTEH air samples are in Appendix E and Appendix F.

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<sup>11</sup> Air samples collected on the first day of sampling, June 11, 2024, did not make it to the lab for analysis within the required hold time (not to exceed 30 hours). Samples analyzed outside of sample hold time requirements may result in some degradation of air samples (i.e., analytes may bio-degrade, oxidize, precipitate, sorb, volatilize, or other physical and chemical processes may occur that can affect the integrity of the sample). Results of these samples were evaluated to be similar to those analyzed within sample hold times except for the presence of thiophene.

Figure 11 also shows maximum concentrations of the eleven odorants detected at or above the lowest published odor detection thresholds. These samples were taken at off-site and background locations. Hydrogen sulfide, dimethyl sulfide, propylene dichloride, ethyl mercaptan, methyl mercaptan, and acrolein were detected at the same or higher concentrations at the background and off-site locations. The results of the background sampling show elevated levels of certain constituents, suggesting that outside influences may have impacted the background sample. This is discussed in more detail in Section 8.3.



**Figure 11. Maximum concentrations of analytes detected in Intertox odor study at background and off-site locations between June 7–11, 2024.**

## 7.2 Odor Data

We evaluated the odor data collected at off-site locations to characterize odor intensity/strength, character, and hedonic tone. Odor intensities measured at sample sites in the neighborhoods surrounding CCL were compared to a dilution to a threshold value of 7 D/T. The character and hedonic tone reported at the sample sites when odor intensity exceeded the threshold were also evaluated.

### **7.2.1 Odor intensity data**

Odor intensity was measured by CTEH odor samplers using the Nasal Ranger® during a 28-day odor study in March 2024 and a 7-day odor study in June 2024. The results of these studies are summarized in the following sections (raw data from Nasal Ranger® sampling are in Appendix G and Appendix H).

#### **7.2.1.1 March 2024 odor study**

In March 2024, CTEH collected over 3,600 odor intensity measurements at fifteen (15) sample sites in the communities surrounding CCL (Figure 12) using the Nasal Ranger® Field Olfactometer. The frequency of odor intensities detected at each sample site through the study period, March 11–29, 2024, is summarized in Table 6. Most odor intensity measurements (97.6%) were below 7 D/T. Most odors were also below 2 D/T (86.2%), the lowest odor intensity using the Nasal Ranger®.

Approximately 2.5% of the total odor samples collected in the March 2024 study were detected at or above 7 D/T. Most odor detections at or above 7 D/T were detected at location OS-001, west of CCL, near the LA County Fire Department Del Valle Regional Training Center (14.7% of total samples collected at OS-001). At all other sample locations, individually, odor intensity was at or above 7 D/T in less than 5% of collected samples, and no odors equal to or greater than 7 D/T were detected at the sampling locations furthest from CCL (OS-012, OS-013, and OS-015). See Figure 12 below for sampling locations.



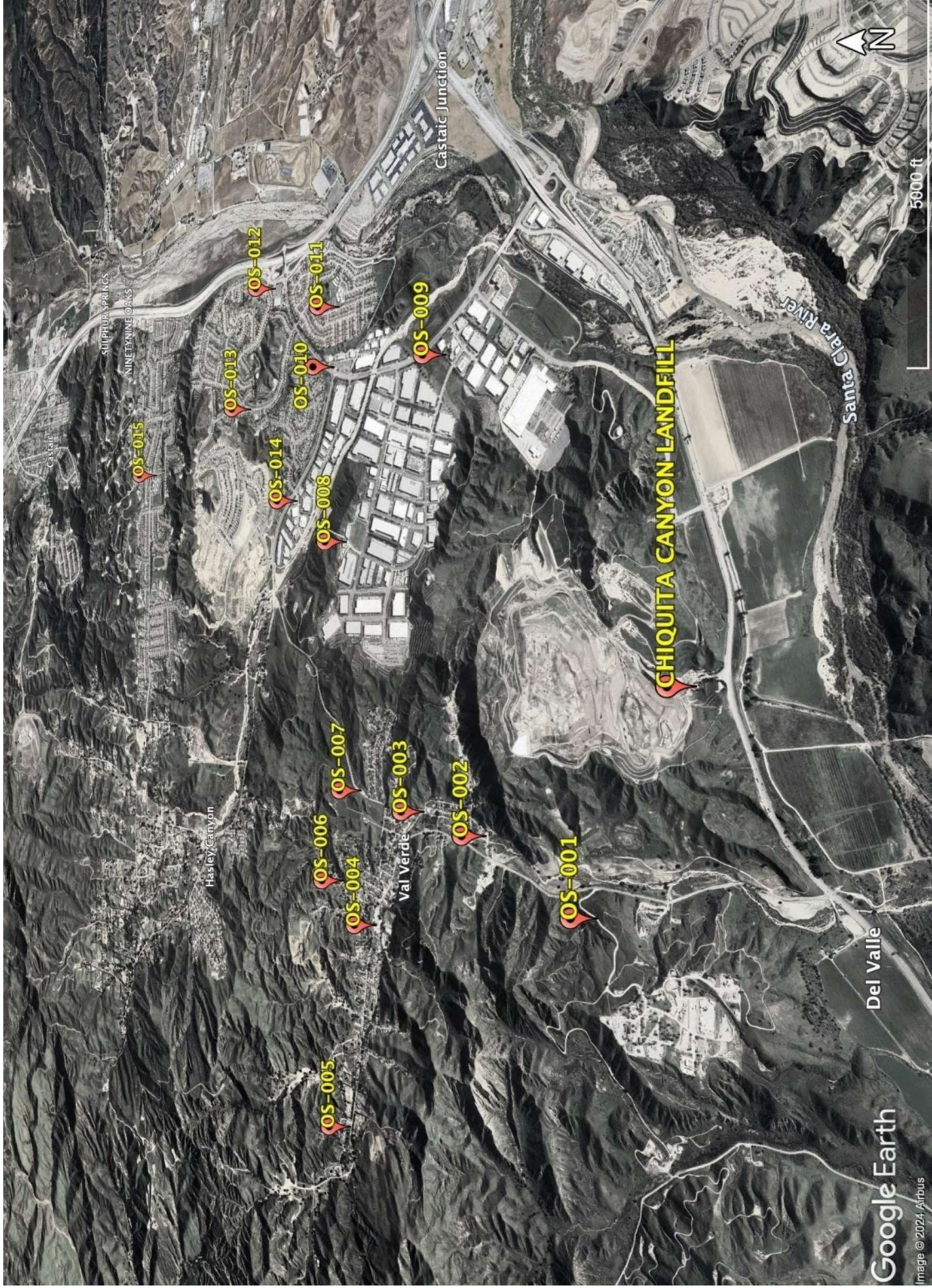


Figure 12. Map of CTEH odor sampling locations during the March 11–29, 2024 odor study

**Table 6. Summary of the number and percent frequency of different odor intensity detected at each sample site during the March 11–29, 2024 odor study conducted by CTEH**

Location ID	Location Description	Dilution to Threshold (D/T) Frequency (Percent Frequency)							
		ND	<2	2	4	7	15	30	60
OS-001	LA County Fire Department Del Valle Regional Training Center	78 (32.6%)	95 (39.7%)	22 (9.2%)	9 (3.8%)	9 (3.8%)	10 (4.2%)	14 (5.9%)	2 (0.8%)
OS-002	Lincoln Ave near intersection with Chiquito Canyon Rd	106 (44.9%)	101 (42.8%)	16 (6.8%)	3 (1.3%)	6 (2.5%)	3 (1.3%)	0 (0%)	1 (0.4%)
OS-003	Lincoln Ave and Taylor St	118 (49.2%)	93 (38.8%)	22 (9.2%)	2 (0.8%)	0 (0%)	3 (1.3%)	2 (0.8%)	0 (0%)
OS-004	Bus Stop at San Martinez and Val Verde Rd	114 (48.5%)	91 (38.7%)	21 (8.9%)	5 (2.1%)	2 (0.9%)	1 (0.4%)	0 (0%)	1 (0.4%)
OS-005	San Martinez Rd and Verdale Ave	65 (27.4%)	139 (58.6%)	25 (10.5%)	7 (3.0%)	0 (0%)	1 (0.4%)	0 (0%)	0 (0%)
OS-006	Val Verde Rd and Oakwood Ave	78 (33.3%)	120 (51.3%)	25 (10.7%)	5 (2.1%)	4 (1.7%)	0 (0%)	2 (0.9%)	0 (0%)
OS-007	Bus Stop 14608 - Del Valle Rd & Silver St	98 (40.7%)	115 (47.7%)	13 (5.4%)	7 (2.9%)	4 (1.7%)	3 (1.2%)	1 (0.4%)	0 (0%)

Location ID	Location Description	Dilution to Threshold (D/T) Frequency (Percent Frequency)									
		ND	<2	2	4	7	15	30	60		
OS-008	Ave Penn and Witherspoon Pkwy	105 (44.1%)	93 (39.1%)	22 (9.2%)	9 (3.8%)	5 (2.1%)	4 (1.7%)	0 (0%)	0 (0%)	0 (0%)	
OS-009	Castaic Union School District Building	107 (43.9%)	100 (41%)	23 (9.4%)	9 (3.7%)	4 (1.6%)	0 (0%)	1 (0.4%)	0 (0%)	0 (0%)	
OS-010	Starbucks / store by Bruce sushi	80 (32.7%)	133 (54.3%)	25 (10.2%)	5 (2.0%)	2 (0.8%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
OS-011	Park behind Live Oak Elementary school	86 (35.1%)	113 (46.1%)	39 (15.9%)	5 (2.0%)	2 (0.8%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
OS-012	Ralph's parking lot facing Bank of America	95 (39.4%)	132 (54.8%)	13 (5.4%)	1 (0.4%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
OS-013	Cambridge Ave across from house number 29862	46 (18.9%)	160 (65.8%)	32 (13.2%)	5 (2.1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
OS-014	Lot in front of Fire Station 143	54 (21.5%)	167 (66.5%)	21 (8.4%)	8 (3.2%)	1 (0.4%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	

Location ID	Location Description	Dilution to Threshold (D/T) Frequency (Percent Frequency)							
		ND	<2	2	4	7	15	30	60
OS-015	Front of Castaic Elementary School	110 (46.4%)	114 (48.1%)	12 (5.1%)	1 (0.4%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<b>Grand Total</b>	<b>All locations</b>	<b>1340 (37.2%)</b>	<b>1766 (49%)</b>	<b>331 (9.2%)</b>	<b>81 (2.2%)</b>	<b>39 (1.1%)</b>	<b>25 (0.7%)</b>	<b>20 (0.6%)</b>	<b>4 (0.1%)</b>



### *7.2.1.2 June 2024 odor study*

CTEH conducted a follow-up, 7-day odor study from June 11–17, 2024, at the same sampling locations as the March 2024 odor study in conjunction with Intertox's odor study (see Section 6.1.3). CTEH collected over 500 additional measurements at the fifteen (15) sample sites in the communities surrounding CCL. The frequency of odor intensity detected at each site during the June 2024 odor study is summarized in Table 7. Most odor intensity measurements (approximately 92.4%) were below 7 D/T. Additionally, most odors were below 2 D/T (78.3%), the lowest odor intensity on the Nasal Ranger®.

Only approximately 7.6% of odor strength measurements were at or above 7 D/T. Most odor strength measurements at or above 7 D/T were detected at OS-005, located northwest of CCL near the corner of San Martinez Road and Verdale Avenue (26.5% of total samples collected at OS-005). Of note, this sample site was located across the street from a chicken and horse farm, and the primary odor descriptions provided were of manure (6 of 9 descriptions) and smoke (2 of 9 descriptions) due to a nearby fire. At all other sample locations, odor intensity was at or above 7 D/T in less than 15% of measurements. No odor intensity equal to or greater than 7 D/T was measured at the furthest sampling location in front of Castaic Elementary School, OS-015.

**Table 7. Summary of the frequency and percent frequency of odor intensity detected at each sample site during the June 11–17, 2024 odor study conducted by CTEH**

Location ID	Location Description	Dilution to Threshold (D/T) Frequency (Percent Frequency)							
		ND	<2	2	4	7	15	30	60
OS001	LA County Fire Department Del Valle Regional Training Center	29 (76.3%)	4 (10.5%)	2 (5.3%)	1 (2.6%)	1 (2.6%)	0 (0.0%)	1 (2.6%)	0 (0.0%)
OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	15 (42.9%)	14 (40.0%)	2 (5.7%)	1 (2.9%)	2 (5.7%)	1 (2.9%)	0 (0.0%)	0 (0.0%)
OS003	Lincoln Ave and Taylor St	22 (61.1%)	8 (22.2%)	2 (5.6%)	2 (5.6%)	1 (2.8%)	1 (2.8%)	0 (0.0%)	0 (0.0%)
OS004	Bus Stop at San Martinez and Val Verde Rd	26 (68.4%)	6 (15.8%)	5 (13.2%)	0 (0.0%)	1 (2.6%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
OS005	San Martinez Rd and Verdale Ave	9 (26.5%)	11 (32.4%)	3 (8.8%)	2 (5.9%)	1 (2.9%)	4 (11.8%)	3 (8.8%)	1 (2.9%)
OS006	Val Verde Rd and Oakwood Ave	26 (74.3%)	4 (11.4%)	3 (8.6%)	1 (2.9%)	1 (2.9%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
OS007	Bus Stop 14608 - Del Valle Rd & Silver St	22 (57.9%)	10 (26.3%)	2 (5.3%)	3 (7.9%)	1 (2.6%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

Location ID	Location Description	Dilution to Threshold (D/T) Frequency (Percent Frequency)									
		ND	<2	2	4	7	15	30	60		
OS008	Ave Penn and Witherspoon Pkwy	25 (73.5%)	2 (5.9%)	2 (5.9%)	1 (2.9%)	1 (2.9%)	2 (5.9%)	1 (2.9%)	1 (2.9%)	0 (0.0%)	
OS009	Castaic Union School District Building	16 (47.1%)	10 (29.4%)	0 (0.0%)	3 (8.8%)	3 (8.8%)	2 (5.9%)	2 (5.9%)	0 (0.0%)		
OS010	Starbucks / store by Bruce sushi	14 (38.9%)	11 (30.6%)	9 (25.0%)	1 (2.8%)	1 (2.8%)	0 (0.0%)	0 (0.0%)	0 (0.0%)		
OS011	Park behind Live Oak Elementary school	7 (25.9%)	13 (48.1%)	3 (11.1%)	2 (7.4%)	1 (3.7%)	1 (3.7%)	0 (0.0%)	0 (0.0%)		
OS012	Ralph's parking lot facing Bank of America	3 (10.0%)	11 (36.7%)	7 (23.3%)	5 (16.7%)	1 (3.3%)	3 (10.0%)	0 (0.0%)	0 (0.0%)		
OS013	Cambridge Ave across from house number 29862	23 (67.6%)	5 (14.7%)	4 (11.8%)	0 (0.0%)	1 (2.9%)	0 (0.0%)	1 (2.9%)	0 (0.0%)		
OS014	Lot in front of Fire Station 143	24 (66.7%)	6 (16.7%)	4 (11.1%)	0 (0.0%)	1 (2.8%)	0 (0.0%)	0 (0.0%)	1 (2.8%)		
OS015	Front of Castaic Elementary School	21 (70.0%)	6 (20.0%)	1 (3.3%)	2 (6.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)		

Location ID	Location Description	Dilution to Threshold (D/T) Frequency (Percent Frequency)						
		<2	2	4	7	15	30	60
ND								
Grand Total	All locations	121 (54.8%)	49 (9.5%)	24 (4.7%)	17 (3.3%)	14 (2.7%)	6 (1.2%)	2 (0.4%)

### 7.2.2 Odor character and hedonic tone data

During the March and June 2024 odor studies, CTEH odor samplers recorded odor character and hedonic tone—the relative pleasantness or unpleasantness of the odor—for each odor intensity measurement (excluding non-detects).

During March 2024, odors associated with a pleasant hedonic tone ( $HT \geq 0$ ) were recorded more frequently (54.3%) than odors associated with an unpleasant hedonic tone ( $HT < 0$ ) (45.7%) (Table 8). Positive, or pleasant, hedonic tones reported by odor samplers were generally associated with fruity (e.g., sweet), floral (e.g., fragrant, herbal), vegetable (e.g., onion, potato), or earthy (e.g., grassy, woody) odor character. In contrast, negative, or unpleasant, hedonic tones reported by odor samplers were generally associated with offensive (e.g., garbage, rancid, sewer, manure) or chemical (e.g., car exhaust, tar/asphalt, gasoline, burnt rubber) odor character.

**Table 8. Percent frequency of unpleasant hedonic tone ( $HT < 0$ ) and pleasant hedonic tone ( $HT \geq 0$ ) measured at each sample site during the March 11–29, 2024 odor study conducted by CTEH**

Location ID	Location Description	HT < 0 (unpleasant)	HT ≥ 0 (pleasant)
OS-001	LA County Fire Department Del Valle Regional Training Center	68.1%	31.9%
OS-002	Lincoln Ave near the intersection with Chiquito Canyon Rd	60.8%	39.2%
OS-003	Lincoln Ave and Taylor St	53.2%	46.8%
OS-004	Bus Stop at San Martinez and Val Verde Rd	55.7%	44.3%
OS-005	San Martinez Rd and Verdale Ave	72.1%	27.9%
OS-006	Val Verde Rd and Oakwood Ave	23.1%	76.9%
OS-007	Bus Stop 14608 - Del Valle Rd & Silver St	29.9%	70.1%

<b>Location ID</b>	<b>Location Description</b>	<b>HT &lt; 0 (unpleasant)</b>	<b>HT ≥ 0 (pleasant)</b>
OS-008	Ave Penn and Witherspoon Pkwy	63.7%	36.3%
OS-009	Castaic Union School District Building	51.8%	48.2%
OS-010	Starbucks / store by Bruce Sushi	57.3%	42.7%
OS-011	Park behind Live Oak Elementary School	34.0%	66.0%
OS-012	Ralph's parking lot facing Bank of America	57.9%	42.1%
OS-013	Cambridge Ave across from house number 29862	18.7%	81.3%
OS-014	Lot in front of Fire Station 143	27.9%	72.1%
OS-015	Front of Castaic Elementary School	24.6%	75.4%
<b>Grand Total</b>	<b>All locations</b>	<b>45.7%</b>	<b>54.3%</b>

During June 2024, odors associated with an unpleasant hedonic tone (HT<0) (63.8%) were recorded more frequently than odors associated with a pleasant hedonic tone (HT≥0) (36.2%) (Table 9). Similar to the March 2024 odor study, positive or pleasant, hedonic tones reported by odor samplers were generally related to fruity (e.g., sweet), floral (e.g., fragrant, perfumy, rose-like), vegetable (e.g., onion, celery, tomato), and earthy (e.g., smokey, grassy, woody) odor character and negative hedonic tones with offensive (e.g., garbage, manure) and chemical (e.g., car exhaust, tar/asphalt), earthy (smokey, grassy).

On June 15, 2024, a brush fire broke out approximately 20–25 miles northwest of CCL in Gorman, CA, resulting in poor air quality and smokey conditions on the evening of June 15 and throughout June 16, 2024. Additionally, construction activities were occurring at OS008 and OS011. These factors during odor sampling were an additional source of odors associated with a negative hedonic tone.

**Table 9. Percent frequency of unpleasant hedonic tone (HT<0) and pleasant hedonic tone (HT≥0) measured at each sample site during the June 11–17, 2024, odor study conducted by CTEH**

Location ID	Location Description	HT < 0 (unpleasant)	HT ≥ 0 (pleasant)
OS001	LA County Fire Department Del Valle Regional Training Center	66.7%	33.3%
OS002	Lincoln Ave near the intersection with Chiquita Canyon Rd	40.0%	60.0%
OS003	Lincoln Ave and Taylor St	64.3%	35.7%
OS004	Bus Stop at San Martinez and Val Verde Rd	66.7%	33.3%
OS005	San Martinez Rd and Verdale Ave	84.0%	16.0%
OS006	Val Verde Rd and Oakwood Ave	44.4%	55.6%
OS007	Bus Stop 14608 - Del Valle Rd & Silver St	31.3%	68.8%
OS008	Ave Penn and Witherspoon Pkwy	100.0%	0.0%
OS009	Castaic Union School District Building	94.4%	5.6%
OS010	Starbucks / store by Bruce Sushi	63.6%	36.4%
OS011	Park behind Live Oak Elementary School	70.0%	30.0%
OS012	Ralph's parking lot facing Bank of America	33.3%	66.7%
OS013	Cambridge Ave across from house number 29862	80.0%	20.0%
OS014	Lot in front of Fire Station 143	83.3%	16.7%
OS015	Front of Castaic Elementary School	66.7%	33.3%
<b>Grand Total</b>		<b>63.8%</b>	<b>36.2%</b>



### **7.2.3 Odor irritation data**

We reviewed chemical irritation data from authoritative agencies and organizations and presented in the peer-reviewed literature to identify irritation thresholds for the following chemicals that were identified as potential odorants of concern (see Section 7.1):

- Hydrogen sulfide, which has a "rotten egg" odor;
- Dimethyl sulfide, which has a disagreeable, asparagus, or putrid odor;
- Dimethyl disulfide, which has a "rotten cabbage" odor;
- Styrene, which has a sharp, solvent-like odor;
- Ethanol, which has an ethereal, vinous, alcohol odor;
- Toluene, which has a pungent, paint-thinner-type odor;
- Propylene, dichloride which has a chloroform-like odor;
- Butyl mercaptan, which has a skunk-like odor;
- tert-Butyl mercaptan, which has a foul-smelling odor;
- Propyl mercaptan, which has a cabbage, natural gas-type odor;
- Ethyl mercaptan, which has a vegetable sulfurous-type odor;
- Methyl mercaptan, which has a "rotten cabbage" odor;
- Thiophene, which has a slightly aromatic, benzene-like odor; and
- Acrolein, which has a pungent, disagreeable almond- or cherry-like odor.

We also reviewed the peer-reviewed literature to characterize each chemical's potential for stimulating trigeminal and vagal nerve endings and their respective TRP channels<sup>12</sup>. While little data is available in the literature for most chemicals that were detected, irritation responses generally point to trigeminal nerve involvement and TRPA1 or TRPV1 channels. Table 10 summarizes the available information regarding impacted cranial nerves and receptors and the potential physiological responses for each odorant identified in our evaluation.

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<sup>12</sup> Transient receptor potential (TRP) ion channels are key molecular sensors that allow us to detect and respond to our chemical environment. They convert chemical stimuli into electrical signals that our nervous system can understand.

**Table 10. Summary of the cranial nerve, receptors, and potential physiological responses caused by innervation from exposure to detected odorants, and corresponding maximum concentrations detected in off-site grab samples and odor and irritation thresholds. Note: For a physiological response to occur from exposure to an odorant, the chemical concentration must be at or above the odor detection threshold (ODT) and, for some chemicals, be at or above the irritation threshold.**

<b>Odorant</b>	<b>Maximum concentration detected in off-site grab samples</b>	<b>Odor and Irritation Thresholds</b>	<b>Cranial Nerve</b>	<b>Receptor</b>	<b>Potential Physiological Response</b>	<b>Source(s)</b>
Hydrogen sulfide	205 ppb	Lowest ODT: 0.0047 ppb Irritation threshold: 5,000–10,000 ppb	Trigeminal	TRPV1	Lacrimation (eye watering), eye blinking, reduced respiratory rate, and reduced nasal flow; Eye, nose, and throat irritation	Martinez and Eling, 2019; Armstrong and Herr, 2023; ATSDR, 2016
Dimethyl sulfide	482 ppb	Lowest ODT: 0.12 ppb Irritation threshold: N/A*	Unknown	Unknown	Respiratory and eye irritation	Partti-Pellinen et al., 1996; Ljunggren and Norberg, 1943
Dimethyl disulfide	64 ppb	Lowest ODT: 0.29 ppb Irritation threshold: N/A*	Unknown	Unknown	Respiratory and eye irritation	Partti-Pellinen et al., 1996; Ljunggren and Norberg, 1943
Styrene	37.0 ppb	Lowest ODT: 16 ppb Irritation threshold: 20,000 ppb	Trigeminal	TRPA1	Lacrimation (eye watering), eye blinking, reduced respiratory rate, and reduced nasal flow	Martinez and Eling, 2019; Lanosa et al., 2010

<b>Odorant</b>	<b>Maximum concentration detected in off-site grab samples</b>	<b>Odor and Irritation Thresholds</b>	<b>Cranial Nerve</b>	<b>Receptor</b>	<b>Potential Physiological Response</b>	<b>Source(s)</b>
Ethanol	108 ppb	Lowest ODT: 90 ppb Irritation threshold: 5,042,000 ppb	Unknown	Unknown	Respiratory tract irritation	PubChem, 2024h
Toluene	91.3 ppb	Lowest ODT: 32 ppb Irritation threshold: N/A*	Unknown	Unknown	Respiratory and eye irritation	PubChem, 2024k; ATSDR, 2017
Propylene dichloride	739 ppb	Lowest ODT: 260 ppb Irritation threshold: N/A*	Unknown	Unknown	Unknown	NA
Butyl mercaptan	17 ppb	Lowest ODT: 0.0027 ppb Irritation threshold: N/A*	Unknown	Unknown	Irritation of mucous membranes	Key et al., 1977
tert-Butyl mercaptan	3 ppb	Lowest ODT: 0.029 ppb Irritation threshold: N/A*	Unknown	Unknown	Irritation of mucous membranes	Key et al., 1977

<b>Odorant</b>	<b>Maximum concentration detected in off-site grab samples</b>	<b>Odor and Irritation Thresholds</b>	<b>Cranial Nerve</b>	<b>Receptor</b>	<b>Potential Physiological Response</b>	<b>Source(s)</b>
Propyl mercaptan	4 ppb	Lowest ODT: 0.013 ppb Irritation threshold: N/A*	Unknown	Unknown	Irritation of mucous membranes	Key et al., 1977
Ethyl mercaptan	3 ppb	Lowest ODT: 0.0052 ppb Irritation threshold: 1,000 ppb	Unknown	Unknown	Irritation of mucous membranes	Key et al., 1977
Methyl mercaptan	19.6 ppb	Lowest ODT: 0.0002 ppb Irritation threshold: N/A*	Unknown	Unknown	Irritation of mucous membranes	Key et al., 1977
Thiophene	1 ppb	Lowest ODT: 0.56 ppb Irritation threshold: N/A*	Unknown	Unknown	Respiratory irritation	PubChem, 2024j
Acrolein	7 ppb	Lowest ODT: 3.6 ppb Irritation threshold: 30–550 ppb	Trigeminal	TRPA1	Lacrimation (watering), eye blinking, reduced respiratory rate, and reduced nasal flow; Respiratory and eye irritation	Martinez and Eling, 2019; Achantia and Jordt, 2017; ATSDR, 2024

\*No irritation threshold was identified by authoritative organization or literature. N/A = not available.

Sensory irritation occurs when chemicals present at sufficient concentrations bind to TRP channels, triggering physiological responses including lacrimation (eye watering), eye blinking, reduced respiratory rate, and decreased nasal flow (Martinez and Eling, 2019). Acrolein and styrene are two of the chemicals known to trigger this response by binding to the TRPA1 receptor and hydrogen sulfide has been linked to TRPV1; both channels are found on free nerve endings of the trigeminal nerve (Achanta and Jordt, 2017; Armstrong and Herr, 2023, Lanosa et al., 2010). No other chemical-specific TRP channel activation data were identified for the remaining identified chemicals.

Several mercaptan compounds, including methyl (methanethiol), ethyl (ethanethiol), butyl (butanethiol), propyl (propane thiol), and tert-butyl mercaptan (2-methyl-2-propenethiol) were detected during air sampling.

Eye, nose, and throat irritation is relatively well-documented for hydrogen sulfide (ATSDR, 2016). It is well known in the field of chemosensory research that hydrogen sulfide is used as a pure olfactory stimulus because it is an extremely weak irritant and has been shown not to produce sensory irritation at concentrations up to 2,100 ppb (Kobal & Hummel, 1998). Irritation of the eyes has been noted at 50,000 ppb; however, concentrations that cause eye effects have been reported to range from 5,000 to 10,000 ppb (Beauchamp et al., 1984). Consistent with this range, another study reported that hydrogen sulfide irritation begins at 10,000 ppb (Ruth, 1986), as compared to the odor detection threshold range of 0.0047 to 72 ppb. As previously noted, TRPV1 is involved in the irritation response for hydrogen sulfide (Armstrong and Herr, 2023).

Both dimethyl disulfide and dimethyl sulfide may cause respiratory and eye irritation; however, human data are limited; one study measured a mixture of hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide (collectively called total reduced sulfur compounds) in a community near a paper pulp mill at 2–3  $\mu\text{g}/\text{m}^3$ . Based on self-reported data, residents near the pulp mill had significantly more irritation in the preceding four (4) weeks and 12 months than a reference population (Partti-Pellinen et al., 1996). It is important to note that the individual contribution of each chemical present could not be determined. Mucous membrane irritation has been reported at concentrations greater than 5,600,000 ppb in rodents following 2 minutes of exposure to dimethyl sulfide (Ljunggren and Norberg, 1943).

Acrolein is listed as a respiratory and eye irritant, with concentrations of 30 ppb resulting in nasal and throat irritation (ATSDR, 2024). At 300 ppb, rapid onset of nose, throat, and eye irritation occurs (Weber-Tschopp et al., 1977, as cited in ATSDR, 2024). Slight eye irritation at 100 ppb was described in another study; no eye effects were identified at 50 ppb, and no nasal irritation was seen at either dose (Dwivedi et al., 2015). The level at which respiratory irritation is noted for acrolein is 550 ppb (Ruth, 1986). Acrolein irritation is triggered by the activation of TRPA1 (Achanta and Jordt, 2017).

Styrene irritates the eyes, throat, and respiratory tract at concentrations between 10,000 and 100,000 ppb (Arora and Manila, 2021). The acute exposure guideline level (AEGl) for styrene falls within this range at 19,950 ppb (AEGl-1), based on an airborne concentration of styrene above which the general population, including susceptible individuals, could experience irritation (ATSDR, 2010; USEPA, 2007a). One human study with nine volunteers reported a 1-hr exposure to 216,000 ppb styrene resulted in no irritating effects (Stewart et al., 1968). The sensory irritation response for styrene is mediated by the TRPA1 receptor on the free nerve endings of the trigeminal nerve (Lanosa et al., 2010).

Toluene may cause mild to moderate respiratory irritation in humans and irritate eyes (PubChem, 2024k; ATSDR, 2017). In humans, eye and upper airway irritation occurred after a 6.5-hr exposure to 100,000 ppb (IARC, 1989). At 200,000 ppb, mild throat and eye irritation occurred (Zenz et al., 1994). At 199,000 ppb (750 mg/m<sup>3</sup>, derived from either petroleum or coke), respiratory irritation begins to be noted (Ruth, 1986).

The remaining three chemicals identified (ethanol, 1,2-dichloropropane, and thiophene) have limited information regarding irritation mediated through stimulation of the cranial nerve network. Ethanol has limited inhalation or irritation information; however, ethanol vapor is reported to irritate the respiratory tract, although concentrations at which this occurs were not identified (PubChem, 2024h). 1,2-Dichloropropane has been noted by two sources as a respiratory tract irritant, but there is no further information regarding the concentrations at which this occurs (PubChem, 2024i; ATSDR, 2021). Thiophene has the potential to cause eye irritation and may cause respiratory irritation at unknown concentrations (PubChem, 2024j).

## **8.0 FACTORS THAT CONTRIBUTE TO UNCERTAINTY AND VARIABILITY**

In any assessment, scientific variability and uncertainty are discussed and evaluated. The USEPA defines variability as "the inherent heterogeneity or diversity of data in an assessment" and uncertainty as "a lack of data or an incomplete understanding of the context of the risk assessment decision" (USEPA, 2011). Variability occurs naturally in our world (i.e., body weights vary among members of a population) but can be characterized to try and ensure, to the extent possible, that an evaluation is protective of the most sensitive members of a population. Uncertainty is evaluated to identify where more data is needed to reduce or eliminate the uncertainty of an assessment.

In this section we discuss the factors that may introduce scientific uncertainty and variability with regard to odor detection thresholds and odor perception, other potential sources of odors in the communities surrounding CCL, and air quality and odor data.

## 8.1 Variability of odor study data

Multiple factors contribute to variability in odor detection thresholds, as reported in the peer-reviewed literature and relied upon by authoritative agencies. Three primary factors in the experimental design impact variability:

- 1) The odor presentation of a study (e.g., delivery method, flow rate, order, and duration) can cause variability because the way the study is conducted by each researcher may differ.
- 2) The study setting (e.g., laboratory vs. environmental) can act as a source of variability when assessing the same chemical because the experimental design employed for detecting an odor or determining an odor threshold can substantially impact the characterization and quantification of an odor (Cook et al., 2014).
- 3) Studies may focus on characterizing odor detection or odor recognition. Generally, an odor threshold is "the minimum gas-phase concentration of an odorant that generates a discerning response" where a discerning response could be odor detection or odor recognition. However, these thresholds differ. An *odor detection threshold* is defined as the "estimated concentration of odorant that 50% of the test participants would detect" (AIHA, 2024), while the *odor recognition threshold* is "the minimum concentration recognized by 50% of the evaluation test participants" (AIHA, 2024). The difference in concentration between detection and recognition thresholds can vary from approximately twofold to tenfold (USEPA, 1992).

In our assessment, we selected odor detection thresholds from authoritative organizations that reviewed each study according to a given set of criteria. If a source did not clarify whether it measured the odor detection or recognition threshold, it was not selected for our assessment.

In addition, we selected the lowest reported odor detection thresholds to attempt to minimize the potential impact of these factors. However, this approach is also likely to overstate exposure to odors.

## 8.2 Uncertainty of other potential odor sources

Other potential odor sources can impact air quality and odor samples collected in the field. This can contribute to uncertainty about whether the air quality and odor measurements are attributable to a particular source, in this case, CCL, or other odor sources. The region surrounding CCL is a growing rural/suburban area bordered by Interstate 5 (I-5) on the east end and Highway 128 (Hwy 128) on the south end. As discussed in Section 4.2, the region sits among surrounding canyons, with development primarily in the lower valleys between canyons.

Given the location and terrain, other sources also likely contribute to odors in the communities. For example, in the Val Verde neighborhood, multiple farms raise animals (e.g., chickens, horses, goats) that produce manure-like odors. In Hasley Hills and Live Oak neighborhoods, construction and development that requires heavy machinery contribute to odors in the area. In addition, emissions from car and truck traffic contribute to odors at locations near I-5 and Hwy 128.

These sources of odors can be significant and likely mix and amplify or hide landfill-related odors (Thomas-Danguin et al., 2014). The nature of odors is complex and not fully characterized; therefore, the odor intensity, character, and hedonic tone change when multiple sources of odors are present. All of the potential sources make identifying the primary source of the odorant(s) challenging.

Intertox and CTEH intended to mitigate the influence of other potential odor sources during the March and June 2024 studies by collecting samples from locations where impacts from other known sources were located upwind from the sampling locations; however, due to localized wind conditions (e.g., wind eddies), odors from other known sources were detected. These odors were often distinguishable by the trained odor samplers, and the presence of other known odor sources and their corresponding odor characters were noted in field notes.

### **8.3 Uncertainty of air quality and odor data**

The analytes selected for this report were determined based on the results of flux chamber studies conducted by SCS Engineers (see SCS Engineers report) and chemicals known to be common landfill-related odorants. Although the list of analytes included across all studies is robust, it is impossible to identify all individual chemical odorants present in the air at or above odor detection thresholds due to limitations in analytical instrument capabilities and resources. However, this was mitigated by evaluating all the datasets (SCS Engineers, CTEH, and Intertox), which deployed numerous sample collection devices (e.g., evacuated canisters, Tedlar bags), analytical instruments (e.g., PTR-MS, SIFT-MS), and a robust list of chemical analytes.

Measuring chemicals and odors using a method relevant to capturing odors is difficult. Odors are transient, so capturing air and odor samples precisely when odorants are detected above the odor detection threshold is challenging. By updating CTEH's sampling design from the March 2024 study to collect grab air samples when a strong odor was detected (at or above 7 D/T when any odor was detected) by odor samplers using the Nasal Ranger® during the June 2024 study, some of these limitations and uncertainties were addressed. This resulted in air samples that detected higher concentrations of odorants associated with the elevated temperature landfill event at CCL, which are expected to be more indicative of what residents experience.



Odor samples from SCS Engineers and CTEH's March 2024 study did not include a background sample location intended to identify background levels of odors in the region that are not potentially impacted by CCL. This contributed to uncertainty in our evaluation. Ideally, a location that is upwind of the source, is safe and easy to access, and is characteristic of the study region is selected as a background sample location. A background sample location can be helpful in reducing uncertainty because it helps identify if there are potential upwind sources of the odorants that contribute to odors within the neighborhoods.

A background odor sample location was added for the June 2024 study to attempt to identify if there were upwind sources of odorants in the region to mitigate this data gap. The background location was upwind of CCL (SW of CCL) directly off Hwy 128 in Del Valle, CA. However, similar concentrations of some odorants were measured in the background and some off-site locations.

During the June 2024 study at the background location, air quality and odor samplers found no distinguishable odors. However, it is likely that other untested odorants from different sources (e.g., vehicle traffic) were interfering with the detection of odors. During future sample collections, inclusion of a new or additional background location is recommended to help identify whether upwind sources of odorants potentially contribute to odors detected in the neighborhood (e.g., Val Verde, Live Oak, Hasley Hills).

## 9.0 DISCUSSION

Our evaluation aimed to assess the possible implications of odorants potentially emitted by the CCL elevated temperature event on people living near the Landfill. First, we evaluated data collected by multiple independent contracting companies at off-site locations in the neighborhoods surrounding CCL. SCS Engineers and CTEH collected air samples to identify chemicals detected in the communities surrounding CCL. This data provided us a list of chemicals to focus our assessment as we proposed to measure chemicals as well as odor intensity when an odor with a dilution to threshold (D/T) greater than 7 D/T was detected.

Our approach was to simultaneously capture air concentrations of chemicals with a strong odor (greater than 7 D/T). Intertox and CTEH collected air samples when a strong odor was measured by odor samplers using the Nasal Ranger®. CTEH also collected air samples during the June 2024 odor study, and, except for hydrogen sulfide, Intertox and CTEH detected similar chemicals; however, Intertox detected chemicals more frequently in Tedlar bag air samples.

Analysis of the results of the Intertox odor study conducted in June 2024 suggests:

- If an odor is detected in the neighborhoods surrounding CCL, it is most likely caused by hydrogen sulfide and/or dimethyl sulfide. These pungent chemicals have the lowest odor detection thresholds and were the most frequently detected chemicals at or above the lowest odor detection threshold.

- Odor intensities at or above 7 D/T were recorded less than 2.5% of the time we tested in the June 2024 study.
- Odors with intensities at or above 7 D/T and a negative hedonic tone were characterized as garbage, manure, and tar/asphalt.
- If an odor at or above 7 D/T is detected in the neighborhoods surrounding CCL, people likely detected individual or combinations of sulfides (hydrogen sulfide and dimethyl disulfide), propylene dichloride, and/or mercaptans (butyl mercaptan, tert-butyl mercaptan, propyl mercaptan, ethyl mercaptan, and methyl mercaptan), because these chemicals were detected in the study at or above their average odor detection thresholds.

Hydrogen sulfide, styrene, and acrolein have been identified as chemicals that stimulate the trigeminal nerve, resulting in sensory irritation. In addition, irritation thresholds for ethyl mercaptan and ethanol have also been reported in the scientific literature or by authoritative agencies.

Previous sampling efforts were conducted by SCS Engineers (off-site, weekly grab air samples) and CTEH (28-day air quality study using the PTR-MS mobile van air sampling). There is a difference in their collection techniques. Air samples collected by SCS Engineers and during CTEH's 28-day air quality study were not collected simultaneously with Nasal Ranger® odor samples; therefore, air samples did not necessarily coincide with the occurrence of strong environmental odors.

Although samples were collected during various environmental conditions throughout the sampling periods, no air or odor samples have been collected during nighttime hours. During the sampling events in late June, we heard from residents that odors are worst after dusk and before dawn, between approximately 8 pm and 5 am. To fill this data gap, Intertox and CTEH will conduct a nighttime air quality and odor study.

## 10.0 CONCLUSIONS

Our evaluation confirms that odorants of the type detected in the neighborhoods surrounding CCL have the ability to cause physiological irritation when an individual is exposed to sufficient concentrations of compounds over a sufficient duration. The scientific literature supports that some of the detected chemicals can bind to nerve endings, which may result in short-term physiological responses such as eye-watering and nasal or respiratory irritation if an individual is exposed to sufficient concentrations over a sufficient duration. When concentrations are high enough, these odorants can also trigger short-term physiological responses such as headaches, nausea, or lightheadedness.

Those odorants in the context of this analysis are discussed below:

- Hydrogen sulfide, which has a "rotten egg" odor, was detected in 42% of Intertox samples and is a known irritant that, when present in high enough concentrations, can stimulate the trigeminal nerve and cause lacrimation (eye-watering), eye blinking, reduced respiratory rate, reduced nasal flow, and eye, nose, and throat irritation. The irritation threshold of hydrogen sulfide is 5–10 ppm (or 5,000–10,000 ppb). Hydrogen sulfide was not detected at or above this threshold during any sampling. The maximum hydrogen sulfide concentration detected in grab air samples was 0.205 ppm (or 205 ppb);
- Dimethyl disulfide, which has a "rotten cabbage" odor, was detected in 95% of Intertox samples and 5% of CTEH samples from the June 2024 study, <0.01% of samples from March 2024 study, and 6% of SCS Engineers' samples, and is unknown whether it stimulates the trigeminal or vagus nerve(s) but is suspected to cause respiratory and eye irritation at sufficient concentrations. An irritation threshold for dimethyl disulfide was not available from an authoritative organization;
- Dimethyl sulfide, which has a disagreeable, asparagus, or putrid odor, was detected in 22% of Intertox samples and 5% of CTEH samples from June 2024 study, 23.5% of samples from March 2024 study, and 0.8% of SCS Engineers' samples, and is unknown whether it stimulates the trigeminal or vagus nerve(s) but is suspected to cause respiratory and eye irritation at sufficient concentrations. An irritation threshold for dimethyl sulfide was not available from an authoritative organization;
- Propylene dichloride, which has a chloroform-like odor, was detected in 95% of Intertox samples from the June 2024 study and is unknown whether it stimulates the trigeminal or vagus nerve(s) and no data could be identified to determine whether it is a known irritant. An irritation threshold for propylene dichloride was not available from an authoritative organization;
- Styrene, which has a sharp, solvent-like odor, was detected in 0.01% of samples from March 2024 study and is a known irritant that, when present in high enough concentrations, can stimulate the trigeminal nerve and cause lacrimation (eye-watering), eye blinking, reduced respiratory rate, and reduced nasal flow. The irritation threshold for styrene is 20 ppm (or 20,000 ppb). Styrene was not detected at or above this threshold during any sampling. The maximum concentration of styrene detected in grab air samples was 0.037 ppm (or 37.0 ppb);
- Ethanol, which has an ethereal, vinous, alcohol odor, was detected in 5% of CTEH samples from the June 2024 study and in 0.8% of SCS Engineers' samples, and it is unknown whether it stimulates the trigeminal or vagus nerve(s), but it is suspected to cause respiratory irritation at sufficient concentrations. The irritation threshold is 5,042 ppm (or 5,042,000 ppb). Ethanol was not detected at or above this threshold

during any sampling. The maximum concentration of ethanol detected in grab air samples was 0.108 ppm (or 108 ppb);

- Toluene, which has a pungent, paint-thinner-type odor, was detected in 2% of SCS Engineers' samples and is unknown whether it stimulates the trigeminal or vagus nerve(s) but is suspected to cause respiratory and eye irritation at sufficient concentrations. An irritation threshold for toluene was not available from an authoritative organization;
- Butyl mercaptan, which has a skunk-like odor, was detected in 17% of Intertox samples from June 2024 study and is unknown whether it stimulates the trigeminal or vagus nerve(s) but is suspected to cause irritation of mucous membranes at sufficient concentrations. An irritation threshold for butyl mercaptan was not available from an authoritative organization;
- tert-Butyl mercaptan, which has a foul-smelling odor, was detected in 17% of Intertox samples from June 2024 study and is unknown whether it stimulates the trigeminal or vagus nerve(s) but is suspected to cause irritation of mucous membranes at sufficient concentrations. An irritation threshold for tert-Butyl mercaptan was not available from an authoritative organization;
- Propyl mercaptan, which has a cabbage, natural gas-type odor, was detected in 84% of Intertox samples from June 2024 study and is unknown whether it stimulates the trigeminal or vagus nerve(s) but is suspected to cause irritation of mucous membranes at sufficient concentrations;
- Ethyl mercaptan, which has a vegetable sulfurous-type odor, was detected in 63% of Intertox samples from June 2024 and is unknown whether it stimulates the trigeminal or vagus nerve(s) but is suspected to cause irritation of mucous membranes at sufficient concentrations. The irritation threshold for ethyl mercaptan is 1 ppm (or 1,000 ppb). Ethyl mercaptan was not detected at or above this threshold during any sampling. The maximum concentration of ethyl mercaptan detected in grab air samples was 0.003 ppm (or 3 ppb);
- Methyl mercaptan, which has a "rotten cabbage" odor, was detected in 32% of Intertox samples and 5% of CTEH samples from June 2024 and is unknown whether it stimulates the trigeminal or vagus nerve(s) but is suspected to cause irritation of mucous membranes at sufficient concentrations. An irritation threshold for methyl mercaptan was not available from an authoritative organization;
- Thiophene, which has a slightly aromatic, benzene-like odor, was detected in 21% of Intertox samples from the June 2024 study and is unknown whether it stimulates the trigeminal or vagus nerve(s) but is suspected to cause respiratory irritation at

sufficient concentrations. An irritation threshold for thiophene was not available from an authoritative organization; and

- Acrolein, which has a pungent, disagreeable almond- or cherry-like odor, was detected in 37% of Intertox samples from June 2024 study and is a known irritant that, when present in high enough concentrations, can stimulate the trigeminal nerve and cause lacrimation (eye watering), eye blinking, reduced respiratory rate, reduced nasal flow and respiratory and eye irritation. The irritation threshold for acrolein is 0.03–0.55 ppm (or 30–550 ppb). Acrolein was not detected at or above this threshold during any sampling. The maximum concentration of styrene detected in grab air samples was 0.007 ppm (or 7 ppb).

Although sampling indicates that chemicals were present when odors were detected in the neighborhoods surrounding CCL, they were not detected above irritation thresholds. These air samples represent a snapshot of odor exposures; therefore, it is possible that residents may encounter short-term exposures to odorants in sufficient concentrations to cause a physiological response. However, exposures to these chemical odorants are transient, and physiological responses should resolve after exposure has ceased.

Because physiological responses to odors are transient and resolve shortly after exposure has ceased, limiting exposure to odorants is the most effective way of reducing the physiological effects associated with odors. Residents can limit their exposure to odors by:

- Keeping windows and doors shut when odors are present;
- Staying indoors when strong odors are present; and
- Removing one's self from an area where odors are present.

Additionally, research suggests that, based on the topography and environmental conditions of the region surrounding CCL, odors may be most persistent in the lower elevation areas (e.g., valleys) after dusk and before dawn, therefore, avoiding being outdoors during these hours may also reduce resident exposures to odors.

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**APPENDIX F. ENTHALPY ANALYTICAL LABORATORY REPORTS  
FROM JUNE 2024 ODOR STUDY**



1941 Reymet Road • Richmond, Virginia 23237 • Tel: (804)-358-8295 Fax: (804)-358-8297

## Certificate of Analysis

*Final Report*

Laboratory Order ID 24F0819

Client Name:	CTEH, LLC	Date Received:	June 13, 2024 10:20
	5120 Northshore Drive	Date Issued:	July 22, 2024 8:25
	N. Little Rock, AR 72118	Project Number:	PROJ-036688
Submitted To:	Cassie Smythe	Purchase Order:	PROJ-036688

Client Site I.D.: Air Quality Study

Enclosed are the results of analyses for samples received by the laboratory on 06/13/2024 10:20. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

A handwritten signature in black ink that reads 'Ginny Thrasher'.

Ginny Thrasher  
Project Manager

### End Notes:

The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

Unless otherwise noted, the test results for solid materials are calculated on a wet weight basis. Analyses for pH, dissolved oxygen, temperature, residual chlorine and sulfite that are performed in the laboratory do not meet NELAC requirements due to extremely short holding times. These analyses should be performed in the field. The results of field analyses performed by the Sampler included in the Certificate of Analysis are done so at the client's request and are not included in the laboratory's fields of certification nor have they been audited for adherence to a reference method or procedure.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Laboratory's NELAC certified parameters please contact customer service.

This report shall not be reproduced except in full without the expressed and written approval of an authorized representative of Enthalpy Analytical, Inc.



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### Certificate of Analysis

#### Final Report

Laboratory Order ID 24F0819

Client Name: CTEH, LLC Date Received: June 13, 2024 10:20  
 5120 Northshore Drive Date Issued: July 22, 2024 8:25  
 N. Little Rock, AR 72118 Project Number: PROJ-036688  
 Submitted To: Cassie Smythe Purchase Order: PROJ-036688  
 Client Site I.D.: Air Quality Study

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CACA0611OS008	24F0819-01	Air	06/11/2024 10:46	06/13/2024 10:20
CACA0611OS011	24F0819-02	Air	06/11/2024 08:25	06/13/2024 10:20
CACA0611UW001	24F0819-03	Air	06/11/2024 16:44	06/13/2024 10:20
CACA0611OS013	24F0819-04	Air	06/11/2024 11:55	06/13/2024 10:20
CACA0612UW001	24F0819-05	Air	06/12/2024 09:10	06/13/2024 10:20
CACA0612OS002	24F0819-06	Air	06/12/2024 09:36	06/13/2024 10:20

The Certificate of Analysis is being reissued on 7/12/2024 to update the sample IDs for samples 24F0819-01, -02, -04, and -06.

The Certificate of Analysis is being reissued on 7/22/2024 to update the "0" in front of the "S" to the letter "O" in the sample IDs.



1941 Reymet Road • Richmond, Virginia 23237 • Tel: (804)-358-8295 Fax: (804)-358-8297

## Certificate of Analysis

Final Report

Laboratory Order ID 24F0819

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 13, 2024 10:20  
Date Issued: July 22, 2024 8:25

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06110S008

Project Location:

Sample ID: 24F0819-01

Canister ID: 063-00746::16804

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/11/2024 10:46

Flow Controller ID: 063-00880::GS028

Receipt Vacuum(in Hg): 3.4

Sample Type: AA

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/14/24 12:52	DFH
Hydrogen Sulfide, as received	10.1	10.0	10.0		14	14	14	1	1	6/14/24 12:52	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/14/24 12:52	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/14/24 12:52	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/14/24 12:52	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/14/24 12:52	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/14/24 12:52	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/14/24 12:52	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/14/24 12:52	DFH
Total Reduced Sulfurs, as received	10.1	10.0	10.0		14	14	14	1	1	6/14/24 12:52	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
1,4-Difluorobenzene (Surr), as received			102				80-120			6/14/24 12:52	
1,4-Difluorobenzene (Surr), as received			96.0				80-120			6/14/24 12:52	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/14/24 10:39	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/14/24 10:39	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/14/24 10:39	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/14/24 10:39	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/14/24 10:39	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/14/24 10:39	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/14/24 10:39	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/14/24 10:39	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 10:39	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/14/24 10:39	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0819

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 13, 2024 10:20  
Date Issued: July 22, 2024 8:25

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06110S008

Project Location:

Sample ID: 24F0819-01

Canister ID: 063-00746::16804

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/11/2024 10:46

Flow Controller ID: 063-00880::GS028

Receipt Vacuum(in Hg): 3.4

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/14/24 10:39	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/14/24 10:39	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/14/24 10:39	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/14/24 10:39	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 10:39	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/14/24 10:39	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/14/24 10:39	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/14/24 10:39	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/14/24 10:39	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 10:39	DFH
2-Butanone (MEK)	1.09	0.20	0.50		3.2	0.59	1.5	1	1	6/14/24 10:39	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/14/24 10:39	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/14/24 10:39	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/14/24 10:39	DFH
Acetone	5.48	0.20	0.50		13	0.48	1.2	1	1	6/14/24 10:39	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/14/24 10:39	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/14/24 10:39	DFH
Benzene	0.46	0.20	0.50	J	1.5	0.64	1.6	1	1	6/14/24 10:39	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/14/24 10:39	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/14/24 10:39	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/14/24 10:39	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/14/24 10:39	DFH
Carbon Disulfide	ND	0.50	0.50	U	ND	1.6	1.6	1	1	6/14/24 10:39	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/14/24 10:39	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/14/24 10:39	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/14/24 10:39	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/14/24 10:39	DFH
Chloromethane	0.27	0.20	0.50	J	0.56	0.41	1.0	1	1	6/14/24 10:39	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/14/24 10:39	DFH



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## Certificate of Analysis

Final Report

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Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 13, 2024 10:20  
Date Issued: July 22, 2024 8:25

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06110S008

Project Location:

Sample ID: 24F0819-01

Canister ID: 063-00746::16804

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/11/2024 10:46

Flow Controller ID: 063-00880::GS028

Receipt Vacuum(in Hg): 3.4

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/14/24 10:39	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/14/24 10:39	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/14/24 10:39	DFH
Dichlorodifluoromethane	ND	0.50	0.50	U	ND	2.5	2.5	1	1	6/14/24 10:39	DFH
Ethanol	6.74	0.20	0.50		13	0.38	0.94	1	1	6/14/24 10:39	DFH
Ethyl acetate	0.29	0.20	0.50	J	1.0	0.72	1.8	1	1	6/14/24 10:39	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/14/24 10:39	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/14/24 10:39	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/14/24 10:39	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/14/24 10:39	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/14/24 10:39	DFH
Isopropyl alcohol	2.14	0.20	0.50		5.3	0.49	1.2	1	1	6/14/24 10:39	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 10:39	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/14/24 10:39	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/14/24 10:39	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/14/24 10:39	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/14/24 10:39	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/14/24 10:39	DFH
n-Butane (C4)	0.97	0.20	0.50		2.3	0.48	1.2	1	1	6/14/24 10:39	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/14/24 10:39	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 10:39	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/14/24 10:39	DFH
n-Pentane (C5)	0.66	0.20	0.50		1.9	0.59	1.5	1	1	6/14/24 10:39	DFH
Propylene	ND	1.00	1.00	U	ND	1.7	1.7	1	1	6/14/24 10:39	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/14/24 10:39	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/14/24 10:39	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/14/24 10:39	DFH
Tetrahydrofuran	0.57	0.20	0.50		1.7	0.59	1.5	1	1	6/14/24 10:39	DFH
Toluene	0.23	0.20	0.50	J	0.87	0.75	1.9	1	1	6/14/24 10:39	DFH





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## Certificate of Analysis

Final Report

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5120 Northshore Drive

Date Received: June 13, 2024 10:20  
Date Issued: July 22, 2024 8:25

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06110S008

Project Location:

Sample ID: 24F0819-01

Canister ID: 063-00746::16804

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/11/2024 10:46

Flow Controller ID: 063-00880::GS028

Receipt Vacuum(in Hg): 3.4

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/14/24 10:39	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/14/24 10:39	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/14/24 10:39	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/14/24 10:39	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/14/24 10:39	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/14/24 10:39	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/14/24 10:39	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/14/24 10:39	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			101				80-120			6/14/24 10:39	

## Certificate of Analysis

Final Report

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Client Name: CTEH, LLC  
5120 Northshore Drive

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Date Issued: July 22, 2024 8:25

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06110S011

Project Location:

Sample ID: 24F0819-02

Canister ID: 063-00749::16820

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/11/2024 08:25

Flow Controller ID: 063-00881::GS029

Receipt Vacuum(in Hg): 3.0

Sample Type: AA

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/14/24 13:33	DFH
Hydrogen Sulfide, as received	ND	10.0	10.0	U	ND	14	14	1	1	6/14/24 13:33	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/14/24 13:33	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/14/24 13:33	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/14/24 13:33	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/14/24 13:33	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/14/24 13:33	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/14/24 13:33	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/14/24 13:33	DFH
Total Reduced Sulfurs, as received	ND	10.0	10.0	U	ND	14	14	1	1	6/14/24 13:33	DFH
Surrogate(s)	% Recovery			% Recovery Limits							
1,4-Difluorobenzene (Surr), as received			94.6			80-120				6/14/24 13:33	
1,4-Difluorobenzene (Surr), as received			100			80-120				6/14/24 13:33	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/14/24 11:32	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/14/24 11:32	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/14/24 11:32	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/14/24 11:32	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/14/24 11:32	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/14/24 11:32	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/14/24 11:32	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/14/24 11:32	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 11:32	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/14/24 11:32	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0819

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5120 Northshore Drive

Date Received: June 13, 2024 10:20  
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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06110S011

Project Location:

Sample ID: 24F0819-02

Canister ID: 063-00749::16820

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/11/2024 08:25

Flow Controller ID: 063-00881::GS029

Receipt Vacuum(in Hg): 3.0

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/14/24 11:32	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/14/24 11:32	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/14/24 11:32	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/14/24 11:32	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 11:32	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/14/24 11:32	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/14/24 11:32	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/14/24 11:32	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/14/24 11:32	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 11:32	DFH
2-Butanone (MEK)	0.36	0.20	0.50	J	1.1	0.59	1.5	1	1	6/14/24 11:32	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/14/24 11:32	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/14/24 11:32	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/14/24 11:32	DFH
Acetone	4.22	0.20	0.50		10	0.48	1.2	1	1	6/14/24 11:32	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/14/24 11:32	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/14/24 11:32	DFH
Benzene	0.54	0.20	0.50		1.7	0.64	1.6	1	1	6/14/24 11:32	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/14/24 11:32	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/14/24 11:32	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/14/24 11:32	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/14/24 11:32	DFH
Carbon Disulfide	ND	0.50	0.50	U	ND	1.6	1.6	1	1	6/14/24 11:32	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/14/24 11:32	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/14/24 11:32	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/14/24 11:32	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/14/24 11:32	DFH
Chloromethane	0.29	0.20	0.50	J	0.60	0.41	1.0	1	1	6/14/24 11:32	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/14/24 11:32	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0819

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 13, 2024 10:20  
Date Issued: July 22, 2024 8:25

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06110S011

Project Location:

Sample ID: 24F0819-02

Canister ID: 063-00749::16820

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/11/2024 08:25

Flow Controller ID: 063-00881::GS029

Receipt Vacuum(in Hg): 3.0

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/14/24 11:32	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/14/24 11:32	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/14/24 11:32	DFH
Dichlorodifluoromethane	ND	0.50	0.50	U	ND	2.5	2.5	1	1	6/14/24 11:32	DFH
Ethanol	4.90	0.20	0.50		9.2	0.38	0.94	1	1	6/14/24 11:32	DFH
Ethyl acetate	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/14/24 11:32	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/14/24 11:32	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/14/24 11:32	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/14/24 11:32	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/14/24 11:32	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/14/24 11:32	DFH
Isopropyl alcohol	0.58	0.20	0.50		1.4	0.49	1.2	1	1	6/14/24 11:32	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 11:32	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/14/24 11:32	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/14/24 11:32	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/14/24 11:32	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/14/24 11:32	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/14/24 11:32	DFH
n-Butane (C4)	1.00	0.20	0.50		2.4	0.48	1.2	1	1	6/14/24 11:32	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/14/24 11:32	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 11:32	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/14/24 11:32	DFH
n-Pentane (C5)	0.25	0.20	0.50	J	0.74	0.59	1.5	1	1	6/14/24 11:32	DFH
Propylene	ND	1.00	1.00	U	ND	1.7	1.7	1	1	6/14/24 11:32	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/14/24 11:32	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/14/24 11:32	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/14/24 11:32	DFH
Tetrahydrofuran	0.30	0.20	0.50	J	0.88	0.59	1.5	1	1	6/14/24 11:32	DFH
Toluene	ND	0.20	0.50	U	ND	0.75	1.9	1	1	6/14/24 11:32	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0819

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 13, 2024 10:20  
Date Issued: July 22, 2024 8:25

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06110S011

Project Location:

Sample ID: 24F0819-02

Canister ID: 063-00749::16820

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/11/2024 08:25

Flow Controller ID: 063-00881::GS029

Receipt Vacuum(in Hg): 3.0

Sample Type: AA

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/14/24 11:32	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/14/24 11:32	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/14/24 11:32	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/14/24 11:32	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/14/24 11:32	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/14/24 11:32	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/14/24 11:32	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/14/24 11:32	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			97.4				80-120			6/14/24 11:32	



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5120 Northshore Drive

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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0611UW001

Project Location:

Sample ID: 24F0819-03

Canister ID: 063-00759::17018

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/11/2024 16:44

Flow Controller ID: 063-00883::GS031

Receipt Vacuum(in Hg): 3.2

Sample Type: AA

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/14/24 14:14	DFH
Hydrogen Sulfide, as received	14.3	10.0	10.0		20	14	14	1	1	6/14/24 14:14	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/14/24 14:14	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/14/24 14:14	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/14/24 14:14	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/14/24 14:14	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/14/24 14:14	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/14/24 14:14	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/14/24 14:14	DFH
Total Reduced Sulfurs, as received	14.3	10.0	10.0		20	14	14	1	1	6/14/24 14:14	DFH
Surrogate(s)	% Recovery			% Recovery Limits							
1,4-Difluorobenzene (Surr), as received	94.6			80-120						6/14/24 14:14	
1,4-Difluorobenzene (Surr), as received	100			80-120						6/14/24 14:14	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/14/24 12:24	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/14/24 12:24	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/14/24 12:24	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/14/24 12:24	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/14/24 12:24	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/14/24 12:24	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/14/24 12:24	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/14/24 12:24	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 12:24	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/14/24 12:24	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0819

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 13, 2024 10:20  
Date Issued: July 22, 2024 8:25

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0611UW001

Project Location:

Sample ID: 24F0819-03

Canister ID: 063-00759::17018

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/11/2024 16:44

Flow Controller ID: 063-00883::GS031

Receipt Vacuum(in Hg): 3.2

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/14/24 12:24	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/14/24 12:24	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/14/24 12:24	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/14/24 12:24	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 12:24	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/14/24 12:24	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/14/24 12:24	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/14/24 12:24	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/14/24 12:24	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 12:24	DFH
2-Butanone (MEK)	1.54	0.20	0.50		4.5	0.59	1.5	1	1	6/14/24 12:24	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/14/24 12:24	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/14/24 12:24	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/14/24 12:24	DFH
Acetone	5.03	0.20	0.50		12	0.48	1.2	1	1	6/14/24 12:24	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/14/24 12:24	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/14/24 12:24	DFH
Benzene	0.24	0.20	0.50	J	0.77	0.64	1.6	1	1	6/14/24 12:24	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/14/24 12:24	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/14/24 12:24	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/14/24 12:24	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/14/24 12:24	DFH
Carbon Disulfide	0.59	0.50	0.50		1.8	1.6	1.6	1	1	6/14/24 12:24	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/14/24 12:24	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/14/24 12:24	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/14/24 12:24	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/14/24 12:24	DFH
Chloromethane	0.29	0.20	0.50	J	0.60	0.41	1.0	1	1	6/14/24 12:24	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/14/24 12:24	DFH





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## Certificate of Analysis

Final Report

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5120 Northshore Drive

Date Received: June 13, 2024 10:20  
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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0611UW001

Project Location:

Sample ID: 24F0819-03

Canister ID: 063-00759::17018

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/11/2024 16:44

Flow Controller ID: 063-00883::GS031

Receipt Vacuum(in Hg): 3.2

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/14/24 12:24	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/14/24 12:24	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/14/24 12:24	DFH
Dichlorodifluoromethane	ND	0.50	0.50	U	ND	2.5	2.5	1	1	6/14/24 12:24	DFH
Ethanol	10.4	0.20	0.50		20	0.38	0.94	1	1	6/14/24 12:24	DFH
Ethyl acetate	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/14/24 12:24	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/14/24 12:24	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/14/24 12:24	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/14/24 12:24	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/14/24 12:24	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/14/24 12:24	DFH
Isopropyl alcohol	1.87	0.20	0.50		4.6	0.49	1.2	1	1	6/14/24 12:24	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 12:24	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/14/24 12:24	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/14/24 12:24	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/14/24 12:24	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/14/24 12:24	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/14/24 12:24	DFH
n-Butane (C4)	0.21	0.20	0.50	J	0.50	0.48	1.2	1	1	6/14/24 12:24	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/14/24 12:24	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 12:24	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/14/24 12:24	DFH
n-Pentane (C5)	ND	0.20	0.50	U	ND	0.59	1.5	1	1	6/14/24 12:24	DFH
Propylene	ND	1.00	1.00	U	ND	1.7	1.7	1	1	6/14/24 12:24	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/14/24 12:24	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/14/24 12:24	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/14/24 12:24	DFH
Tetrahydrofuran	0.71	0.20	0.50		2.1	0.59	1.5	1	1	6/14/24 12:24	DFH
Toluene	ND	0.20	0.50	U	ND	0.75	1.9	1	1	6/14/24 12:24	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0819

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5120 Northshore Drive

Date Received: June 13, 2024 10:20  
Date Issued: July 22, 2024 8:25

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0611UW001

Project Location:

Sample ID: 24F0819-03

Canister ID: 063-00759::17018

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/11/2024 16:44

Flow Controller ID: 063-00883::GS031

Receipt Vacuum(in Hg): 3.2

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/14/24 12:24	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/14/24 12:24	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/14/24 12:24	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/14/24 12:24	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/14/24 12:24	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/14/24 12:24	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/14/24 12:24	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/14/24 12:24	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			100				80-120			6/14/24 12:24	



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0819

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 13, 2024 10:20  
Date Issued: July 22, 2024 8:25

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06110S013

Project Location:

Sample ID: 24F0819-04

Canister ID: 063-00762::17021

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/11/2024 11:55

Flow Controller ID: 063-00882::GS030

Receipt Vacuum(in Hg): 4.4

Sample Type: AA

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/14/24 14:56	DFH
Hydrogen Sulfide, as received	ND	10.0	10.0	U	ND	14	14	1	1	6/14/24 14:56	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/14/24 14:56	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/14/24 14:56	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/14/24 14:56	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/14/24 14:56	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/14/24 14:56	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/14/24 14:56	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/14/24 14:56	DFH
Total Reduced Sulfurs, as received	ND	10.0	10.0	U	ND	14	14	1	1	6/14/24 14:56	DFH
Surrogate(s)	% Recovery			% Recovery Limits							
1,4-Difluorobenzene (Surr), as received			100			80-120				6/14/24 14:56	
1,4-Difluorobenzene (Surr), as received			94.6			80-120				6/14/24 14:56	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/14/24 13:17	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/14/24 13:17	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/14/24 13:17	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/14/24 13:17	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/14/24 13:17	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/14/24 13:17	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/14/24 13:17	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/14/24 13:17	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 13:17	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/14/24 13:17	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0819

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 13, 2024 10:20  
Date Issued: July 22, 2024 8:25

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06110S013

Project Location:

Sample ID: 24F0819-04

Canister ID: 063-00762::17021

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/11/2024 11:55

Flow Controller ID: 063-00882::GS030

Receipt Vacuum(in Hg): 4.4

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/14/24 13:17	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/14/24 13:17	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/14/24 13:17	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/14/24 13:17	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 13:17	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/14/24 13:17	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/14/24 13:17	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/14/24 13:17	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/14/24 13:17	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 13:17	DFH
2-Butanone (MEK)	0.27	0.20	0.50	J	0.80	0.59	1.5	1	1	6/14/24 13:17	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/14/24 13:17	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/14/24 13:17	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/14/24 13:17	DFH
Acetone	3.54	0.20	0.50		8.4	0.48	1.2	1	1	6/14/24 13:17	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/14/24 13:17	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/14/24 13:17	DFH
Benzene	ND	0.20	0.50	U	ND	0.64	1.6	1	1	6/14/24 13:17	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/14/24 13:17	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/14/24 13:17	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/14/24 13:17	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/14/24 13:17	DFH
Carbon Disulfide	ND	0.50	0.50	U	ND	1.6	1.6	1	1	6/14/24 13:17	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/14/24 13:17	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/14/24 13:17	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/14/24 13:17	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/14/24 13:17	DFH
Chloromethane	0.29	0.20	0.50	J	0.60	0.41	1.0	1	1	6/14/24 13:17	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/14/24 13:17	DFH



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## Certificate of Analysis

Final Report

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5120 Northshore Drive

Date Received: June 13, 2024 10:20  
Date Issued: July 22, 2024 8:25

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06110S013

Project Location:

Sample ID: 24F0819-04

Canister ID: 063-00762::17021

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/11/2024 11:55

Flow Controller ID: 063-00882::GS030

Receipt Vacuum(in Hg): 4.4

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/14/24 13:17	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/14/24 13:17	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/14/24 13:17	DFH
Dichlorodifluoromethane	ND	0.50	0.50	U	ND	2.5	2.5	1	1	6/14/24 13:17	DFH
Ethanol	3.53	0.20	0.50		6.7	0.38	0.94	1	1	6/14/24 13:17	DFH
Ethyl acetate	0.23	0.20	0.50	J	0.83	0.72	1.8	1	1	6/14/24 13:17	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/14/24 13:17	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/14/24 13:17	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/14/24 13:17	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/14/24 13:17	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/14/24 13:17	DFH
Isopropyl alcohol	1.03	0.20	0.50		2.5	0.49	1.2	1	1	6/14/24 13:17	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 13:17	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/14/24 13:17	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/14/24 13:17	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/14/24 13:17	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/14/24 13:17	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/14/24 13:17	DFH
n-Butane (C4)	0.47	0.20	0.50	J	1.1	0.48	1.2	1	1	6/14/24 13:17	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/14/24 13:17	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 13:17	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/14/24 13:17	DFH
n-Pentane (C5)	0.30	0.20	0.50	J	0.89	0.59	1.5	1	1	6/14/24 13:17	DFH
Propylene	ND	1.00	1.00	U	ND	1.7	1.7	1	1	6/14/24 13:17	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/14/24 13:17	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/14/24 13:17	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/14/24 13:17	DFH
Tetrahydrofuran	ND	0.20	0.50	U	ND	0.59	1.5	1	1	6/14/24 13:17	DFH
Toluene	ND	0.20	0.50	U	ND	0.75	1.9	1	1	6/14/24 13:17	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0819

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 13, 2024 10:20  
Date Issued: July 22, 2024 8:25

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06110S013

Project Location:

Sample ID: 24F0819-04

Canister ID: 063-00762::17021

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/11/2024 11:55

Flow Controller ID: 063-00882::GS030

Receipt Vacuum(in Hg): 4.4

Sample Type: AA

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/14/24 13:17	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/14/24 13:17	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/14/24 13:17	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/14/24 13:17	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/14/24 13:17	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/14/24 13:17	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/14/24 13:17	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/14/24 13:17	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			100				80-120			6/14/24 13:17	



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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0612UW001

Project Location:

Sample ID: 24F0819-05

Canister ID: 063-00258::12420

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/12/2024 09:10

Flow Controller ID: 063-00878::GS026

Receipt Vacuum(in Hg): 2.6

Sample Type: AA

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	23.0	10.0	10.0		71	31	31	1	1	6/14/24 15:37	DFH
Hydrogen Sulfide, as received	84.0	10.0	10.0		120	14	14	1	1	6/14/24 15:37	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/14/24 15:37	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/14/24 15:37	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/14/24 15:37	DFH
Carbonyl sulfide, as received	11.9	10.0	10.0		29	25	25	1	1	6/14/24 15:37	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/14/24 15:37	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/14/24 15:37	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/14/24 15:37	DFH
Total Reduced Sulfurs, as received	142	10.0	10.0		200	14	14	1	1	6/14/24 15:37	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
1,4-Difluorobenzene (Surr), as received	96.0				80-120					6/14/24 15:37	
1,4-Difluorobenzene (Surr), as received	102				80-120					6/14/24 15:37	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/14/24 14:10	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/14/24 14:10	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/14/24 14:10	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/14/24 14:10	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/14/24 14:10	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/14/24 14:10	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/14/24 14:10	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/14/24 14:10	DFH
1,2,4-Trimethylbenzene	0.34	0.20	0.50	J	1.7	0.98	2.5	1	1	6/14/24 14:10	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/14/24 14:10	DFH





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## Certificate of Analysis

Final Report

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5120 Northshore Drive

Date Received: June 13, 2024 10:20  
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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0612UW001

Project Location:

Sample ID: 24F0819-05

Canister ID: 063-00258::12420

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/12/2024 09:10

Flow Controller ID: 063-00878::GS026

Receipt Vacuum(in Hg): 2.6

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/14/24 14:10	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/14/24 14:10	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/14/24 14:10	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/14/24 14:10	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 14:10	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/14/24 14:10	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/14/24 14:10	DFH
1,4-Dichlorobenzene	0.26	0.20	0.50	J	1.6	1.2	3.0	1	1	6/14/24 14:10	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/14/24 14:10	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 14:10	DFH
2-Butanone (MEK)	6.95	0.20	0.50		20	0.59	1.5	1	1	6/14/24 14:10	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/14/24 14:10	DFH
2-Hexanone (MBK)	0.23	0.20	0.50	J	0.94	0.82	2.0	1	1	6/14/24 14:10	DFH
4-Methyl-2-pentanone (MIBK)	0.22	0.20	0.50	J	2.5	2.3	5.7	1	1	6/14/24 14:10	DFH
Acetone	15.8	0.20	0.50		38	0.48	1.2	1	1	6/14/24 14:10	DFH
Acrolein	0.82	0.40	0.50		1.9	0.92	1.1	1	1	6/14/24 14:10	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/14/24 14:10	DFH
Benzene	0.23	0.20	0.50	J	0.73	0.64	1.6	1	1	6/14/24 14:10	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/14/24 14:10	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/14/24 14:10	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/14/24 14:10	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/14/24 14:10	DFH
Carbon Disulfide	12.4	0.50	0.50		39	1.6	1.6	1	1	6/14/24 14:10	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/14/24 14:10	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/14/24 14:10	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/14/24 14:10	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/14/24 14:10	DFH
Chloromethane	0.74	0.20	0.50		1.5	0.41	1.0	1	1	6/14/24 14:10	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/14/24 14:10	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0819

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 13, 2024 10:20  
Date Issued: July 22, 2024 8:25

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0612UW001

Project Location:

Sample ID: 24F0819-05

Canister ID: 063-00258::12420

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/12/2024 09:10

Flow Controller ID: 063-00878::GS026

Receipt Vacuum(in Hg): 2.6

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/14/24 14:10	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/14/24 14:10	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/14/24 14:10	DFH
Dichlorodifluoromethane	ND	0.50	0.50	U	ND	2.5	2.5	1	1	6/14/24 14:10	DFH
Ethanol	11.0	0.20	0.50		21	0.38	0.94	1	1	6/14/24 14:10	DFH
Ethyl acetate	0.29	0.20	0.50	J	1.0	0.72	1.8	1	1	6/14/24 14:10	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/14/24 14:10	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/14/24 14:10	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/14/24 14:10	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/14/24 14:10	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/14/24 14:10	DFH
Isopropyl alcohol	5.82	0.20	0.50		14	0.49	1.2	1	1	6/14/24 14:10	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 14:10	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/14/24 14:10	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/14/24 14:10	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/14/24 14:10	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/14/24 14:10	DFH
Naphthalene	1.95	0.20	0.50		10	1.0	2.6	1	1	6/14/24 14:10	DFH
n-Butane (C4)	0.82	0.20	0.50		1.9	0.48	1.2	1	1	6/14/24 14:10	DFH
n-Nonane (C9)	0.21	0.20	0.50	J	1.1	1.0	2.6	1	1	6/14/24 14:10	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 14:10	DFH
o-Xylene	0.41	0.20	0.50	J	1.8	0.87	2.2	1	1	6/14/24 14:10	DFH
n-Pentane (C5)	0.48	0.20	0.50	J	1.4	0.59	1.5	1	1	6/14/24 14:10	DFH
Propylene	1.66	1.00	1.00		2.9	1.7	1.7	1	1	6/14/24 14:10	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/14/24 14:10	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/14/24 14:10	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/14/24 14:10	DFH
Tetrahydrofuran	1.06	0.20	0.50		3.1	0.59	1.5	1	1	6/14/24 14:10	DFH
Toluene	1.73	0.20	0.50		6.5	0.75	1.9	1	1	6/14/24 14:10	DFH



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Final Report

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5120 Northshore Drive

Date Received: June 13, 2024 10:20  
Date Issued: July 22, 2024 8:25

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0612UW001

Project Location:

Sample ID: 24F0819-05

Canister ID: 063-00258::12420

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/12/2024 09:10

Flow Controller ID: 063-00878::GS026

Receipt Vacuum(in Hg): 2.6

Sample Type: AA

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/14/24 14:10	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/14/24 14:10	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/14/24 14:10	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/14/24 14:10	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/14/24 14:10	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/14/24 14:10	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/14/24 14:10	DFH
Xylenes, Total	0.75	0.60	1.50	J	3.3	2.6	6.5	1	1	6/14/24 14:10	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)	115				80-120					6/14/24 14:10	



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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0612OS002

Project Location:

Sample ID: 24F0819-06

Canister ID: 063-00021::12408

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/12/2024 09:36

Flow Controller ID: 063-00876::GS024

Receipt Vacuum(in Hg): 2.6

Sample Type: AA

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/14/24 16:19	DFH
Hydrogen Sulfide, as received	35.8	10.0	10.0		50	14	14	1	1	6/14/24 16:19	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/14/24 16:19	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/14/24 16:19	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/14/24 16:19	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/14/24 16:19	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/14/24 16:19	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/14/24 16:19	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/14/24 16:19	DFH
Total Reduced Sulfurs, as received	35.8	10.0	10.0		50	14	14	1	1	6/14/24 16:19	DFH
Surrogate(s)	% Recovery			% Recovery Limits							
1,4-Difluorobenzene (Surr), as received	94.7			80-120						6/14/24 16:19	
1,4-Difluorobenzene (Surr), as received	100			80-120						6/14/24 16:19	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/14/24 15:03	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/14/24 15:03	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/14/24 15:03	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/14/24 15:03	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/14/24 15:03	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/14/24 15:03	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/14/24 15:03	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/14/24 15:03	DFH
1,2,4-Trimethylbenzene	0.20	0.20	0.50	J	0.98	0.98	2.5	1	1	6/14/24 15:03	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/14/24 15:03	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0819

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 13, 2024 10:20  
Date Issued: July 22, 2024 8:25

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0612OS002

Project Location:

Sample ID: 24F0819-06

Canister ID: 063-00021::12408

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/12/2024 09:36

Flow Controller ID: 063-00876::GS024

Receipt Vacuum(in Hg): 2.6

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/14/24 15:03	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/14/24 15:03	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/14/24 15:03	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/14/24 15:03	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 15:03	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/14/24 15:03	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/14/24 15:03	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/14/24 15:03	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/14/24 15:03	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 15:03	DFH
2-Butanone (MEK)	0.85	0.20	0.50		2.5	0.59	1.5	1	1	6/14/24 15:03	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/14/24 15:03	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/14/24 15:03	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/14/24 15:03	DFH
Acetone	4.78	0.20	0.50		11	0.48	1.2	1	1	6/14/24 15:03	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/14/24 15:03	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/14/24 15:03	DFH
Benzene	0.45	0.20	0.50	J	1.4	0.64	1.6	1	1	6/14/24 15:03	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/14/24 15:03	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/14/24 15:03	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/14/24 15:03	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/14/24 15:03	DFH
Carbon Disulfide	1.03	0.50	0.50		3.2	1.6	1.6	1	1	6/14/24 15:03	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/14/24 15:03	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/14/24 15:03	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/14/24 15:03	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/14/24 15:03	DFH
Chloromethane	0.31	0.20	0.50	J	0.64	0.41	1.0	1	1	6/14/24 15:03	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/14/24 15:03	DFH



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## Certificate of Analysis

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5120 Northshore Drive

Date Received: June 13, 2024 10:20  
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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0612OS002

Project Location:

Sample ID: 24F0819-06

Canister ID: 063-00021::12408

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/12/2024 09:36

Flow Controller ID: 063-00876::GS024

Receipt Vacuum(in Hg): 2.6

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/14/24 15:03	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/14/24 15:03	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/14/24 15:03	DFH
Dichlorodifluoromethane	ND	0.50	0.50	U	ND	2.5	2.5	1	1	6/14/24 15:03	DFH
Ethanol	12.6	0.20	0.50		24	0.38	0.94	1	1	6/14/24 15:03	DFH
Ethyl acetate	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/14/24 15:03	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/14/24 15:03	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/14/24 15:03	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/14/24 15:03	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/14/24 15:03	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/14/24 15:03	DFH
Isopropyl alcohol	2.03	0.20	0.50		5.0	0.49	1.2	1	1	6/14/24 15:03	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 15:03	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/14/24 15:03	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/14/24 15:03	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/14/24 15:03	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/14/24 15:03	DFH
Naphthalene	0.65	0.20	0.50		3.4	1.0	2.6	1	1	6/14/24 15:03	DFH
n-Butane (C4)	0.93	0.20	0.50		2.2	0.48	1.2	1	1	6/14/24 15:03	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/14/24 15:03	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/14/24 15:03	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/14/24 15:03	DFH
n-Pentane (C5)	0.22	0.20	0.50	J	0.65	0.59	1.5	1	1	6/14/24 15:03	DFH
Propylene	ND	1.00	1.00	U	ND	1.7	1.7	1	1	6/14/24 15:03	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/14/24 15:03	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/14/24 15:03	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/14/24 15:03	DFH
Tetrahydrofuran	0.65	0.20	0.50		1.9	0.59	1.5	1	1	6/14/24 15:03	DFH
Toluene	0.21	0.20	0.50	J	0.79	0.75	1.9	1	1	6/14/24 15:03	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0819

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 13, 2024 10:20  
Date Issued: July 22, 2024 8:25

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0612OS002

Project Location:

Sample ID: 24F0819-06

Canister ID: 063-00021::12408

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/12/2024 09:36

Flow Controller ID: 063-00876::GS024

Receipt Vacuum(in Hg): 2.6

Sample Type: AA

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/14/24 15:03	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/14/24 15:03	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/14/24 15:03	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/14/24 15:03	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/14/24 15:03	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/14/24 15:03	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/14/24 15:03	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/14/24 15:03	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			101				80-120			6/14/24 15:03	





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### Analytical Summary

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
<b>Sulfur Volatile Organic Compounds by GCMS</b>			<b>Preparation Method:</b>	<b>No Prep VOC Air</b>	
24F0819-01	100 mL / 100 mL	EPA TO-15	BHF0511	SHF0474	AF40193
24F0819-02	100 mL / 100 mL	EPA TO-15	BHF0511	SHF0474	AF40193
24F0819-03	100 mL / 100 mL	EPA TO-15	BHF0511	SHF0474	AF40193
24F0819-04	100 mL / 100 mL	EPA TO-15	BHF0511	SHF0474	AF40193
24F0819-05	100 mL / 100 mL	EPA TO-15	BHF0511	SHF0474	AF40193
24F0819-06	100 mL / 100 mL	EPA TO-15	BHF0511	SHF0474	AF40193
24F0819-01	100 mL / 100 mL	EPA TO-15	BHF0512	SHF0476	AF40197
24F0819-02	100 mL / 100 mL	EPA TO-15	BHF0512	SHF0476	AF40197
24F0819-03	100 mL / 100 mL	EPA TO-15	BHF0512	SHF0476	AF40197
24F0819-04	100 mL / 100 mL	EPA TO-15	BHF0512	SHF0476	AF40197
24F0819-05	100 mL / 100 mL	EPA TO-15	BHF0512	SHF0476	AF40197
24F0819-06	100 mL / 100 mL	EPA TO-15	BHF0512	SHF0476	AF40197

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
<b>Volatile Organic Compounds by GCMS</b>			<b>Preparation Method:</b>	<b>No Prep VOC Air</b>	
24F0819-01	400 mL / 400 mL	EPA TO-15	BHF0469	SHF0477	AF40163
24F0819-02	400 mL / 400 mL	EPA TO-15	BHF0469	SHF0477	AF40163
24F0819-03	400 mL / 400 mL	EPA TO-15	BHF0469	SHF0477	AF40163
24F0819-04	400 mL / 400 mL	EPA TO-15	BHF0469	SHF0477	AF40163
24F0819-05	400 mL / 400 mL	EPA TO-15	BHF0469	SHF0477	AF40163
24F0819-06	400 mL / 400 mL	EPA TO-15	BHF0469	SHF0477	AF40163



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### Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source		%REC		RPD		Qual
	Result	Limit		Units	Result	%REC	Limits	RPD	Limit	

#### Batch BHF0469 - No Prep VOC Air

##### Blank (BHF0469-BLK1)

Prepared & Analyzed: 06/13/2024

1,1,1-Trichloroethane	<	0.50	ppbv							U
1,1,1,2-Tetrachloroethane	<	0.50	ppbv							U
1,1,2,2-Tetrachloroethane	<	0.50	ppbv							U
1,1,2-Trichloro-1,2,2-trifluoroethane	<	0.50	ppbv							U
1,1,2-Trichloroethane	<	0.50	ppbv							U
1,1-Dichloroethane	<	0.50	ppbv							U
1,1-Dichloroethylene	<	0.50	ppbv							U
1,2,4-Trimethylbenzene	<	0.50	ppbv							U
1,2-Dibromoethane (EDB)	<	0.50	ppbv							U
1,2-Dichlorobenzene	<	0.50	ppbv							U
1,2-Dichloroethane	<	0.50	ppbv							U
1,2-Dichloropropane	<	0.50	ppbv							U
1,2-Dichlorotetrafluoroethane	<	0.50	ppbv							U
1,3,5-Trimethylbenzene	<	0.50	ppbv							U
1,3-Butadiene	<	0.50	ppbv							U
1,3-Dichlorobenzene	<	0.50	ppbv							U
1,4-Dichlorobenzene	<	0.50	ppbv							U
1,4-Dioxane	<	0.50	ppbv							U
2-Butanone (MEK)	<	0.50	ppbv							U
2-Chlorotoluene	<	0.50	ppbv							U
2-Hexanone (MBK)	<	0.50	ppbv							U
4-Methyl-2-pentanone (MIBK)	<	0.50	ppbv							U
Allyl chloride	<	0.50	ppbv							U
Benzene	<	0.50	ppbv							U
Benzyl Chloride	<	0.50	ppbv							U
Bromoform	<	0.50	ppbv							U
Bromomethane	<	0.50	ppbv							U
Carbon Disulfide	<	0.50	ppbv							U
Carbon Tetrachloride	<	0.50	ppbv							U
Chlorobenzene	<	0.50	ppbv							U
Chloroethane	<	0.50	ppbv							U



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### Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source Result	%REC		RPD	RPD	Limit	Qual
	Result	Limit			Units	%REC				

#### Batch BHF0469 - No Prep VOC Air

##### Blank (BHF0469-BLK1)

Prepared & Analyzed: 06/13/2024

Chloroform	<	0.50	ppbv							U
Chloromethane	<	0.50	ppbv							U
cis-1,2-Dichloroethylene	<	0.50	ppbv							U
cis-1,3-Dichloropropene	<	0.50	ppbv							U
Cyclohexane	<	0.50	ppbv							U
Dibromochloromethane	<	0.50	ppbv							U
Dichlorodifluoromethane	<	0.50	ppbv							U
Ethyl acetate	<	0.50	ppbv							U
Ethylbenzene	<	0.50	ppbv							U
Heptane	<	0.50	ppbv							U
Hexachlorobutadiene	<	0.50	ppbv							U
Hexane	<	0.50	ppbv							U
Isopropylbenzene	<	0.50	ppbv							U
m+p-Xylenes	<	1.00	ppbv							U
Methyl methacrylate	<	0.50	ppbv							U
Methylene chloride	<	1.00	ppbv							U
Methyl-t-butyl ether (MTBE)	<	0.50	ppbv							U
Naphthalene	<	0.50	ppbv							U
o-Xylene	<	0.50	ppbv							U
Propylene	<	1.00	ppbv							U
Styrene	<	0.50	ppbv							U
TBA	<	0.50	ppbv							U
Tetrachloroethylene (PCE)	<	0.50	ppbv							U
Tetrahydrofuran	<	0.50	ppbv							U
Toluene	<	0.50	ppbv							U
trans-1,2-Dichloroethylene	<	0.50	ppbv							U
trans-1,3-Dichloropropene	<	0.50	ppbv							U
Trichloroethylene	<	0.50	ppbv							U
Trichlorofluoromethane	<	0.50	ppbv							U
Vinyl acetate	<	0.50	ppbv							U
Vinyl bromide	<	0.50	ppbv							U
Vinyl chloride	<	0.50	ppbv							U
Xylenes, Total	<	1.50	ppbv							U

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### Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BHF0469 - No Prep VOC Air

##### Blank (BHF0469-BLK1)

Prepared &amp; Analyzed: 06/13/2024

Surr: 4-Bromofluorobenzene (Surr)	4.89		ppbv	5.00	97.8	80-120			
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##### LCS (BHF0469-BS1)

Prepared &amp; Analyzed: 06/13/2024

1,1,1-Trichloroethane	4.18	0.5	ppbv	5.00	83.6	70-130			
1,1,1,2-Tetrachloroethane	5.04	0.5	ppbv	5.00	101	70-130			
1,1,2,2-Tetrachloroethane	5.36	0.5	ppbv	5.00	107	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane	4.79	0.5	ppbv	5.00	95.8	70-130			
1,1,2-Trichloroethane	4.48	0.5	ppbv	5.00	89.6	70-130			
1,1-Dichloroethane	3.52	0.5	ppbv	5.00	70.4	70-130			
1,1-Dichloroethylene	4.90	0.5	ppbv	5.00	98.0	70-130			
1,2,4-Trimethylbenzene	4.98	0.5	ppbv	5.00	99.6	70-130			
1,2-Dibromoethane (EDB)	5.04	0.5	ppbv	5.00	101	70-130			
1,2-Dichlorobenzene	5.10	0.5	ppbv	5.00	102	70-130			
1,2-Dichloroethane	4.13	0.5	ppbv	5.00	82.6	70-130			
1,2-Dichloropropane	4.31	0.5	ppbv	5.00	86.2	70-130			
1,2-Dichlorotetrafluoroethane	4.97	0.5	ppbv	5.00	99.4	70-130			
1,3,5-Trimethylbenzene	5.15	0.5	ppbv	5.00	103	70-130			
1,3-Butadiene	4.19	0.5	ppbv	5.00	83.8	70-130			
1,3-Dichlorobenzene	4.62	0.5	ppbv	5.00	92.4	70-130			
1,4-Dichlorobenzene	4.32	0.5	ppbv	5.00	86.4	70-130			
1,4-Dioxane	4.48	0.5	ppbv	5.00	89.6	70-130			
2-Butanone (MEK)	3.79	0.5	ppbv	5.00	75.8	70-130			
2-Chlorotoluene	5.09	0.5	ppbv	5.00	102	70-130			
2-Hexanone (MBK)	4.28	0.5	ppbv	5.00	85.6	70-130			
4-Methyl-2-pentanone (MIBK)	4.47	0.5	ppbv	5.00	89.4	70-130			
Allyl chloride	4.75	0.5	ppbv	5.00	95.0	70-130			
Benzene	4.32	0.5	ppbv	5.00	86.4	70-130			
Benzyl Chloride	3.37	0.5	ppbv	5.00	67.4	70-130			L
Bromoform	5.11	0.5	ppbv	5.00	102	70-130			
Bromomethane	5.40	0.5	ppbv	5.00	108	70-130			
Carbon Disulfide	4.87	0.5	ppbv	5.00	97.4	70-130			
Carbon Tetrachloride	4.23	0.5	ppbv	5.00	84.6	70-130			
Chlorobenzene	4.93	0.5	ppbv	5.00	98.6	70-130			



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### Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BHF0469 - No Prep VOC Air

##### LCS (BHF0469-BS1)

Prepared & Analyzed: 06/13/2024

Chloroethane	5.22	0.5	ppbv	5.00	104	70-130			
Chloroform	4.21	0.5	ppbv	5.00	84.2	70-130			
Chloromethane	4.78	0.5	ppbv	5.00	95.6	70-130			
cis-1,2-Dichloroethylene	4.35	0.5	ppbv	5.00	87.0	70-130			
cis-1,3-Dichloropropene	4.30	0.5	ppbv	5.00	86.0	70-130			
Cyclohexane	4.33	0.5	ppbv	5.00	86.6	70-130			
Dibromochloromethane	4.44	0.5	ppbv	5.00	88.8	70-130			
Dichlorodifluoromethane	4.29	0.5	ppbv	5.00	85.8	70-130			
Ethyl acetate	4.07	0.5	ppbv	5.00	81.4	70-130			
Ethylbenzene	5.00	0.5	ppbv	5.00	100	70-130			
Heptane	3.85	0.5	ppbv	5.00	77.0	70-130			
Hexachlorobutadiene	4.57	0.5	ppbv	5.00	91.4	60-140			
Hexane	4.11	0.5	ppbv	5.00	82.2	70-130			
Isopropylbenzene	5.23	0.5	ppbv	5.00	105	70-130			
m+p-Xylenes	10.0	1	ppbv	10.0	100	70-130			
Methyl methacrylate	4.21	0.5	ppbv	5.00	84.2	70-130			
Methylene chloride	5.39	1	ppbv	5.00	108	70-130			
Methyl-t-butyl ether (MTBE)	3.35	0.5	ppbv	5.00	67.0	70-130			L
Naphthalene	3.57	0.5	ppbv	5.00	71.4	60-140			
o-Xylene	5.10	0.5	ppbv	5.00	102	70-130			
Propylene	3.81	1	ppbv	5.00	76.2	70-130			
Styrene	4.84	0.5	ppbv	5.00	96.8	70-130			
TBA	4.16	0.5	ppbv	5.00	83.2	70-130			
Tetrachloroethylene (PCE)	4.98	0.5	ppbv	5.00	99.6	70-130			
Tetrahydrofuran	3.75	0.5	ppbv	5.00	75.0	70-130			
Toluene	4.32	0.5	ppbv	5.00	86.4	70-130			
trans-1,2-Dichloroethylene	3.67	0.5	ppbv	5.00	73.4	70-130			
trans-1,3-Dichloropropene	4.05	0.5	ppbv	5.00	81.0	70-130			
Trichloroethylene	4.48	0.5	ppbv	5.00	89.6	70-130			
Trichlorofluoromethane	4.94	0.5	ppbv	5.00	98.8	70-130			
Vinyl acetate	2.75	0.5	ppbv	5.00	55.0	70-130			L
Vinyl bromide	5.23	0.5	ppbv	5.00	105	70-130			
Vinyl chloride	5.09	0.5	ppbv	5.00	102	70-130			



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### Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BHF0469 - No Prep VOC Air

##### LCS (BHF0469-BS1)

Prepared & Analyzed: 06/13/2024

Surr: 4-Bromofluorobenzene (Surr)	5.45		ppbv	5.00	109	70-130			
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##### LCS Dup (BHF0469-BS1)

Prepared & Analyzed: 06/13/2024

1,1,1-Trichloroethane	4.11	0.5	ppbv	5.00	82.2	70-130	1.69	25	
1,1,1,2-Tetrachloroethane	5.03	0.5	ppbv	5.00	101	70-130	0.199	25	
1,1,1,2,2-Tetrachloroethane	5.42	0.5	ppbv	5.00	108	70-130	1.11	25	
1,1,2-Trichloro-1,2,2-trifluoroethane	4.68	0.5	ppbv	5.00	93.6	70-130	2.32	25	
1,1,2-Trichloroethane	4.47	0.5	ppbv	5.00	89.4	70-130	0.223	25	
1,1-Dichloroethane	3.54	0.5	ppbv	5.00	70.8	70-130	0.567	25	
1,1-Dichloroethylene	4.89	0.5	ppbv	5.00	97.8	70-130	0.204	25	
1,2,4-Trimethylbenzene	5.03	0.5	ppbv	5.00	101	70-130	0.999	25	
1,2-Dibromoethane (EDB)	5.10	0.5	ppbv	5.00	102	70-130	1.18	25	
1,2-Dichlorobenzene	5.17	0.5	ppbv	5.00	103	70-130	1.36	25	
1,2-Dichloroethane	4.04	0.5	ppbv	5.00	80.8	70-130	2.20	25	
1,2-Dichloropropane	4.30	0.5	ppbv	5.00	86.0	70-130	0.232	25	
1,2-Dichlorotetrafluoroethane	4.82	0.5	ppbv	5.00	96.4	70-130	3.06	25	
1,3,5-Trimethylbenzene	5.14	0.5	ppbv	5.00	103	70-130	0.194	25	
1,3-Butadiene	4.09	0.5	ppbv	5.00	81.8	70-130	2.42	25	
1,3-Dichlorobenzene	4.68	0.5	ppbv	5.00	93.6	70-130	1.29	25	
1,4-Dichlorobenzene	4.40	0.5	ppbv	5.00	88.0	70-130	1.83	25	
1,4-Dioxane	4.46	0.5	ppbv	5.00	89.2	70-130	0.447	25	
2-Butanone (MEK)	3.71	0.5	ppbv	5.00	74.2	70-130	2.13	25	
2-Chlorotoluene	5.14	0.5	ppbv	5.00	103	70-130	0.978	25	
2-Hexanone (MBK)	4.35	0.5	ppbv	5.00	87.0	70-130	1.62	25	
4-Methyl-2-pentanone (MIBK)	4.44	0.5	ppbv	5.00	88.8	70-130	0.673	25	
Allyl chloride	4.67	0.5	ppbv	5.00	93.4	70-130	1.70	25	
Benzene	4.29	0.5	ppbv	5.00	85.8	70-130	0.697	25	
Benzyl Chloride	3.45	0.5	ppbv	5.00	69.0	70-130	2.35	25	L
Bromoform	5.14	0.5	ppbv	5.00	103	70-130	0.585	25	
Bromomethane	5.23	0.5	ppbv	5.00	105	70-130	3.20	25	
Carbon Disulfide	4.79	0.5	ppbv	5.00	95.8	70-130	1.66	25	
Carbon Tetrachloride	4.15	0.5	ppbv	5.00	83.0	70-130	1.91	25	
Chlorobenzene	4.93	0.5	ppbv	5.00	98.6	70-130	0.00	25	



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0819

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 13, 2024 10:20  
Date Issued: July 22, 2024 8:25

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Units	Source Level	%REC		RPD		Qual
	Result	Limit			Result	Limits	RPD	Limit	

#### Batch BHF0469 - No Prep VOC Air

##### LCS Dup (BHF0469-BSD1)

Prepared & Analyzed: 06/13/2024

Chloroethane	5.23	0.5	ppbv	5.00	105	70-130	0.191	25	
Chloroform	4.17	0.5	ppbv	5.00	83.4	70-130	0.955	25	
Chloromethane	4.51	0.5	ppbv	5.00	90.2	70-130	5.81	25	
cis-1,2-Dichloroethylene	4.32	0.5	ppbv	5.00	86.4	70-130	0.692	25	
cis-1,3-Dichloropropene	4.25	0.5	ppbv	5.00	85.0	70-130	1.17	25	
Cyclohexane	4.23	0.5	ppbv	5.00	84.6	70-130	2.34	25	
Dibromochloromethane	4.36	0.5	ppbv	5.00	87.2	70-130	1.82	25	
Dichlorodifluoromethane	4.21	0.5	ppbv	5.00	84.2	70-130	1.88	25	
Ethyl acetate	3.93	0.5	ppbv	5.00	78.6	70-130	3.50	25	
Ethylbenzene	5.03	0.5	ppbv	5.00	101	70-130	0.598	25	
Heptane	3.77	0.5	ppbv	5.00	75.4	70-130	2.10	25	
Hexachlorobutadiene	4.62	0.5	ppbv	5.00	92.4	60-140	1.09	25	
Hexane	4.06	0.5	ppbv	5.00	81.2	70-130	1.22	25	
Isopropylbenzene	5.29	0.5	ppbv	5.00	106	70-130	1.14	25	
m+p-Xylenes	10.1	1	ppbv	10.0	101	70-130	0.694	25	
Methyl methacrylate	4.10	0.5	ppbv	5.00	82.0	70-130	2.65	25	
Methylene chloride	5.43	1	ppbv	5.00	109	70-130	0.739	25	
Methyl-t-butyl ether (MTBE)	3.30	0.5	ppbv	5.00	66.0	70-130	1.50	25	L
Naphthalene	3.64	0.5	ppbv	5.00	72.8	60-140	1.94	25	
o-Xylene	5.11	0.5	ppbv	5.00	102	70-130	0.196	25	
Propylene	3.91	1	ppbv	5.00	78.2	70-130	2.59	25	
Styrene	4.87	0.5	ppbv	5.00	97.4	70-130	0.618	25	
TBA	4.08	0.5	ppbv	5.00	81.6	70-130	1.94	25	
Tetrachloroethylene (PCE)	4.95	0.5	ppbv	5.00	99.0	70-130	0.604	25	
Tetrahydrofuran	3.77	0.5	ppbv	5.00	75.4	70-130	0.532	25	
Toluene	4.23	0.5	ppbv	5.00	84.6	70-130	2.11	25	
trans-1,2-Dichloroethylene	3.59	0.5	ppbv	5.00	71.8	70-130	2.20	25	
trans-1,3-Dichloropropene	3.99	0.5	ppbv	5.00	79.8	70-130	1.49	25	
Trichloroethylene	4.40	0.5	ppbv	5.00	88.0	70-130	1.80	25	
Trichlorofluoromethane	4.83	0.5	ppbv	5.00	96.6	70-130	2.25	25	
Vinyl acetate	2.68	0.5	ppbv	5.00	53.6	70-130	2.58	25	L
Vinyl bromide	5.10	0.5	ppbv	5.00	102	70-130	2.52	25	
Vinyl chloride	4.99	0.5	ppbv	5.00	99.8	70-130	1.98	25	





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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0819

Client Name:	CTEH, LLC	Date Received:	June 13, 2024 10:20
	5120 Northshore Drive	Date Issued:	July 22, 2024 8:25
	N. Little Rock, AR 72118		
Submitted To:	Cassie Smythe	Project Number:	PROJ-036688
Client Site I.D.:	Air Quality Study	Purchase Order:	PROJ-036688

### Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BHF0469 - No Prep VOC Air

#### LCS Dup (BHF0469-BSD1)

Prepared & Analyzed: 06/13/2024

Surr: 4-Bromofluorobenzene (Surr)	5.53		ppbv	5.00	111	70-130			
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Final Report

Laboratory Order ID 24F0819

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 13, 2024 10:20  
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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### Sulfur Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BHF0511 - No Prep VOC Air

##### Blank (BHF0511-BLK1)

Prepared & Analyzed: 06/14/2024

Carbon Disulfide	<	10.0	ppbv							U
Hydrogen Sulfide	<	10.0	ppbv							U
1-Propanethiol	<	10.0	ppbv							U
2-Propanethiol	<	10.0	ppbv							U
Carbonyl sulfide	<	10.0	ppbv							U
Dimethyl sulfide	<	10.0	ppbv							U
Ethyl mercaptan	<	10.0	ppbv							U
Methyl mercaptan	<	10.0	ppbv							U
Total Reduced Sulfurs	<	10.0	ppbv							U

Surr: 1,4-Difluorobenzene (Surr) 18.9 ppbv 20.0 94.4 80-120

##### LCS (BHF0511-BS1)

Prepared & Analyzed: 06/14/2024

Carbon Disulfide	21.8	10	ppbv	22.4	97.4	70-130				
Hydrogen Sulfide	21.2	10	ppbv	22.2	95.7	70-130				
1-Propanethiol	19.2	10	ppbv	18.8	102	70-130				
2-Propanethiol	19.4	10	ppbv	18.2	107	70-130				
Carbonyl sulfide	21.6	10	ppbv	22.8	94.5	70-130				
Dimethyl sulfide	20.6	10	ppbv	20.6	100	70-130				
Ethyl mercaptan	19.1	10	ppbv	17.6	108	70-130				
Methyl mercaptan	18.7	10	ppbv	19.0	98.3	70-130				

Surr: 1,4-Difluorobenzene (Surr) 19.4 ppbv 20.0 97.0 70-130

##### LCS Dup (BHF0511-BSD1)

Prepared & Analyzed: 06/14/2024

Carbon Disulfide	21.9	10	ppbv	22.4	97.6	70-130	0.229	25		
Hydrogen Sulfide	20.9	10	ppbv	22.2	94.2	70-130	1.61	25		
1-Propanethiol	19.6	10	ppbv	18.8	104	70-130	1.96	25		
2-Propanethiol	19.6	10	ppbv	18.2	107	70-130	0.873	25		
Carbonyl sulfide	21.6	10	ppbv	22.8	94.7	70-130	0.232	25		
Dimethyl sulfide	20.3	10	ppbv	20.6	98.6	70-130	1.37	25		
Ethyl mercaptan	19.1	10	ppbv	17.6	109	70-130	0.210	25		
Methyl mercaptan	19.3	10	ppbv	19.0	102	70-130	3.47	25		

Surr: 1,4-Difluorobenzene (Surr) 19.3 ppbv 20.0 96.4 70-130



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5120 Northshore Drive

Date Received: June 13, 2024 10:20  
Date Issued: July 22, 2024 8:25

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### Sulfur Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BHF0512 - No Prep VOC Air

##### Blank (BHF0512-BLK1)

Prepared & Analyzed: 06/14/2024

Dimethyl disulfide	<	10.0	ppbv							U
Surr: 1,4-Difluorobenzene (Surr)	20.0		ppbv	20.0	100	80-120				

##### LCS (BHF0512-BS1)

Prepared & Analyzed: 06/14/2024

Dimethyl disulfide	16.2	10	ppbv	20.8	78.0	70-130				
Surr: 1,4-Difluorobenzene (Surr)	20.0		ppbv	20.0	100	70-130				

##### LCS Dup (BHF0512-BSD1)

Prepared & Analyzed: 06/14/2024

Dimethyl disulfide	16.6	10	ppbv	20.8	80.0	70-130	2.49	25		
Surr: 1,4-Difluorobenzene (Surr)	20.0		ppbv	20.0	99.8	70-130				

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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### Certified Analytes included in this Report

Analyte	Certifications	Analyte	Certifications
<i>EPA TO-15 in Air</i>		cis-1,3-Dichloropropene	VELAP
Carbon Disulfide	VELAP	Cyclohexane	VELAP
1,1,1-Trichloroethane	VELAP	Dibromochloromethane	VELAP
1,1,1,2-Tetrachloroethane	VELAP	Dichlorodifluoromethane	VELAP
1,1,2,2-Tetrachloroethane	VELAP	Ethanol	VELAP
1,1,2-Trichloro-1,2,2-trifluoroethane	VELAP	Ethyl acetate	VELAP
1,1,2-Trichloroethane	VELAP	Ethylbenzene	VELAP
1,1-Dichloroethane	VELAP	Heptane	VELAP
1,1-Dichloroethylene	VELAP	Hexachlorobutadiene	VELAP
1,2,4-Trichlorobenzene	VELAP	Hexane	VELAP
1,2,4-Trimethylbenzene	VELAP	Isooctane	VELAP
1,2-Dibromoethane (EDB)	VELAP	Isopropyl alcohol	VELAP
1,2-Dichlorobenzene	VELAP	Isopropylbenzene	VELAP
1,2-Dichloroethane	VELAP	m+p-Xylenes	VELAP
1,2-Dichloropropane	VELAP	Methyl methacrylate	VELAP
1,2-Dichlorotetrafluoroethane	VELAP	Methylene chloride	VELAP
1,3,5-Trimethylbenzene	VELAP	Methyl-t-butyl ether (MTBE)	VELAP
1,3-Butadiene	VELAP	Naphthalene	VELAP
1,3-Dichlorobenzene	VELAP	n-Butane (C4)	VELAP
1,4-Dichlorobenzene	VELAP	n-Nonane (C9)	VELAP
1,4-Dioxane	VELAP	n-Propylbenzene	VELAP
1-Ethyl-4-methyl benzene	VELAP	o-Xylene	VELAP
2-Butanone (MEK)	VELAP	n-Pentane (C5)	VELAP
2-Chlorotoluene	VELAP	Propylene	VELAP
2-Hexanone (MBK)	VELAP	Styrene	VELAP
4-Methyl-2-pentanone (MIBK)	VELAP	TBA	VELAP
Acetone	VELAP	Tetrachloroethylene (PCE)	VELAP
Acrolein	VELAP	Tetrahydrofuran	VELAP
Allyl chloride	VELAP	Toluene	VELAP
Benzene	VELAP	trans-1,2-Dichloroethylene	VELAP
Benzyl Chloride	VELAP	trans-1,3-Dichloropropene	VELAP
Bromodichloromethane	VELAP	Trichloroethylene	VELAP
Bromoform	VELAP	Trichlorofluoromethane	VELAP
Bromomethane	VELAP	Vinyl acetate	VELAP
Carbon Disulfide	VELAP	Vinyl bromide	VELAP
Carbon Tetrachloride	VELAP	Vinyl chloride	VELAP
Chlorobenzene	VELAP	Xylenes, Total	VELAP
Chloroethane	VELAP		
Chloroform	VELAP		
Chloromethane	VELAP		
cis-1,2-Dichloroethylene	VELAP		



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0819

Client Name:	CTEH, LLC	Date Received:	June 13, 2024 10:20
	5120 Northshore Drive	Date Issued:	July 22, 2024 8:25
	N. Little Rock, AR 72118		
Submitted To:	Cassie Smythe	Project Number:	PROJ-036688
Client Site I.D.:	Air Quality Study	Purchase Order:	PROJ-036688

Code	Description	Laboratory ID	Expires
MdDOE	Maryland DE Drinking Water	341	12/31/2024
NCDEQ	North Carolina DEQ	495	12/31/2024
NCDOH	North Carolina Department of Health	51714	07/31/2024
NYDOH	New York DOH Drinking Water	12069	04/01/2025
PADEP	NELAP-Pennsylvania Certificate #009	68-03503	10/31/2024
SCDHEC	South Carolina Dept of Health and Environmental	93016	09/14/2024
TXCEQ	Texas Comm on Environmental Quality #T104704	T104704576	05/31/2025
VELAP	NELAP-Virginia Certificate #12969	460021	06/14/2025
WVDEP	West Virginia DEP	350	11/30/2024

### Qualifiers and Definitions

- C Continuing calibration verification response for this analyte is outside specifications.
  - J The reported result is an estimated value.
  - L LCS recovery is outside of established acceptance limits
  - U Analyte was not detected and is reported as less than the DL or as defined by the client . The DL has been adjusted for any dilution or concentration of the sample.
  - RPD Relative Percent Difference
  - Qual Qualifiers
  - RE Denotes sample was re-analyzed
  - PF Preparation Factor
  - MDL Method Detection Limit
  - LOQ Limit of Quantitation
  - ppbv parts per billion by volume
  - TIC Tentatively Identified Compounds are compounds that are identified by comparing the analyte mass spectral pattern with the NIST spectral library. A TIC spectral match is reported when the pattern is at least 75% consistent with the published pattern. Compound concentrations are estimated and are calculated using an internal standard response factor of 1.
- All EPA method 3C results are reported as normalized values when the sum total of all evaluated constituents is outside  $\pm 10\%$  of the absolute.

**AIR ANALYSIS  
CHAIN OF CUSTODY**

COMPANY NAME: CTEH  
 CONTACT: **Cassie Smythe**  
 ADDRESS:  
 PHONE #:  
 FAX #:  
 EMAIL: labresults@cteh.com

INVOICE TO: same  
 INVOICE CONTACT:  
 INVOICE ADDRESS:  
 INVOICE PHONE #:

PROJECT NAME/Quote #: Air Quality Study  
 SITE NAME:  
 PROJECT NUMBER: PROJ-036688  
 P.O. #:  
 Pretreatment Program:

Is sample for compliance reporting? YES  NO  Regulatory State: Is sample from a chlorinated supply? YES NO PWS I.D. #:  
 SAMPLER NAME (PRINT): *Kemie Steche* SAMPLER SIGNATURE: *Kemie Stecher* Turn Around Time: Circle: 10 5 Days or \_\_\_ Day(s)  
 Matrix Codes: AA=Indoor/Ambient Air SG=Soil Gas LV=Landfill/Vent Gas OT=Other **063-24E-0027**

CLIENT SAMPLE I.D.	Regulator Info		Canister Information				Sampling Start Information				Sampling Stop Information				ANALYSIS			
	Flow Controller ID	Cal Flow (mL/min)	Canister ID	Cleaning Batch ID	LAB Outgoing Canister Vacuum (in Hg/psia)	LAB Receiving Canister Vacuum (in Hg)	Barometric Pres. (in Hg):		Start Date (24hr clock)	Initial Canister Vacuum (in Hg)	Starting Sample Temp °F	Barometric Pres. (in Hg):		Stop Date (24hr clock)	Final Canister Vacuum (in Hg)	Ending Sample Temp °F	Sulfurs by TO-15	VOC TO-15 Full List
							Start Date (24hr clock)	Initial Canister Vacuum (in Hg)				Start Date (24hr clock)	Final Canister Vacuum (in Hg)				Sulfurs by TO-15	VOC TO-15 Full List
1) CACA061105008 G5028			16804	1.4 IC240530	30			6/11/24	1046			6/11/24	1046				X	X
2) CACA061105011 G5029			16820	1.4 IC240530	30			6/11/24	0825			6/11/24	0825				X	X
3) CACA061105001 G5031			17018	1.4 IC240530	30			6/11/24	1644			6/11/24	1644				X	X
4) CACA061105003 G5030			17021	1.4 IC240530	30			6/11/24	1155			6/11/24	1155				X	X

RELINQUISHED: *Kemie Steche* DATE / TIME: 6/12/24 1445 RECEIVED: *Fede x* DATE / TIME: 6/12/24 1445  
 RELINQUISHED: *Fede x E* DATE / TIME: 6-13-24 1020 RECEIVED: *[Signature]* DATE / TIME: 6-13-24 1020  
 INQUIRED: DATE / TIME: RECEIVED: DATE / TIME:

QC Data Package LAB USE ONLY  
 Level I  Level II  Level III  Level IV   
 14 grab samplers  
 2 dup tee  
 2 ucl1

CTEH, LLC  
 Air Quality Study  
 24F0819  
 Recd: 06/13/2024 Due: 06/20/2024

OT: 20.6 19.2g  
 CF: 10.5 10.50g  
 21.1 310

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**AIR ANALYSIS  
CHAIN OF CUSTODY**

COMPANY NAME: CTEH  
 CONTACT: Cassie Smythe  
 ADDRESS:  
 PHONE #:  
 FAX #:  
 EMAIL: labresults@cteh.com  
 PROJECT NAME/Quote #: Air Quality Study  
 SITE NAME:  
 PROJECT NUMBER: PROJ-036688  
 P.O. #:  
 Pretreatment Program:  
 Is sample for compliance reporting? YES  NO   
 Is sample from a chlorinated supply? YES  NO   
 PWS I.D. #:  
 SAMPLER NAME (PRINT): *Kamie Stecher*  
 SAMPLER SIGNATURE: *Kamie Stecher*  
 Turn Around Time: Circle: 10  5 Days  or \_\_\_ Days

Matrix Codes: AA=Indoor/Ambient Air SG=Soil Gas LV=Landfill/Vent Gas OT=Other

CLIENT SAMPLE I.D.	Regulator Info			Canister Information			Sampling Start Information				Sampling Stop Information				ANALYSIS		
	Flow Controller ID	Cal Flow (mL/min)	Canister ID	Cleaning Batch ID	LAB Outgoing Canister Vacuum (in Hg/psia)	LAB Receiving Canister Vacuum (in Hg)	Start Date	Start Time (24hr clock)	Initial Canister Vacuum (in Hg)	Starting Sample Temp °F	Stop Date	Stop Time (24hr clock)	Final Canister Vacuum (in Hg)	Ending Sample Temp °F	Matrix (See Codes)	Sulfurs by TO-15	DMS by TO-15
																VOC TO-15 Full	
1) CACA061105008	G5028		16804	1.4	IC240530	30	3.4	6/11/24	1046		6/11/24	1046			HA	X	X
2) CACA061105011	G5029		16820	1.4	IC240530	30	3.0	6/11/24	0825		6/11/24	0825			HA	X	X
3) CACA061105001	G5031		17018	1.4	IC240530	30	3.2	6/11/24	1644		6/11/24	1644			HA	X	X
4) CACA061105003	G5030		17021	1.4	IC240530	30	4.4	6/11/24	1155		6/11/24	1155			HA	X	X

RELINQUISHED: *Kamie Stecher* 6/12/24 1445  
 RECEIVED: *Fdx Ex* 6/12/24 1445  
 RELINQUISHED: *Fdx Ex*  
 RECEIVED: *[Signature]* 6-13-24 1020  
 RELINQUISHED: \_\_\_\_\_  
 RECEIVED: \_\_\_\_\_

QC Data Package  
 Level I  Level II  Level III  Level IV

LAB USE ONLY  
 14 grab samplers  
 2 cup tee  
 2 UCI

CTEH, LLC  
 Air Quality Study  
 Recd: 06/13/2024 Due: 06/20/2024  
 24F0819

OT: 20.6 19.25  
 CF: 10.5 10.50a  
 21.1 310

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# CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

THE SCIENCE OF READY™

Send Report to labresults@cteh.com  
 Company CTEH  
 Address \_\_\_\_\_  
 Phone \_\_\_\_\_  
 e-mail \_\_\_\_\_  
 Accounting CTEH

CTEH Project # Proj 0310088  
 Turnaround Requested:  Normal  Same Day  Next Day  
 Two Day  Other (Specify) 5 Day  
 Data Packet Requested:  Standard Level II  Other \_\_\_\_\_  
 Sample and Extract Retention/Disposal:  
 Dispose after 2X hold time   
 Retain w/ storage fees after 2X hold time

Lab Contact Information	Primary Sample Identification	Secondary Sample Identification	Units	Sample Size	Sample Start Date	Sample Start Time	Sample Stop Date	Sample Stop Time	Initials	Method			Matrix
										Can	Regulator		
	CACA061205001 (2.6")	12420 G5026	L	1.4	6/12/24	0910	6/12/24	0910	KES	X	X	X	A
	CACA061205002 (2.6")	12408 G5024	L	1.4	6/12/24	0936	6/12/24	0936	KES	X	X	X	A
<del>_____</del>													

CTEH, LLC  
Air Quality Study  
24F0819

Recd: 06/13/2024 Due: 06/20/2024  
V190326002

RELINQUISHED BY Kami Suche DATE/TIME 6/12/24 1445 RECEIVED BY FedEx DATE/TIME 6/12/24 1445  
Floxy E  
 DG# CACA061105 OT: 20.6 OT CFI: 105 no fee no seal 3/b  
2.1.1  
 COMMENTS FedEx E



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### Certificate of Analysis

Final Report

Laboratory Order ID 24F0819

Client Name:	CTEH, LLC	Date Received:	June 13, 2024 10:20
	5120 Northshore Drive	Date Issued:	July 22, 2024 8:25
	N. Little Rock, AR 72118		
Submitted To:	Cassie Smythe	Project Number:	PROJ-036688
Client Site I.D.:	Air Quality Study	Purchase Order:	PROJ-036688

### Sample Conditions Checklist

Samples Received at:	21.10°C
How were samples received?	FedEx Express
Were Custody Seals used? If so, were they received intact?	No
Are the custody papers filled out completely and correctly?	Yes
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits or received on ice, and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	No
Are all volatile organic and TOX containers free of headspace?	NA
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	NA
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis. In addition, field parameters are always received outside holding time and will be marked accordingly.	Yes

### Work Order Comments

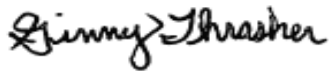
**Certificate of Analysis***Final Report***Laboratory Order ID 24F0908**

Client Name:	CTEH, LLC	Date Received:	June 17, 2024 8:38
	5120 Northshore Drive	Date Issued:	July 22, 2024 8:33
	N. Little Rock, AR 72118	Project Number:	PROJ-036688
Submitted To:	Cassie Smythe	Purchase Order:	PROJ-036688

Client Site I.D.: Air Quality Study

Enclosed are the results of analyses for samples received by the laboratory on 06/17/2024 08:38. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,



Ginny Thrasher  
Project Manager

**End Notes:**

The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

Unless otherwise noted, the test results for solid materials are calculated on a wet weight basis. Analyses for pH, dissolved oxygen, temperature, residual chlorine and sulfite that are performed in the laboratory do not meet NELAC requirements due to extremely short holding times. These analyses should be performed in the field. The results of field analyses performed by the Sampler included in the Certificate of Analysis are done so at the client's request and are not included in the laboratory's fields of certification nor have they been audited for adherence to a reference method or procedure.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Laboratory's NELAC certified parameters please contact customer service.

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## Certificate of Analysis

### Final Report

**Laboratory Order ID 24F0908**

Client Name:	CTEH, LLC	Date Received:	June 17, 2024 8:38
	5120 Northshore Drive	Date Issued:	July 22, 2024 8:33
	N. Little Rock, AR 72118	Project Number:	PROJ-036688
Submitted To:	Cassie Smythe	Purchase Order:	PROJ-036688
Client Site I.D.:	Air Quality Study		

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CACA0612OS012	24F0908-01	Air	06/12/2024 17:30	06/17/2024 08:38
CACA0613UW001	24F0908-02	Air	06/13/2024 10:35	06/17/2024 08:38
CACA0613OS005	24F0908-03	Air	06/13/2024 09:37	06/17/2024 08:38
CACA0613OS008	24F0908-04	Air	06/13/2024 08:52	06/17/2024 08:38
CACA0614UW001	24F0908-05	Air	06/14/2024 07:05	06/17/2024 08:38
CACA0614OS002	24F0908-06	Air	06/14/2024 07:31	06/17/2024 08:38
CACA0614OSD002	24F0908-07	Air	06/14/2024 07:31	06/17/2024 08:38
CACA0614OS003	24F0908-08	Air	06/14/2024 07:51	06/17/2024 08:38
CACA0614OS004	24F0908-09	Air	06/14/2024 08:19	06/17/2024 08:38
CACA0614OSD004	24F0908-10	Air	06/14/2024 08:19	06/17/2024 08:38

The Certificate of Analysis is being reissued on 7/22/2024 to update the sample ID for 24F0908-03 to CACA0613OS005.

## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0612OS012

Project Location:

Sample ID: 24F0908-01

Canister ID: 063-00289::13437

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/12/2024 17:30

Flow Controller ID: 063-00879::GS027

Receipt Vacuum(in Hg): 3.2

Sample Type:

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 12:05	DFH
Hydrogen Sulfide, as received	ND	10.0	10.0	U	ND	14	14	1	1	6/17/24 12:05	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 12:05	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/17/24 12:05	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 12:05	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 12:05	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 12:05	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 12:05	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/17/24 12:05	DFH
Total Reduced Sulfurs, as received	ND	10.0	10.0	U	ND	14	14	1	1	6/17/24 12:05	DFH
Surrogate(s)	% Recovery			% Recovery Limits							
1,4-Difluorobenzene (Surr), as received			100			80-120				6/17/24 12:05	
1,4-Difluorobenzene (Surr), as received			94.2			80-120				6/17/24 12:05	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/17/24 13:53	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/17/24 13:53	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/17/24 13:53	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/17/24 13:53	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/17/24 13:53	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/17/24 13:53	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/17/24 13:53	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/17/24 13:53	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 13:53	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/17/24 13:53	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0612OS012

Project Location:

Sample ID: 24F0908-01

Canister ID: 063-00289::13437

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/12/2024 17:30

Flow Controller ID: 063-00879::GS027

Receipt Vacuum(in Hg): 3.2

Sample Type:

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/17/24 13:53	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/17/24 13:53	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/17/24 13:53	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/17/24 13:53	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 13:53	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/17/24 13:53	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/17/24 13:53	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/17/24 13:53	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/17/24 13:53	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 13:53	DFH
2-Butanone (MEK)	0.45	0.20	0.50	J	1.3	0.59	1.5	1	1	6/17/24 13:53	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 13:53	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/17/24 13:53	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/17/24 13:53	DFH
Acetone	3.55	0.20	0.50		8.4	0.48	1.2	1	1	6/17/24 13:53	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/17/24 13:53	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/17/24 13:53	DFH
Benzene	ND	0.20	0.50	U	ND	0.64	1.6	1	1	6/17/24 13:53	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 13:53	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/17/24 13:53	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/17/24 13:53	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/17/24 13:53	DFH
Carbon Disulfide	ND	0.50	0.50	U	ND	1.6	1.6	1	1	6/17/24 13:53	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/17/24 13:53	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/17/24 13:53	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/17/24 13:53	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/17/24 13:53	DFH
Chloromethane	0.28	0.20	0.50	J	0.58	0.41	1.0	1	1	6/17/24 13:53	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/17/24 13:53	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0612OS012

Project Location:

Sample ID: 24F0908-01

Canister ID: 063-00289::13437

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/12/2024 17:30

Flow Controller ID: 063-00879::GS027

Receipt Vacuum(in Hg): 3.2

Sample Type:

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/17/24 13:53	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/17/24 13:53	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/17/24 13:53	DFH
Dichlorodifluoromethane	ND	0.50	0.50	U	ND	2.5	2.5	1	1	6/17/24 13:53	DFH
Ethanol	4.37	0.20	0.50		8.2	0.38	0.94	1	1	6/17/24 13:53	DFH
Ethyl acetate	0.26	0.20	0.50	J	0.94	0.72	1.8	1	1	6/17/24 13:53	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/17/24 13:53	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/17/24 13:53	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/17/24 13:53	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/17/24 13:53	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/17/24 13:53	DFH
Isopropyl alcohol	2.30	0.20	0.50		5.7	0.49	1.2	1	1	6/17/24 13:53	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 13:53	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/17/24 13:53	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/17/24 13:53	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/17/24 13:53	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	C, U	ND	0.72	1.8	1	1	6/17/24 13:53	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 13:53	DFH
n-Butane (C4)	0.23	0.20	0.50	J	0.55	0.48	1.2	1	1	6/17/24 13:53	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 13:53	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 13:53	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/17/24 13:53	DFH
n-Pentane (C5)	ND	0.20	0.50	U	ND	0.59	1.5	1	1	6/17/24 13:53	DFH
Propylene	ND	1.00	1.00	U	ND	1.7	1.7	1	1	6/17/24 13:53	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/17/24 13:53	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/17/24 13:53	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/17/24 13:53	DFH
Tetrahydrofuran	ND	0.20	0.50	U	ND	0.59	1.5	1	1	6/17/24 13:53	DFH
Toluene	ND	0.20	0.50	U	ND	0.75	1.9	1	1	6/17/24 13:53	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0612OS012

Project Location:

Sample ID: 24F0908-01

Canister ID: 063-00289::13437

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/12/2024 17:30

Flow Controller ID: 063-00879::GS027

Receipt Vacuum(in Hg): 3.2

Sample Type:

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/17/24 13:53	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/17/24 13:53	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/17/24 13:53	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/17/24 13:53	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/17/24 13:53	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/17/24 13:53	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/17/24 13:53	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/17/24 13:53	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			103				80-120			6/17/24 13:53	





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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0613UW001

Project Location:

Sample ID: 24F0908-02

Canister ID: 063-00379::13963

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/13/2024 10:35

Flow Controller ID: 063-00872::GS020

Receipt Vacuum(in Hg): 2.6

Sample Type:

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 12:46	DFH
Hydrogen Sulfide, as received	50.5	10.0	10.0		70	14	14	1	1	6/17/24 12:46	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 12:46	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/17/24 12:46	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 12:46	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 12:46	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 12:46	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 12:46	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/17/24 12:46	DFH
Total Reduced Sulfurs, as received	50.5	10.0	10.0		70	14	14	1	1	6/17/24 12:46	DFH
Surrogate(s)	% Recovery			% Recovery Limits							
1,4-Difluorobenzene (Surr), as received	94.8			80-120						6/17/24 12:46	
1,4-Difluorobenzene (Surr), as received	100			80-120						6/17/24 12:46	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/17/24 14:45	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/17/24 14:45	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/17/24 14:45	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/17/24 14:45	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/17/24 14:45	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/17/24 14:45	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/17/24 14:45	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/17/24 14:45	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 14:45	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/17/24 14:45	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0613UW001

Project Location:

Sample ID: 24F0908-02

Canister ID: 063-00379::13963

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/13/2024 10:35

Flow Controller ID: 063-00872::GS020

Receipt Vacuum(in Hg): 2.6

Sample Type:

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/17/24 14:45	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/17/24 14:45	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/17/24 14:45	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/17/24 14:45	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 14:45	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/17/24 14:45	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/17/24 14:45	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/17/24 14:45	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/17/24 14:45	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 14:45	DFH
2-Butanone (MEK)	0.91	0.20	0.50		2.7	0.59	1.5	1	1	6/17/24 14:45	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 14:45	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/17/24 14:45	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/17/24 14:45	DFH
Acetone	7.47	0.20	0.50		18	0.48	1.2	1	1	6/17/24 14:45	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/17/24 14:45	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/17/24 14:45	DFH
Benzene	ND	0.20	0.50	U	ND	0.64	1.6	1	1	6/17/24 14:45	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 14:45	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/17/24 14:45	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/17/24 14:45	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/17/24 14:45	DFH
Carbon Disulfide	1.22	0.50	0.50		3.8	1.6	1.6	1	1	6/17/24 14:45	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/17/24 14:45	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/17/24 14:45	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/17/24 14:45	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/17/24 14:45	DFH
Chloromethane	0.28	0.20	0.50	J	0.58	0.41	1.0	1	1	6/17/24 14:45	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/17/24 14:45	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0613UW001

Project Location:

Sample ID: 24F0908-02

Canister ID: 063-00379::13963

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/13/2024 10:35

Flow Controller ID: 063-00872::GS020

Receipt Vacuum(in Hg): 2.6

Sample Type:

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/17/24 14:45	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/17/24 14:45	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/17/24 14:45	DFH
Dichlorodifluoromethane	ND	0.50	0.50	U	ND	2.5	2.5	1	1	6/17/24 14:45	DFH
Ethanol	36.2	1.20	3.00		68	2.3	5.7	6	1	6/17/24 17:20	DFH
Ethyl acetate	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/17/24 14:45	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/17/24 14:45	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/17/24 14:45	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/17/24 14:45	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/17/24 14:45	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/17/24 14:45	DFH
Isopropyl alcohol	4.36	0.20	0.50		11	0.49	1.2	1	1	6/17/24 14:45	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 14:45	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/17/24 14:45	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/17/24 14:45	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/17/24 14:45	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	C, U	ND	0.72	1.8	1	1	6/17/24 14:45	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 14:45	DFH
n-Butane (C4)	0.33	0.20	0.50	J	0.78	0.48	1.2	1	1	6/17/24 14:45	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 14:45	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 14:45	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/17/24 14:45	DFH
n-Pentane (C5)	ND	0.20	0.50	U	ND	0.59	1.5	1	1	6/17/24 14:45	DFH
Propylene	ND	1.00	1.00	U	ND	1.7	1.7	1	1	6/17/24 14:45	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/17/24 14:45	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/17/24 14:45	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/17/24 14:45	DFH
Tetrahydrofuran	ND	0.20	0.50	U	ND	0.59	1.5	1	1	6/17/24 14:45	DFH
Toluene	ND	0.20	0.50	U	ND	0.75	1.9	1	1	6/17/24 14:45	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0613UW001

Project Location:

Sample ID: 24F0908-02

Canister ID: 063-00379::13963

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/13/2024 10:35

Flow Controller ID: 063-00872::GS020

Receipt Vacuum(in Hg): 2.6

Sample Type:

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/17/24 14:45	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/17/24 14:45	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/17/24 14:45	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/17/24 14:45	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/17/24 14:45	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/17/24 14:45	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/17/24 14:45	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/17/24 14:45	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			95.6			80-120				6/17/24 17:20	
4-Bromofluorobenzene (Surr)			99.4			80-120				6/17/24 14:45	



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## Certificate of Analysis

Final Report

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Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06130S005

Project Location:

Sample ID: 24F0908-03

Canister ID: 063-00669::15971

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/13/2024 09:37

Flow Controller ID:

Receipt Vacuum(in Hg): 2.8

Sample Type:

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 13:26	DFH
Hydrogen Sulfide, as received	ND	10.0	10.0	U	ND	14	14	1	1	6/17/24 13:26	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 13:26	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/17/24 13:26	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 13:26	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 13:26	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 13:26	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 13:26	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/17/24 13:26	DFH
Total Reduced Sulfurs, as received	ND	10.0	10.0	U	ND	14	14	1	1	6/17/24 13:26	DFH
Surrogate(s)	% Recovery			% Recovery Limits							
1,4-Difluorobenzene (Surr), as received	94.5			80-120						6/17/24 13:26	
1,4-Difluorobenzene (Surr), as received	100			80-120						6/17/24 13:26	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/17/24 15:38	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/17/24 15:38	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/17/24 15:38	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/17/24 15:38	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/17/24 15:38	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/17/24 15:38	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/17/24 15:38	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/17/24 15:38	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 15:38	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/17/24 15:38	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06130S005

Project Location:

Sample ID: 24F0908-03

Canister ID: 063-00669::15971

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/13/2024 09:37

Flow Controller ID:

Receipt Vacuum(in Hg): 2.8

Sample Type:

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/17/24 15:38	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/17/24 15:38	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/17/24 15:38	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/17/24 15:38	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 15:38	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/17/24 15:38	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/17/24 15:38	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/17/24 15:38	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/17/24 15:38	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 15:38	DFH
2-Butanone (MEK)	2.82	0.20	0.50		8.3	0.59	1.5	1	1	6/17/24 15:38	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 15:38	DFH
2-Hexanone (MBK)	0.23	0.20	0.50	J	0.94	0.82	2.0	1	1	6/17/24 15:38	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/17/24 15:38	DFH
Acetone	5.05	0.20	0.50		12	0.48	1.2	1	1	6/17/24 15:38	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/17/24 15:38	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/17/24 15:38	DFH
Benzene	ND	0.20	0.50	U	ND	0.64	1.6	1	1	6/17/24 15:38	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 15:38	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/17/24 15:38	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/17/24 15:38	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/17/24 15:38	DFH
Carbon Disulfide	0.84	0.50	0.50		2.6	1.6	1.6	1	1	6/17/24 15:38	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/17/24 15:38	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/17/24 15:38	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/17/24 15:38	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/17/24 15:38	DFH
Chloromethane	0.28	0.20	0.50	J	0.58	0.41	1.0	1	1	6/17/24 15:38	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/17/24 15:38	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06130S005

Project Location:

Sample ID: 24F0908-03

Canister ID: 063-00669::15971

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/13/2024 09:37

Flow Controller ID:

Receipt Vacuum(in Hg): 2.8

Sample Type:

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/17/24 15:38	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/17/24 15:38	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/17/24 15:38	DFH
Dichlorodifluoromethane	ND	0.50	0.50	U	ND	2.5	2.5	1	1	6/17/24 15:38	DFH
Ethanol	10.1	0.20	0.50		19	0.38	0.94	1	1	6/17/24 15:38	DFH
Ethyl acetate	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/17/24 15:38	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/17/24 15:38	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/17/24 15:38	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/17/24 15:38	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/17/24 15:38	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/17/24 15:38	DFH
Isopropyl alcohol	1.35	0.20	0.50		3.3	0.49	1.2	1	1	6/17/24 15:38	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 15:38	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/17/24 15:38	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/17/24 15:38	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/17/24 15:38	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	C, U	ND	0.72	1.8	1	1	6/17/24 15:38	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 15:38	DFH
n-Butane (C4)	1.55	0.20	0.50		3.7	0.48	1.2	1	1	6/17/24 15:38	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 15:38	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 15:38	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/17/24 15:38	DFH
n-Pentane (C5)	0.41	0.20	0.50	J	1.2	0.59	1.5	1	1	6/17/24 15:38	DFH
Propylene	ND	1.00	1.00	U	ND	1.7	1.7	1	1	6/17/24 15:38	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/17/24 15:38	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/17/24 15:38	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/17/24 15:38	DFH
Tetrahydrofuran	0.81	0.20	0.50		2.4	0.59	1.5	1	1	6/17/24 15:38	DFH
Toluene	ND	0.20	0.50	U	ND	0.75	1.9	1	1	6/17/24 15:38	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06130S005

Project Location:

Sample ID: 24F0908-03

Canister ID: 063-00669::15971

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/13/2024 09:37

Flow Controller ID:

Receipt Vacuum(in Hg): 2.8

Sample Type:

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/17/24 15:38	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/17/24 15:38	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/17/24 15:38	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/17/24 15:38	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/17/24 15:38	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/17/24 15:38	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/17/24 15:38	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/17/24 15:38	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			104				80-120			6/17/24 15:38	





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5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06130S008

Project Location:

Sample ID: 24F0908-04

Canister ID: 063-00272::13379

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/13/2024 08:52

Flow Controller ID:

Receipt Vacuum(in Hg): 2.6

Sample Type:

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	14.9	10.0	10.0		46	31	31	1	1	6/17/24 14:07	DFH
Hydrogen Sulfide, as received	11.5	10.0	10.0		16	14	14	1	1	6/17/24 14:07	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 14:07	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/17/24 14:07	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 14:07	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 14:07	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 14:07	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 14:07	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/17/24 14:07	DFH
Total Reduced Sulfurs, as received	41.3	10.0	10.0		58	14	14	1	1	6/17/24 14:07	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
1,4-Difluorobenzene (Surr), as received	101				80-120					6/17/24 14:07	
1,4-Difluorobenzene (Surr), as received	95.2				80-120					6/17/24 14:07	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/17/24 16:30	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/17/24 16:30	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/17/24 16:30	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/17/24 16:30	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/17/24 16:30	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/17/24 16:30	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/17/24 16:30	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/17/24 16:30	DFH
1,2,4-Trimethylbenzene	0.44	0.20	0.50	J	2.2	0.98	2.5	1	1	6/17/24 16:30	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/17/24 16:30	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06130S008

Project Location:

Sample ID: 24F0908-04

Canister ID: 063-00272::13379

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/13/2024 08:52

Flow Controller ID:

Receipt Vacuum(in Hg): 2.6

Sample Type:

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/17/24 16:30	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/17/24 16:30	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/17/24 16:30	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/17/24 16:30	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 16:30	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/17/24 16:30	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/17/24 16:30	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/17/24 16:30	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/17/24 16:30	DFH
1-Ethyl-4-methyl benzene	0.20	0.20	0.50	J	0.98	0.98	2.5	1	1	6/17/24 16:30	DFH
2-Butanone (MEK)	14.6	0.20	0.50		43	0.59	1.5	1	1	6/17/24 16:30	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 16:30	DFH
2-Hexanone (MBK)	0.75	0.20	0.50		3.1	0.82	2.0	1	1	6/17/24 16:30	DFH
4-Methyl-2-pentanone (MIBK)	0.84	0.20	0.50		9.6	2.3	5.7	1	1	6/17/24 16:30	DFH
Acetone	25.9	2.40	6.00		62	5.7	14	12	1	6/18/24 16:03	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/17/24 16:30	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/17/24 16:30	DFH
Benzene	1.10	0.20	0.50		3.5	0.64	1.6	1	1	6/17/24 16:30	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 16:30	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/17/24 16:30	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/17/24 16:30	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/17/24 16:30	DFH
Carbon Disulfide	7.58	0.50	0.50		24	1.6	1.6	1	1	6/17/24 16:30	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/17/24 16:30	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/17/24 16:30	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/17/24 16:30	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/17/24 16:30	DFH
Chloromethane	0.29	0.20	0.50	J	0.60	0.41	1.0	1	1	6/17/24 16:30	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/17/24 16:30	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06130S008

Project Location:

Sample ID: 24F0908-04

Canister ID: 063-00272::13379

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/13/2024 08:52

Flow Controller ID:

Receipt Vacuum(in Hg): 2.6

Sample Type:

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/17/24 16:30	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/17/24 16:30	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/17/24 16:30	DFH
Dichlorodifluoromethane	ND	0.50	0.50	U	ND	2.5	2.5	1	1	6/17/24 16:30	DFH
Ethanol	108	2.40	6.00		200	4.5	11	12	1	6/18/24 16:03	DFH
Ethyl acetate	0.99	0.20	0.50		3.6	0.72	1.8	1	1	6/17/24 16:30	DFH
Ethylbenzene	0.30	0.20	0.50	J	1.3	0.87	2.2	1	1	6/17/24 16:30	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/17/24 16:30	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/17/24 16:30	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/17/24 16:30	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/17/24 16:30	DFH
Isopropyl alcohol	23.5	2.40	6.00		58	5.9	15	12	1	6/18/24 16:03	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 16:30	DFH
m+p-Xylenes	0.52	0.40	1.00	J	2.3	1.7	4.3	1	1	6/17/24 16:30	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/17/24 16:30	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/17/24 16:30	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	C, U	ND	0.72	1.8	1	1	6/17/24 16:30	DFH
Naphthalene	0.82	0.20	0.50		4.3	1.0	2.6	1	1	6/17/24 16:30	DFH
n-Butane (C4)	1.39	0.20	0.50		3.3	0.48	1.2	1	1	6/17/24 16:30	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 16:30	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 16:30	DFH
o-Xylene	1.24	0.20	0.50		5.4	0.87	2.2	1	1	6/17/24 16:30	DFH
n-Pentane (C5)	0.34	0.20	0.50	J	1.0	0.59	1.5	1	1	6/17/24 16:30	DFH
Propylene	1.91	1.00	1.00		3.3	1.7	1.7	1	1	6/17/24 16:30	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/17/24 16:30	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/17/24 16:30	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/17/24 16:30	DFH
Tetrahydrofuran	5.57	0.20	0.50		16	0.59	1.5	1	1	6/17/24 16:30	DFH
Toluene	0.47	0.20	0.50	J	1.8	0.75	1.9	1	1	6/17/24 16:30	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06130S008

Project Location:

Sample ID: 24F0908-04

Canister ID: 063-00272::13379

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/13/2024 08:52

Flow Controller ID:

Receipt Vacuum(in Hg): 2.6

Sample Type:

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/17/24 16:30	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/17/24 16:30	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/17/24 16:30	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/17/24 16:30	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/17/24 16:30	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/17/24 16:30	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/17/24 16:30	DFH
Xylenes, Total	1.76	0.60	1.50		7.6	2.6	6.5	1	1	6/17/24 16:30	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			97.6			80-120				6/18/24 16:03	
4-Bromofluorobenzene (Surr)			109			80-120				6/17/24 16:30	



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## Certificate of Analysis

Final Report

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Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0614UW001

Project Location:

Sample ID: 24F0908-05

Canister ID: 063-00757::16483

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 07:05

Flow Controller ID: 063-00875::GS023

Receipt Vacuum(in Hg): 1.8

Sample Type:

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 15:25	DFH
Hydrogen Sulfide, as received	43.3	10.0	10.0		60	14	14	1	1	6/17/24 15:25	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 15:25	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/17/24 15:25	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 15:25	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 15:25	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 15:25	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 15:25	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/17/24 15:25	DFH
Total Reduced Sulfurs, as received	43.3	10.0	10.0		60	14	14	1	1	6/17/24 15:25	DFH
Surrogate(s)	% Recovery			% Recovery Limits							
1,4-Difluorobenzene (Surr), as received	93.6			80-120						6/17/24 15:25	
1,4-Difluorobenzene (Surr), as received	99.2			80-120						6/17/24 15:25	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/17/24 18:13	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/17/24 18:13	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/17/24 18:13	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/17/24 18:13	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/17/24 18:13	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/17/24 18:13	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/17/24 18:13	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/17/24 18:13	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 18:13	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/17/24 18:13	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0614UW001

Project Location:

Sample ID: 24F0908-05

Canister ID: 063-00757::16483

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 07:05

Flow Controller ID: 063-00875::GS023

Receipt Vacuum(in Hg): 1.8

Sample Type:

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/17/24 18:13	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/17/24 18:13	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/17/24 18:13	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/17/24 18:13	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 18:13	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/17/24 18:13	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/17/24 18:13	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/17/24 18:13	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/17/24 18:13	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 18:13	DFH
2-Butanone (MEK)	1.84	0.20	0.50		5.4	0.59	1.5	1	1	6/17/24 18:13	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 18:13	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/17/24 18:13	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/17/24 18:13	DFH
Acetone	5.75	0.20	0.50		14	0.48	1.2	1	1	6/17/24 18:13	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/17/24 18:13	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/17/24 18:13	DFH
Benzene	0.20	0.20	0.50	J	0.64	0.64	1.6	1	1	6/17/24 18:13	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 18:13	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/17/24 18:13	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/17/24 18:13	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/17/24 18:13	DFH
Carbon Disulfide	0.78	0.50	0.50		2.4	1.6	1.6	1	1	6/17/24 18:13	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/17/24 18:13	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/17/24 18:13	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/17/24 18:13	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/17/24 18:13	DFH
Chloromethane	0.27	0.20	0.50	J	0.56	0.41	1.0	1	1	6/17/24 18:13	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/17/24 18:13	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0614UW001

Project Location:

Sample ID: 24F0908-05

Canister ID: 063-00757::16483

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 07:05

Flow Controller ID: 063-00875::GS023

Receipt Vacuum(in Hg): 1.8

Sample Type:

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/17/24 18:13	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/17/24 18:13	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/17/24 18:13	DFH
Dichlorodifluoromethane	ND	0.50	0.50	U	ND	2.5	2.5	1	1	6/17/24 18:13	DFH
Ethanol	7.11	0.20	0.50		13	0.38	0.94	1	1	6/17/24 18:13	DFH
Ethyl acetate	0.66	0.20	0.50		2.4	0.72	1.8	1	1	6/17/24 18:13	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/17/24 18:13	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/17/24 18:13	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/17/24 18:13	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/17/24 18:13	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/17/24 18:13	DFH
Isopropyl alcohol	35.1	1.20	3.00		86	2.9	7.4	6	1	6/18/24 13:30	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 18:13	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/17/24 18:13	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/17/24 18:13	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/17/24 18:13	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	C, U	ND	0.72	1.8	1	1	6/17/24 18:13	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 18:13	DFH
n-Butane (C4)	0.81	0.20	0.50		1.9	0.48	1.2	1	1	6/17/24 18:13	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 18:13	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 18:13	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/17/24 18:13	DFH
n-Pentane (C5)	0.22	0.20	0.50	J	0.65	0.59	1.5	1	1	6/17/24 18:13	DFH
Propylene	ND	1.00	1.00	U	ND	1.7	1.7	1	1	6/17/24 18:13	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/17/24 18:13	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/17/24 18:13	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/17/24 18:13	DFH
Tetrahydrofuran	0.45	0.20	0.50	J	1.3	0.59	1.5	1	1	6/17/24 18:13	DFH
Toluene	ND	0.20	0.50	U	ND	0.75	1.9	1	1	6/17/24 18:13	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0614UW001

Project Location:

Sample ID: 24F0908-05

Canister ID: 063-00757::16483

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 07:05

Flow Controller ID: 063-00875::GS023

Receipt Vacuum(in Hg): 1.8

Sample Type:

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/17/24 18:13	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/17/24 18:13	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/17/24 18:13	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/17/24 18:13	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/17/24 18:13	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/17/24 18:13	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/17/24 18:13	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/17/24 18:13	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			103			80-120				6/17/24 18:13	
4-Bromofluorobenzene (Surr)			103			80-120				6/18/24 13:30	





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## Certificate of Analysis

Final Report

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Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0614OS002

Project Location:

Sample ID: 24F0908-06

Canister ID: 063-00739::16779

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 07:31

Flow Controller ID: 063-00884::GS032

Receipt Vacuum(in Hg): 2.0

Sample Type:

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 16:06	DFH
Hydrogen Sulfide, as received	ND	10.0	10.0	U	ND	14	14	1	1	6/17/24 16:06	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 16:06	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/17/24 16:06	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 16:06	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 16:06	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 16:06	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 16:06	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/17/24 16:06	DFH
Total Reduced Sulfurs, as received	ND	10.0	10.0	U	ND	14	14	1	1	6/17/24 16:06	DFH
Surrogate(s)	% Recovery			% Recovery Limits							
1,4-Difluorobenzene (Surr), as received			101			80-120				6/17/24 16:06	
1,4-Difluorobenzene (Surr), as received			95.4			80-120				6/17/24 16:06	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/17/24 19:06	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/17/24 19:06	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/17/24 19:06	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/17/24 19:06	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/17/24 19:06	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/17/24 19:06	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/17/24 19:06	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/17/24 19:06	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 19:06	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/17/24 19:06	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06140S002

Project Location:

Sample ID: 24F0908-06

Canister ID: 063-00739::16779

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 07:31

Flow Controller ID: 063-00884::GS032

Receipt Vacuum(in Hg): 2.0

Sample Type:

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/17/24 19:06	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/17/24 19:06	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/17/24 19:06	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/17/24 19:06	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 19:06	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/17/24 19:06	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/17/24 19:06	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/17/24 19:06	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/17/24 19:06	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 19:06	DFH
2-Butanone (MEK)	1.29	0.20	0.50		3.8	0.59	1.5	1	1	6/17/24 19:06	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 19:06	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/17/24 19:06	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/17/24 19:06	DFH
Acetone	3.45	0.20	0.50		8.2	0.48	1.2	1	1	6/17/24 19:06	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/17/24 19:06	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/17/24 19:06	DFH
Benzene	0.23	0.20	0.50	J	0.73	0.64	1.6	1	1	6/17/24 19:06	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 19:06	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/17/24 19:06	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/17/24 19:06	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/17/24 19:06	DFH
Carbon Disulfide	ND	0.50	0.50	U	ND	1.6	1.6	1	1	6/17/24 19:06	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/17/24 19:06	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/17/24 19:06	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/17/24 19:06	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/17/24 19:06	DFH
Chloromethane	0.28	0.20	0.50	J	0.58	0.41	1.0	1	1	6/17/24 19:06	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/17/24 19:06	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06140S002

Project Location:

Sample ID: 24F0908-06

Canister ID: 063-00739::16779

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 07:31

Flow Controller ID: 063-00884::GS032

Receipt Vacuum(in Hg): 2.0

Sample Type:

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/17/24 19:06	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/17/24 19:06	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/17/24 19:06	DFH
Dichlorodifluoromethane	ND	0.50	0.50	U	ND	2.5	2.5	1	1	6/17/24 19:06	DFH
Ethanol	15.8	0.20	0.50		30	0.38	0.94	1	1	6/17/24 19:06	DFH
Ethyl acetate	0.41	0.20	0.50	J	1.5	0.72	1.8	1	1	6/17/24 19:06	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/17/24 19:06	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/17/24 19:06	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/17/24 19:06	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/17/24 19:06	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/17/24 19:06	DFH
Isopropyl alcohol	1.32	0.20	0.50		3.2	0.49	1.2	1	1	6/17/24 19:06	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 19:06	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/17/24 19:06	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/17/24 19:06	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/17/24 19:06	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	C, U	ND	0.72	1.8	1	1	6/17/24 19:06	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 19:06	DFH
n-Butane (C4)	1.78	0.20	0.50		4.2	0.48	1.2	1	1	6/17/24 19:06	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/17/24 19:06	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/17/24 19:06	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/17/24 19:06	DFH
n-Pentane (C5)	0.56	0.20	0.50		1.7	0.59	1.5	1	1	6/17/24 19:06	DFH
Propylene	ND	1.00	1.00	U	ND	1.7	1.7	1	1	6/17/24 19:06	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/17/24 19:06	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/17/24 19:06	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/17/24 19:06	DFH
Tetrahydrofuran	0.36	0.20	0.50	J	1.1	0.59	1.5	1	1	6/17/24 19:06	DFH
Toluene	ND	0.20	0.50	U	ND	0.75	1.9	1	1	6/17/24 19:06	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06140S002

Project Location:

Sample ID: 24F0908-06

Canister ID: 063-00739::16779

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 07:31

Flow Controller ID: 063-00884::GS032

Receipt Vacuum(in Hg): 2.0

Sample Type:

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/17/24 19:06	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/17/24 19:06	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/17/24 19:06	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/17/24 19:06	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/17/24 19:06	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/17/24 19:06	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/17/24 19:06	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/17/24 19:06	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			101				80-120			6/17/24 19:06	



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5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0614OSD002

Project Location:

Sample ID: 24F0908-07

Canister ID: 063-00708::16769

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 07:31

Flow Controller ID: 063-00884::GS032

Receipt Vacuum(in Hg): 2.0

Sample Type:

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 16:47	DFH
Hydrogen Sulfide, as received	105	10.0	10.0		150	14	14	1	1	6/17/24 16:47	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 16:47	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/17/24 16:47	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 16:47	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 16:47	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 16:47	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 16:47	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/17/24 16:47	DFH
Total Reduced Sulfurs, as received	105	10.0	10.0		150	14	14	1	1	6/17/24 16:47	DFH
Surrogate(s)	% Recovery			% Recovery Limits							
1,4-Difluorobenzene (Surr), as received	100			80-120						6/17/24 16:47	
1,4-Difluorobenzene (Surr), as received	94.6			80-120						6/17/24 16:47	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/18/24 8:49	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/18/24 8:49	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/18/24 8:49	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/18/24 8:49	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/18/24 8:49	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/18/24 8:49	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/18/24 8:49	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/18/24 8:49	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 8:49	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/18/24 8:49	DFH

## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0614OSD002

Project Location:

Sample ID: 24F0908-07

Canister ID: 063-00708::16769

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 07:31

Flow Controller ID: 063-00884::GS032

Receipt Vacuum(in Hg): 2.0

Sample Type:

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/18/24 8:49	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/18/24 8:49	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/18/24 8:49	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/18/24 8:49	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 8:49	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/18/24 8:49	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/18/24 8:49	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/18/24 8:49	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/18/24 8:49	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 8:49	DFH
2-Butanone (MEK)	3.78	0.20	0.50		11	0.59	1.5	1	1	6/18/24 8:49	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 8:49	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/18/24 8:49	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/18/24 8:49	DFH
Acetone	5.40	0.20	0.50		13	0.48	1.2	1	1	6/18/24 8:49	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/18/24 8:49	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/18/24 8:49	DFH
Benzene	0.37	0.20	0.50	J	1.2	0.64	1.6	1	1	6/18/24 8:49	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 8:49	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/18/24 8:49	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/18/24 8:49	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/18/24 8:49	DFH
Carbon Disulfide	0.75	0.50	0.50		2.3	1.6	1.6	1	1	6/18/24 8:49	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/18/24 8:49	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/18/24 8:49	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/18/24 8:49	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/18/24 8:49	DFH
Chloromethane	0.29	0.20	0.50	C, J	0.60	0.41	1.0	1	1	6/18/24 8:49	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/18/24 8:49	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0614OSD002

Project Location:

Sample ID: 24F0908-07

Canister ID: 063-00708::16769

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 07:31

Flow Controller ID: 063-00884::GS032

Receipt Vacuum(in Hg): 2.0

Sample Type:

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/18/24 8:49	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/18/24 8:49	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/18/24 8:49	DFH
Dichlorodifluoromethane	ND	0.50	0.50	C, U	ND	2.5	2.5	1	1	6/18/24 8:49	DFH
Ethanol	23.1	1.20	3.00		44	2.3	5.7	6	1	6/18/24 14:21	DFH
Ethyl acetate	0.48	0.20	0.50	J	1.7	0.72	1.8	1	1	6/18/24 8:49	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/18/24 8:49	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/18/24 8:49	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/18/24 8:49	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/18/24 8:49	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/18/24 8:49	DFH
Isopropyl alcohol	1.87	0.20	0.50		4.6	0.49	1.2	1	1	6/18/24 8:49	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 8:49	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/18/24 8:49	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/18/24 8:49	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/18/24 8:49	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	C, U	ND	0.72	1.8	1	1	6/18/24 8:49	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 8:49	DFH
n-Butane (C4)	1.77	0.20	0.50		4.2	0.48	1.2	1	1	6/18/24 8:49	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 8:49	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 8:49	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/18/24 8:49	DFH
n-Pentane (C5)	0.64	0.20	0.50		1.9	0.59	1.5	1	1	6/18/24 8:49	DFH
Propylene	ND	1.00	1.00	C, U	ND	1.7	1.7	1	1	6/18/24 8:49	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/18/24 8:49	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/18/24 8:49	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/18/24 8:49	DFH
Tetrahydrofuran	0.89	0.20	0.50		2.6	0.59	1.5	1	1	6/18/24 8:49	DFH
Toluene	0.22	0.20	0.50	J	0.83	0.75	1.9	1	1	6/18/24 8:49	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0614OSD002

Project Location:

Sample ID: 24F0908-07

Canister ID: 063-00708::16769

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 07:31

Flow Controller ID: 063-00884::GS032

Receipt Vacuum(in Hg): 2.0

Sample Type:

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/18/24 8:49	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/18/24 8:49	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/18/24 8:49	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/18/24 8:49	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/18/24 8:49	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/18/24 8:49	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/18/24 8:49	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/18/24 8:49	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			100			80-120				6/18/24 14:21	
4-Bromofluorobenzene (Surr)			102			80-120				6/18/24 8:49	





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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06140S003

Project Location:

Sample ID: 24F0908-08

Canister ID: 063-00755::16484

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 07:51

Flow Controller ID: 063-00873::GS021

Receipt Vacuum(in Hg): 2.4

Sample Type:

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 17:28	DFH
Hydrogen Sulfide, as received	13.5	10.0	10.0		19	14	14	1	1	6/17/24 17:28	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 17:28	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/17/24 17:28	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 17:28	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 17:28	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 17:28	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 17:28	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/17/24 17:28	DFH
Total Reduced Sulfurs, as received	13.5	10.0	10.0		19	14	14	1	1	6/17/24 17:28	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
1,4-Difluorobenzene (Surr), as received	94.0				80-120					6/17/24 17:28	
1,4-Difluorobenzene (Surr), as received	99.6				80-120					6/17/24 17:28	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/18/24 9:42	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/18/24 9:42	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/18/24 9:42	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/18/24 9:42	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/18/24 9:42	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/18/24 9:42	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/18/24 9:42	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/18/24 9:42	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 9:42	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/18/24 9:42	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06140S003

Project Location:

Sample ID: 24F0908-08

Canister ID: 063-00755::16484

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 07:51

Flow Controller ID: 063-00873::GS021

Receipt Vacuum(in Hg): 2.4

Sample Type:

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/18/24 9:42	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/18/24 9:42	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/18/24 9:42	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/18/24 9:42	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 9:42	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/18/24 9:42	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/18/24 9:42	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/18/24 9:42	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/18/24 9:42	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 9:42	DFH
2-Butanone (MEK)	2.07	0.20	0.50		6.1	0.59	1.5	1	1	6/18/24 9:42	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 9:42	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/18/24 9:42	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/18/24 9:42	DFH
Acetone	6.94	0.20	0.50		16	0.48	1.2	1	1	6/18/24 9:42	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/18/24 9:42	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/18/24 9:42	DFH
Benzene	0.91	0.20	0.50		2.9	0.64	1.6	1	1	6/18/24 9:42	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 9:42	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/18/24 9:42	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/18/24 9:42	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/18/24 9:42	DFH
Carbon Disulfide	ND	0.50	0.50	U	ND	1.6	1.6	1	1	6/18/24 9:42	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/18/24 9:42	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/18/24 9:42	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/18/24 9:42	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/18/24 9:42	DFH
Chloromethane	0.31	0.20	0.50	C, J	0.64	0.41	1.0	1	1	6/18/24 9:42	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/18/24 9:42	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06140S003

Project Location:

Sample ID: 24F0908-08

Canister ID: 063-00755::16484

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 07:51

Flow Controller ID: 063-00873::GS021

Receipt Vacuum(in Hg): 2.4

Sample Type:

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/18/24 9:42	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/18/24 9:42	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/18/24 9:42	DFH
Dichlorodifluoromethane	ND	0.50	0.50	C, U	ND	2.5	2.5	1	1	6/18/24 9:42	DFH
Ethanol	26.6	1.20	3.00		50	2.3	5.7	6	1	6/18/24 15:12	DFH
Ethyl acetate	0.78	0.20	0.50		2.8	0.72	1.8	1	1	6/18/24 9:42	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/18/24 9:42	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/18/24 9:42	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/18/24 9:42	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/18/24 9:42	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/18/24 9:42	DFH
Isopropyl alcohol	25.1	1.20	3.00		62	2.9	7.4	6	1	6/18/24 15:12	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 9:42	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/18/24 9:42	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/18/24 9:42	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/18/24 9:42	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	C, U	ND	0.72	1.8	1	1	6/18/24 9:42	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 9:42	DFH
n-Butane (C4)	2.05	0.20	0.50		4.9	0.48	1.2	1	1	6/18/24 9:42	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 9:42	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 9:42	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/18/24 9:42	DFH
n-Pentane (C5)	0.43	0.20	0.50	J	1.3	0.59	1.5	1	1	6/18/24 9:42	DFH
Propylene	ND	1.00	1.00	C, U	ND	1.7	1.7	1	1	6/18/24 9:42	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/18/24 9:42	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/18/24 9:42	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/18/24 9:42	DFH
Tetrahydrofuran	1.06	0.20	0.50		3.1	0.59	1.5	1	1	6/18/24 9:42	DFH
Toluene	0.22	0.20	0.50	J	0.83	0.75	1.9	1	1	6/18/24 9:42	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06140S003

Project Location:

Sample ID: 24F0908-08

Canister ID: 063-00755::16484

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 07:51

Flow Controller ID: 063-00873::GS021

Receipt Vacuum(in Hg): 2.4

Sample Type:

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/18/24 9:42	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/18/24 9:42	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/18/24 9:42	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/18/24 9:42	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/18/24 9:42	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/18/24 9:42	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/18/24 9:42	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/18/24 9:42	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			98.6			80-120				6/18/24 15:12	
4-Bromofluorobenzene (Surr)			101			80-120				6/18/24 9:42	

## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06140S004

Project Location:

Sample ID: 24F0908-09

Canister ID: 063-00743::16791

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 08:19

Flow Controller ID: 063-00885::GS033

Receipt Vacuum(in Hg): 2.6

Sample Type:

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 18:09	DFH
Hydrogen Sulfide, as received	ND	10.0	10.0	U	ND	14	14	1	1	6/17/24 18:09	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 18:09	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/17/24 18:09	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 18:09	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 18:09	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 18:09	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 18:09	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/17/24 18:09	DFH
Total Reduced Sulfurs, as received	ND	10.0	10.0	U	ND	14	14	1	1	6/17/24 18:09	DFH
Surrogate(s)	% Recovery			% Recovery Limits							
1,4-Difluorobenzene (Surr), as received			101			80-120				6/17/24 18:09	
1,4-Difluorobenzene (Surr), as received			95.3			80-120				6/17/24 18:09	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/18/24 10:35	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/18/24 10:35	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/18/24 10:35	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/18/24 10:35	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/18/24 10:35	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/18/24 10:35	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/18/24 10:35	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/18/24 10:35	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 10:35	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/18/24 10:35	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06140S004

Project Location:

Sample ID: 24F0908-09

Canister ID: 063-00743::16791

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 08:19

Flow Controller ID: 063-00885::GS033

Receipt Vacuum(in Hg): 2.6

Sample Type:

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/18/24 10:35	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/18/24 10:35	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/18/24 10:35	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/18/24 10:35	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 10:35	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/18/24 10:35	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/18/24 10:35	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/18/24 10:35	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/18/24 10:35	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 10:35	DFH
2-Butanone (MEK)	0.93	0.20	0.50		2.7	0.59	1.5	1	1	6/18/24 10:35	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 10:35	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/18/24 10:35	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/18/24 10:35	DFH
Acetone	4.76	0.20	0.50		11	0.48	1.2	1	1	6/18/24 10:35	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/18/24 10:35	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/18/24 10:35	DFH
Benzene	0.57	0.20	0.50		1.8	0.64	1.6	1	1	6/18/24 10:35	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 10:35	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/18/24 10:35	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/18/24 10:35	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/18/24 10:35	DFH
Carbon Disulfide	ND	0.50	0.50	U	ND	1.6	1.6	1	1	6/18/24 10:35	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/18/24 10:35	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/18/24 10:35	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/18/24 10:35	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/18/24 10:35	DFH
Chloromethane	0.29	0.20	0.50	C, J	0.60	0.41	1.0	1	1	6/18/24 10:35	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/18/24 10:35	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06140S004

Project Location:

Sample ID: 24F0908-09

Canister ID: 063-00743::16791

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 08:19

Flow Controller ID: 063-00885::GS033

Receipt Vacuum(in Hg): 2.6

Sample Type:

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/18/24 10:35	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/18/24 10:35	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/18/24 10:35	DFH
Dichlorodifluoromethane	ND	0.50	0.50	C, U	ND	2.5	2.5	1	1	6/18/24 10:35	DFH
Ethanol	12.7	0.20	0.50		24	0.38	0.94	1	1	6/18/24 10:35	DFH
Ethyl acetate	0.34	0.20	0.50	J	1.2	0.72	1.8	1	1	6/18/24 10:35	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/18/24 10:35	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/18/24 10:35	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/18/24 10:35	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/18/24 10:35	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/18/24 10:35	DFH
Isopropyl alcohol	11.7	0.20	0.50		29	0.49	1.2	1	1	6/18/24 10:35	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 10:35	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/18/24 10:35	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/18/24 10:35	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/18/24 10:35	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	C, U	ND	0.72	1.8	1	1	6/18/24 10:35	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 10:35	DFH
n-Butane (C4)	1.53	0.20	0.50		3.6	0.48	1.2	1	1	6/18/24 10:35	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 10:35	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 10:35	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/18/24 10:35	DFH
n-Pentane (C5)	0.76	0.20	0.50		2.2	0.59	1.5	1	1	6/18/24 10:35	DFH
Propylene	ND	1.00	1.00	C, U	ND	1.7	1.7	1	1	6/18/24 10:35	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/18/24 10:35	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/18/24 10:35	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/18/24 10:35	DFH
Tetrahydrofuran	0.56	0.20	0.50		1.7	0.59	1.5	1	1	6/18/24 10:35	DFH
Toluene	0.31	0.20	0.50	J	1.2	0.75	1.9	1	1	6/18/24 10:35	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06140S004

Project Location:

Sample ID: 24F0908-09

Canister ID: 063-00743::16791

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 08:19

Flow Controller ID: 063-00885::GS033

Receipt Vacuum(in Hg): 2.6

Sample Type:

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/18/24 10:35	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/18/24 10:35	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/18/24 10:35	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/18/24 10:35	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/18/24 10:35	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/18/24 10:35	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/18/24 10:35	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/18/24 10:35	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			101				80-120			6/18/24 10:35	





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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0614OSD004

Project Location:

Sample ID: 24F0908-10

Canister ID: 063-00710::16783

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 08:19

Flow Controller ID: 063-00885::GS033

Receipt Vacuum(in Hg): 2.8

Sample Type:

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 18:50	DFH
Hydrogen Sulfide, as received	95.8	10.0	10.0		130	14	14	1	1	6/17/24 18:50	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 18:50	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/17/24 18:50	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/17/24 18:50	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 18:50	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 18:50	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/17/24 18:50	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/17/24 18:50	DFH
Total Reduced Sulfurs, as received	95.8	10.0	10.0		130	14	14	1	1	6/17/24 18:50	DFH
Surrogate(s)	% Recovery			% Recovery Limits							
1,4-Difluorobenzene (Surr), as received	93.9			80-120						6/17/24 18:50	
1,4-Difluorobenzene (Surr), as received	99.6			80-120						6/17/24 18:50	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/18/24 11:27	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/18/24 11:27	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/18/24 11:27	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/18/24 11:27	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/18/24 11:27	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/18/24 11:27	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/18/24 11:27	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/18/24 11:27	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 11:27	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/18/24 11:27	DFH

## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0614OSD004

Project Location:

Sample ID: 24F0908-10

Canister ID: 063-00710::16783

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 08:19

Flow Controller ID: 063-00885::GS033

Receipt Vacuum(in Hg): 2.8

Sample Type:

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/18/24 11:27	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/18/24 11:27	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/18/24 11:27	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/18/24 11:27	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 11:27	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/18/24 11:27	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/18/24 11:27	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/18/24 11:27	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/18/24 11:27	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 11:27	DFH
2-Butanone (MEK)	3.64	0.20	0.50		11	0.59	1.5	1	1	6/18/24 11:27	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 11:27	DFH
2-Hexanone (MBK)	0.22	0.20	0.50	J	0.90	0.82	2.0	1	1	6/18/24 11:27	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/18/24 11:27	DFH
Acetone	10.2	0.20	0.50		24	0.48	1.2	1	1	6/18/24 11:27	DFH
Acrolein	0.40	0.40	0.50	J	0.92	0.92	1.1	1	1	6/18/24 11:27	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/18/24 11:27	DFH
Benzene	0.98	0.20	0.50		3.1	0.64	1.6	1	1	6/18/24 11:27	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 11:27	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/18/24 11:27	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/18/24 11:27	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/18/24 11:27	DFH
Carbon Disulfide	0.74	0.50	0.50		2.3	1.6	1.6	1	1	6/18/24 11:27	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/18/24 11:27	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/18/24 11:27	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/18/24 11:27	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/18/24 11:27	DFH
Chloromethane	0.35	0.20	0.50	C, J	0.72	0.41	1.0	1	1	6/18/24 11:27	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/18/24 11:27	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0614OSD004

Project Location:

Sample ID: 24F0908-10

Canister ID: 063-00710::16783

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 08:19

Flow Controller ID: 063-00885::GS033

Receipt Vacuum(in Hg): 2.8

Sample Type:

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/18/24 11:27	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/18/24 11:27	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/18/24 11:27	DFH
Dichlorodifluoromethane	ND	0.50	0.50	C, U	ND	2.5	2.5	1	1	6/18/24 11:27	DFH
Ethanol	17.9	0.20	0.50		34	0.38	0.94	1	1	6/18/24 11:27	DFH
Ethyl acetate	0.30	0.20	0.50	J	1.1	0.72	1.8	1	1	6/18/24 11:27	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/18/24 11:27	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/18/24 11:27	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/18/24 11:27	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/18/24 11:27	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/18/24 11:27	DFH
Isopropyl alcohol	8.77	0.20	0.50		22	0.49	1.2	1	1	6/18/24 11:27	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 11:27	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/18/24 11:27	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/18/24 11:27	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/18/24 11:27	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	C, U	ND	0.72	1.8	1	1	6/18/24 11:27	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 11:27	DFH
n-Butane (C4)	1.54	0.20	0.50		3.7	0.48	1.2	1	1	6/18/24 11:27	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 11:27	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 11:27	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/18/24 11:27	DFH
n-Pentane (C5)	0.34	0.20	0.50	J	1.0	0.59	1.5	1	1	6/18/24 11:27	DFH
Propylene	ND	1.00	1.00	C, U	ND	1.7	1.7	1	1	6/18/24 11:27	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/18/24 11:27	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/18/24 11:27	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/18/24 11:27	DFH
Tetrahydrofuran	0.98	0.20	0.50		2.9	0.59	1.5	1	1	6/18/24 11:27	DFH
Toluene	0.23	0.20	0.50	J	0.87	0.75	1.9	1	1	6/18/24 11:27	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0614OSD004

Project Location:

Sample ID: 24F0908-10

Canister ID: 063-00710::16783

Initial Vacuum(in Hg):

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/14/2024 08:19

Flow Controller ID: 063-00885::GS033

Receipt Vacuum(in Hg): 2.8

Sample Type:

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/18/24 11:27	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/18/24 11:27	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/18/24 11:27	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/18/24 11:27	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/18/24 11:27	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/18/24 11:27	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/18/24 11:27	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/18/24 11:27	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			104				80-120			6/18/24 11:27	



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### Analytical Summary

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
<b>Sulfur Volatile Organic Compounds by GCMS</b>			<b>Preparation Method:</b>	<b>No Prep VOC Air</b>	
24F0908-01	100 mL / 100 mL	EPA TO-15	BHF0511	SHF0535	AF40193
24F0908-02	100 mL / 100 mL	EPA TO-15	BHF0511	SHF0535	AF40193
24F0908-03	100 mL / 100 mL	EPA TO-15	BHF0511	SHF0535	AF40193
24F0908-04	100 mL / 100 mL	EPA TO-15	BHF0511	SHF0535	AF40193
24F0908-05	100 mL / 100 mL	EPA TO-15	BHF0511	SHF0535	AF40193
24F0908-06	100 mL / 100 mL	EPA TO-15	BHF0511	SHF0535	AF40193
24F0908-07	100 mL / 100 mL	EPA TO-15	BHF0511	SHF0535	AF40193
24F0908-08	100 mL / 100 mL	EPA TO-15	BHF0511	SHF0535	AF40193
24F0908-09	100 mL / 100 mL	EPA TO-15	BHF0511	SHF0535	AF40193
24F0908-10	100 mL / 100 mL	EPA TO-15	BHF0511	SHF0535	AF40193
24F0908-01	100 mL / 100 mL	EPA TO-15	BHF0512	SHF0536	AF40197
24F0908-02	100 mL / 100 mL	EPA TO-15	BHF0512	SHF0536	AF40197
24F0908-03	100 mL / 100 mL	EPA TO-15	BHF0512	SHF0536	AF40197
24F0908-04	100 mL / 100 mL	EPA TO-15	BHF0512	SHF0536	AF40197
24F0908-05	100 mL / 100 mL	EPA TO-15	BHF0512	SHF0536	AF40197
24F0908-06	100 mL / 100 mL	EPA TO-15	BHF0512	SHF0536	AF40197
24F0908-07	100 mL / 100 mL	EPA TO-15	BHF0512	SHF0536	AF40197
24F0908-08	100 mL / 100 mL	EPA TO-15	BHF0512	SHF0536	AF40197
24F0908-09	100 mL / 100 mL	EPA TO-15	BHF0512	SHF0536	AF40197
24F0908-10	100 mL / 100 mL	EPA TO-15	BHF0512	SHF0536	AF40197
<b>Volatile Organic Compounds by GCMS</b>			<b>Preparation Method:</b>	<b>No Prep VOC Air</b>	
24F0908-01	400 mL / 400 mL	EPA TO-15	BHF0582	SHF0534	AF40163
24F0908-02	400 mL / 400 mL	EPA TO-15	BHF0582	SHF0534	AF40163
24F0908-02RE1	400 mL / 400 mL	EPA TO-15	BHF0582	SHF0534	AF40163
24F0908-03	400 mL / 400 mL	EPA TO-15	BHF0582	SHF0534	AF40163
24F0908-04	400 mL / 400 mL	EPA TO-15	BHF0582	SHF0534	AF40163
24F0908-04RE1	400 mL / 400 mL	EPA TO-15	BHF0582	SHF0534	AF40163
24F0908-05	400 mL / 400 mL	EPA TO-15	BHF0582	SHF0534	AF40163
24F0908-05RE1	400 mL / 400 mL	EPA TO-15	BHF0582	SHF0534	AF40163
24F0908-06	400 mL / 400 mL	EPA TO-15	BHF0582	SHF0534	AF40163
24F0908-07	400 mL / 400 mL	EPA TO-15	BHF0582	SHF0534	AF40163
24F0908-07RE1	400 mL / 400 mL	EPA TO-15	BHF0582	SHF0534	AF40163
24F0908-08	400 mL / 400 mL	EPA TO-15	BHF0582	SHF0534	AF40163



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N. Little Rock, AR 72118

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Project Number: PROJ-036688

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Purchase Order: PROJ-036688

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
<b>Volatile Organic Compounds by GCMS</b>			<b>Preparation Method:</b>	<b>No Prep VOC Air</b>	
24F0908-08RE1	400 mL / 400 mL	EPA TO-15	BHF0582	SHF0534	AF40163
24F0908-09	400 mL / 400 mL	EPA TO-15	BHF0582	SHF0534	AF40163
24F0908-10	400 mL / 400 mL	EPA TO-15	BHF0582	SHF0534	AF40163



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### Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source		%REC		RPD		Qual
	Result	Limit		Units	Result	%REC	Limits	RPD	Limit	

#### Batch BHF0582 - No Prep VOC Air

##### Blank (BHF0582-BLK1)

Prepared & Analyzed: 06/17/2024

1,1,1-Trichloroethane	<	0.50	ppbv							U
1,1,1,2-Tetrachloroethane	<	0.50	ppbv							U
1,1,2,2-Tetrachloroethane	<	0.50	ppbv							U
1,1,2-Trichloro-1,2,2-trifluoroethane	<	0.50	ppbv							U
1,1,2-Trichloroethane	<	0.50	ppbv							U
1,1-Dichloroethane	<	0.50	ppbv							U
1,1-Dichloroethylene	<	0.50	ppbv							U
1,2,4-Trichlorobenzene	<	0.50	ppbv							U
1,2,4-Trimethylbenzene	<	0.50	ppbv							U
1,2-Dibromoethane (EDB)	<	0.50	ppbv							U
1,2-Dichlorobenzene	<	0.50	ppbv							U
1,2-Dichloroethane	<	0.50	ppbv							U
1,2-Dichloropropane	<	0.50	ppbv							U
1,2-Dichlorotetrafluoroethane	<	0.50	ppbv							U
1,3,5-Trimethylbenzene	<	0.50	ppbv							U
1,3-Butadiene	<	0.50	ppbv							U
1,3-Dichlorobenzene	<	0.50	ppbv							U
1,4-Dichlorobenzene	<	0.50	ppbv							U
1,4-Dioxane	<	0.50	ppbv							U
1-Ethyl-4-methyl benzene	<	0.50	ppbv							U
2-Butanone (MEK)	<	0.50	ppbv							U
2-Chlorotoluene	<	0.50	ppbv							U
2-Hexanone (MBK)	<	0.50	ppbv							U
4-Methyl-2-pentanone (MIBK)	<	0.50	ppbv							U
Acetone	<	0.50	ppbv							U
Acrolein	<	0.50	ppbv							U
Allyl chloride	<	0.50	ppbv							U
Benzene	<	0.50	ppbv							U
Benzyl Chloride	<	0.50	ppbv							U
Bromodichloromethane	<	0.50	ppbv							U
Bromoform	<	0.50	ppbv							U



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Project Number: PROJ-036688

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Purchase Order: PROJ-036688

### Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source Result	%REC		RPD	RPD	Limit	Qual
	Result	Limit			Units	%REC				

#### Batch BHF0582 - No Prep VOC Air

##### Blank (BHF0582-BLK1)

Prepared & Analyzed: 06/17/2024

Bromomethane	<	0.50	ppbv							U
Carbon Disulfide	<	0.50	ppbv							U
Carbon Tetrachloride	<	0.50	ppbv							U
Chlorobenzene	<	0.50	ppbv							U
Chloroethane	<	0.50	ppbv							U
Chloroform	<	0.50	ppbv							U
Chloromethane	<	0.50	ppbv							U
cis-1,2-Dichloroethylene	<	0.50	ppbv							U
cis-1,3-Dichloropropene	<	0.50	ppbv							U
Cyclohexane	<	0.50	ppbv							U
Dibromochloromethane	<	0.50	ppbv							U
Dichlorodifluoromethane	<	0.50	ppbv							U
Ethanol	<	0.50	ppbv							U
Ethyl acetate	<	0.50	ppbv							U
Ethylbenzene	<	0.50	ppbv							U
Heptane	<	0.50	ppbv							U
Hexachlorobutadiene	<	0.50	ppbv							U
Hexane	<	0.50	ppbv							U
Isooctane	<	0.50	ppbv							U
Isopropyl alcohol	<	0.50	ppbv							U
Isopropylbenzene	<	0.50	ppbv							U
m+p-Xylenes	<	1.00	ppbv							U
Methyl methacrylate	<	0.50	ppbv							U
Methylene chloride	<	1.00	ppbv							U
Methyl-t-butyl ether (MTBE)	<	0.50	ppbv							U
Naphthalene	<	0.50	ppbv							U
n-Butane (C4)	<	0.50	ppbv							U
n-Nonane (C9)	<	0.50	ppbv							U
n-Propylbenzene	<	0.50	ppbv							U
o-Xylene	<	0.50	ppbv							U
n-Pentane (C5)	<	0.50	ppbv							U
Propylene	<	1.00	ppbv							U
Styrene	<	0.50	ppbv							U
TBA	<	0.50	ppbv							U



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### Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BHF0582 - No Prep VOC Air

##### Blank (BHF0582-BLK1)

Prepared &amp; Analyzed: 06/17/2024

Tetrachloroethylene (PCE)	<	0.50	ppbv							U
Tetrahydrofuran	<	0.50	ppbv							U
Toluene	<	0.50	ppbv							U
trans-1,2-Dichloroethylene	<	0.50	ppbv							U
trans-1,3-Dichloropropene	<	0.50	ppbv							U
Trichloroethylene	<	0.50	ppbv							U
Trichlorofluoromethane	<	0.50	ppbv							U
Vinyl acetate	<	0.50	ppbv							U
Vinyl bromide	<	0.50	ppbv							U
Vinyl chloride	<	0.50	ppbv							U
Xylenes, Total	<	1.50	ppbv							U

 Surr: 4-Bromofluorobenzene  
 (Surr)

5.01 ppbv 5.00 100 80-120

##### LCS (BHF0582-BS1)

Prepared &amp; Analyzed: 06/17/2024

1,1,1-Trichloroethane	4.06	0.5	ppbv	5.00	81.2	70-130
1,1,1,2-Tetrachloroethane	5.00	0.5	ppbv	5.00	100	70-130
1,1,2,2-Tetrachloroethane	5.34	0.5	ppbv	5.00	107	70-130
1,1,2-Trichloro-1,2,2-trifluoroethane	4.65	0.5	ppbv	5.00	93.0	70-130
1,1,2-Trichloroethane	4.42	0.5	ppbv	5.00	88.4	70-130
1,1-Dichloroethane	4.70	0.5	ppbv	5.00	94.0	70-130
1,1-Dichloroethylene	4.72	0.5	ppbv	5.00	94.4	70-130
1,2,4-Trichlorobenzene	3.50	0.5	ppbv	5.00	70.0	60-140
1,2,4-Trimethylbenzene	4.98	0.5	ppbv	5.00	99.6	70-130
1,2-Dibromoethane (EDB)	4.97	0.5	ppbv	5.00	99.4	70-130
1,2-Dichlorobenzene	5.12	0.5	ppbv	5.00	102	70-130
1,2-Dichloroethane	4.00	0.5	ppbv	5.00	80.0	70-130
1,2-Dichloropropane	4.28	0.5	ppbv	5.00	85.6	70-130
1,2-Dichlorotetrafluoroethane	4.77	0.5	ppbv	5.00	95.4	70-130
1,3,5-Trimethylbenzene	5.14	0.5	ppbv	5.00	103	70-130
1,3-Butadiene	4.20	0.5	ppbv	5.00	84.0	70-130
1,3-Dichlorobenzene	4.63	0.5	ppbv	5.00	92.6	70-130
1,4-Dichlorobenzene	4.36	0.5	ppbv	5.00	87.2	70-130
1,4-Dioxane	4.44	0.5	ppbv	5.00	88.8	70-130



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### Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BHF0582 - No Prep VOC Air

##### LCS (BHF0582-BS1)

Prepared & Analyzed: 06/17/2024

1-Ethyl-4-methyl benzene	5.16	0.5	ppbv	5.00	103	70-130			
2-Butanone (MEK)	3.77	0.5	ppbv	5.00	75.4	70-130			
2-Chlorotoluene	5.08	0.5	ppbv	5.00	102	70-130			
2-Hexanone (MBK)	4.38	0.5	ppbv	5.00	87.6	70-130			
4-Methyl-2-pentanone (MIBK)	4.32	0.5	ppbv	5.00	86.4	70-130			
Acetone	4.71	0.5	ppbv	5.00	94.2	70-130			
Acrolein	3.36	0.5	ppbv	5.00	67.2	70-130			L
Allyl chloride	4.68	0.5	ppbv	5.00	93.6	70-130			
Benzene	4.25	0.5	ppbv	5.00	85.0	70-130			
Benzyl Chloride	3.48	0.5	ppbv	5.00	69.6	70-130			L
Bromoform	5.14	0.5	ppbv	5.00	103	70-130			
Bromomethane	5.07	0.5	ppbv	5.00	101	70-130			
Carbon Disulfide	4.73	0.5	ppbv	5.00	94.6	70-130			
Carbon Tetrachloride	4.08	0.5	ppbv	5.00	81.6	70-130			
Chlorobenzene	4.84	0.5	ppbv	5.00	96.8	70-130			
Chloroethane	5.11	0.5	ppbv	5.00	102	70-130			
Chloroform	4.14	0.5	ppbv	5.00	82.8	70-130			
Chloromethane	4.61	0.5	ppbv	5.00	92.2	70-130			
cis-1,2-Dichloroethylene	4.36	0.5	ppbv	5.00	87.2	70-130			
cis-1,3-Dichloropropene	4.15	0.5	ppbv	5.00	83.0	70-130			
Cyclohexane	4.15	0.5	ppbv	5.00	83.0	70-130			
Dibromochloromethane	4.29	0.5	ppbv	5.00	85.8	70-130			
Dichlorodifluoromethane	4.18	0.5	ppbv	5.00	83.6	70-130			
Ethanol	4.36	0.5	ppbv	5.00	87.2	70-130			
Ethyl acetate	4.10	0.5	ppbv	5.00	82.0	70-130			
Ethylbenzene	5.03	0.5	ppbv	5.00	101	70-130			
Heptane	3.77	0.5	ppbv	5.00	75.4	70-130			
Hexachlorobutadiene	4.80	0.5	ppbv	5.00	96.0	60-140			
Hexane	4.05	0.5	ppbv	5.00	81.0	70-130			
Isopropyl alcohol	4.40	0.5	ppbv	5.00	88.0	70-130			
Isopropylbenzene	5.24	0.5	ppbv	5.00	105	70-130			
m+p-Xylenes	10.0	1	ppbv	10.0	100	70-130			
Methyl methacrylate	4.13	0.5	ppbv	5.00	82.6	70-130			
Methylene chloride	5.27	1	ppbv	5.00	105	70-130			



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### Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BHF0582 - No Prep VOC Air

##### LCS (BHF0582-BS1)

Prepared & Analyzed: 06/17/2024

Methyl-t-butyl ether (MTBE)	4.32	0.5	ppbv	5.00	86.4	70-130			
Naphthalene	3.65	0.5	ppbv	5.00	73.0	60-140			
n-Butane (C4)	4.71	0.5	ppbv	5.00	94.2	70-130			
n-Nonane (C9)	4.64	0.5	ppbv	5.00	92.8	70-130			
n-Propylbenzene	5.16	0.5	ppbv	5.00	103	70-130			
o-Xylene	5.06	0.5	ppbv	5.00	101	70-130			
n-Pentane (C5)	4.31	0.5	ppbv	5.00	86.2	70-130			
Propylene	3.92	1	ppbv	5.00	78.4	70-130			
Styrene	4.78	0.5	ppbv	5.00	95.6	70-130			
TBA	4.13	0.5	ppbv	5.00	82.6	70-130			
Tetrachloroethylene (PCE)	4.97	0.5	ppbv	5.00	99.4	70-130			
Tetrahydrofuran	3.78	0.5	ppbv	5.00	75.6	70-130			
Toluene	4.16	0.5	ppbv	5.00	83.2	70-130			
trans-1,2-Dichloroethylene	4.77	0.5	ppbv	5.00	95.4	70-130			
trans-1,3-Dichloropropene	3.95	0.5	ppbv	5.00	79.0	70-130			
Trichloroethylene	4.30	0.5	ppbv	5.00	86.0	70-130			
Trichlorofluoromethane	4.72	0.5	ppbv	5.00	94.4	70-130			
Vinyl acetate	2.78	0.5	ppbv	5.00	55.6	70-130			L
Vinyl bromide	5.05	0.5	ppbv	5.00	101	70-130			
Vinyl chloride	4.87	0.5	ppbv	5.00	97.4	70-130			

Surr: 4-Bromofluorobenzene (Surr)

5.59 ppbv 5.00 112 70-130

##### LCS Dup (BHF0582-BS1)

Prepared & Analyzed: 06/17/2024

1,1,1-Trichloroethane	4.03	0.5	ppbv	5.00	80.6	70-130	0.742	25	
1,1,1,2-Tetrachloroethane	4.98	0.5	ppbv	5.00	99.6	70-130	0.401	25	
1,1,2,2-Tetrachloroethane	5.35	0.5	ppbv	5.00	107	70-130	0.187	25	
1,1,2-Trichloro-1,2,2-trifluoroethane	4.69	0.5	ppbv	5.00	93.8	70-130	0.857	25	
1,1,2-Trichloroethane	4.36	0.5	ppbv	5.00	87.2	70-130	1.37	25	
1,1-Dichloroethane	4.70	0.5	ppbv	5.00	94.0	70-130	0.00	25	
1,1-Dichloroethylene	4.78	0.5	ppbv	5.00	95.6	70-130	1.26	25	
1,2,4-Trichlorobenzene	3.46	0.5	ppbv	5.00	69.2	60-140	1.15	25	
1,2,4-Trimethylbenzene	4.95	0.5	ppbv	5.00	99.0	70-130	0.604	25	
1,2-Dibromoethane (EDB)	4.97	0.5	ppbv	5.00	99.4	70-130	0.00	25	

## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

 Client Name: CTEH, LLC  
 5120 Northshore Drive

 Date Received: June 17, 2024 8:38  
 Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Units	Source Level	%REC		RPD		Qual
	Result	Limit			%REC	Limits	RPD	Limit	

#### Batch BHF0582 - No Prep VOC Air

##### LCS Dup (BHF0582-BSD1)

Prepared &amp; Analyzed: 06/17/2024

1,2-Dichlorobenzene	5.09	0.5	ppbv	5.00	102	70-130	0.588	25	
1,2-Dichloroethane	4.01	0.5	ppbv	5.00	80.2	70-130	0.250	25	
1,2-Dichloropropane	4.26	0.5	ppbv	5.00	85.2	70-130	0.468	25	
1,2-Dichlorotetrafluoroethane	4.76	0.5	ppbv	5.00	95.2	70-130	0.210	25	
1,3,5-Trimethylbenzene	5.09	0.5	ppbv	5.00	102	70-130	0.978	25	
1,3-Butadiene	4.20	0.5	ppbv	5.00	84.0	70-130	0.00	25	
1,3-Dichlorobenzene	4.63	0.5	ppbv	5.00	92.6	70-130	0.00	25	
1,4-Dichlorobenzene	4.34	0.5	ppbv	5.00	86.8	70-130	0.460	25	
1,4-Dioxane	4.42	0.5	ppbv	5.00	88.4	70-130	0.451	25	
1-Ethyl-4-methyl benzene	5.11	0.5	ppbv	5.00	102	70-130	0.974	25	
2-Butanone (MEK)	3.78	0.5	ppbv	5.00	75.6	70-130	0.265	25	
2-Chlorotoluene	5.03	0.5	ppbv	5.00	101	70-130	0.989	25	
2-Hexanone (MBK)	4.28	0.5	ppbv	5.00	85.6	70-130	2.31	25	
4-Methyl-2-pentanone (MIBK)	4.23	0.5	ppbv	5.00	84.6	70-130	2.11	25	
Acetone	4.61	0.5	ppbv	5.00	92.2	70-130	2.15	25	
Acrolein	3.22	0.5	ppbv	5.00	64.4	70-130	4.26	25	L
Allyl chloride	4.66	0.5	ppbv	5.00	93.2	70-130	0.428	25	
Benzene	4.19	0.5	ppbv	5.00	83.8	70-130	1.42	25	
Benzyl Chloride	3.53	0.5	ppbv	5.00	70.6	70-130	1.43	25	
Bromoform	5.09	0.5	ppbv	5.00	102	70-130	0.978	25	
Bromomethane	5.14	0.5	ppbv	5.00	103	70-130	1.37	25	
Carbon Disulfide	4.75	0.5	ppbv	5.00	95.0	70-130	0.422	25	
Carbon Tetrachloride	4.06	0.5	ppbv	5.00	81.2	70-130	0.491	25	
Chlorobenzene	4.82	0.5	ppbv	5.00	96.4	70-130	0.414	25	
Chloroethane	5.06	0.5	ppbv	5.00	101	70-130	0.983	25	
Chloroform	4.18	0.5	ppbv	5.00	83.6	70-130	0.962	25	
Chloromethane	4.57	0.5	ppbv	5.00	91.4	70-130	0.871	25	
cis-1,2-Dichloroethylene	4.44	0.5	ppbv	5.00	88.8	70-130	1.82	25	
cis-1,3-Dichloropropene	4.14	0.5	ppbv	5.00	82.8	70-130	0.241	25	
Cyclohexane	4.17	0.5	ppbv	5.00	83.4	70-130	0.481	25	
Dibromochloromethane	4.26	0.5	ppbv	5.00	85.2	70-130	0.702	25	
Dichlorodifluoromethane	4.23	0.5	ppbv	5.00	84.6	70-130	1.19	25	
Ethanol	4.32	0.5	ppbv	5.00	86.4	70-130	0.922	25	
Ethyl acetate	4.10	0.5	ppbv	5.00	82.0	70-130	0.00	25	



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 17, 2024 8:38  
Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Units	Source Level	%REC		RPD		Qual
	Result	Limit			%REC	Limits	RPD	Limit	

#### Batch BHF0582 - No Prep VOC Air

##### LCS Dup (BHF0582-BSD1)

Prepared & Analyzed: 06/17/2024

Ethylbenzene	4.96	0.5	ppbv	5.00	99.2	70-130	1.40	25	
Heptane	3.78	0.5	ppbv	5.00	75.6	70-130	0.265	25	
Hexachlorobutadiene	4.77	0.5	ppbv	5.00	95.4	60-140	0.627	25	
Hexane	4.06	0.5	ppbv	5.00	81.2	70-130	0.247	25	
Isopropyl alcohol	4.44	0.5	ppbv	5.00	88.8	70-130	0.905	25	
Isopropylbenzene	5.18	0.5	ppbv	5.00	104	70-130	1.15	25	
m+p-Xylenes	9.94	1	ppbv	10.0	99.4	70-130	0.901	25	
Methyl methacrylate	4.12	0.5	ppbv	5.00	82.4	70-130	0.242	25	
Methylene chloride	5.37	1	ppbv	5.00	107	70-130	1.88	25	
Methyl-t-butyl ether (MTBE)	4.30	0.5	ppbv	5.00	86.0	70-130	0.464	25	
Naphthalene	3.57	0.5	ppbv	5.00	71.4	60-140	2.22	25	
n-Butane (C4)	4.52	0.5	ppbv	5.00	90.4	70-130	4.12	25	
n-Nonane (C9)	4.60	0.5	ppbv	5.00	92.0	70-130	0.866	25	
n-Propylbenzene	5.17	0.5	ppbv	5.00	103	70-130	0.194	25	
o-Xylene	5.07	0.5	ppbv	5.00	101	70-130	0.197	25	
n-Pentane (C5)	4.32	0.5	ppbv	5.00	86.4	70-130	0.232	25	
Propylene	3.94	1	ppbv	5.00	78.8	70-130	0.509	25	
Styrene	4.76	0.5	ppbv	5.00	95.2	70-130	0.419	25	
TBA	4.08	0.5	ppbv	5.00	81.6	70-130	1.22	25	
Tetrachloroethylene (PCE)	4.88	0.5	ppbv	5.00	97.6	70-130	1.83	25	
Tetrahydrofuran	3.70	0.5	ppbv	5.00	74.0	70-130	2.14	25	
Toluene	4.20	0.5	ppbv	5.00	84.0	70-130	0.957	25	
trans-1,2-Dichloroethylene	4.82	0.5	ppbv	5.00	96.4	70-130	1.04	25	
trans-1,3-Dichloropropene	3.93	0.5	ppbv	5.00	78.6	70-130	0.508	25	
Trichloroethylene	4.27	0.5	ppbv	5.00	85.4	70-130	0.700	25	
Trichlorofluoromethane	4.73	0.5	ppbv	5.00	94.6	70-130	0.212	25	
Vinyl acetate	2.83	0.5	ppbv	5.00	56.6	70-130	1.78	25	L
Vinyl bromide	5.02	0.5	ppbv	5.00	100	70-130	0.596	25	
Vinyl chloride	4.90	0.5	ppbv	5.00	98.0	70-130	0.614	25	

Surr: 4-Bromofluorobenzene  
(Surr)

5.53 ppbv 5.00 111 70-130



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## Certificate of Analysis

Final Report

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5120 Northshore Drive

Date Received: June 17, 2024 8:38  
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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### Sulfur Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BHF0511 - No Prep VOC Air

##### Blank (BHF0511-BLK1)

Prepared & Analyzed: 06/14/2024

Carbon Disulfide	<	10.0	ppbv							U
Hydrogen Sulfide	<	10.0	ppbv							U
1-Propanethiol	<	10.0	ppbv							U
2-Propanethiol	<	10.0	ppbv							U
Carbonyl sulfide	<	10.0	ppbv							U
Dimethyl sulfide	<	10.0	ppbv							U
Ethyl mercaptan	<	10.0	ppbv							U
Methyl mercaptan	<	10.0	ppbv							U
Total Reduced Sulfurs	<	10.0	ppbv							U

Surr: 1,4-Difluorobenzene (Surr) 18.9 ppbv 20.0 94.4 80-120

##### LCS (BHF0511-BS1)

Prepared & Analyzed: 06/14/2024

Carbon Disulfide	21.8	10	ppbv	22.4	97.4	70-130				
Hydrogen Sulfide	21.2	10	ppbv	22.2	95.7	70-130				
1-Propanethiol	19.2	10	ppbv	18.8	102	70-130				
2-Propanethiol	19.4	10	ppbv	18.2	107	70-130				
Carbonyl sulfide	21.6	10	ppbv	22.8	94.5	70-130				
Dimethyl sulfide	20.6	10	ppbv	20.6	100	70-130				
Ethyl mercaptan	19.1	10	ppbv	17.6	108	70-130				
Methyl mercaptan	18.7	10	ppbv	19.0	98.3	70-130				

Surr: 1,4-Difluorobenzene (Surr) 19.4 ppbv 20.0 97.0 70-130

##### LCS Dup (BHF0511-BSD1)

Prepared & Analyzed: 06/14/2024

Carbon Disulfide	21.9	10	ppbv	22.4	97.6	70-130	0.229	25		
Hydrogen Sulfide	20.9	10	ppbv	22.2	94.2	70-130	1.61	25		
1-Propanethiol	19.6	10	ppbv	18.8	104	70-130	1.96	25		
2-Propanethiol	19.6	10	ppbv	18.2	107	70-130	0.873	25		
Carbonyl sulfide	21.6	10	ppbv	22.8	94.7	70-130	0.232	25		
Dimethyl sulfide	20.3	10	ppbv	20.6	98.6	70-130	1.37	25		
Ethyl mercaptan	19.1	10	ppbv	17.6	109	70-130	0.210	25		
Methyl mercaptan	19.3	10	ppbv	19.0	102	70-130	3.47	25		

Surr: 1,4-Difluorobenzene (Surr) 19.3 ppbv 20.0 96.4 70-130



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5120 Northshore Drive

Date Received: June 17, 2024 8:38  
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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### Sulfur Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BHF0512 - No Prep VOC Air

##### Blank (BHF0512-BLK1)

Prepared & Analyzed: 06/14/2024

Dimethyl disulfide	<	10.0	ppbv							U
Surr: 1,4-Difluorobenzene (Surr)	20.0		ppbv	20.0	100	80-120				

##### LCS (BHF0512-BS1)

Prepared & Analyzed: 06/14/2024

Dimethyl disulfide	16.2	10	ppbv	20.8	78.0	70-130				
Surr: 1,4-Difluorobenzene (Surr)	20.0		ppbv	20.0	100	70-130				

##### LCS Dup (BHF0512-BSD1)

Prepared & Analyzed: 06/14/2024

Dimethyl disulfide	16.6	10	ppbv	20.8	80.0	70-130	2.49	25		
Surr: 1,4-Difluorobenzene (Surr)	20.0		ppbv	20.0	99.8	70-130				

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### Certified Analytes included in this Report

Analyte	Certifications	Analyte	Certifications
<i>EPA TO-15 in Air</i>		cis-1,3-Dichloropropene	VELAP
Carbon Disulfide	VELAP	Cyclohexane	VELAP
1,1,1-Trichloroethane	VELAP	Dibromochloromethane	VELAP
1,1,1,2-Tetrachloroethane	VELAP	Dichlorodifluoromethane	VELAP
1,1,2,2-Tetrachloroethane	VELAP	Ethanol	VELAP
1,1,2-Trichloro-1,2,2-trifluoroethane	VELAP	Ethyl acetate	VELAP
1,1,2-Trichloroethane	VELAP	Ethylbenzene	VELAP
1,1-Dichloroethane	VELAP	Heptane	VELAP
1,1-Dichloroethylene	VELAP	Hexachlorobutadiene	VELAP
1,2,4-Trichlorobenzene	VELAP	Hexane	VELAP
1,2,4-Trimethylbenzene	VELAP	Isooctane	VELAP
1,2-Dibromoethane (EDB)	VELAP	Isopropyl alcohol	VELAP
1,2-Dichlorobenzene	VELAP	Isopropylbenzene	VELAP
1,2-Dichloroethane	VELAP	m+p-Xylenes	VELAP
1,2-Dichloropropane	VELAP	Methyl methacrylate	VELAP
1,2-Dichlorotetrafluoroethane	VELAP	Methylene chloride	VELAP
1,3,5-Trimethylbenzene	VELAP	Methyl-t-butyl ether (MTBE)	VELAP
1,3-Butadiene	VELAP	Naphthalene	VELAP
1,3-Dichlorobenzene	VELAP	n-Butane (C4)	VELAP
1,4-Dichlorobenzene	VELAP	n-Nonane (C9)	VELAP
1,4-Dioxane	VELAP	n-Propylbenzene	VELAP
1-Ethyl-4-methyl benzene	VELAP	o-Xylene	VELAP
2-Butanone (MEK)	VELAP	n-Pentane (C5)	VELAP
2-Chlorotoluene	VELAP	Propylene	VELAP
2-Hexanone (MBK)	VELAP	Styrene	VELAP
4-Methyl-2-pentanone (MIBK)	VELAP	TBA	VELAP
Acetone	VELAP	Tetrachloroethylene (PCE)	VELAP
Acrolein	VELAP	Tetrahydrofuran	VELAP
Allyl chloride	VELAP	Toluene	VELAP
Benzene	VELAP	trans-1,2-Dichloroethylene	VELAP
Benzyl Chloride	VELAP	trans-1,3-Dichloropropene	VELAP
Bromodichloromethane	VELAP	Trichloroethylene	VELAP
Bromoform	VELAP	Trichlorofluoromethane	VELAP
Bromomethane	VELAP	Vinyl acetate	VELAP
Carbon Disulfide	VELAP	Vinyl bromide	VELAP
Carbon Tetrachloride	VELAP	Vinyl chloride	VELAP
Chlorobenzene	VELAP	Xylenes, Total	VELAP
Chloroethane	VELAP		
Chloroform	VELAP		
Chloromethane	VELAP		
cis-1,2-Dichloroethylene	VELAP		





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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name:	CTEH, LLC	Date Received:	June 17, 2024 8:38
	5120 Northshore Drive	Date Issued:	July 22, 2024 8:33
	N. Little Rock, AR 72118		
Submitted To:	Cassie Smythe	Project Number:	PROJ-036688
Client Site I.D.:	Air Quality Study	Purchase Order:	PROJ-036688

Code	Description	Laboratory ID	Expires
MdDOE	Maryland DE Drinking Water	341	12/31/2024
NCDEQ	North Carolina DEQ	495	12/31/2024
NCDOH	North Carolina Department of Health	51714	07/31/2024
NYDOH	New York DOH Drinking Water	12069	04/01/2025
PADEP	NELAP-Pennsylvania Certificate #009	68-03503	10/31/2024
SCDHEC	South Carolina Dept of Health and Environmental	93016	09/14/2024
TXCEQ	Texas Comm on Environmental Quality #T104704	T104704576	05/31/2025
VELAP	NELAP-Virginia Certificate #12969	460021	06/14/2025
WVDEP	West Virginia DEP	350	11/30/2024

### Qualifiers and Definitions

- C Continuing calibration verification response for this analyte is outside specifications.
  - J The reported result is an estimated value.
  - L LCS recovery is outside of established acceptance limits
  - U Analyte was not detected and is reported as less than the DL or as defined by the client . The DL has been adjusted for any dilution or concentration of the sample.
  - RPD Relative Percent Difference
  - Qual Qualifiers
  - RE Denotes sample was re-analyzed
  - PF Preparation Factor
  - MDL Method Detection Limit
  - LOQ Limit of Quantitation
  - ppbv parts per billion by volume
  - TIC Tentatively Identified Compounds are compounds that are identified by comparing the analyte mass spectral pattern with the NIST spectral library. A TIC spectral match is reported when the pattern is at least 75% consistent with the published pattern. Compound concentrations are estimated and are calculated using an internal standard response factor of 1.
- All EPA method 3C results are reported as normalized values when the sum total of all evaluated constituents is outside  $\pm 10\%$  of the absolute.



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# CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

CTEH Project # Proj-036688

Turnaround Requested:  Normal  Same Day  Next Day  
 Two Day  Other (Specify) 5 days

Data Packet Requested:  Standard Level II  Other \_\_\_\_\_

Sample and Extract Retention/Disposal:  
 Dispose after 2X hold time   
 Retain w/ storage fees after 2X hold time

Send Report to labresults@cteh.com

Company CTEH, LLC

Address 5120 North Shore Drive, North Little Rock, Arkansas 72118

Phone (501)801-8500

e-mail labresults@cteh.com;

Accounting Send invoices to CTEHAP@montrose-env.com with invoice # and Vendor name in subject line

Lab Contact Information	Can	Regulator	Secondary Sample Identification	Sample Size	Units	Sample Start Date	Sample Start Time	Sample Stop Date	Sample Stop Time	Method			Matrix
										GC	MS	IR	
CACA061205012	13437	GS027		1.4	L	6/12/24		6/12/24		X	X	X	A
CACA061305001	13463	GS020		1.4	L	6/13/24	1035	6/13/24	1035	X	X	X	A
CACA061305005	15371	GS012		1.4	L	6/13/24	0937	6/13/24	0937	X	X	X	A
CACA061305008	13379			1.4	L	6/13/24	0852	6/13/24	0852	X	X	X	A
CACA061405001	16423	GS023		1.4	L	6/14/24	0705	6/14/24	0705	X	X	X	A
CACA061405002	16779	GS032		1.4	L	6/14/24	0731	6/14/24	0731	X	X	X	A
CACA061405002	16761	GS032		1.4	L	6/14/24	0731	6/14/24	0731	X	X	X	A
CACA061405003	16424	GS021		1.4	L	6/14/24	0751	6/14/24	0751	X	X	X	A
CACA061405004	16791	GS033		1.4	L	6/14/24	0819	6/14/24	0819	X	X	X	A
CACA061405004	16785	GS033		1.4	L	6/14/24	0819	6/14/24	0819	X	X	X	A

RELINQUISHED BY Karin Sachin DATE/TIME 6/14/24 1200 RECEIVED BY [Signature] DATE/TIME 6/17/24 0838

COMMENTS 24F0908

CTEH, LLC **24F0908**

Air Quality Study

Recd: 06/17/2024 Due: 06/24/2024

SDG # CACA061205 310 DT: 10.6 NO (C) CF: 0.5 NO (C) FT: 1.2 NO (C)



# CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

CTEH Project # 7801-036688

Turnaround Requested:  Normal  Same Day  Next Day  
 Two Day  Other (Specify) 5 days

Data Packet Requested:  Standard Level II  Other \_\_\_\_\_

Sample and Extract Retention/Disposal:  
 Dispose after 2X hold time   
 Retain w/ storage fees after 2X hold time

Send Report to labresults@cteh.com

Company CTEH, LLC

Address 5120 North Shore Drive, North Little Rock, Arkansas 72118

Phone (501)801-8500

e-mail labresults@cteh.com

Accounting Send invoices to CTEHAP@montrose-env.com with Invoice # and Vendor name in subject line

Lab Contact Information	Primary Sample Identification	Secondary Sample Identification	Sample Size	Units	Sample Start Date	Sample Start Time	Sample Stop Date	Sample Stop Time	Method			Matrix	
									Initials	Initials	Initials		
	CACA061205012 3.2"	13437 GS027	1.4	L	6/12/24		6/12/24		KS	X	X	X	A
	CACA061205001 2.6"	13463 GS020	1.4	L	6/13/24	1035	6/13/24	1035	KS	X	X	X	A
	CACA061305005 2.8"	15971 GS012	1.4	L	6/13/24	0937	6/13/24	0937	KS	X	X	X	A
	CACA061305008 2.6"	13379	1.4	L	6/13/24	0852	6/13/24	0852	KS	X	X	X	A
	CACA061405001 1.8"	16483 GS023	1.4	L	6/14/24	0705	6/14/24	0705	KS	X	X	X	A
	CACA061405002 2.0"	16779 GS032	1.4	L	6/14/24	0731	6/14/24	0731	KS	X	X	X	A
	CACA061405002 2.0"	16769 GS032	1.4	L	6/14/24	0731	6/14/24	0731	KS	X	X	X	A
	CACA061405003 2.4"	16484 GS021	1.4	L	6/14/24	0751	6/14/24	0751	KS	X	X	X	A
	CACA061405004 2.6"	16791 GS033	1.4	L	6/14/24	0819	6/14/24	0819	KS	X	X	X	A
	CACA061405004 2.8"	16783 GS033	1.4	L	6/14/24	0819	6/14/24	0819	KS	X	X	X	A

RELINQUISHED BY Karin Sachin DATE/TIME 6/14/24 1200 RECEIVED BY FedEx DATE/TIME 6/17/24 0838

SDG # CACA061205 COMMENTS CTEH, LLC Air Quality Study

24F0908

Recd: 06/17/2024 Due: 06/24/2024

310 07:20.4 no cu  
 CF: 0.5 no cu

VI30325002



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### Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name:	CTEH, LLC	Date Received:	June 17, 2024 8:38
	5120 Northshore Drive	Date Issued:	July 22, 2024 8:33
	N. Little Rock, AR 72118		
Submitted To:	Cassie Smythe	Project Number:	PROJ-036688
Client Site I.D.:	Air Quality Study	Purchase Order:	PROJ-036688

### Sample Conditions Checklist

Samples Received at:	21.20°C
How were samples received?	FedEx Express
Were Custody Seals used? If so, were they received intact?	No
Are the custody papers filled out completely and correctly?	No
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits or received on ice, and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	No
Are all volatile organic and TOX containers free of headspace?	NA
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	NA
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis. In addition, field parameters are always received outside holding time and will be marked accordingly.	Yes

### Work Order Comments



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0908

Client Name: CTEH, LLC Date Received: June 17, 2024 8:38  
5120 Northshore Drive Date Issued: July 22, 2024 8:33

N. Little Rock, AR 72118

Submitted To: Cassie Smythe Project Number: PROJ-036688

Client Site I.D.: Air Quality Study Purchase Order: PROJ-036688

Sample CACA0613OS008 was received with no grab sampler indicated.  
CACA0613OS005 was received with a grab sampler number that was not provided with the shipment. (GS012)  
The lab has received two grab samplers not indicated on the COC (GS022 and GS025)  
The sample matrix has been logged as Ambient Air per project history .  
Additionally, sample "CACA0612OS012" was received with no collection time provided.  
Cassie Smythe notified via email  
JNH 6/17/24 1140

Per Kamie Stecher via email  
Sample CACA0613OS008 was used with regulator GS025.  
Sample CACA0613OS005 must have been used with GS022.  
Sample CACA0612OS012 was collected at 17:30.  
JNH 6/17/24 1611



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## Certificate of Analysis

*Final Report*

Laboratory Order ID 24F0971

Client Name:	CTEH, LLC	Date Received:	June 18, 2024 10:13
	5120 Northshore Drive	Date Issued:	June 25, 2024 8:52
	N. Little Rock, AR 72118	Project Number:	PROJ-036688
Submitted To:	Cassie Smythe	Purchase Order:	PROJ-036688

Client Site I.D.: Air Quality Study

Enclosed are the results of analyses for samples received by the laboratory on 06/18/2024 10:13. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

A handwritten signature in black ink that reads 'Ginny Thrasher'.

Ginny Thrasher  
Project Manager

### End Notes:

The test results listed in this report relate only to the samples submitted to the laboratory and as received by the Laboratory.

Unless otherwise noted, the test results for solid materials are calculated on a wet weight basis. Analyses for pH, dissolved oxygen, temperature, residual chlorine and sulfite that are performed in the laboratory do not meet NELAC requirements due to extremely short holding times. These analyses should be performed in the field. The results of field analyses performed by the Sampler included in the Certificate of Analysis are done so at the client's request and are not included in the laboratory's fields of certification nor have they been audited for adherence to a reference method or procedure.

The signature on the final report certifies that these results conform to all applicable NELAC standards unless otherwise specified. For a complete list of the Laboratory's NELAC certified parameters please contact customer service.

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VELAP ID 460021



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### Certificate of Analysis

#### Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC Date Received: June 18, 2024 10:13  
 5120 Northshore Drive Date Issued: June 25, 2024 8:52  
 N. Little Rock, AR 72118 Project Number: PROJ-036688  
 Submitted To: Cassie Smythe Purchase Order: PROJ-036688  
 Client Site I.D.: Air Quality Study

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CACA0616OS003	24F0971-01	Air	06/16/2024 09:42	06/18/2024 10:13
CACA0616OS005	24F0971-02	Air	06/16/2024 09:59	06/18/2024 10:13
CACA0616OS007	24F0971-03	Air	06/16/2024 10:30	06/18/2024 10:13
CACA0617UW001	24F0971-04	Air	06/17/2024 07:14	06/18/2024 10:13
CACA0617OS009	24F0971-06	Air	06/17/2024 09:20	06/18/2024 10:13
CACA0617OS010	24F0971-07	Air	06/17/2024 08:42	06/18/2024 10:13
CACA0615UW001	24F0971-08	Air	06/15/2024 18:09	06/18/2024 10:13
CACA0615OS005	24F0971-09	Air	06/15/2024 11:27	06/18/2024 10:13
CACA0615OS008	24F0971-10	Air	06/15/2024 17:40	06/18/2024 10:13
CACA0616UW001	24F0971-11	Air	06/16/2024 09:04	06/18/2024 10:13



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06160S003

Project Location:

Sample ID: 24F0971-01

Canister ID: 063-00103::12474

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/16/2024 09:42

Flow Controller ID: 063-00894::GS041

Receipt Vacuum(in Hg): 3.2

Sample Type: AA

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 13:50	DFH
Hydrogen Sulfide, as received	35.0	10.0	10.0		49	14	14	1	1	6/19/24 13:50	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 13:50	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/19/24 13:50	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 13:50	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 13:50	DFH
Dimethyl sulfide, as received	15.7	10.0	10.0		40	25	25	1	1	6/19/24 13:50	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 13:50	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/19/24 13:50	DFH
Total Reduced Sulfurs, as received	50.7	10.0	10.0		71	14	14	1	1	6/19/24 13:50	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
1,4-Difluorobenzene (Surr), as received	100				80-120					6/19/24 13:50	
1,4-Difluorobenzene (Surr), as received	94.4				80-120					6/19/24 13:50	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/18/24 22:04	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/18/24 22:04	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/18/24 22:04	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/18/24 22:04	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/18/24 22:04	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/18/24 22:04	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/18/24 22:04	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/18/24 22:04	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 22:04	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/18/24 22:04	DFH





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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0616OS003

Project Location:

Sample ID: 24F0971-01

Canister ID: 063-00103::12474

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/16/2024 09:42

Flow Controller ID: 063-00894::GS041

Receipt Vacuum(in Hg): 3.2

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/18/24 22:04	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/18/24 22:04	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/18/24 22:04	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/18/24 22:04	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 22:04	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/18/24 22:04	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/18/24 22:04	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/18/24 22:04	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/18/24 22:04	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 22:04	DFH
2-Butanone (MEK)	2.66	0.20	0.50		7.8	0.59	1.5	1	1	6/18/24 22:04	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 22:04	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/18/24 22:04	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/18/24 22:04	DFH
Acetone	10.6	0.20	0.50		25	0.48	1.2	1	1	6/18/24 22:04	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/18/24 22:04	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/18/24 22:04	DFH
Benzene	2.17	0.20	0.50		6.9	0.64	1.6	1	1	6/18/24 22:04	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 22:04	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/18/24 22:04	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/18/24 22:04	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/18/24 22:04	DFH
Carbon Disulfide	3.40	0.50	0.50		11	1.6	1.6	1	1	6/18/24 22:04	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/18/24 22:04	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/18/24 22:04	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/18/24 22:04	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/18/24 22:04	DFH
Chloromethane	0.29	0.20	0.50	C, J	0.60	0.41	1.0	1	1	6/18/24 22:04	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/18/24 22:04	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0616OS003

Project Location:

Sample ID: 24F0971-01

Canister ID: 063-00103::12474

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/16/2024 09:42

Flow Controller ID: 063-00894::GS041

Receipt Vacuum(in Hg): 3.2

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/18/24 22:04	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/18/24 22:04	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/18/24 22:04	DFH
Dichlorodifluoromethane	ND	0.50	0.50	C, U	ND	2.5	2.5	1	1	6/18/24 22:04	DFH
Ethanol	12.7	0.20	0.50		24	0.38	0.94	1	1	6/18/24 22:04	DFH
Ethyl acetate	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/18/24 22:04	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/18/24 22:04	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/18/24 22:04	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/18/24 22:04	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/18/24 22:04	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/18/24 22:04	DFH
Isopropyl alcohol	3.79	0.20	0.50		9.3	0.49	1.2	1	1	6/18/24 22:04	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 22:04	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/18/24 22:04	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/18/24 22:04	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/18/24 22:04	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	C, U	ND	0.72	1.8	1	1	6/18/24 22:04	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 22:04	DFH
n-Butane (C4)	0.93	0.20	0.50		2.2	0.48	1.2	1	1	6/18/24 22:04	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 22:04	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 22:04	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/18/24 22:04	DFH
n-Pentane (C5)	0.25	0.20	0.50	J	0.74	0.59	1.5	1	1	6/18/24 22:04	DFH
Propylene	ND	1.00	1.00	C, U	ND	1.7	1.7	1	1	6/18/24 22:04	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/18/24 22:04	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/18/24 22:04	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/18/24 22:04	DFH
Tetrahydrofuran	2.15	0.20	0.50		6.3	0.59	1.5	1	1	6/18/24 22:04	DFH
Toluene	0.25	0.20	0.50	J	0.94	0.75	1.9	1	1	6/18/24 22:04	DFH



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## Certificate of Analysis

Final Report

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5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06160S003

Project Location:

Sample ID: 24F0971-01

Canister ID: 063-00103::12474

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/16/2024 09:42

Flow Controller ID: 063-00894::GS041

Receipt Vacuum(in Hg): 3.2

Sample Type: AA

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/18/24 22:04	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/18/24 22:04	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/18/24 22:04	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/18/24 22:04	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/18/24 22:04	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/18/24 22:04	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/18/24 22:04	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/18/24 22:04	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			102				80-120			6/18/24 22:04	



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06160S005

Project Location:

Sample ID: 24F0971-02

Canister ID: 063-00251::12846

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/16/2024 09:59

Flow Controller ID: 063-00895::GS042

Receipt Vacuum(in Hg): 3.4

Sample Type: AA

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 14:32	DFH
Hydrogen Sulfide, as received	ND	10.0	10.0	U	ND	14	14	1	1	6/19/24 14:32	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 14:32	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/19/24 14:32	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 14:32	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 14:32	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 14:32	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 14:32	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/19/24 14:32	DFH
Total Reduced Sulfurs, as received	ND	10.0	10.0	U	ND	14	14	1	1	6/19/24 14:32	DFH
Surrogate(s)	% Recovery			% Recovery Limits							
1,4-Difluorobenzene (Surr), as received	94.2			80-120						6/19/24 14:32	
1,4-Difluorobenzene (Surr), as received	99.9			80-120						6/19/24 14:32	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/18/24 22:57	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/18/24 22:57	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/18/24 22:57	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/18/24 22:57	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/18/24 22:57	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/18/24 22:57	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/18/24 22:57	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/18/24 22:57	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 22:57	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/18/24 22:57	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0616OS005

Project Location:

Sample ID: 24F0971-02

Canister ID: 063-00251::12846

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/16/2024 09:59

Flow Controller ID: 063-00895::GS042

Receipt Vacuum(in Hg): 3.4

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/18/24 22:57	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/18/24 22:57	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/18/24 22:57	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/18/24 22:57	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 22:57	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/18/24 22:57	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/18/24 22:57	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/18/24 22:57	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/18/24 22:57	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 22:57	DFH
2-Butanone (MEK)	1.10	0.20	0.50		3.2	0.59	1.5	1	1	6/18/24 22:57	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 22:57	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/18/24 22:57	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/18/24 22:57	DFH
Acetone	5.94	0.20	0.50		14	0.48	1.2	1	1	6/18/24 22:57	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/18/24 22:57	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/18/24 22:57	DFH
Benzene	1.03	0.20	0.50		3.3	0.64	1.6	1	1	6/18/24 22:57	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 22:57	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/18/24 22:57	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/18/24 22:57	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/18/24 22:57	DFH
Carbon Disulfide	1.25	0.50	0.50		3.9	1.6	1.6	1	1	6/18/24 22:57	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/18/24 22:57	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/18/24 22:57	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/18/24 22:57	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/18/24 22:57	DFH
Chloromethane	0.35	0.20	0.50	C, J	0.72	0.41	1.0	1	1	6/18/24 22:57	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/18/24 22:57	DFH



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## Certificate of Analysis

Final Report

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Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0616OS005

Project Location:

Sample ID: 24F0971-02

Canister ID: 063-00251::12846

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/16/2024 09:59

Flow Controller ID: 063-00895::GS042

Receipt Vacuum(in Hg): 3.4

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/18/24 22:57	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/18/24 22:57	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/18/24 22:57	DFH
Dichlorodifluoromethane	ND	0.50	0.50	C, U	ND	2.5	2.5	1	1	6/18/24 22:57	DFH
Ethanol	6.29	0.20	0.50		12	0.38	0.94	1	1	6/18/24 22:57	DFH
Ethyl acetate	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/18/24 22:57	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/18/24 22:57	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/18/24 22:57	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/18/24 22:57	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/18/24 22:57	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/18/24 22:57	DFH
Isopropyl alcohol	12.7	0.20	0.50		31	0.49	1.2	1	1	6/18/24 22:57	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 22:57	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/18/24 22:57	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/18/24 22:57	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/18/24 22:57	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	C, U	ND	0.72	1.8	1	1	6/18/24 22:57	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 22:57	DFH
n-Butane (C4)	0.57	0.20	0.50		1.4	0.48	1.2	1	1	6/18/24 22:57	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 22:57	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 22:57	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/18/24 22:57	DFH
n-Pentane (C5)	0.23	0.20	0.50	J	0.68	0.59	1.5	1	1	6/18/24 22:57	DFH
Propylene	ND	1.00	1.00	C, U	ND	1.7	1.7	1	1	6/18/24 22:57	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/18/24 22:57	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/18/24 22:57	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/18/24 22:57	DFH
Tetrahydrofuran	0.74	0.20	0.50		2.2	0.59	1.5	1	1	6/18/24 22:57	DFH
Toluene	0.22	0.20	0.50	J	0.83	0.75	1.9	1	1	6/18/24 22:57	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0616OS005

Project Location:

Sample ID: 24F0971-02

Canister ID: 063-00251::12846

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/16/2024 09:59

Flow Controller ID: 063-00895::GS042

Receipt Vacuum(in Hg): 3.4

Sample Type: AA

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/18/24 22:57	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/18/24 22:57	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/18/24 22:57	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/18/24 22:57	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/18/24 22:57	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/18/24 22:57	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/18/24 22:57	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/18/24 22:57	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			99.6				80-120			6/18/24 22:57	



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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06160S007

Project Location:

Sample ID: 24F0971-03

Canister ID: 063-00244::12849

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/16/2024 10:30

Flow Controller ID: 063-00896::GS043

Receipt Vacuum(in Hg): 3.4

Sample Type: AA

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 15:13	DFH
Hydrogen Sulfide, as received	47.7	10.0	10.0		67	14	14	1	1	6/19/24 15:13	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 15:13	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/19/24 15:13	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 15:13	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 15:13	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 15:13	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 15:13	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/19/24 15:13	DFH
Total Reduced Sulfurs, as received	47.7	10.0	10.0		67	14	14	1	1	6/19/24 15:13	DFH
Surrogate(s)	% Recovery			% Recovery Limits							
1,4-Difluorobenzene (Surr), as received	93.4			80-120						6/19/24 15:13	
1,4-Difluorobenzene (Surr), as received	99.0			80-120						6/19/24 15:13	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/18/24 23:51	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/18/24 23:51	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/18/24 23:51	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/18/24 23:51	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/18/24 23:51	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/18/24 23:51	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/18/24 23:51	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/18/24 23:51	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 23:51	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/18/24 23:51	DFH



## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0616OS007

Project Location:

Sample ID: 24F0971-03

Canister ID: 063-00244::12849

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/16/2024 10:30

Flow Controller ID: 063-00896::GS043

Receipt Vacuum(in Hg): 3.4

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/18/24 23:51	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/18/24 23:51	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/18/24 23:51	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/18/24 23:51	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 23:51	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/18/24 23:51	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/18/24 23:51	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/18/24 23:51	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/18/24 23:51	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 23:51	DFH
2-Butanone (MEK)	0.64	0.20	0.50		1.9	0.59	1.5	1	1	6/18/24 23:51	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 23:51	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/18/24 23:51	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/18/24 23:51	DFH
Acetone	4.28	0.20	0.50		10	0.48	1.2	1	1	6/18/24 23:51	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/18/24 23:51	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/18/24 23:51	DFH
Benzene	0.64	0.20	0.50		2.0	0.64	1.6	1	1	6/18/24 23:51	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 23:51	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/18/24 23:51	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/18/24 23:51	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/18/24 23:51	DFH
Carbon Disulfide	0.78	0.50	0.50		2.4	1.6	1.6	1	1	6/18/24 23:51	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/18/24 23:51	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/18/24 23:51	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/18/24 23:51	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/18/24 23:51	DFH
Chloromethane	0.20	0.20	0.50	C, J	0.41	0.41	1.0	1	1	6/18/24 23:51	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/18/24 23:51	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0616OS007

Project Location:

Sample ID: 24F0971-03

Canister ID: 063-00244::12849

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/16/2024 10:30

Flow Controller ID: 063-00896::GS043

Receipt Vacuum(in Hg): 3.4

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/18/24 23:51	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/18/24 23:51	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/18/24 23:51	DFH
Dichlorodifluoromethane	ND	0.50	0.50	C, U	ND	2.5	2.5	1	1	6/18/24 23:51	DFH
Ethanol	3.87	0.20	0.50		7.3	0.38	0.94	1	1	6/18/24 23:51	DFH
Ethyl acetate	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/18/24 23:51	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/18/24 23:51	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/18/24 23:51	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/18/24 23:51	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/18/24 23:51	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/18/24 23:51	DFH
Isopropyl alcohol	0.80	0.20	0.50		2.0	0.49	1.2	1	1	6/18/24 23:51	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 23:51	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/18/24 23:51	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/18/24 23:51	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/18/24 23:51	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	C, U	ND	0.72	1.8	1	1	6/18/24 23:51	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 23:51	DFH
n-Butane (C4)	0.60	0.20	0.50		1.4	0.48	1.2	1	1	6/18/24 23:51	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/18/24 23:51	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/18/24 23:51	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/18/24 23:51	DFH
n-Pentane (C5)	ND	0.20	0.50	U	ND	0.59	1.5	1	1	6/18/24 23:51	DFH
Propylene	ND	1.00	1.00	C, U	ND	1.7	1.7	1	1	6/18/24 23:51	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/18/24 23:51	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/18/24 23:51	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/18/24 23:51	DFH
Tetrahydrofuran	0.40	0.20	0.50	J	1.2	0.59	1.5	1	1	6/18/24 23:51	DFH
Toluene	0.22	0.20	0.50	J	0.83	0.75	1.9	1	1	6/18/24 23:51	DFH



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## Certificate of Analysis

Final Report

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5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06160S007

Project Location:

Sample ID: 24F0971-03

Canister ID: 063-00244::12849

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/16/2024 10:30

Flow Controller ID: 063-00896::GS043

Receipt Vacuum(in Hg): 3.4

Sample Type: AA

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/18/24 23:51	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/18/24 23:51	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/18/24 23:51	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/18/24 23:51	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/18/24 23:51	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/18/24 23:51	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/18/24 23:51	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/18/24 23:51	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			101				80-120			6/18/24 23:51	



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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0617UW001

Project Location:

Sample ID: 24F0971-04

Canister ID: 063-00224::12854

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/17/2024 07:14

Flow Controller ID: 063-00897::GS044

Receipt Vacuum(in Hg): 2.2

Sample Type: AA

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 16:00	DFH
Hydrogen Sulfide, as received	49.5	10.0	10.0		69	14	14	1	1	6/19/24 16:00	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 16:00	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/19/24 16:00	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 16:00	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 16:00	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 16:00	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 16:00	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/19/24 16:00	DFH
Total Reduced Sulfurs, as received	49.5	10.0	10.0		69	14	14	1	1	6/19/24 16:00	DFH
Surrogate(s)	% Recovery			% Recovery Limits							
1,4-Difluorobenzene (Surr), as received	93.0			80-120						6/19/24 16:00	
1,4-Difluorobenzene (Surr), as received	98.6			80-120						6/19/24 16:00	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/19/24 0:44	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/19/24 0:44	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/19/24 0:44	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/19/24 0:44	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/19/24 0:44	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/19/24 0:44	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/19/24 0:44	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/19/24 0:44	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 0:44	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/19/24 0:44	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0617UW001

Project Location:

Sample ID: 24F0971-04

Canister ID: 063-00224::12854

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/17/2024 07:14

Flow Controller ID: 063-00897::GS044

Receipt Vacuum(in Hg): 2.2

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/19/24 0:44	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/19/24 0:44	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/19/24 0:44	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/19/24 0:44	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 0:44	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/19/24 0:44	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/19/24 0:44	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/19/24 0:44	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/19/24 0:44	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 0:44	DFH
2-Butanone (MEK)	1.87	0.20	0.50		5.5	0.59	1.5	1	1	6/19/24 0:44	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 0:44	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/19/24 0:44	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/19/24 0:44	DFH
Acetone	4.54	0.20	0.50		11	0.48	1.2	1	1	6/19/24 0:44	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/19/24 0:44	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/19/24 0:44	DFH
Benzene	0.46	0.20	0.50	J	1.5	0.64	1.6	1	1	6/19/24 0:44	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 0:44	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/19/24 0:44	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/19/24 0:44	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/19/24 0:44	DFH
Carbon Disulfide	0.95	0.50	0.50		3.0	1.6	1.6	1	1	6/19/24 0:44	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/19/24 0:44	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/19/24 0:44	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/19/24 0:44	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/19/24 0:44	DFH
Chloromethane	0.31	0.20	0.50	C, J	0.64	0.41	1.0	1	1	6/19/24 0:44	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/19/24 0:44	DFH



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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0617UW001

Project Location:

Sample ID: 24F0971-04

Canister ID: 063-00224::12854

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/17/2024 07:14

Flow Controller ID: 063-00897::GS044

Receipt Vacuum(in Hg): 2.2

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/19/24 0:44	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/19/24 0:44	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/19/24 0:44	DFH
Dichlorodifluoromethane	ND	0.50	0.50	C, U	ND	2.5	2.5	1	1	6/19/24 0:44	DFH
Ethanol	25.5	1.20	3.00		48	2.3	5.7	6	1	6/19/24 10:51	DFH
Ethyl acetate	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/19/24 0:44	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/19/24 0:44	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/19/24 0:44	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/19/24 0:44	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/19/24 0:44	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/19/24 0:44	DFH
Isopropyl alcohol	3.90	0.20	0.50		9.6	0.49	1.2	1	1	6/19/24 0:44	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 0:44	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/19/24 0:44	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/19/24 0:44	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/19/24 0:44	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	C, U	ND	0.72	1.8	1	1	6/19/24 0:44	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 0:44	DFH
n-Butane (C4)	0.24	0.20	0.50	J	0.57	0.48	1.2	1	1	6/19/24 0:44	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 0:44	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 0:44	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/19/24 0:44	DFH
n-Pentane (C5)	ND	0.20	0.50	U	ND	0.59	1.5	1	1	6/19/24 0:44	DFH
Propylene	ND	1.00	1.00	C, U	ND	1.7	1.7	1	1	6/19/24 0:44	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/19/24 0:44	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/19/24 0:44	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/19/24 0:44	DFH
Tetrahydrofuran	1.33	0.20	0.50		3.9	0.59	1.5	1	1	6/19/24 0:44	DFH
Toluene	ND	0.20	0.50	U	ND	0.75	1.9	1	1	6/19/24 0:44	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0617UW001

Project Location:

Sample ID: 24F0971-04

Canister ID: 063-00224::12854

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/17/2024 07:14

Flow Controller ID: 063-00897::GS044

Receipt Vacuum(in Hg): 2.2

Sample Type: AA

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/19/24 0:44	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/19/24 0:44	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/19/24 0:44	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/19/24 0:44	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/19/24 0:44	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/19/24 0:44	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/19/24 0:44	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/19/24 0:44	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			95.0			80-120				6/19/24 10:51	
4-Bromofluorobenzene (Surr)			102			80-120				6/19/24 0:44	



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5120 Northshore Drive

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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0617OS009

Project Location:

Sample ID: 24F0971-06

Canister ID: 063-00380::13961

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/17/2024 09:20

Flow Controller ID: 063-00900::GS047

Receipt Vacuum(in Hg): 2.8

Sample Type: AA

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 16:35	DFH
Hydrogen Sulfide, as received	ND	10.0	10.0	U	ND	14	14	1	1	6/19/24 16:35	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 16:35	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/19/24 16:35	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 16:35	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 16:35	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 16:35	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 16:35	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/19/24 16:35	DFH
Total Reduced Sulfurs, as received	ND	10.0	10.0	U	ND	14	14	1	1	6/19/24 16:35	DFH
Surrogate(s)	% Recovery			% Recovery Limits							
1,4-Difluorobenzene (Surr), as received			94.0			80-120				6/19/24 16:35	
1,4-Difluorobenzene (Surr), as received			99.6			80-120				6/19/24 16:35	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/19/24 1:37	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/19/24 1:37	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/19/24 1:37	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/19/24 1:37	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/19/24 1:37	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/19/24 1:37	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/19/24 1:37	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/19/24 1:37	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 1:37	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/19/24 1:37	DFH



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Final Report

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5120 Northshore Drive

Date Received: June 18, 2024 10:13  
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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0617OS009

Project Location:

Sample ID: 24F0971-06

Canister ID: 063-00380::13961

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/17/2024 09:20

Flow Controller ID: 063-00900::GS047

Receipt Vacuum(in Hg): 2.8

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/19/24 1:37	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/19/24 1:37	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/19/24 1:37	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/19/24 1:37	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 1:37	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/19/24 1:37	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/19/24 1:37	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/19/24 1:37	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/19/24 1:37	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 1:37	DFH
2-Butanone (MEK)	0.66	0.20	0.50		1.9	0.59	1.5	1	1	6/19/24 1:37	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 1:37	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/19/24 1:37	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/19/24 1:37	DFH
Acetone	2.43	0.20	0.50		5.8	0.48	1.2	1	1	6/19/24 1:37	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/19/24 1:37	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/19/24 1:37	DFH
Benzene	ND	0.20	0.50	U	ND	0.64	1.6	1	1	6/19/24 1:37	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 1:37	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/19/24 1:37	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/19/24 1:37	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/19/24 1:37	DFH
Carbon Disulfide	ND	0.50	0.50	U	ND	1.6	1.6	1	1	6/19/24 1:37	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/19/24 1:37	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/19/24 1:37	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/19/24 1:37	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/19/24 1:37	DFH
Chloromethane	0.29	0.20	0.50	C, J	0.60	0.41	1.0	1	1	6/19/24 1:37	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/19/24 1:37	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0617OS009

Project Location:

Sample ID: 24F0971-06

Canister ID: 063-00380::13961

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/17/2024 09:20

Flow Controller ID: 063-00900::GS047

Receipt Vacuum(in Hg): 2.8

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/19/24 1:37	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/19/24 1:37	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/19/24 1:37	DFH
Dichlorodifluoromethane	ND	0.50	0.50	C, U	ND	2.5	2.5	1	1	6/19/24 1:37	DFH
Ethanol	6.34	0.20	0.50		12	0.38	0.94	1	1	6/19/24 1:37	DFH
Ethyl acetate	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/19/24 1:37	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/19/24 1:37	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/19/24 1:37	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/19/24 1:37	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/19/24 1:37	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/19/24 1:37	DFH
Isopropyl alcohol	2.71	0.20	0.50		6.7	0.49	1.2	1	1	6/19/24 1:37	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 1:37	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/19/24 1:37	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/19/24 1:37	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/19/24 1:37	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	C, U	ND	0.72	1.8	1	1	6/19/24 1:37	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 1:37	DFH
n-Butane (C4)	0.25	0.20	0.50	J	0.59	0.48	1.2	1	1	6/19/24 1:37	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 1:37	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 1:37	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/19/24 1:37	DFH
n-Pentane (C5)	ND	0.20	0.50	U	ND	0.59	1.5	1	1	6/19/24 1:37	DFH
Propylene	ND	1.00	1.00	C, U	ND	1.7	1.7	1	1	6/19/24 1:37	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/19/24 1:37	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/19/24 1:37	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/19/24 1:37	DFH
Tetrahydrofuran	0.36	0.20	0.50	J	1.1	0.59	1.5	1	1	6/19/24 1:37	DFH
Toluene	ND	0.20	0.50	U	ND	0.75	1.9	1	1	6/19/24 1:37	DFH



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Final Report

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5120 Northshore Drive

Date Received: June 18, 2024 10:13  
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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0617OS009

Project Location:

Sample ID: 24F0971-06

Canister ID: 063-00380::13961

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/17/2024 09:20

Flow Controller ID: 063-00900::GS047

Receipt Vacuum(in Hg): 2.8

Sample Type: AA

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/19/24 1:37	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/19/24 1:37	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/19/24 1:37	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/19/24 1:37	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/19/24 1:37	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/19/24 1:37	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/19/24 1:37	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/19/24 1:37	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			99.8				80-120			6/19/24 1:37	



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Date Received: June 18, 2024 10:13  
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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0617OS010

Project Location:

Sample ID: 24F0971-07

Canister ID: 063-00471::15034

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/17/2024 08:42

Flow Controller ID: 063-00901::GS048

Receipt Vacuum(in Hg): 2.6

Sample Type: AA

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 17:16	DFH
Hydrogen Sulfide, as received	44.4	10.0	10.0		62	14	14	1	1	6/19/24 17:16	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 17:16	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/19/24 17:16	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 17:16	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 17:16	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 17:16	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 17:16	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/19/24 17:16	DFH
Total Reduced Sulfurs, as received	44.4	10.0	10.0		62	14	14	1	1	6/19/24 17:16	DFH
Surrogate(s)	% Recovery			% Recovery Limits							
1,4-Difluorobenzene (Surr), as received	100			80-120						6/19/24 17:16	
1,4-Difluorobenzene (Surr), as received	94.5			80-120						6/19/24 17:16	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/19/24 2:30	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/19/24 2:30	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/19/24 2:30	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/19/24 2:30	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/19/24 2:30	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/19/24 2:30	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/19/24 2:30	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/19/24 2:30	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 2:30	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/19/24 2:30	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0617OS010

Project Location:

Sample ID: 24F0971-07

Canister ID: 063-00471::15034

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/17/2024 08:42

Flow Controller ID: 063-00901::GS048

Receipt Vacuum(in Hg): 2.6

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/19/24 2:30	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/19/24 2:30	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/19/24 2:30	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/19/24 2:30	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 2:30	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/19/24 2:30	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/19/24 2:30	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/19/24 2:30	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/19/24 2:30	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 2:30	DFH
2-Butanone (MEK)	0.58	0.20	0.50		1.7	0.59	1.5	1	1	6/19/24 2:30	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 2:30	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/19/24 2:30	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/19/24 2:30	DFH
Acetone	6.94	0.20	0.50		16	0.48	1.2	1	1	6/19/24 2:30	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/19/24 2:30	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/19/24 2:30	DFH
Benzene	0.25	0.20	0.50	J	0.80	0.64	1.6	1	1	6/19/24 2:30	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 2:30	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/19/24 2:30	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/19/24 2:30	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/19/24 2:30	DFH
Carbon Disulfide	ND	0.50	0.50	U	ND	1.6	1.6	1	1	6/19/24 2:30	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/19/24 2:30	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/19/24 2:30	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/19/24 2:30	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/19/24 2:30	DFH
Chloromethane	0.28	0.20	0.50	C, J	0.58	0.41	1.0	1	1	6/19/24 2:30	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/19/24 2:30	DFH



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## Certificate of Analysis

Final Report

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Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0617OS010

Project Location:

Sample ID: 24F0971-07

Canister ID: 063-00471::15034

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/17/2024 08:42

Flow Controller ID: 063-00901::GS048

Receipt Vacuum(in Hg): 2.6

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/19/24 2:30	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/19/24 2:30	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/19/24 2:30	DFH
Dichlorodifluoromethane	ND	0.50	0.50	C, U	ND	2.5	2.5	1	1	6/19/24 2:30	DFH
Ethanol	6.93	0.20	0.50		13	0.38	0.94	1	1	6/19/24 2:30	DFH
Ethyl acetate	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/19/24 2:30	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/19/24 2:30	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/19/24 2:30	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/19/24 2:30	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/19/24 2:30	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/19/24 2:30	DFH
Isopropyl alcohol	18.6	0.20	0.50		46	0.49	1.2	1	1	6/19/24 2:30	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 2:30	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/19/24 2:30	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/19/24 2:30	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/19/24 2:30	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	C, U	ND	0.72	1.8	1	1	6/19/24 2:30	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 2:30	DFH
n-Butane (C4)	0.65	0.20	0.50		1.5	0.48	1.2	1	1	6/19/24 2:30	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 2:30	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 2:30	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/19/24 2:30	DFH
n-Pentane (C5)	0.58	0.20	0.50		1.7	0.59	1.5	1	1	6/19/24 2:30	DFH
Propylene	ND	1.00	1.00	C, U	ND	1.7	1.7	1	1	6/19/24 2:30	DFH
Styrene	0.27	0.20	0.50	J	1.2	0.85	2.1	1	1	6/19/24 2:30	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/19/24 2:30	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/19/24 2:30	DFH
Tetrahydrofuran	0.27	0.20	0.50	J	0.80	0.59	1.5	1	1	6/19/24 2:30	DFH
Toluene	ND	0.20	0.50	U	ND	0.75	1.9	1	1	6/19/24 2:30	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

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5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0617OS010

Project Location:

Sample ID: 24F0971-07

Canister ID: 063-00471::15034

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/17/2024 08:42

Flow Controller ID: 063-00901::GS048

Receipt Vacuum(in Hg): 2.6

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/19/24 2:30	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/19/24 2:30	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/19/24 2:30	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/19/24 2:30	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/19/24 2:30	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/19/24 2:30	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/19/24 2:30	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/19/24 2:30	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			99.2				80-120			6/19/24 2:30	



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5120 Northshore Drive

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Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0615UW001

Project Location:

Sample ID: 24F0971-08

Canister ID: 063-00290::13436

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/15/2024 18:09

Flow Controller ID: 063-00889::GS037

Receipt Vacuum(in Hg): 3.4

Sample Type: AA

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 17:58	DFH
Hydrogen Sulfide, as received	ND	10.0	10.0	U	ND	14	14	1	1	6/19/24 17:58	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 17:58	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/19/24 17:58	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 17:58	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 17:58	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 17:58	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 17:58	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/19/24 17:58	DFH
Total Reduced Sulfurs, as received	ND	10.0	10.0	U	ND	14	14	1	1	6/19/24 17:58	DFH
Surrogate(s)	% Recovery			% Recovery Limits							
1,4-Difluorobenzene (Surr), as received	93.4			80-120						6/19/24 17:58	
1,4-Difluorobenzene (Surr), as received	99.0			80-120						6/19/24 17:58	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/19/24 3:23	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/19/24 3:23	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/19/24 3:23	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/19/24 3:23	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/19/24 3:23	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/19/24 3:23	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/19/24 3:23	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/19/24 3:23	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 3:23	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/19/24 3:23	DFH



## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0615UW001

Project Location:

Sample ID: 24F0971-08

Canister ID: 063-00290::13436

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/15/2024 18:09

Flow Controller ID: 063-00889::GS037

Receipt Vacuum(in Hg): 3.4

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/19/24 3:23	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/19/24 3:23	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/19/24 3:23	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/19/24 3:23	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 3:23	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/19/24 3:23	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/19/24 3:23	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/19/24 3:23	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/19/24 3:23	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 3:23	DFH
2-Butanone (MEK)	0.57	0.20	0.50		1.7	0.59	1.5	1	1	6/19/24 3:23	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 3:23	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/19/24 3:23	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/19/24 3:23	DFH
Acetone	3.66	0.20	0.50		8.7	0.48	1.2	1	1	6/19/24 3:23	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/19/24 3:23	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/19/24 3:23	DFH
Benzene	ND	0.20	0.50	U	ND	0.64	1.6	1	1	6/19/24 3:23	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 3:23	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/19/24 3:23	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/19/24 3:23	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/19/24 3:23	DFH
Carbon Disulfide	ND	0.50	0.50	U	ND	1.6	1.6	1	1	6/19/24 3:23	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/19/24 3:23	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/19/24 3:23	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/19/24 3:23	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/19/24 3:23	DFH
Chloromethane	0.28	0.20	0.50	C, J	0.58	0.41	1.0	1	1	6/19/24 3:23	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/19/24 3:23	DFH



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## Certificate of Analysis

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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0615UW001

Project Location:

Sample ID: 24F0971-08

Canister ID: 063-00290::13436

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/15/2024 18:09

Flow Controller ID: 063-00889::GS037

Receipt Vacuum(in Hg): 3.4

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/19/24 3:23	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/19/24 3:23	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/19/24 3:23	DFH
Dichlorodifluoromethane	ND	0.50	0.50	C, U	ND	2.5	2.5	1	1	6/19/24 3:23	DFH
Ethanol	37.2	1.20	3.00		70	2.3	5.7	6	1	6/19/24 11:41	DFH
Ethyl acetate	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/19/24 3:23	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/19/24 3:23	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/19/24 3:23	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/19/24 3:23	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/19/24 3:23	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/19/24 3:23	DFH
Isopropyl alcohol	4.34	0.20	0.50		11	0.49	1.2	1	1	6/19/24 3:23	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 3:23	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/19/24 3:23	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/19/24 3:23	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/19/24 3:23	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	C, U	ND	0.72	1.8	1	1	6/19/24 3:23	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 3:23	DFH
n-Butane (C4)	ND	0.20	0.50	U	ND	0.48	1.2	1	1	6/19/24 3:23	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 3:23	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 3:23	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/19/24 3:23	DFH
n-Pentane (C5)	ND	0.20	0.50	U	ND	0.59	1.5	1	1	6/19/24 3:23	DFH
Propylene	ND	1.00	1.00	C, U	ND	1.7	1.7	1	1	6/19/24 3:23	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/19/24 3:23	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/19/24 3:23	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/19/24 3:23	DFH
Tetrahydrofuran	0.73	0.20	0.50		2.2	0.59	1.5	1	1	6/19/24 3:23	DFH
Toluene	ND	0.20	0.50	U	ND	0.75	1.9	1	1	6/19/24 3:23	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0615UW001

Project Location:

Sample ID: 24F0971-08

Canister ID: 063-00290::13436

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/15/2024 18:09

Flow Controller ID: 063-00889::GS037

Receipt Vacuum(in Hg): 3.4

Sample Type: AA

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/19/24 3:23	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/19/24 3:23	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/19/24 3:23	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/19/24 3:23	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/19/24 3:23	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/19/24 3:23	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/19/24 3:23	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/19/24 3:23	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			95.4			80-120				6/19/24 11:41	
4-Bromofluorobenzene (Surr)			99.4			80-120				6/19/24 3:23	



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5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0615OS005

Project Location:

Sample ID: 24F0971-09

Canister ID: 063-00372::13957

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/15/2024 11:27

Flow Controller ID: 063-00890::GS038

Receipt Vacuum(in Hg): 4.0

Sample Type: AA

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 18:39	DFH
Hydrogen Sulfide, as received	39.1	10.0	10.0		55	14	14	1	1	6/19/24 18:39	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 18:39	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/19/24 18:39	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 18:39	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 18:39	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 18:39	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 18:39	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/19/24 18:39	DFH
Total Reduced Sulfurs, as received	39.1	10.0	10.0		55	14	14	1	1	6/19/24 18:39	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
1,4-Difluorobenzene (Surr), as received			94.0				80-120			6/19/24 18:39	
1,4-Difluorobenzene (Surr), as received			99.7				80-120			6/19/24 18:39	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/19/24 4:16	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/19/24 4:16	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/19/24 4:16	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/19/24 4:16	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/19/24 4:16	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/19/24 4:16	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/19/24 4:16	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/19/24 4:16	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 4:16	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/19/24 4:16	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0615OS005

Project Location:

Sample ID: 24F0971-09

Canister ID: 063-00372::13957

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/15/2024 11:27

Flow Controller ID: 063-00890::GS038

Receipt Vacuum(in Hg): 4.0

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/19/24 4:16	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/19/24 4:16	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/19/24 4:16	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/19/24 4:16	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 4:16	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/19/24 4:16	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/19/24 4:16	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/19/24 4:16	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/19/24 4:16	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 4:16	DFH
2-Butanone (MEK)	0.22	0.20	0.50	J	0.65	0.59	1.5	1	1	6/19/24 4:16	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 4:16	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/19/24 4:16	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/19/24 4:16	DFH
Acetone	2.33	0.20	0.50		5.5	0.48	1.2	1	1	6/19/24 4:16	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/19/24 4:16	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/19/24 4:16	DFH
Benzene	ND	0.20	0.50	U	ND	0.64	1.6	1	1	6/19/24 4:16	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 4:16	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/19/24 4:16	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/19/24 4:16	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/19/24 4:16	DFH
Carbon Disulfide	0.60	0.50	0.50		1.9	1.6	1.6	1	1	6/19/24 4:16	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/19/24 4:16	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/19/24 4:16	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/19/24 4:16	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/19/24 4:16	DFH
Chloromethane	0.32	0.20	0.50	C, J	0.66	0.41	1.0	1	1	6/19/24 4:16	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/19/24 4:16	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0615OS005

Project Location:

Sample ID: 24F0971-09

Canister ID: 063-00372::13957

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/15/2024 11:27

Flow Controller ID: 063-00890::GS038

Receipt Vacuum(in Hg): 4.0

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/19/24 4:16	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/19/24 4:16	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/19/24 4:16	DFH
Dichlorodifluoromethane	ND	0.50	0.50	C, U	ND	2.5	2.5	1	1	6/19/24 4:16	DFH
Ethanol	5.59	0.20	0.50		11	0.38	0.94	1	1	6/19/24 4:16	DFH
Ethyl acetate	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/19/24 4:16	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/19/24 4:16	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/19/24 4:16	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/19/24 4:16	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/19/24 4:16	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/19/24 4:16	DFH
Isopropyl alcohol	2.94	0.20	0.50		7.2	0.49	1.2	1	1	6/19/24 4:16	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 4:16	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/19/24 4:16	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/19/24 4:16	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/19/24 4:16	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	C, U	ND	0.72	1.8	1	1	6/19/24 4:16	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 4:16	DFH
n-Butane (C4)	0.24	0.20	0.50	J	0.57	0.48	1.2	1	1	6/19/24 4:16	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 4:16	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 4:16	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/19/24 4:16	DFH
n-Pentane (C5)	ND	0.20	0.50	U	ND	0.59	1.5	1	1	6/19/24 4:16	DFH
Propylene	ND	1.00	1.00	C, U	ND	1.7	1.7	1	1	6/19/24 4:16	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/19/24 4:16	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/19/24 4:16	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/19/24 4:16	DFH
Tetrahydrofuran	ND	0.20	0.50	U	ND	0.59	1.5	1	1	6/19/24 4:16	DFH
Toluene	ND	0.20	0.50	U	ND	0.75	1.9	1	1	6/19/24 4:16	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06150S005

Project Location:

Sample ID: 24F0971-09

Canister ID: 063-00372::13957

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/15/2024 11:27

Flow Controller ID: 063-00890::GS038

Receipt Vacuum(in Hg): 4.0

Sample Type: AA

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/19/24 4:16	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/19/24 4:16	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/19/24 4:16	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/19/24 4:16	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/19/24 4:16	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/19/24 4:16	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/19/24 4:16	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/19/24 4:16	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			103				80-120			6/19/24 4:16	

## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0615OS008

Project Location:

Sample ID: 24F0971-10

Canister ID: 063-00215::10221

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/15/2024 17:40

Flow Controller ID: 063-00891::GS039

Receipt Vacuum(in Hg): 3.8

Sample Type: AA

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 19:20	DFH
Hydrogen Sulfide, as received	205	30.0	30.0		290	42	42	3	1	6/20/24 9:01	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 19:20	DFH
Dimethyl disulfide, as received	23.0	10.0	10.0		88	39	39	1	1	6/19/24 19:20	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 19:20	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 19:20	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 19:20	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 19:20	DFH
Methyl mercaptan, as received	19.6	10.0	10.0		39	20	20	1	1	6/19/24 19:20	DFH
Total Reduced Sulfurs, as received	271	30.0	30.0		380	42	42	3	1	6/20/24 9:01	DFH

Surrogate(s)	% Recovery	% Recovery Limits	Date/Time Analyzed
1,4-Difluorobenzene (Surr), as received	93.8	80-120	6/20/24 9:01
1,4-Difluorobenzene (Surr), as received	97.1	80-120	6/19/24 19:20
1,4-Difluorobenzene (Surr), as received	103	80-120	6/19/24 19:20

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/19/24 5:09	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/19/24 5:09	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/19/24 5:09	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/19/24 5:09	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/19/24 5:09	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/19/24 5:09	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/19/24 5:09	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/19/24 5:09	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 5:09	DFH





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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06150S008

Project Location:

Sample ID: 24F0971-10

Canister ID: 063-00215::10221

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/15/2024 17:40

Flow Controller ID: 063-00891::GS039

Receipt Vacuum(in Hg): 3.8

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/19/24 5:09	DFH
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/19/24 5:09	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/19/24 5:09	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/19/24 5:09	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/19/24 5:09	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 5:09	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/19/24 5:09	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/19/24 5:09	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/19/24 5:09	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/19/24 5:09	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 5:09	DFH
2-Butanone (MEK)	8.44	0.20	0.50		25	0.59	1.5	1	1	6/19/24 5:09	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 5:09	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/19/24 5:09	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/19/24 5:09	DFH
Acetone	17.0	0.20	0.50		40	0.48	1.2	1	1	6/19/24 5:09	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/19/24 5:09	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/19/24 5:09	DFH
Benzene	1.12	0.20	0.50		3.6	0.64	1.6	1	1	6/19/24 5:09	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 5:09	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/19/24 5:09	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/19/24 5:09	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/19/24 5:09	DFH
Carbon Disulfide	1.72	0.50	0.50		5.4	1.6	1.6	1	1	6/19/24 5:09	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/19/24 5:09	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/19/24 5:09	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/19/24 5:09	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/19/24 5:09	DFH
Chloromethane	0.32	0.20	0.50	C, J	0.66	0.41	1.0	1	1	6/19/24 5:09	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0615OS008

Project Location:

Sample ID: 24F0971-10

Canister ID: 063-00215::10221

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/15/2024 17:40

Flow Controller ID: 063-00891::GS039

Receipt Vacuum(in Hg): 3.8

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/19/24 5:09	DFH
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/19/24 5:09	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/19/24 5:09	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/19/24 5:09	DFH
Dichlorodifluoromethane	ND	0.50	0.50	C, U	ND	2.5	2.5	1	1	6/19/24 5:09	DFH
Ethanol	42.8	1.20	3.00		81	2.3	5.7	6	1	6/19/24 12:31	DFH
Ethyl acetate	0.47	0.20	0.50	J	1.7	0.72	1.8	1	1	6/19/24 5:09	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/19/24 5:09	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/19/24 5:09	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/19/24 5:09	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/19/24 5:09	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/19/24 5:09	DFH
Isopropyl alcohol	8.67	0.20	0.50		21	0.49	1.2	1	1	6/19/24 5:09	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 5:09	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/19/24 5:09	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/19/24 5:09	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/19/24 5:09	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	C, U	ND	0.72	1.8	1	1	6/19/24 5:09	DFH
Naphthalene	0.41	0.20	0.50	J	2.1	1.0	2.6	1	1	6/19/24 5:09	DFH
n-Butane (C4)	0.20	0.20	0.50	J	0.48	0.48	1.2	1	1	6/19/24 5:09	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 5:09	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 5:09	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/19/24 5:09	DFH
n-Pentane (C5)	ND	0.20	0.50	U	ND	0.59	1.5	1	1	6/19/24 5:09	DFH
Propylene	ND	1.00	1.00	C, U	ND	1.7	1.7	1	1	6/19/24 5:09	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/19/24 5:09	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/19/24 5:09	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/19/24 5:09	DFH
Tetrahydrofuran	4.94	0.20	0.50		15	0.59	1.5	1	1	6/19/24 5:09	DFH



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## Certificate of Analysis

Final Report

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5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA06150S008

Project Location:

Sample ID: 24F0971-10

Canister ID: 063-00215::10221

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/15/2024 17:40

Flow Controller ID: 063-00891::GS039

Receipt Vacuum(in Hg): 3.8

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ			Results	MDL	LOQ				
Toluene	ND	0.20	0.50	U	ND	0.75	1.9	1	1	6/19/24 5:09	DFH	
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/19/24 5:09	DFH	
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/19/24 5:09	DFH	
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/19/24 5:09	DFH	
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/19/24 5:09	DFH	
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/19/24 5:09	DFH	
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/19/24 5:09	DFH	
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/19/24 5:09	DFH	
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/19/24 5:09	DFH	

Surrogate(s)	% Recovery	% Recovery Limits	Date/Time Analyzed
4-Bromofluorobenzene (Surr)	97.2	80-120	6/19/24 12:31
4-Bromofluorobenzene (Surr)	107	80-120	6/19/24 5:09

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5120 Northshore Drive

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Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0616UW001

Project Location:

Sample ID: 24F0971-11

Canister ID: 063-00050::12417

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/16/2024 09:04

Flow Controller ID: 063-00892::GS040

Receipt Vacuum(in Hg): 2.8

Sample Type: AA

Flow Controller Type: Passive

#### Sulfur Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
Carbon Disulfide, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 20:02	DFH
Hydrogen Sulfide, as received	ND	10.0	10.0	U	ND	14	14	1	1	6/19/24 20:02	DFH
1-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 20:02	DFH
Dimethyl disulfide, as received	ND	10.0	10.0	U	ND	39	39	1	1	6/19/24 20:02	DFH
2-Propanethiol, as received	ND	10.0	10.0	U	ND	31	31	1	1	6/19/24 20:02	DFH
Carbonyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 20:02	DFH
Dimethyl sulfide, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 20:02	DFH
Ethyl mercaptan, as received	ND	10.0	10.0	U	ND	25	25	1	1	6/19/24 20:02	DFH
Methyl mercaptan, as received	ND	10.0	10.0	U	ND	20	20	1	1	6/19/24 20:02	DFH
Total Reduced Sulfurs, as received	ND	10.0	10.0	U	ND	14	14	1	1	6/19/24 20:02	DFH
Surrogate(s)	% Recovery			% Recovery Limits							
1,4-Difluorobenzene (Surr), as received	93.6			80-120						6/19/24 20:02	
1,4-Difluorobenzene (Surr), as received	99.2			80-120						6/19/24 20:02	

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,1,1-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/19/24 6:02	DFH
1,1,1,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/19/24 6:02	DFH
1,1,2,2-Tetrachloroethane	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/19/24 6:02	DFH
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/19/24 6:02	DFH
1,1,2-Trichloroethane	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/19/24 6:02	DFH
1,1-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/19/24 6:02	DFH
1,1-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/19/24 6:02	DFH
1,2,4-Trichlorobenzene	ND	0.20	0.50	U	ND	1.5	3.7	1	1	6/19/24 6:02	DFH
1,2,4-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 6:02	DFH
1,2-Dibromoethane (EDB)	ND	0.20	0.50	U	ND	1.5	3.8	1	1	6/19/24 6:02	DFH



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## Certificate of Analysis

Final Report

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Date Received: June 18, 2024 10:13  
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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0616UW001

Project Location:

Sample ID: 24F0971-11

Canister ID: 063-00050::12417

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/16/2024 09:04

Flow Controller ID: 063-00892::GS040

Receipt Vacuum(in Hg): 2.8

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv			Flag/Qual	ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ		Results	MDL	LOQ				
1,2-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/19/24 6:02	DFH
1,2-Dichloroethane	ND	0.20	0.50	U	ND	0.81	2.0	1	1	6/19/24 6:02	DFH
1,2-Dichloropropane	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/19/24 6:02	DFH
1,2-Dichlorotetrafluoroethane	ND	0.20	0.50	U	ND	1.4	3.5	1	1	6/19/24 6:02	DFH
1,3,5-Trimethylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 6:02	DFH
1,3-Butadiene	ND	0.20	0.50	U	ND	0.44	1.1	1	1	6/19/24 6:02	DFH
1,3-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/19/24 6:02	DFH
1,4-Dichlorobenzene	ND	0.20	0.50	U	ND	1.2	3.0	1	1	6/19/24 6:02	DFH
1,4-Dioxane	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/19/24 6:02	DFH
1-Ethyl-4-methyl benzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 6:02	DFH
2-Butanone (MEK)	0.39	0.20	0.50	J	1.2	0.59	1.5	1	1	6/19/24 6:02	DFH
2-Chlorotoluene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 6:02	DFH
2-Hexanone (MBK)	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/19/24 6:02	DFH
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.50	U	ND	2.3	5.7	1	1	6/19/24 6:02	DFH
Acetone	3.13	0.20	0.50		7.4	0.48	1.2	1	1	6/19/24 6:02	DFH
Acrolein	ND	0.40	0.50	U	ND	0.92	1.1	1	1	6/19/24 6:02	DFH
Allyl chloride	ND	0.20	0.50	U	ND	0.63	1.6	1	1	6/19/24 6:02	DFH
Benzene	ND	0.20	0.50	U	ND	0.64	1.6	1	1	6/19/24 6:02	DFH
Benzyl Chloride	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 6:02	DFH
Bromodichloromethane	ND	0.20	0.50	U	ND	1.3	3.4	1	1	6/19/24 6:02	DFH
Bromoform	ND	0.20	0.50	U	ND	2.1	5.2	1	1	6/19/24 6:02	DFH
Bromomethane	ND	0.20	0.50	U	ND	0.78	1.9	1	1	6/19/24 6:02	DFH
Carbon Disulfide	1.29	0.50	0.50		4.0	1.6	1.6	1	1	6/19/24 6:02	DFH
Carbon Tetrachloride	ND	0.20	0.50	U	ND	1.3	3.1	1	1	6/19/24 6:02	DFH
Chlorobenzene	ND	0.20	0.50	U	ND	0.92	2.3	1	1	6/19/24 6:02	DFH
Chloroethane	ND	0.20	0.50	U	ND	0.53	1.3	1	1	6/19/24 6:02	DFH
Chloroform	ND	0.20	0.50	U	ND	0.98	2.4	1	1	6/19/24 6:02	DFH
Chloromethane	0.29	0.20	0.50	C, J	0.60	0.41	1.0	1	1	6/19/24 6:02	DFH
cis-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/19/24 6:02	DFH



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0616UW001

Project Location:

Sample ID: 24F0971-11

Canister ID: 063-00050::12417

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/16/2024 09:04

Flow Controller ID: 063-00892::GS040

Receipt Vacuum(in Hg): 2.8

Sample Type: AA

Flow Controller Type: Passive

### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
cis-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/19/24 6:02	DFH
Cyclohexane	ND	0.20	0.50	U	ND	0.69	1.7	1	1	6/19/24 6:02	DFH
Dibromochloromethane	ND	0.20	0.50	U	ND	1.7	4.3	1	1	6/19/24 6:02	DFH
Dichlorodifluoromethane	ND	0.50	0.50	C, U	ND	2.5	2.5	1	1	6/19/24 6:02	DFH
Ethanol	2.81	0.20	0.50		5.3	0.38	0.94	1	1	6/19/24 6:02	DFH
Ethyl acetate	ND	0.20	0.50	U	ND	0.72	1.8	1	1	6/19/24 6:02	DFH
Ethylbenzene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/19/24 6:02	DFH
Heptane	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/19/24 6:02	DFH
Hexachlorobutadiene	ND	0.20	0.50	U	ND	2.1	5.3	1	1	6/19/24 6:02	DFH
Hexane	ND	0.20	0.50	U	ND	0.70	1.8	1	1	6/19/24 6:02	DFH
Isooctane	ND	0.20	0.50	U	ND	0.93	2.3	1	1	6/19/24 6:02	DFH
Isopropyl alcohol	0.59	0.20	0.50		1.5	0.49	1.2	1	1	6/19/24 6:02	DFH
Isopropylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 6:02	DFH
m+p-Xylenes	ND	0.40	1.00	U	ND	1.7	4.3	1	1	6/19/24 6:02	DFH
Methyl methacrylate	ND	0.20	0.50	U	ND	0.82	2.0	1	1	6/19/24 6:02	DFH
Methylene chloride	ND	0.50	1.00	U	ND	1.7	3.5	1	1	6/19/24 6:02	DFH
Methyl-t-butyl ether (MTBE)	ND	0.20	0.50	C, U	ND	0.72	1.8	1	1	6/19/24 6:02	DFH
Naphthalene	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 6:02	DFH
n-Butane (C4)	0.28	0.20	0.50	J	0.67	0.48	1.2	1	1	6/19/24 6:02	DFH
n-Nonane (C9)	ND	0.20	0.50	U	ND	1.0	2.6	1	1	6/19/24 6:02	DFH
n-Propylbenzene	ND	0.20	0.50	U	ND	0.98	2.5	1	1	6/19/24 6:02	DFH
o-Xylene	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/19/24 6:02	DFH
n-Pentane (C5)	ND	0.20	0.50	U	ND	0.59	1.5	1	1	6/19/24 6:02	DFH
Propylene	ND	1.00	1.00	C, U	ND	1.7	1.7	1	1	6/19/24 6:02	DFH
Styrene	ND	0.20	0.50	U	ND	0.85	2.1	1	1	6/19/24 6:02	DFH
TBA	ND	0.50	0.50	U	ND	1.5	1.5	1	1	6/19/24 6:02	DFH
Tetrachloroethylene (PCE)	ND	0.20	0.50	U	ND	1.4	3.4	1	1	6/19/24 6:02	DFH
Tetrahydrofuran	ND	0.20	0.50	U	ND	0.59	1.5	1	1	6/19/24 6:02	DFH
Toluene	ND	0.20	0.50	U	ND	0.75	1.9	1	1	6/19/24 6:02	DFH



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5120 Northshore Drive

Date Received: June 18, 2024 10:13  
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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### ANALYTICAL RESULTS

Field Sample #: CACA0616UW001

Project Location:

Sample ID: 24F0971-11

Canister ID: 063-00050::12417

Initial Vacuum(in Hg): 30

Sample Matrix: Air

Canister Size: 1.4

Final Vacuum(in Hg):

Sampled: 6/16/2024 09:04

Flow Controller ID: 063-00892::GS040

Receipt Vacuum(in Hg): 2.8

Sample Type: AA

Flow Controller Type: Passive

#### Volatile Organic Compounds by GCMS EPA TO-15

Analyte	ppbv				ug/M <sup>3</sup>			Dilution	PF	Date/Time Analyzed	Analyst
	Results	MDL	LOQ	Flag/Qual	Results	MDL	LOQ				
trans-1,2-Dichloroethylene	ND	0.20	0.50	U	ND	0.79	2.0	1	1	6/19/24 6:02	DFH
trans-1,3-Dichloropropene	ND	0.20	0.50	U	ND	0.91	2.3	1	1	6/19/24 6:02	DFH
Trichloroethylene	ND	0.20	0.50	U	ND	1.1	2.7	1	1	6/19/24 6:02	DFH
Trichlorofluoromethane	ND	0.50	0.50	U	ND	2.8	2.8	1	1	6/19/24 6:02	DFH
Vinyl acetate	ND	0.20	0.50	C, U	ND	0.70	1.8	1	1	6/19/24 6:02	DFH
Vinyl bromide	ND	0.20	0.50	U	ND	0.87	2.2	1	1	6/19/24 6:02	DFH
Vinyl chloride	ND	0.20	0.50	U	ND	0.51	1.3	1	1	6/19/24 6:02	DFH
Xylenes, Total	ND	0.60	1.50	U	ND	2.6	6.5	1	1	6/19/24 6:02	DFH
Surrogate(s)	% Recovery				% Recovery Limits						
4-Bromofluorobenzene (Surr)			99.8				80-120			6/19/24 6:02	



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Purchase Order: PROJ-036688

### Analytical Summary

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
<b>Sulfur Volatile Organic Compounds by GCMS</b>			<b>Preparation Method:</b>	<b>No Prep VOC Air</b>	
24F0971-01	100 mL / 100 mL	EPA TO-15	BHF0663	SHF0631	AF40193
24F0971-02	100 mL / 100 mL	EPA TO-15	BHF0663	SHF0631	AF40193
24F0971-03	100 mL / 100 mL	EPA TO-15	BHF0663	SHF0631	AF40193
24F0971-04	100 mL / 100 mL	EPA TO-15	BHF0663	SHF0631	AF40193
24F0971-06	100 mL / 100 mL	EPA TO-15	BHF0663	SHF0631	AF40193
24F0971-07	100 mL / 100 mL	EPA TO-15	BHF0663	SHF0631	AF40193
24F0971-08	100 mL / 100 mL	EPA TO-15	BHF0663	SHF0631	AF40193
24F0971-09	100 mL / 100 mL	EPA TO-15	BHF0663	SHF0631	AF40193
24F0971-10	100 mL / 100 mL	EPA TO-15	BHF0663	SHF0631	AF40193
24F0971-10RE1	100 mL / 100 mL	EPA TO-15	BHF0663	SHF0631	AF40193
24F0971-11	100 mL / 100 mL	EPA TO-15	BHF0663	SHF0631	AF40193
24F0971-01	100 mL / 100 mL	EPA TO-15	BHF0664	SHF0633	AF40197
24F0971-02	100 mL / 100 mL	EPA TO-15	BHF0664	SHF0633	AF40197
24F0971-03	100 mL / 100 mL	EPA TO-15	BHF0664	SHF0633	AF40197
24F0971-04	100 mL / 100 mL	EPA TO-15	BHF0664	SHF0633	AF40197
24F0971-06	100 mL / 100 mL	EPA TO-15	BHF0664	SHF0633	AF40197
24F0971-07	100 mL / 100 mL	EPA TO-15	BHF0664	SHF0633	AF40197
24F0971-08	100 mL / 100 mL	EPA TO-15	BHF0664	SHF0633	AF40197
24F0971-09	100 mL / 100 mL	EPA TO-15	BHF0664	SHF0633	AF40197
24F0971-10	100 mL / 100 mL	EPA TO-15	BHF0664	SHF0633	AF40197
24F0971-11	100 mL / 100 mL	EPA TO-15	BHF0664	SHF0633	AF40197

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
<b>Volatile Organic Compounds by GCMS</b>			<b>Preparation Method:</b>	<b>No Prep VOC Air</b>	
24F0971-01	400 mL / 400 mL	EPA TO-15	BHF0662	SHF0630	AF40163
24F0971-02	400 mL / 400 mL	EPA TO-15	BHF0662	SHF0630	AF40163
24F0971-03	400 mL / 400 mL	EPA TO-15	BHF0662	SHF0630	AF40163
24F0971-04	400 mL / 400 mL	EPA TO-15	BHF0662	SHF0630	AF40163
24F0971-04RE1	400 mL / 400 mL	EPA TO-15	BHF0662	SHF0630	AF40163
24F0971-06	400 mL / 400 mL	EPA TO-15	BHF0662	SHF0630	AF40163
24F0971-07	400 mL / 400 mL	EPA TO-15	BHF0662	SHF0630	AF40163
24F0971-08	400 mL / 400 mL	EPA TO-15	BHF0662	SHF0630	AF40163
24F0971-08RE1	400 mL / 400 mL	EPA TO-15	BHF0662	SHF0630	AF40163
24F0971-09	400 mL / 400 mL	EPA TO-15	BHF0662	SHF0630	AF40163
24F0971-10	400 mL / 400 mL	EPA TO-15	BHF0662	SHF0630	AF40163





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### Certificate of Analysis

Final Report

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5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

Sample ID	Preparation Factors Initial / Final	Method	Batch ID	Sequence ID	Calibration ID
<b>Volatile Organic Compounds by GCMS</b>			<b>Preparation Method:</b>	<b>No Prep VOC Air</b>	
24F0971-10RE1	400 mL / 400 mL	EPA TO-15	BHF0662	SHF0630	AF40163
24F0971-11	400 mL / 400 mL	EPA TO-15	BHF0662	SHF0630	AF40163



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### Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source		%REC		RPD		Qual
	Result	Limit		Units	Result	%REC	Limits	RPD	Limit	

#### Batch BHF0662 - No Prep VOC Air

##### Blank (BHF0662-BLK1)

Prepared & Analyzed: 06/18/2024

1,1,1-Trichloroethane	<	0.50	ppbv							U
1,1,1,2-Tetrachloroethane	<	0.50	ppbv							U
1,1,2,2-Tetrachloroethane	<	0.50	ppbv							U
1,1,2-Trichloro-1,2,2-trifluoroethane	<	0.50	ppbv							U
1,1,2-Trichloroethane	<	0.50	ppbv							U
1,1-Dichloroethane	<	0.50	ppbv							U
1,1-Dichloroethylene	<	0.50	ppbv							U
1,2,4-Trimethylbenzene	<	0.50	ppbv							U
1,2-Dibromoethane (EDB)	<	0.50	ppbv							U
1,2-Dichlorobenzene	<	0.50	ppbv							U
1,2-Dichloroethane	<	0.50	ppbv							U
1,2-Dichloropropane	<	0.50	ppbv							U
1,2-Dichlorotetrafluoroethane	<	0.50	ppbv							U
1,3,5-Trimethylbenzene	<	0.50	ppbv							U
1,3-Butadiene	<	0.50	ppbv							U
1,3-Dichlorobenzene	<	0.50	ppbv							U
1,4-Dichlorobenzene	<	0.50	ppbv							U
1,4-Dioxane	<	0.50	ppbv							U
2-Butanone (MEK)	<	0.50	ppbv							U
2-Chlorotoluene	<	0.50	ppbv							U
2-Hexanone (MBK)	<	0.50	ppbv							U
4-Methyl-2-pentanone (MIBK)	<	0.50	ppbv							U
Allyl chloride	<	0.50	ppbv							U
Benzene	<	0.50	ppbv							U
Benzyl Chloride	<	0.50	ppbv							U
Bromoform	<	0.50	ppbv							U
Bromomethane	<	0.50	ppbv							U
Carbon Disulfide	<	0.50	ppbv							U
Carbon Tetrachloride	<	0.50	ppbv							U
Chlorobenzene	<	0.50	ppbv							U
Chloroethane	<	0.50	ppbv							U



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### Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source Result	%REC		RPD	Qual
	Result	Limit			Units	%REC		

#### Batch BHF0662 - No Prep VOC Air

##### Blank (BHF0662-BLK1)

Prepared & Analyzed: 06/18/2024

Chloroform	<	0.50	ppbv					U
Chloromethane	<	0.50	ppbv					U
cis-1,2-Dichloroethylene	<	0.50	ppbv					U
cis-1,3-Dichloropropene	<	0.50	ppbv					U
Cyclohexane	<	0.50	ppbv					U
Dibromochloromethane	<	0.50	ppbv					U
Dichlorodifluoromethane	<	0.50	ppbv					U
Ethyl acetate	<	0.50	ppbv					U
Ethylbenzene	<	0.50	ppbv					U
Heptane	<	0.50	ppbv					U
Hexachlorobutadiene	<	0.50	ppbv					U
Hexane	<	0.50	ppbv					U
Isopropylbenzene	<	0.50	ppbv					U
m+p-Xylenes	<	1.00	ppbv					U
Methyl methacrylate	<	0.50	ppbv					U
Methylene chloride	<	1.00	ppbv					U
Methyl-t-butyl ether (MTBE)	<	0.50	ppbv					U
Naphthalene	<	0.50	ppbv					U
o-Xylene	<	0.50	ppbv					U
Propylene	<	1.00	ppbv					U
Styrene	<	0.50	ppbv					U
TBA	<	0.50	ppbv					U
Tetrachloroethylene (PCE)	<	0.50	ppbv					U
Tetrahydrofuran	<	0.50	ppbv					U
Toluene	<	0.50	ppbv					U
trans-1,2-Dichloroethylene	<	0.50	ppbv					U
trans-1,3-Dichloropropene	<	0.50	ppbv					U
Trichloroethylene	<	0.50	ppbv					U
Trichlorofluoromethane	<	0.50	ppbv					U
Vinyl acetate	<	0.50	ppbv					U
Vinyl bromide	<	0.50	ppbv					U
Vinyl chloride	<	0.50	ppbv					U
Xylenes, Total	<	1.50	ppbv					U



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### Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BHF0662 - No Prep VOC Air

##### Blank (BHF0662-BLK1)

Prepared & Analyzed: 06/18/2024

Surr: 4-Bromofluorobenzene (Surr)	4.90		ppbv	5.00	98.0	80-120			
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##### LCS (BHF0662-BS1)

Prepared & Analyzed: 06/18/2024

1,1,1-Trichloroethane	3.81	0.5	ppbv	5.00	76.2	70-130			
1,1,1,2-Tetrachloroethane	4.86	0.5	ppbv	5.00	97.2	70-130			
1,1,2,2-Tetrachloroethane	5.37	0.5	ppbv	5.00	107	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane	4.53	0.5	ppbv	5.00	90.6	70-130			
1,1,2-Trichloroethane	4.19	0.5	ppbv	5.00	83.8	70-130			
1,1-Dichloroethane	3.60	0.5	ppbv	5.00	72.0	70-130			
1,1-Dichloroethylene	4.59	0.5	ppbv	5.00	91.8	70-130			
1,2,4-Trimethylbenzene	4.98	0.5	ppbv	5.00	99.6	70-130			
1,2-Dibromoethane (EDB)	4.91	0.5	ppbv	5.00	98.2	70-130			
1,2-Dichlorobenzene	5.09	0.5	ppbv	5.00	102	70-130			
1,2-Dichloroethane	3.81	0.5	ppbv	5.00	76.2	70-130			
1,2-Dichloropropane	4.10	0.5	ppbv	5.00	82.0	70-130			
1,2-Dichlorotetrafluoroethane	4.62	0.5	ppbv	5.00	92.4	70-130			
1,3,5-Trimethylbenzene	5.11	0.5	ppbv	5.00	102	70-130			
1,3-Butadiene	4.01	0.5	ppbv	5.00	80.2	70-130			
1,3-Dichlorobenzene	4.59	0.5	ppbv	5.00	91.8	70-130			
1,4-Dichlorobenzene	4.31	0.5	ppbv	5.00	86.2	70-130			
1,4-Dioxane	4.25	0.5	ppbv	5.00	85.0	70-130			
2-Butanone (MEK)	3.62	0.5	ppbv	5.00	72.4	70-130			
2-Chlorotoluene	5.00	0.5	ppbv	5.00	100	70-130			
2-Hexanone (MBK)	4.23	0.5	ppbv	5.00	84.6	70-130			
4-Methyl-2-pentanone (MIBK)	4.01	0.5	ppbv	5.00	80.2	70-130			
Allyl chloride	4.47	0.5	ppbv	5.00	89.4	70-130			
Benzene	4.02	0.5	ppbv	5.00	80.4	70-130			
Benzyl Chloride	3.42	0.5	ppbv	5.00	68.4	70-130			L
Bromoform	5.05	0.5	ppbv	5.00	101	70-130			
Bromomethane	5.03	0.5	ppbv	5.00	101	70-130			
Carbon Disulfide	4.63	0.5	ppbv	5.00	92.6	70-130			
Carbon Tetrachloride	3.90	0.5	ppbv	5.00	78.0	70-130			
Chlorobenzene	4.84	0.5	ppbv	5.00	96.8	70-130			



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### Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	
<b>Batch BHF0662 - No Prep VOC Air</b>									
<b>LCS (BHF0662-BS1)</b>					Prepared & Analyzed: 06/18/2024				
Chloroethane	4.94	0.5	ppbv	5.00	98.8	70-130			
Chloroform	3.94	0.5	ppbv	5.00	78.8	70-130			
Chloromethane	0.56	0.5	ppbv	5.00	11.2	70-130			L
cis-1,2-Dichloroethylene	4.09	0.5	ppbv	5.00	81.8	70-130			
cis-1,3-Dichloropropene	3.89	0.5	ppbv	5.00	77.8	70-130			
Cyclohexane	3.95	0.5	ppbv	5.00	79.0	70-130			
Dibromochloromethane	4.10	0.5	ppbv	5.00	82.0	70-130			
Dichlorodifluoromethane	0.00	0.5	ppbv	5.00		70-130			L, U
Ethyl acetate	3.93	0.5	ppbv	5.00	78.6	70-130			
Ethylbenzene	4.91	0.5	ppbv	5.00	98.2	70-130			
Heptane	3.59	0.5	ppbv	5.00	71.8	70-130			
Hexachlorobutadiene	4.66	0.5	ppbv	5.00	93.2	60-140			
Hexane	3.92	0.5	ppbv	5.00	78.4	70-130			
Isopropylbenzene	5.18	0.5	ppbv	5.00	104	70-130			
m+p-Xylenes	9.77	1	ppbv	10.0	97.7	70-130			
Methyl methacrylate	3.91	0.5	ppbv	5.00	78.2	70-130			
Methylene chloride	5.20	1	ppbv	5.00	104	70-130			
Methyl-t-butyl ether (MTBE)	3.04	0.5	ppbv	5.00	60.8	70-130			L
Naphthalene	3.40	0.5	ppbv	5.00	68.0	60-140			
o-Xylene	5.09	0.5	ppbv	5.00	102	70-130			
Propylene	0.00	1	ppbv	5.00		70-130			L, U
Styrene	4.69	0.5	ppbv	5.00	93.8	70-130			
TBA	3.82	0.5	ppbv	5.00	76.4	70-130			
Tetrachloroethylene (PCE)	4.73	0.5	ppbv	5.00	94.6	70-130			
Tetrahydrofuran	3.58	0.5	ppbv	5.00	71.6	70-130			
Toluene	3.98	0.5	ppbv	5.00	79.6	70-130			
trans-1,2-Dichloroethylene	4.56	0.5	ppbv	5.00	91.2	70-130			
trans-1,3-Dichloropropene	3.71	0.5	ppbv	5.00	74.2	70-130			
Trichloroethylene	4.16	0.5	ppbv	5.00	83.2	70-130			
Trichlorofluoromethane	4.59	0.5	ppbv	5.00	91.8	70-130			
Vinyl acetate	2.37	0.5	ppbv	5.00	47.4	70-130			L
Vinyl bromide	4.94	0.5	ppbv	5.00	98.8	70-130			
Vinyl chloride	4.76	0.5	ppbv	5.00	95.2	70-130			



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name: CTEH, LLC  
5120 Northshore Drive

Date Received: June 18, 2024 10:13  
Date Issued: June 25, 2024 8:52

N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BHF0662 - No Prep VOC Air

##### LCS (BHF0662-BS1)

Prepared & Analyzed: 06/18/2024

Surr: 4-Bromofluorobenzene (Surr)	5.58		ppbv	5.00	112	70-130				
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##### LCS Dup (BHF0662-BS1)

Prepared & Analyzed: 06/18/2024

1,1,1-Trichloroethane	3.87	0.5	ppbv	5.00	77.4	70-130	1.56	25	
1,1,1,2-Tetrachloroethane	4.94	0.5	ppbv	5.00	98.8	70-130	1.63	25	
1,1,2,2-Tetrachloroethane	5.38	0.5	ppbv	5.00	108	70-130	0.186	25	
1,1,2-Trichloro-1,2,2-trifluoroethane	4.58	0.5	ppbv	5.00	91.6	70-130	1.10	25	
1,1,2-Trichloroethane	4.26	0.5	ppbv	5.00	85.2	70-130	1.66	25	
1,1-Dichloroethane	3.36	0.5	ppbv	5.00	67.2	70-130	6.90	25	L
1,1-Dichloroethylene	4.58	0.5	ppbv	5.00	91.6	70-130	0.218	25	
1,2,4-Trimethylbenzene	4.92	0.5	ppbv	5.00	98.4	70-130	1.21	25	
1,2-Dibromoethane (EDB)	4.91	0.5	ppbv	5.00	98.2	70-130	0.00	25	
1,2-Dichlorobenzene	5.13	0.5	ppbv	5.00	103	70-130	0.783	25	
1,2-Dichloroethane	3.84	0.5	ppbv	5.00	76.8	70-130	0.784	25	
1,2-Dichloropropane	4.12	0.5	ppbv	5.00	82.4	70-130	0.487	25	
1,2-Dichlorotetrafluoroethane	4.47	0.5	ppbv	5.00	89.4	70-130	3.30	25	
1,3,5-Trimethylbenzene	5.06	0.5	ppbv	5.00	101	70-130	0.983	25	
1,3-Butadiene	0.64	0.5	ppbv	5.00	12.8	70-130	145	25	L, P
1,3-Dichlorobenzene	4.58	0.5	ppbv	5.00	91.6	70-130	0.218	25	
1,4-Dichlorobenzene	4.32	0.5	ppbv	5.00	86.4	70-130	0.232	25	
1,4-Dioxane	4.29	0.5	ppbv	5.00	85.8	70-130	0.937	25	
2-Butanone (MEK)	3.51	0.5	ppbv	5.00	70.2	70-130	3.09	25	
2-Chlorotoluene	5.06	0.5	ppbv	5.00	101	70-130	1.19	25	
2-Hexanone (MBK)	4.20	0.5	ppbv	5.00	84.0	70-130	0.712	25	
4-Methyl-2-pentanone (MIBK)	4.00	0.5	ppbv	5.00	80.0	70-130	0.250	25	
Allyl chloride	4.42	0.5	ppbv	5.00	88.4	70-130	1.12	25	
Benzene	4.07	0.5	ppbv	5.00	81.4	70-130	1.24	25	
Benzyl Chloride	3.41	0.5	ppbv	5.00	68.2	70-130	0.293	25	L
Bromoform	5.06	0.5	ppbv	5.00	101	70-130	0.198	25	
Bromomethane	3.10	0.5	ppbv	5.00	62.0	70-130	47.5	25	L, P
Carbon Disulfide	4.63	0.5	ppbv	5.00	92.6	70-130	0.00	25	
Carbon Tetrachloride	3.94	0.5	ppbv	5.00	78.8	70-130	1.02	25	
Chlorobenzene	4.82	0.5	ppbv	5.00	96.4	70-130	0.414	25	



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## Certificate of Analysis

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5120 Northshore Drive

Date Received: June 18, 2024 10:13  
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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Units	Source Level	%REC		RPD		Qual
	Result	Limit			Result	%REC	RPD	Limit	

#### Batch BHF0662 - No Prep VOC Air

##### LCS Dup (BHF0662-BSD1)

Prepared & Analyzed: 06/18/2024

Chloroethane	5.03	0.5	ppbv	5.00	101	70-130	1.81	25	
Chloroform	4.02	0.5	ppbv	5.00	80.4	70-130	2.01	25	
Chloromethane	0.16	0.5	ppbv	5.00	3.20	70-130	111	25	L, P
cis-1,2-Dichloroethylene	4.08	0.5	ppbv	5.00	81.6	70-130	0.245	25	
cis-1,3-Dichloropropene	3.94	0.5	ppbv	5.00	78.8	70-130	1.28	25	
Cyclohexane	4.08	0.5	ppbv	5.00	81.6	70-130	3.24	25	
Dibromochloromethane	4.15	0.5	ppbv	5.00	83.0	70-130	1.21	25	
Dichlorodifluoromethane	5.57	0.5	ppbv	5.00	111	70-130	200	25	P
Ethyl acetate	3.88	0.5	ppbv	5.00	77.6	70-130	1.28	25	
Ethylbenzene	4.94	0.5	ppbv	5.00	98.8	70-130	0.609	25	
Heptane	3.63	0.5	ppbv	5.00	72.6	70-130	1.11	25	
Hexachlorobutadiene	4.63	0.5	ppbv	5.00	92.6	60-140	0.646	25	
Hexane	3.91	0.5	ppbv	5.00	78.2	70-130	0.255	25	
Isopropylbenzene	5.14	0.5	ppbv	5.00	103	70-130	0.775	25	
m+p-Xylenes	9.87	1	ppbv	10.0	98.7	70-130	1.02	25	
Methyl methacrylate	3.95	0.5	ppbv	5.00	79.0	70-130	1.02	25	
Methylene chloride	5.28	1	ppbv	5.00	106	70-130	1.53	25	
Methyl-t-butyl ether (MTBE)	3.07	0.5	ppbv	5.00	61.4	70-130	0.982	25	L
Naphthalene	3.42	0.5	ppbv	5.00	68.4	60-140	0.587	25	
o-Xylene	5.04	0.5	ppbv	5.00	101	70-130	0.987	25	
Propylene	0.00	1	ppbv	5.00		70-130		25	L, U
Styrene	4.75	0.5	ppbv	5.00	95.0	70-130	1.27	25	
TBA	3.82	0.5	ppbv	5.00	76.4	70-130	0.00	25	
Tetrachloroethylene (PCE)	4.83	0.5	ppbv	5.00	96.6	70-130	2.09	25	
Tetrahydrofuran	3.61	0.5	ppbv	5.00	72.2	70-130	0.834	25	
Toluene	3.98	0.5	ppbv	5.00	79.6	70-130	0.00	25	
trans-1,2-Dichloroethylene	3.44	0.5	ppbv	5.00	68.8	70-130	28.0	25	L, P
trans-1,3-Dichloropropene	3.72	0.5	ppbv	5.00	74.4	70-130	0.269	25	
Trichloroethylene	4.13	0.5	ppbv	5.00	82.6	70-130	0.724	25	
Trichlorofluoromethane	4.69	0.5	ppbv	5.00	93.8	70-130	2.16	25	
Vinyl acetate	2.37	0.5	ppbv	5.00	47.4	70-130	0.00	25	L
Vinyl bromide	4.99	0.5	ppbv	5.00	99.8	70-130	1.01	25	
Vinyl chloride	0.14	0.5	ppbv	5.00	2.80	70-130	189	25	L, P



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## Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

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	5120 Northshore Drive	Date Issued:	June 25, 2024 8:52
	N. Little Rock, AR 72118		
Submitted To:	Cassie Smythe	Project Number:	PROJ-036688
Client Site I.D.:	Air Quality Study	Purchase Order:	PROJ-036688

### Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike	Source	%REC		RPD		Qual
	Result	Limit			Units	Level	Result	%REC	

#### Batch BHF0662 - No Prep VOC Air

#### LCS Dup (BHF0662-BSD1)

Prepared & Analyzed: 06/18/2024

Surr: 4-Bromofluorobenzene	5.63	ppbv	5.00	113	70-130
(Surr)					





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Project Number: PROJ-036688

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Purchase Order: PROJ-036688

### Sulfur Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BHF0663 - No Prep VOC Air

##### Blank (BHF0663-BLK1)

Prepared: 06/18/2024 Analyzed: 06/19/2024

Carbon Disulfide	<	10.0	ppbv							U
Hydrogen Sulfide	<	10.0	ppbv							U
1-Propanethiol	<	10.0	ppbv							U
2-Propanethiol	<	10.0	ppbv							U
Carbonyl sulfide	<	10.0	ppbv							U
Dimethyl sulfide	<	10.0	ppbv							U
Ethyl mercaptan	<	10.0	ppbv							U
Methyl mercaptan	<	10.0	ppbv							U
Total Reduced Sulfurs	<	10.0	ppbv							U

Surr: 1,4-Difluorobenzene (Surr) 18.7 ppbv 20.0 93.5 80-120

##### LCS (BHF0663-BS1)

Prepared: 06/18/2024 Analyzed: 06/19/2024

Carbon Disulfide	23.9	10	ppbv	22.4	107	70-130				
Hydrogen Sulfide	21.1	10	ppbv	22.2	95.2	70-130				
1-Propanethiol	20.9	10	ppbv	18.8	111	70-130				
2-Propanethiol	20.8	10	ppbv	18.2	114	70-130				
Carbonyl sulfide	23.5	10	ppbv	22.8	103	70-130				
Dimethyl sulfide	22.0	10	ppbv	20.6	107	70-130				
Ethyl mercaptan	20.6	10	ppbv	17.6	117	70-130				
Methyl mercaptan	20.6	10	ppbv	19.0	109	70-130				

Surr: 1,4-Difluorobenzene (Surr) 19.4 ppbv 20.0 97.2 70-130

##### LCS Dup (BHF0663-BSD1)

Prepared: 06/18/2024 Analyzed: 06/19/2024

Carbon Disulfide	24.1	10	ppbv	22.4	107	70-130	0.751	25		
Hydrogen Sulfide	21.6	10	ppbv	22.2	97.1	70-130	1.97	25		
1-Propanethiol	21.7	10	ppbv	18.8	115	70-130	3.48	25		
2-Propanethiol	21.0	10	ppbv	18.2	115	70-130	1.05	25		
Carbonyl sulfide	23.8	10	ppbv	22.8	104	70-130	1.01	25		
Dimethyl sulfide	22.5	10	ppbv	20.6	109	70-130	2.02	25		
Ethyl mercaptan	21.3	10	ppbv	17.6	121	70-130	3.24	25		
Methyl mercaptan	21.6	10	ppbv	19.0	114	70-130	4.64	25		

Surr: 1,4-Difluorobenzene (Surr) 19.2 ppbv 20.0 96.2 70-130



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N. Little Rock, AR 72118

Submitted To: Cassie Smythe

Project Number: PROJ-036688

Client Site I.D.: Air Quality Study

Purchase Order: PROJ-036688

### Sulfur Volatile Organic Compounds by GCMS - Quality Control

#### Enthalpy Analytical

Analyte	Reporting		Spike Level	Source Result	%REC		RPD		Qual
	Result	Limit			Units	%REC	Limits	RPD	

#### Batch BHF0664 - No Prep VOC Air

##### Blank (BHF0664-BLK1)

Prepared: 06/18/2024 Analyzed: 06/19/2024

Dimethyl disulfide	<	10.0	ppbv							U
Surr: 1,4-Difluorobenzene (Surr)	19.8		ppbv	20.0	99.2	80-120				

##### LCS (BHF0664-BS1)

Prepared: 06/18/2024 Analyzed: 06/19/2024

Dimethyl disulfide	17.0	10	ppbv	20.8	81.6	70-130				
Surr: 1,4-Difluorobenzene (Surr)	20.0		ppbv	20.0	100	70-130				

##### LCS Dup (BHF0664-BSD1)

Prepared: 06/18/2024 Analyzed: 06/19/2024

Dimethyl disulfide	16.6	10	ppbv	20.8	79.9	70-130	2.14	25		
Surr: 1,4-Difluorobenzene (Surr)	19.8		ppbv	20.0	98.8	70-130				

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### Certified Analytes included in this Report

Analyte	Certifications	Analyte	Certifications
<i>EPA TO-15 in Air</i>		cis-1,3-Dichloropropene	VELAP
Carbon Disulfide	VELAP	Cyclohexane	VELAP
1,1,1-Trichloroethane	VELAP	Dibromochloromethane	VELAP
1,1,1,2-Tetrachloroethane	VELAP	Dichlorodifluoromethane	VELAP
1,1,2,2-Tetrachloroethane	VELAP	Ethanol	VELAP
1,1,2-Trichloro-1,2,2-trifluoroethane	VELAP	Ethyl acetate	VELAP
1,1,2-Trichloroethane	VELAP	Ethylbenzene	VELAP
1,1-Dichloroethane	VELAP	Heptane	VELAP
1,1-Dichloroethylene	VELAP	Hexachlorobutadiene	VELAP
1,2,4-Trichlorobenzene	VELAP	Hexane	VELAP
1,2,4-Trimethylbenzene	VELAP	Isooctane	VELAP
1,2-Dibromoethane (EDB)	VELAP	Isopropyl alcohol	VELAP
1,2-Dichlorobenzene	VELAP	Isopropylbenzene	VELAP
1,2-Dichloroethane	VELAP	m+p-Xylenes	VELAP
1,2-Dichloropropane	VELAP	Methyl methacrylate	VELAP
1,2-Dichlorotetrafluoroethane	VELAP	Methylene chloride	VELAP
1,3,5-Trimethylbenzene	VELAP	Methyl-t-butyl ether (MTBE)	VELAP
1,3-Butadiene	VELAP	Naphthalene	VELAP
1,3-Dichlorobenzene	VELAP	n-Butane (C4)	VELAP
1,4-Dichlorobenzene	VELAP	n-Nonane (C9)	VELAP
1,4-Dioxane	VELAP	n-Propylbenzene	VELAP
1-Ethyl-4-methyl benzene	VELAP	o-Xylene	VELAP
2-Butanone (MEK)	VELAP	n-Pentane (C5)	VELAP
2-Chlorotoluene	VELAP	Propylene	VELAP
2-Hexanone (MBK)	VELAP	Styrene	VELAP
4-Methyl-2-pentanone (MIBK)	VELAP	TBA	VELAP
Acetone	VELAP	Tetrachloroethylene (PCE)	VELAP
Acrolein	VELAP	Tetrahydrofuran	VELAP
Allyl chloride	VELAP	Toluene	VELAP
Benzene	VELAP	trans-1,2-Dichloroethylene	VELAP
Benzyl Chloride	VELAP	trans-1,3-Dichloropropene	VELAP
Bromodichloromethane	VELAP	Trichloroethylene	VELAP
Bromoform	VELAP	Trichlorofluoromethane	VELAP
Bromomethane	VELAP	Vinyl acetate	VELAP
Carbon Disulfide	VELAP	Vinyl bromide	VELAP
Carbon Tetrachloride	VELAP	Vinyl chloride	VELAP
Chlorobenzene	VELAP	Xylenes, Total	VELAP
Chloroethane	VELAP		
Chloroform	VELAP		
Chloromethane	VELAP		
cis-1,2-Dichloroethylene	VELAP		



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Code	Description	Laboratory ID	Expires
MdDOE	Maryland DE Drinking Water	341	12/31/2024
NCDEQ	North Carolina DEQ	495	12/31/2024
NCDOH	North Carolina Department of Health	51714	07/31/2024
NYDOH	New York DOH Drinking Water	12069	04/01/2025
PADEP	NELAP-Pennsylvania Certificate #009	68-03503	10/31/2024
TXCEQ	Texas Comm on Environmental Quality #T104704	T104704576	05/31/2025
VELAP	NELAP-Virginia Certificate #12969	460021	06/14/2025
WVDEP	West Virginia DEP	350	11/30/2024

### Qualifiers and Definitions

- C Continuing calibration verification response for this analyte is outside specifications.
  - J The reported result is an estimated value.
  - L LCS recovery is outside of established acceptance limits
  - P Duplicate analysis does not meet the acceptance criteria for precision
  - U Analyte was not detected and is reported as less than the DL or as defined by the client . The DL has been adjusted for any dilution or concentration of the sample.
  - RPD Relative Percent Difference
  - Qual Qualifiers
  - RE Denotes sample was re-analyzed
  - PF Preparation Factor
  - MDL Method Detection Limit
  - LOQ Limit of Quantitation
  - ppbv parts per billion by volume
  - TIC Tentatively Identified Compounds are compounds that are identified by comparing the analyte mass spectral pattern with the NIST spectral library. A TIC spectral match is reported when the pattern is at least 75% consistent with the published pattern. Compound concentrations are estimated and are calculated using an internal standard response factor of 1.
- All EPA method 3C results are reported as normalized values when the sum total of all evaluated constituents is outside  $\pm 10\%$  of the absolute.



Equipment Must be Returned By: 7/13/2024

AIR ANALYSIS

CHAIN OF CUSTODY

1941 REYMET ROAD  
RICHMOND, VIRGINIA 23237  
(804) 358-8295 PHONE  
(804)358-8297 FAX

CACAD61405

COMPANY NAME: CTEH  
 CONTACT: Cassie Smythe  
 ADDRESS:  
 PHONE #:  
 FAX #:  
 EMAIL:  
 PROJECT NAME/Quote #: Air Quality Study  
 SITE NAME:  
 PROJECT NUMBER: PROJ-036688  
 P.O. #:  
 Pretreatment Program:

Is sample for compliance reporting? YES (NO) Regulatory State: Is sample from a chlorinated supply? YES NO PWS I.D. #:  
 Turn Around Time: Circle: 10 5 Days or Days

SAMPLER NAME (PRINT): Kamie Steyer SAMPLER SIGNATURE: *Kamie Steyer*  
 Matrix Codes: AA=Indoor/Ambient Air SG=Soil Gas LV=Landfill/Vent Gas OT=Other 063-24F-0020

CLIENT SAMPLE I.D.	Regulator Info		Canister Information			Sampling Start Information				Sampling Stop Information				ANALYSIS		
	Flow Controller ID	Cal Flow (mL/min)	Cleaning Batch ID	LAB Outgoing Canister Vacuum (in Hg/psia)	LAB Receiving Canister Vacuum (in Hg)	Barometric Pres. (in Hg):		Starting Sample Temp °F	Final Canister Vacuum (in Hg)	Stop Time (24hr clock)	Stop Date	Ending Sample Temp °F	Sulfurs by TO-15	DMDS by TO-15	VOC TO-15 Full List	
						Start Date	Start Time (24hr clock)									Initial Canister Vacuum (in Hg)
1) CACAD616050003	GS041		IC240611	30		6/16/24	0942		6/16/24	0942			AA	X	X	
2) CACAD616050005	GS042		IC240611	30		6/16/24	0959		6/16/24	0959			AA	X	X	
3) CACAD616050007	GS043		IC240611	30		6/16/24	1030		6/16/24	1030			AA	X	X	
4) CACAD616050011	GS044		IC240611	30		6/17/24	0714		6/17/24	0714			AA	X	X	

RELINQUISHED: Kamie Steyer DATE / TIME: 6/17/24 1200 RECEIVED: FedEx DATE / TIME: 6/17/24 1200  
 RELINQUISHED: Fedex E DATE / TIME: 6/18/24 1013 RECEIVED: DATE / TIME:   
 QC Data Package LAB USE ONLY  
 Level I  Level II  Level III  Level IV   
 Recd: 06/18/2024 Due: 06/25/2024  
 CTEH, LLC  
 Air Quality Study  
 24F0971  
 bT: 10.7 CF: 0.5 FT: 21.3 NO ICE sealed





Equipment Must be Returned By: 7/13/2024

### AIR ANALYSIS

### CHAIN OF CUSTODY

1941 REYMET ROAD  
RICHMOND, VIRGINIA 23237  
(804) 358-8295 PHONE  
(804)358-8297 FAX

CACAD61405

Page 1 of 1

COMPANY NAME: CTEH  
 CONTACT: Cassie Smythe  
 ADDRESS:  
 PHONE #:  
 FAX #:

INVOICE TO: same  
 INVOICE CONTACT:  
 INVOICE ADDRESS:  
 INVOICE PHONE #:

PROJECT NAME/Quote #: Air Quality Study  
 SITE NAME:  
 PROJECT NUMBER: PROJ-036688  
 P.O. #:  
 Pretreatment Program:

Is sample for compliance reporting? YES  NO  Regulatory State: CA Is sample from a chlorinated supply? YES  NO  PWS I.D. #:  
 SAMPLER NAME (PRINT): Kamie Stecher SAMPLER SIGNATURE: *Kamie Stecher* Turn Around Time: Circle: 10 5 Days or \_\_\_ Day(s)

Matrix Codes: AA=Indoor/Ambient Air SG=Soil Gas LV=Landfill/Vent Gas OT=Other 063-24F-0020

CLIENT SAMPLE I.D.	Regulator Info		Canister Information			Sampling Start Information				Sampling Stop Information				ANALYSIS			
	Flow Controller ID	Cal Flow (mL/min)	Canister ID	Cleaning Batch ID	LAB Outgoing Canister Vacuum (in Hg/psia)	LAB Receiving Canister Vacuum (in Hg)	Barometric Pres. (in Hg):		Starting Sample Temp °F	Final Canister Vacuum (in Hg)	Stop Time (24hr clock)	Stop Date	Barometric Pres. (in Hg):		Sulfurs by TO-15	DMDS by TO-15	VOC TO-15 Full List
							Start Date	Start Time (24hr clock)					Initial Canister Vacuum (in Hg)	Stop Date			
1) CACAD61705008	GS045		12856	10240611	30		6/17/24	0920			6/17/24	0920		AA	X	X	X
2) CACAD61705010	GS046		12859	10240611	30		6/17/24	0920			6/17/24	0842		AA	X	X	X
3) CACAD61705009	GS047		13961	10240611	30		6/17/24	0920			6/17/24	0842		AA	X	X	X
4) CACAD61705010	GS048		15034	10240611	30		6/17/24	0842			6/17/24	0842		AA	X	X	X

RELINQUISHED: *Kamie Stecher* DATE / TIME: 6/17/24 1200 RECEIVED: FedEx DATE / TIME: 6/17/24 1200  
 RELINQUISHED: *FedEx E* DATE / TIME: 6/17/24 1013 RECEIVED: *AA* DATE / TIME: 6/17/24 1013  
 RELINQUISHED: DATE / TIME: RECEIVED: DATE / TIME:

QC Data Package LAB USE ONLY  
 Level I  Level II  Level III  Level IV

OT: 20.7 CFM FT: 21.3 NO ICG sealed

CTEH, LLC  
 Air Quality Study  
 Recd: 06/18/2024 Due: 06/25/2024  
 24F0971



Equipment Must be Returned By: 7/13/2024

### AIR ANALYSIS CHAIN OF CUSTODY

Page 1 of 1

COMPANY NAME: **CTEH** PROJECT NAME/Quote #: Air Quality Study  
 CONTACT: **Cassie Smythe** SITE NAME:  
 ADDRESS: PROJECT NUMBER: PROJ-036688  
 PHONE #: P.O. #:  
 FAX #: EMAIL: Pretreatment Program:

Is sample for compliance reporting? YES NO Regulatory State: Is sample from a chlorinated supply? YES NO PWS I.D. #:  
 SAMPLER NAME (PRINT): **Kamie Stecher** SAMPLER SIGNATURE: *Kamie Stecher* Turn Around Time: Circle: **10** 5 Days or \_\_\_ Day(s)

Matrix Codes: AA=Indoor/Ambient Air SG=Soil Gas LV=Landfill/Vent Gas OT=Other **063-24F-0020**

CLIENT SAMPLE I.D.	Regulator Info		Canister Information				Sampling Start Information				Sampling Stop Information				ANALYSIS		
	Flow Controller ID	Cal Flow (mL/min)	Canister ID	Cleaning Batch ID	LAB Outgoing Vacuum (in Hg/psia)	LAB Receiving Vacuum (in Hg)	Barometric Pres. (in Hg):		Starting Sample Temp °F	Initial Canister Vacuum (in Hg)	Barometric Pres. (in Hg):		Ending Sample Temp °F	Final Canister Vacuum (in Hg)	Sulfurs by TO-15	DMDS by TO-15	VOC TO-15 Full List
							Start Date	Start Time (24hr clock)			Start Date	Stop Time (24hr clock)					
1) CACAD061500005	GS037	1.4	13436	IC240610	30	30	6/15/24	1809	6/15/24	1809	6/15/24	1809	AA	AA	X	X	X
2) CACAD061500005	GS038	1.4	13957	IC240610	30	30	6/15/24	1127	6/15/24	1127	6/15/24	1127	AA	AA	X	X	X
3) CACAD061500008	GS039	1.4	10221	IC240611	30	30	6/15/24	1740	6/15/24	1740	6/15/24	1740	AA	AA	X	X	X
4) CACAD061600001	GS040	1.4	12417	IC240611	30	30	6/16/24	0904	6/16/24	0904	6/16/24	0904	AA	AA	X	X	X

OT: 20.7 CF=0.5 FT=21.3 no ice sealed

RELINQUISHED: **Kamie Stecher** DATE / TIME: 6/17/24 1200 RECEIVED: **FedEx** DATE / TIME: 6/17/24 1200  
 RELINQUISHED: **FedEx** DATE / TIME: 6/18/24 1013 RECEIVED: **FedEx** DATE / TIME: 6/18/24 1013

QC Data Package LAB USE ONLY  
 13 grab samplers  
 Level I  Level II  Level III  Level IV

CTEH, LLC 24F0971  
 Air Quality Study  
 Recd: 06/18/2024 Due: 06/25/2024



CACAD061405

**AIR ANALYSIS**

**CHAIN OF CUSTODY**

COMPANY NAME: CTEH INVOICE TO: same PROJECT NAME/Quote #: Air Quality Study  
 CONTACT: Cassie Smythe INVOICE CONTACT: SITE NAME:  
 ADDRESS: INVOICE ADDRESS: PROJECT NUMBER: PROJ-036688  
 PHONE #: INVOICE PHONE #: P.O. #:  
 FAX #: EMAIL: Pretreatment Program:

Is sample for compliance reporting? YES  NO  Regulatory State: Is sample from a chlorinated supply? YES  NO  PWS I.D. #:  
 SAMPLER NAME (PRINT): Kamie Stecher SAMPLER SIGNATURE: *Kamie Stecher* Turn Around Time: Circle: 10 5 Days or \_\_\_ Days

Matrix Codes: AA=Indoor/Ambient Air SG=Soil Gas LV=Landfill/Vent Gas OT=Other **063-24F-0020**

CLIENT SAMPLE I.D.	Regulator Info			Canister Information			Sampling Start Information				Sampling Stop Information				ANALYSIS				
	Flow Controller ID	Cal Flow (mL/min)	Canister ID	Cleaning Batch ID	LAB Outgoing Canister Vacuum (in Hg/psia)	LAB Receiving Canister Vacuum (in Hg)	Barometric Pres. (in Hg):		Starting Sample Temp °F	Initial Canister Vacuum (in Hg)	Barometric Pres. (in Hg):		Stop Time (24hr clock)	Final Canister Vacuum (in Hg)	Ending Sample Temp °F	Matrix (See Codes)	Sulfurs by TO-15	DMDS by TO-15	VOC TO-15 Full List
							Start Date	Start Time (24hr clock)			Start Date	Start Time (24hr clock)							
1) CACA0616050003	GS041		12474	1.4	30	3.2	6/16/24	0942		6/16/24	0942				AA	X	X	X	
2) CACA0616050005	GS042		12846	1.4	30	3.4	6/16/24	0959		6/16/24	0957				AA	X	X	X	
3) CACA0616050007	GS043		12849	1.4	30	3.4	6/16/24	1030		6/16/24	1030				AA	X	X	X	
4) CACA06170001	GS044		12854	1.4	30	2.2	6/17/24	0714		6/17/24	0714				AA	X	X	X	

DT: 20.7 CF: 0.5 FT: 24.3 NO ICE sealed

REINQUIRED: Kamie Stecher 6/17/24 1200 RECEIVED: Fedex 6/17/24 1200  
 REINQUIRED: Fedex E 6/18/24 1013 RECEIVED: Fedex 6/18/24 1013

QC Data Package LAB USE ONLY  
 Level I  Level II  Level III  Level IV

CTEH, LLC  
 Air Quality Study  
 24F0971  
 Recd: 06/18/2024 Due: 06/25/2024



Equipment Must be Returned By: 7/13/2024

AIR ANALYSIS CHAIN OF CUSTODY

1941 REYMET ROAD RICHMOND, VIRGINIA 23237 (804) 358-8295 PHONE (804)358-8297 FAX

CACADG 146

Page 1 of 1

COMPANY NAME: CTEH INVOICE TO: same PROJECT NAME/Quote #: Air Quality Study

CONTACT: Cassie Smythe INVOICE CONTACT: SITE NAME:

ADDRESS: INVOICE ADDRESS: PROJECT NUMBER: PROJ-036688

PHONE #: INVOICE PHONE #: P.O. #:

FAX #: EMAIL: labresults@cteh.com Pretreatment Program:

Is sample for compliance reporting? YES NO Regulatory State: Is sample from a chlorinated supply? YES NO PWS I.D. #:

SAMPLER NAME (PRINT): *Karin Stecker* SAMPLER SIGNATURE: *Karin Stecker* Turn Around Time: Circle: 10 5 Days or \_\_\_ Day(s)

Matrix Codes: AA=Indoor/Ambient Air SG=Soil Gas LV=Landfill/Vent Gas OT=Other **063-24F-0018**

CLIENT SAMPLE I.D.	Regulator Info		Canister Information			Sampling Start Information			Sampling Stop Information			ANALYSIS						
	Flow Controller ID	Cal Flow (mL/min)	Canister ID	Cleaning Batch ID	Outgoing Canister Vacuum (in Hg)	LAB Receiving Canister Vacuum (in Hg)	Barometric Pres. (in Hg):		Initial Canister Vacuum (in Hg)	Starting Sample Temp °F	Stop Date (24hr clock)	Stop Time (24hr clock)	Final Canister Vacuum (in Hg)	Ending Sample Temp °F	Matrix (See Codes)	Sulfurs by TO-15	DMDS by TO-15	VOC TO-15 Full List
							Start Date	Start Time (24hr clock)										
1) CACADG1405011	GS036	11079	1.4	IC240605	30	30	6/14/24	1702	6/14/24	1702	AA	X	X	X				
2) GS035		15382	1.4	IC240610	30													
3) GS036		17036	1.4	IC240628	30													
4)																		

RELINQUISHED: *Karin Stecker* DATE / TIME: 6/17/24/1200 RECEIVED: *FedEx* DATE / TIME: 6/17/24/1200

QC Data Package: LAB USE ONLY **LAB USE ONLY** sealed

Level I  3 grab samplers  
Level II  1 dup. test

RELINQUISHED: *FedEx E* DATE / TIME: 6/19/24/1013 RECEIVED: *CTEH, LLC* DATE / TIME: 6/19/24/1013

CTEH, LLC Air Quality Study 24F0971

Recd: 06/18/2024 Due: 06/25/2024

VI3035002

063-24F-0018.xls



Equipment Must be Returned By: 7/13/2024

AIR ANALYSIS

CHAIN OF CUSTODY

1941 REYMET ROAD  
RICHMOND, VIRGINIA 23237  
(804) 358-8295 PHONE  
(804) 358-8297 FAX

CACAD61403

Page 1 of 1

COMPANY NAME: CTEH  
 CONTACT: Cassie Smythe  
 ADDRESS:  
 PHONE #:  
 FAX #:

INVOICE TO: same  
 INVOICE CONTACT:  
 INVOICE ADDRESS:  
 INVOICE PHONE #:

PROJECT NAME/Quote #: Air Quality Study  
 SITE NAME:  
 PROJECT NUMBER: PROJ-036688  
 P.O. #:

EMAIL:  
 Pretreatment Program:

Is sample for compliance reporting? YES  NO  Regulatory State: CA Is sample from a chlorinated supply? YES  NO  PWS I.D. #:  
 SAMPLER NAME (PRINT): Kamie Stecher SAMPLER SIGNATURE: *Kamie Stecher* Turn Around Time: Circle: 10 5 Days or \_\_\_ Days

Matrix Codes: AA=Indoor/Ambient Air SG=Soil Gas LV=Landfill/Vent Gas OT=Other 063-24F-0020

CLIENT SAMPLE I.D.	Regulator Info		Canister Information		Sampling Start Information				Sampling Stop Information				ANALYSIS								
	Flow Controller ID	Cal Flow (mL/min)	Canister ID	Cleaning Batch ID	LAB Outgoing Canister Vacuum (in Hg/psia)	LAB Receiving Canister Vacuum (in Hg)	Barometric Pres. (in Hg):		Barometric Pres. (in Hg):		Starting Sample Temp °F	Initial Canister Vacuum (in Hg)	Stop Time (24hr clock)		Final Canister Vacuum (in Hg)	Ending Sample Temp °F	Matrix (See Codes)	Sulfurs by TO-15	DMS by TO-15	VOC TO-15 Full List	
							Start Date	Start Time (24hr clock)	Start Date	Start Time (24hr clock)											
1)	GS045		12856	10240611	30																
2)	GS046		12859	10240611	30																
3) CACAD61705000	GS047		13961	10240611	30	2.8	6/17/24	0920	6/17/24	0920			6/17/24	0920			AA	X	X	X	
4) CACAD61705000	GS048		15034	10240611	30	2.6	6/17/24	0842	6/17/24	0842			6/17/24	0842			AA	X	X	X	

RELINQUISHED: *Kamie Stecher* DATE / TIME: 6/17/24/1200 RECEIVED: FedEx DATE / TIME: 6/17/24/1200  
 RELINQUISHED: *FedEx E* DATE / TIME: 6/17/24/1013 RECEIVED: *AA A* DATE / TIME: 6/17/24/1013  
 RELINQUISHED: *FedEx* DATE / TIME: 6/17/24/1013 RECEIVED: *AA A* DATE / TIME: 6/17/24/1013

QC Data Package LAB USE ONLY  
 Level I  Level II  Level III  Level IV

OT: 20.7 CFM FEI: 21.3 NO ICE sealed

CTEH, LLC  
 Air Quality Study  
 Recd: 06/18/2024 Due: 06/25/2024  
 24F0971





1941 Reymet Road • Richmond, Virginia 23237 • Tel: (804)-358-8295 Fax: (804)-358-8297

### Certificate of Analysis

Final Report

Laboratory Order ID 24F0971

Client Name:	CTEH, LLC	Date Received:	June 18, 2024 10:13
	5120 Northshore Drive	Date Issued:	June 25, 2024 8:52
	N. Little Rock, AR 72118		
Submitted To:	Cassie Smythe	Project Number:	PROJ-036688
Client Site I.D.:	Air Quality Study	Purchase Order:	PROJ-036688

### Sample Conditions Checklist

Samples Received at:	21.30°C
How were samples received?	FedEx Express
Were Custody Seals used? If so, were they received intact?	Yes
Are the custody papers filled out completely and correctly?	Yes
Do all bottle labels agree with custody papers?	Yes
Is the temperature blank or representative sample within acceptable limits or received on ice, and recently taken?	Yes
Are all samples within holding time for requested laboratory tests?	Yes
Is a sufficient amount of sample provided to perform the tests included?	Yes
Are all samples in appropriate containers for the analyses requested?	Yes
Were volatile organic containers received?	No
Are all volatile organic and TOX containers free of headspace?	NA
Is a trip blank provided for each VOC sample set? VOC sample sets include EPA8011, EPA504, EPA8260, EPA624, EPA8015 GRO, EPA8021, EPA524, and RSK-175.	NA
Are all samples received appropriately preserved? Note that metals containers do not require field preservation but lab preservation may delay analysis. In addition, field parameters are always received outside holding time and will be marked accordingly.	Yes

### Work Order Comments

Sample 24F0971-05 (CACA0614OS011) was received at a pressure of 30, which is what the outgoing pressure was. Since there is no air sample in the can we are not analyzing this sample. Kamie Stecher notified via email. VJT 6/18/24 1713



## **Data Verification Report (Level 2)**

**Project 036688: Chiquita Canyon**

**Client: CTEH, LLC**

Analytical Report #: 24F0908

Date: July 23, 2024

Reviewed for release by: *Dana Hebert*

Date: July 23, 2024

**Disclaimer:**

The validation performed and reported herein is based on procedures and methods presented to eQAQC Consultants, LLC in the associated laboratory data package. Qualification and review was based on method and/or project specific requirements utilizing the latest version of USEPA National Functional Guidelines for Inorganic and/or Organic Data Review.

Information contained in this report is based solely on the hardcopy and/or electronic deliverables that were submitted to eQAQC Consultants, LLC. eQAQC Consultants, LLC reserves the right to modify or change the validation report if new information is presented or if this report is determined to be inaccurate or incomplete.

The following parameters were reviewed during the validation process:

**Chain-of-Custody (COC):** Completeness and sample custody

**Holding time:** Collection date versus preparation and/or analysis date

**Preservation:** Temperature and chemical

**Blank Contamination:** Laboratory and field blanks

**Matrix/Precision/Recovery:** Surrogates, Internal Standards, Calibrations, Duplicates, Matrix Spikes, Laboratory Control Samples (when applicable)

## INTRODUCTION:

Project: 036688 – Chiquita Canyon  
Laboratory: Enthalpy Analytical, LLC - Richmond  
Laboratory Package No.: 24F0908  
Matrix: Air

eQAQC Consultants, LLC received one electronic Level II data package containing the results for eight field samples and two field duplicates. Qualification and review was based on method and/or project specific requirements utilizing the latest versions of USEPA National Functional Guidelines for Organic Data Review.

The following samples were reviewed:

<b>Sample ID</b>	<b>Lab ID</b>	<b>Collection Date</b>	<b>Analyses</b>
CACA0612OS012	24F0908-01	06/12/2024 05:30 PM	[1-2]
CACA0613UW001	24F0908-02	06/13/2024 10:35 AM	[1-2]
CACA0613OS005	24F0908-03	06/13/2024 09:37 AM	[1-2]
CACA0613OS008	24F0908-04	06/13/2024 08:52 AM	[1-2]
CACA0614UW001	24F0908-05	06/14/2024 07:05 AM	[1-2]
CACA0614OS002	24F0908-06	06/14/2024 07:31 AM	[1-2]
CACA0614OSD002	24F0908-07	06/14/2024 07:31 AM	[1-2]
CACA0614OS003	24F0908-08	06/14/2024 07:51 AM	[1-2]
CACA0614OS004	24F0908-09	06/14/2024 08:19 AM	[1-2]
CACA0614OSD004	24F0908-10	06/14/2024 08:19 AM	[1-2]

Analyses Performed Codes:

[1] Sulfur Volatile Organic Compounds by GCMS - (EPA TO-15)

[2] Volatile Organic Compounds by GCMS - (EPA TO-15)



## **DATA REVIEW FINDINGS SUMMARY**

### **I. General Package/Sample Receipt:**

A compliant laboratory level II data package was received on July 22, 2024.

The collection time was not recorded on the chain-of-custody (COC) for field sample CACA0612OS012. The client confirmed via email the time at 17:30.

Field sampling precision was assessed through the collection of field sample CACA0614OS002 and field duplicate sample CACA0614OSD002. The relative percent difference (RPD) was acceptable (<30%) for all measurements, except as noted below in the method section(s).

Field sampling precision was assessed through the collection of field sample CACA0614OS004 and field duplicate sample CACA0614OSD004. The RPD was acceptable (<30%) for all measurements, except as noted below in the method section(s).

### **I. Sulfur Volatile Organic Compounds by GCMS (EPA-TO-15):**

The laboratory reported the results in both PPBV and UG/M3 units in the hardcopy report. Results were expressed only in PPBV units in the electronic data deliverable.

The RPD between field sample CACA0614OS002 and field duplicate sample CACA0614OSD002 was >30% for Hydrogen Sulfide. Results in both the parent sample and field duplicate were qualified as estimated (J).

The RPD between field sample CACA0614OS004 and field duplicate sample CACA0614OSD004 was >30% for Hydrogen Sulfide. Results in both the parent sample and field duplicate were qualified as estimated (J).

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

### **II. Volatile Organic Compounds by GCMS (EPA-TO-15):**

The laboratory reported the results in both PPBV and UG/M3 units in the hardcopy report. Results were expressed only in PPBV units in the electronic data deliverable.

The laboratory noted the continuing calibration verification (CCV) response was outside specifications for Methyl-t-butyl ether (MTBE), Dichlorodifluoromethane, Chloromethane, Propylene and Vinyl acetate. Supporting data were not included in the level II data package; therefore, this non-conformance could not be verified. The laboratory applied "C" qualifier was removed.

Recoveries of Acrolein and Vinyl acetate were below acceptance criteria in the laboratory control sample (LCS) and LCS duplicate (LCSD) for batch ID BHF0582. These analytes were not detected above the limit of quantitation (LOQ) in the field samples. Acrolein and Vinyl acetate results in the associated samples were qualified as estimated non-detect (UJ) due to the non-conformance.

The RPD between field sample CACA0614OS002 and field duplicate sample CACA0614OSD002 was >30% for 2-Butanone (MEK), Acetone, Ethanol, Isopropyl alcohol and Tetrahydrofuran. Results in both the parent sample and field duplicate were qualified as estimated (J).

The RPD between field sample CACA0614OS004 and field duplicate sample CACA0614OSD004 was >30% for 2-Butanone (MEK), Acetone, Benzene, Carbon Disulfide, Ethanol, n-Pentane (C5) and Tetrahydrofuran. Results in both the parent sample and field duplicate were qualified as estimated (J).

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

## DATA QUALIFIER REFERENCE

Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The associated value is an estimated quantity.
J-	The result is an estimated quantity, but the result may be biased low.
J+	The result is an estimated quantity, but the result may be biased high.
UJ	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet the quality control criteria. The presence or absence of the analyte cannot be verified.

**Appendix I**  
**Form 1 Data (Qualified)**

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0612OS012**  
 Location ID: **NA**  
 Lab Sample ID: **24F0908-01**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/12/2024 17:30**  
 Analysis Date: **06/17/2024 12:05**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	10	U	10	U	ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	10	U	10	U	ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0613UW001**  
 Location ID: **NA**  
 Lab Sample ID: **24F0908-02**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/13/2024 10:35**  
 Analysis Date: **06/17/2024 12:46**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	50.5		50.5		ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	50.5		50.5		ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation

\* = Modified by Validation

U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0613OS005**  
 Location ID: **NA**  
 Lab Sample ID: **24F0908-03**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/13/2024 9:37**  
 Analysis Date: **06/17/2024 13:26**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	10	U	10	U	ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	10	U	10	U	ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation

\* = Modified by Validation

U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0613OS008**  
 Location ID: **NA**  
 Lab Sample ID: **24F0908-04**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/13/2024 8:52**  
 Analysis Date: **06/17/2024 14:07**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	14.9		14.9		ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	11.5		11.5		ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	41.3		41.3		ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 U = Not detected at or above LOQ    J = Estimated    R = Rejected





Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614UW001**  
 Location ID: **NA**  
 Lab Sample ID: **24F0908-05**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/14/2024 7:05**  
 Analysis Date: **06/17/2024 15:25**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	43.3		43.3		ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	43.3		43.3		ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614OS002**  
 Location ID: **NA**  
 Lab Sample ID: **24F0908-06**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/14/2024 7:31**  
 Analysis Date: **06/17/2024 16:06**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	10	U	10	U	ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	10	U	10	U	ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614OSD002**  
 Location ID: **NA**  
 Lab Sample ID: **24F0908-07**  
 Sample Type: **Field Duplicate**

Sample Matrix : **Air**  
 Sample Date: **06/14/2024 7:31**  
 Analysis Date: **06/17/2024 16:47**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units	
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv	
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv	
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv	
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv	
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv	
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv	
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv	
7783-06-4	Hydrogen Sulfide	1	10	105		105	J	ppbv	*
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv	
	Total Reduced Sulfurs	1	10	105		105	J	ppbv	*

DF = Dilution Factor    LOQ = Limit of Quantitation

\* = Modified by Validation

U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614OS003**  
 Location ID: **NA**  
 Lab Sample ID: **24F0908-08**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/14/2024 7:51**  
 Analysis Date: **06/17/2024 17:28**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	13.5		13.5		ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	13.5		13.5		ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614OS004**  
 Location ID: **NA**  
 Lab Sample ID: **24F0908-09**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/14/2024 8:19**  
 Analysis Date: **06/17/2024 18:09**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	10	U	10	U	ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	10	U	10	U	ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614OSD004**  
 Location ID: **NA**  
 Lab Sample ID: **24F0908-10**  
 Sample Type: **Field Duplicate**

Sample Matrix : **Air**  
 Sample Date: **06/14/2024 8:19**  
 Analysis Date: **06/17/2024 18:50**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units	
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv	
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv	
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv	
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv	
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv	
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv	
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv	
7783-06-4	Hydrogen Sulfide	1	10	95.8		95.8	J	ppbv	*
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv	
	Total Reduced Sulfurs	1	10	95.8		95.8	J	ppbv	*

DF = Dilution Factor    LOQ = Limit of Quantitation

\* = Modified by Validation

U = Not detected at or above LOQ    J = Estimated    R = Rejected



**Form 1 Data Sheet - Volatiles**

**CTEH, LLC**  
**Chiquita Landfill**  
**SDG: 24F0908**

COC Sample ID: **CACA0612OS012**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-01**

Sample Matrix: **Air**  
 Sample Date: **06/12/2024 17:30**  
 Analysis Date: **06/17/2024 13:53**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	0.45	J	0.45	J	ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	3.55		3.55		ppbv
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	UJ	ppbv *

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0612OS012**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-01**

Sample Matrix: **Air**  
 Sample Date: **06/12/2024 17:30**  
 Analysis Date: **06/17/2024 13:53**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-15-0	Carbon Disulfide	1	0.5	0.5	0.5	U	0.5	U	ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.28	J	0.28	J	ppbv
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
64-17-5	Ethanol	1	0.2	0.5	4.37		4.37		ppbv
141-78-6	Ethyl acetate	1	0.2	0.5	0.26	J	0.26	J	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-63-0	Isopropyl alcohol	1	0.2	0.5	2.3		2.3		ppbv
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0612OS012**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-01**

Sample Matrix: **Air**  
 Sample Date: **06/12/2024 17:30**  
 Analysis Date: **06/17/2024 13:53**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	C, U	0.2	U	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	0.23	J	0.23	J	ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.2	U	0.2	U	ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	U	1	U	ppbv
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-88-3	Toluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0613UW001**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-02**

Sample Matrix: **Air**  
 Sample Date: **06/13/2024 10:35**  
 Analysis Date: **06/17/2024 14:45**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	0.91		0.91		ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	7.47		7.47		ppbv
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	UJ	ppbv *

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0613UW001**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-02**

Sample Matrix: **Air**  
 Sample Date: **06/13/2024 10:35**  
 Analysis Date: **06/17/2024 14:45**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-15-0	Carbon Disulfide	1	0.5	0.5	1.22		1.22		ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.28	J	0.28	J	ppbv
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
141-78-6	Ethyl acetate	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-63-0	Isopropyl alcohol	1	0.2	0.5	4.36		4.36		ppbv
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0613UW001**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-02**

Sample Matrix: **Air**  
 Sample Date: **06/13/2024 10:35**  
 Analysis Date: **06/17/2024 14:45**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	C, U	0.2	U	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	0.33	J	0.33	J	ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.2	U	0.2	U	ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	U	1	U	ppbv
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-88-3	Toluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
Chiquita Landfill  
SDG: 24F0908

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COC Sample ID: **CACA0613UW001**      Sample Matrix: **Air**      Total/Dissolved: **T**  
Site ID: **NA**      Sample Date: **06/13/2024 10:35**      Lab: **Enthalpy Analytical**  
Sample Type: **Site Sample Re-extraction/Re-an**      Analysis Date: **06/17/2024 17:20**      Method: **EPA TO-15**  
Lab Sample ID: **24F0908-02RE1**

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CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
64-17-5	Ethanol	6	1.2	3	36.2		36.2		ppbv

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DF = Dilution Factor      MDL = Method Detection Limit      LOQ = Limit of Quantitation  
\* = Modified by Validation  
J = Estimated  
U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0613OS005**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-03**

Sample Matrix: **Air**  
 Sample Date: **06/13/2024 9:37**  
 Analysis Date: **06/17/2024 15:38**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	2.82		2.82		ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.23	J	0.23	J	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	5.05		5.05		ppbv
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	UJ	ppbv *

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0613OS005**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-03**

Sample Matrix: **Air**  
 Sample Date: **06/13/2024 9:37**  
 Analysis Date: **06/17/2024 15:38**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-15-0	Carbon Disulfide	1	0.5	0.5	0.84		0.84		ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.28	J	0.28	J	ppbv
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
64-17-5	Ethanol	1	0.2	0.5	10.1		10.1		ppbv
141-78-6	Ethyl acetate	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-63-0	Isopropyl alcohol	1	0.2	0.5	1.35		1.35		ppbv
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0613OS005**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-03**

Sample Matrix: **Air**  
 Sample Date: **06/13/2024 9:37**  
 Analysis Date: **06/17/2024 15:38**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	C, U	0.2	U	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	1.55		1.55		ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.41	J	0.41	J	ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	U	1	U	ppbv
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	0.81		0.81		ppbv
108-88-3	Toluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0613OS008**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-04**

Sample Matrix: **Air**  
 Sample Date: **06/13/2024 8:52**  
 Analysis Date: **06/17/2024 16:30**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.44	J	0.44	J	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	J	0.2	J	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	14.6		14.6		ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.75		0.75		ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.84		0.84		ppbv
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	UJ	ppbv *
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0613OS008**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-04**

Sample Matrix: **Air**  
 Sample Date: **06/13/2024 8:52**  
 Analysis Date: **06/17/2024 16:30**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
71-43-2	Benzene	1	0.2	0.5	1.1		1.1		ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-15-0	Carbon Disulfide	1	0.5	0.5	7.58		7.58		ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.29	J	0.29	J	ppbv
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
141-78-6	Ethyl acetate	1	0.2	0.5	0.99		0.99		ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.3	J	0.3	J	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
179601-23-1	m+p-Xylenes	1	0.4	1	0.52	J	0.52	J	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0613OS008**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-04**

Sample Matrix: **Air**  
 Sample Date: **06/13/2024 8:52**  
 Analysis Date: **06/17/2024 16:30**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	C, U	0.2	U	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.82		0.82		ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	1.39		1.39		ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.34	J	0.34	J	ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	1.24		1.24		ppbv
115-07-1	Propylene	1	1	1	1.91		1.91		ppbv
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	5.57		5.57		ppbv
108-88-3	Toluene	1	0.2	0.5	0.47	J	0.47	J	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
1330-20-7	Xylenes, Total	1	0.6	1.5	1.76		1.76		ppbv

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 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
Chiquita Landfill  
SDG: 24F0908

COC Sample ID: **CACA0613OS008**      Sample Matrix: **Air**      Total/Dissolved: **T**  
Site ID: **NA**      Sample Date: **06/13/2024 8:52**      Lab: **Enthalpy Analytical**  
Sample Type: **Site Sample Re-extraction/Re-an**      Analysis Date: **06/18/2024 16:03**      Method: **EPA TO-15**  
Lab Sample ID: **24F0908-04RE1**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
67-64-1	Acetone	12	2.4	6	25.9		25.9		ppbv
64-17-5	Ethanol	12	2.4	6	108		108		ppbv
67-63-0	Isopropyl alcohol	12	2.4	6	23.5		23.5		ppbv

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\* = Modified by Validation  
J = Estimated  
U = Not Detected at or above the MDL

**Form 1 Data Sheet - Volatiles**

**CTEH, LLC**  
**Chiquita Landfill**  
**SDG: 24F0908**

COC Sample ID: **CACA0614UW001**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-05**

Sample Matrix: **Air**  
 Sample Date: **06/14/2024 7:05**  
 Analysis Date: **06/17/2024 18:13**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	1.84		1.84		ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	5.75		5.75		ppbv
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	UJ	ppbv *

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 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614UW001**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-05**

Sample Matrix: **Air**  
 Sample Date: **06/14/2024 7:05**  
 Analysis Date: **06/17/2024 18:13**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.2	J	0.2	J	ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-15-0	Carbon Disulfide	1	0.5	0.5	0.78		0.78		ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.27	J	0.27	J	ppbv
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
64-17-5	Ethanol	1	0.2	0.5	7.11		7.11		ppbv
141-78-6	Ethyl acetate	1	0.2	0.5	0.66		0.66		ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv

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**Form 1 Data Sheet - Volatiles**

**CTEH, LLC**  
**Chiquita Landfill**  
**SDG: 24F0908**

COC Sample ID: **CACA0614UW001**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-05**

Sample Matrix: **Air**  
 Sample Date: **06/14/2024 7:05**  
 Analysis Date: **06/17/2024 18:13**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	C, U	0.2	U	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	0.81		0.81		ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.22	J	0.22	J	ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	U	1	U	ppbv
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	0.45	J	0.45	J	ppbv
108-88-3	Toluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
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Form 1 Data Sheet - Volatiles

CTEH, LLC  
Chiquita Landfill  
SDG: 24F0908

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COC Sample ID: **CACA0614UW001**      Sample Matrix: **Air**      Total/Dissolved: **T**  
Site ID: **NA**      Sample Date: **06/14/2024 7:05**      Lab: **Enthalpy Analytical**  
Sample Type: **Site Sample Re-extraction/Re-an**      Analysis Date: **06/18/2024 13:30**      Method: **EPA TO-15**  
Lab Sample ID: **24F0908-05RE1**

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CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
67-63-0	Isopropyl alcohol	6	1.2	3	35.1		35.1		ppbv

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J = Estimated  
U = Not Detected at or above the MDL



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614OS002**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-06**

Sample Matrix: **Air**  
 Sample Date: **06/14/2024 7:31**  
 Analysis Date: **06/17/2024 19:06**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	1.29		1.29	J	ppbv *
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	3.45		3.45	J	ppbv *
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	UJ	ppbv *

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614OS002**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-06**

Sample Matrix: **Air**  
 Sample Date: **06/14/2024 7:31**  
 Analysis Date: **06/17/2024 19:06**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.23	J	0.23	J	ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-15-0	Carbon Disulfide	1	0.5	0.5	0.5	U	0.5	U	ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.28	J	0.28	J	ppbv
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
64-17-5	Ethanol	1	0.2	0.5	15.8		15.8	J	ppbv *
141-78-6	Ethyl acetate	1	0.2	0.5	0.41	J	0.41	J	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-63-0	Isopropyl alcohol	1	0.2	0.5	1.32		1.32	J	ppbv *
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
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 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614OS002**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-06**

Sample Matrix: **Air**  
 Sample Date: **06/14/2024 7:31**  
 Analysis Date: **06/17/2024 19:06**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	C, U	0.2	U	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	1.78		1.78		ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.56		0.56		ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	U	1	U	ppbv
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	0.36	J	0.36	J	ppbv
108-88-3	Toluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

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 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614OSD002**  
 Site ID: **NA**  
 Sample Type: **Field Duplicate**  
 Lab Sample ID: **24F0908-07**

Sample Matrix: **Air**  
 Sample Date: **06/14/2024 7:31**  
 Analysis Date: **06/18/2024 8:49**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	3.78		3.78	J	ppbv *
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	5.4		5.4	J	ppbv *
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	UJ	ppbv *

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
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 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614OSD002**  
 Site ID: **NA**  
 Sample Type: **Field Duplicate**  
 Lab Sample ID: **24F0908-07**

Sample Matrix: **Air**  
 Sample Date: **06/14/2024 7:31**  
 Analysis Date: **06/18/2024 8:49**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.37	J	0.37	J	ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-15-0	Carbon Disulfide	1	0.5	0.5	0.75		0.75		ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.29	C, J	0.29	J	ppbv *
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	C, U	0.5	U	ppbv *
141-78-6	Ethyl acetate	1	0.2	0.5	0.48	J	0.48	J	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-63-0	Isopropyl alcohol	1	0.2	0.5	1.87		1.87	J	ppbv *
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614OSD002**  
 Site ID: **NA**  
 Sample Type: **Field Duplicate**  
 Lab Sample ID: **24F0908-07**

Sample Matrix: **Air**  
 Sample Date: **06/14/2024 7:31**  
 Analysis Date: **06/18/2024 8:49**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	C, U	0.2	U	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	1.77		1.77		ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.64		0.64		ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	C, U	1	U	ppbv *
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	0.89		0.89	J	ppbv *
108-88-3	Toluene	1	0.2	0.5	0.22	J	0.22	J	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
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 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
Chiquita Landfill  
SDG: 24F0908

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COC Sample ID: **CACA0614OSD002**      Sample Matrix: **Air**      Total/Dissolved: **T**  
Site ID: **NA**      Sample Date: **06/14/2024 7:31**      Lab: **Enthalpy Analytical**  
Sample Type: **Field Duplicate Re-extraction/Re-**      Analysis Date: **06/18/2024 14:21**      Method: **EPA TO-15**  
Lab Sample ID: **24F0908-07RE1**

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CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
64-17-5	Ethanol	6	1.2	3	23.1		23.1	J	ppbv *

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DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
\* = Modified by Validation  
J = Estimated  
U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614OS003**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-08**

Sample Matrix: **Air**  
 Sample Date: **06/14/2024 7:51**  
 Analysis Date: **06/18/2024 9:42**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	2.07		2.07		ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	6.94		6.94		ppbv
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	UJ	ppbv *

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614OS003**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-08**

Sample Matrix: **Air**  
 Sample Date: **06/14/2024 7:51**  
 Analysis Date: **06/18/2024 9:42**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.91		0.91		ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-15-0	Carbon Disulfide	1	0.5	0.5	0.5	U	0.5	U	ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.31		0.31		ppbv
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	C, U	0.5	U	ppbv *
141-78-6	Ethyl acetate	1	0.2	0.5	0.78		0.78		ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
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 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614OS003**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-08**

Sample Matrix: **Air**  
 Sample Date: **06/14/2024 7:51**  
 Analysis Date: **06/18/2024 9:42**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	C, U	0.2	U	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	2.05		2.05		ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.43	J	0.43	J	ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	C, U	1	U	ppbv *
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	1.06		1.06		ppbv
108-88-3	Toluene	1	0.2	0.5	0.22	J	0.22	J	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
Chiquita Landfill  
SDG: 24F0908

COC Sample ID: **CACA0614OS003**      Sample Matrix: **Air**      Total/Dissolved: **T**  
Site ID: **NA**      Sample Date: **06/14/2024 7:51**      Lab: **Enthalpy Analytical**  
Sample Type: **Site Sample Re-extraction/Re-an**      Analysis Date: **06/18/2024 15:12**      Method: **EPA TO-15**  
Lab Sample ID: **24F0908-08RE1**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
64-17-5	Ethanol	6	1.2	3	26.6		26.6		ppbv
67-63-0	Isopropyl alcohol	6	1.2	3	25.1		25.1		ppbv

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\* = Modified by Validation  
J = Estimated  
U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614OS004**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-09**

Sample Matrix: **Air**  
 Sample Date: **06/14/2024 8:19**  
 Analysis Date: **06/18/2024 10:35**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	0.93		0.93	J	ppbv *
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	4.76		4.76	J	ppbv *
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	UJ	ppbv *

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
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 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614OS004**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-09**

Sample Matrix: **Air**  
 Sample Date: **06/14/2024 8:19**  
 Analysis Date: **06/18/2024 10:35**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.57		0.57	J	ppbv *
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-15-0	Carbon Disulfide	1	0.5	0.5	0.5	U	0.5	U	ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.29		0.29		ppbv
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	C, U	0.5	U	ppbv *
64-17-5	Ethanol	1	0.2	0.5	12.7		12.7	J	ppbv *
141-78-6	Ethyl acetate	1	0.2	0.5	0.34	J	0.34	J	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-63-0	Isopropyl alcohol	1	0.2	0.5	11.7		11.7		ppbv
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614OS004**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0908-09**

Sample Matrix: **Air**  
 Sample Date: **06/14/2024 8:19**  
 Analysis Date: **06/18/2024 10:35**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	C, U	0.2	U	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	1.53		1.53		ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.76		0.76	J	ppbv *
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	C, U	1	U	ppbv *
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	0.56		0.56	J	ppbv *
108-88-3	Toluene	1	0.2	0.5	0.31	J	0.31	J	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

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 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614OSD004**  
 Site ID: **NA**  
 Sample Type: **Field Duplicate**  
 Lab Sample ID: **24F0908-10**

Sample Matrix: **Air**  
 Sample Date: **06/14/2024 8:19**  
 Analysis Date: **06/18/2024 11:27**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	3.64		3.64	J	ppbv *
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.22	J	0.22	J	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	10.2		10.2	J	ppbv *
107-02-8	Acrolein	1	0.4	0.5	0.4	J	0.4	J	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614OSD004**  
 Site ID: **NA**  
 Sample Type: **Field Duplicate**  
 Lab Sample ID: **24F0908-10**

Sample Matrix: **Air**  
 Sample Date: **06/14/2024 8:19**  
 Analysis Date: **06/18/2024 11:27**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.98		0.98	J	ppbv *
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-15-0	Carbon Disulfide	1	0.5	0.5	0.74		0.74	J	ppbv *
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.35		0.35		ppbv
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	C, U	0.5	U	ppbv *
64-17-5	Ethanol	1	0.2	0.5	17.9		17.9	J	ppbv *
141-78-6	Ethyl acetate	1	0.2	0.5	0.3	J	0.3	J	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-63-0	Isopropyl alcohol	1	0.2	0.5	8.77		8.77		ppbv
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0908

COC Sample ID: **CACA0614OSD004**  
 Site ID: **NA**  
 Sample Type: **Field Duplicate**  
 Lab Sample ID: **24F0908-10**

Sample Matrix: **Air**  
 Sample Date: **06/14/2024 8:19**  
 Analysis Date: **06/18/2024 11:27**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	C, U	0.2	U	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	1.54		1.54		ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.34	J	0.34	J	ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	C, U	1	U	ppbv *
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	0.98		0.98	J	ppbv *
108-88-3	Toluene	1	0.2	0.5	0.23	J	0.23	J	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

## **Appendix II Chain of Custody**



# CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

Send Report to labresults@cteh.com  
 Company CTEH, LLC  
 Address 5120 North Shore Drive, North Little Rock, Arkansas 72118  
 Phone (501)801-8500  
 e-mail labresults@cteh.com;  
 Accounting Send invoices to CTEHAP@montrose-env.com with Invoice # and Vendor name in subject line

CTEH Project # Proj-036688  
 Turnaround Requested:  Normal  Same Day  Next Day  
 Two Day  Other (Specify) 5 days  
 Data Packet Requested:  Standard Level II  Other \_\_\_\_\_  
 Sample and Extract Retention/Disposal:  
 Dispose after 2X hold time   
 Retain w/ storage fees after 2X hold time

Lab Contact Information	Can	Regulator	Secondary Sample Identification	Sample Size	Units	Sample Start Date	Sample Start Time	Sample Stop Date	Sample Stop Time	Initials	Method					Matrix	
											Sulfurs	To-15	PMDS	To-15	VOC		To-15 Full List
Primary Sample Identification																	
CACA06120S012 3.2"	13437	GS027	1.4	L	6/12/24			6/12/24		KS	X	X	X				A
CACA0612UW001 2.6"	13A63	GS020	1.4	L	6/13/24	1035		6/13/24	1035	KS	X	X	X				A
CACA06130S005 2.8"	15971	GS012	1.4	L	6/13/24	0937		6/13/24	0937	KS	X	X	X				A
CACA06130S008 2.6"	13379		1.4	L	6/13/24	0852		6/13/24	0852	KS	X	X	X				A
CACA0614UW001 1.8"	16483	GS023	1.4	L	6/14/24	0705		6/14/24	0705	KS	X	X	X				A
CACA06140S002 2.0"	16779	GS032	1.4	L	6/14/24	0731		6/14/24	0731	KS	X	X	X				A
CACA06140SD002 2.0"	16769	GS032	1.4	L	6/14/24	0731		6/14/24	0731	KS	X	X	X				A
CACA06140S003 2.4"	16484	GS021	1.4	L	6/14/24	0751		6/14/24	0751	KS	X	X	X				A
CACA06140S004 2.6"	16791	GS033	1.4	L	6/14/24	0819		6/14/24	0819	KS	X	X	X				A
CACA06140SD004 2.8"	16783	GS033	1.4	L	6/14/24	0819		6/14/24	0819	KS	X	X	X				A

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
Kamie Sachin	6/14/24 1200	FedEx	6/14/24 1200
FEDEX E		<i>[Signature]</i>	6/17/24 0838

COMMENTS  
**CTEH, LLC** 24F0908  
**Air Quality Study**  
 Recd: 06/17/2024 Due: 06/24/2024

310 DT: 20.6  
 CF: 0.5 no (C  
 na (C)



## **Data Verification Report (Level 2)**

**Project 036688: Chiquita Canyon**

**Client: CTEH, LLC**

Analytical Report #: 24F0971

Date: July 24, 2024

Reviewed for release by: Dana Hebert

Date: July 24, 2024

**Disclaimer:**

The validation performed and reported herein is based on procedures and methods presented to eQAQC Consultants, LLC in the associated laboratory data package. Qualification and review was based on method and/or project specific requirements utilizing the latest version of USEPA National Functional Guidelines for Inorganic and/or Organic Data Review.

Information contained in this report is based solely on the hardcopy and/or electronic deliverables that were submitted to eQAQC Consultants, LLC. eQAQC Consultants, LLC reserves the right to modify or change the validation report if new information is presented or if this report is determined to be inaccurate or incomplete.

The following parameters were reviewed during the validation process:

**Chain-of-Custody (COC):** Completeness and sample custody

**Holding time:** Collection date versus preparation and/or analysis date

**Preservation:** Temperature and chemical

**Blank Contamination:** Laboratory and field blanks

**Matrix/Precision/Recovery:** Surrogates, Internal Standards, Calibrations, Duplicates, Matrix Spikes, Laboratory Control Samples (when applicable)

## INTRODUCTION:

Project: 036688 – Chiquita Canyon  
Laboratory: Enthalpy Analytical, LLC - Richmond  
Laboratory Package No.: 24F0971  
Matrix: Air

eQAQC Consultants, LLC received one electronic Level II data package containing the results for ten field samples. Qualification and review was based on method and/or project specific requirements utilizing the latest versions of USEPA National Functional Guidelines for Organic Data Review.

The following samples were reviewed:

<b>Sample ID</b>	<b>Lab ID</b>	<b>Collection Date</b>	<b>Analyses</b>
CACA0616OS003	24F0971-01	06/16/2024 09:42 AM	[1-2]
CACA0616OS005	24F0971-02	06/16/2024 09:59 AM	[1-2]
CACA0616OS007	24F0971-03	06/16/2024 10:30 AM	[1-2]
CACA0617UW001	24F0971-04	06/17/2024 07:14 AM	[1-2]
CACA0617OS009	24F0971-06	06/17/2024 09:20 AM	[1-2]
CACA0617OS010	24F0971-07	06/17/2024 08:42 AM	[1-2]
CACA0615UW001	24F0971-08	06/15/2024 06:09 PM	[1-2]
CACA0615OS005	24F0971-09	06/15/2024 11:27 AM	[1-2]
CACA0615OS008	24F0971-10	06/15/2024 05:40 PM	[1-2]
CACA0616UW001	24F0971-11	06/16/2024 09:04 AM	[1-2]

Analyses Performed Codes:

[1] Sulfur Volatile Organic Compounds by GCMS - (EPA TO-15)

[2] Volatile Organic Compounds by GCMS - (EPA TO-15)

## DATA REVIEW FINDINGS SUMMARY

### I. General Package/Sample Receipt:

A compliant laboratory level II data package was received on June 26, 2024.

Sample CACA0614OS011 was received at the laboratory with the same sample pressure as the outgoing sample pressure. No air sample was collected; therefore, the analysis was cancelled.

### I. Sulfur Volatile Organic Compounds by GCMS (EPA-TO-15):

The laboratory reported the results in both PPBV and UG/M3 units in the hardcopy report. Results were expressed only in PPBV units in the electronic data deliverable.

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria. No data qualifications were necessary.

### II. Volatile Organic Compounds by GCMS (EPA-TO-15):

The laboratory reported the results in both PPBV and UG/M3 units in the hardcopy report. Results were expressed only in PPBV units in the electronic data deliverable.

The laboratory noted the continuing calibration verification (CCV) response was outside specifications for Methyl-t-butyl ether (MTBE), Dichlorodifluoromethane, Chloromethane, Propylene and Vinyl acetate. Supporting data were not included in the level II data package; therefore, this non-conformance could not be verified. The laboratory applied "C" qualifier was removed.

Recoveries of Benzyl Chloride, Chloromethane, Methyl-t-butyl ether (MTBE) and Vinyl acetate were below acceptance criteria in the laboratory control sample (LCS) and LCS duplicate (LCSD) for batch ID BHF0662. These analytes were not detected in the field samples. Benzyl Chloride, Chloromethane, Methyl-t-butyl ether (MTBE), and Vinyl acetate results in the associated samples were qualified as estimated non-detect (UJ) due to the non-conformance.

Recoveries of 1,3-Butadiene, Bromomethane, trans-1,2-Dichloroethylene and Vinyl chloride were below acceptance criteria in the LCSD. Recoveries were acceptable in the LCS. In addition, the relative percent difference (RPD) between the LCS and LCSD exceeded acceptance criteria. These analytes were not detected in the field samples. 1,3-Butadiene, Bromomethane, trans-1,2-Dichloroethylene and Vinyl chloride results in the associated samples were qualified as estimated non-detect (UJ) due to the non-conformance.

Recovery of 1,1-Dichloroethane was below acceptance criteria in the LCSD. Recovery was acceptable in the LCS. This analyte was not detected in the field samples. 1,1-Dichloroethane results in the associated samples were qualified as estimated non-detect (UJ) due to the non-conformance.

Dichlorodifluoromethane was not recovered in the LCS. Recovery was acceptable in the LCSD. In addition, the RPD between the LCS and LCSD exceeded acceptance criteria. This analyte was not detected in the field samples. Dichlorodifluoromethane results in the associated samples were qualified as estimated non-detect (UJ) due to the non-conformance.

Propylene was not recovered in the LCS and LCSD. This analyte was not detected in the field samples. The presence or absence cannot be verified; therefore, the Propylene results in the associated samples were qualified as rejected (R). The data is not usable.

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.



## DATA QUALIFIER REFERENCE

Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The associated value is an estimated quantity.
J-	The result is an estimated quantity, but the result may be biased low.
J+	The result is an estimated quantity, but the result may be biased high.
UJ	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet the quality control criteria. The presence or absence of the analyte cannot be verified.

**Appendix I**  
**Form 1 Data (Qualified)**

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0616OS003**  
 Location ID: **NA**  
 Lab Sample ID: **24F0971-01**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/16/2024 9:42**  
 Analysis Date: **06/19/2024 13:50**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	15.7		15.7		ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	35		35		ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	50.7		50.7		ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation

\* = Modified by Validation

U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0616OS005**  
 Location ID: **NA**  
 Lab Sample ID: **24F0971-02**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/16/2024 9:59**  
 Analysis Date: **06/19/2024 14:32**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	10	U	10	U	ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	10	U	10	U	ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0616OS007**  
 Location ID: **NA**  
 Lab Sample ID: **24F0971-03**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/16/2024 10:30**  
 Analysis Date: **06/19/2024 15:13**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	47.7		47.7		ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	47.7		47.7		ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation

\* = Modified by Validation

U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0617UW001**  
 Location ID: **NA**  
 Lab Sample ID: **24F0971-04**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/17/2024 7:14**  
 Analysis Date: **06/19/2024 16:00**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	49.5		49.5		ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	49.5		49.5		ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation

\* = Modified by Validation

U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0617OS009**  
 Location ID: **NA**  
 Lab Sample ID: **24F0971-06**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/17/2024 9:20**  
 Analysis Date: **06/19/2024 16:35**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	10	U	10	U	ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	10	U	10	U	ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation

\* = Modified by Validation

U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0617OS010**  
 Location ID: **NA**  
 Lab Sample ID: **24F0971-07**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/17/2024 8:42**  
 Analysis Date: **06/19/2024 17:16**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	44.4		44.4		ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	44.4		44.4		ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 U = Not detected at or above LOQ    J = Estimated    R = Rejected





Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0615UW001**  
 Location ID: **NA**  
 Lab Sample ID: **24F0971-08**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/15/2024 18:09**  
 Analysis Date: **06/19/2024 17:58**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	10	U	10	U	ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	10	U	10	U	ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation

\* = Modified by Validation

U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0615OS005**  
 Location ID: **NA**  
 Lab Sample ID: **24F0971-09**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/15/2024 11:27**  
 Analysis Date: **06/19/2024 18:39**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	39.1		39.1		ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	39.1		39.1		ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation

\* = Modified by Validation

U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0615OS008**  
 Location ID: **NA**  
 Lab Sample ID: **24F0971-10**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/15/2024 17:40**  
 Analysis Date: **06/19/2024 19:20**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	23		23		ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
74-93-1	Methyl mercaptan	1	10	19.6		19.6		ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
Chiquita Landfill  
SDG: 24F0971

COC Sample ID: **CACA0615OS008**      Sample Matrix : **Air**      Total/Dissolved: **T**  
Location ID: **NA**      Sample Date: **06/15/2024 17:40**      Lab: **Enthalpy Analytical**  
Lab Sample ID: **24F0971-10RE1**      Analysis Date: **06/20/2024 9:01**      Method: **EPA TO15**  
Sample Type: **Site Sample Re-extraction/Re-analysis**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
7783-06-4	Hydrogen Sulfide	3	30	205		205		ppbv
	Total Reduced Sulfurs	3	30	271		271		ppbv

DF = Dilution Factor      LOQ = Limit of Quantitation  
\* = Modified by Validation  
U = Not detected at or above LOQ      J = Estimated      R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0616UW001**  
 Location ID: **NA**  
 Lab Sample ID: **24F0971-11**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/16/2024 9:04**  
 Analysis Date: **06/19/2024 20:02**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	10	U	10	U	ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	10	U	10	U	ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation

\* = Modified by Validation

U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0616OS003**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-01**

Sample Matrix: **Air**  
 Sample Date: **06/16/2024 9:42**  
 Analysis Date: **06/18/2024 22:04**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	2.66		2.66		ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	10.6		10.6		ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation

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R = Rejected

**Form 1 Data Sheet - Volatiles**

**CTEH, LLC**  
**Chiquita Landfill**  
**SDG: 24F0971**

COC Sample ID: **CACA0616OS003**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-01**

Sample Matrix: **Air**  
 Sample Date: **06/16/2024 9:42**  
 Analysis Date: **06/18/2024 22:04**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	U	ppbv
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	2.17		2.17		ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-15-0	Carbon Disulfide	1	0.5	0.5	3.4		3.4		ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.29		0.29	UJ	ppbv *
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	C, U	0.5	UJ	ppbv *
64-17-5	Ethanol	1	0.2	0.5	12.7		12.7		ppbv
141-78-6	Ethyl acetate	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0616OS003**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-01**

Sample Matrix: **Air**  
 Sample Date: **06/16/2024 9:42**  
 Analysis Date: **06/18/2024 22:04**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
67-63-0	Isopropyl alcohol	1	0.2	0.5	3.79		3.79		ppbv
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	0.93		0.93		ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.25	J	0.25	J	ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	C, U		R	ppbv *
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	2.15		2.15		ppbv
108-88-3	Toluene	1	0.2	0.5	0.25	J	0.25	J	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation

\* = Modified by Validation

J = Estimated

U = Not Detected at or above the MDL

R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
Chiquita Landfill  
SDG: 24F0971

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COC Sample ID: **CACA0616OS003**      Sample Matrix: **Air**      Total/Dissolved: **T**  
Site ID: **NA**      Sample Date: **06/16/2024 9:42**      Lab: **Enthalpy Analytical**  
Sample Type: **Site Sample**      Analysis Date: **06/18/2024 22:04**      Method: **EPA TO-15**  
Lab Sample ID: **24F0971-01**

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CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

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DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
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J = Estimated  
U = Not Detected at or above the MDL  
R = Rejected

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0616OS005**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-02**

Sample Matrix: **Air**  
 Sample Date: **06/16/2024 9:59**  
 Analysis Date: **06/18/2024 22:57**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	1.1		1.1		ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	5.94		5.94		ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation

\* = Modified by Validation

J = Estimated

U = Not Detected at or above the MDL

R = Rejected

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0616OS005**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-02**

Sample Matrix: **Air**  
 Sample Date: **06/16/2024 9:59**  
 Analysis Date: **06/18/2024 22:57**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	U	ppbv
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	1.03		1.03		ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-15-0	Carbon Disulfide	1	0.5	0.5	1.25		1.25		ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.35		0.35	UJ	ppbv *
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	C, U	0.5	UJ	ppbv *
64-17-5	Ethanol	1	0.2	0.5	6.29		6.29		ppbv
141-78-6	Ethyl acetate	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation

\* = Modified by Validation

J = Estimated

U = Not Detected at or above the MDL

R = Rejected

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0616OS005**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-02**

Sample Matrix: **Air**  
 Sample Date: **06/16/2024 9:59**  
 Analysis Date: **06/18/2024 22:57**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
67-63-0	Isopropyl alcohol	1	0.2	0.5	12.7		12.7		ppbv
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	0.57		0.57		ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.23	J	0.23	J	ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	C, U		R	ppbv *
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	0.74		0.74		ppbv
108-88-3	Toluene	1	0.2	0.5	0.22	J	0.22	J	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation

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U = Not Detected at or above the MDL

R = Rejected

Form 1 Data Sheet - Volatiles

CTEH, LLC  
Chiquita Landfill  
SDG: 24F0971

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COC Sample ID: **CACA0616OS005**      Sample Matrix: **Air**      Total/Dissolved: **T**  
Site ID: **NA**      Sample Date: **06/16/2024 9:59**      Lab: **Enthalpy Analytical**  
Sample Type: **Site Sample**      Analysis Date: **06/18/2024 22:57**      Method: **EPA TO-15**  
Lab Sample ID: **24F0971-02**

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CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0616OS007**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-03**

Sample Matrix: **Air**  
 Sample Date: **06/16/2024 10:30**  
 Analysis Date: **06/18/2024 23:51**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	0.64		0.64		ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	4.28		4.28		ppbv

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0616OS007**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-03**

Sample Matrix: **Air**  
 Sample Date: **06/16/2024 10:30**  
 Analysis Date: **06/18/2024 23:51**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	U	ppbv
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.64		0.64		ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-15-0	Carbon Disulfide	1	0.5	0.5	0.78		0.78		ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.2		0.2	UJ	ppbv *
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	C, U	0.5	UJ	ppbv *
64-17-5	Ethanol	1	0.2	0.5	3.87		3.87		ppbv
141-78-6	Ethyl acetate	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0616OS007**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-03**

Sample Matrix: **Air**  
 Sample Date: **06/16/2024 10:30**  
 Analysis Date: **06/18/2024 23:51**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
67-63-0	Isopropyl alcohol	1	0.2	0.5	0.8		0.8		ppbv
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	0.6		0.6		ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.2	U	0.2	U	ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	C, U		R	ppbv *
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	0.4	J	0.4	J	ppbv
108-88-3	Toluene	1	0.2	0.5	0.22	J	0.22	J	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
Chiquita Landfill  
SDG: 24F0971

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COC Sample ID: **CACA0616OS007**      Sample Matrix: **Air**      Total/Dissolved: **T**  
Site ID: **NA**      Sample Date: **06/16/2024 10:30**      Lab: **Enthalpy Analytical**  
Sample Type: **Site Sample**      Analysis Date: **06/18/2024 23:51**      Method: **EPA TO-15**  
Lab Sample ID: **24F0971-03**

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CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0617UW001**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-04**

Sample Matrix: **Air**  
 Sample Date: **06/17/2024 7:14**  
 Analysis Date: **06/19/2024 0:44**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	1.87		1.87		ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	4.54		4.54		ppbv

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R = Rejected

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0617UW001**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-04**

Sample Matrix: **Air**  
 Sample Date: **06/17/2024 7:14**  
 Analysis Date: **06/19/2024 0:44**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	U	ppbv
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.46	J	0.46	J	ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-15-0	Carbon Disulfide	1	0.5	0.5	0.95		0.95		ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.31		0.31	UJ	ppbv *
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	C, U	0.5	UJ	ppbv *
141-78-6	Ethyl acetate	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-63-0	Isopropyl alcohol	1	0.2	0.5	3.9		3.9		ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation

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U = Not Detected at or above the MDL

R = Rejected

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0617UW001**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-04**

Sample Matrix: **Air**  
 Sample Date: **06/17/2024 7:14**  
 Analysis Date: **06/19/2024 0:44**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	0.24	J	0.24	J	ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.2	U	0.2	U	ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	C, U		R	ppbv *
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	1.33		1.33		ppbv
108-88-3	Toluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation

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R = Rejected

Form 1 Data Sheet - Volatiles

CTEH, LLC  
Chiquita Landfill  
SDG: 24F0971

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COC Sample ID: **CACA0617UW001**      Sample Matrix: **Air**      Total/Dissolved: **T**  
Site ID: **NA**      Sample Date: **06/17/2024 7:14**      Lab: **Enthalpy Analytical**  
Sample Type: **Site Sample Re-extraction/Re-an**      Analysis Date: **06/19/2024 10:51**      Method: **EPA TO-15**  
Lab Sample ID: **24F0971-04RE1**

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CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
64-17-5	Ethanol	6	1.2	3	25.5		25.5		ppbv

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R = Rejected

**Form 1 Data Sheet - Volatiles**

**CTEH, LLC**  
**Chiquita Landfill**  
**SDG: 24F0971**

COC Sample ID: **CACA0617OS009**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-06**

Sample Matrix: **Air**  
 Sample Date: **06/17/2024 9:20**  
 Analysis Date: **06/19/2024 1:37**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	0.66		0.66		ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	2.43		2.43		ppbv

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0617OS009**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-06**

Sample Matrix: **Air**  
 Sample Date: **06/17/2024 9:20**  
 Analysis Date: **06/19/2024 1:37**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	U	ppbv
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-15-0	Carbon Disulfide	1	0.5	0.5	0.5	U	0.5	U	ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.29		0.29	UJ	ppbv *
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	C, U	0.5	UJ	ppbv *
64-17-5	Ethanol	1	0.2	0.5	6.34		6.34		ppbv
141-78-6	Ethyl acetate	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0617OS009**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-06**

Sample Matrix: **Air**  
 Sample Date: **06/17/2024 9:20**  
 Analysis Date: **06/19/2024 1:37**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
67-63-0	Isopropyl alcohol	1	0.2	0.5	2.71		2.71		ppbv
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	0.25	J	0.25	J	ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.2	U	0.2	U	ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	C, U		R	ppbv *
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	0.36	J	0.36	J	ppbv
108-88-3	Toluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
Chiquita Landfill  
SDG: 24F0971

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COC Sample ID: **CACA0617OS009**      Sample Matrix: **Air**      Total/Dissolved: **T**  
Site ID: **NA**      Sample Date: **06/17/2024 9:20**      Lab: **Enthalpy Analytical**  
Sample Type: **Site Sample**      Analysis Date: **06/19/2024 1:37**      Method: **EPA TO-15**  
Lab Sample ID: **24F0971-06**

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CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

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R = Rejected

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0617OS010**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-07**

Sample Matrix: **Air**  
 Sample Date: **06/17/2024 8:42**  
 Analysis Date: **06/19/2024 2:30**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	0.58		0.58		ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	6.94		6.94		ppbv

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0617OS010**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-07**

Sample Matrix: **Air**  
 Sample Date: **06/17/2024 8:42**  
 Analysis Date: **06/19/2024 2:30**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	U	ppbv
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.25	J	0.25	J	ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-15-0	Carbon Disulfide	1	0.5	0.5	0.5	U	0.5	U	ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.28		0.28	UJ	ppbv *
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	C, U	0.5	UJ	ppbv *
64-17-5	Ethanol	1	0.2	0.5	6.93		6.93		ppbv
141-78-6	Ethyl acetate	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation

\* = Modified by Validation

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U = Not Detected at or above the MDL

R = Rejected

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0617OS010**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-07**

Sample Matrix: **Air**  
 Sample Date: **06/17/2024 8:42**  
 Analysis Date: **06/19/2024 2:30**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
67-63-0	Isopropyl alcohol	1	0.2	0.5	18.6		18.6		ppbv
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	0.65		0.65		ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.58		0.58		ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	C, U		R	ppbv *
100-42-5	Styrene	1	0.2	0.5	0.27	J	0.27	J	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	0.27	J	0.27	J	ppbv
108-88-3	Toluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation

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U = Not Detected at or above the MDL

R = Rejected

Form 1 Data Sheet - Volatiles

CTEH, LLC  
Chiquita Landfill  
SDG: 24F0971

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COC Sample ID: **CACA0617OS010**      Sample Matrix: **Air**      Total/Dissolved: **T**  
Site ID: **NA**      Sample Date: **06/17/2024 8:42**      Lab: **Enthalpy Analytical**  
Sample Type: **Site Sample**      Analysis Date: **06/19/2024 2:30**      Method: **EPA TO-15**  
Lab Sample ID: **24F0971-07**

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CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

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R = Rejected

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0615UW001**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-08**

Sample Matrix: **Air**  
 Sample Date: **06/15/2024 18:09**  
 Analysis Date: **06/19/2024 3:23**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	0.57		0.57		ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	3.66		3.66		ppbv

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0615UW001**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-08**

Sample Matrix: **Air**  
 Sample Date: **06/15/2024 18:09**  
 Analysis Date: **06/19/2024 3:23**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	U	ppbv
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-15-0	Carbon Disulfide	1	0.5	0.5	0.5	U	0.5	U	ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.28		0.28	UJ	ppbv *
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	C, U	0.5	UJ	ppbv *
141-78-6	Ethyl acetate	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-63-0	Isopropyl alcohol	1	0.2	0.5	4.34		4.34		ppbv

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**Form 1 Data Sheet - Volatiles**

**CTEH, LLC**  
**Chiquita Landfill**  
**SDG: 24F0971**

COC Sample ID: **CACA0615UW001**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-08**

Sample Matrix: **Air**  
 Sample Date: **06/15/2024 18:09**  
 Analysis Date: **06/19/2024 3:23**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	0.2	U	0.2	U	ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.2	U	0.2	U	ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	C, U		R	ppbv *
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	0.73		0.73		ppbv
108-88-3	Toluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
Chiquita Landfill  
SDG: 24F0971

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COC Sample ID: **CACA0615UW001**      Sample Matrix: **Air**      Total/Dissolved: **T**  
Site ID: **NA**      Sample Date: **06/15/2024 18:09**      Lab: **Enthalpy Analytical**  
Sample Type: **Site Sample Re-extraction/Re-an**      Analysis Date: **06/19/2024 11:41**      Method: **EPA TO-15**  
Lab Sample ID: **24F0971-08RE1**

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CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
64-17-5	Ethanol	6	1.2	3	37.2		37.2		ppbv

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0615OS005**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-09**

Sample Matrix: **Air**  
 Sample Date: **06/15/2024 11:27**  
 Analysis Date: **06/19/2024 4:16**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	0.22	J	0.22	J	ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	2.33		2.33		ppbv

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0615OS005**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-09**

Sample Matrix: **Air**  
 Sample Date: **06/15/2024 11:27**  
 Analysis Date: **06/19/2024 4:16**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	U	ppbv
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-15-0	Carbon Disulfide	1	0.5	0.5	0.6		0.6		ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.32		0.32	UJ	ppbv *
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	C, U	0.5	UJ	ppbv *
64-17-5	Ethanol	1	0.2	0.5	5.59		5.59		ppbv
141-78-6	Ethyl acetate	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation

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U = Not Detected at or above the MDL

R = Rejected

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0615OS005**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-09**

Sample Matrix: **Air**  
 Sample Date: **06/15/2024 11:27**  
 Analysis Date: **06/19/2024 4:16**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
67-63-0	Isopropyl alcohol	1	0.2	0.5	2.94		2.94		ppbv
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	0.24	J	0.24	J	ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.2	U	0.2	U	ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	C, U		R	ppbv *
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-88-3	Toluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation

\* = Modified by Validation

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U = Not Detected at or above the MDL

R = Rejected

Form 1 Data Sheet - Volatiles

CTEH, LLC  
Chiquita Landfill  
SDG: 24F0971

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COC Sample ID: **CACA0615OS005**      Sample Matrix: **Air**      Total/Dissolved: **T**  
Site ID: **NA**      Sample Date: **06/15/2024 11:27**      Lab: **Enthalpy Analytical**  
Sample Type: **Site Sample**      Analysis Date: **06/19/2024 4:16**      Method: **EPA TO-15**  
Lab Sample ID: **24F0971-09**

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CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

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R = Rejected

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0615OS008**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-10**

Sample Matrix: **Air**  
 Sample Date: **06/15/2024 17:40**  
 Analysis Date: **06/19/2024 5:09**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	8.44		8.44		ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	17		17		ppbv

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0615OS008**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-10**

Sample Matrix: **Air**  
 Sample Date: **06/15/2024 17:40**  
 Analysis Date: **06/19/2024 5:09**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	U	ppbv
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	1.12		1.12		ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-15-0	Carbon Disulfide	1	0.5	0.5	1.72		1.72		ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.32		0.32	UJ	ppbv *
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	C, U	0.5	UJ	ppbv *
141-78-6	Ethyl acetate	1	0.2	0.5	0.47	J	0.47	J	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-63-0	Isopropyl alcohol	1	0.2	0.5	8.67		8.67		ppbv

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0615OS008**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-10**

Sample Matrix: **Air**  
 Sample Date: **06/15/2024 17:40**  
 Analysis Date: **06/19/2024 5:09**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.41	J	0.41	J	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	0.2	J	0.2	J	ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.2	U	0.2	U	ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	C, U		R	ppbv *
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	4.94		4.94		ppbv
108-88-3	Toluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
Chiquita Landfill  
SDG: 24F0971

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COC Sample ID: **CACA0615OS008**      Sample Matrix: **Air**      Total/Dissolved: **T**  
Site ID: **NA**      Sample Date: **06/15/2024 17:40**      Lab: **Enthalpy Analytical**  
Sample Type: **Site Sample Re-extraction/Re-an**      Analysis Date: **06/19/2024 12:31**      Method: **EPA TO-15**  
Lab Sample ID: **24F0971-10RE1**

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CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
64-17-5	Ethanol	6	1.2	3	42.8		42.8		ppbv

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0616UW001**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-11**

Sample Matrix: **Air**  
 Sample Date: **06/16/2024 9:04**  
 Analysis Date: **06/19/2024 6:02**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	0.39	J	0.39	J	ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	3.13		3.13		ppbv

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0616UW001**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-11**

Sample Matrix: **Air**  
 Sample Date: **06/16/2024 9:04**  
 Analysis Date: **06/19/2024 6:02**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	U	ppbv
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-15-0	Carbon Disulfide	1	0.5	0.5	1.29		1.29		ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.29		0.29	UJ	ppbv *
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	C, U	0.5	UJ	ppbv *
64-17-5	Ethanol	1	0.2	0.5	2.81		2.81		ppbv
141-78-6	Ethyl acetate	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation

\* = Modified by Validation

J = Estimated

U = Not Detected at or above the MDL

R = Rejected

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0971

COC Sample ID: **CACA0616UW001**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0971-11**

Sample Matrix: **Air**  
 Sample Date: **06/16/2024 9:04**  
 Analysis Date: **06/19/2024 6:02**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
67-63-0	Isopropyl alcohol	1	0.2	0.5	0.59		0.59		ppbv
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	0.28	J	0.28	J	ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.2	U	0.2	U	ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	C, U		R	ppbv *
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-88-3	Toluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation

\* = Modified by Validation

J = Estimated

U = Not Detected at or above the MDL

R = Rejected

Form 1 Data Sheet - Volatiles

CTEH, LLC  
Chiquita Landfill  
SDG: 24F0971

---

COC Sample ID: **CACA0616UW001**      Sample Matrix: **Air**      Total/Dissolved: **T**  
Site ID: **NA**      Sample Date: **06/16/2024 9:04**      Lab: **Enthalpy Analytical**  
Sample Type: **Site Sample**      Analysis Date: **06/19/2024 6:02**      Method: **EPA TO-15**  
Lab Sample ID: **24F0971-11**

---

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

---

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
\* = Modified by Validation  
J = Estimated  
U = Not Detected at or above the MDL  
R = Rejected

## **Appendix II Chain of Custody**

**AIR ANALYSIS  
CHAIN OF CUSTODY**

CACAD61405

COMPANY NAME: CTEH		INVOICE TO: same	PROJECT NAME/Quote #: Air Quality Study
CONTACT: Cassie Smythe		INVOICE CONTACT:	SITE NAME:
ADDRESS:		INVOICE ADDRESS:	PROJECT NUMBER: PROJ-036688
PHONE #:		INVOICE PHONE #:	P.O. #:
FAX #:	EMAIL:	Pretreatment Program:	
Is sample for compliance reporting? YES <b>(NO)</b>		Regulatory State:	Is sample from a chlorinated supply? YES NO
			PWS I.D. #:

SAMPLER NAME (PRINT): *Kamie Stecher* SAMPLER SIGNATURE: *Kamie Stecher* Turn Around Time: Circle: 10 **5 Days** or \_\_\_ Day(s)

Matrix Codes: AA=Indoor/Ambient Air SG=Soil Gas LV=Landfill/Vent Gas OT=Other \_\_\_\_\_ **063-24F-0020**

CLIENT SAMPLE I.D.	Regulator Info		Canister Information				Sampling Start Information				Sampling Stop Information				ANALYSIS				
	Flow Controller ID	Cal Flow (mL/min)	Canister ID	Size (L)	Cleaning Batch ID	LAB Outgoing Canister Vacuum (in Hg/psia)	LAB Receiving Canister Vacuum (in Hg)	Barometric Pres. (In Hg):				Barometric Pres. (In Hg):				Matrix (See Codes)	Sulfurs by TO-15	DMDS by TO-15	VOC TO-15 Full List
								Start Date	Start Time (24hr clock)	Initial Canister Vacuum (in Hg)	Starting Sample Temp °F	Stop Date	Stop Time (24hr clock)	Final Canister Vacuum (in Hg)	Ending Sample Temp °F				
1) CACAD61605003	GS041		12474	1.4	IC240611	30	3.2	6/16/24	0942			6/16/24	0942			AA	X	X	X
2) CACA 2161605005	GS042		12846	1.4	IC240611	30	3.4	6/16/24	0959			6/16/24	0959			AA	X	X	X
3) CACA 2161605007	GS043		12849	1.4	IC240611	30	3.4	6/16/24	1030			6/16/24	1030			AA	X	X	X
4) CACAD61710001	GS044		12854	1.4	IC240611	30	2.2	6/17/24	0714			6/17/24	0714			AA	X	X	X

DT: 20.7 CF: 0.5 FT: 21.3 NO ICE sealed

RELINQUISHED: <i>Kamie Stecher</i>	DATE / TIME: 6/17/24 1200	RECEIVED: <i>FedEx</i>	DATE / TIME: 6/17/24 1200	QC Data Package	LAB USE ONLY
RELINQUISHED: <i>FedEx E</i>	DATE / TIME:	RECEIVED: <i>[Signature]</i>	DATE / TIME: 6/18/24 1013	Level I	<input type="checkbox"/>
				Level II	<input type="checkbox"/>
				Level III	<input type="checkbox"/>
				Level IV	<input type="checkbox"/>

**CTEH, LLC**  
Air Quality Study  
24F0971  
Recd: 06/18/2024 Due: 06/25/2024

**AIR ANALYSIS  
 CHAIN OF CUSTODY**

CACA061405

COMPANY NAME: CTEH		INVOICE TO: same	PROJECT NAME/Quote #: Air Quality Study
CONTACT: Cassie Smythe		INVOICE CONTACT:	SITE NAME:
ADDRESS:		INVOICE ADDRESS:	PROJECT NUMBER: PROJ-036688
PHONE #:		INVOICE PHONE #:	P.O. #:
FAX #:	EMAIL: labresults@cteh.com	Pretreatment Program:	
Is sample for compliance reporting? YES NO	Regulatory State:	Is sample from a chlorinated supply? YES NO	PWS I.D. #:

SAMPLER NAME (PRINT): *Kamie Steehr*      SAMPLER SIGNATURE: *Kamie Steehr*      Turn Around Time: Circle: 10    5 Days    or    \_\_\_ Days:

Matrix Codes: AA=Indoor/Ambient Air SG=Soil Gas LV=Landfill/Vent Gas OT=Other \_\_\_\_\_      **063-24F-0018**

CLIENT SAMPLE I.D.	Regulator Info		Canister Information				Sampling Start Information				Sampling Stop Information				ANALYSIS				
	Flow Controller ID	Cal Flow (mL/min)	Canister ID	Size (L)	Cleaning Batch ID	LAB Outgoing Canister Vacuum (in Hg/psia)	LAB Receiving Canister Vacuum (in Hg)	Barometric Pres. (in Hg):				Barometric Pres. (in Hg):				Matrix (See Codes)	Sulfurs by TO-15	DMDS by TO-15	VOC TO-15 Full List
								Start Date	Start Time (24hr clock)	Initial Canister Vacuum (in Hg)	Starting Sample Temp °F	Stop Date	Stop Time (24hr clock)	Final Canister Vacuum (in Hg)	Ending Sample Temp °F				
1) CACA061405D11	GS036 <del>GS034</del>		11079	1.4	IC240605	30	<b>-30</b>	6/14/24	1702			6/14/24	1702			AA	X	X	X
2)	<del>GS035</del>		<del>13382</del>	1.4	<del>IC240810</del>	<del>30</del>													
3)	<del>GS036</del>		<del>17036</del>	1.4	<del>IC240623</del>	<del>30</del>													
4)																			

RELINQUISHED: <i>Kamie Steehr</i>	DATE / TIME: 6/17/24/1200	RECEIVED: <i>FedEx</i>	DATE / TIME: 6/17/24/1200	QC Data Package	LAB USE ONLY
RELINQUISHED: <i>FedEx E</i>	DATE / TIME: 6/19/24/1013	RECEIVED: <i>H A</i>	DATE / TIME: 6/19/24/1013	Level I <input type="checkbox"/>	3 grab samplers 1 dup tee
RELINQUISHED:	DATE / TIME:	RECEIVED:	DATE / TIME:	Level II <input type="checkbox"/>	
RELINQUISHED:	DATE / TIME:	RECEIVED:	DATE / TIME:	Level III <input type="checkbox"/>	
RELINQUISHED:	DATE / TIME:	RECEIVED:	DATE / TIME:	Level IV <input type="checkbox"/>	

**CTEH, LLC      24F0971**  
**Air Quality Study**  
**Recd: 06/18/2024    Due: 06/25/2024**

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CACA061403

**AIR ANALYSIS  
CHAIN OF CUSTODY**

COMPANY NAME: CTEH		INVOICE TO: same	PROJECT NAME/Quote #: Air Quality Study
CONTACT: Cassie Smythe		INVOICE CONTACT:	SITE NAME:
ADDRESS:		INVOICE ADDRESS:	PROJECT NUMBER: PROJ-036688
PHONE #:		INVOICE PHONE #:	P.O. #:
FAX #:	EMAIL:	Pretreatment Program:	
Is sample for compliance reporting? YES <input checked="" type="radio"/> NO <input type="radio"/>		Regulatory State: CA	Is sample from a chlorinated supply? YES <input checked="" type="radio"/> NO <input type="radio"/>
PWS I.D. #:			

SAMPLER NAME (PRINT): Kamie Stecher SAMPLER SIGNATURE: Kamie Stecher Turn Around Time: Circle: 10 5 Days or \_\_\_ Day(s)

Matrix Codes: AA=Indoor/Ambient Air SG=Soil Gas LV=Landfill/Vent Gas OT=Other \_\_\_\_\_ **063-24F-0020**

CLIENT SAMPLE I.D.	Regulator Info		Canister Information				Sampling Start Information				Sampling Stop Information				ANALYSIS			
	Flow Controller ID	Cal Flow (mL/min)	Canister ID	Size (L)	Cleaning Batch ID	LAB Outgoing Canister Vacuum (in Hg/psia)	LAB Receiving Canister Vacuum (in Hg)	Barometric Pres. (In Hg):		Barometric Pres. (In Hg):		Final Canister Vacuum (in Hg)	Ending Sample Temp °F	Matrix (See Codes)	Sulfurs by TO-15	DMDS by TO-15	VOC TO-15 Full List	
								Start Date	Start Time (24hr clock)	Initial Canister Vacuum (in Hg)	Starting Sample Temp °F							Stop Date
1)	<del>GS045</del>		<del>12856</del>	<del>1.4</del>	<del>IC240811</del>	<del>30</del>												
2)	<del>GS046</del>		<del>12859</del>	<del>1.4</del>	<del>IC240811</del>	<del>30</del>												
3) CACA061705009	GS047		13961	1.4	IC240811	30	2.8	6/17/24	0920					6/17/24	0920		AA X X X	
4) CACA061705010	GS048		15034	1.4	IC240611	30	2.6	6/17/24	0842					6/17/24	0842		AA X X X	

OT: 20.7 CF<sup>0.5</sup> FT: 21.3 no ice sealed

RELINQUISHED: <u>Kamie Stecher</u>	DATE / TIME: <u>6/17/24/1200</u>	RECEIVED: <u>FedEx</u>	DATE / TIME: <u>6/17/24 1200</u>	QC Data Package	LAB USE ONLY
RELINQUISHED: <u>FedEx E</u>	DATE / TIME: _____	RECEIVED: <u>H A</u>	DATE / TIME: <u>6/17/24 1013</u>	Level I <input type="checkbox"/>	
RELINQUISHED: _____	DATE / TIME: _____	RECEIVED: _____	DATE / TIME: _____	Level II <input type="checkbox"/>	
				Level III <input type="checkbox"/>	
				Level IV <input type="checkbox"/>	

**CTEH, LLC**  
Air Quality Study **24F0971**  
Recd: 06/18/2024 Due: 06/25/2024

CACA061405

**AIR ANALYSIS  
 CHAIN OF CUSTODY**

COMPANY NAME: CTEH		INVOICE TO: same	PROJECT NAME/Quote #: Air Quality Study
CONTACT: Cassie Smythe		INVOICE CONTACT:	SITE NAME:
ADDRESS:		INVOICE ADDRESS:	PROJECT NUMBER: PROJ-036688
PHONE #:		INVOICE PHONE #:	P.O. #:
FAX #:	EMAIL:	Pretreatment Program:	
Is sample for compliance reporting? YES NO	Regulatory State:	Is sample from a chlorinated supply? YES NO	PWS I.D. #:

SAMPLER NAME (PRINT): Kamie Stecher SAMPLER SIGNATURE: Kamie Stecher Turn Around Time: Circle: 10 **5 Days** or \_\_\_ Day(s)

Matrix Codes: AA=Indoor/Ambient Air SG=Soil Gas LV=Landfill/Vent Gas OT=Other **063-24F-0020**

CLIENT SAMPLE I.D.	Regulator Info		Canister Information					Sampling Start Information				Sampling Stop Information				ANALYSIS			
	Flow Controller ID	Cal Flow (mL/min)	Canister ID	Size (L)	Cleaning Batch ID	LAB Outgoing Canister Vacuum (in Hg/psia)	LAB Receiving Canister Vacuum (in Hg)	Barometric Pres. (in Hg):				Barometric Pres. (in Hg):				Matrix (See Codes)	Sulfurs by TO-15	DMDS by TO-15	VOC TO-15 Full List
								Start Date	Start Time (24hr clock)	Initial Canister Vacuum (in Hg)	Starting Sample Temp *F	Stop Date	Stop Time (24hr clock)	Final Canister Vacuum (in Hg)	Ending Sample Temp *F				
1) CACA061501200	GS037		13436	1.4	IC240610	30	3.4	6/15/24	1809			6/15/24	1809			AA	X	X	X
2) CACA061505005	GS038		13957	1.4	IC240610	30	4.0	6/15/24	1127			6/15/24	1127			AA	X	X	X
3) CACA061503008	GS039		10221	1.4	IC240611	30	3.8	6/15/24	1740			6/15/24	1740			AA	X	X	X
4) CACA061600001	GS040		12417	1.4	IC240611	30	2.8	6/16/24	0904			6/16/24	0904			AA	X	X	X

OT: 20.7 CF: 0.5 FT: 21.3 no ice sealed

RELINQUISHED: <u>Kamie Stecher</u> DATE / TIME: <u>6/17/24 1200</u>	RECEIVED: <u>FedEx</u> DATE / TIME: <u>6/17/24/200</u>	QC Data Package	LAB USE ONLY 13 grab samplers
RELINQUISHED: <u>FedEx</u> DATE / TIME: <u>6/18/24</u>	RECEIVED: <u>HR A</u> DATE / TIME: <u>6/18/24 1013</u>	Level I <input type="checkbox"/>	
RELINQUISHED: _____ DATE / TIME: _____	RECEIVED: _____ DATE / TIME: _____	Level II <input type="checkbox"/>	
RELINQUISHED: _____ DATE / TIME: _____	RECEIVED: _____ DATE / TIME: _____	Level III <input type="checkbox"/>	
		Level IV <input type="checkbox"/>	

**CTEH, LLC** 24F0971  
**Air Quality Study**  
 Recd: 06/18/2024 Due: 06/25/2024



## **Data Verification Report (Level 2)**

**Project 036688: Chiquita Canyon**

**Client: CTEH, LLC**

Analytical Report #: 24F0819

Date: July 22, 2024

Reviewed for release by: Dana Hebert

Date: July 22, 2024

**Disclaimer:**

The validation performed and reported herein is based on procedures and methods presented to eQAQC Consultants, LLC in the associated laboratory data package. Qualification and review was based on method and/or project specific requirements utilizing the latest version of USEPA National Functional Guidelines for Inorganic and/or Organic Data Review.

Information contained in this report is based solely on the hardcopy and/or electronic deliverables that were submitted to eQAQC Consultants, LLC. eQAQC Consultants, LLC reserves the right to modify or change the validation report if new information is presented or if this report is determined to be inaccurate or incomplete.

The following parameters were reviewed during the validation process:

**Chain-of-Custody (COC):** Completeness and sample custody

**Holding time:** Collection date versus preparation and/or analysis date

**Preservation:** Temperature and chemical

**Blank Contamination:** Laboratory and field blanks

**Matrix/Precision/Recovery:** Surrogates, Internal Standards, Calibrations, Duplicates, Matrix Spikes, Laboratory Control Samples (when applicable)

## INTRODUCTION:

Project: 036688 – Chiquita Canyon  
Laboratory: Enthalpy Analytical, LLC - Richmond  
Laboratory Package No.: 24F0819  
Matrix: Air

eQAQC Consultants, LLC received one electronic Level II data package containing the results for six field samples. Qualification and review was based on method and/or project specific requirements utilizing the latest versions of USEPA National Functional Guidelines for Organic Data Review.

The following samples were reviewed:

<b>Sample ID</b>	<b>Lab ID</b>	<b>Collection Date</b>	<b>Analyses</b>
CACA0611OS08	24F0819-01	06/11/2024 10:46 AM	[1-2]
CACA0611OS011	24F0819-02	06/11/2024 08:25 AM	[1-2]
CACA0611UW001	24F0819-03	06/11/2024 04:44 PM	[1-2]
CACA0611OS013	24F0819-04	06/11/2024 11:55 AM	[1-2]
CACA0612UW001	24F0819-05	06/12/2024 09:10 AM	[1-2]
CACA0612OS002	24F0819-06	06/12/2024 09:36 AM	[1-2]

Analyses Performed Codes:

- [1] Sulfur Volatile Organic Compounds by GCMS - (EPA TO-15)
- [2] Volatile Organic Compounds by GCMS - (EPA TO-15)

## **DATA REVIEW FINDINGS SUMMARY**

### **I. General Package/Sample Receipt:**

A compliant laboratory level II data package was received on July 22, 2024.

### **I. Sulfur Volatile Organic Compounds by GCMS (EPA-TO-15):**

The laboratory reported the results in both PPBV and UG/M3 units in the hardcopy report. Results were expressed only in PPBV units in the electronic data deliverable.

All quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria. No data qualifications were necessary.

### **II. Volatile Organic Compounds by GCMS (EPA-TO-15):**

The laboratory reported the results in both PPBV and UG/M3 units in the hardcopy report. Results were expressed only in PPBV units in the electronic data deliverable.

The laboratory noted the continuing calibration verification (CCV) response was outside specifications for Vinyl acetate. Supporting data were not included in the level II data package; therefore, this non-conformance could not be verified.

Recoveries of Benzyl Chloride, Methyl-t-butyl ether (MTBE) and Vinyl acetate were below acceptance criteria in the laboratory control sample (LCS) and LCS duplicate (LCSD) for batch ID BHF0469. These analytes were not detected in the field samples. Benzyl Chloride, Methyl-t-butyl ether (MTBE), and Vinyl acetate results in the associated samples were qualified as estimated non-detect (UJ) due to the non-conformance.

All other quality assurance and quality control (QA/QC) components presented by the laboratory satisfied method and data review acceptance criteria.

## DATA QUALIFIER REFERENCE

Qualifier	Definition
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The associated value is an estimated quantity.
J-	The result is an estimated quantity, but the result may be biased low.
J+	The result is an estimated quantity, but the result may be biased high.
UJ	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet the quality control criteria. The presence or absence of the analyte cannot be verified.

**Appendix I**  
**Form 1 Data (Qualified)**



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0819

COC Sample ID: **CACA0611OS008**  
 Location ID: **NA**  
 Lab Sample ID: **24F0819-01**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/11/2024 10:46**  
 Analysis Date: **06/14/2024 12:52**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	10.1		10.1		ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	10.1		10.1		ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0819

COC Sample ID: **CACA0611OS011**  
 Location ID: **NA**  
 Lab Sample ID: **24F0819-02**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/11/2024 8:25**  
 Analysis Date: **06/14/2024 13:33**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	10	U	10	U	ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	10	U	10	U	ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0819

COC Sample ID: **CACA0611UW001**  
 Location ID: **NA**  
 Lab Sample ID: **24F0819-03**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/11/2024 16:44**  
 Analysis Date: **06/14/2024 14:14**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	14.3		14.3		ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	14.3		14.3		ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation

\* = Modified by Validation

U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0819

COC Sample ID: **CACA0611OS013**  
 Location ID: **NA**  
 Lab Sample ID: **24F0819-04**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/11/2024 11:55**  
 Analysis Date: **06/14/2024 14:56**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	10	U	10	U	ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	10	U	10	U	ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0819

COC Sample ID: **CACA0612UW001**  
 Location ID: **NA**  
 Lab Sample ID: **24F0819-05**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/12/2024 9:10**  
 Analysis Date: **06/14/2024 15:37**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	23		23		ppbv
463-58-1	Carbonyl sulfide	1	10	11.9		11.9		ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	84		84		ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	142		142		ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation

\* = Modified by Validation

U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0819

COC Sample ID: **CACA0612OS002**  
 Location ID: **NA**  
 Lab Sample ID: **24F0819-06**  
 Sample Type: **Site Sample**

Sample Matrix : **Air**  
 Sample Date: **06/12/2024 9:36**  
 Analysis Date: **06/14/2024 16:19**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO15**

CAS	Parameter Name	DF	LOQ	Lab Result	Lab Qualifier	Verified Result	Verified Qualifier	Units
107-03-9	1-Propanethiol	1	10	10	U	10	U	ppbv
75-33-2	2-Propanethiol	1	10	10	U	10	U	ppbv
75-15-0	Carbon Disulfide	1	10	10	U	10	U	ppbv
463-58-1	Carbonyl sulfide	1	10	10	U	10	U	ppbv
624-92-0	Dimethyl disulfide	1	10	10	U	10	U	ppbv
75-18-3	Dimethyl sulfide	1	10	10	U	10	U	ppbv
75-08-1	Ethyl mercaptan	1	10	10	U	10	U	ppbv
7783-06-4	Hydrogen Sulfide	1	10	35.8		35.8		ppbv
74-93-1	Methyl mercaptan	1	10	10	U	10	U	ppbv
	Total Reduced Sulfurs	1	10	35.8		35.8		ppbv

DF = Dilution Factor    LOQ = Limit of Quantitation

\* = Modified by Validation

U = Not detected at or above LOQ    J = Estimated    R = Rejected



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0819

COC Sample ID: **CACA0611OS008**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0819-01**

Sample Matrix: **Air**  
 Sample Date: **06/11/2024 10:46**  
 Analysis Date: **06/14/2024 10:39**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	1.09		1.09		ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	5.48		5.48		ppbv
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0819

COC Sample ID: **CACA0611OS008**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0819-01**

Sample Matrix: **Air**  
 Sample Date: **06/11/2024 10:46**  
 Analysis Date: **06/14/2024 10:39**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.46	J	0.46	J	ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-15-0	Carbon Disulfide	1	0.5	0.5	0.5	U	0.5	U	ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.27	J	0.27	J	ppbv
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
64-17-5	Ethanol	1	0.2	0.5	6.74		6.74		ppbv
141-78-6	Ethyl acetate	1	0.2	0.5	0.29	J	0.29	J	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-63-0	Isopropyl alcohol	1	0.2	0.5	2.14		2.14		ppbv
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv

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 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL



Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0819

COC Sample ID: **CACA0611OS008**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0819-01**

Sample Matrix: **Air**  
 Sample Date: **06/11/2024 10:46**  
 Analysis Date: **06/14/2024 10:39**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	0.97		0.97		ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.66		0.66		ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	U	1	U	ppbv
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	0.57		0.57		ppbv
108-88-3	Toluene	1	0.2	0.5	0.23	J	0.23	J	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

**Form 1 Data Sheet - Volatiles**

**CTEH, LLC**  
**Chiquita Landfill**  
**SDG: 24F0819**

COC Sample ID: <b>CACA0611OS011</b> Site ID: <b>NA</b> Sample Type: <b>Site Sample</b> Lab Sample ID: <b>24F0819-02</b>	Sample Matrix: <b>Air</b> Sample Date: <b>06/11/2024 8:25</b> Analysis Date: <b>06/14/2024 11:32</b>	Total/Dissolved: <b>T</b> Lab: <b>Enthalpy Analytical</b> Method: <b>EPA TO-15</b>
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CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	0.36	J	0.36	J	ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	4.22		4.22		ppbv
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0819

COC Sample ID: **CACA0611OS011**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0819-02**

Sample Matrix: **Air**  
 Sample Date: **06/11/2024 8:25**  
 Analysis Date: **06/14/2024 11:32**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.54		0.54		ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-15-0	Carbon Disulfide	1	0.5	0.5	0.5	U	0.5	U	ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.29	J	0.29	J	ppbv
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
64-17-5	Ethanol	1	0.2	0.5	4.9		4.9		ppbv
141-78-6	Ethyl acetate	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-63-0	Isopropyl alcohol	1	0.2	0.5	0.58		0.58		ppbv
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0819

COC Sample ID: **CACA0611OS011**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0819-02**

Sample Matrix: **Air**  
 Sample Date: **06/11/2024 8:25**  
 Analysis Date: **06/14/2024 11:32**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	1		1		ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.25	J	0.25	J	ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	U	1	U	ppbv
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	0.3	J	0.3	J	ppbv
108-88-3	Toluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0819

COC Sample ID: **CACA0611UW001**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0819-03**

Sample Matrix: **Air**  
 Sample Date: **06/11/2024 16:44**  
 Analysis Date: **06/14/2024 12:24**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	1.54		1.54		ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	5.03		5.03		ppbv
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0819

COC Sample ID: **CACA0611UW001**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0819-03**

Sample Matrix: **Air**  
 Sample Date: **06/11/2024 16:44**  
 Analysis Date: **06/14/2024 12:24**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.24	J	0.24	J	ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-15-0	Carbon Disulfide	1	0.5	0.5	0.59		0.59		ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.29	J	0.29	J	ppbv
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
64-17-5	Ethanol	1	0.2	0.5	10.4		10.4		ppbv
141-78-6	Ethyl acetate	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-63-0	Isopropyl alcohol	1	0.2	0.5	1.87		1.87		ppbv
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0819

COC Sample ID: **CACA0611UW001**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0819-03**

Sample Matrix: **Air**  
 Sample Date: **06/11/2024 16:44**  
 Analysis Date: **06/14/2024 12:24**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	0.21	J	0.21	J	ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.2	U	0.2	U	ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	U	1	U	ppbv
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	0.71		0.71		ppbv
108-88-3	Toluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

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 U = Not Detected at or above the MDL

**Form 1 Data Sheet - Volatiles**

**CTEH, LLC**  
**Chiquita Landfill**  
**SDG: 24F0819**

COC Sample ID: **CACA0611OS013**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0819-04**

Sample Matrix: **Air**  
 Sample Date: **06/11/2024 11:55**  
 Analysis Date: **06/14/2024 13:17**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	0.27	J	0.27	J	ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	3.54		3.54		ppbv
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL



**Form 1 Data Sheet - Volatiles**

**CTEH, LLC**  
**Chiquita Landfill**  
**SDG: 24F0819**

COC Sample ID: **CACA0611OS013**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0819-04**

Sample Matrix: **Air**  
 Sample Date: **06/11/2024 11:55**  
 Analysis Date: **06/14/2024 13:17**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-15-0	Carbon Disulfide	1	0.5	0.5	0.5	U	0.5	U	ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.29	J	0.29	J	ppbv
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
64-17-5	Ethanol	1	0.2	0.5	3.53		3.53		ppbv
141-78-6	Ethyl acetate	1	0.2	0.5	0.23	J	0.23	J	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-63-0	Isopropyl alcohol	1	0.2	0.5	1.03		1.03		ppbv
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

**Form 1 Data Sheet - Volatiles**

**CTEH, LLC**  
**Chiquita Landfill**  
**SDG: 24F0819**

COC Sample ID: **CACA0611OS013**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0819-04**

Sample Matrix: **Air**  
 Sample Date: **06/11/2024 11:55**  
 Analysis Date: **06/14/2024 13:17**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	0.47	J	0.47	J	ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.3	J	0.3	J	ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	U	1	U	ppbv
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-88-3	Toluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0819

COC Sample ID: **CACA0612UW001**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0819-05**

Sample Matrix: **Air**  
 Sample Date: **06/12/2024 9:10**  
 Analysis Date: **06/14/2024 14:10**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.34	J	0.34	J	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.26	J	0.26	J	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	6.95		6.95		ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.23	J	0.23	J	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.22	J	0.22	J	ppbv
67-64-1	Acetone	1	0.2	0.5	15.8		15.8		ppbv
107-02-8	Acrolein	1	0.4	0.5	0.82		0.82		ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0819

COC Sample ID: **CACA0612UW001**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0819-05**

Sample Matrix: **Air**  
 Sample Date: **06/12/2024 9:10**  
 Analysis Date: **06/14/2024 14:10**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.23	J	0.23	J	ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-15-0	Carbon Disulfide	1	0.5	0.5	12.4		12.4		ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.74		0.74		ppbv
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
64-17-5	Ethanol	1	0.2	0.5	11		11		ppbv
141-78-6	Ethyl acetate	1	0.2	0.5	0.29	J	0.29	J	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-63-0	Isopropyl alcohol	1	0.2	0.5	5.82		5.82		ppbv
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv

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 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0819

COC Sample ID: **CACA0612UW001**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0819-05**

Sample Matrix: **Air**  
 Sample Date: **06/12/2024 9:10**  
 Analysis Date: **06/14/2024 14:10**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	1.95		1.95		ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	0.82		0.82		ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.21	J	0.21	J	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.48	J	0.48	J	ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.41	J	0.41	J	ppbv
115-07-1	Propylene	1	1	1	1.66		1.66		ppbv
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	1.06		1.06		ppbv
108-88-3	Toluene	1	0.2	0.5	1.73		1.73		ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
1330-20-7	Xylenes, Total	1	0.6	1.5	0.75	J	0.75	J	ppbv

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Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0819

COC Sample ID: **CACA0612OS002**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0819-06**

Sample Matrix: **Air**  
 Sample Date: **06/12/2024 9:36**  
 Analysis Date: **06/14/2024 15:03**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
630-20-6	1,1,1,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-55-6	1,1,1-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-34-5	1,1,2,2-Tetrachloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-00-5	1,1,2-Trichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-34-3	1,1-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-35-4	1,1-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
120-82-1	1,2,4-Trichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-63-6	1,2,4-Trimethylbenzene	1	0.2	0.5	0.2	J	0.2	J	ppbv
106-93-4	1,2-Dibromoethane (EDB)	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-50-1	1,2-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
107-06-2	1,2-Dichloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-87-5	1,2-Dichloropropane	1	0.2	0.5	0.2	U	0.2	U	ppbv
76-14-2	1,2-Dichlorotetrafluoroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-67-8	1,3,5-Trimethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-99-0	1,3-Butadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
541-73-1	1,3-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
106-46-7	1,4-Dichlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
123-91-1	1,4-Dioxane	1	0.2	0.5	0.2	U	0.2	U	ppbv
622-96-8	1-Ethyl-4-methyl benzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
78-93-3	2-Butanone (MEK)	1	0.2	0.5	0.85		0.85		ppbv
95-49-8	2-Chlorotoluene	1	0.2	0.5	0.2	U	0.2	U	ppbv
591-78-6	2-Hexanone (MBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-10-1	4-Methyl-2-pentanone (MIBK)	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-64-1	Acetone	1	0.2	0.5	4.78		4.78		ppbv
107-02-8	Acrolein	1	0.4	0.5	0.4	U	0.4	U	ppbv

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 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0819

COC Sample ID: **CACA0612OS002**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0819-06**

Sample Matrix: **Air**  
 Sample Date: **06/12/2024 9:36**  
 Analysis Date: **06/14/2024 15:03**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
107-05-1	Allyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
71-43-2	Benzene	1	0.2	0.5	0.45	J	0.45	J	ppbv
100-44-7	Benzyl Chloride	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
75-27-4	Bromodichloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-25-2	Bromoform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-83-9	Bromomethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-15-0	Carbon Disulfide	1	0.5	0.5	1.03		1.03		ppbv
56-23-5	Carbon tetrachloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
108-90-7	Chlorobenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-00-3	Chloroethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-66-3	Chloroform	1	0.2	0.5	0.2	U	0.2	U	ppbv
74-87-3	Chloromethane	1	0.2	0.5	0.31	J	0.31	J	ppbv
156-59-2	cis-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-01-5	cis-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-82-7	Cyclohexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
124-48-1	Dibromochloromethane	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-71-8	Dichlorodifluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
64-17-5	Ethanol	1	0.2	0.5	12.6		12.6		ppbv
141-78-6	Ethyl acetate	1	0.2	0.5	0.2	U	0.2	U	ppbv
100-41-4	Ethylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
142-82-5	Heptane	1	0.2	0.5	0.2	U	0.2	U	ppbv
87-68-3	Hexachlorobutadiene	1	0.2	0.5	0.2	U	0.2	U	ppbv
110-54-3	Hexane	1	0.2	0.5	0.2	U	0.2	U	ppbv
540-84-1	Isooctane	1	0.2	0.5	0.2	U	0.2	U	ppbv
67-63-0	Isopropyl alcohol	1	0.2	0.5	2.03		2.03		ppbv
98-82-8	Isopropylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL

Form 1 Data Sheet - Volatiles

CTEH, LLC  
 Chiquita Landfill  
 SDG: 24F0819

COC Sample ID: **CACA0612OS002**  
 Site ID: **NA**  
 Sample Type: **Site Sample**  
 Lab Sample ID: **24F0819-06**

Sample Matrix: **Air**  
 Sample Date: **06/12/2024 9:36**  
 Analysis Date: **06/14/2024 15:03**

Total/Dissolved: **T**  
 Lab: **Enthalpy Analytical**  
 Method: **EPA TO-15**

CAS#	Parameter Name	DF	MDL	LOQ	Lab Result	Lab Qualifier	Validated Result	Validated Qualifier	Units
179601-23-1	m+p-Xylenes	1	0.4	1	0.4	U	0.4	U	ppbv
80-62-6	Methyl methacrylate	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-09-2	Methylene chloride	1	0.5	1	0.5	U	0.5	U	ppbv
1634-04-4	Methyl-t-butyl ether (MTBE)	1	0.2	0.5	0.2	U	0.2	UJ	ppbv *
91-20-3	Naphthalene	1	0.2	0.5	0.65		0.65		ppbv
106-97-8	n-Butane (C4)	1	0.2	0.5	0.93		0.93		ppbv
111-84-2	n-Nonane (C9)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-66-0	n-Pentane (C5)	1	0.2	0.5	0.22	J	0.22	J	ppbv
103-65-1	n-Propylbenzene	1	0.2	0.5	0.2	U	0.2	U	ppbv
95-47-6	o-Xylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
115-07-1	Propylene	1	1	1	1	U	1	U	ppbv
100-42-5	Styrene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-65-0	TBA	1	0.5	0.5	0.5	U	0.5	U	ppbv
127-18-4	Tetrachloroethylene (PCE)	1	0.2	0.5	0.2	U	0.2	U	ppbv
109-99-9	Tetrahydrofuran	1	0.2	0.5	0.65		0.65		ppbv
108-88-3	Toluene	1	0.2	0.5	0.21	J	0.21	J	ppbv
156-60-5	trans-1,2-Dichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
10061-02-6	trans-1,3-Dichloropropene	1	0.2	0.5	0.2	U	0.2	U	ppbv
79-01-6	Trichloroethylene	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-69-4	Trichlorofluoromethane	1	0.5	0.5	0.5	U	0.5	U	ppbv
108-05-4	Vinyl acetate	1	0.2	0.5	0.2	C, U	0.2	UJ	ppbv *
593-60-2	Vinyl bromide	1	0.2	0.5	0.2	U	0.2	U	ppbv
75-01-4	Vinyl chloride	1	0.2	0.5	0.2	U	0.2	U	ppbv
1330-20-7	Xylenes, Total	1	0.6	1.5	0.6	U	0.6	U	ppbv

DF = Dilution Factor    MDL = Method Detection Limit    LOQ = Limit of Quantitation  
 \* = Modified by Validation  
 J = Estimated  
 U = Not Detected at or above the MDL



## **Appendix II Chain of Custody**

**AIR ANALYSIS  
CHAIN OF CUSTODY**

COMPANY NAME: CTEH		INVOICE TO: same	PROJECT NAME/Quote #: Air Quality Study
CONTACT: Cassie Smythe		INVOICE CONTACT:	SITE NAME:
ADDRESS:		INVOICE ADDRESS:	PROJECT NUMBER: PROJ-036688
PHONE #:		INVOICE PHONE #:	P.O. #:
FAX #:	EMAIL: labresults@cteh.com	Pretreatment Program:	
Is sample for compliance reporting? YES <input checked="" type="radio"/> NO <input type="radio"/>		Regulatory State:	Is sample from a chlorinated supply? YES NO PWS I.D. #:
SAMPLER NAME (PRINT): Kamie Stecher		SAMPLER SIGNATURE: Kamie Stecher	

Turn Around Time: Circle: 10 **5 Days** or \_\_\_ Day(s)

Matrix Codes: AA=Indoor/Ambient Air SG=Soil Gas LV=Landfill/Vent Gas OT=Other

CLIENT SAMPLE I.D.	Regulator Info		Canister Information				Sampling Start Information				Sampling Stop Information				ANALYSIS				
	Flow Controller ID	Cal Flow (mL/min)	Canister ID	Size (L)	Cleaning Batch ID	LAB Outgoing Canister Vacuum (in Hg/psia)	LAB Receiving Canister Vacuum (in Hg)	Barometric Pres. (in Hg):				Barometric Pres. (in Hg):				Matrix (See Codes)	Sulfurs by TO-15	DMDS by TO-15	VOC TO-15 Full List
								Start Date	Start Time (24hr clock)	Initial Canister Vacuum (in Hg)	Starting Sample Temp °F	Stop Date	Stop Time (24hr clock)	Final Canister Vacuum (in Hg)	Ending Sample Temp °F				
1) CACA061105008	G5028		16804	1.4	IC240530	30	3.4	6/11/24	1046			6/11/24	1046			AA	X	X	X
2) CACA061105011	G5029		16820	1.4	IC240530	30	3.0	6/11/24	0825			6/11/24	0825			AA	X	X	X
3) CACA0611UW001	G5031 G5031 (KS)		17018	1.4	IC240530	30	3.2	6/11/24	1644			6/11/24	1644			AA	X	X	X
4) CACA061105013	G5030		17021	1.4	IC240530	30	4.4	6/11/24	1155			6/11/24	1155			AA	X	X	X

RELINQUISHED: Kamie Stecher	DATE / TIME: 6/12/24 1445	RECEIVED: FedEx	DATE / TIME: 6/12/24 1445	QC Data Package	LAB USE ONLY
RELINQUISHED: FedEx E	DATE / TIME:	RECEIVED: [Signature]	DATE / TIME: 6-13-24 1020	Level I <input type="checkbox"/>	14 grab samplers
RELINQUISHED:	DATE / TIME:	RECEIVED:	DATE / TIME:	Level II <input type="checkbox"/>	2 dup tee
				Level III <input type="checkbox"/>	2 UQ I
				Level IV <input type="checkbox"/>	

**CTEH, LLC**  
Air Quality Study  
24F0819  
Recd: 06/13/2024 Due: 06/20/2024

OT: 20.6  
CF: +0.5  
21.1

19.25  
10.50a  
310

# CHAIN OF CUSTODY AND ANALYSIS REQUEST FORM

Send Report to: labresults@cteh.com  
 Company: CTEH  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 e-mail: \_\_\_\_\_  
 Accounting: CTEH

CTEH Project # PROJ 0310088  
 Turnaround Requested:  Normal  Same Day  Next Day  
 Two Day  Other (Specify) 5 Day  
 Data Packet Requested:  Standard Level II  Other \_\_\_\_\_  
 Sample and Extract Retention/Disposal:  
 Dispose after 2X hold time   
 Retain w/ storage fees after 2X hold time

Lab Contact Information	Can	Regulator	Secondary Sample Identification	Sample Size	Units	Sample Start Date	Sample Start Time	Sample Stop Date	Sample Stop Time	Initials	Method					Matrix	
											Sulfur	TO-15	DMDS	TO-15	VOC		TO-15 Full List
Primary Sample Identification																	
CACA061200001 (2.6")	12420	G5026	1.4	L	6/12/24	0910	6/12/24	0910	KES	X	X	X					A
CACA061205002 (2.6")	12408	G5024	1.4	L	6/12/24	0936	6/12/24	0936	KES	X	X	X					A
<del>_____</del>																	

**CTEH, LLC** 24F0819  
 Air Quality Study  
 Recd: 06/13/2024 Due: 06/20/2024  
 v130325002

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME	COMMENTS
Karin Suche	6/12/24 1445	FedEx	6/12/24 1445	FedEx E
Flores E		<i>[Signature]</i>	6-12-24 1020	

DG # CACA061105  
 OT: 20.6  
 OT  
 CF: 10.5  
 2.1  
 no SE  
 no seal  
 310

**APPENDIX G. NASAL RANGER® DATA FROM MARCH 2024 28-DAY  
AIR QUALITY STUDY**

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8127	2024-03-11 14:05:05	Front of Castaic Elementary School	Floral aroma	34.47105	-118.630407	Intermittent	<2
8128	2024-03-11 14:15:10	LA County Fire Department Del Valle Regional Training Center	Musky odor	34.43215	-118.659426	Persistent	4
8129	2024-03-11 14:16:11	Front of Castaic Elementary School		34.471014	-118.630416	Intermittent	<2
8148	2024-03-11 14:18:03	Bus Stop 14608 - Del Valle Rd & Silver St	Musky Odor	34.44864192	-118.6551431	Persistent	4
8131	2024-03-11 14:26:13	Ralph's parking lot facing Bank of America	Smells like perfume	34.456855	-118.617841	Intermittent	<2
8141	2024-03-11 14:26:47	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor	34.438472	-118.656974		ND
8142	2024-03-11 14:27:58	Lincoln Ave near intersection with Chiquito Canyon Rd	Faint musky smell	34.438488	-118.657001	Persistent	<2
8130	2024-03-11 14:27:59	Ralph's parking lot facing Bank of America	Kind of near a sewer drain and fragrant bushes so there were smells of the sewer and a flight floral smell.	34.456791	-118.618254	Intermittent	<2
8139	2024-03-11 14:36:11	Lincoln Ave and Taylor St	Musty odor	34.442943	-118.655793	Persistent	2
8143	2024-03-11 14:36:57	Lincoln Ave and Taylor St	Stale smell	34.442913	-118.655781	Persistent	2
8133	2024-03-11 14:43:13	Cambridge Ave across from house number 29862		34.459911	-118.626381	Intermittent	<2
8132	2024-03-11 14:43:52	Cambridge Ave across from house number 29862	Light grassy smell	34.459603	-118.626737	Intermittent	<2
8144	2024-03-11 14:49:38	Bus Stop at San Martinez and Val Verde Rd	Stale Odor	34.447097	-118.664079	Persistent	<2
8145	2024-03-11 14:49:38	Bus Stop at San Martinez and Val Verde Rd	Musky/stale smell	34.447054	-118.664089	Intermittent	2
8134	2024-03-11 14:56:04	Lot in front of Fire Station 143	Slight unpleasant trash-like smell. Near a sewer drain.	34.454639	-118.634449	Intermittent	<2
8135	2024-03-11 14:58:33	Lot in front of Fire Station 143	Smells a little stale but not overwhelming	34.454652	-118.634466	Intermittent	<2
8146	2024-03-11 15:02:45	San Martinez Rd and Verdale Ave	Musky smell	34.449611	-118.678609	Persistent	2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
3	100 - Floral	106 - Herbal	Partly Cloudy	None	SE	0.8	53.4	57.7	28.71
-1	400 - Earthy	410 - Musky	Sunny	None	W	2.2	43.9	63.5	28.93
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	SE	0	53.4	57.7	28.71
-1	400 - Earthy	410 - Musky	Sunny	None	N	2.2	43.9	63.5	28.93
4	100 - Floral	105 - Fragrant	Partly Cloudy	None	SE	0	49	69.2	29
			Sunny	None	N	1.1	45.4	68.0	28.94
0	400 - Earthy	410 - Musky	Sunny	None	N	1.1	45.4	68	28.94
0	400 - Earthy	415 - Stale	Partly Cloudy	None	SE	0	49	69.2	29
-2	400 - Earthy	415 - Stale	Sunny	None	NW	1.2	50	64.9	28.87
-1	400 - Earthy	415 - Stale	Sunny	None	NW	1.2	50	64.9	28.87
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	SE	0	52.8	68.5	28.76
3	400 - Earthy	406 - Grassy	Partly Cloudy	None	SE	0	52.8	68.5	28.76
-1	400 - Earthy	415 - Stale	Sunny	None	S	1.3	44.5	68.2	28.78
-1	400 - Earthy	410 - Musky	Sunny	None	S	1.3	44.5	68.2	28.78
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	SE	0.9	50	61.7	28.86
0	400 - Earthy	415 - Stale	Partly Cloudy	None	SE	0.8	50	61.7	28.86
-3	400 - Earthy	415 - Stale	Sunny	None	SE	0.8	51	58.9	28.65

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8140	2024-03-11 15:03:14	San Martinez Rd and Verdale Ave	Musty	34.449546	-118.678418	Persistent	4
8136	2024-03-11 15:12:14	Starbucks / store by Bruce sushi	Smelled like baked goods.	34.451047	-118.625087	Persistent	2
8137	2024-03-11 15:14:15	Starbucks / store by Bruce sushi	Smells like a bakery	34.450991	-118.624945	Intermittent	<2
8149	2024-03-11 15:16:50	Val Verde Rd and Oakwood Ave	No odor	34.450363	-118.661893		ND
8147	2024-03-11 15:19:22	Val Verde Rd and Oakwood Ave	Faint musky smell	34.450378	-118.661907	Intermittent	<2
8138	2024-03-11 15:23:38	Park behind Live Oak Elementary school		34.450409	-118.6211	Intermittent	<2
8152	2024-03-11 15:23:53	Park behind Live Oak Elementary school	Smells like wet grass	34.450465	-118.620996	Intermittent	<2
8183	2024-03-11 15:32:47	Castaic Union School District Building	No odor	34.44162	-118.626257		ND
8151	2024-03-11 15:34:59	Bus Stop 14608 - Del Valle Rd & Silver St	Could smell car exhaust	34.448865	-118.65509	Intermittent	<2
8153	2024-03-11 15:35:43	Ave Penn and Witherspoon Pkwy	Slight garbage smell	34.450195	-118.638504	Intermittent	<2
8150	2024-03-11 15:36:38	Ave Penn and Witherspoon Pkwy		34.450189	-118.638489		<2
8154	2024-03-11 15:47:43	Castaic Union School District Building	Very slight smell of baked goods	34.441621	-118.62624	Intermittent	<2
8155	2024-03-11 15:49:53	Castaic Union School District Building	Smelled like dirt or compost more the grass	34.441644	-118.626259		2
8181	2024-03-11 16:02:02	Ave Penn and Witherspoon Pkwy	No Odor	34.449508	-118.638167		ND
8160	2024-03-11 16:02:30	Ave Penn and Witherspoon Pkwy	No odors noticed	34.449511	-118.63817		ND
8156	2024-03-11 16:04:30	Bus Stop 14608 - Del Valle Rd & Silver St		34.448821	-118.655091	Persistent	<2
8157	2024-03-11 16:04:47	Bus Stop 14608 - Del Valle Rd & Silver St	Noticeable smell of compost or dirt	34.448827	-118.655103	Persistent	4
8159	2024-03-11 16:09:00	LA County Fire Department Del Valle Regional Training Center	Strong smell of garbage, smell was strongest with wind	34.43172294	-118.6588923	Persistent	30

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-2	400 - Earthy	417 - Woody	Sunny	None	SE	0.8	51	58.9	28.65
6	300 - Vegetable	307 - Nutty	Partly Cloudy	None	SE	0	49.7	61.9	28.95
4	300 - Vegetable	307 - Nutty	Partly Cloudy	None	SE	0	49.7	61.9	28.95
			Partly Cloudy	None	N	0	52	61.1	28.75
0	400 - Earthy	410 - Musky	Sunny	None	N	0	52	61.1	28.75
1	400 - Earthy	406 - Grassy	Partly Cloudy		NW	1	49.6	63.6	29.03
2	400 - Earthy	406 - Grassy	Partly Cloudy	None	NW	1	49.6	63.6	29.03
			Partly Cloudy	None	NE	3.2	57.9	52.3	29.98
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	N	0	56.2	68.4	28.82
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	NW	0	46.9	67.2	28.82
1	400 - Earthy	417 - Woody	Partly Cloudy	None		0	46.9	67.2	29.82
2	300 - Vegetable	307 - Nutty	Partly Cloudy	None		0	49.5	64.0	29.01
-1	400 - Earthy	406 - Grassy	Partly Cloudy	None		0	49.5	64.0	29.01
			Partly Cloudy	None	N	1.3	64.1	55.8	28.8
			Sunny	None	N	1.3	64.1	55.8	28.8
0	400 - Earthy	406 - Grassy	Sunny	None		0	53.1	65.2	28.85
-1	400 - Earthy	412 - Peat-like	Sunny	None		0	53.1	65.2	28.85
-6	500 - Offensive	506 - Garbage	Sunny	None	N	2.6	51.8	54.3	28.94



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8161	2024-03-11 16:16:51	Castaic Union School District Building	No detection	34.441604	-118.62627		ND
8158	2024-03-11 16:17:09	LA County Fire Department Del Valle Regional Training Center	Smell had some variation and seemed stronger with wind	34.43172251	-118.6588957	Persistent	15
8180	2024-03-11 16:17:54	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor	34.438443	-118.657207		ND
8162	2024-03-11 16:28:43	Lincoln Ave near intersection with Chiquita Canyon Rd		34.43862	-118.657104	Persistent	<2
8164	2024-03-11 16:29:00	Lincoln Ave near intersection with Chiquita Canyon Rd	Lingering smell of garbage and dirt	34.438606	-118.657088	Intermittent	<2
8177	2024-03-11 16:31:26	Starbucks / store by Bruce sushi	Light Coffee smell	34.451025	-118.625094	Intermittent	<2
8172	2024-03-11 16:35:55	Lincoln Ave and Taylor St		34.442969	-118.655854	Intermittent	2
8163	2024-03-11 16:37:04	Lincoln Ave and Taylor St	Slight musty smell	34.443051	-118.655822	Persistent	<2
8171	2024-03-11 16:45:39	Bus Stop at San Martinez and Val Verde Rd		34.446971	-118.664307	Intermittent	<2
8165	2024-03-11 16:45:41	Bus Stop at San Martinez and Val Verde Rd	Slight grassy smell	34.446965	-118.664253	Intermittent	<2
8173	2024-03-11 16:55:17	San Martinez Rd and Verdale Ave	Smells like a farm animal	34.449614	-118.679094	Intermittent	<2
8168	2024-03-11 16:55:39	San Martinez Rd and Verdale Ave	Farm animal smell and could hear chickens	34.449539	-118.679118	Persistent	<2
8182	2024-03-11 16:59:48	Starbucks / store by Bruce sushi	Coffee smell	34.451052	-118.624837	Persistent	<2
8169	2024-03-11 17:05:16	Val Verde Rd and Oakwood Ave		34.450246	-118.662522	Intermittent	<2
8166	2024-03-11 17:06:01	Val Verde Rd and Oakwood Ave		34.450271	-118.662485	Intermittent	<2
8184	2024-03-11 17:08:32	Park behind Live Oak Elementary school	Grass smell	34.45031362	-118.621026	Persistent	2
8178	2024-03-11 17:14:31	Park behind Live Oak Elementary school	Smells like grass	34.45018739	-118.6210649	Persistent	2
8170	2024-03-11 17:16:10	Lot in front of Fire Station 143		34.454695	-118.634401	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny	None	NE	3.2	57.9	52.3	29.98
-6	500 - Offensive	506 - Garbage	Sunny	None	N	2.6	51.8	54.3	28.04
			Partly Cloudy	None	N	1.3	64.1	68.4	28.8
-2	400 - Earthy	411 - Musty	Sunny	None	S	0.7	53.6	68.9	28.95
-3	500 - Offensive	506 - Garbage	Sunny	None	S	0.7	53.6	68.9	28.95
0	400 - Earthy	404 - Coffee	Sunny	None	N	3	68.4	46.1	28.93
-1	400 - Earthy	411 - Musty	Sunny	None	NW	1.6	55.1	58.2	28.92
-1	400 - Earthy	411 - Musty	Sunny	None	NW	1.6	55.1	58.2	28.92
0	400 - Earthy	406 - Grassy	Sunny	None	NE	1.5	62	49.4	28.83
1	400 - Earthy	406 - Grassy	Sunny	None	NE	1.5	62	49.4	28.83
-2	400 - Earthy	410 - Musky	Sunny	None	SW	2.6	59	52.2	28.68
-2	500 - Offensive	508 - Manure	Sunny	None	SW	2.6	59	52.2	28.68
2	400 - Earthy	404 - Coffee	Partly Cloudy	None	N	3	68.4	46.1	28.93
0	400 - Earthy	411 - Musty	Sunny	None	SW	2.3	57	57.1	28.79
-2	500 - Offensive	506 - Garbage	Sunny	None	SW	2.3	57	57.1	28.79
0	400 - Earthy	406 - Grassy	Partly Cloudy	None	W	1.2	68.5	43.2	29
0	400 - Earthy	406 - Grassy	Sunny	None	W	1.2	68.5	43.2	29
0	400 - Earthy	411 - Musty	Partly Cloudy	None		0	65.1	52.8	28.7

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8167	2024-03-11 17:16:36	Lot in front of Fire Station 143	Stale smelling	34.454648	-118.634388	Intermittent	<2
8185	2024-03-11 17:24:50	Ralph's parking lot facing Bank of America	No Odor	34.45691	-118.617831		ND
8176	2024-03-11 17:26:17	Ralph's parking lot facing Bank of America	No detection	34.456901	-118.617795		ND
8174	2024-03-11 17:26:41	Cambridge Ave across from house number 29862		34.45943099	-118.6268134	Persistent	2
8175	2024-03-11 17:27:03	Cambridge Ave across from house number 29862	Slight floral smell	34.459599	-118.62678	Intermittent	<2
8194	2024-03-11 17:31:42	Cambridge Ave across from house number 29862	Floral smell in area	34.459362	-118.626778		<2
8195	2024-03-11 17:36:25	Cambridge Ave across from house number 29862	Floral	34.459321	-118.626786	Persistent	<2
8186	2024-03-11 17:40:26	Starbucks / store by Bruce sushi	Busy parking lot with a lot of running cars	34.45103	-118.624997	Intermittent	<2
8188	2024-03-11 17:40:45	Starbucks / store by Bruce sushi	Heard a few cars running in the parking lot.	34.451037	-118.625074	Intermittent	<2
8193	2024-03-11 17:43:35	Lot in front of Fire Station 143	Floral smell in area	34.454615	-118.634232	Persistent	<2
8192	2024-03-11 17:44:25	Lot in front of Fire Station 143	No odor	34.454696	-118.634449		ND
8189	2024-03-11 17:54:14	Park behind Live Oak Elementary school		34.450405	-118.621135	Persistent	2
8187	2024-03-11 17:54:29	Park behind Live Oak Elementary school	Noticeable grassy smell	34.450442	-118.621072	Persistent	2
8190	2024-03-11 18:07:09	Front of Castaic Elementary School	Floral	34.471831	-118.629992		<2
8191	2024-03-11 18:08:02	Front of Castaic Elementary School	Floral detected	34.471523	-118.630188	Persistent	<2
8196	2024-03-11 19:56:09	Front of Castaic Elementary School		34.471163	-118.630437	Intermittent	<2
8198	2024-03-11 19:57:10	Front of Castaic Elementary School	Slight floral scent	34.471108	-118.630409	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	400 - Earthy	415 - Stale	Partly Cloudy	None		0	65.1	52.8	28.87
			Partly Cloudy	None	NW	1.4	64.2	46.6	29.01
			Sunny	None	NE	1.4	64.2	46.6	29.01
5	100 - Floral	109 - Marigolds	Partly Cloudy	None	SW	3.4	61.9	53.0	28.79
4	100 - Floral	106 - Herbal	Partly Cloudy	None	SW	3.4	61.9	53.0	28.79
2	100 - Floral	105 - Fragrant	Sunny	None	NE	1.3	62.5	54.4	28.77
2	100 - Floral	105 - Fragrant	Partly Cloudy	None	NE	1.3	62.5	54.4	28.77
-1	700 - Chemical	707 - Gasoline	Partly Cloudy	None	N	2.2	59.8	56.0	28.97
-1	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None	N	2.2	59.8	56.0	28.97
3	100 - Floral	105 - Fragrant	Sunny	None	NE	0	66.2	51.4	28.86
			Partly Cloudy	None	NE	0	66.2	51.4	28.86
3	400 - Earthy	406 - Grassy	Partly Cloudy	None	W	1.3	60.5	54.2	29.04
3	400 - Earthy	406 - Grassy	Partly Cloudy	None	W	1.3	60.5	54.2	29.04
3	100 - Floral	105 - Fragrant	Partly Cloudy	None	NE	2.4	67.2	48.7	28.73
3	100 - Floral	105 - Fragrant	Sunny	None	N	2.4	67.2	48.7	28.73
0	400 - Earthy	415 - Stale	Sunny	None	W	5.2	63.8	47.5	28.72
2	100 - Floral	105 - Fragrant	Sunny		W	5.2	63.8	47.5	28.72

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8221	2024-03-11 20:00:48	LA County Fire Department Del Valle Regional Training Center	Garbage Odor	34.432193	-118.659396	Intermittent	2
8203	2024-03-11 20:02:06	LA County Fire Department Del Valle Regional Training Center	Garbage smell detected	34.432178	-118.659451	Persistent	2
8200	2024-03-11 20:06:22	Ralph's parking lot facing Bank of America	Smells like grass	34.456872	-118.617763	Intermittent	<2
8197	2024-03-11 20:06:22	Ralph's parking lot facing Bank of America		34.45678435	-118.6178112		<2
8201	2024-03-11 20:11:09	Castaic Union School District Building		34.44118974	-118.6270576	Intermittent	<2
8218	2024-03-11 20:15:16	Lincoln Ave near intersection with Chiquita Canyon Rd	No Odor	34.438485	-118.657044		ND
8199	2024-03-11 20:16:00	Castaic Union School District Building	Smelled stale	34.44159	-118.626224	Intermittent	<2
8202	2024-03-11 20:17:39	Lincoln Ave near intersection with Chiquita Canyon Rd	Slight garbage odor detected	34.43848	-118.657002	Persistent	2
8222	2024-03-11 20:22:59	Lincoln Ave and Taylor St	No Odor	34.44287	-118.655914		ND
8214	2024-03-11 20:22:59	Lincoln Ave near intersection with Chiquita Canyon Rd	Slight garbage odor	34.438481	-118.657005	Intermittent	<2
8204	2024-03-11 20:23:31	Ave Penn and Witherspoon Pkwy		34.449511	-118.638197	Intermittent	7
8206	2024-03-11 20:24:07	Ave Penn and Witherspoon Pkwy	Very noticeable smell of sewage and garbage	34.44951	-118.638205	Persistent	15
8217	2024-03-11 20:31:11	Bus Stop at San Martinez and Val Verde Rd	Grass smell	34.447121	-118.66422	Persistent	<2
8212	2024-03-11 20:35:49	Bus Stop at San Martinez and Val Verde Rd	Slight odor detected	34.447023	-118.664087	Intermittent	<2
8205	2024-03-11 20:41:19	LA County Fire Department Del Valle Regional Training Center		34.431751	-118.660252	Intermittent	<2
8216	2024-03-11 20:42:32	San Martinez Rd and Verdale Ave	No Odor	34.449932	-118.678656		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-5	500 - Offensive	506 - Garbage	Partly Cloudy	None	SE	0.8	76.4	35.8	28.92
-4	500 - Offensive	506 - Garbage	Sunny	None	SE	0.8	76.4	35.8	28.92
2	400 - Earthy	406 - Grassy	Sunny		SW	2.5	69.6	39.6	29
	400 - Earthy	406 - Grassy	Sunny	None	SW	2.5	69.6	39.6	29
0	400 - Earthy	415 - Stale	Sunny	None	SW	5.4	71.5	40.0	28.98
			Partly Cloudy	None	W	3.2	73	41.0	28.91
1	400 - Earthy	415 - Stale	Sunny		SW	5.4	71.5	40.0	28.98
-1	500 - Offensive	506 - Garbage	Sunny	None	W	3.2	73	41.0	28.91
			Partly Cloudy	None	W	3.8	73.3	37.6	28.85
-1	500 - Offensive	506 - Garbage	Sunny	None	SW	3.8	73.3	37.6	28.85
-4	500 - Offensive	515 - Sewer	Sunny	None	SW	5.2	68	44.5	28.8
-4	500 - Offensive	515 - Sewer	Sunny		SW	5.2	68	44.5	28.8
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	W	1.1	73.3	38.7	28.77
-1	500 - Offensive	506 - Garbage	Sunny	None	W	1.1	73.3	38.7	28.77
0	400 - Earthy	417 - Woody	Sunny	None	S	7.8	69.4	40.5	28.93
			Partly Cloudy	None	W	2.7	69.6	40.7	28.63

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8207	2024-03-11 20:43:36	LA County Fire Department Del Valle Regional Training Center	Slight musty smell	34.431708	-118.660262	Persistent	<2
8211	2024-03-11 20:46:41	San Martinez Rd and Verdale Ave	Grassy odor detected	34.449567	-118.67864	Intermittent	<2
8209	2024-03-11 20:50:22	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438544	-118.657109	Intermittent	<2
8208	2024-03-11 20:51:07	Lincoln Ave near intersection with Chiquito Canyon Rd	Smells slightly stale	34.438508	-118.65709	Intermittent	<2
8215	2024-03-11 20:52:04	San Martinez Rd and Verdale Ave	Slight odor detected	34.449583	-118.678641	Intermittent	2
8210	2024-03-11 20:52:20	Lincoln Ave and Taylor St		34.442957	-118.655871	Intermittent	<2
8220	2024-03-11 20:52:43	Val Verde Rd and Oakwood Ave	Garbage smell	34.450387	-118.661974		2
8226	2024-03-11 20:56:30	Lincoln Ave and Taylor St	Smells slightly like sand and dirt	34.442854	-118.655888		<2
8224	2024-03-11 20:58:28	San Martinez Rd and Verdale Ave	Smelled like fresh lawn clippings	34.449949	-118.67912	Intermittent	2
8213	2024-03-11 21:04:09	Val Verde Rd and Oakwood Ave	Slight odor detected	34.450346	-118.661923	Intermittent	2
8219	2024-03-11 21:06:29	Bus Stop 14608 - Del Valle Rd & Silver St	No Odor	34.448844	-118.655119		ND
8229	2024-03-11 21:07:20	San Martinez Rd and Verdale Ave	Smelled like fresh lawn clippings	34.449559	-118.679168	Intermittent	<2
8223	2024-03-11 21:15:19	Bus Stop at San Martinez and Val Verde Rd		34.447024	-118.664283	Intermittent	<2
8238	2024-03-11 21:15:43	Ave Penn and Witherspoon Pkwy	Odor detected	34.449502	-118.638204	Intermittent	4
8227	2024-03-11 21:16:11	Bus Stop at San Martinez and Val Verde Rd	Slightly stale	34.447129	-118.664294	Intermittent	<2
8267	2024-03-11 21:16:52	Ave Penn and Witherspoon Pkwy	Garbage smell	34.449494	-118.638199	Intermittent	4
8230	2024-03-11 21:20:27	Val Verde Rd and Oakwood Ave		34.450274	-118.662579	Intermittent	<2
8225	2024-03-11 21:21:24	Val Verde Rd and Oakwood Ave		34.450284	-118.66256	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	400 - Earthy	411 - Musty	Sunny		S	7.8	69.4	40.5	28.93
0	400 - Earthy	406 - Grassy	Sunny	None	S	2.7	69.6	40.7	28.63
0	400 - Earthy	415 - Stale	Sunny	None	SW	2.5	74.9	72.3	28.95
-1	400 - Earthy	415 - Stale	Sunny		SW	2.5	74.9	72.3	28.95
-2	500 - Offensive	506 - Garbage	Sunny	None	SW	2.2	70.9	41.6	28.73
0	400 - Earthy	415 - Stale	Sunny	None		0	75.4	41.7	28.88
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	2.2	70.9	41.6	28.73
1	400 - Earthy	412 - Peat-like	Sunny			0	75.4	41.7	28.88
2	400 - Earthy	406 - Grassy	Sunny	None	SW	3	73.7	40.9	28.65
-2	500 - Offensive	506 - Garbage	Sunny	None	SE	1.5	73.7	38.7	28.8
			Partly Cloudy	None	SE	1.5	73.7	38.7	28.8
2	400 - Earthy	406 - Grassy	Sunny	None	SW	3	73.7	40.9	28.65
-1	700 - Chemical	718 - Rubber	Sunny	None	SW	1.9	73.8	37.3	28.81
-2	500 - Offensive	506 - Garbage	Sunny	None	S	3.6	74.7	41.0	28.75
-1	400 - Earthy	415 - Stale	Sunny	None	SW	1.9	73.8	37.3	28.8
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	3.6	74.7	41.0	28.75
0	400 - Earthy	406 - Grassy	Sunny	None	SW	2.3	70.5	40.1	28.75
2	400 - Earthy	406 - Grassy	Sunny	None	SW	2.3	70.5	40.7	28.75



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8231	2024-03-11 21:25:23	Bus Stop 14608 - Del Valle Rd & Silver St		34.448686	-118.655164	Intermittent	<2
8228	2024-03-11 21:27:49	Bus Stop 14608 - Del Valle Rd & Silver St	Slight grassy smell	34.448696	-118.655178	Persistent	<2
8232	2024-03-11 21:33:54	Lot in front of Fire Station 143		34.454661	-118.634478	Intermittent	<2
8233	2024-03-11 21:34:41	Lot in front of Fire Station 143	Slightly stale industrial smell	34.454646	-118.634482	Persistent	<2
8235	2024-03-11 21:37:12	Castaic Union School District Building	Odor detected	34.441583	-118.626284	Intermittent	7
8237	2024-03-11 21:41:55	Cambridge Ave across from house number 29862		34.459538	-118.62677	Persistent	2
8236	2024-03-11 21:42:32	Cambridge Ave across from house number 29862	Noticeable floral/ perfume scent	34.459519	-118.626788	Persistent	<2
8268	2024-03-11 21:45:17	Castaic Union School District Building	Garbage smell when there is a wind gust	34.441642	-118.626299	Intermittent	4
8234	2024-03-11 21:50:42	Starbucks / store by Bruce sushi	Noticeable smell of garbage mixed with car exhaust	34.451027	-118.62496	Intermittent	<2
8239	2024-03-11 21:51:35	Starbucks / store by Bruce sushi		34.450966	-118.625067	Persistent	2
8250	2024-03-11 21:51:53	Starbucks / store by Bruce sushi	Slight odor detected	34.451039	-118.625115	Intermittent	2
8266	2024-03-11 21:57:02	Starbucks / store by Bruce sushi	Intermittent smell	34.450772	-118.625178	Intermittent	2
8240	2024-03-11 21:57:50	Park behind Live Oak Elementary school		34.450456	-118.62105	Intermittent	<2
8243	2024-03-11 21:58:52	Park behind Live Oak Elementary school	Slight grassy smell	34.450467	-118.621081	Persistent	<2
8251	2024-03-11 22:05:18	Park behind Live Oak Elementary school	Odor detected	34.450232	-118.621069	Intermittent	2
8272	2024-03-11 22:06:04	Park behind Live Oak Elementary school	Garbage smell	34.450233	-118.621056	Intermittent	2
8241	2024-03-11 22:08:44	Front of Castaic Elementary School		34.471369	-118.630244	Intermittent	<2
8244	2024-03-11 22:09:26	Front of Castaic Elementary School	Slight grass smell	34.471414	-118.630185	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
0	400 - Earthy	411 - Musty	Sunny	None	SW	5.9	67.2	39.9	28.8
2	400 - Earthy	406 - Grassy	Sunny	None	SW	5.9	67.2	39.9	28.8
-2	700 - Chemical	702 - Car Exhaust	Sunny	None	SW	5.4	67.2	41.6	28.85
-1	400 - Earthy	415 - Stale	Sunny	None	SW	5.4	67.2	41.6	28.85
-4	500 - Offensive	506 - Garbage	Sunny	None	SW	2.5	73.6	38.4	28.94
3	100 - Floral	109 - Marigolds	Sunny	None	S	7.4	68.2	36.9	28.75
4	100 - Floral	105 - Fragrant	Sunny	None	S	7.4	68.2	36.9	28.75
-4	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	2.5	73.6	38.4	28.94
-3	500 - Offensive	506 - Garbage	Sunny	None	SW	6.6	68.7	36.8	28.91
-3	700 - Chemical	702 - Car Exhaust	Sunny	None	SW	6.6	68.7	36.8	28.91
-2	500 - Offensive	506 - Garbage	Sunny	None	W	1.6	76.5	32.1	28.89
-1	400 - Earthy	411 - Musty	Partly Cloudy	None	NW	1.6	76.5	32.1	28.89
0	400 - Earthy	415 - Stale	Sunny	None	SW	4.8	70.5	34.3	28.99
1	400 - Earthy	406 - Grassy	Sunny		SW	4.8	70.5	34.3	28.99
-3	500 - Offensive	506 - Garbage	Sunny	None	SW	3.6	75.4	49.2	28.96
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	3.6	75.4	49.2	28.96
0	400 - Earthy	415 - Stale	Sunny	None		0	75.9	31.7	28.71
1	400 - Earthy	406 - Grassy	Sunny	None		0	75.9	31.7	28.71

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8242	2024-03-11 22:15:37	Ralph's parking lot facing Bank of America		34.456866	-118.617843	Intermittent	<2
8245	2024-03-11 22:16:27	Ralph's parking lot facing Bank of America	Slight beefy food smell	34.456907	-118.617809	Persistent	<2
8249	2024-03-11 22:17:25	Ralph's parking lot facing Bank of America	Odor detected	34.456902	-118.61778	Intermittent	2
8271	2024-03-11 22:18:16	Ralph's parking lot facing Bank of America	Food cooking	34.456975	-118.61811	Intermittent	<2
8248	2024-03-11 22:23:45	Castaic Union School District Building		34.441567	-118.626297	Intermittent	<2
8278	2024-03-11 22:23:48	Castaic Union School District Building		34.4416	-118.626294	Persistent	<2
8247	2024-03-11 22:26:25	Castaic Union School District Building		34.4408579	-118.6275304		ND
8246	2024-03-11 22:29:40	Ave Penn and Witherspoon Pkwy		34.449512	-118.638184	Intermittent	<2
8276	2024-03-11 22:30:16	Ave Penn and Witherspoon Pkwy	Slight garbage and soured wine smell	34.449484	-118.638175	Intermittent	<2
8253	2024-03-11 22:34:06	LA County Fire Department Del Valle Regional Training Center		34.431822	-118.660237	Intermittent	<2
8256	2024-03-11 22:34:36	Cambridge Ave across from house number 29862	Odor detected	34.459512	-118.626758	Intermittent	4
8270	2024-03-11 22:39:37	Cambridge Ave across from house number 29862	Strong garbage smell	34.459496	-118.626786	Intermittent	4
8280	2024-03-11 22:43:48	LA County Fire Department Del Valle Regional Training Center	Slight grassy compost smell	34.431808	-118.660229	Intermittent	<2
8257	2024-03-11 22:44:50	Lot in front of Fire Station 143	Odor detected	34.454622	-118.634236	Persistent	4
8252	2024-03-11 22:48:01	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438549	-118.657227	Intermittent	<2
8281	2024-03-11 22:48:37	Lincoln Ave near intersection with Chiquito Canyon Rd	Smells like sand and soil	34.438516	-118.657255	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
1	300 - Vegetable	308 - Potato	Sunny	None	W	2.9	70.6	38.8	28.96
-2	300 - Vegetable	310 - Onion	Sunny		W	2.9	70.6	38.8	28.96
4	300 - Vegetable	308 - Potato	Sunny	None	SW	4.1	74.1	32.0	28.94
2	300 - Vegetable	308 - Potato	Partly Cloudy	None	SW	4.1	74.1	32.0	28.94
0	400 - Earthy	411 - Musty	Sunny	None	SW	6.1	69.7	30.8	28.96
-1	400 - Earthy	411 - Musty	Sunny		SW	6.1	69.7	30.8	28.96
			Sunny	None	SW	6.1	69.7	30.8	28.96
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	SW	5.2	69.5	32.0	28.77
-3	500 - Offensive	506 - Garbage	Sunny	None	SW	5.2	68.4	32.0	28.77
1	400 - Earthy	406 - Grassy	Sunny	None	SW	9.2	69.6	38.2	28.9
-4	500 - Offensive	506 - Garbage	Sunny	None	SW	5.5	70.8	44.1	28.74
-4	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	5.5	70.8	44.1	28.74
2	400 - Earthy	406 - Grassy	Sunny	None	SW	9.2	69.6	38.2	28.9
-4	500 - Offensive	506 - Garbage	Sunny	None	SE	3.8	69.8	41.2	28.83
0	400 - Earthy	411 - Musty	Sunny	None	SW	3.6	68.8	40.5	28.91
1	400 - Earthy	410 - Musky	Sunny	None	SW	3.6	68.8	40.5	28.91

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8269	2024-03-11 22:52:11	Lot in front of Fire Station 143	Continues strong garbage smell	34.4546	-118.634258	Persistent	4
8254	2024-03-11 22:52:47	Lincoln Ave and Taylor St		34.442934	-118.655965	Persistent	<2
8275	2024-03-11 22:53:20	Lincoln Ave and Taylor St	Smells like old dirt	34.442919	-118.655916	Persistent	<2
8258	2024-03-11 22:56:45	San Martinez Rd and Verdale Ave		34.449497	-118.67912	Intermittent	4
8255	2024-03-11 22:57:58	Front of Castaic Elementary School	No detection	34.471563	-118.630181		ND
8288	2024-03-11 23:01:46	San Martinez Rd and Verdale Ave	Smells of grass and farm animals	34.449514	-118.679131	Persistent	<2
8265	2024-03-11 23:07:12	Front of Castaic Elementary School	No Odor	34.47174	-118.630604		ND
8261	2024-03-11 23:07:15	Bus Stop at San Martinez and Val Verde Rd		34.447012	-118.664276	Intermittent	<2
8286	2024-03-11 23:09:27	Bus Stop at San Martinez and Val Verde Rd	Slight floral fragrance	34.447054	-118.66417		<2
8259	2024-03-11 23:11:30	Val Verde Rd and Oakwood Ave		34.450319	-118.662573	Persistent	<2
8291	2024-03-11 23:13:24	Val Verde Rd and Oakwood Ave	Grassy smell mixed with compost	34.450286	-118.662556	Persistent	<2
8260	2024-03-11 23:19:40	Bus Stop 14608 - Del Valle Rd & Silver St		34.448636	-118.65517	Persistent	<2
8277	2024-03-11 23:20:14	Bus Stop 14608 - Del Valle Rd & Silver St	Smells like the sand and the beach	34.448624	-118.655099		<2
8264	2024-03-11 23:22:28	Lot in front of Fire Station 143		34.45459	-118.634422	Intermittent	<2
8279	2024-03-11 23:27:24	Lot in front of Fire Station 143	Slight grass smell	34.454687	-118.634445	Persistent	<2
8263	2024-03-11 23:31:41	Cambridge Ave across from house number 29862		34.459572	-118.626755	Intermittent	<2
8283	2024-03-11 23:32:45	Cambridge Ave across from house number 29862	Slight floral aroma	34.459611	-118.626694	Persistent	<2
8274	2024-03-11 23:38:13	Park behind Live Oak Elementary school		34.450465	-118.621072	Intermittent	<2
8282	2024-03-11 23:38:51	Park behind Live Oak Elementary school		34.450448	-118.621075	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-5	500 - Offensive	506 - Garbage	Partly Cloudy	None	SE	3.8	69.8	41.2	28.83
0	400 - Earthy	415 - Stale	Sunny	None	SW	1.8	68.1	42.1	28.87
-1	400 - Earthy	411 - Musty	Sunny	None	SW	1.8	69.1	42.1	28.87
-3	500 - Offensive	508 - Manure	Sunny	None	SW	1.5	70.1	45.9	28.66
			Sunny	None	W	4	71.2	40.8	28.68
-1	400 - Earthy	406 - Grassy	Sunny	None	SW	1.5	71.1	45.9	28.66
			Partly Cloudy	None	W	4	71.2	40.8	28.68
0	400 - Earthy	411 - Musty	Sunny	None	SW	1.6	73.5	39.7	28.79
1	100 - Floral	105 - Fragrant	Sunny	None	SW	1.6	73.5	39.7	28.79
-1	400 - Earthy	411 - Musty	Sunny	None	W	3.8	68.4	45.6	28.75
1	400 - Earthy	406 - Grassy	Sunny	None	W	3.8	68.4	45.6	28.75
0	400 - Earthy	415 - Stale	Sunny	None	SW	4.4	67.7	52.2	28.79
2	400 - Earthy	415 - Stale	Sunny	None	SW	4.4	67.7	42.2	28.75
-2	500 - Offensive	515 - Sewer	Partly Cloudy	None	W	2.4	69.2	40.7	28.84
2	400 - Earthy	406 - Grassy	Overcast	None	W	2.4	69.2	40.7	28.84
3	100 - Floral	105 - Fragrant	Mostly Cloudy	None	SW	9.7	63.1	53.4	28.75
2	100 - Floral	105 - Fragrant	Overcast	None	SW	9.7	63.1	53.4	28.75
-1	500 - Offensive	506 - Garbage	Mostly Cloudy	None	SW	2.1	65.1	45.1	29
2	400 - Earthy	406 - Grassy	Overcast	None	SW	2.1	65.1	45.1	29

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8273	2024-03-11 23:43:09	Starbucks / store by Bruce sushi		34.451019	-118.625047	Persistent	2
8284	2024-03-11 23:45:06	Starbucks / store by Bruce sushi	Smells like garbage and car exhaust	34.451042	-118.625075	Persistent	<2
8290	2024-03-11 23:47:27	Ralph's parking lot facing Bank of America		34.456833	-118.617801	Intermittent	<2
8287	2024-03-11 23:50:33	Ralph's parking lot facing Bank of America		34.456875	-118.61776	Persistent	<2
8289	2024-03-11 23:53:26	Front of Castaic Elementary School		34.471513	-118.630208	Intermittent	<2
8285	2024-03-11 23:58:44	Front of Castaic Elementary School		34.471526	-118.630191	Intermittent	<2
8343	2024-03-12 13:50:32	Front of Castaic Elementary School	No odor	34.471708	-118.630153		ND
8309	2024-03-12 13:52:35	Front of Castaic Elementary School	No odor detected	34.471726	-118.630195		ND
8292	2024-03-12 13:54:37	LA County Fire Department Del Valle Regional Training Center	About 100 ft east of the OS01 location. Very faint smells.	34.431722	-118.660277	Persistent	<2
8302	2024-03-12 13:56:51	LA County Fire Department Del Valle Regional Training Center	100ft east up from the spot	34.431692	-118.660252	Persistent	<2
8349	2024-03-12 14:01:39	Castaic Union School District Building	No odor	34.440232	-118.626389		ND
8297	2024-03-12 14:03:22	Lincoln Ave near intersection with Chiquito Canyon Rd	Very faint sewer/trash smell.	34.438557	-118.657175	Intermittent	<2
8301	2024-03-12 14:04:22	Lincoln Ave near intersection with Chiquito Canyon Rd	Noticeable garbage smell	34.438578	-118.657179	Persistent	<2
8310	2024-03-12 14:07:25	Ralph's parking lot facing Bank of America	No odor detected	34.456842	-118.617845		ND
8295	2024-03-12 14:09:02	Lincoln Ave and Taylor St	Not much smell very faint musty/stale smell.	34.4429	-118.655825	Persistent	<2
8305	2024-03-12 14:09:18	Lincoln Ave and Taylor St		34.442948	-118.65582	Persistent	<2
8344	2024-03-12 14:12:33	Bus Stop 14608 - Del Valle Rd & Silver St	Exhaust smell	34.447805	-118.655236	Intermittent	2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None	SW	3.7	67.5	46.1	28.94
-3	500 - Offensive	506 - Garbage	Overcast	None	SW	3.7	67.5	46.1	28.94
0	400 - Earthy	411 - Musty	Mostly Cloudy	None	SW	6.9	67.9	43.0	28.96
2	400 - Earthy	406 - Grassy	Overcast	None	SW	6.6	67.9	43.0	28.96
0	400 - Earthy	415 - Stale	Mostly Cloudy	None	S	2.9	66.6	47.6	28.71
2	100 - Floral	105 - Fragrant	Overcast	None	S	2.9	66.6	47.6	28.7
			Overcast	None	N	0	64.4	61.2	28.74
			Partly Cloudy	None		0	64.4	61.2	28.74
1	400 - Earthy	417 - Woody	Overcast	None	E	1.4	54.5	73.0	28.95
3	400 - Earthy	417 - Woody	Overcast	None	E	1.4	54.5	73	28.95
			Overcast	None	N	0	62.3	61.2	28.99
-1	500 - Offensive	515 - Sewer	Overcast	None		0	56.7	68.6	28.96
-4	500 - Offensive	506 - Garbage	Overcast	None	E	0	56.7	68.6	28.96
			Partly Cloudy	None		0	62.3	61.2	28.99
0	400 - Earthy	415 - Stale	Overcast	None		0	57.4	66.0	28.93
-2	500 - Offensive	506 - Garbage	Overcast	None		0	57.4	66.6	28.93
-1	700 - Chemical	702 - Car Exhaust	Overcast	None	N	0	66.2	51.6	28.94



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8311	2024-03-12 14:14:18	Starbucks / store by Bruce		34.451032	-118.625116		2
8298	2024-03-12 14:17:15	San Martinez Rd and Verdale Ave		34.449555	-118.679172	Persistent	<2
8303	2024-03-12 14:17:34	San Martinez Rd and Verdale Ave	Smells like farm animals	34.449573	-118.679156	Persistent	<2
8312	2024-03-12 14:19:04	Park behind Live Oak Elementary school		34.450996	-118.621111	Persistent	2
8296	2024-03-12 14:25:15	Bus Stop at San Martinez and Val Verde Rd	Noticeable smell	34.447032	-118.66388	Persistent	2
8304	2024-03-12 14:26:09	Bus Stop at San Martinez and Val Verde Rd	Very noticeable smell of garbage	34.446987	-118.663874	Persistent	2
8347	2024-03-12 14:26:55	Park behind Live Oak Elementary school	Grassy smells	34.450772	-118.620993	Persistent	2
8293	2024-03-12 14:31:07	Val Verde Rd and Oakwood Ave	Faint smell	34.450252	-118.66256	Persistent	2
8299	2024-03-12 14:31:55	Val Verde Rd and Oakwood Ave	Smells like trash	34.450263	-118.662516	Persistent	2
8313	2024-03-12 14:36:24	Cambridge Ave across from house number 29862		34.459455	-118.62677	Persistent	2
8294	2024-03-12 14:37:55	Bus Stop 14608 - Del Valle Rd & Silver St	Very faint trash smell along with some grass and earthy tones.	34.448597	-118.655172	Intermittent	<2
8300	2024-03-12 14:38:24	Bus Stop 14608 - Del Valle Rd & Silver St	Noticeable smell of garbage	34.448617	-118.655152	Persistent	<2
8341	2024-03-12 14:41:52	Cambridge Ave across from house number 29862	Flower smell	34.459448	-118.626785	Persistent	<2
8308	2024-03-12 14:46:44	Lot in front of Fire Station 143	Very faint trash smell, could be from trash being collected approx. 150 ft away (see pic)	34.454647	-118.634453	Persistent	<2
8306	2024-03-12 14:47:24	Lot in front of Fire Station 143	Smelled like stale and musty	34.454618	-118.63443	Persistent	<2
8337	2024-03-12 14:54:36	Castaic Union School District Building	No odor	34.441645	-118.626281		ND
8314	2024-03-12 14:55:11	Castaic Union School District Building		34.441609	-118.626245		<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None		0	66.2	51.6	28.94
-1	500 - Offensive	508 - Manure	Overcast	None			59.1	65.2	28.7
-1	400 - Earthy	411 - Musty	Overcast	None		0	59.1	65.2	28.7
1	400 - Earthy	406 - Grassy	Partly Cloudy	None		0	66.7	53.2	28.99
-2	500 - Offensive	506 - Garbage	Overcast	None	S	1	58	65.7	28.85
-4	500 - Offensive	506 - Garbage	Overcast	None	S	1	58	65.7	28.85
0	400 - Earthy	406 - Grassy	Overcast	None	N	0	66.7	53.2	28.99
-2	500 - Offensive	506 - Garbage	Overcast	None		0	58.8	65.5	28.81
-2	500 - Offensive	506 - Garbage	Overcast	None		0	58.8	66.5	28.81
3	100 - Floral	105 - Fragrant	Partly Cloudy	None		0	64.4	53.4	28.82
-1	500 - Offensive	506 - Garbage	Mostly Cloudy	None		0	58.5	64.4	28.86
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None		0	58.5	64.4	28.86
3	100 - Floral	105 - Fragrant	Overcast	None	N	0	64.4	53.4	28.82
-1	500 - Offensive	506 - Garbage	Mostly Cloudy	None		0	60.7	63.1	28.9
1	400 - Earthy	415 - Stale	Overcast	None		0	60.7	63.1	28.9
			Overcast	None	N	0	66.5	55.0	29.04
3	400 - Earthy	406 - Grassy	Partly Cloudy	None		0	66.5	55.0	29.04

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8307	2024-03-12 14:59:36	Castaic Union School District Building	Not much smell	34.441612	-118.62627	Intermittent	<2
8322	2024-03-12 15:00:38	Castaic Union School District Building		34.44166	-118.626224	Intermittent	<2
8315	2024-03-12 15:06:29	Ave Penn and Witherspoon Pkwy	Garbage odor detected	34.449444	-118.638241	Persistent	4
8342	2024-03-12 15:06:39	Ave Penn and Witherspoon Pkwy	Garbage smell	34.449698	-118.63792	Persistent	4
8316	2024-03-12 15:08:31	Ave Penn and Witherspoon Pkwy	Very strong trash/sewer smell	34.449524	-118.638161	Persistent	7
8325	2024-03-12 15:09:15	Ave Penn and Witherspoon Pkwy	Overwhelming rotten garbage smell	34.449569	-118.638164	Persistent	7
8317	2024-03-12 15:24:22	Front of Castaic Elementary School	A mix of grassy and garbage smell. Parked on the street not in school parking lot.	34.471374	-118.630058	Intermittent	2
8321	2024-03-12 15:24:35	Front of Castaic Elementary School	Slight intermittent smell of garbage that was able to be picked up but it mixed in and out with the smell of grass	34.471437	-118.630224	Intermittent	2
8345	2024-03-12 15:31:32	Lot in front of Fire Station 143	Garbage smell	34.45462	-118.635144	Persistent	4
8318	2024-03-12 15:32:05	Lot in front of Fire Station 143	Garbage odor detected	34.454582	-118.634311	Persistent	4
8323	2024-03-12 15:34:19	Ralph's parking lot facing Bank of America	Noticeable garbage smell	34.456887	-118.617802	Persistent	2
8319	2024-03-12 15:34:26	Ralph's parking lot facing Bank of America	Noticeable smell	34.456901	-118.617807	Persistent	2
8330	2024-03-12 15:36:48	Bus Stop 14608 - Del Valle Rd & Silver St	Garbage odor	34.448816	-118.655128	Intermittent	7
8320	2024-03-12 15:44:05	Cambridge Ave across from house number 29862	Noticeable smell	34.459669	-118.626724	Persistent	2
8324	2024-03-12 15:44:17	Cambridge Ave across from house number 29862	Noticeable smell of garbage	34.459703	-118.626718	Persistent	4
8339	2024-03-12 15:46:52	Bus Stop 14608 - Del Valle Rd & Silver St	No odor	34.447604	-118.655432		ND
8326	2024-03-12 15:52:38	Park behind Live Oak Elementary school	Fragrant grass smell	34.450456	-118.621081	Persistent	2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
0	400 - Earthy	406 - Grassy	Overcast	None		0	58.8	66.0	29.06
1	400 - Earthy	415 - Stale	Overcast	None		0	68.8	66.0	29.06
-4	500 - Offensive	506 - Garbage	Partly Cloudy	None		0	61.1	64.5	28.55
-4	500 - Offensive	506 - Garbage	Overcast	None	N	0	61.1	64.5	28.55
-4	500 - Offensive	506 - Garbage	Overcast	None	SE	1.8	54.4	75.6	28.87
-4	500 - Offensive	506 - Garbage	Overcast	None	SE	1.8	54.4	75.6	28.87
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None		0	62.4	60.2	28.79
-1	500 - Offensive	506 - Garbage	Mostly Cloudy	None		0	62.4	60.2	28.79
-4	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	0	71.2	50.5	28.94
-4	500 - Offensive	506 - Garbage	Sunny	None		0	71.2	50.5	28.94
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	NE	2.1	61.1	65.2	29.06
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	NE	2.1	61.1	65.2	29.06
-4	500 - Offensive	506 - Garbage	Sunny	None		0	69.4	51.3	28.86
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None		0	63.4	61.2	28.83
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None		0	63.4	61.2	28.83
			Sunny	None		0	69.4	51.3	28.86
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	SW	1.2	58.7	65.7	29.08

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8332	2024-03-12 15:52:56	Val Verde Rd and Oakwood Ave	No odor detected	34.450369	-118.661937		ND
8359	2024-03-12 15:53:06	Park behind Live Oak Elementary school	Noticeable smell of grass	34.45045	-118.621078	Persistent	<2
8350	2024-03-12 15:54:05	Val Verde Rd and Oakwood Ave	No Oder	34.450066	-118.662304		ND
8327	2024-03-12 16:00:29	Starbucks / store by Bruce sushi	Noticeable smell comes and goes	34.451098	-118.625115	Intermittent	2
8360	2024-03-12 16:00:39	Starbucks / store by Bruce sushi	Mainly woody but faint smell of garbage	34.451153	-118.625178	Intermittent	<2
8331	2024-03-12 16:04:14	San Martinez Rd and Verdale Ave	No odor detected	34.44963	-118.678624		ND
8338	2024-03-12 16:05:06	San Martinez Rd and Verdale Ave	No Odor	34.450068	-118.678785		ND
8361	2024-03-12 16:13:57	LA County Fire Department Del Valle Regional Training Center	Slight grassy smell	34.432201	-118.659452	Persistent	<2
8328	2024-03-12 16:14:22	LA County Fire Department Del Valle Regional Training Center	Neutral grassy/beach smell	34.432176	-118.65944	Persistent	<2
8333	2024-03-12 16:16:03	Bus Stop at San Martinez and Val Verde Rd	Grassy odor	34.447025	-118.663889	Persistent	2
8340	2024-03-12 16:16:15	Bus Stop at San Martinez and Val Verde Rd	Grassy smell	34.447235	-118.663917	Intermittent	2
8329	2024-03-12 16:19:37	Lincoln Ave near intersection with Chiquito Canyon Rd	Noticeable smell	34.438558	-118.657148	Persistent	2
8358	2024-03-12 16:19:39	Lincoln Ave near intersection with Chiquito Canyon Rd	Noticeable garbage smell	34.438568	-118.657138	Persistent	2
8334	2024-03-12 16:25:23	Lincoln Ave and Taylor St	Strong odor detected	34.442888	-118.655861	Persistent	15
8353	2024-03-12 16:25:53	Lincoln Ave and Taylor St	Noticeable smell	34.442944	-118.655812	Persistent	2
8364	2024-03-12 16:26:42	Lincoln Ave and Taylor St	Strongest smell of garbage	34.442946	-118.655815	Persistent	2
8336	2024-03-12 16:29:44	Lincoln Ave and Taylor St	Strong Garbage Smell	34.44340896	-118.655892	Persistent	15
8351	2024-03-12 16:35:08	Lincoln Ave and Taylor St		34.442886	-118.655858	Persistent	<2
8355	2024-03-12 16:35:36	San Martinez Rd and Verdale Ave	Smelled grassy with occasional manure smell	34.449569	-118.679166	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny	None		0	71	49.9	28.89
3	400 - Earthy	406 - Grassy	Partly Cloudy	None	SW	1.2	58.7	65.7	29.08
			Sunny	None		0	71	49.9	28.89
-1	500 - Offensive	506 - Garbage	Sunny	None	E	1.5	59.9	66.3	29.01
-1	400 - Earthy	417 - Woody	Sunny	None	E	1.2	59.9	66.3	29.01
			Sunny	None		0	67.5	53.5	28.7
			Sunny	None		0	67.5	53.5	28.7
2	400 - Earthy	406 - Grassy	Sunny	None	S	3.7	62.7	63.8	29.02
0	400 - Earthy	406 - Grassy	Sunny	None	S	3.7	62.7	63.8	29.02
0	400 - Earthy	406 - Grassy	Sunny	None	E	1.2	67.3	52.3	28.7
0	400 - Earthy	406 - Grassy	Sunny	None	E	1.2	67.3	52.3	28.7
-2	500 - Offensive	506 - Garbage	Sunny	None	S	2.6	62	57.6	29
-3	500 - Offensive	506 - Garbage	Sunny	None	S	2.6	62	57.6	29
-4	500 - Offensive	506 - Garbage	Sunny	None	E	0	69.4	47.4	28.94
-1	500 - Offensive	506 - Garbage	Sunny	None		0	67.2	53.2	28.95
-4	500 - Offensive	506 - Garbage	Sunny	None		0	67.2	53.2	28.95
-6	500 - Offensive	506 - Garbage	Partly Cloudy	None		0	69.4	47.4	28.94
-3	500 - Offensive	506 - Garbage	Sunny	None		0	68.7	49.6	29.96
0	400 - Earthy	406 - Grassy	Sunny	None		0	69.4	55.0	28.72

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8365	2024-03-12 16:35:36	San Martinez Rd and Verdale Ave	Slight smell of garbage when arriving bit dissipated into a grassy smell	34.449548	-118.679161	Intermittent	<2
8348	2024-03-12 16:39:29	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor	34.438551	-118.65712		ND
8352	2024-03-12 16:42:27	LA County Fire Department Del Valle Regional Training Center		34.432177	-118.659448	Persistent	2
8354	2024-03-12 16:42:52	Bus Stop at San Martinez and Val Verde Rd	Grassy smell with some slight garbage notes.	34.447005	-118.663859	Intermittent	2
8366	2024-03-12 16:43:31	Bus Stop at San Martinez and Val Verde Rd	Smells like garbage	34.446981	-118.663849	Persistent	2
8335	2024-03-12 16:45:39	LA County Fire Department Del Valle Regional Training Center	Garbage smell	34.432171	-118.659355	Intermittent	2
8362	2024-03-12 16:48:01	Val Verde Rd and Oakwood Ave	Slight garbage smell	34.450273	-118.662524	Persistent	<2
8356	2024-03-12 16:48:03	Val Verde Rd and Oakwood Ave		34.450285	-118.662547	Persistent	<2
8363	2024-03-12 16:55:35	Bus Stop 14608 - Del Valle Rd & Silver St	Grassy smell with garbage undertones	34.448581	-118.655134	Persistent	<2
8357	2024-03-12 16:55:48	Bus Stop 14608 - Del Valle Rd & Silver St	Sandy smell	34.448546	-118.655126	Intermittent	<2
8374	2024-03-12 17:03:07	Lot in front of Fire Station 143	Smelled like black licorice	34.454642	-118.634396	Intermittent	<2
8367	2024-03-12 17:03:21	Lot in front of Fire Station 143		34.454623	-118.6344	Intermittent	<2
8415	2024-03-12 17:07:06	Front of Castaic Elementary School	No Odor	34.471336	-118.62993		ND
8387	2024-03-12 17:07:13	Front of Castaic Elementary School		34.471546	-118.630213		ND
8389	2024-03-12 17:12:43	Ralph's parking lot facing Bank of America		34.456876	-118.617801	Persistent	2
8368	2024-03-12 17:14:24	Castaic Union School District Building	Slight sewer/trash smell	34.441675	-118.626355	Intermittent	<2
8373	2024-03-12 17:14:43	Castaic Union School District Building	Smells like grass	34.441683	-118.626345	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
1	400 - Earthy	406 - Grassy	Sunny	None		0	69.4	55.0	28.72
			Partly Cloudy	None		0	68.7	49.6	29.96
	500 - Offensive	506 - Garbage	Sunny	None		0	70.2	49.0	29.06
-1	400 - Earthy	406 - Grassy	Sunny	None	NE	1.3	63.5	57.2	28.88
-2	500 - Offensive	506 - Garbage	Sunny	None	NE	1.3	63.5	57.2	28.88
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None		0	70.2	49.0	29.06
-2	500 - Offensive	506 - Garbage	Sunny	None	N	2	62.6	64.4	28.85
-1	400 - Earthy	416 - Swampy	Sunny	None	N	2	62.6	64.4	28.85
-1	500 - Offensive	506 - Garbage	Sunny	None	S	2.4	62.7	60.5	28.9
0	400 - Earthy	415 - Stale		None	S	2.4	62.7	60.5	28.9
2	100 - Floral	108 - Licorice	Sunny		SW	3.9	62.3	58.6	28.94
0	100 - Floral	108 - Licorice	Sunny	None	SW	3.9	62.3	58.6	28.94
			Partly Cloudy	None		2.3	70.2	48.3	28.66
			Sunny	None	E	2.3	70.2	48.3	28.66
-2	400 - Earthy	411 - Musty	Sunny	None	SW	0	72.8	45.1	29.04
-1	500 - Offensive	515 - Sewer	Sunny	None	E	3.2	65.5	55.5	29.07
1	400 - Earthy	406 - Grassy	Sunny		E	3.2	65.5	55.5	29.07



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8422	2024-03-12 17:19:01	Lincoln Ave near intersection with Chiquita Canyon Rd	Slight musky smell	34.438563	-118.657099		<2
8369	2024-03-12 17:21:05	Ave Penn and Witherspoon Pkwy	Garbage truck near by could explain smell	34.449506	-118.638169	Persistent	2
8382	2024-03-12 17:21:07	Ave Penn and Witherspoon Pkwy	Noticeable smell of garbage and construction	34.449495	-118.638202	Persistent	2
8385	2024-03-12 17:24:15	Cambridge Ave across from house number 29862	Garbage	34.459487	-118.626765	Intermittent	<2
8372	2024-03-12 17:29:27	Starbucks / store by Bruce sushi		34.451109	-118.625103	Persistent	<2
8370	2024-03-12 17:30:05	Starbucks / store by Bruce sushi	Very little smell	34.451038	-118.625114	Intermittent	<2
8371	2024-03-12 17:36:18	Park behind Live Oak Elementary school		34.450375	-118.621074	Persistent	2
8379	2024-03-12 17:36:25	Park behind Live Oak Elementary school	Very noticeable smell of grass	34.450409	-118.621035	Persistent	2
8424	2024-03-12 17:41:05	Cambridge Ave across from house number 29862	Slight odor	34.459385	-118.626549	Intermittent	<2
8377	2024-03-12 17:44:17	Cambridge Ave across from house number 29862		34.459714	-118.626652	Persistent	<2
8375	2024-03-12 17:45:09	Cambridge Ave across from house number 29862	Strong floral smell	34.459723	-118.626698	Persistent	<2
8412	2024-03-12 17:49:37	Park behind Live Oak Elementary school	No odor	34.450465	-118.62117		ND
8390	2024-03-12 17:50:12	Park behind Live Oak Elementary school	No odor detected	34.450469	-118.621095		ND
8376	2024-03-12 17:54:35	Front of Castaic Elementary School	Very faint floral smell	34.471437	-118.630223	Intermittent	<2
8380	2024-03-12 17:54:38	Front of Castaic Elementary School	Slight unpleasant smell	34.471451	-118.630218	Intermittent	<2
8388	2024-03-12 17:59:52	Castaic Union School District Building	No odor detected	34.441751	-118.626192		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	400 - Earthy	410 - Musky	Partly Cloudy	None		0	72.8	45.1	29.04
-2	500 - Offensive	506 - Garbage	Sunny	None	S	4.2	63.7	56.2	28.88
-3	500 - Offensive	506 - Garbage	Sunny		S	4.2	63.7	56.2	28.88
-2	500 - Offensive	506 - Garbage	Sunny	None	SW	1.1	69.7	45.8	28.42
0	400 - Earthy	415 - Stale	Sunny		S	4.4	64.4	56.0	29.03
0	700 - Chemical	702 - Car Exhaust	Sunny	None	S	4.4	64.4	56.0	29.03
1	400 - Earthy	406 - Grassy	Sunny	None	S	2.1	67.6	52.0	29.09
3	400 - Earthy	406 - Grassy	Sunny	None	S	2.1	67.6	52.0	29.09
2	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	1.1	69.7	45.8	28.42
1	100 - Floral	105 - Fragrant	Sunny	None	S	2.5	66.1	60.0	28.84
4	100 - Floral	105 - Fragrant	Sunny	None	S	2.5	66.1	60.0	28.84
			Partly Cloudy	None	W	4.4	63.7	60.6	29.07
			Sunny	None	W	4.4	63.7	60.6	29.07
2	100 - Floral	106 - Herbal	Sunny	None	S	0	71.2	51.5	28.8
-1	400 - Earthy	411 - Musty	Sunny	None			71.2	51.5	28.8
			Sunny	None	SW	2	68.5	51.6	29.04

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8378	2024-03-12 18:01:41	Ralph's parking lot facing Bank of America	Strong burger smell	34.45684	-118.617811	Persistent	<2
8381	2024-03-12 18:01:52	Ralph's parking lot facing Bank of America	Smelled like fast food	34.456857	-118.617793	Intermittent	<2
8427	2024-03-12 18:06:29	Castaic Union School District Building	No Odor	34.441733	-118.626199		ND
8418	2024-03-12 18:11:51	Ave Penn and Witherspoon Pkwy	Garbage odor	34.449686	-118.637928	Persistent	2
8386	2024-03-12 18:12:21	Ave Penn and Witherspoon Pkwy	Odor detected	34.449391	-118.638254	Persistent	2
8384	2024-03-12 18:17:53	Starbucks / store by Bruce sushi		34.451039	-118.6251	Intermittent	<2
8410	2024-03-12 19:24:19	Starbucks / store by Bruce sushi	No odor	34.45109	-118.625152		ND
8383	2024-03-12 19:33:49	Lot in front of Fire Station 143		34.454589	-118.634257	Intermittent	2
8426	2024-03-12 19:39:00	Lot in front of Fire Station 143	Flower smell	34.454574	-118.634243	Intermittent	2
8416	2024-03-12 19:45:57	Bus Stop 14608 - Del Valle Rd & Silver St		34.448811	-118.655124	Intermittent	<2
8414	2024-03-12 19:50:06	Bus Stop 14608 - Del Valle Rd & Silver St	No odor	34.447846	-118.655251		ND
8406	2024-03-12 19:54:08	Val Verde Rd and Oakwood Ave	No odor detected	34.450334	-118.661867		ND
8419	2024-03-12 19:55:08	Val Verde Rd and Oakwood Ave	No odor	34.449857	-118.662439		ND
8423	2024-03-12 20:03:56	San Martinez Rd and Verdale Ave		34.449647	-118.678597	Intermittent	<2
8403	2024-03-12 20:04:37	LA County Fire Department Del Valle Regional Training Center	Approx. 50ft NW of location	34.432081	-118.660162	Persistent	2
8398	2024-03-12 20:04:44	LA County Fire Department Del Valle Regional Training Center		34.432084	-118.66013	Intermittent	<2
8400	2024-03-12 20:10:42	Lincoln Ave near intersection with Chiquito Canyon Rd	Slight beach-like smell	34.438546	-118.65718	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
2	300 - Vegetable	310 - Onion	Sunny	None	S	3.6	69.5	50.4	29.05
1	300 - Vegetable	308 - Potato	Sunny	None	S	3.6	69.5	50.4	29.05
			Partly Cloudy	None	W	2	68.5	51.6	29.04
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	NW	1.7	74.2	46.4	29.11
-3	500 - Offensive	506 - Garbage	Sunny	None	NW	1.7	74.2	46.4	29.11
4	400 - Earthy	404 - Coffee	Sunny	None	SW	4.5	76.1	41.1	28.91
			Partly Cloudy	None	SW	4.5	76.1	41.1	28.91
4	100 - Floral	106 - Herbal	Sunny	None	NW	0.5	79.5	38.1	29.25
2	100 - Floral	105 - Fragrant	Partly Cloudy	None	NW	0.5	79.5	38.9	29.25
-2	700 - Chemical	702 - Car Exhaust	Sunny	None	NW	2	79.1	39.0	28.83
			Partly Cloudy	None	NW	2	79.1	39.0	28.3
			Sunny	None	S	2.8	79.4	39.9	28.79
			Partly Cloudy	None	S	2.8	78.4	39.9	28.79
-4	500 - Offensive	508 - Manure	Sunny	None	NW	2	80.4	36.8	28.68
1	400 - Earthy	406 - Grassy	Sunny	None	SW	5.8	65.7	49.9	28.96
3	400 - Earthy	417 - Woody	Sunny		SW	5.8	65.7	49.9	28.96
0	400 - Earthy	415 - Stale	Sunny	None	S	2.6	72.5	42.0	28.96

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8395	2024-03-12 20:10:45	Lincoln Ave near intersection with Chiquita Canyon Rd	Smells like sand	34.43858	-118.657188		<2
8421	2024-03-12 20:10:51	San Martinez Rd and Verdale Ave	No odor	34.449661	-118.678612	Intermittent	<2
8405	2024-03-12 20:15:42	Lincoln Ave and Taylor St	Neutral sand smell	34.442859	-118.655808	Persistent	<2
8393	2024-03-12 20:16:01	Lincoln Ave and Taylor St	Fragrant grassy smell	34.442889	-118.655813	Persistent	2
8420	2024-03-12 20:16:47	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446851	-118.664057		ND
8425	2024-03-12 20:19:59	Bus Stop at San Martinez and Val Verde Rd	No odor	34.44707627	-118.6641005		ND
8402	2024-03-12 20:24:32	San Martinez Rd and Verdale Ave		34.449561	-118.679145	Persistent	<2
8392	2024-03-12 20:24:48	San Martinez Rd and Verdale Ave		34.449564	-118.67915	Intermittent	<2
8407	2024-03-12 20:26:41	Lincoln Ave and Taylor St	No odor detected	34.442957	-118.655808		ND
8409	2024-03-12 20:29:46	Lincoln Ave and Taylor St	No Odor	34.444271	-118.656544		ND
8411	2024-03-12 20:30:10	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438558	-118.657071	Intermittent	<2
8404	2024-03-12 20:31:04	Bus Stop at San Martinez and Val Verde Rd	Very sporadic light chlorine-like smell	34.44701	-118.66394	Intermittent	<2
8394	2024-03-12 20:31:26	Bus Stop at San Martinez and Val Verde Rd	Hint of chlorine/ pool smell	34.447004	-118.663849	Intermittent	<2
8413	2024-03-12 20:37:43	Lincoln Ave near intersection with Chiquita Canyon Rd	No Odor	34.43845622	-118.6571266		ND
8401	2024-03-12 20:38:03	Val Verde Rd and Oakwood Ave	Tree and forest type smell	34.45027	-118.662537	Persistent	<2
8391	2024-03-12 20:38:45	Val Verde Rd and Oakwood Ave		34.450277	-118.662581	Persistent	<2
8408	2024-03-12 20:41:37	LA County Fire Department Del Valle Regional Training Center		34.432134	-118.659414	Intermittent	2
8399	2024-03-12 20:45:17	Bus Stop 14608 - Del Valle Rd & Silver St	Very slight sandy smell	34.448616	-118.655109	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
1	400 - Earthy	415 - Stale	Sunny		S	2.6	72.5	42.0	28.96
-1	500 - Offensive	506 - Garbage	Sunny	None	NW	2	80.4	36.8	28.68
0	400 - Earthy	415 - Stale	Sunny	None	SW	3.8	69.7	42.4	28.95
2	400 - Earthy	406 - Grassy	Sunny	None	SW	3.8	69.7	42.4	28.95
			Sunny	None	N	2.7	65.6	46.7	28.82
			Sunny	None	NW	2.7	65.6	46.7	28.82
0	400 - Earthy	415 - Stale	Sunny	None	SW	5.4	69.8	44.1	28.69
1	400 - Earthy	406 - Grassy	Sunny	None	SW	5.4	69.8	44.1	28.69
			Sunny	None	SE	1.7	74.6	39.9	28.89
			Sunny	None	SE	1.7	74.6	39.9	28.89
-3	500 - Offensive	506 - Garbage	Sunny	None	SW	3	72.7	45.7	28.93
-1	700 - Chemical	725 - Vinegar	Sunny	None	NW	6.4	70.2	49.2	28.83
-1	800 - Medicinal	809 - Vinegar	Sunny	None	NW	6.4	70.2	49.2	28.83
			Partly Cloudy	None		3	72.7	45.7	28.93
0	400 - Earthy	417 - Woody	Sunny	None	SW	2.3	69.3	44.2	28.8
3	400 - Earthy	417 - Woody	Sunny	None	SW	2.3	69.3	44.2	28.8
-4	500 - Offensive	506 - Garbage	Sunny	None	NW	3.4	74.9	39.1	28.96
0	400 - Earthy	415 - Stale	Sunny	None	SW	5.8	68.2	44.9	28.84

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8417	2024-03-12 20:45:34	LA County Fire Department Del Valle Regional Training Center	No Odor	34.432131	-118.659391	Intermittent	2
8396	2024-03-12 20:45:34	Bus Stop 14608 - Del Valle Rd & Silver St		34.448589	-118.655156	Persistent	<2
8436	2024-03-12 20:52:31	Lot in front of Fire Station 143		34.454673	-118.63444	Persistent	<2
8432	2024-03-12 20:53:17	Lot in front of Fire Station 143	Faint plant smell	34.45464	-118.634438	Persistent	<2
8431	2024-03-12 21:03:51	Castaic Union School District Building	Mostly fresh air with bursts of sewer/trash smell	34.441566	-118.626339	Intermittent	<2
8437	2024-03-12 21:04:04	Castaic Union School District Building	Trash smell briefly in the air	34.441616	-118.626293	Intermittent	<2
8441	2024-03-12 21:11:40	Ave Penn and Witherspoon Pkwy		34.44938	-118.638292	Persistent	<2
8428	2024-03-12 21:11:46	Ave Penn and Witherspoon Pkwy		34.44936	-118.638326	Intermittent	<2
8447	2024-03-12 21:15:44	Ralph's parking lot facing Bank of America	Coffee smell	34.456949	-118.617733	Intermittent	<2
8443	2024-03-12 21:19:36	Starbucks / store by Bruce sushi	Slight smell of paint, noticeable smell of garbage	34.45121	-118.624998	Intermittent	2
8430	2024-03-12 21:19:36	Starbucks / store by Bruce sushi	Initially smelled like paint then garbage smell came in with breeze.	34.451205	-118.625045	Intermittent	2
8454	2024-03-12 21:25:46	Ralph's parking lot facing Bank of America		34.456852	-118.61779	Intermittent	2
8435	2024-03-12 21:28:49	Park behind Live Oak Elementary school	Closer to park, approx. 200ft East from school. Initially fish/plant smell. Some garbage smell.	34.452661	-118.620054	Intermittent	2
8439	2024-03-12 21:28:59	Park behind Live Oak Elementary school	200ft from east from school towards the park. Woody tree smell at first, but whiffs of car exhaust and garbage are present	34.452714	-118.620015	Persistent	<2
8450	2024-03-12 21:32:29	Cambridge Ave across from house number 29862	Floy smell	34.459819	-118.62665	Intermittent	<2
8434	2024-03-12 21:36:44	Cambridge Ave across from house number 29862	Slight floral smell	34.459693	-118.626691	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	500 - Offensive	507 - Landfill Leachate	Sunny	None	NW	3.4	74.9	39.1	28.95
1	400 - Earthy	415 - Stale	Sunny	None	SW	5.8	68.2	44.9	28.84
1	400 - Earthy	415 - Stale	Sunny	None	SW	2.8	71.4	42.6	28.87
1	100 - Floral	106 - Herbal	Sunny	None	SW	2.8	71.4	42.6	28.87
-1	500 - Offensive	515 - Sewer	Sunny	None	SW	4.8	71.4	47.5	29.01
1	400 - Earthy	406 - Grassy	Sunny	None	SW	4.8	71.4	47.5	29.01
1	400 - Earthy	415 - Stale	Sunny	None	NE	5.2	72.8	42.7	28.8
0	400 - Earthy	411 - Musty	Sunny	None	NE	5.2	72.8	42.7	28.8
1	400 - Earthy	404 - Coffee	Sunny	None	S	2.1	74.2	43.2	28.96
-2	500 - Offensive	506 - Garbage	Sunny	None	SW	4.8	72.9	43.0	28.96
-2	500 - Offensive	506 - Garbage	Sunny	None	SW	4.8	72.9	43.0	28.96
1	400 - Earthy	404 - Coffee	Sunny	None	S	2.1	74.2	42.32	28.96
0	700 - Chemical	702 - Car Exhaust	Sunny	None	SW	7.5	69.2	47.8	29.01
2	400 - Earthy	417 - Woody	Sunny	None	SW	7.5	69.2	47.8	29.01
3	100 - Floral	111 - Rose-like	Sunny	None	E	7	75	42.0	28.74
0	100 - Floral	105 - Fragrant	Sunny	None	SW	9.7	72	46.2	28.78



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8438	2024-03-12 21:37:38	Cambridge Ave across from house number 29862		34.459718	-118.626686	Persistent	<2
8449	2024-03-12 21:37:54	Cambridge Ave across from house number 29862		34.459873	-118.626677	Intermittent	2
8455	2024-03-12 21:42:58	Lot in front of Fire Station 143	No odor	34.455005	-118.633814		ND
8459	2024-03-12 21:45:54	Lot in front of Fire Station 143	No odor detected	34.45482	-118.634044		ND
8433	2024-03-12 21:49:11	Front of Castaic Elementary School	No smell	34.47157	-118.630219	Persistent	<2
8440	2024-03-12 21:49:35	Front of Castaic Elementary School		34.471612	-118.630194		ND
8444	2024-03-12 21:52:08	Ralph's parking lot facing Bank of America	Initial car exhaust smell. Then bakery smell and some garbage smell that came and went.	34.456839	-118.617826	Intermittent	<2
8451	2024-03-12 21:54:46	Starbucks / store by Bruce sushi	Garbage Smell	34.451096	-118.624943	Persistent	4
8587	2024-03-12 21:55:46	Starbucks / store by Bruce sushi	Strong odor detected	34.451041	-118.625121	Persistent	7
8442	2024-03-12 21:56:57	Ralph's parking lot facing Bank of America	Smells like garbage and sewage	34.456863	-118.617773	Persistent	<2
8445	2024-03-12 21:59:51	Castaic Union School District Building		34.441479	-118.627189		ND
8448	2024-03-12 22:05:02	Castaic Union School District Building		34.441212	-118.627039		ND
8453	2024-03-12 22:05:53	Castaic Union School District Building		34.441496	-118.625936	Intermittent	<2
8458	2024-03-12 22:10:47	Ave Penn and Witherspoon Pkwy	Garbage smell	34.449036	-118.637763	Persistent	2
8472	2024-03-12 22:12:42	LA County Fire Department Del Valle Regional Training Center	Approx. 75ft SW of location. Not much smell.	34.432158	-118.660074	Persistent	<2
8467	2024-03-12 22:13:14	LA County Fire Department Del Valle Regional Training Center		34.432149	-118.660096	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
2	100 - Floral	105 - Fragrant	Sunny	None	SW	9.7	72	46.2	28.78
2	100 - Floral	105 - Fragrant	Sunny	None	E	7	75	42.0	28.74
			Sunny	None	E	2.6	76.6	39.9	28.83
			Sunny	None	W	2.6	76.6	30.9	28.83
0	000 - No Odor	000 - No Odor	Sunny	None	S	2.7	74.6	43.8	28.71
			Sunny	None	S	2.7	74.6	43.8	28.71
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	S	2.4	74.6	40.1	28.98
-3	500 - Offensive	506 - Garbage	Sunny	None	E	5.5	77.1	40.1	28.9
-4	500 - Offensive	506 - Garbage	Sunny	None	W	5.5	77.1	40.1	28.9
-3	500 - Offensive	515 - Sewer	Sunny	None	S	2.4	74.6	40.1	28.98
			Sunny	None	E	5.5	77.1	40.1	28.9
			Sunny	None	W	2.4	70.2	48.1	28.94
-3	500 - Offensive	506 - Garbage	Sunny	None	W	2.4	70.2	48.1	28.94
-2	500 - Offensive	506 - Garbage	Sunny	None	W	3.1	83.1	36.5	28.77
0	400 - Earthy	415 - Stale	Sunny	None	SW	6.1	71.2	48.4	28.91
0	400 - Earthy	415 - Stale	Sunny	None	SW	6.1	71.2	48.4	28.91

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8457	2024-03-12 22:15:18	Ave Penn and Witherspoon Pkwy	No odor detected	34.449423	-118.638307		ND
8473	2024-03-12 22:18:41	Lincoln Ave near intersection with Chiquita Canyon Rd	Beach-like smell	34.438566	-118.657167	Intermittent	<2
8461	2024-03-12 22:19:01	Lincoln Ave near intersection with Chiquita Canyon Rd	It smells like sand at the beach	34.43857	-118.657188	Persistent	<2
8446	2024-03-12 22:20:13	Park behind Live Oak Elementary school	No odor detected	34.450567	-118.621101		ND
8460	2024-03-12 22:23:35	Park behind Live Oak Elementary school	Slight Garbage smell	34.450581	-118.621053		2
8469	2024-03-12 22:26:16	Lincoln Ave and Taylor St	Almost no smell.	34.442926	-118.655897	Intermittent	<2
8463	2024-03-12 22:28:17	Lincoln Ave and Taylor St		34.442927	-118.655871	Persistent	<2
8456	2024-03-12 22:32:57	Front of Castaic Elementary School		34.47154	-118.630196	Persistent	2
8452	2024-03-12 22:33:42	Front of Castaic Elementary School	Flower smell	34.471622	-118.629946	Intermittent	<2
8474	2024-03-12 22:38:09	San Martinez Rd and Verdale Ave	Almost no smell besides occasional farm animal smell	34.449959	-118.678842	Intermittent	<2
8465	2024-03-12 22:38:20	San Martinez Rd and Verdale Ave	Smells like farm animal	34.449561	-118.679137	Intermittent	<2
8470	2024-03-12 22:41:07	Bus Stop at San Martinez and Val Verde Rd	Barely any smell	34.446997	-118.663894	Persistent	<2
8462	2024-03-12 22:46:58	Bus Stop at San Martinez and Val Verde Rd		34.447007	-118.663831	Persistent	<2
8484	2024-03-12 22:47:44	Bus Stop 14608 - Del Valle Rd & Silver St		34.448872	-118.655086	Persistent	<2
8471	2024-03-12 22:52:49	Val Verde Rd and Oakwood Ave	Smelled like trees/moss/forrest.	34.450298	-118.662535	Persistent	<2
8466	2024-03-12 22:53:14	Val Verde Rd and Oakwood Ave	Very noticeable grassy smell	34.450302	-118.662554	Persistent	4
8485	2024-03-12 22:57:39	Bus Stop 14608 - Del Valle Rd & Silver St	No odor	34.447677	-118.655196		ND
8464	2024-03-12 23:02:29	Bus Stop 14608 - Del Valle Rd & Silver St	Smells like a prairie	34.448726	-118.655148	Persistent	<2
8481	2024-03-12 23:03:51	Val Verde Rd and Oakwood Ave	Slight odor detected	34.450584	-118.66203	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny	None	SW	3.1	83.1	36.5	28.77
0	400 - Earthy	415 - Stale	Sunny	None	SW	3.8	73.3	47.1	28.92
1	400 - Earthy	412 - Peat-like	Sunny	None	SW	3.8	73.3	47.1	28.92
			Sunny	None	SE	4.2	75.2	44.2	28.98
-1	500 - Offensive	506 - Garbage	Sunny	None	SE	4.2	75.2	44.2	28.98
0	400 - Earthy	411 - Musty	Sunny	None		0	75.6	42.7	28.89
1	400 - Earthy	415 - Stale	Sunny	None		0	75.6	42.7	28.89
4	100 - Floral	105 - Fragrant	Sunny	None	SW	2	80.5	37.1	28.68
3	100 - Floral	105 - Fragrant	Sunny	None	SW	2	80.5	37.1	28.68
-1	500 - Offensive	508 - Manure	Sunny	None	W	4.2	69.8	51.2	28.64
-2	500 - Offensive	508 - Manure	Sunny	None	W	4.2	69.8	51.2	28.64
0	400 - Earthy	415 - Stale	Sunny	None	SW	1.4	72.8	46.2	28.8
1	400 - Earthy	415 - Stale	Sunny	None	SW	1.4	72.8	46.2	28.8
1	400 - Earthy	406 - Grassy	Sunny	None	SE	5.1	70.5	50.3	28.78
1	400 - Earthy	417 - Woody	Sunny	None	SW	4.7	69.2	48.5	28.77
2	400 - Earthy	406 - Grassy	Sunny	None	SW	4.7	69.2	48.5	28.77
			Sunny	None	SE	5.1	70.5	50.3	28.78
3	400 - Earthy	406 - Grassy	Sunny	None	SW	5.2	68.3	52.9	28.81
-4	500 - Offensive	506 - Garbage	Sunny	None	SW	4.2	73.3	47.1	28.48

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8468	2024-03-12 23:04:01	Bus Stop 14608 - Del Valle Rd & Silver St	Not much smell	34.448678	-118.655137	Intermittent	<2
8476	2024-03-12 23:07:11	Lot in front of Fire Station 143	Hardly any smell.	34.454707	-118.634621	Intermittent	<2
8489	2024-03-12 23:09:08	Val Verde Rd and Oakwood Ave	No odor	34.450319	-118.661834		ND
8478	2024-03-12 23:12:44	San Martinez Rd and Verdale Ave		34.449668	-118.6786	Persistent	<2
8492	2024-03-12 23:16:40	Lot in front of Fire Station 143		34.454632	-118.634459		<2
8491	2024-03-12 23:18:28	San Martinez Rd and Verdale Ave	Slight horse manure smell	34.450129	-118.6788	Intermittent	<2
8486	2024-03-12 23:27:15	Bus Stop at San Martinez and Val Verde Rd	No odor	34.44713	-118.664394		ND
8483	2024-03-12 23:27:34	Bus Stop at San Martinez and Val Verde Rd		34.447158	-118.66438	Persistent	<2
8475	2024-03-12 23:31:16	Ave Penn and Witherspoon Pkwy	Mostly no odor. Short burst of a diesel smell.	34.449359	-118.638288	Intermittent	<2
8493	2024-03-12 23:31:48	Ave Penn and Witherspoon Pkwy	Smelt a whiff of diesel general industrial smell	34.449368	-118.638265	Intermittent	<2
8490	2024-03-12 23:31:50	Lincoln Ave and Taylor St	No odor	34.442946	-118.655906		ND
8477	2024-03-12 23:35:16	Castaic Union School District Building	Smelled like trash.	34.441566	-118.626382	Persistent	2
8479	2024-03-12 23:36:14	Lincoln Ave and Taylor St		34.442945	-118.655901		ND
8487	2024-03-12 23:42:15	Lincoln Ave near intersection with Chiquita Canyon Rd	Garbage smell	34.43853	-118.657065		2
8482	2024-03-12 23:42:32	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438558	-118.657072	Persistent	2
8495	2024-03-12 23:47:15	Castaic Union School District Building	Smells like sewage and garbage	34.441576	-118.626252	Persistent	2
8488	2024-03-12 23:47:45	LA County Fire Department Del Valle Regional Training Center	No odor	34.432029	-118.659295		ND
8480	2024-03-12 23:49:50	LA County Fire Department Del Valle Regional Training Center		34.432019	-118.659313		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
0	400 - Earthy	406 - Grassy	Sunny	None	SW	5.2	68.3	52.9	28.81
0	400 - Earthy	415 - Stale	Sunny	None	SW	4	70.4	46.3	28.85
			Sunny	None	SW	4.2	73.3	47.1	28.48
-4	500 - Offensive	508 - Manure	Sunny	None	W	1	78.3	40.0	28.63
1	400 - Earthy	415 - Stale	Sunny	None	SW	4	70.4	46.3	28.85
-2	500 - Offensive	508 - Manure	Sunny	None	SW	1	78.3	40.0	28.63
			Sunny	None	W	4.2	72.3	46.7	28.76
-3	500 - Offensive	508 - Manure	Sunny	None	W	4.2	72.3	46.7	28.76
0	700 - Chemical	706 - Diesel	Sunny	None	SW	6.2	70.2	48.0	28.79
-1	700 - Chemical	706 - Diesel	Sunny	None	SW	6.2	70.2	48.0	28.79
			Sunny	None	SW	1.2	75.1	43.2	28.85
-2	500 - Offensive	506 - Garbage	Sunny	None	SW	2.9	69.1	51.4	28.96
			Sunny	None	SW	1.2	75.1	43.2	28.85
-2	500 - Offensive	506 - Garbage	Sunny	None	SW	1.6	74.7	42.9	28.9
-3	500 - Offensive	506 - Garbage	Sunny	None	SW	1.6	74.7	42.9	28.9
-2	500 - Offensive	506 - Garbage	Sunny	None	SW	2.9	69.1	51.4	28.96
			Sunny	None	SW	0	74.1	47.5	28.93
			Sunny	None		0	74.1	47.5	28.93

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8496	2024-03-12 23:54:35	Starbucks / store by Bruce sushi	Smell of car exhaust	34.45107	-118.62513	Persistent	<2
8494	2024-03-12 23:54:43	Starbucks / store by Bruce sushi	Very faint grass/plant smell and slight car exhaust smell.	34.451071	-118.625169	Persistent	<2
8500	2024-03-13 15:47:09	Cambridge Ave across from house number 29862	Parked on the street of location. Smells carried with some being a little sweet and some smelling like fresh laundry.	34.459431	-118.626482	Intermittent	<2
8543	2024-03-13 15:47:10	LA County Fire Department Del Valle Regional Training Center	No odor	34.43203	-118.659385		ND
8499	2024-03-13 15:49:33	Front of Castaic Elementary School	It smells faintly like laundry detergent	34.47145	-118.630223	Intermittent	<2
8511	2024-03-13 15:52:45	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432176	-118.659439		ND
8532	2024-03-13 15:59:21	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor	34.438484	-118.65697		ND
8505	2024-03-13 15:59:26	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438497	-118.656971		ND
8502	2024-03-13 16:02:23	Ralph's parking lot facing Bank of America	It is not really a floral smell it smells like salt water at a beach	34.456904	-118.617792	Persistent	<2
8535	2024-03-13 16:02:31	Lincoln Ave and Taylor St	No odor	34.443207	-118.655777		ND
8498	2024-03-13 16:02:31	Ralph's parking lot facing Bank of America	Smelled like fresh beach air - a little briny.	34.456882	-118.617782	Persistent	<2
8510	2024-03-13 16:05:27	Lincoln Ave and Taylor St	No odors detected	34.442955	-118.655776		ND
8536	2024-03-13 16:09:15	Bus Stop at San Martinez and Val Verde Rd	No Odor	34.447137	-118.664132		ND
8507	2024-03-13 16:14:41	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447253	-118.664299		ND
8497	2024-03-13 16:14:55	Cambridge Ave across from house number 29862	Fresh plant smell with some beach-like briny smell.	34.459591	-118.626766	Persistent	<2
8501	2024-03-13 16:15:08	Cambridge Ave across from house number 29862	Herbal plant smell mixed with saltwater	34.4596	-118.626742	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-2	700 - Chemical	702 - Car Exhaust	Sunny	None	SW	3.4	70.5	49.0	28.95
0	400 - Earthy	406 - Grassy	Sunny	None	SW	3.4	70.5	49.0	28.5
1	800 - Medicinal	808 - Soapy	Partly Cloudy	None	S	4	56.5	55.4	28.74
			Sunny	None	E	5.9	63	49.3	28.94
1	800 - Medicinal	808 - Soapy	Sunny	None	S	4	56.5	55.4	28.74
			Sunny	None	E	5.9	63	49.3	28.94
			Sunny	None	SW	10.1	63.7	51.7	28.92
			Sunny	None	SW	10.1	63.7	51.7	28.92
6	100 - Floral	105 - Fragrant	Sunny	None	N	12	58.2	49.8	28.98
			Sunny	None	N	6.5	62.9	51.9	28.93
0	100 - Floral	105 - Fragrant	Partly Cloudy	None	N	12	50.2	49.8	28.98
			Sunny	None	N	6.5	62.9	51.9	28.93
			Sunny	None	SW	6.9	66.4	46.7	28.99
			Sunny	None	SW	6.9	66.4	46.7	28.99
5	100 - Floral	106 - Herbal	Partly Cloudy	None	N	9.6	56.8	52.4	28.76
6	100 - Floral	106 - Herbal	Sunny	None	N	9.6	56.8	52.8	28.76



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8541	2024-03-13 16:16:11	San Martinez Rd and Verdale Ave	Slight manure smell	34.450054	-118.678623	Intermittent	<2
8508	2024-03-13 16:21:29	San Martinez Rd and Verdale Ave	Slight odor	34.449644	-118.678611	Intermittent	<2
8503	2024-03-13 16:24:45	Park behind Live Oak Elementary school	Grassy and a bit dirt-like smell.	34.450351	-118.621173	Persistent	<2
8515	2024-03-13 16:24:46	Park behind Live Oak Elementary school	Smells mainly of grass mixed with saltwater beach smell	34.450434	-118.621043	Persistent	<2
8534	2024-03-13 16:27:06	Val Verde Rd and Oakwood Ave	No odor	34.45043	-118.661788		ND
8506	2024-03-13 16:33:53	Val Verde Rd and Oakwood Ave	No odor detected	34.450351	-118.661854		ND
8521	2024-03-13 16:34:07	Starbucks / store by Bruce sushi	Smells like vanilla mixed with a cinnamon roll smell. Subtle intermittent diesel smell	34.451076	-118.625128	Persistent	<2
8504	2024-03-13 16:34:11	Starbucks / store by Bruce sushi	Smelled like baked goods and some diesel/gas smell from people using hedge trimmers.	34.45106	-118.625165	Intermittent	<2
8528	2024-03-13 16:35:08	Bus Stop 14608 - Del Valle Rd & Silver St	Slight grass smell	34.44872127	-118.6551169	Intermittent	<2
8509	2024-03-13 16:38:30	Bus Stop 14608 - Del Valle Rd & Silver St		34.44885	-118.655092	Persistent	<2
8516	2024-03-13 16:41:58	Lot in front of Fire Station 143	Smells like fragrant saltwater air	34.454642	-118.634337	Persistent	<2
8545	2024-03-13 16:42:17	Ave Penn and Witherspoon Pkwy	No odor detected	34.449445	-118.638222		ND
8514	2024-03-13 16:42:33	Lot in front of Fire Station 143	Very fresh no distinguishable odor.	34.454701	-118.634367	Persistent	<2
8531	2024-03-13 16:49:00	Ave Penn and Witherspoon Pkwy	No odor	34.448804	-118.638547		ND
8517	2024-03-13 16:52:43	Ave Penn and Witherspoon Pkwy	Dirt and saltwater smell	34.449509	-118.638148	Persistent	<2
8513	2024-03-13 16:53:57	Ave Penn and Witherspoon Pkwy	Dirt/planting soil type smell.	34.44953	-118.638201	Intermittent	<2
8538	2024-03-13 16:57:26	Starbucks / store by Bruce sushi	No odor	34.451307	-118.624939		ND
8544	2024-03-13 16:58:01	Castaic Union School District Building	No odor	34.441719	-118.626027		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	500 - Offensive	508 - Manure	Sunny	None	W	6.5	67.4	43.1	28.65
-2	500 - Offensive	508 - Manure	Sunny	None	W	6.5	67.4	43.1	28.65
0	400 - Earthy	406 - Grassy	Partly Cloudy	None	NW	20.3	57.8	51.4	29.03
4	400 - Earthy	406 - Grassy	Sunny	None	NW	20.3	57.8	51.4	29.03
			Sunny	None	NW	11.7	67.9	48.3	28.96
			Sunny	None	NW	11.7	67.9	48.3	28.96
5	100 - Floral	113 - Vanilla	Sunny	None	N	10.2	58.3	48.6	28.95
5	100 - Floral	113 - Vanilla	Partly Cloudy	None	NW	10.2	58.3	48.6	28.95
0	400 - Earthy	406 - Grassy	Sunny	None	NW	6.5	64.9	41.9	28.77
0	400 - Earthy	406 - Grassy	Sunny	None	NW	6.5	64.9	41.9	28.77
5	100 - Floral	105 - Fragrant	Sunny	None	N	12.4	60.3	48.1	28.86
			Sunny	None	NW	11.5	65.6	49.7	28.77
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	N	12.4	60.3	48.1	28.86
			Sunny	None	NW	11.5	65.6	49.7	28.77
5	400 - Earthy	412 - Peat-like	Sunny	None	N	5.7	59.6	48.1	28.8
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	N	5.7	59.6	48.1	28.8
			Sunny	None	NW	12	67.4	44.3	28.99
			Sunny	None	NE	12	67.4	44.3	28.99

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8518	2024-03-13 17:00:24	Castaic Union School District Building	Grassy smell mixed with saltwater	34.441596	-118.626308	Persistent	<2
8512	2024-03-13 17:02:54	Castaic Union School District Building	Entered gps coordinates manually. Nasal ranger stopped working after this location.	34.441596	-118.626308	Intermittent	<2
8540	2024-03-13 17:09:44	Starbucks / store by Bruce sushi	No odor	34.451042	-118.625153		ND
8537	2024-03-13 17:20:15	Starbucks / store by Bruce sushi	No odor	34.451138	-118.625181		ND
8547	2024-03-13 17:28:27	Park behind Live Oak Elementary school	Garbage cans out	34.450366	-118.621074	Persistent	<2
8527	2024-03-13 17:28:42	Park behind Live Oak Elementary school	Exhaust smell	34.450364	-118.621111	Intermittent	2
8525	2024-03-13 17:32:13	Lot in front of Fire Station 143		34.45455	-118.634417	Persistent	<2
8530	2024-03-13 17:32:44	Lot in front of Fire Station 143	Floral smell	34.454583	-118.634396	Intermittent	<2
8529	2024-03-13 17:45:22	Cambridge Ave across from house number 29862	Flower smell	34.459391	-118.626559	Intermittent	<2
8526	2024-03-13 17:45:23	Cambridge Ave across from house number 29862		34.459482	-118.626746	Persistent	2
8520	2024-03-13 17:46:37	LA County Fire Department Del Valle Regional Training Center	Grassy prarie smell	34.432182	-118.659438		<2
8522	2024-03-13 17:50:55	LA County Fire Department Del Valle Regional Training Center	Fresh grassy smell with some soil and slight briny beach smell.	34.432182	-118.659439	Persistent	<2
8533	2024-03-13 17:55:37	Ralph's parking lot facing Bank of America		34.456807	-118.617928	Persistent	4
8524	2024-03-13 17:56:33	Lincoln Ave near intersection with Chiquito Canyon Rd	Smelled very fresh and beach-like.	34.438578	-118.657157	Persistent	<2
8519	2024-03-13 17:56:56	Lincoln Ave near intersection with Chiquito Canyon Rd	Smells like a beach sand and saltwater	34.438591	-118.657121	Persistent	2
8542	2024-03-13 18:01:55	Ralph's parking lot facing Bank of America	Grassy smell	34.456838	-118.61789	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
5	400 - Earthy	406 - Grassy	Sunny	None	N	12.1	59.1	46.5	28.99
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	N	12.4	59.1	46.5	28.99
			Sunny	None	NW	13.6	67	37.4	28.92
			Sunny	None	NW	13.6	67	37.4	28.9
-3	500 - Offensive	506 - Garbage	Sunny	None	NW	8.2	62.8	42.2	28.36
-2	700 - Chemical	702 - Car Exhaust	Sunny	None	NW	8.2	62.8	42.2	28.36
3	100 - Floral	105 - Fragrant	Sunny	None	NW	2.5	62.9	37.2	28.63
1	100 - Floral	110 - Perfumy	Sunny	None	NW	2.5	62.9	37.2	28.63
1	100 - Floral	110 - Perfumy	Sunny	None	NW	2.7	63.9	39.1	28.78
4	100 - Floral	105 - Fragrant	Sunny	None	NW	2.7	63.9	39.1	28.78
2	400 - Earthy	406 - Grassy	Sunny	None	N	8.5	60.6	41.8	28.95
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	N	8.5	60.6	41.8	28.95
4	100 - Floral	105 - Fragrant	Sunny	None	NW	5.7	64.6	48.4	28.55
2	400 - Earthy	406 - Grassy	Partly Cloudy	None	NE	7.1	65.5	42.1	28.93
5	100 - Floral	105 - Fragrant	Sunny	None	NE	7.1	65.5	42.1	28.93
-1	400 - Earthy	406 - Grassy	Sunny	None	NW	5.7	64.6	48.4	28.55

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8523	2024-03-13 18:03:46	Lincoln Ave and Taylor St	No distinct smell, best described as "fresh" air.	34.442921	-118.655789	Persistent	<2
8554	2024-03-13 18:04:01	Lincoln Ave and Taylor St	Smells like saltwater	34.442937	-118.655801	Persistent	<2
8546	2024-03-13 18:06:10	Front of Castaic Elementary School		34.471612	-118.630177	Persistent	4
8539	2024-03-13 18:06:24	Front of Castaic Elementary School	No odor	34.471905	-118.630002		ND
8548	2024-03-13 18:16:54	San Martinez Rd and Verdale Ave	Faint farm smell	34.449568	-118.679078	Persistent	<2
8556	2024-03-13 18:18:06	San Martinez Rd and Verdale Ave	Very faint soil/dirt/manure smell.	34.449586	-118.67909	Persistent	<2
8552	2024-03-13 18:25:44	Bus Stop at San Martinez and Val Verde Rd	No distinct odor.	34.447064	-118.663897	Persistent	<2
8551	2024-03-13 18:26:23	Bus Stop at San Martinez and Val Verde Rd	Smells like Fresh air	34.447064	-118.663894		ND
8550	2024-03-13 18:32:19	Val Verde Rd and Oakwood Ave	Slight swampy/woody smell when no gusts of wind were present.	34.450271	-118.662583	Intermittent	<2
8553	2024-03-13 18:33:37	Val Verde Rd and Oakwood Ave	Smells like grass	34.450348	-118.662523	Persistent	<2
8549	2024-03-13 18:40:13	Bus Stop 14608 - Del Valle Rd & Silver St	Very faint smell of soil and slight beach-like smell.	34.448609	-118.655131	Persistent	<2
8555	2024-03-13 18:40:30	Bus Stop 14608 - Del Valle Rd & Silver St		34.448626	-118.655129	Persistent	<2
8557	2024-03-13 18:47:18	Lot in front of Fire Station 143	Slight grassy and beach-like smell.	34.454701	-118.634368	Intermittent	<2
8563	2024-03-13 18:50:23	Lot in front of Fire Station 143	Fresh Saltwater smell	34.454663	-118.63438	Persistent	<2
8559	2024-03-13 19:02:15	Ave Penn and Witherspoon Pkwy	Slight plant smell	34.449538	-118.638181	Persistent	<2
8560	2024-03-13 19:02:40	Ave Penn and Witherspoon Pkwy	Smells like plants and saltwater air	34.449544	-118.638178	Persistent	<2
8585	2024-03-13 19:05:48	LA County Fire Department Del Valle Regional Training Center	No odor	34.432094	-118.659378		ND
8579	2024-03-13 19:06:29	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432112	-118.659331		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	NW	5.3	61.5	46.0	28.88
3	100 - Floral	105 - Fragrant	Sunny	None	NW	5.3	61.5	46.0	28.88
4	100 - Floral	105 - Fragrant	Sunny	None	NW	3.5	63.3	39.2	28.75
			Sunny	None	NW	3.5	63.3	39.2	28.75
-1	500 - Offensive	508 - Manure	Sunny	None	NE	3.9	67	41.9	28.65
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	NE	3.9	67	41.9	28.65
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	NW	3	64.4	45.8	28.8
			Sunny	None	NW	3	64.4	45.8	28.8
0	400 - Earthy	416 - Swampy	Partly Cloudy	None	W	5.9	63.8	45.5	28.75
5	400 - Earthy	406 - Grassy	Sunny	None	W	5.9	63.8	45.5	28.75
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	NW	6.7	64.2	41.6	28.81
4	400 - Earthy	406 - Grassy	Sunny	None	NW	6.7	64.2	41.6	28.81
0	400 - Earthy	406 - Grassy	Mostly Cloudy	None	N	5	65.6	40.4	28.84
3	100 - Floral	105 - Fragrant	Sunny	None	N	5	65.6	40.4	28.84
0	100 - Floral	106 - Herbal	Partly Cloudy	None	N	6.2	63.2	43.0	28.78
3	100 - Floral	105 - Fragrant	Sunny	None	N	6.2	63.2	43.0	28.78
			Sunny	None	NW	2.7	68.4	39.7	28.91
			Sunny	None	NW	2.7	68.4	39.7	28.91

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8561	2024-03-13 19:08:07	Castaic Union School District Building		34.441619	-118.626303	Persistent	<2
8558	2024-03-13 19:08:25	Castaic Union School District Building	Very slight odor that comes and goes with the wind	34.441574	-118.626315	Intermittent	<2
8564	2024-03-13 19:11:14	Starbucks / store by Bruce sushi	Very light sweet and somewhat plant like smell.	34.451095	-118.625095	Intermittent	<2
8576	2024-03-13 19:11:45	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor	34.438505	-118.656951		ND
8573	2024-03-13 19:12:09	Lincoln Ave near intersection with Chiquito Canyon Rd	Slight odor detected	34.438547	-118.656955	Intermittent	<2
8562	2024-03-13 19:17:19	Starbucks / store by Bruce sushi	Mainly saltwater air with a faint licorice smell	34.451094	-118.62506	Persistent	<2
8580	2024-03-13 19:18:09	Lincoln Ave and Taylor St	No odor	34.442573	-118.655689		ND
8581	2024-03-13 19:18:10	Lincoln Ave and Taylor St	No odor detected	34.442967	-118.6558		ND
8572	2024-03-13 19:21:31	Park behind Live Oak Elementary school	200ft north east of the school, next to the Harley canyon county park sign. Grassy smell	34.452672	-118.620144	Persistent	<2
8565	2024-03-13 19:24:25	Park behind Live Oak Elementary school	Approx. 200 ft NE of the location. Very faint smell.	34.452659	-118.620284	Persistent	<2
8578	2024-03-13 19:28:31	San Martinez Rd and Verdale Ave	Slight manure smell	34.450004	-118.678767	Intermittent	<2
8575	2024-03-13 19:28:51	San Martinez Rd and Verdale Ave	Slight odor detected	34.449641	-118.678612	Intermittent	<2
8569	2024-03-13 19:32:27	Cambridge Ave across from house number 29862	Smells like saltwater and a floral fragrant smell	34.459737	-118.626698	Persistent	2
8566	2024-03-13 19:32:39	Cambridge Ave across from house number 29862	Light smell less noticeable when fresh air blew in.	34.459684	-118.626743	Persistent	<2
8582	2024-03-13 19:42:34	Bus Stop at San Martinez and Val Verde Rd		34.446885	-118.664015	Persistent	4
8583	2024-03-13 19:42:46	Bus Stop at San Martinez and Val Verde Rd	Slight musky smell	34.447167	-118.663994	Intermittent	2
8568	2024-03-13 19:45:35	Front of Castaic Elementary School	Approx. 200 ft. NE of the location. No detectable odor.	34.470287	-118.630817	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
4	400 - Earthy	417 - Woody	Sunny	None	N	14.9	63.4	41.0	28.95
0	400 - Earthy	402 - Burnt Wood	Partly Cloudy	None	N	14.9	63.4	41.0	28.95
0	100 - Floral	108 - Licorice	Partly Cloudy	None	NW	8.1	64.8	42.1	28.92
			Sunny	None	N	2.9	67.2	39.9	28.8
-3	500 - Offensive	506 - Garbage	Sunny	None	N	2.9	67.2	39.9	28.8
5	100 - Floral	105 - Fragrant	Sunny	None	NW	8.1	64.8	42.1	28.92
			Sunny	None	N	7.6	67.9	35.3	28.84
			Sunny	None	N	7.6	67.9	35.3	28.84
2	400 - Earthy	406 - Grassy	Sunny	None	NE	2.2	68.4	38.0	28.98
0	400 - Earthy	406 - Grassy	Partly Cloudy	None	NE	2.2	68.4	38.0	28.98
-1	500 - Offensive	508 - Manure		None	N	1	67.9	24.5	28.61
-3	500 - Offensive	508 - Manure	Sunny	None	N	1	67.9	24.5	28.61
6	100 - Floral	105 - Fragrant	Sunny	None	N	14.4	64.3	40.2	28.73
1	100 - Floral	105 - Fragrant	Partly Cloudy	None	N	14.4	64.3	40.2	28.73
-1	400 - Earthy	411 - Musty	Sunny	None	NW	5.2	68.4	35.1	28.75
0	400 - Earthy	410 - Musky		None	N	5.2	68.4	35.1	28.75
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	NE	3	66.7	41.0	28.66



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8570	2024-03-13 19:45:45	Front of Castaic Elementary School	Slight floral smell	34.470305	-118.630753	Persistent	<2
8586	2024-03-13 19:53:20	Val Verde Rd and Oakwood Ave		34.45038	-118.661879	Persistent	2
8574	2024-03-13 19:53:50	Val Verde Rd and Oakwood Ave	Grassy smell	34.44996	-118.662337	Intermittent	2
8567	2024-03-13 19:54:10	Ralph's parking lot facing Bank of America	No detectable odor.	34.456902	-118.617811	Persistent	<2
8571	2024-03-13 19:54:17	Ralph's parking lot facing Bank of America	Faint grass smell	34.456923	-118.617679	Persistent	<2
8577	2024-03-13 20:02:12	Bus Stop 14608 - Del Valle Rd & Silver St	Car exhaust smell	34.447908	-118.655186	Intermittent	<2
8584	2024-03-13 20:02:25	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448835	-118.655103		ND
8598	2024-03-13 21:35:00	Ralph's parking lot facing Bank of America		34.45689	-118.61806	Persistent	2
8604	2024-03-13 21:40:58	Ralph's parking lot facing Bank of America	No odor	34.45698	-118.617952		ND
8590	2024-03-13 21:47:11	Front of Castaic Elementary School	No odor	34.471613	-118.629862		ND
8599	2024-03-13 21:54:07	Front of Castaic Elementary School		34.471609	-118.630234	Persistent	<2
8607	2024-03-13 22:05:09	LA County Fire Department Del Valle Regional Training Center	Dirt/soil smell.	34.43224	-118.659479	Persistent	<2
8597	2024-03-13 22:05:55	Cambridge Ave across from house number 29862	Flowers smell	34.458914	-118.626731	Intermittent	2
8608	2024-03-13 22:06:33	LA County Fire Department Del Valle Regional Training Center	Smells like dirt	34.43227	-118.659473	Persistent	<2
8601	2024-03-13 22:06:50	Cambridge Ave across from house number 29862		34.459487	-118.626777	Persistent	<2
8593	2024-03-13 22:15:29	Park behind Live Oak Elementary school	Grassy smell	34.449968	-118.620775	Intermittent	2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
3	100 - Floral	105 - Fragrant	Sunny	None	N	3	66.7	41.0	28.66
0	400 - Earthy	406 - Grassy	Sunny	None	NW	2.2	68.3	35.9	28.71
0	400 - Earthy	406 - Grassy		None	N	2.2	68.3	35.9	28.71
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	NE	6.7	69.3	35.9	28.95
1	400 - Earthy	406 - Grassy	Sunny	None	N	6.7	69.3	35.9	28.95
-1	700 - Chemical	702 - Car Exhaust		None	NW	9.5	67.9	35.1	28.75
			Sunny	None	NW	9.5	67.9	35.1	28.75
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	N	2.5	69	32.3	28.88
				None	NW	2.5	69	32.3	28.88
				None	N	5.1	68	32.7	28.62
3	100 - Floral	105 - Fragrant	Sunny	None	N	5.1	68	32.7	28.62
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	NW	5.2	68.5	33.8	28.87
2	100 - Floral	110 - Perfumy	Sunny	None	N	11.5	67.5	31.8	28.66
-1	400 - Earthy	412 - Peat-like	Sunny	None	NW	5.2	68.5	33.8	28.87
2	400 - Earthy	406 - Grassy	Sunny	None	N	11.5	67.5	31.8	28.66
0	400 - Earthy	406 - Grassy	Sunny	None	N	14.1	67.9	29.3	28.89

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8618	2024-03-13 22:16:06	Lincoln Ave near intersection with Chiquito Canyon Rd	Smells like dirt	34.438633	-118.657197	Persistent	<2
8606	2024-03-13 22:17:50	Lincoln Ave near intersection with Chiquito Canyon Rd		34.43862	-118.657159	Intermittent	<2
8596	2024-03-13 22:20:25	Park behind Live Oak Elementary school		34.450462	-118.621083	Persistent	2
8611	2024-03-13 22:23:21	Lincoln Ave and Taylor St	Difficult to detect a smell when wind was strong	34.442578	-118.655699	Intermittent	<2
8613	2024-03-13 22:25:06	Lincoln Ave and Taylor St	Hint of a dirt smell mainly fresh air	34.442978	-118.655882	Intermittent	<2
8602	2024-03-13 22:26:06	Starbucks / store by Bruce sushi	Coffee smell	34.451412	-118.625029		<2
8589	2024-03-13 22:27:14	Starbucks / store by Bruce sushi		34.451224	-118.625138	Persistent	2
8594	2024-03-13 22:36:47	Lot in front of Fire Station 143	Flower smell	34.454656	-118.634382	Persistent	<2
8592	2024-03-13 22:37:25	Lot in front of Fire Station 143		34.454589	-118.634481	Persistent	2
8605	2024-03-13 22:38:35	San Martinez Rd and Verdale Ave		34.449533	-118.679162	Intermittent	<2
8614	2024-03-13 22:39:17	San Martinez Rd and Verdale Ave	Faint dirt smell	34.449582	-118.679142	Intermittent	<2
8603	2024-03-13 22:45:39	Ave Penn and Witherspoon Pkwy	No odor	34.448974	-118.638497		ND
8591	2024-03-13 22:46:24	Ave Penn and Witherspoon Pkwy		34.449455	-118.63825	Persistent	2
8610	2024-03-13 22:47:28	Bus Stop at San Martinez and Val Verde Rd	Faint chlorine smell with some earthy/dirt notes.	34.447269	-118.663924	Intermittent	<2
8615	2024-03-13 22:48:15	Bus Stop at San Martinez and Val Verde Rd	Slightly stale air	34.447011	-118.663863		<2
8595	2024-03-13 22:54:24	Castaic Union School District Building	No odor	34.441472	-118.626013		ND
8600	2024-03-13 22:55:01	Castaic Union School District Building	Smells kind of like vanilla but not completely. That's the closest smell.	34.441569	-118.62599	Persistent	2
8609	2024-03-13 22:55:39	Val Verde Rd and Oakwood Ave		34.45024	-118.662521	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	400 - Earthy	412 - Peat-like	Sunny	None	NW	6.6	66.1	35.8	28.84
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	NW	6.6	66.1	35.8	28.84
1	400 - Earthy	406 - Grassy	Sunny	None	N	14.1	67.9	29.3	28.89
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	NW	15.7	65.1	38.7	28.79
-1	400 - Earthy	412 - Peat-like	Sunny	None	NW	15.7	65.1	38.7	28.79
0	400 - Earthy	404 - Coffee	Sunny	None	N	15.8	64	30.9	28.82
4	400 - Earthy	404 - Coffee	Sunny	None	N	15.8	64	30.9	28.82
1	100 - Floral	110 - Perfumy	Sunny	None	N	7.5	68.5	33.3	28.74
4	100 - Floral	105 - Fragrant	Sunny	None	N	7.5	68.5	33.3	28.74
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	SW	4.4	71	33.4	28.56
-1	400 - Earthy	412 - Peat-like	Sunny	None	SW	4.4	71	33.4	28.76
			Sunny	None	NW	8.5	65.8	34.8	28.67
1	400 - Earthy	406 - Grassy	Sunny	None	NW	8.5	65.8	34.8	28.67
0	800 - Medicinal	805 - Chlorinou	Mostly Cloudy	None	SW	6.2	65.6	33.4	28.72
-1	400 - Earthy	415 - Stale	Mostly Cloudy	None	SW	6.2	65.6	33.4	28.72
			Sunny	None	NW	8.9	64.8	34.8	28.87
4	100 - Floral	113 - Vanilla	Sunny	None	NW	8.9	64.8	34.8	28.87
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	NE	3.9	66.7	37.4	28.67

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8617	2024-03-13 22:56:27	Val Verde Rd and Oakwood Ave	Slight grassy smell	34.450264	-118.662535		<2
8612	2024-03-13 23:03:11	Bus Stop 14608 - Del Valle Rd & Silver St	Not able to detect any odor.	34.448689	-118.655156	Persistent	<2
8616	2024-03-13 23:03:51	Bus Stop 14608 - Del Valle Rd & Silver St	Fresh air	34.448732	-118.655169		ND
8635	2024-03-13 23:08:58	LA County Fire Department Del Valle Regional Training Center	Slight Garbage smell	34.432146	-118.659396	Intermittent	2
8637	2024-03-13 23:09:40	Ave Penn and Witherspoon Pkwy	Slight rubber/diesel smell	34.449284	-118.637766	Intermittent	<2
8621	2024-03-13 23:11:00	Lot in front of Fire Station 143	Stale industrial air	34.454631	-118.634443	Persistent	<2
8629	2024-03-13 23:12:02	LA County Fire Department Del Valle Regional Training Center	Odor detected off and on	34.432191	-118.659415	Intermittent	<2
8636	2024-03-13 23:17:02	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor	34.438503	-118.657008		ND
8634	2024-03-13 23:18:36	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438466	-118.65723		ND
8632	2024-03-13 23:21:39	Lincoln Ave and Taylor St	No odor	34.443647	-118.656303		ND
8640	2024-03-13 23:21:54	Ave Penn and Witherspoon Pkwy	Very little odor.	34.449398	-118.638319	Intermittent	<2
8624	2024-03-13 23:23:27	Lincoln Ave and Taylor St	No odor detected	34.442965	-118.655845		ND
8620	2024-03-13 23:27:12	Ave Penn and Witherspoon Pkwy	Stale air	34.44936	-118.638313	Persistent	<2
8626	2024-03-13 23:33:24	San Martinez Rd and Verdale Ave	No odor detected	34.449627	-118.678604		ND
8619	2024-03-13 23:33:39	Castaic Union School District Building	Fresh air	34.441595	-118.626284		ND
8630	2024-03-13 23:33:50	San Martinez Rd and Verdale Ave	Slight odor	34.44959	-118.678594		<2
8638	2024-03-13 23:34:01	Castaic Union School District Building	No detectable odor.	34.441587	-118.626229	Persistent	<2
8633	2024-03-13 23:44:20	Bus Stop at San Martinez and Val Verde Rd	No odor	34.447046	-118.663991		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
2	400 - Earthy	406 - Grassy	Sunny	None	NE	3.9	66.7	37.4	28.67
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	N	13.2	62	39.9	28.71
			Sunny	None	N	13.2	62	39.9	28.71
-1	500 - Offensive	506 - Garbage	Sunny	None	NW	8.3	65.6	33.9	28.83
-1	700 - Chemical	718 - Rubber	Partly Cloudy	None	SW	6.3	65.9	35.9	28.74
-1	400 - Earthy	415 - Stale	Mostly Cloudy	None	SW	6.3	65.9	35.9	28.74
-3	500 - Offensive	506 - Garbage	Sunny	None	NE	8.3	65.6	33.9	28.83
			Sunny	None	NW	8.5	66.6	31.3	28.8
			Sunny	None	NW	8.5	66.6	31.3	28.8
			Sunny	None	NW	3	64.9	32.3	28.75
0	400 - Earthy	415 - Stale	Overcast	None	N	5.5	60.8	38.4	28.69
			Sunny	None	NW	3	64.9	32.3	28.75
0	400 - Earthy	415 - Stale	Overcast	None	N	5.5	60.8	38.4	28.69
			Sunny	None	NW	2	67.9	32.3	28.53
			Overcast	None	N	12.6	61.6	40.0	28.91
-1	500 - Offensive	506 - Garbage	Sunny	None	NW	2	67.9	32.3	28.53
0	000 - No Odor	000 - No Odor	Overcast	None	N	12.6	61.6	40.0	28.91
			Sunny	None	NW	4.5	64.6	35.7	28.66

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8628	2024-03-13 23:44:48	Bus Stop at San Martinez and Val Verde Rd	Slight Grassy odor	34.447056	-118.663995	Persistent	<2
8639	2024-03-13 23:45:34	Starbucks / store by Bruce sushi	Occasional car exhaust smell with some grassy/plant smell.	34.451064	-118.624958	Intermittent	<2
8622	2024-03-13 23:46:42	Starbucks / store by Bruce sushi	Slight Woody smell mixed with car exhaust	34.451039	-118.624997	Intermittent	<2
8625	2024-03-13 23:54:33	Val Verde Rd and Oakwood Ave	No odor detected	34.450355	-118.661872		ND
8623	2024-03-13 23:54:40	Val Verde Rd and Oakwood Ave	No odor	34.450335	-118.661841		ND
8631	2024-03-14 00:00:23	Bus Stop 14608 - Del Valle Rd & Silver St	Slight exhaust smell	34.448822	-118.655108	Intermittent	<2
8627	2024-03-14 00:01:31	Bus Stop 14608 - Del Valle Rd & Silver St	No odors detected	34.44882	-118.655083		ND
8654	2024-03-14 00:09:51	Starbucks / store by Bruce sushi	Slight odor detected	34.451113	-118.625174	Intermittent	<2
8650	2024-03-14 00:11:43	Starbucks / store by Bruce sushi	No odor	34.451163	-118.625208		ND
8642	2024-03-14 00:12:37	Park behind Live Oak Elementary school		34.450428	-118.621135	Intermittent	<2
8644	2024-03-14 00:16:24	Park behind Live Oak Elementary school	Slight grassy smell	34.45020992	-118.62104	Persistent	2
8658	2024-03-14 00:18:52	Lot in front of Fire Station 143	Flower smell	34.454832	-118.634425	Intermittent	2
8656	2024-03-14 00:19:23	Lot in front of Fire Station 143		34.454578	-118.634294	Persistent	2
8660	2024-03-14 00:22:44	Ave Penn and Witherspoon Pkwy	Slight odor detected	34.449425	-118.638252	Intermittent	<2
8643	2024-03-14 00:23:04	Cambridge Ave across from house number 29862	No detectable odor.	34.459471	-118.626789	Persistent	<2
8645	2024-03-14 00:24:05	Cambridge Ave across from house number 29862	Fresh air	34.4595934	-118.6267573		ND
8651	2024-03-14 00:26:48	Ave Penn and Witherspoon Pkwy	No odor	34.44939	-118.638251		ND
8649	2024-03-14 00:37:06	Castaic Union School District Building	No odor	34.441649	-118.626081		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
1	400 - Earthy	406 - Grassy	Sunny	None	NW	4.5	64.6	35.7	28.66
-1	700 - Chemical	702 - Car Exhaust	Overcast	None	N	4.4	62.1	39.2	28.83
1	400 - Earthy	417 - Woody	Overcast	None	N	4.4	62.1	39.2	28.83
			Sunny	None	NW	2.4	67	33.0	28.62
			Sunny	None	NW	2.4	67	33.0	28.62
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	NW	11.8	64.3	33.5	28.54
			Sunny	None	NW	7.8	64.3	33.5	28.54
1	400 - Earthy	406 - Grassy	Sunny	None	NW	4.5	65.4	35.3	28.79
			Sunny	None	NW	4.5	65.4	35.3	28.79
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	N	11.1	63.5	36.3	28.88
1	400 - Earthy	406 - Grassy	Overcast	None	N	11.1	63.5	36.3	28.88
2	100 - Floral	105 - Fragrant	Sunny	None	NW	5.8	65	35.7	28.71
4	100 - Floral	106 - Herbal	Sunny	None	NW	5.8	65	35.7	28.71
-3	500 - Offensive	506 - Garbage	Sunny	None	NW	8	65.9	35.7	28.65
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	NW	11.6	60	38.4	28.64
			Overcast	None	NW	11.6	60	38.4	28.64
			Sunny	None	NW	8	65.9	35.7	28.65
			Sunny	None	NW	9	58	36.0	29.85



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8655	2024-03-14 00:37:26	Castaic Union School District Building	No odor detected	34.441712	-118.626127		ND
8641	2024-03-14 00:38:26	Front of Castaic Elementary School	On street for location. No detectable odor.	34.471423	-118.630239	Persistent	<2
8647	2024-03-14 00:38:52	Front of Castaic Elementary School	Fresh air smell	34.471359	-118.630131	Persistent	<2
8657	2024-03-14 00:47:22	Park behind Live Oak Elementary school	No wind detected	34.450463	-118.621106		ND
8652	2024-03-14 00:48:08	Park behind Live Oak Elementary school	No odor	34.450485	-118.621126		ND
8675	2024-03-14 00:54:27	Ralph's parking lot facing Bank of America	Occasional exhaust smell and some plant smell.	34.456921	-118.617772	Intermittent	<2
8646	2024-03-14 00:55:00	Ralph's parking lot facing Bank of America		34.456849	-118.617692	Persistent	<2
8648	2024-03-14 00:57:44	Cambridge Ave across from house number 29862	No odor	34.459466	-118.626757		ND
8659	2024-03-14 00:58:01	Cambridge Ave across from house number 29862	No odor detected	34.459505	-118.626775		ND
8671	2024-03-14 01:14:12	LA County Fire Department Del Valle Regional Training Center	Barely noticeable smell.	34.43219749	-118.6594905	Intermittent	<2
8663	2024-03-14 01:16:08	Ralph's parking lot facing Bank of America	No odor	34.456914	-118.617792		ND
8662	2024-03-14 01:16:52	Ralph's parking lot facing Bank of America	No odor detected	34.456907	-118.617833		ND
8664	2024-03-14 01:17:11	LA County Fire Department Del Valle Regional Training Center	Slight dirt smell	34.432226	-118.659445	Persistent	<2
8679	2024-03-14 01:20:38	Lincoln Ave near intersection with Chiquita Canyon Rd	Food cooking smell.	34.438599	-118.657204	Persistent	<2
8653	2024-03-14 01:20:53	Front of Castaic Elementary School	No odor	34.471536	-118.630178		ND
8665	2024-03-14 01:21:17	Lincoln Ave near intersection with Chiquita Canyon Rd	Smells like a raw potato	34.438584	-118.657147	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny	None	NW	9	58	36	29.85
0	000 - No Odor	000 - No Odor	Sunny	None	NW	2.3	63.8	38.3	28.61
0	000 - No Odor	000 - No Odor	Sunny	None	NW	2.3	63.8	38.3	28.61
			Sunny	None	NW	11	58	34	29.85
			Sunny	None	NW	11	58	34.0	29.85
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	N	6.1	61.2	39.8	28.85
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	N	6.1	61.2	39.8	28.85
			Sunny	None	NW	12	57	44.0	29.84
			Sunny	None	NW	12	57	44	29.84
0	400 - Earthy	415 - Stale	Partly Cloudy	None	W	4.2	61	35.9	28.82
			Sunny	None	NW	16	57	41.0	29.84
			Sunny	None	NW	16	57	41	29.84
1	400 - Earthy	406 - Grassy	Sunny	None	W	4.2	61	35.9	28.82
3	300 - Vegetable	308 - Potato	Mostly Cloudy	None	W	2.5	61.2	38.4	28.82
			Sunny	None	NW	5	57	42.0	29.84
-1	300 - Vegetable	308 - Potato	Overcast	None	W	2.5	61.2	38.4	28.82

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8674	2024-03-14 01:23:34	Lincoln Ave and Taylor St	Not detectable odor.	34.442936	-118.655876	Persistent	<2
8666	2024-03-14 01:24:52	Lincoln Ave and Taylor St	Smells slightly like grass	34.442926	-118.655891	Persistent	<2
8661	2024-03-14 01:26:25	Front of Castaic Elementary School	No odor detected	34.471553	-118.630225		ND
8667	2024-03-14 01:34:23	San Martinez Rd and Verdale Ave	Smells like farm animal more then manure	34.449581	-118.679118	Persistent	<2
8672	2024-03-14 01:36:13	San Martinez Rd and Verdale Ave	Slight farm smell	34.449569	-118.679133	Intermittent	<2
8673	2024-03-14 01:41:24	Bus Stop at San Martinez and Val Verde Rd	Faint chlorine smell with mostly stale/sandy smell.	34.447109	-118.663845	Intermittent	<2
8669	2024-03-14 01:41:53	Bus Stop at San Martinez and Val Verde Rd	Slight chlorine smell	34.447144	-118.663873	Intermittent	<2
8677	2024-03-14 01:46:01	Val Verde Rd and Oakwood Ave	Occasional woody/tree/plant smell.	34.450189	-118.66258	Intermittent	<2
8670	2024-03-14 01:46:11	Val Verde Rd and Oakwood Ave	Smells grassy	34.450266	-118.662568	Persistent	<2
8668	2024-03-14 01:51:10	Bus Stop 14608 - Del Valle Rd & Silver St	Smells like a prairie field	34.448712	-118.655157	Persistent	<2
8676	2024-03-14 01:51:49	Bus Stop 14608 - Del Valle Rd & Silver St	Plant/grass smell.	34.448709	-118.655154	Intermittent	<2
8720	2024-03-14 13:51:26	Front of Castaic Elementary School	No odor	34.471502	-118.630205		ND
8705	2024-03-14 13:53:51	Front of Castaic Elementary School	No odor detected	34.471528	-118.63019		ND
8686	2024-03-14 13:56:21	LA County Fire Department Del Valle Regional Training Center	Odor came in more prominent with breeze	34.432227	-118.659446	Intermittent	2
8683	2024-03-14 13:56:51	LA County Fire Department Del Valle Regional Training Center	Strong intermittent smell of garbage	34.432227	-118.659429	Intermittent	<2
8726	2024-03-14 14:03:27	Ralph's parking lot facing Bank of America	No odor	34.456937	-118.617711		ND
8700	2024-03-14 14:03:40	Ralph's parking lot facing Bank of America	Slight odor, freeway nearby	34.456882	-118.617777	Intermittent	<2
8682	2024-03-14 14:03:55	Lincoln Ave near intersection with Chiquito Canyon Rd	Smelled like sand	34.438678	-118.656945	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
0	000 - No Odor	000 - No Odor	Overcast	None	N	4.5	59.9	39.6	28.76
1	400 - Earthy	406 - Grassy	Overcast	None	N	4.5	59.9	39.6	28.76
			Sunny	None	NW	5	57	42	29.84
-1	500 - Offensive	508 - Manure	Overcast	None	SW	2.8	58.9	42.4	28.53
-1	500 - Offensive	508 - Manure	Overcast	None	SW	2.8	58.9	42.4	28.53
0	400 - Earthy	415 - Stale	Overcast	None	NW	3.4	59.8	39.9	28.69
-1	800 - Medicinal	805 - Chlorinou	Overcast	None	NW	3.4	59.8	39.9	28.69
1	400 - Earthy	417 - Woody	Overcast	None	NE	5.8	58.4	42.9	28.67
2	400 - Earthy	406 - Grassy	Overcast	None	NE	5.8	58.4	42.9	28.67
4	400 - Earthy	406 - Grassy	Overcast	None	N	6.1	58.1	44.8	28.17
2	100 - Floral	106 - Herbal	Overcast	None	N	6.1	58.1	44.8	28.72
			Sunny	None	N	5	51	24.0	29.85
			Sunny	None	N	5	51	24	29.85
-2	500 - Offensive	506 - Garbage	Overcast	None	SE	5.5	54.9	26.5	28.85
-3	500 - Offensive	506 - Garbage	Overcast	None	SE	5.5	54.9	26.5	28.85
			Sunny	None	N	5	51	24.0	29.85
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	N	5	51	24	29.85
0	400 - Earthy	415 - Stale	Overcast	None	NW	8.3	53	26.9	28.83

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8685	2024-03-14 14:04:35	Lincoln Ave near intersection with Chiquita Canyon Rd	Smells like sand	34.43862	-118.657074	Persistent	<2
8718	2024-03-14 14:06:57	Cambridge Ave across from house number 29862	Slight floral Smell	34.459552	-118.626464	Intermittent	2
8689	2024-03-14 14:10:18	Lincoln Ave and Taylor St	Smells stale	34.442902	-118.655696	Persistent	<2
8698	2024-03-14 14:10:52	Cambridge Ave across from house number 29862	No odor detected	34.459488	-118.626769		ND
8681	2024-03-14 14:10:57	Lincoln Ave and Taylor St	Very neutral odor with slight sandy smell.	34.442891	-118.655877	Intermittent	<2
8727	2024-03-14 14:15:38	Park behind Live Oak Elementary school	Grassy smell	34.450367	-118.621189	Intermittent	<2
8708	2024-03-14 14:19:35	Park behind Live Oak Elementary school	No odors detected	34.450384	-118.621059		ND
8680	2024-03-14 14:20:44	Bus Stop 14608 - Del Valle Rd & Silver St	No detectable odor.	34.448593	-118.655144	Persistent	ND
8690	2024-03-14 14:20:48	San Martinez Rd and Verdale Ave	Slight farm animal smell.	34.449953	-118.679191	Intermittent	<2
8692	2024-03-14 14:21:14	San Martinez Rd and Verdale Ave	Smells like farm animal	34.449533	-118.679119	Persistent	<2
8724	2024-03-14 14:27:44	Starbucks / store by Bruce sushi	Slight coffee smell	34.45127	-118.624942	Persistent	<2
8684	2024-03-14 14:27:47	Bus Stop at San Martinez and Val Verde Rd	Barely noticeable smell. Slight briny beach smell.	34.447055	-118.66386	Intermittent	<2
8688	2024-03-14 14:27:55	Bus Stop at San Martinez and Val Verde Rd	Smells faintly like a taco	34.447006	-118.663892	Intermittent	<2
8711	2024-03-14 14:28:25	Starbucks / store by Bruce sushi	Slight odor	34.451015	-118.62507	Intermittent	<2
8722	2024-03-14 14:33:54	Lot in front of Fire Station 143	Slight floral smell	34.454837	-118.634572		<2
8691	2024-03-14 14:33:54	Bus Stop 14608 - Del Valle Rd & Silver St	Approx. 50 ft NE of location. Slight woody/forrest smell.	34.448618	-118.655245	Persistent	<2
8687	2024-03-14 14:33:57	Val Verde Rd and Oakwood Ave	50ft north east of spot 6 on oakwood ave Noticeable grassy smell	34.450352	-118.661962	Persistent	2
8701	2024-03-14 14:35:44	Lot in front of Fire Station 143	No odor detected	34.454586	-118.634255		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	400 - Earthy	415 - Stale	Overcast	None	NW	8.3	53	26.9	28.83
1	100 - Floral	105 - Fragrant	Sunny	None	N	10	52	23.0	29.85
-1	400 - Earthy	415 - Stale	Overcast	None	N	6.3	53.7	25.5	28.79
			Sunny	None	N	10	52	23	29.85
0	400 - Earthy	415 - Stale	Overcast	None	N	6.3	53.7	25.5	28.79
0	400 - Earthy	406 - Grassy	Sunny	None	NE	7	51	23.0	29.85
			Sunny	None	NE	7	51	23	29.85
0	000 - No Odor	000 - No Odor	Sunny	None	NE	12.8	54.6	23.3	28.73
-1	500 - Offensive	508 - Manure	Partly Cloudy	None	N	3.5	57.5	26.8	28.56
-1	500 - Offensive	508 - Manure	Overcast	None	N	3.5	57.5	26.8	28.56
0	400 - Earthy	404 - Coffee	Sunny	None	N	4	51	23.0	29.85
0	400 - Earthy	415 - Stale	Partly Cloudy	None	N	4.9	54.8	25.0	28.72
1	300 - Vegetable	310 - Onion	Overcast	None	N	4.9	54.8	25.0	28.72
2	400 - Earthy	404 - Coffee	Sunny	None	N	4	51	23	29.85
1	100 - Floral	105 - Fragrant	Sunny	None	N	5	51	23.0	29.85
1	400 - Earthy	417 - Woody	Partly Cloudy	None	NE	3.6	53.8	26.5	28.67
2	400 - Earthy	406 - Grassy	Overcast	None	NE	3.6	53.8	26.5	28.67
			Sunny	None	N	5	51	23	29.85

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8693	2024-03-14 14:43:28	Bus Stop 14608 - Del Valle Rd & Silver St	Smells like field grass	34.448616	-118.655174	Persistent	<2
8729	2024-03-14 14:44:25	Ave Penn and Witherspoon Pkwy	No odor	34.448523	-118.638911		ND
8699	2024-03-14 14:45:10	Ave Penn and Witherspoon Pkwy	No odor detected	34.449417	-118.63824		ND
8706	2024-03-14 14:51:40	Castaic Union School District Building	No odor detected	34.441649	-118.626125		ND
8725	2024-03-14 14:52:44	Castaic Union School District Building	No odor	34.441339	-118.626767		ND
8695	2024-03-14 14:53:48	Lot in front of Fire Station 143	No detectable odor.	34.454621	-118.634458	Persistent	ND
8733	2024-03-14 14:59:18	Lot in front of Fire Station 143	Smells like car exhaust	34.454626	-118.634451	Persistent	<2
8696	2024-03-14 15:13:05	Ave Penn and Witherspoon Pkwy	No detectable odor.	34.449341	-118.63836	Persistent	ND
8739	2024-03-14 15:22:07	Ave Penn and Witherspoon Pkwy	Smells like diesel intermittently	34.449323	-118.638316	Intermittent	<2
8713	2024-03-14 15:22:23	Bus Stop 14608 - Del Valle Rd & Silver St	No odor	34.448834	-118.655096		ND
8710	2024-03-14 15:23:07	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448842	-118.655116		ND
8694	2024-03-14 15:27:34	Castaic Union School District Building	Fresh forest smell	34.441704	-118.626382	Intermittent	<2
8735	2024-03-14 15:27:48	Castaic Union School District Building	Smells like grass	34.441719	-118.626325	Persistent	<2
8719	2024-03-14 15:35:19	Val Verde Rd and Oakwood Ave	No odor	34.450342	-118.661964		ND
8709	2024-03-14 15:36:17	Val Verde Rd and Oakwood Ave	No odor detected	34.450339	-118.661944		ND
8697	2024-03-14 15:39:10	Starbucks / store by Bruce sushi	Occasional car smells	34.451055	-118.625125	Intermittent	<2
8740	2024-03-14 15:39:12	Starbucks / store by Bruce sushi	Faint smell of car exhaust	34.451036	-118.625098	Persistent	<2
8714	2024-03-14 15:48:02	San Martinez Rd and Verdale Ave	Slight grassy odor	34.449998	-118.678729	Intermittent	<2
8704	2024-03-14 15:48:40	San Martinez Rd and Verdale Ave	No odors detected	34.449614	-118.678635		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
2	400 - Earthy	406 - Grassy	Sunny	None	NE	12.8	54.6	23.3	28.73
			Sunny	None	NE	8	51	23.0	29.85
			Sunny	None	NE	8	51	23	29.85
			Sunny	None	NE	4	51	23	29.86
			Sunny	None	NE	4	51	23.0	29.86
0	000 - No Odor	000 - No Odor	Sunny	None	SE	2.2	59.5	24.1	28.79
-2	700 - Chemical	702 - Car Exhaust	Sunny	None	SE	2.2	59.5	24.1	28.79
0	000 - No Odor	000 - No Odor	Sunny	None	NE	11.4	56.6	21.0	28.72
-1	700 - Chemical	706 - Diesel	Sunny	None	NE	11.4	56.6	21.0	28.72
			Overcast	None	NE	4	59.8	23.0	29.86
			Sunny	None	NE	4	59.8	23	29.9
1	400 - Earthy	417 - Woody	Sunny	None	NW	6.9	57.2	21.5	28.89
2	400 - Earthy	406 - Grassy	Sunny	None	NW	6.9	57.2	21.5	28.89
			Overcast	None	NE	5	58.9	22.7	28.64
			Sunny	None	NE	5	58.9	22.7	28.64
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	N	7.2	59.7	20.2	28.84
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	N	7.2	59.7	20.2	28.84
0	400 - Earthy	406 - Grassy	Overcast	None	NE	4.5	57.6	23.0	28.54
			Sunny	None	NE	4.5	57.6	23.0	28.54



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8702	2024-03-14 15:58:02	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447025	-118.663888		ND
8728	2024-03-14 15:58:06	Bus Stop at San Martinez and Val Verde Rd	No odor	34.447041	-118.663863		ND
8703	2024-03-14 16:01:48	Park behind Live Oak Elementary school	Approx. 125ft NE from location.	34.451743	-118.621162	Persistent	<2
8738	2024-03-14 16:02:57	Park behind Live Oak Elementary school	125 north east from the school. Noticable wet grass smell	34.451666	-118.621118	Persistent	<2
8721	2024-03-14 16:04:28	Lincoln Ave and Taylor St	Slight exhaust smell	34.443016	-118.655841	Intermittent	<2
8715	2024-03-14 16:05:04	Lincoln Ave and Taylor St	No odor detected	34.442983	-118.655891		ND
8731	2024-03-14 16:12:02	Cambridge Ave across from house number 29862	No detectable odor.	34.459398	-118.626801	Persistent	ND
8716	2024-03-14 16:12:50	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438559	-118.657099		ND
8717	2024-03-14 16:13:11	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor	34.438566	-118.657434		ND
8723	2024-03-14 16:16:01	LA County Fire Department Del Valle Regional Training Center	Strong garbage smell	34.432133	-118.659399	Persistent	15
8712	2024-03-14 16:21:32	LA County Fire Department Del Valle Regional Training Center	Strong odor detected	34.432154	-118.659426	Persistent	30
8756	2024-03-14 16:24:39	Front of Castaic Elementary School	No odor	34.471656	-118.630029		ND
8734	2024-03-14 16:25:42	Cambridge Ave across from house number 29862	Very faint herbal floral smell	34.459379	-118.626783	Persistent	<2
8730	2024-03-14 16:37:24	Front of Castaic Elementary School	Occasional faint exhaust smell.	34.471378	-118.630188	Intermittent	<2
8737	2024-03-14 16:37:25	Front of Castaic Elementary School		34.471438	-118.630215		ND
8757	2024-03-14 16:41:17	Front of Castaic Elementary School	No odor detected	34.471546	-118.630167		ND
8736	2024-03-14 16:49:11	Ralph's parking lot facing Bank of America	Fast food smell	34.456885	-118.617773	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny	None	NE	4.5	58	22.5	28.69
			Overcast	None	NE	4.5	58	22.5	28.69
1	400 - Earthy	406 - Grassy	Sunny	None	NE	2.7	60.3	23.0	28.92
1	400 - Earthy	406 - Grassy	Sunny	None	NE	2.7	60.3	23.0	28.92
-1	700 - Chemical	702 - Car Exhaust	Overcast	None	N	6	53	22.0	29.87
			Sunny	None	N	6	53	22	29.87
0	000 - No Odor	000 - No Odor	Sunny	None	N	11.5	61.1	21.2	28.65
			Sunny	None	N	4	53	22	29.84
			Overcast	None	N	4	53	22.0	29.84
-5	500 - Offensive	506 - Garbage	Sunny	None	N	4	53	21.0	29.83
-7	500 - Offensive	506 - Garbage	Sunny	None	N	4	53	21	29.83
			Sunny	None	NE	4	54	21.0	29.83
1	100 - Floral	106 - Herbal	Sunny	None	NE	11.5	61.1	21.2	28.65
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	NE	5.8	61.2	20.7	28.59
			Sunny	None	NE	5.8	61.2	20.7	28.59
			Sunny	None	NE	4	54	21	29.83
2	300 - Vegetable	308 - Potato	Partly Cloudy	None	NE	8.7	61.7	21.8	28.86

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8732	2024-03-14 16:49:22	Ralph's parking lot facing Bank of America	Faint smell of car exhaust	34.456854	-118.617778	Persistent	<2
8759	2024-03-14 16:52:37	Cambridge Ave across from house number 29862	Slight floral smell	34.459434	-118.626778	Intermittent	<2
8763	2024-03-14 16:53:27	Cambridge Ave across from house number 29862	No odor detected	34.459431	-118.626737		ND
8761	2024-03-14 16:57:18	Castaic Union School District Building	Slight burning smell	34.4415	-118.626109	Intermittent	<2
8766	2024-03-14 17:01:48	Park behind Live Oak Elementary school	No odor detected	34.450712	-118.621116		ND
8747	2024-03-14 17:08:45	LA County Fire Department Del Valle Regional Training Center	Noticeable garbage/sewer smell.	34.432187	-118.659397	Persistent	7
8744	2024-03-14 17:10:01	LA County Fire Department Del Valle Regional Training Center	The smell of garbage was persistent but the strength of the smell varied	34.432173	-118.659382	Persistent	30
8768	2024-03-14 17:12:04	Castaic Union School District Building		34.44133	-118.625973	Persistent	<2
8755	2024-03-14 17:13:01	Castaic Union School District Building	No odor	34.441515	-118.626112		ND
8742	2024-03-14 17:17:49	Lincoln Ave and Taylor St	Forest and tree smell	34.443021	-118.655885		<2
8748	2024-03-14 17:18:16	Lincoln Ave and Taylor St	Smelled stale	34.443025	-118.655858	Persistent	<2
8770	2024-03-14 17:22:36	Ave Penn and Witherspoon Pkwy	No wind detected	34.4494	-118.638255		ND
8746	2024-03-14 17:23:50	Lincoln Ave near intersection with Chiquita Canyon Rd	Smells like dry sand	34.438556	-118.657182	Persistent	<2
8741	2024-03-14 17:23:55	Lincoln Ave near intersection with Chiquita Canyon Rd	Sandy odor.	34.438557	-118.657201	Persistent	<2
8764	2024-03-14 17:23:55	Ave Penn and Witherspoon Pkwy	No odor	34.449419	-118.638266		ND
8745	2024-03-14 17:32:22	San Martinez Rd and Verdale Ave	Noticeable farm/animal smell.	34.450049	-118.679346	Persistent	2
8758	2024-03-14 17:32:29	Lot in front of Fire Station 143	Slight floral smell	34.454524	-118.634436	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	NE	8.7	61.7	21.8	28.86
0	100 - Floral	105 - Fragrant	Sunny	None	NE	14	54	22.0	29.83
			Sunny	None	NE	14	54	22	29.83
0	400 - Earthy	402 - Burnt Wood	Sunny	None	N	17	54	21.0	29.83
			Sunny	None	N	17	54	21	29.83
-3	500 - Offensive	506 - Garbage	Sunny	None	SE	10.2	66.4	18.7	28.82
-6	500 - Offensive	506 - Garbage	Sunny	None	SE	10.2	66.4	18.7	28.82
1	400 - Earthy	406 - Grassy	Sunny	None	N	15	54	21	29.83
			Sunny	None	N	15	54	21.0	29.83
1	400 - Earthy	417 - Woody	Sunny	None	NW	13.9	60.9	21.7	28.76
-1	400 - Earthy	415 - Stale	Sunny	None	NW	13.9	60.9	21.7	28.76
			Sunny	None	NE	6	56	21	29.83
-1	400 - Earthy	415 - Stale	Sunny	None	NW	6.7	63	20.2	28.81
0	400 - Earthy	415 - Stale	Sunny	None	NW	6.7	63	20.2	28.81
			Sunny	None	NE	15	56	21.0	29.83
-3	500 - Offensive	508 - Manure	Sunny	None	NE	7.2	60.2	20.5	28.53
0	100 - Floral	105 - Fragrant	Sunny	None	NE	10	55	20.0	29.83

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8753	2024-03-14 17:32:32	San Martinez Rd and Verdale Ave	Smelled strongly of farm animal manure	34.449586	-118.679115	Persistent	2
8765	2024-03-14 17:33:06	Lot in front of Fire Station 143		34.454568	-118.634408	Persistent	<2
8751	2024-03-14 17:38:33	Bus Stop at San Martinez and Val Verde Rd	No noticeable odor, very windy and sandy.	34.447324	-118.664192	Persistent	<2
8754	2024-03-14 17:40:15	Bus Stop at San Martinez and Val Verde Rd	Smells like chlorine	34.447142	-118.663732	Persistent	<2
8752	2024-03-14 17:45:02	Val Verde Rd and Oakwood Ave	Faint grassy smell	34.450281	-118.662535	Persistent	<2
8750	2024-03-14 17:45:03	Val Verde Rd and Oakwood Ave	No detectable odor.	34.450285	-118.662572	Persistent	ND
8762	2024-03-14 17:46:47	Starbucks / store by Bruce sushi	No. Odor Wind gusts at 32 mph	34.451022	-118.625106		ND
8769	2024-03-14 17:47:39	Starbucks / store by Bruce sushi	Large gust of wind in the area	34.451043	-118.625091	Persistent	<2
8749	2024-03-14 17:50:12	Bus Stop 14608 - Del Valle Rd & Silver St	Smells like prairie grass	34.448662	-118.655143	Persistent	<2
8743	2024-03-14 17:50:57	Bus Stop 14608 - Del Valle Rd & Silver St	Occasional exhaust smell from passing cars.	34.448885	-118.655062	Intermittent	<2
8767	2024-03-14 17:54:05	Ralph's parking lot facing Bank of America	Near freeway	34.456835	-118.618116	Persistent	<2
8760	2024-03-14 17:54:07	Ralph's parking lot facing Bank of America	No odor	34.45683	-118.618107		ND
8781	2024-03-14 19:44:25	Bus Stop 14608 - Del Valle Rd & Silver St	No odors detected	34.448814	-118.655109		ND
8774	2024-03-14 19:46:10	Bus Stop 14608 - Del Valle Rd & Silver St	No odor	34.448833	-118.655104		ND
8777	2024-03-14 19:57:01	Val Verde Rd and Oakwood Ave	No odor	34.450346	-118.661929		ND
8787	2024-03-14 19:57:43	Val Verde Rd and Oakwood Ave	No odor detected	34.450321	-118.66195		ND
8783	2024-03-14 20:05:31	San Martinez Rd and Verdale Ave		34.449692	-118.678685	Persistent	<2
8780	2024-03-14 20:05:42	San Martinez Rd and Verdale Ave	Grassy smell	34.450036	-118.67879		<2
8772	2024-03-14 20:07:51	Front of Castaic Elementary School	Slight soil/dirt smell.	34.471375	-118.630209	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-3	500 - Offensive	508 - Manure	Sunny	None	NE	7.2	60.2	20.5	28.53
3	100 - Floral	106 - Herbal	Sunny	None	NE	10	55	20	29.83
0	000 - No Odor	000 - No Odor	Sunny	None	N	22.7	62.8	19.8	28.69
-1	800 - Medicinal	805 - Chlorinou	Sunny	None	N	22.7	62.8	19.8	28.69
1	400 - Earthy	406 - Grassy	Sunny	None	E	4.8	64.7	19.1	28.64
0	000 - No Odor	000 - No Odor	Sunny	None	E	4.8	64.7	19.1	28.64
			Sunny	None	NE	32	55	20.0	29.87
3	400 - Earthy	404 - Coffee	Sunny	None	NE	32	55	20	29.87
2	400 - Earthy	406 - Grassy	Sunny	None	NE	19.4	61.3	20.2	28.69
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	NE	19.4	61.3	20.2	28.69
-2	700 - Chemical	702 - Car Exhaust	Sunny	None	NE	13	55	20	29.87
			Sunny	None	NE	13	55	20.0	29.87
			Sunny	None	N	24	58	19	29.79
			Sunny	None	N	24	58	19.0	29.79
			Sunny	None	N	18	58	19.0	29.8
			Sunny	None	N	18	58	19	29.8
-2	500 - Offensive	508 - Manure	Sunny	None	NE	24	58	19	29.79
	400 - Earthy	406 - Grassy	Sunny	None	NE	24	58	19.0	29.79
0	400 - Earthy	412 - Peat-like	Sunny	None	N	8.2	63.8	17.1	28.55

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8796	2024-03-14 20:07:53	Front of Castaic Elementary School		34.471424	-118.630094	Persistent	<2
8775	2024-03-14 20:14:55	Bus Stop at San Martinez and Val Verde Rd	No odor	34.446838	-118.663869		ND
8773	2024-03-14 20:16:21	Ralph's parking lot facing Bank of America	Barely noticeable rubber/tire smell.	34.456845	-118.617842	Intermittent	<2
8785	2024-03-14 20:19:12	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446854	-118.66391		ND
8795	2024-03-14 20:21:12	Ralph's parking lot facing Bank of America	Noticeable smell of car exhaust	34.456888	-118.61774	Persistent	<2
8786	2024-03-14 20:23:43	Lincoln Ave and Taylor St	No odors detected	34.442937	-118.655822		ND
8778	2024-03-14 20:24:19	Lincoln Ave and Taylor St	No odor	34.44424	-118.656341		ND
8771	2024-03-14 20:24:54	Park behind Live Oak Elementary school	Fresh grass odor.	34.450406	-118.621076	Persistent	2
8791	2024-03-14 20:26:29	Park behind Live Oak Elementary school	Fresh cut grass smell	34.450361	-118.62105	Persistent	2
8782	2024-03-14 20:27:12	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438538	-118.657121		ND
8779	2024-03-14 20:29:10	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor	34.438605	-118.657018		ND
8789	2024-03-14 20:31:25	Cambridge Ave across from house number 29862	Pleasant flower smell.	34.459252	-118.626518	Persistent	<2
8776	2024-03-14 20:36:04	LA County Fire Department Del Valle Regional Training Center	Strong garbage smell	34.432091	-118.659367		15
8784	2024-03-14 20:37:04	LA County Fire Department Del Valle Regional Training Center	Strong odor detected	34.432091	-118.659382	Persistent	30
8797	2024-03-14 20:38:52	Cambridge Ave across from house number 29862	Smells like fresh flowers	34.459454	-118.626808	Persistent	<2
8788	2024-03-14 20:47:13	Castaic Union School District Building	Sight soil/dirt smell.	34.441592	-118.626351	Persistent	<2
8798	2024-03-14 20:49:46	Ave Penn and Witherspoon Pkwy	Slight construction and diesel smell	34.449356	-118.638312	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
0	000 - No Odor	000 - No Odor	Sunny	None	N	8.2	63.8	17.1	28.55
			Sunny	None	NE	19	58	19.0	29.79
0	700 - Chemical	718 - Rubber	Sunny	None	NE	9.7	67.6	19.1	28.8
			Sunny	None	NE	19	58	19	29.79
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	NE	9.7	67.6	19.1	28.8
			Sunny	None	NE	10	58	19	29.79
			Sunny	None	NE	10	58	19.0	29.79
2	400 - Earthy	406 - Grassy	Sunny	None	NE	6.4	68.4	21.8	28.82
3	400 - Earthy	406 - Grassy	Sunny	None	NE	6.4	68.4	21.8	28.82
			Sunny	None	NE	13.5	59	19	29.88
			Sunny	None	NE	13.5	59	19.0	29.88
3	100 - Floral	105 - Fragrant	Sunny	None	N	12	66	19.4	28.59
-5	500 - Offensive	506 - Garbage	Sunny	None	NE	5	59	20.0	29.75
-5	500 - Offensive	506 - Garbage	Sunny	None	NE	5	59	20	29.75
4	100 - Floral	105 - Fragrant	Sunny	None	N	12	66	19.4	28.59
0	400 - Earthy	412 - Peat-like	Sunny	None	NW	2.5	69.2	22.3	28.6
-1	700 - Chemical	706 - Diesel	Sunny	None	NW	2.5	69.2	22.3	28.6



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8810	2024-03-14 20:50:39	Castaic Union School District Building	No odor	34.440904	-118.626032		ND
8813	2024-03-14 20:51:25	Castaic Union School District Building	No odors detected	34.441456	-118.626071		ND
8790	2024-03-14 20:55:35	Castaic Union School District Building	No obvious odor.	34.441596	-118.626257	Persistent	ND
8802	2024-03-14 20:55:36	Ave Penn and Witherspoon Pkwy	Slight musty smell	34.448614	-118.63868	Intermittent	<2
8799	2024-03-14 20:56:33	Castaic Union School District Building		34.441595	-118.626242	Persistent	ND
8815	2024-03-14 20:59:31	Ave Penn and Witherspoon Pkwy	No odor detected	34.449405	-118.638262		ND
8805	2024-03-14 21:08:17	Lot in front of Fire Station 143	Slight floral smell	34.45485	-118.63466	Intermittent	<2
8816	2024-03-14 21:09:06	Lot in front of Fire Station 143		34.454551	-118.634553	Persistent	<2
8817	2024-03-14 21:15:42	Starbucks / store by Bruce sushi	No odor	34.451428	-118.624995		ND
8806	2024-03-14 21:15:57	Starbucks / store by Bruce sushi		34.451413	-118.625004	Persistent	<2
8794	2024-03-14 21:16:38	Starbucks / store by Bruce sushi	Smelled like baked goods.	34.451114	-118.625096	Intermittent	<2
8801	2024-03-14 21:16:40	Starbucks / store by Bruce sushi	Noticeable car exhaust smell	34.451047	-118.625142	Persistent	<2
8811	2024-03-14 21:23:24	Ralph's parking lot facing Bank of America	No odor	34.456841	-118.61774		ND
8793	2024-03-14 21:25:54	Lot in front of Fire Station 143	No detectable odor	34.454654	-118.634455	Persistent	<2
8803	2024-03-14 21:25:56	Ralph's parking lot facing Bank of America	No odor detected	34.456875	-118.617787		ND
8800	2024-03-14 21:28:56	Lot in front of Fire Station 143		34.454677	-118.634463	Persistent	<2
8809	2024-03-14 21:35:44	Cambridge Ave across from house number 29862	Floral smell	34.459849	-118.626367	Persistent	2
8812	2024-03-14 21:35:56	Cambridge Ave across from house number 29862		34.459504	-118.626744	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny	None	NE	2	61	19.0	29.85
			Sunny	None	N	2	61	19	29.85
0	000 - No Odor	000 - No Odor	Sunny	None	N	4.5	75.3	15.6	28.79
-1	400 - Earthy	411 - Musty	Sunny	None	NE	2	61	19.0	29.85
0	000 - No Odor	000 - No Odor	Sunny	None	N	4.5	75.3	15.6	28.79
			Sunny	None	N	2	61	19	29.85
2	100 - Floral	105 - Fragrant	Sunny	None	NE	14	60	19.0	29.87
4	100 - Floral	105 - Fragrant	Sunny	None	NE	14	60	18	29.87
			Sunny	None	NE	20	60	18.0	29.87
4	400 - Earthy	404 - Coffee	Sunny	None	NE	20	61	18	29.87
2	100 - Floral	101 - Almond	Sunny	None	NW	9.7	72.5	14.5	28.72
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	NW	9.7	72.5	14.5	28.72
			Sunny	None	NE	17	61	19.0	29.75
0	000 - No Odor	000 - No Odor	Sunny	None	NE	10.1	67.5	19.2	28.64
			Sunny	None	NE	17	61	19	29.75
0	000 - No Odor	000 - No Odor	Sunny	None	NE	10.1	67.5	19.2	28.64
2	100 - Floral	105 - Fragrant	Sunny	None	NE	14	60	18.0	29.75
1	400 - Earthy	406 - Grassy	Sunny	None	NE	14	60	18	29.73

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8831	2024-03-14 21:39:46	LA County Fire Department Del Valle Regional Training Center	Obvious and persistent garbage/sewer smell.	34.432214	-118.659447	Persistent	30
8820	2024-03-14 21:41:04	LA County Fire Department Del Valle Regional Training Center	Overwhelming garbage smell	34.4322	-118.65943	Persistent	30
8827	2024-03-14 21:44:34	Lincoln Ave and Taylor St	No noticeable detection	34.442944	-118.655914	Persistent	<2
8818	2024-03-14 21:44:38	Lincoln Ave near intersection with Chiquita Canyon Rd	Smells like sand	34.438555	-118.657213	Persistent	<2
8814	2024-03-14 21:46:39	Park behind Live Oak Elementary school	No odor detected	34.450544	-118.621106		ND
8807	2024-03-14 21:48:13	Park behind Live Oak Elementary school	No odor	34.450568	-118.621086		ND
8819	2024-03-14 21:50:01	Lincoln Ave and Taylor St		34.44292	-118.655935	Persistent	<2
8828	2024-03-14 21:50:03	Lincoln Ave and Taylor St	Very faint dirt/soil odor.	34.442972	-118.655886	Intermittent	<2
8808	2024-03-14 21:59:20	Front of Castaic Elementary School	Slight floral smell	34.471541	-118.630218	Intermittent	<2
8804	2024-03-14 21:59:36	Front of Castaic Elementary School	No odors detected	34.471575	-118.630215		ND
8825	2024-03-14 22:05:09	San Martinez Rd and Verdale Ave	Occasional manure/farm animal smell and some car exhaust.	34.449524	-118.679157	Intermittent	<2
8822	2024-03-14 22:05:17	San Martinez Rd and Verdale Ave	Faint manure smell	34.449582	-118.679073	Intermittent	<2
8830	2024-03-14 22:12:02	Bus Stop at San Martinez and Val Verde Rd	No noticeable odor.	34.446957	-118.663913	Persistent	ND
8821	2024-03-14 22:13:08	Bus Stop at San Martinez and Val Verde Rd	Faint chlorine smell but could not pick it up with wind	34.446955	-118.663884	Intermittent	<2
8823	2024-03-14 22:17:06	Val Verde Rd and Oakwood Ave		34.450284	-118.662575	Persistent	<2
8829	2024-03-14 22:17:15	Val Verde Rd and Oakwood Ave	No noticeable odor.	34.450301	-118.662538	Persistent	<2
8826	2024-03-14 22:23:27	Bus Stop 14608 - Del Valle Rd & Silver St	Barely noticeable sandy odor.	34.448751	-118.655157	Persistent	<2
8824	2024-03-14 22:24:55	Bus Stop 14608 - Del Valle Rd & Silver St	Slight smell of car exhaust	34.44874	-118.655147	Intermittent	<2
8846	2024-03-14 22:34:36	Bus Stop 14608 - Del Valle Rd & Silver St	No odor	34.448832	-118.655091		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-4	500 - Offensive	506 - Garbage	Sunny	None	E	7.6	68.5	20.8	28.72
-7	500 - Offensive	506 - Garbage	Sunny	None	E	7.6	68.5	20.8	28.72
0	000 - No Odor	000 - No Odor	Sunny	None	W	4.6	71.1	19.9	28.7
0	400 - Earthy	415 - Stale	Sunny	None	W	4.6	71.1	19.9	28.7
			Sunny	None	NE	14	60	18	29.74
			Sunny	None	NE	14	60	18.0	29.73
0	400 - Earthy	415 - Stale	Sunny	None	NW	5.4	72.7	15.6	28.65
0	400 - Earthy	412 - Peat-like	Sunny	None	NW	5.4	72.7	15.6	28.65
0	100 - Floral	105 - Fragrant	Sunny	None	N	7	61	19.0	29.73
			Sunny	None	N	7	61	19	29.73
-1	500 - Offensive	508 - Manure	Sunny	None	E	11.3	70.7	16.2	28.44
-1	500 - Offensive	508 - Manure	Sunny	None	E	11.3	70.7	16.2	28.44
0	000 - No Odor	000 - No Odor	Sunny	None	W	9.2	70.6	15.8	28.57
-1	800 - Medicinal	805 - Chlorinou	Sunny	None	W	9.2	70.6	15.8	28.57
0	000 - No Odor	000 - No Odor	Sunny	None	E	8.7	73.7	19.8	28.53
0	000 - No Odor	000 - No Odor	Sunny	None	E	8.7	73.7	19.8	28.53
0	400 - Earthy	415 - Stale	Sunny	None	N	9	69.4	20.6	28.59
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	N	9	69.4	20.6	28.59
			Sunny	None	N	7	62	18.0	29.73

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8838	2024-03-14 22:35:29	Bus Stop 14608 - Del Valle Rd & Silver St	No odors detected	34.448834	-118.6551		ND
8832	2024-03-14 22:36:22	Lot in front of Fire Station 143	No noticeable odor.	34.454685	-118.634443	Persistent	ND
8854	2024-03-14 22:37:45	Lot in front of Fire Station 143	Faint herbal scent	34.454696	-118.634439	Intermittent	<2
8844	2024-03-14 22:42:45	Val Verde Rd and Oakwood Ave	No odor	34.450268	-118.661861		ND
8842	2024-03-14 22:43:04	Val Verde Rd and Oakwood Ave	No odor detected	34.450286	-118.661845		ND
8833	2024-03-14 22:44:44	Ave Penn and Witherspoon Pkwy	No detectable odors.	34.449369	-118.638362	Persistent	ND
8852	2024-03-14 22:45:05	Ave Penn and Witherspoon Pkwy		34.449337	-118.638318	Persistent	ND
8856	2024-03-14 22:50:27	Castaic Union School District Building		34.441584	-118.626218	Persistent	ND
8840	2024-03-14 22:52:02	San Martinez Rd and Verdale Ave	No odor	34.449625	-118.6786		ND
8839	2024-03-14 22:52:06	San Martinez Rd and Verdale Ave	No odors detected	34.449683	-118.67861		ND
8834	2024-03-14 22:53:18	Castaic Union School District Building	No detectable odor.	34.441603	-118.626243	Persistent	ND
8836	2024-03-14 22:58:31	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446898	-118.663983		ND
8845	2024-03-14 22:58:56	Bus Stop at San Martinez and Val Verde Rd	No odor	34.446847	-118.663981		ND
8835	2024-03-14 23:00:54	Starbucks / store by Bruce sushi	Some noticeable car exhaust smell as cars drove past.	34.451061	-118.624891	Intermittent	<2
8849	2024-03-14 23:05:11	Lincoln Ave and Taylor St	No odor	34.442936	-118.655814		ND
8841	2024-03-14 23:05:20	Lincoln Ave and Taylor St	No odor detected	34.442944	-118.655801		ND
8851	2024-03-14 23:08:23	Starbucks / store by Bruce sushi	Noticeable smell of car exhaust	34.451073	-118.625028	Persistent	<2
8848	2024-03-14 23:09:45	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor	34.438593	-118.657093		ND
8843	2024-03-14 23:12:07	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438583	-118.657085		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny	None	N	7	62	18	29.73
0	000 - No Odor	000 - No Odor	Sunny	None	NE	5.2	71.3	16.2	28.62
1	100 - Floral	106 - Herbal	Sunny	None	NE	5.2	71.3	16.2	28.62
			Sunny	None	NE	13	62	18.0	29.72
			Sunny	None	NE	13	62	18	29.72
0	000 - No Odor	000 - No Odor	Sunny	None	N	7.8	69.7	17.2	28.55
0	000 - No Odor	000 - No Odor	Sunny	None	N	7.8	69.7	17.2	28.55
0	000 - No Odor	000 - No Odor	Sunny	None	N	4.4	75.8	16.5	28.74
			Sunny	None	NE	10	62	18.0	29.72
			Sunny	None	NE	10	62	18	29.72
0	000 - No Odor	000 - No Odor	Sunny	None	N	4.4	75.8	16.5	28.74
			Sunny	None	NE	15	62	19	29.73
			Sunny	None	NE	15	62	19.0	29.73
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	N	9.2	73.8	15.5	28.69
			Sunny	None	NE	6	63	18.0	29.71
			Sunny	None	NE	6	63	18	29.71
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	N	9.2	73.8	15.5	28.69
			Sunny	None	NE	6	63	18.0	29.71
			Sunny	None	NE	6	63	18	29.71

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8847	2024-03-14 23:14:45	LA County Fire Department Del Valle Regional Training Center	Strong garbage smell	34.43216	-118.659412		4
8857	2024-03-14 23:16:45	Park behind Live Oak Elementary school	Cedar like smell	34.450595	-118.621148	Persistent	<2
8850	2024-03-14 23:16:53	Park behind Live Oak Elementary school		34.450567	-118.621044	Persistent	<2
8837	2024-03-14 23:18:48	LA County Fire Department Del Valle Regional Training Center		34.432179	-118.659425	Persistent	4
8858	2024-03-14 23:24:07	Cambridge Ave across from house number 29862		34.459423	-118.626764	Persistent	<2
8861	2024-03-14 23:24:11	Cambridge Ave across from house number 29862	Plant smell	34.459472	-118.626801	Persistent	<2
8860	2024-03-14 23:41:39	Front of Castaic Elementary School	Strong food/taco smell.	34.471419	-118.630209	Persistent	2
8855	2024-03-14 23:42:22	Front of Castaic Elementary School	Strong Taco smell	34.47145	-118.630222	Intermittent	<2
8859	2024-03-14 23:50:08	Ralph's parking lot facing Bank of America	Car exhaust/diesel smell.	34.456929	-118.617792	Persistent	<2
8853	2024-03-14 23:50:17	Ralph's parking lot facing Bank of America	Strong intermittent gas smell	34.456905	-118.617797	Intermittent	<2
8895	2024-03-15 01:29:17	LA County Fire Department Del Valle Regional Training Center	Slight garbage smell	34.432122	-118.65941	Intermittent	2
8866	2024-03-15 14:05:24	LA County Fire Department Del Valle Regional Training Center		34.432171	-118.659418	Persistent	2
8863	2024-03-15 14:11:55	Front of Castaic Elementary School	Slight soil/dirt smell	34.471441	-118.630251	Persistent	<2
8900	2024-03-15 14:13:08	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor	34.438487	-118.657025		ND
8867	2024-03-15 14:13:11	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438448	-118.656929	Persistent	2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-4	500 - Offensive	506 - Garbage	Sunny	None	NE	12	63	17.0	29.8
3	400 - Earthy	417 - Woody	Sunny	None	N	11.2	73.1	17.2	28.75
2	400 - Earthy	406 - Grassy	Sunny	None	N	11.2	73.1	17.2	28.75
-4	500 - Offensive	506 - Garbage	Sunny	None	NE	12	63	17	29.8
3	100 - Floral	105 - Fragrant	Sunny	None	N	21.7	69.9	17.8	28.51
2	100 - Floral	106 - Herbal	Sunny	None	N	21.7	69.9	17.8	28.51
6	300 - Vegetable	310 - Onion	Sunny	None	N	2.5	69.7	18.3	28.47
5	300 - Vegetable	310 - Onion	Sunny	None	N	2.5	69.7	18.3	28.47
0	700 - Chemical	706 - Diesel	Sunny	None	N	11.3	69.2	16.6	28.72
-4	700 - Chemical	707 - Gasoline	Sunny	None	N	11.3	69.2	16.6	28.72
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	1	48	56.0	29.78
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	1	48	56	29.78
0	400 - Earthy	412 - Peat-like	Overcast	None		0	57.3	38.9	28.47
			Partly Cloudy	None	SW	3	49	56.0	29.8
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	3	49	54	29.8



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8874	2024-03-15 14:13:22	Front of Castaic Elementary School	Slight floral smell	34.471423	-118.630207	Persistent	<2
8897	2024-03-15 14:17:34	Lincoln Ave and Taylor St	No odor	34.442585	-118.655676		ND
8865	2024-03-15 14:19:05	Lincoln Ave and Taylor St		34.442918	-118.655831	Persistent	2
8864	2024-03-15 14:20:57	Ralph's parking lot facing Bank of America	Slight baked goods/sweet smell	34.456859	-118.617833	Intermittent	<2
8878	2024-03-15 14:22:29	Ralph's parking lot facing Bank of America	Smelled like a fresh bakery	34.456803	-118.617791	Persistent	<2
8905	2024-03-15 14:27:43	San Martinez Rd and Verdale Ave	Grassy smell	34.450021	-118.67873	Intermittent	<2
8862	2024-03-15 14:28:04	Cambridge Ave across from house number 29862	Plant/flower smell	34.459418	-118.626519	Persistent	<2
8877	2024-03-15 14:28:05	Cambridge Ave across from house number 29862	Noticeable floral scent	34.459488	-118.626769	Persistent	<2
8871	2024-03-15 14:28:09	San Martinez Rd and Verdale Ave		34.449832	-118.67862	Persistent	<2
8904	2024-03-15 14:35:45	Bus Stop at San Martinez and Val Verde Rd	Musty smell	34.447112	-118.663897	Intermittent	<2
8869	2024-03-15 14:35:48	Bus Stop at San Martinez and Val Verde Rd		34.447042	-118.663945	Persistent	2
8872	2024-03-15 14:39:02	Park behind Live Oak Elementary school	Closer to park, approx. 125 ft. North of location. Occasional slight garbage odor.	34.451974	-118.621155	Intermittent	<2
8879	2024-03-15 14:39:39	Park behind Live Oak Elementary school		34.451937	-118.621087	Persistent	<2
8868	2024-03-15 14:42:07	Val Verde Rd and Oakwood Ave		34.450334	-118.661862	Persistent	<2
8898	2024-03-15 14:42:43	Val Verde Rd and Oakwood Ave	No odor	34.450417	-118.661903		ND
8902	2024-03-15 14:46:04	Bus Stop 14608 - Del Valle Rd & Silver St	No odor	34.448645	-118.65525		ND
8881	2024-03-15 14:46:40	Starbucks / store by Bruce sushi	Sweet bakery and Cinnamon smell	34.451005	-118.625085	Persistent	<2
8870	2024-03-15 14:49:43	Bus Stop 14608 - Del Valle Rd & Silver St		34.448644	-118.655256	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
2	100 - Floral	105 - Fragrant	Partly Cloudy	None	N	0	57.3	38.9	28.47
			Partly Cloudy	None	SW	4	49	54.0	29.8
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	SW	4	49	54	29.8
5	100 - Floral	113 - Vanilla	Partly Cloudy	None	S	1.1	52.9	48.4	28.74
4	200 - Fruity	207 - Maple	Partly Cloudy	None	S	1.1	52.9	48.4	28.74
0	400 - Earthy	406 - Grassy	Partly Cloudy	None	SW	5	49	54.0	29.8
3	100 - Floral	105 - Fragrant	Partly Cloudy	None		0	58.5	45.9	28.52
4	100 - Floral	105 - Fragrant	Partly Cloudy	None		0	58.5	45.9	28.52
-1	500 - Offensive	508 - Manure	Partly Cloudy	None	SW	5	49	54	29.8
-1	400 - Earthy	411 - Musty	Partly Cloudy	None	SW	5	49	54.0	29.8
-1	400 - Earthy	414 - Smokey	Partly Cloudy	None	SW	5	49	54	29.8
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	4.2	51.3	55.1	28.76
2	400 - Earthy	406 - Grassy	Partly Cloudy	None	N	4.2	51.3	55.1	28.76
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	SW	3	49	54	29.8
			Partly Cloudy	None	SW	3	49	54.0	29.8
			Partly Cloudy	None	W	3	50	54.0	29.8
4	100 - Floral	102 - Cinnamon	Partly Cloudy	None	E	1.5	51	55.1	28.7
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	W	3	50	54	29.8

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8894	2024-03-15 14:57:21	Lot in front of Fire Station 143	Floral smell	34.454822	-118.634089		2
8873	2024-03-15 14:57:22	Starbucks / store by Bruce sushi	Smelled like baked goods/coffee.	34.451054	-118.625029	Persistent	<2
8883	2024-03-15 14:58:02	Lot in front of Fire Station 143		34.454805	-118.634075	Persistent	<2
8891	2024-03-15 15:05:29	Ave Penn and Witherspoon Pkwy	Sweet smell	34.448651	-118.63876	Persistent	2
8884	2024-03-15 15:05:51	Ave Penn and Witherspoon Pkwy	Odor detected	34.449418	-118.638242	Intermittent	<2
8880	2024-03-15 15:08:43	Ave Penn and Witherspoon Pkwy	Strong Cinnamon smell	34.449535	-118.638143	Persistent	<2
8882	2024-03-15 15:09:46	Ave Penn and Witherspoon Pkwy	Faint trash/sewer smell depending on area standing. Some plant/floral smells and some diesel exhaust from construction.	34.449031	-118.638461	Intermittent	<2
8892	2024-03-15 15:13:00	Castaic Union School District Building	Sweet smell	34.440898	-118.625981		2
8888	2024-03-15 15:13:22	Castaic Union School District Building	Smells sorta like vanilla	34.441729	-118.626161	Persistent	<2
8876	2024-03-15 15:17:15	Castaic Union School District Building	Sweet smell maybe a faint trash smell mixed with it	34.441709	-118.626357	Persistent	<2
8875	2024-03-15 15:17:33	Castaic Union School District Building	Very faint smell of soil/plants/forest-like smell.	34.441752	-118.626422	Intermittent	<2
8887	2024-03-15 15:32:11	Starbucks / store by Bruce sushi		34.451016	-118.624807	Persistent	<2
8893	2024-03-15 15:32:33	Starbucks / store by Bruce sushi	No odor	34.451423	-118.624961		ND
8903	2024-03-15 15:42:11	Park behind Live Oak Elementary school	Grassy smell	34.450501	-118.621081	Intermittent	2
8886	2024-03-15 15:42:37	Park behind Live Oak Elementary school		34.4505	-118.621067	Persistent	<2
8913	2024-03-15 15:43:49	Lot in front of Fire Station 143	No detectable odor.	34.454624	-118.634427	Persistent	<2
8907	2024-03-15 15:44:19	Lot in front of Fire Station 143	Stale industrial smell	34.454638	-118.634353	Persistent	<2
8885	2024-03-15 15:50:55	Cambridge Ave across from house number 29862		34.459495	-118.626742	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
1	100 - Floral	105 - Fragrant	Partly Cloudy	None	W	1	50	53.0	29.79
6	100 - Floral	101 - Almond	Partly Cloudy	None	E	1.5	51	55.1	28.7
4	100 - Floral	105 - Fragrant	Sunny	None	NW	1	53	53	29.79
2	200 - Fruity	212 - Sweet	Partly Cloudy	None	W	2	50	53.0	29.79
4	200 - Fruity	212 - Sweet	Sunny	None	NW	2	50	53	29.79
3	100 - Floral	102 - Cinnamon	Partly Cloudy	None	SW	2.3	52.8	47.6	28.56
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	2.3	52.8	47.6	28.56
0	200 - Fruity	212 - Sweet	Partly Cloudy	None	NW	2	50	54.0	29.81
3	100 - Floral	113 - Vanilla	Sunny	None	NW	2	50	54	29.81
2	200 - Fruity	212 - Sweet	Partly Cloudy	None	NW	0.8	54.4	52.3	28.76
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	NW	0.8	54.4	52.3	28.76
3	400 - Earthy	404 - Coffee	Sunny	None	NW	1	51	54	29.8
			Partly Cloudy	None	NW	1	51	54.0	29.8
0	400 - Earthy	406 - Grassy	Partly Cloudy	None	NW	2	51	52.0	29.81
1	400 - Earthy	406 - Grassy	Sunny	None	NW	2	51	52	29.81
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	NE	1.1	62.3	39.1	28.62
-1	400 - Earthy	415 - Stale	Partly Cloudy	None	NE	1.1	62.3	39.1	28.62
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	NW	1	51	52	29.81

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8899	2024-03-15 15:50:56	Cambridge Ave across from house number 29862	No odor	34.459508	-118.626733		ND
8908	2024-03-15 15:58:02	LA County Fire Department Del Valle Regional Training Center	Noticeable garbage/sewer smell.	34.432297	-118.65944	Persistent	<2
8910	2024-03-15 15:58:54	LA County Fire Department Del Valle Regional Training Center	Noticeable smell of garbage	34.432208	-118.659419	Persistent	<2
8901	2024-03-15 16:00:42	Front of Castaic Elementary School	No odor	34.472018	-118.630148		ND
8889	2024-03-15 16:01:08	Front of Castaic Elementary School		34.472075	-118.63019	Persistent	<2
8918	2024-03-15 16:03:28	Lincoln Ave near intersection with Chiquita Canyon Rd	Noticeable but not super strong smell of garbage/sewer.	34.438583	-118.657158	Persistent	<2
8909	2024-03-15 16:04:54	Lincoln Ave near intersection with Chiquita Canyon Rd	Noticeable smell of garbage	34.438557	-118.657045	Persistent	2
8915	2024-03-15 16:08:19	Lincoln Ave and Taylor St	Noticeable garbage smell	34.442942	-118.655745	Persistent	2
8914	2024-03-15 16:08:20	Lincoln Ave and Taylor St	Slight garbage/sewer smell	34.442361	-118.656516	Persistent	<2
8896	2024-03-15 16:10:48	Ralph's parking lot facing Bank of America	No odor	34.456859	-118.618244		ND
8890	2024-03-15 16:10:54	Ralph's parking lot facing Bank of America		34.45684	-118.618284		ND
8906	2024-03-15 16:13:02	Ralph's parking lot facing Bank of America	No odor detected	34.45688	-118.61826		ND
8938	2024-03-15 16:15:16	LA County Fire Department Del Valle Regional Training Center	No odor	34.432144	-118.659421		ND
8912	2024-03-15 16:18:25	San Martinez Rd and Verdale Ave	Noticeable farm animal/manure smell.	34.449572	-118.679115	Intermittent	2
8911	2024-03-15 16:18:27	San Martinez Rd and Verdale Ave	Noticable smell of farm animals, the intensity did vary while there	34.449522	-118.679033	Persistent	<2
8922	2024-03-15 16:26:25	Bus Stop at San Martinez and Val Verde Rd	Stale dirt smell	34.44704	-118.664167	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None	NW	1	51	52.0	29.81
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	SE	2.1	60.9	39.6	28.72
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	SE	2.1	60.9	39.6	28.72
			Partly Cloudy	None	NW	14	52	51.0	29.81
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	NW	14	52	51	29.81
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None		0	65.9	41.4	28.7
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None		0	65.9	41.4	28.7
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	2.7	62.6	41.0	28.65
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	2.7	62.6	41.0	28.65
			Partly Cloudy	None	NW	14	52	51.0	29.81
			Partly Cloudy	None	NW	14	52	51	29.81
			Partly Cloudy	None	NW	14	52	51	29.81
			Partly Cloudy	None	N	3	58	40.0	29.81
-2	500 - Offensive	508 - Manure	Partly Cloudy	None	SW	1.5	69.4	28.2	28.45
-2	500 - Offensive	508 - Manure	Partly Cloudy	None	SW	1.5	69.4	28.2	28.42
-1	400 - Earthy	415 - Stale	Sunny	None	N	4.8	64.1	26.5	28.57

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8916	2024-03-15 16:26:33	Bus Stop at San Martinez and Val Verde Rd	Mostly neutral sand smell.	34.447039	-118.6641	Persistent	<2
8921	2024-03-15 16:31:41	Val Verde Rd and Oakwood Ave		34.450302	-118.66253	Intermittent	<2
8919	2024-03-15 16:31:43	Val Verde Rd and Oakwood Ave	Tree/forest smell	34.449968	-118.662448	Persistent	<2
8917	2024-03-15 16:38:29	Bus Stop 14608 - Del Valle Rd & Silver St	Smells like prairie grass	34.448634	-118.65513	Persistent	<2
8920	2024-03-15 16:38:51	Bus Stop 14608 - Del Valle Rd & Silver St	Neutral sandy smell.	34.448642	-118.655133	Persistent	<2
8926	2024-03-15 16:45:16	Lot in front of Fire Station 143	Slight unpleasant odor that disappeared with the breeze	34.454665	-118.634403	Intermittent	<2
8927	2024-03-15 16:46:18	Lot in front of Fire Station 143	Industrial smell that left with the wind	34.454618	-118.634417	Intermittent	<2
8951	2024-03-15 16:47:12	LA County Fire Department Del Valle Regional Training Center		34.432176	-118.65943	Persistent	<2
8928	2024-03-15 16:53:21	Ave Penn and Witherspoon Pkwy	Intermittent smell of trash that became stronger with wind	34.449383	-118.63833	Intermittent	<2
8935	2024-03-15 16:54:20	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor	34.438475	-118.65699		ND
8950	2024-03-15 16:54:25	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438508	-118.656991		ND
8925	2024-03-15 16:54:28	Ave Penn and Witherspoon Pkwy	Slight soil/dirt smell.	34.449305	-118.638335	Intermittent	<2
8932	2024-03-15 16:57:07	Lincoln Ave and Taylor St	No odor	34.442754	-118.655802		ND
8949	2024-03-15 16:58:41	Lincoln Ave and Taylor St		34.44294	-118.655833	Persistent	<2
8924	2024-03-15 17:01:08	Castaic Union School District Building	No detectable smell.	34.44144	-118.625752	Persistent	<2
8936	2024-03-15 17:01:55	San Martinez Rd and Verdale Ave	Slight grassy smell	34.449924	-118.678326		<2
8923	2024-03-15 17:02:46	Castaic Union School District Building		34.441598	-118.626077	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
0	400 - Earthy	415 - Stale	Sunny	None	N	4.8	64.1	26.5	28.57
1	400 - Earthy	406 - Grassy	Sunny	None	SE	2.4	64.5	31.2	28.53
1	400 - Earthy	417 - Woody	Sunny	None	SE	2.4	64.5	31.2	28.53
2	400 - Earthy	406 - Grassy	Sunny	None	NE	4.9	65.9	30.8	28.58
0	400 - Earthy	415 - Stale	Partly Cloudy	None	NE	4.9	65.9	30.8	28.58
-1	400 - Earthy	410 - Musky	Partly Cloudy	None	NE	5.1	66.8	26.2	28.62
-1	400 - Earthy	410 - Musky	Sunny	None	NE	5.1	66.8	26.2	28.62
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	3	58	40	29.81
-1	500 - Offensive	506 - Garbage	Sunny	None	NE	7.6	66	27.6	28.58
			Partly Cloudy	None	N	3	58	40.0	29.82
			Partly Cloudy	None	N	3	58	40	29.82
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	NE	7.6	66	27.6	28.58
			Partly Cloudy	None	N	7	59	37.0	29.81
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	N	7	59	37	29.81
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	E	5.3	67	26.5	28.76
0	400 - Earthy	406 - Grassy	Partly Cloudy	None	N	5	59	38.0	29.81
0	000 - No Odor	000 - No Odor	Sunny	None	E	5.3	67	26.5	28.76



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8952	2024-03-15 17:08:02	San Martinez Rd and Verdale Ave		34.449638	-118.678605	Persistent	<2
8941	2024-03-15 17:09:59	Starbucks / store by Bruce sushi	Smells like Cinnamon mixed with cumin, savory food smelling	34.451555	-118.624908	Persistent	<2
8930	2024-03-15 17:10:34	Starbucks / store by Bruce sushi	Approx. 50 ft. North of location. Subtle plant smell.	34.451587	-118.62489	Persistent	<2
8933	2024-03-15 17:15:42	Bus Stop at San Martinez and Val Verde Rd	Slight Exhaust smell	34.44694	-118.663859	Intermittent	2
8946	2024-03-15 17:15:50	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447038	-118.663832		ND
8939	2024-03-15 17:17:50	Park behind Live Oak Elementary school	Fresh cut grass smell	34.450237	-118.621065	Persistent	<2
8929	2024-03-15 17:18:13	Park behind Live Oak Elementary school		34.450262	-118.621082	Persistent	<2
8947	2024-03-15 17:22:09	Val Verde Rd and Oakwood Ave		34.450352	-118.661847	Persistent	<2
8937	2024-03-15 17:22:33	Val Verde Rd and Oakwood Ave	No odor	34.450329	-118.661864		ND
8931	2024-03-15 17:24:05	Cambridge Ave across from house number 29862	Flower smell.	34.459125	-118.626614	Persistent	<2
8944	2024-03-15 17:24:21	Cambridge Ave across from house number 29862	Slight herbal floral smell	34.459533	-118.626785	Persistent	<2
8948	2024-03-15 17:29:04	Bus Stop 14608 - Del Valle Rd & Silver St		34.448775	-118.655163	Persistent	<2
8934	2024-03-15 17:29:04	Bus Stop 14608 - Del Valle Rd & Silver St	No odor was	34.448764	-118.655156		ND
8945	2024-03-15 17:32:32	Front of Castaic Elementary School		34.471447	-118.630194	Persistent	<2
8942	2024-03-15 17:32:51	Front of Castaic Elementary School	Reading taken on street of school. No detectable odor.	34.471427	-118.630162	Persistent	<2
8940	2024-03-15 17:40:58	Ralph's parking lot facing Bank of America	Occasional car exhaust smell.	34.456829	-118.618192	Intermittent	<2
8943	2024-03-15 17:41:14	Ralph's parking lot facing Bank of America	Noticable smell of car exhaust	34.456917	-118.617751	Persistent	<2
8964	2024-03-15 20:03:14	Front of Castaic Elementary School	No odor	34.471624	-118.629988		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-2	500 - Offensive	508 - Manure	Partly Cloudy	None	N	5	59	38	29.81
6	100 - Floral	102 - Cinnamon	Sunny	None	N	6	68.8	26.1	28.71
1	100 - Floral	106 - Herbal	Partly Cloudy	None	N	6	68.8	26.1	28.51
-1	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None	N	7	59	37.0	29.81
			Partly Cloudy	None	N	7	59	37	29.81
1	400 - Earthy	406 - Grassy	Sunny	None	N	4	69.8	25.6	28.78
0	400 - Earthy	406 - Grassy	Partly Cloudy	None	N	4	69.8	25.6	28.78
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	N	4	60	37	29.81
			Partly Cloudy	None	N	4	60	37.0	29.81
2	100 - Floral	105 - Fragrant	Partly Cloudy	None	N	5.4	65.5	26.9	28.54
1	100 - Floral	106 - Herbal	Sunny	None	N	5.4	65.5	26.9	28.54
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	E	3	62	32	29.81
			Partly Cloudy	None	E	3	62	32.0	29.81
0	000 - No Odor	000 - No Odor	Sunny	None		0	73.4	30.2	28.49
0	000 - No Odor	000 - No Odor	Partly Cloudy	None		0	73.4	30.2	28.49
-1	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None	N	4.7	71.8	23.7	28.75
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	N	4.7	71.8	23.7	28.75
			Partly Cloudy	None	NW	3	64	30.0	29.81

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8959	2024-03-15 20:03:29	Front of Castaic Elementary School	No odor detected	34.471506	-118.630202		ND
8972	2024-03-15 20:08:09	LA County Fire Department Del Valle Regional Training Center	Obvious garbage smell	34.432238	-118.659492	Persistent	7
8978	2024-03-15 20:08:59	LA County Fire Department Del Valle Regional Training Center	Very strong smell of garbage	34.432268	-118.65936	Persistent	7
8963	2024-03-15 20:11:10	Ralph's parking lot facing Bank of America	Car exhaust smell	34.456874	-118.617763	Intermittent	2
8956	2024-03-15 20:12:31	Ralph's parking lot facing Bank of America	Next to freeway	34.456888	-118.617772	Persistent	<2
8973	2024-03-15 20:13:50	Lincoln Ave near intersection with Chiquita Canyon Rd	No detectable odor.	34.438587	-118.657204	Persistent	<2
8980	2024-03-15 20:15:10	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438522	-118.657165	Persistent	<2
8975	2024-03-15 20:18:39	Lincoln Ave and Taylor St	No detectable odor.	34.442931	-118.655866	Persistent	<2
8981	2024-03-15 20:19:39	Lincoln Ave and Taylor St	Faint woody smell	34.442897	-118.655878	Persistent	<2
8961	2024-03-15 20:20:42	Cambridge Ave across from house number 29862	Flower smell	34.459506	-118.626806	Persistent	2
8955	2024-03-15 20:20:58	Cambridge Ave across from house number 29862		34.459466	-118.626776	Persistent	2
8965	2024-03-15 20:25:23	Park behind Live Oak Elementary school	No odor	34.451183	-118.620589		ND
8979	2024-03-15 20:28:13	San Martinez Rd and Verdale Ave	Faint smell of farm animals	34.449588	-118.679232	Persistent	<2
8970	2024-03-15 20:28:18	San Martinez Rd and Verdale Ave	Occasional noticeable farm animal/manure smell.	34.450094	-118.67936	Intermittent	<2
8957	2024-03-15 20:29:19	Park behind Live Oak Elementary school		34.450652	-118.621095	Persistent	<2
8960	2024-03-15 20:35:14	Starbucks / store by Bruce sushi	No odor	34.451187	-118.625024		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None	NW	3	64	30	29.81
-4	500 - Offensive	506 - Garbage	Mostly Cloudy	None	E	7.2	69.2	25.5	28.72
-7	500 - Offensive	507 - Landfill Leachate	Sunny	None	E	7.2	69.2	25.5	28.72
-1	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None	SE	7	63	29.0	29.82
-1	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None	SE	7	63	29	29.82
0	000 - No Odor	000 - No Odor	Mostly Cloudy	None	N	5.7	72.9	22.7	28.73
0	000 - No Odor	000 - No Odor	Sunny		N	5.7	72.9	22.7	28.73
0	000 - No Odor	000 - No Odor	Mostly Cloudy	None	SE	3.5	72.3	23.2	28.66
2	400 - Earthy	417 - Woody	Mostly Cloudy		SE	3.5	72.3	23.2	28.66
2	100 - Floral	110 - Perfumy	Partly Cloudy	None	SE	1	62	32.0	29.81
3	100 - Floral	105 - Fragrant	Partly Cloudy	None	SE	1	62	32	29.81
			Partly Cloudy	None	E	3	62	32.0	29.82
-1	500 - Offensive	508 - Manure	Mostly Cloudy		SE	3	72.4	23.6	28.42
-1	500 - Offensive	508 - Manure	Mostly Cloudy	None	SE	3	72.4	23.6	28.42
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	E	3	62	32	29.82
			Partly Cloudy	None	SW	2	62	31.0	29.81

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8966	2024-03-15 20:39:26	Starbucks / store by Bruce sushi		34.451163	-118.62502	Persistent	<2
8974	2024-03-15 20:44:49	Bus Stop at San Martinez and Val Verde Rd	Occasional damp smell.	34.447064	-118.663894	Intermittent	<2
8954	2024-03-15 20:45:11	Lot in front of Fire Station 143	No odor	34.454605	-118.634353		ND
8977	2024-03-15 20:45:48	Bus Stop at San Martinez and Val Verde Rd	Musky scent with hints of chlorine	34.446997	-118.663853	Persistent	<2
8962	2024-03-15 20:46:06	Lot in front of Fire Station 143		34.454571	-118.634343	Persistent	<2
8967	2024-03-15 20:54:24	Ave Penn and Witherspoon Pkwy	No odor	34.449392	-118.638295		ND
8958	2024-03-15 20:54:43	Ave Penn and Witherspoon Pkwy	No odor detected	34.44941	-118.638331		ND
8968	2024-03-15 20:58:11	Castaic Union School District Building	No odor	34.441457	-118.626049		ND
8953	2024-03-15 21:01:28	Castaic Union School District Building		34.441506	-118.62602	Persistent	<2
8969	2024-03-15 21:04:53	Val Verde Rd and Oakwood Ave	Slight dirt smell.	34.450315	-118.661885	Persistent	<2
8976	2024-03-15 21:05:32	Val Verde Rd and Oakwood Ave	Smells like dirt	34.45032	-118.661846	Persistent	<2
8971	2024-03-15 21:10:49	Bus Stop 14608 - Del Valle Rd & Silver St		34.44884	-118.655122	Persistent	<2
8982	2024-03-15 21:10:51	Bus Stop 14608 - Del Valle Rd & Silver St	Faint smell of prairie grass	34.448873	-118.655111	Persistent	<2
9010	2024-03-15 21:13:50	LA County Fire Department Del Valle Regional Training Center	Slight garbage smell	34.432162	-118.65941	Intermittent	<2
8985	2024-03-15 21:14:36	LA County Fire Department Del Valle Regional Training Center		34.432207	-118.659529	Persistent	<2
8993	2024-03-15 21:15:51	Lot in front of Fire Station 143	Damp smell	34.454643	-118.634392	Persistent	<2
8996	2024-03-15 21:19:20	Lot in front of Fire Station 143	Faint industrial smell	34.454602	-118.634451	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
3	400 - Earthy	404 - Coffee	Partly Cloudy	None	SW	2	62	31	29.81
-1	400 - Earthy	411 - Musty	Mostly Cloudy	None	SE	4.7	72.1	30.2	28.58
			Partly Cloudy	None	NE	4	62	31.0	29.81
-1	400 - Earthy	410 - Musky	Mostly Cloudy		SE	4.7	72.1	30.2	28.58
4	100 - Floral	105 - Fragrant	Partly Cloudy	None	NE	4	62	31	29.81
			Partly Cloudy	None	NE	6	62	31.0	29.81
			Partly Cloudy	None	NE	6	62	31	29.81
			Partly Cloudy	None	NE	6	64	30.0	29.81
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	NE	6	64	30	29.81
0	400 - Earthy	412 - Peat-like	Mostly Cloudy	None	E	1.2	76.5	23.9	28.53
1	400 - Earthy	412 - Peat-like	Mostly Cloudy		E	1.2	76.5	23.9	28.53
1	400 - Earthy	406 - Grassy	Overcast	None	NE	5.3	73.5	25.7	28.59
2	400 - Earthy	406 - Grassy	Overcast		NE	5.3	73.5	25.7	28.59
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	SE	4	66	27.0	29.81
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	SE	4	66	27	29.81
-1	400 - Earthy	411 - Musty	Overcast	None	SW	1.8	73.7	25.0	28.62
-1	400 - Earthy	411 - Musty	Overcast		SW	1.8	73.7	25.0	28.62

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9009	2024-03-15 21:20:28	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor	34.438487	-118.657016		ND
8986	2024-03-15 21:20:34	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438504	-118.657027	Persistent	<2
9016	2024-03-15 21:23:57	Lincoln Ave and Taylor St	No odor	34.443004	-118.65582		ND
8984	2024-03-15 21:25:25	Lincoln Ave and Taylor St		34.442967	-118.655823	Persistent	<2
8994	2024-03-15 21:34:23	Ave Penn and Witherspoon Pkwy	Dirt smell but cleaning smell appeared as water started running down for the east.	34.449352	-118.638354	Persistent	<2
8997	2024-03-15 21:35:26	Ave Penn and Witherspoon Pkwy	Fresh dirt smell	34.449328	-118.638314		<2
8988	2024-03-15 21:36:01	Bus Stop at San Martinez and Val Verde Rd		34.447023	-118.663975	Persistent	<2
9014	2024-03-15 21:36:36	Bus Stop at San Martinez and Val Verde Rd	No odor	34.447047	-118.66393		ND
8983	2024-03-15 21:37:46	Castaic Union School District Building	Slight menthol smell.	34.441735	-118.626165	Intermittent	<2
9006	2024-03-15 21:40:01	San Martinez Rd and Verdale Ave	No odor	34.449645	-118.67865		ND
9003	2024-03-15 21:41:52	Castaic Union School District Building	Noticable rubber smell	34.441716	-118.62619	Intermittent	<2
8989	2024-03-15 21:44:29	San Martinez Rd and Verdale Ave		34.44963	-118.678632	Persistent	<2
8987	2024-03-15 21:50:58	Park behind Live Oak Elementary school		34.450577	-118.621082	Persistent	<2
8999	2024-03-15 21:51:28	Park behind Live Oak Elementary school	Fresh cut grass smell	34.450421	-118.621072	Persistent	<2
9012	2024-03-15 21:53:25	Bus Stop 14608 - Del Valle Rd & Silver St		34.448831	-118.655116		ND
8990	2024-03-15 21:53:27	Val Verde Rd and Oakwood Ave	No odor detected	34.450352	-118.661891		ND
8991	2024-03-15 21:56:23	Cambridge Ave across from house number 29862	Slight floral/plant smell	34.459464	-118.626779	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None	NW	1	66	27.0	29.8
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	NW	1	66	27	29.8
			Mostly Cloudy	None	NE	8	65	27.0	29.8
1	400 - Earthy	406 - Grassy	Mostly Cloudy	None	NE	8	65	27	29.8
0	700 - Chemical	703 - Cleaning Fluid	Overcast	None	S	1.6	72.7	22.9	28.57
1	400 - Earthy	412 - Peat-like	Overcast		S	1.6	72.7	22.9	28.57
1	400 - Earthy	406 - Grassy	Mostly Cloudy	None	NE	5	65	27	29.8
			Mostly Cloudy	None	NE	5	65	27.0	29.8
1	800 - Medicinal	807 - Menthol	Overcast	None	E	1.3	72.3	22.4	28.75
			Mostly Cloudy	None	NE	4	64	27.0	29.8
-1	700 - Chemical	718 - Rubber	Overcast		E	1.3	72.3	22.4	28.75
1	400 - Earthy	406 - Grassy	Mostly Cloudy	None	NE	4	64	27	29.8
0	400 - Earthy	406 - Grassy	Overcast	None		0	73.1	28.1	28.78
3	400 - Earthy	406 - Grassy	Overcast			0	73.1	28.1	28.78
			Mostly Cloudy	None	E	6	63	27.0	29.8
			Mostly Cloudy	None	E	6	63	27	29.8
2	100 - Floral	106 - Herbal	Overcast	None	N	1.1	68.3	29.7	28.56



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
8998	2024-03-15 21:57:14	Cambridge Ave across from house number 29862		34.459454	-118.626771	Persistent	<2
9011	2024-03-15 22:02:08	Bus Stop 14608 - Del Valle Rd & Silver St	No odor	34.448822	-118.655103		ND
8992	2024-03-15 22:02:22	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448858	-118.655064		ND
8995	2024-03-15 22:11:36	Starbucks / store by Bruce sushi	Reading taken when slight sprinkling stopped. Barely noticeable car exhaust smell.	34.451015	-118.625168	Intermittent	<2
9000	2024-03-15 22:12:45	Starbucks / store by Bruce sushi	Noticable car exhaust smell with a faint garbage smell. Slight periodical drizzle, data taken when it subsided for a moment	34.451046	-118.625184	Persistent	<2
9015	2024-03-15 22:22:01	Ralph's parking lot facing Bank of America	No odor	34.456881	-118.618299		ND
9031	2024-03-15 22:22:23	Ralph's parking lot facing Bank of America	Next to the freeway	34.456895	-118.618339	Persistent	<2
9004	2024-03-15 22:22:43	Front of Castaic Elementary School	No detectable smell.	34.47147	-118.630163	Persistent	<2
9002	2024-03-15 22:22:56	Front of Castaic Elementary School		34.471419	-118.6302	Persistent	<2
9005	2024-03-15 22:29:32	Ralph's parking lot facing Bank of America	Approx 25 ft SE of location. Started to sprinkle when leaving.	34.455828	-118.619602	Persistent	<2
9001	2024-03-15 22:29:40	Ralph's parking lot facing Bank of America	Noticeable car exhaust smell	34.45633	-118.617839	Persistent	<2
9007	2024-03-15 22:29:53	Front of Castaic Elementary School	Slight floral smell	34.471512	-118.630215	Intermittent	<2
9032	2024-03-15 22:29:54	Front of Castaic Elementary School	No odor detected	34.47152	-118.63019		ND
9008	2024-03-15 22:40:16	Cambridge Ave across from house number 29862	Flower smell	34.45949	-118.626785	Persistent	2
9033	2024-03-15 22:40:25	Cambridge Ave across from house number 29862	No odor detected	34.459535	-118.626771		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
4	100 - Floral	105 - Fragrant	Overcast		N	1.1	68.3	29.7	28.96
			Mostly Cloudy	None	NW	2	63	33.0	29.83
			Mostly Cloudy	None	NE	2	63	33	29.83
-1	700 - Chemical	702 - Car Exhaust	Overcast	Rain	NE	2	69.1	26.5	28.72
-2	700 - Chemical	702 - Car Exhaust	Overcast	Rain	NE	2	69.1	26.5	28.72
			Mostly Cloudy	None	NW	0	63	33.0	29.82
0	700 - Chemical	702 - Car Exhaust				0	63	33	29.82
0	000 - No Odor	000 - No Odor	Overcast	None	NW	2.5	67.3	26.4	28.5
0	000 - No Odor	000 - No Odor	Overcast	None	NW	2.5	67.3	26.4	28.5
0	400 - Earthy	415 - Stale	Overcast	None	N	3.5	68.8	28.6	28.75
-2	700 - Chemical	702 - Car Exhaust	Overcast	None	N	3.5	68.8	28.6	28.75
			Mostly Cloudy	None	E	1	63	34.00	29.82
1	100 - Floral	110 - Perfumy			E	1	63	34	29.82
					E	1	63	34	29.82
1	100 - Floral	109 - Marigolds	Mostly Cloudy	None	E	1	63	34.00	29.82
					E	1	63	34	29.82

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9025	2024-03-15 22:42:21	San Martinez Rd and Verdale Ave	Noticeable farm animal smell. Entered manual coordinates due to accidental deletion of prior coordinates. Should be at location.	34.449557	-118.6805965	Persistent	<2
9023	2024-03-15 22:44:31	San Martinez Rd and Verdale Ave	Noticable smell of farm animal	34.449562	-118.679182	Persistent	<2
9013	2024-03-15 22:47:10	Park behind Live Oak Elementary school	No odor	34.450713	-118.621104		ND
9034	2024-03-15 22:47:10	Park behind Live Oak Elementary school	No odor detected	34.450716	-118.621094		ND
9017	2024-03-15 22:49:03	Val Verde Rd and Oakwood Ave	No detectable smell	34.450273	-118.662536	Persistent	<2
9024	2024-03-15 22:49:35	Bus Stop at San Martinez and Val Verde Rd		34.446987	-118.663915	Persistent	<2
9037	2024-03-15 22:50:53	Starbucks / store by Bruce sushi	No odor	34.45105	-118.625164		ND
9019	2024-03-15 22:52:39	Val Verde Rd and Oakwood Ave	Damp smell	34.450274	-118.662593	Persistent	<2
9029	2024-03-15 22:53:48	Val Verde Rd and Oakwood Ave	Fresh grass smell	34.450289	-118.662587	Persistent	2
9035	2024-03-15 22:54:40	Starbucks / store by Bruce sushi	No odor detected	34.451083	-118.625163		ND
9038	2024-03-15 22:58:50	Lot in front of Fire Station 143	Flower smell	34.454833	-118.634059	Persistent	2
9020	2024-03-15 23:00:42	LA County Fire Department Del Valle Regional Training Center	Noticeable sewer/garbage smell	34.432166	-118.659464	Persistent	15
9028	2024-03-15 23:01:13	LA County Fire Department Del Valle Regional Training Center	Strong landfill/ garbage smell	34.432181	-118.65942	Persistent	30
9042	2024-03-15 23:02:04	Lot in front of Fire Station 143		34.454696	-118.634449	Persistent	<2
9018	2024-03-15 23:05:06	Lincoln Ave near intersection with Chiquito Canyon Rd	No noticeable odor.	34.438536	-118.657215	Persistent	<2
9030	2024-03-15 23:06:20	Lincoln Ave near intersection with Chiquito Canyon Rd	Smells like sand	34.438598	-118.657218	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-2	500 - Offensive	508 - Manure	Overcast	None	E	4.2	65	33.2	28.42
-2	500 - Offensive	508 - Manure	Overcast	None	E	4.2	65	33.2	28.42
			Mostly Cloudy	None	NE	2	62	34.00	29.83
			Mostly Cloudy	None	NE	2	62	34	29.83
0	000 - No Odor	000 - No Odor	Overcast	None	NE	3.4	67.7	28.3	28.59
0	000 - No Odor	000 - No Odor	Overcast	None	NE	3.4	67.7	28.3	28.59
			Mostly Cloudy	None	NE	2	62	34.00	29.82
-1	400 - Earthy	411 - Musty	Overcast	None	NE	2.3	66	33.5	28.54
3	400 - Earthy	406 - Grassy	Overcast	None	NE	2.3	66	33.5	28.54
			Mostly Cloudy	None	NE	2	62	34	29.82
1	100 - Floral	110 - Perfumy	Mostly Cloudy	None	NE	2	62	34.00	29.82
-5	500 - Offensive	506 - Garbage	Overcast	None	E	2.5	69.1	30.2	28.73
-7	500 - Offensive	507 - Landfill Leachate	Overcast	None	E	2.5	69.1	30.2	28.73
3	100 - Floral	105 - Fragrant	Mostly Cloudy	None	NE	2	62	34	29.82
0	000 - No Odor	000 - No Odor	Overcast	None	S	1.3	67.7	30.5	28.71
-1	400 - Earthy	415 - Stale	Overcast	None	S	1.3	67.7	30.5	28.71

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9039	2024-03-15 23:08:23	Ave Penn and Witherspoon Pkwy	No odor	34.449502	-118.63821		ND
9036	2024-03-15 23:09:30	Ave Penn and Witherspoon Pkwy	No odor detected	34.449501	-118.638192		ND
9040	2024-03-15 23:12:10	Castaic Union School District Building	No odor detected	34.441709	-118.626092		ND
9026	2024-03-15 23:14:40	Lincoln Ave and Taylor St	Smells like dirt	34.442938	-118.655845	Persistent	<2
9041	2024-03-15 23:15:25	Castaic Union School District Building	No odor	34.441691	-118.626101		ND
9022	2024-03-15 23:15:44	Lincoln Ave and Taylor St	Slight damp smell.	34.442912	-118.655899	Persistent	<2
9021	2024-03-15 23:23:35	Bus Stop 14608 - Del Valle Rd & Silver St	Slight grassy smell	34.448846	-118.655088	Persistent	<2
9027	2024-03-15 23:26:29	Bus Stop 14608 - Del Valle Rd & Silver St	Prairie grassy smell	34.448921	-118.655038	Persistent	<2
9049	2024-03-16 15:49:14	LA County Fire Department Del Valle Regional Training Center	Mostly no detectable odor. Some garbage smell came in with breeze.	34.432209	-118.659446	Intermittent	<2
9045	2024-03-16 15:54:03	LA County Fire Department Del Valle Regional Training Center	Intermittent faint garbage smell	34.432192	-118.659463	Intermittent	<2
9060	2024-03-16 15:59:48	Ralph's parking lot facing Bank of America	Near freeway	34.456755	-118.618454	Persistent	<2
9051	2024-03-16 16:01:51	Lincoln Ave near intersection with Chiquita Canyon Rd	Somewhat damp odor.	34.438558	-118.657102	Persistent	<2
9080	2024-03-16 16:02:57	Ralph's parking lot facing Bank of America	No odor	34.456826	-118.618245		ND
9043	2024-03-16 16:03:02	Lincoln Ave near intersection with Chiquita Canyon Rd	Smells like a chicken coop but overall a musty smell	34.438582	-118.657164	Intermittent	<2
9052	2024-03-16 16:16:23	Lincoln Ave and Taylor St	Mostly neutral smell with some grassy/dirt notes.	34.442905	-118.65583	Intermittent	<2
9058	2024-03-16 16:17:40	Front of Castaic Elementary School		34.471636	-118.630183	Persistent	<2
9044	2024-03-16 16:18:50	Lincoln Ave and Taylor St	Smells like dirt	34.442889	-118.655681	Persistent	<2
9086	2024-03-16 16:19:50	Front of Castaic Elementary School	No odd	34.471644	-118.630181		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Mostly Cloudy	None	W	7	62	35.0	29.83
			Mostly Cloudy	None	W	7	62	35	29.83
			Mostly Cloudy	None	NE	1	62	36	29.83
-1	400 - Earthy	411 - Musty	Overcast	None	W	3.4	66.9	31.8	28.67
			Mostly Cloudy	None	NE	1	62	36.0	29.83
-1	400 - Earthy	411 - Musty	Overcast	None	W	3.4	66.9	31.8	28.67
1	400 - Earthy	406 - Grassy	Overcast	None	N	6.5	63	33.1	28.61
1	400 - Earthy	406 - Grassy	Overcast	None	N	6.5	63	33.1	28.61
-1	500 - Offensive	506 - Garbage	Sunny	None	N	2.1	59.1	51.4	28.93
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	2.1	59.1	51.4	28.93
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	SE	1	48	75	29.92
-1	400 - Earthy	411 - Musty	Sunny	None	E	1.5	57.7	53.3	28.91
			Sunny	None	SE	1	48	75.0	29.92
-1	500 - Offensive	508 - Manure	Partly Cloudy	None	E	1.5	57.7	53.3	28.91
0	400 - Earthy	406 - Grassy	Sunny	None	S	1.4	66.5	47.2	28.85
1	400 - Earthy	406 - Grassy	Sunny	None	SE	1	50	70	29.91
-1	400 - Earthy	411 - Musty	Partly Cloudy	None	E	1.4	66.5	47.2	28.85
			Sunny	None	SE	1	50	70.0	29.91

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9055	2024-03-16 16:26:40	San Martinez Rd and Verdale Ave	Occasional farm animal smell.	34.44988	-118.678978	Intermittent	<2
9077	2024-03-16 16:29:28	Cambridge Ave across from house number 29862	No odor	34.45969	-118.626464		ND
9061	2024-03-16 16:29:36	Cambridge Ave across from house number 29862		34.459484	-118.626763		<2
9046	2024-03-16 16:31:41	San Martinez Rd and Verdale Ave	Earthy dirt and grass smell	34.449543	-118.679057	Persistent	<2
9047	2024-03-16 16:34:17	Bus Stop at San Martinez and Val Verde Rd	Noticable garbage smell	34.447126	-118.663922	Persistent	<2
9089	2024-03-16 16:36:06	Park behind Live Oak Elementary school	Slight exhaust smell	34.450364	-118.621015	Intermittent	2
9063	2024-03-16 16:36:38	Park behind Live Oak Elementary school	No odor detected	34.450511	-118.621107		ND
9056	2024-03-16 16:38:03	Bus Stop at San Martinez and Val Verde Rd	Slight garbage/sewer smell	34.44718	-118.663942	Persistent	<2
9048	2024-03-16 16:43:45	Val Verde Rd and Oakwood Ave	Noticeable grassy smell	34.450309	-118.661864	Persistent	<2
9053	2024-03-16 16:43:53	Val Verde Rd and Oakwood Ave	Approx. 50ft SE of location. Slight soil/dirt smell	34.450319	-118.661855	Persistent	<2
9090	2024-03-16 16:47:07	Starbucks / store by Bruce sushi	Musty odor	34.45095238	-118.6250252	Intermittent	<2
9054	2024-03-16 16:50:13	Bus Stop 14608 - Del Valle Rd & Silver St	Smells like prairie grass	34.448881	-118.655068	Persistent	<2
9050	2024-03-16 16:52:09	Bus Stop 14608 - Del Valle Rd & Silver St	Neutral smell	34.448878	-118.655106	Persistent	<2
9059	2024-03-16 16:54:28	Starbucks / store by Bruce sushi		34.451054	-118.625156	Persistent	<2
9057	2024-03-16 16:59:41	Castaic Union School District Building		34.441681	-118.626128	Persistent	<2
9074	2024-03-16 16:59:48	Castaic Union School District Building	No odor	34.441558	-118.625758		ND
9064	2024-03-16 17:06:30	Ave Penn and Witherspoon Pkwy		34.44944	-118.638218	Persistent	2
9081	2024-03-16 17:06:31	Ave Penn and Witherspoon Pkwy	Slight chemical smell	34.449415	-118.638866	Intermittent	2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	500 - Offensive	508 - Manure	Sunny	None		0	61.6	55.3	28.62
			Sunny	None	SE	1	50	70.0	29.91
1	400 - Earthy	406 - Grassy	Sunny	None	SE	1	50	70	29.91
1	400 - Earthy	406 - Grassy	Partly Cloudy	None		0	61.6	55.3	28.62
-2	500 - Offensive	506 - Garbage	Sunny	None		0	65.4	51.5	28.76
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	SE	0	52	67.0	29.92
			Sunny	None			50	67	29.92
-1	500 - Offensive	506 - Garbage	Sunny	None		0	65.4	51.5	28.76
3	400 - Earthy	406 - Grassy	Sunny	None	NW	1.3	68.5	43.8	28.73
0	400 - Earthy	412 - Peat-like	Sunny	None	NW	1.3	68.5	43.8	28.73
-1	400 - Earthy	411 - Musty	Sunny	None	SE	1	52	67.0	29.92
3	400 - Earthy	406 - Grassy	Sunny	None	S	1.2	61.8	46.4	28.8
0	400 - Earthy	415 - Stale	Sunny	None	S	1.2	61.8	46.4	28.8
3	400 - Earthy	404 - Coffee	Sunny	None	SE	1	52	67	29.92
1	400 - Earthy	406 - Grassy	Sunny	None	SE	1	52	67	29.92
			Sunny	None	SE	1	52	67.0	29.92
-1	500 - Offensive	506 - Garbage	Sunny	None	SE	2	54	66	29.91
-2	700 - Chemical	717 - Resins	Sunny	None	SE	2	54	66.0	29.91



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9065	2024-03-16 17:08:13	Lot in front of Fire Station 143	No detectable odor.	34.454672	-118.634356	Persistent	<2
9069	2024-03-16 17:11:40	Lot in front of Fire Station 143		34.454697	-118.634363	Persistent	<2
9062	2024-03-16 17:17:14	Lot in front of Fire Station 143		34.454527	-118.63445	Persistent	2
9072	2024-03-16 17:17:34	Lot in front of Fire Station 143	Flower smell	34.454797	-118.634627	Persistent	2
9091	2024-03-16 17:25:32	Bus Stop 14608 - Del Valle Rd & Silver St		34.44881	-118.655113	Persistent	4
9088	2024-03-16 17:25:34	Bus Stop 14608 - Del Valle Rd & Silver St	No odor	34.448811	-118.65511		ND
9084	2024-03-16 17:32:14	Val Verde Rd and Oakwood Ave	Garbage smell	34.449971	-118.662353	Persistent	4
9092	2024-03-16 17:32:34	Val Verde Rd and Oakwood Ave		34.450345	-118.661832	Persistent	7
9066	2024-03-16 17:33:12	Ave Penn and Witherspoon Pkwy	No detectable odor	34.44932	-118.638301	Persistent	<2
9070	2024-03-16 17:37:13	Ave Penn and Witherspoon Pkwy		34.449366	-118.638261	Persistent	<2
9093	2024-03-16 17:40:20	San Martinez Rd and Verdale Ave		34.449604	-118.678589	Persistent	2
9087	2024-03-16 17:40:44	San Martinez Rd and Verdale Ave	Slight garbage smell	34.449889	-118.678648		2
9079	2024-03-16 17:42:59	Castaic Union School District Building	No detectable odor.	34.441729	-118.626412	Persistent	<2
9068	2024-03-16 17:43:04	Castaic Union School District Building		34.441651	-118.626404	Persistent	<2
9094	2024-03-16 17:51:11	Bus Stop at San Martinez and Val Verde Rd		34.447009	-118.663846	Persistent	7
9083	2024-03-16 17:54:58	Bus Stop at San Martinez and Val Verde Rd	Slight garbage smell	34.447241	-118.663757	Persistent	2
9076	2024-03-16 17:55:42	Cambridge Ave across from house number 29862	Slight sewer garbage smell, odor intensity seemed to vary with intensity of wind	34.459524	-118.626757	Intermittent	2
9071	2024-03-16 17:55:52	Cambridge Ave across from house number 29862	Noticable smell of garbage	34.459541	-118.626765	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
0	000 - No Odor	000 - No Odor	Sunny	None		0	72.5	39.7	28.82
0	000 - No Odor	000 - No Odor	Sunny	None		0	72.5	39.7	28.82
4	100 - Floral	105 - Fragrant	Sunny	None			55	62	29.91
1	100 - Floral	105 - Fragrant	Sunny	None	SE	0	55	62.0	29.91
-3	500 - Offensive	506 - Garbage	Sunny	None	SE	2	56	62	29.91
			Sunny	None	SE	2	56	62.0	29.91
-3	500 - Offensive	506 - Garbage	Sunny	None	SE	2	56	62.0	29.91
-4	500 - Offensive	506 - Garbage	Sunny	None	SE	2	56	62	29.91
0	000 - No Odor	000 - No Odor	Sunny	None	S	2.1	68.1	42.1	20.76
0	000 - No Odor	000 - No Odor	Sunny	None	S	2.1	68.1	42.1	28.76
-3	500 - Offensive	506 - Garbage	Sunny	None	SE	1	57	62	29.91
-1	500 - Offensive	506 - Garbage	Sunny	None	SE	1	57	62.0	29.91
0	000 - No Odor	000 - No Odor	Sunny	None		0	70.5	43.4	28.94
0	000 - No Odor	000 - No Odor	Sunny	None	S	0	70.5	43.4	28.94
-3	500 - Offensive	506 - Garbage	Sunny	None	SE	3	57	61	29.92
-2	500 - Offensive	506 - Garbage	Sunny	None	SE	3	57	61.0	29.92
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	4.2	70.2	39.9	28.73
-2	500 - Offensive	506 - Garbage	Sunny	None	SW	4.2	70.2	39.9	28.73

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9082	2024-03-16 18:02:21	Lincoln Ave and Taylor St	No odor	34.442922	-118.655835		ND
9095	2024-03-16 18:02:26	Lincoln Ave and Taylor St	No odor detected	34.442931	-118.655782		ND
9078	2024-03-16 18:04:23	Park behind Live Oak Elementary school		34.450288	-118.621098	Persistent	<2
9067	2024-03-16 18:04:30	Park behind Live Oak Elementary school	Fresh cut grass smell	34.450308	-118.621042	Persistent	2
9075	2024-03-16 18:05:14	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor	34.438572	-118.657206		ND
9096	2024-03-16 18:07:57	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438538	-118.65709		ND
9085	2024-03-16 18:11:08	LA County Fire Department Del Valle Regional Training Center	No odor	34.432042	-118.659363		ND
9097	2024-03-16 18:14:11	LA County Fire Department Del Valle Regional Training Center		34.432048	-118.659318	Persistent	<2
9103	2024-03-16 18:16:11	Front of Castaic Elementary School	Noticable garbage smell	34.471462	-118.630224	Persistent	2
9073	2024-03-16 18:16:14	Front of Castaic Elementary School	Slight garbage/sewer smell. Parked on street of location.	34.471432	-118.630222	Persistent	2
9123	2024-03-16 18:29:31	Front of Castaic Elementary School	Slight flower smell	34.471548	-118.63021		2
9126	2024-03-16 18:31:40	Front of Castaic Elementary School	No odor detected	34.471508	-118.63017		ND
9099	2024-03-16 18:35:12	Ralph's parking lot facing Bank of America	Mostly car exhaust smell with some trash/sewer smell.	34.456795	-118.617777	Intermittent	<2
9124	2024-03-16 18:36:21	Ralph's parking lot facing Bank of America	No odor	34.45691	-118.618088		ND
9100	2024-03-16 18:37:15	Ralph's parking lot facing Bank of America	Mainly a car exhaust smell but it did have a sewage/ garbage smell as well	34.456715	-118.617724	Persistent	<2
9098	2024-03-16 18:42:22	Starbucks / store by Bruce sushi	Trash/sewer smell with some car exhaust.	34.451112	-118.624764	Persistent	<2
9101	2024-03-16 18:42:37	Starbucks / store by Bruce sushi		34.451201	-118.624889	Persistent	<2
9104	2024-03-16 18:50:30	Bus Stop 14608 - Del Valle Rd & Silver St	Prairie grass smell	34.448674	-118.655122	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny	None	SE	3	57	61.0	29.92
			Sunny	None	SE	3	57	61	29.92
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	S	1.5	68.8	45.4	28.97
2	400 - Earthy	406 - Grassy	Sunny	None	S	1.5	68.8	45.4	28.97
			Sunny	None	SE	2	58	61.0	29.92
			Sunny	None	SE	2	58	61	29.92
			Sunny	None	SE	0	62	53.0	30
-3	500 - Offensive	506 - Garbage	Sunny	None		0	62	53	30
-3	500 - Offensive	506 - Garbage	Sunny	None	E	1.4	68.7	38.8	28.67
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	E	1.4	68.7	38.8	28.67
1	100 - Floral	105 - Fragrant	Sunny	None	SE	3	59	52.0	29.92
			Sunny	None	SE	3	59	52	29.91
-1	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None	S	1.7	71.2	37.7	28.93
			Sunny	None	SW	4	60	47.0	29.99
-3	700 - Chemical	702 - Car Exhaust	Sunny	None	S	1.7	71.2	38.7	28.93
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	E	3.4	71.5	31.5	28.89
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	E	3.4	71.5	31.5	28.89
3	400 - Earthy	406 - Grassy	Sunny	None	S	5.2	72.4	36.7	28.76

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9113	2024-03-16 18:50:35	Bus Stop 14608 - Del Valle Rd & Silver St	No detectable odor	34.448726	-118.655141	Persistent	<2
9125	2024-03-16 18:54:31	Ralph's parking lot facing Bank of America	No odor detected	34.456892	-118.617772		ND
9115	2024-03-16 18:58:21	San Martinez Rd and Verdale Ave	Slight damp odor	34.449543	-118.679095	Persistent	<2
9120	2024-03-16 18:58:59	Cambridge Ave across from house number 29862	Faint flowers smell	34.459397	-118.626575		<2
9102	2024-03-16 18:59:18	San Martinez Rd and Verdale Ave	Smells like a farm animal	34.449388	-118.678986	Persistent	<2
9130	2024-03-16 19:03:02	Cambridge Ave across from house number 29862	No odor detected	34.459491	-118.626755		ND
9107	2024-03-16 19:04:34	Bus Stop at San Martinez and Val Verde Rd	Chlorine smell that was strongest with wind	34.447011	-118.664008	Intermittent	<2
9109	2024-03-16 19:04:39	Bus Stop at San Martinez and Val Verde Rd	Damp earthy smell	34.447303	-118.663972	Persistent	<2
9119	2024-03-16 19:07:10	Park behind Live Oak Elementary school	Musky smell	34.450507	-118.621094		<2
9111	2024-03-16 19:09:04	Val Verde Rd and Oakwood Ave	Approx 25ft SE of location	34.450263	-118.661826	Persistent	<2
9105	2024-03-16 19:09:57	Val Verde Rd and Oakwood Ave		34.450257	-118.661875	Persistent	2
9127	2024-03-16 19:10:40	Park behind Live Oak Elementary school		34.450543	-118.621104	Persistent	<2
9121	2024-03-16 19:17:03	Starbucks / store by Bruce sushi	No odor	34.451055	-118.625192		ND
9116	2024-03-16 19:17:35	Lincoln Ave and Taylor St		34.442672	-118.655749	Persistent	<2
9129	2024-03-16 19:17:41	Starbucks / store by Bruce sushi	No odors detected	34.45094813	-118.6250699		ND
9106	2024-03-16 19:23:01	Lincoln Ave and Taylor St		34.44296	-118.655803	Persistent	<2
9128	2024-03-16 19:24:38	Park behind Live Oak Elementary school	No odors detected	34.45042348	-118.621019		ND
9110	2024-03-16 19:26:50	Lincoln Ave near intersection with Chiquito Canyon Rd	Sand smelling	34.438545	-118.65701	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	S	5.2	72.4	36.7	28.76
			Sunny	None	SW	4	60	47	29.99
-1	400 - Earthy	411 - Musty	Sunny	None	NW	2.6	76.5	29.9	28.6
0	100 - Floral	105 - Fragrant	Sunny	None	SW	9	60	47.0	29.99
-1	500 - Offensive	508 - Manure	Sunny	None	NW	2.6	76.5	29.9	28.6
			Sunny	None	SW	9	60	47	29.99
-1	800 - Medicinal	805 - Chlorinou	Sunny	None	SW	9.3	70.2	33.3	28.75
-1	400 - Earthy	411 - Musty	Sunny	None	SW	9.6	70.2	33.3	28.75
0	400 - Earthy	410 - Musky	Sunny	None	SW	5	61	47.0	29.9
1	400 - Earthy	406 - Grassy	Sunny	None	W	4	75.7	34.0	28.7
3	400 - Earthy	406 - Grassy	Sunny	None	W	4	75.7	34.0	28.7
1	400 - Earthy	406 - Grassy	Sunny	None	SW	5	61	42	29.9
			Sunny	None	SW	8	62	47.0	29.89
1	400 - Earthy	406 - Grassy	Sunny	None	SE	4.9	70.8	29.0	28.82
			Sunny	None	SW	8	62	41	29.89
3	400 - Earthy	406 - Grassy	Sunny	None	SE	4.9	70.8	29.0	28.82
			Sunny	None	SW	3	62	41	29.89
1	400 - Earthy	415 - Stale	Sunny	None	SE	6.2	74.5	31.8	28.86

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9112	2024-03-16 19:26:56	Lincoln Ave near intersection with Chiquita Canyon Rd	Slightly sandy smell but barely noticeable	34.438502	-118.657059	Persistent	<2
9118	2024-03-16 19:30:22	Castaic Union School District Building	No odor	34.441488	-118.626058		ND
9117	2024-03-16 19:35:31	Ave Penn and Witherspoon Pkwy	Slight garbage smell	34.449415	-118.638251		2
9131	2024-03-16 19:35:37	Ave Penn and Witherspoon Pkwy		34.44943	-118.638258	Persistent	<2
9108	2024-03-16 19:36:10	LA County Fire Department Del Valle Regional Training Center	Very slight soil smell	34.4322	-118.659462	Intermittent	<2
9114	2024-03-16 19:36:10	LA County Fire Department Del Valle Regional Training Center		34.432202	-118.659457	Persistent	<2
9122	2024-03-16 19:42:58	Lot in front of Fire Station 143	No odor	34.454801	-118.634492		ND
9132	2024-03-16 19:43:09	Lot in front of Fire Station 143		34.454541	-118.634474	Persistent	<2
9136	2024-03-16 22:05:05	Front of Castaic Elementary School	No detectable odor. Readings taken on street of location.	34.471402	-118.630234	Persistent	<2
9152	2024-03-16 22:08:50	Front of Castaic Elementary School	Smells faintly like salt water	34.471405	-118.63021	Persistent	<2
9138	2024-03-16 22:12:18	Bus Stop 14608 - Del Valle Rd & Silver St	No odor	34.449389	-118.654699		ND
9149	2024-03-16 22:13:20	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449386	-118.654672		ND
9137	2024-03-16 22:15:06	Ralph's parking lot facing Bank of America	Approx 50 ft SE of location. Fast food smell.	34.456382	-118.617893	Persistent	<2
9161	2024-03-16 22:15:49	Ralph's parking lot facing Bank of America	Smells like fried chicken	34.456356	-118.617866	Persistent	<2
9148	2024-03-16 22:16:22	Val Verde Rd and Oakwood Ave	No odor	34.450392	-118.661922		ND
9146	2024-03-16 22:20:33	Val Verde Rd and Oakwood Ave	No odor detected	34.450443	-118.661973		ND
9135	2024-03-16 22:22:39	Cambridge Ave across from house number 29862	Dirt/soil smell.	34.458351	-118.626567	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
0	000 - No Odor	000 - No Odor	Sunny	None	SE	6.2	74.5	31.8	28.86
			Sunny	None	SW	3	62	47.0	29.89
-1	500 - Offensive	506 - Garbage	Sunny	None	SW	3	62	47.0	29.89
-3	500 - Offensive	506 - Garbage	Sunny	None	SW	3	62	41	29.89
0	400 - Earthy	412 - Peat-like	Sunny	None	SE	5.2	73.9	36.7	28.9
1	400 - Earthy	415 - Stale	Sunny	None	SE	5.2	73.9	36.7	28.9
			Sunny	None	W	3	62	40.0	29.93
4	100 - Floral	105 - Fragrant	Sunny	None	W	3	62	40	29.93
0	000 - No Odor	000 - No Odor	Mostly Cloudy	None	SE	3.2	70.6	39.1	28.64
1	400 - Earthy	410 - Musky	Mostly Cloudy	None	SE	3.2	70.6	39.1	28.64
			Sunny	None	SW	12	65	39.0	29.88
			Sunny	None	SW	12	65	39	29.88
0	300 - Vegetable	308 - Potato	Mostly Cloudy	None	NW	7.2	70.4	35.5	28.9
3	300 - Vegetable	305 - Garlic	Mostly Cloudy	None	NW	7.2	70.4	35.5	28.9
			Sunny	None	SW	12	65	39.0	29.88
			Sunny	None	SW	12	65	39	29.88
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	S	11.2	66.5	38.9	28.71



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9156	2024-03-16 22:23:35	Cambridge Ave across from house number 29862	Faint floral smell	34.459458	-118.626788	Persistent	<2
9141	2024-03-16 22:28:30	San Martinez Rd and Verdale Ave	No odor	34.449653	-118.678629		ND
9150	2024-03-16 22:28:59	San Martinez Rd and Verdale Ave	When wind blows harder there is an odor	34.449698	-118.678589	Intermittent	<2
9133	2024-03-16 22:30:31	Park behind Live Oak Elementary school	Trash/sewer smell.	34.450474	-118.621094	Persistent	2
9153	2024-03-16 22:31:36	Park behind Live Oak Elementary school	Noticable smell of garbage	34.450486	-118.621138	Persistent	<2
9147	2024-03-16 22:34:59	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446915	-118.663912		ND
9140	2024-03-16 22:35:28	Bus Stop at San Martinez and Val Verde Rd	No odor	34.446862	-118.663872		ND
9144	2024-03-16 22:40:33	Lincoln Ave and Taylor St	No odor	34.442949	-118.655825		ND
9151	2024-03-16 22:41:22	Lincoln Ave and Taylor St	No odor detected	34.442955	-118.655867		ND
9145	2024-03-16 22:45:54	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438565	-118.65707	Persistent	<2
9139	2024-03-16 22:45:58	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor	34.438635	-118.657124		ND
9134	2024-03-16 22:49:56	Starbucks / store by Bruce sushi	Slight trash/sewer smell	34.451072	-118.624995	Intermittent	<2
9162	2024-03-16 22:50:08	Starbucks / store by Bruce sushi	Smelled like garbage	34.45101	-118.624999	Persistent	<2
9143	2024-03-16 22:52:40	LA County Fire Department Del Valle Regional Training Center	No odor is	34.432208	-118.659432	Intermittent	<2
9154	2024-03-16 22:52:40	Ave Penn and Witherspoon Pkwy	No detectable odor.	34.449383	-118.638313	Persistent	<2
9142	2024-03-16 22:52:47	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432217	-118.659393		ND
9160	2024-03-16 23:22:02	Ave Penn and Witherspoon Pkwy		34.44938	-118.638322	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
1	100 - Floral	105 - Fragrant	Mostly Cloudy	None	S	11.2	66.5	38.9	28.71
			Sunny	None	SW	8	66	39.0	29.88
-4	500 - Offensive	508 - Manure	Sunny	None	SW	8	66	39	29.88
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	6.7	67.7	35.6	28.93
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	6.7	67.7	35.6	28.93
			Sunny	None	SW	6	66	39	29.88
			Sunny	None	SW	6	66	39.0	29.88
			Sunny	None	SW	6	63	45.0	29.89
			Sunny	None	SW	6	63	45	29.89
1	400 - Earthy	406 - Grassy	Sunny	None	SW	18	65	44	29.96
			Sunny	None	SW	18	65	44.0	29.96
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	8.2	68.2	32.5	28.86
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None	SW	8.2	68.2	32.5	28.86
0	500 - Offensive	506 - Garbage	Sunny	None	SW	9	64	45.0	29.96
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	S	8.1	66.9	34.9	28.73
			Sunny	None	SW	9	64	45	29.96
0	000 - No Odor	000 - No Odor	Mostly Cloudy	None	S	8.1	66.9	34.9	28.73

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9207	2024-03-16 23:22:15	Front of Castaic Elementary School	Flower smell	34.471667	-118.630191		2
9165	2024-03-16 23:23:45	Front of Castaic Elementary School	No odor detected	34.471707	-118.630193		ND
9155	2024-03-16 23:25:52	Castaic Union School District Building	No detectable odor.	34.44098	-118.626497	Persistent	<2
9158	2024-03-16 23:26:31	Castaic Union School District Building		34.441488	-118.626265	Persistent	<2
9159	2024-03-16 23:32:34	Lot in front of Fire Station 143	No detectable odor.	34.454687	-118.634427	Persistent	<2
9201	2024-03-16 23:32:55	Ralph's parking lot facing Bank of America	No odor	34.456909	-118.617758		ND
9157	2024-03-16 23:33:52	Lot in front of Fire Station 143		34.454648	-118.634408	Persistent	<2
9179	2024-03-16 23:39:25	LA County Fire Department Del Valle Regional Training Center	No detectable odor.	34.432155	-118.659385	Persistent	<2
9171	2024-03-16 23:43:45	LA County Fire Department Del Valle Regional Training Center		34.432165	-118.659387	Persistent	<2
9167	2024-03-16 23:45:22	Ralph's parking lot facing Bank of America	No odor detected	34.456929	-118.617752		ND
9184	2024-03-16 23:47:07	Lincoln Ave near intersection with Chiquito Canyon Rd	Very faint grassy/dirt smell.	34.438591	-118.657152	Intermittent	<2
9208	2024-03-16 23:47:10	Cambridge Ave across from house number 29862	Slight flowers smell	34.459516	-118.62677		2
9177	2024-03-16 23:48:27	Lincoln Ave near intersection with Chiquito Canyon Rd	Faint smell of dirt that left with the wind	34.438563	-118.65719	Intermittent	<2
9182	2024-03-16 23:50:40	Lincoln Ave and Taylor St	Slight grassy odor.	34.442949	-118.65592	Persistent	<2
9163	2024-03-16 23:51:02	Cambridge Ave across from house number 29862	No odor detected	34.459515	-118.626727		ND
9172	2024-03-16 23:52:24	Lincoln Ave and Taylor St		34.442929	-118.655896	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
1	100 - Floral	105 - Fragrant	Sunny	None	SW	8	62	41.0	29.89
			Sunny	None	SW	8	62	41	29.89
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	SW	3.6	70.9	32.6	28.91
0	000 - No Odor	000 - No Odor	Mostly Cloudy	None	SW	3.6	70.9	32.6	28.91
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	SW	3.1	68.6	32.8	28.79
			Sunny	None	SW	3	62	42.0	29.89
0	000 - No Odor	000 - No Odor	Mostly Cloudy	None	SW	3.1	68.6	32.8	28.79
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	E	2.6	69.2	37.1	28.89
0	000 - No Odor	000 - No Odor	Mostly Cloudy	None	E	2.6	69.2	37.1	28.89
			Sunny	None	SW	3	62	42	29.89
0	400 - Earthy	406 - Grassy	Partly Cloudy	None	W	3.7	68.3	38.3	28.87
1	100 - Floral	105 - Fragrant	Sunny	None	SW	9	61	42.0	29.89
-1	400 - Earthy	412 - Peat-like	Mostly Cloudy	None	W	3.7	68.3	38.3	28.87
0	400 - Earthy	406 - Grassy	Mostly Cloudy	None	SE	4.5	66.3	35.3	28.82
			Sunny	None	SW	9	61	42	29.89
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None	SE	4.5	66.3	35.3	28.82

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9204	2024-03-16 23:58:55	Park behind Live Oak Elementary school	Exhaust smell	34.450639	-118.621092		2
9164	2024-03-16 23:58:55	Park behind Live Oak Elementary school	No odor detected	34.450623	-118.621067		ND
9178	2024-03-16 23:59:31	San Martinez Rd and Verdale Ave	Farm animal smell.	34.449769	-118.679046	Intermittent	<2
9211	2024-03-17 00:01:59	Starbucks / store by Bruce sushi	No smell	34.45119	-118.625193		ND
9173	2024-03-17 00:02:50	San Martinez Rd and Verdale Ave	Smells like farm animal	34.449575	-118.679125	Persistent	<2
9166	2024-03-17 00:04:45	Starbucks / store by Bruce sushi	No odor detected	34.451173	-118.625185		ND
9215	2024-03-17 00:08:11	Castaic Union School District Building	No odor	34.441742	-118.626293		ND
9180	2024-03-17 00:08:57	Bus Stop at San Martinez and Val Verde Rd	Slight stale sand smell.	34.44711	-118.663853	Intermittent	<2
9174	2024-03-17 00:09:20	Bus Stop at San Martinez and Val Verde Rd	Noticable smell of car exhaust when I first arrived that faded over time	34.447095	-118.663785	Intermittent	<2
9170	2024-03-17 00:11:34	Castaic Union School District Building	No odor detected	34.44113584	-118.6268265		ND
9214	2024-03-17 00:15:04	Ave Penn and Witherspoon Pkwy	No odor	34.449275	-118.638384		ND
9181	2024-03-17 00:15:29	Val Verde Rd and Oakwood Ave	Plant/dirt smell	34.449826	-118.662441	Persistent	<2
9168	2024-03-17 00:18:06	Ave Penn and Witherspoon Pkwy	No odor detected	34.449249	-118.63838		ND
9212	2024-03-17 00:20:48	Lot in front of Fire Station 143	No odor	34.454527	-118.634509		ND
9175	2024-03-17 00:24:30	Val Verde Rd and Oakwood Ave		34.450342	-118.661864	Persistent	<2
9169	2024-03-17 00:25:59	Lot in front of Fire Station 143		34.454527	-118.634555	Persistent	<2
9183	2024-03-17 00:26:11	Bus Stop 14608 - Del Valle Rd & Silver St	Dirt/soil smell	34.449062	-118.655037	Intermittent	<2
9176	2024-03-17 00:30:19	Bus Stop 14608 - Del Valle Rd & Silver St	Smells like prairie grass	34.448719	-118.655184	Persistent	<2
9203	2024-03-17 00:30:43	Bus Stop 14608 - Del Valle Rd & Silver St	No odor	34.449375	-118.654735		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	SW	5	61	42.0	29.89
			Sunny	None	SW	5	61	42	29.89
-1	500 - Offensive	508 - Manure	Mostly Cloudy	None	NW	5.8	67.2	43.5	28.59
			Sunny	None	SW	10	61	41.0	29.89
-1	500 - Offensive	508 - Manure	Mostly Cloudy	None	NW	5.8	67.2	43.5	28.59
			Sunny	None	SW	10	61	41	29.89
			Sunny	None	SW	11	62	39.0	29.9
0	400 - Earthy	415 - Stale	Partly Cloudy	None	W	6.3	63.7	36.5	28.74
-1	700 - Chemical	702 - Car Exhaust	Mostly Cloudy	None	W	6.3	63.7	36.5	28.74
			Sunny	None	SW	11	62	39	29.9
			Sunny	None	SW	7	61	39.0	29.9
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	SW	1.8	68.7	36.9	28.7
			Sunny	None	SW	7	61	39	29.9
			Sunny	None	SW	3	62	41.0	29.9
1	400 - Earthy	406 - Grassy	Mostly Cloudy	None	SW	1.8	68.7	36.9	28.7
4	100 - Floral	106 - Herbal	Sunny	None	SW	3	62	41	29.9
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	S	5.7	64.1	35.3	28.76
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None	S	5.7	64.1	35.3	28.76
			Sunny	None	SW	6	60	40.0	29.9

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9218	2024-03-17 00:33:10	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449381	-118.65473		ND
9219	2024-03-17 00:34:45	Val Verde Rd and Oakwood Ave	No odor detected	34.450318	-118.661893		ND
9191	2024-03-17 00:40:23	Lot in front of Fire Station 143	No detectable odor	34.45468729	-118.6343066	Persistent	<2
9205	2024-03-17 00:40:36	Val Verde Rd and Oakwood Ave	Grassy smell	34.450372	-118.66193		2
9186	2024-03-17 00:40:52	Lot in front of Fire Station 143	Slight plant smell	34.454655	-118.634458	Persistent	<2
9193	2024-03-17 00:45:55	Castaic Union School District Building	Faint trash/sewer smell that was more noticeable with breeze.	34.441516	-118.626274	Intermittent	<2
9185	2024-03-17 00:46:55	Castaic Union School District Building	Garbage smell varied in intensity but was always noticeable	34.441563	-118.626242	Persistent	<2
9220	2024-03-17 00:48:45	San Martinez Rd and Verdale Ave		34.449647	-118.678633	Persistent	4
9210	2024-03-17 00:49:17	Bus Stop at San Martinez and Val Verde Rd	No odor	34.446955	-118.66415		ND
9190	2024-03-17 00:52:12	Ave Penn and Witherspoon Pkwy	No detectable odor	34.448758	-118.638663	Persistent	<2
9188	2024-03-17 00:53:04	Ave Penn and Witherspoon Pkwy		34.449341	-118.638332	Persistent	<2
9217	2024-03-17 00:55:50	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446869	-118.663971		ND
9209	2024-03-17 00:55:58	Bus Stop at San Martinez and Val Verde Rd	No odor	34.446861	-118.663917		ND
9192	2024-03-17 00:57:49	Starbucks / store by Bruce sushi	Slight garbage smell	34.451015	-118.625074	Persistent	<2
9187	2024-03-17 00:58:50	Starbucks / store by Bruce sushi	Noticable garbage smell	34.45106	-118.625055	Persistent	2
9206	2024-03-17 01:00:39	Lincoln Ave and Taylor St	No odor	34.442944	-118.655807		ND
9221	2024-03-17 01:00:54	Lincoln Ave and Taylor St	No odor detected	34.442946	-118.65585		ND
9189	2024-03-17 01:01:44	Park behind Live Oak Elementary school	Faint trash/sewer smell	34.451008	-118.621117	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny	None	SW	6	60	40	29.9
			Sunny	None	SW	5	61	40	29.9
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	SW	10.7	62.1	38.2	28.8
0	400 - Earthy	406 - Grassy	Sunny	None	SW	5	61	40.0	29.9
1	100 - Floral	106 - Herbal	Mostly Cloudy	None	S	5.7	64.1	35.3	28.76
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	3.3	64.6	35.4	28.92
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None	W	3.3	64.6	35.4	28.92
-2	500 - Offensive	508 - Manure	Sunny	None	SW	5	61	40	29.9
			Sunny		SW	5	61	40.0	29.9
0	000 - No Odor	000 - No Odor	Mostly Cloudy	None	S	7.1	63.3	33.7	28.74
0	000 - No Odor	000 - No Odor	Mostly Cloudy	None	S	7.1	63.3	33.7	28.74
			Sunny	None	SW	5	62	40	29.9
			Sunny		SW	5	62	40.0	29.9
-1	500 - Offensive	506 - Garbage	Mostly Cloudy	None	SW	5	62.8	35.4	28.88
-3	500 - Offensive	506 - Garbage	Mostly Cloudy	None	SW	5	62.8	35.4	28.88
			Partly Cloudy		SW	5	60	42.0	29.91
			Partly Cloudy	None	SW	5	60	42	29.91
0	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	2.8	65.2	32.1	28.95



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9213	2024-03-17 01:05:16	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor	34.438578	-118.657109		ND
9194	2024-03-17 01:05:25	Park behind Live Oak Elementary school	Very faint smell of garbage	34.451016	-118.621141	Persistent	<2
9216	2024-03-17 01:05:27	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.43859	-118.657109		ND
9199	2024-03-17 01:09:56	Cambridge Ave across from house number 29862	Slight plant smell	34.45927439	-118.6268162	Persistent	<2
9195	2024-03-17 01:10:27	Cambridge Ave across from house number 29862	Noticable floral smell	34.459446	-118.626768	Persistent	<2
9202	2024-03-17 01:10:43	LA County Fire Department Del Valle Regional Training Center	No odor	34.432158	-118.659426		ND
9222	2024-03-17 01:10:51	LA County Fire Department Del Valle Regional Training Center		34.432182	-118.659411	Persistent	<2
9198	2024-03-17 01:15:06	Front of Castaic Elementary School	No detectable odor.	34.471787	-118.629971	Persistent	<2
9196	2024-03-17 01:25:54	Front of Castaic Elementary School		34.471552	-118.630291	Persistent	<2
9200	2024-03-17 01:36:18	Ralph's parking lot facing Bank of America	Slight sewer smell, sewer drain (see pic) nearby.	34.456876	-118.617817	Intermittent	<2
9197	2024-03-17 01:37:30	Ralph's parking lot facing Bank of America		34.456896	-118.617791	Persistent	<2
9231	2024-03-17 15:48:51	Front of Castaic Elementary School	Slight plant/flower smell. Reading taken on street of location	34.471759	-118.630043	Intermittent	<2
9236	2024-03-17 15:50:06	Front of Castaic Elementary School		34.471489	-118.630216	Persistent	<2
9253	2024-03-17 15:52:23	LA County Fire Department Del Valle Regional Training Center	No odor	34.432092	-118.659407		ND
9228	2024-03-17 15:52:24	LA County Fire Department Del Valle Regional Training Center		34.432123	-118.659356	Persistent	2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy		SW	5	60	42.0	29.91
-1	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	2.8	65.2	32.1	28.95
			Partly Cloudy	None	SW	5	60	42	29.91
0	100 - Floral	106 - Herbal	Partly Cloudy	None	S	6.3	60.1	38.6	28.72
3	100 - Floral	105 - Fragrant	Mostly Cloudy	None	S	6.3	60.1	38.6	28.72
			Partly Cloudy		SW	5	60	42.0	29.91
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	5	60	42	29.91
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	SE	1.5	64.5	36.1	28.97
1	100 - Floral	106 - Herbal	Mostly Cloudy	None	SE	1.5	64.5	36.1	28.97
-1	500 - Offensive	515 - Sewer	Partly Cloudy	None	S	2.5	63.8	38.3	28.93
-1	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	2.5	63.8	38.3	28.93
0	100 - Floral	106 - Herbal	Sunny	None		0	58.1	51.7	28.75
0	000 - No Odor	000 - No Odor	Sunny	None		0	58.1	51.7	28.75
			Sunny	None	SE	1	51	73.0	30.07
-4	500 - Offensive	506 - Garbage	Partly Cloudy	None	SE	1	51	73	30.07

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9257	2024-03-17 16:00:17	Lincoln Ave near intersection with Chiquito Canyon Rd	Slight grassy smell	34.438464	-118.656905	Intermittent	<2
9227	2024-03-17 16:00:18	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438488	-118.656923		ND
9232	2024-03-17 16:00:26	Ralph's parking lot facing Bank of America	Slight damp smell	34.456821	-118.617785	Persistent	<2
9238	2024-03-17 16:01:44	Ralph's parking lot facing Bank of America		34.456799	-118.617783	Persistent	<2
9261	2024-03-17 16:04:12	Lincoln Ave and Taylor St	No odor	34.442935	-118.655819		ND
9229	2024-03-17 16:05:42	Lincoln Ave and Taylor St	No odor detected	34.442948	-118.655793		ND
9233	2024-03-17 16:06:26	Cambridge Ave across from house number 29862	Slight soil/dirt smell	34.459486	-118.626738	Persistent	<2
9265	2024-03-17 16:08:48	San Martinez Rd and Verdale Ave	No odor	34.449626	-118.678627		ND
9235	2024-03-17 16:09:53	Cambridge Ave across from house number 29862		34.459505	-118.626764	Persistent	<2
9225	2024-03-17 16:15:00	San Martinez Rd and Verdale Ave	No odor detected	34.44962	-118.678581		ND
9237	2024-03-17 16:16:29	Park behind Live Oak Elementary school	Faint grass smell	34.450338	-118.621051	Persistent	<2
9226	2024-03-17 16:20:28	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447015	-118.66386		ND
9267	2024-03-17 16:20:43	Bus Stop at San Martinez and Val Verde Rd	No odor	34.447275	-118.664446		ND
9230	2024-03-17 16:20:47	Park behind Live Oak Elementary school	No obvious odor.	34.450258	-118.621077	Persistent	<2
9258	2024-03-17 16:23:42	Val Verde Rd and Oakwood Ave	Grassy smell	34.449685	-118.662555	Persistent	2
9224	2024-03-17 16:26:21	Val Verde Rd and Oakwood Ave	No odor detected	34.450331	-118.661838		ND
9262	2024-03-17 16:32:21	Bus Stop 14608 - Del Valle Rd & Silver St	No odor	34.448723	-118.655151		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
0	400 - Earthy	406 - Grassy	Sunny	None	SE	1	51	73.0	30.07
			Partly Cloudy	None	SE	1	51	73	30.07
-1	400 - Earthy	411 - Musty	Sunny	None		0	56.6	51.7	29.02
-1	400 - Earthy	411 - Musty	Sunny	None		0	56.6	51.7	29.02
			Sunny	None	SE	5	53	70.0	30.08
			Partly Cloudy	None	SE	5	53	70	30.08
0	400 - Earthy	412 - Peat-like	Sunny	None		0	57.4	58.4	28.79
			Sunny	None	SE	5	53	69.0	30.08
2	100 - Floral	105 - Fragrant	Sunny	None		0	57.4	58.4	28.79
			Partly Cloudy	None	SE	5	53	69	30.08
1	400 - Earthy	406 - Grassy	Sunny	None		0	57.4	58.4	28.79
			Partly Cloudy	None	SE	5	54	69	30.08
			Sunny	None	SE	5	54	69.0	30.08
0	000 - No Odor	000 - No Odor	Sunny	None		0	57.4	58.4	28.79
0	400 - Earthy	406 - Grassy	Sunny	None	SE	5	54	69.0	30.08
			Partly Cloudy	None	SE	5	54	69	30.08
			Sunny	None	SE	0	55	62.0	30.06

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9223	2024-03-17 16:32:24	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.44874	-118.655147		ND
9240	2024-03-17 16:38:52	Starbucks / store by Bruce sushi	No detectable odor.	34.451135	-118.624905	Persistent	<2
9234	2024-03-17 16:40:14	Starbucks / store by Bruce sushi	The car exhaust smell grew more intense the longer I stood there	34.45123	-118.625143	Intermittent	<2
9260	2024-03-17 16:42:35	Starbucks / store by Bruce sushi	Flower smell	34.451146	-118.625246		2
9247	2024-03-17 16:42:51	Lot in front of Fire Station 143		34.454534	-118.634447	Persistent	4
9239	2024-03-17 16:47:26	Ave Penn and Witherspoon Pkwy	Slight burnt smell	34.449234	-118.638379	Intermittent	<2
9244	2024-03-17 16:48:50	Ave Penn and Witherspoon Pkwy	Kind of like a burnt car smell	34.449242	-118.638387	Persistent	<2
9266	2024-03-17 16:48:54	Starbucks / store by Bruce sushi	No odor	34.451159	-118.625205		ND
9246	2024-03-17 16:52:31	Starbucks / store by Bruce sushi		34.450965	-118.624587	Persistent	<2
9241	2024-03-17 16:55:47	Castaic Union School District Building	No detectable odor.	34.441257	-118.62663	Persistent	<2
9243	2024-03-17 16:56:08	Castaic Union School District Building		34.441731	-118.626185	Persistent	<2
9278	2024-03-17 17:04:14	Lot in front of Fire Station 143	Slight damp smell	34.454548	-118.635223	Intermittent	<2
9259	2024-03-17 17:09:51	Front of Castaic Elementary School	No odor	34.47178	-118.629954		ND
9245	2024-03-17 17:10:24	Front of Castaic Elementary School	No odor detected	34.471665	-118.630152		ND
9263	2024-03-17 17:13:50	Ralph's parking lot facing Bank of America	No odor	34.456848	-118.618165		ND
9242	2024-03-17 17:15:38	Lot in front of Fire Station 143	Smelled sweet like candy that kinda faded into a floral smell	34.454658	-118.634294	Intermittent	<2
9248	2024-03-17 17:22:42	Ralph's parking lot facing Bank of America	No odor	34.456837	-118.618176		ND
9268	2024-03-17 17:29:10	LA County Fire Department Del Valle Regional Training Center	smell of garbage	34.432177	-118.659415	Persistent	15

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None		0	55	62	30.06
0	000 - No Odor	000 - No Odor	Sunny	None	NE	2	64.6	43.7	28.98
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	NE	2	64.6	43.7	28.98
1	100 - Floral	105 - Fragrant	Sunny	None	SE	0	56	56.0	29.97
4	100 - Floral	105 - Fragrant	Partly Cloudy	None		0	56	56	29.97
-1	500 - Offensive	502 - Burnt	Sunny	None		0	64.5	43.7	28.82
-1	500 - Offensive	502 - Burnt	Sunny	None		0	64.5	43.7	28.82
			Sunny	None	SE	0	56	56.0	29.97
5	400 - Earthy	404 - Coffee	Partly Cloudy	None		0	56	56	29.97
0	000 - No Odor	000 - No Odor	Partly Cloudy	None		0	70.7	35.4	28.99
-1	400 - Earthy	411 - Musty	Sunny	None		0	70.7	35.4	28.99
-1	400 - Earthy	411 - Musty	Partly Cloudy	None		0	71	39.3	28.87
			Sunny	None	SE	0	59.9	50.0	29.96
			Partly Cloudy	None		0	59	50	29.96
			Sunny	None	SE	0	62	45.0	29.97
2	200 - Fruity	212 - Sweet	Sunny	None		0	71	39.3	28.87
			Partly Cloudy	None		0	62	45	29.97
-7	500 - Offensive	506 - Garbage	Sunny	None		0	70.9	39.3	28.96

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9277	2024-03-17 17:29:17	LA County Fire Department Del Valle Regional Training Center	Noticeable garbage/sewer smell	34.432144	-118.659403	Persistent	15
9276	2024-03-17 17:34:40	Lincoln Ave near intersection with Chiquita Canyon Rd	noticeable garbage smell	34.439021	-118.656739	Persistent	2
9269	2024-03-17 17:35:25	Lincoln Ave near intersection with Chiquita Canyon Rd	Very noticeable garbage smell	34.438556	-118.657142	Persistent	<2
9249	2024-03-17 17:36:19	Cambridge Ave across from house number 29862	No odor detected	34.459464	-118.626734		ND
9255	2024-03-17 17:36:22	Cambridge Ave across from house number 29862	Flower smell	34.459387	-118.626554	Persistent	2
9279	2024-03-17 17:40:00	Lincoln Ave and Taylor St	No detectable odor	34.443212	-118.655999	Persistent	ND
9270	2024-03-17 17:40:38	Lincoln Ave and Taylor St	Didn't smell fresh	34.442934	-118.655815	Persistent	<2
9250	2024-03-17 17:45:33	Park behind Live Oak Elementary school	No odor detected	34.450576	-118.621074		ND
9282	2024-03-17 17:48:41	San Martinez Rd and Verdale Ave	Noticeable farm animal smell	34.449561	-118.679103	Persistent	<2
9271	2024-03-17 17:49:53	San Martinez Rd and Verdale Ave	Smells like farm animals, varied in intensity	34.449577	-118.679034	Persistent	<2
9254	2024-03-17 17:54:31	Ave Penn and Witherspoon Pkwy	No odor	34.449977	-118.637895		ND
9251	2024-03-17 17:55:00	Ave Penn and Witherspoon Pkwy	No odor detected	34.44928	-118.638231		ND
9272	2024-03-17 17:57:53	Bus Stop at San Martinez and Val Verde Rd	Smelled like chlorine	34.447155	-118.66391	Intermittent	<2
9280	2024-03-17 17:57:57	Bus Stop at San Martinez and Val Verde Rd	Slight burning smell.	34.447026	-118.663709	Intermittent	<2
9264	2024-03-17 18:00:35	Castaic Union School District Building	No odor	34.441435	-118.626097		ND
9252	2024-03-17 18:00:44	Castaic Union School District Building	No odor detected	34.441507	-118.626046		ND
9273	2024-03-17 18:02:22	Val Verde Rd and Oakwood Ave		34.450276	-118.662542	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None		0	70.9	39.3	28.96
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None		0	71.5	39.5	28.94
-3	500 - Offensive	506 - Garbage	Sunny	None		0	71.5	39.5	28.94
			Partly Cloudy	None		0	62	45	29.96
0	100 - Floral	105 - Fragrant	Sunny	None	SE	0	62	45.0	29.96
0	000 - No Odor	000 - No Odor	Partly Cloudy	None		0	75	39.5	28.9
0	400 - Earthy	415 - Stale	Sunny	None		0	75	39.5	28.9
			Partly Cloudy	None	SE	2	62	44	29.96
-1	500 - Offensive	508 - Manure	Partly Cloudy	None	NE	2.2	74.6	35.6	28.66
-1	500 - Offensive	508 - Manure	Sunny	None	NE	2.2	74.6	35.6	28.66
			Sunny	None	SE	1	63	44.0	29.96
			Partly Cloudy	None	SE	1	63	44	29.96
-1	800 - Medicinal	805 - Chlorinou	Sunny	None	NE	3.3	74.6	35.6	28.66
-1	400 - Earthy	402 - Burnt Wood	Partly Cloudy	None	NE	3.3	74.6	35.6	28.66
			Sunny	None	SE	2	63	44.0	29.96
			Partly Cloudy	None	SE	2	63	44	29.96
2	400 - Earthy	406 - Grassy	Sunny	None	SW	2.8	71.9	33.6	28.78



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9281	2024-03-17 18:02:25	Val Verde Rd and Oakwood Ave	Slight woody/forest smell	34.45023	-118.662529	Persistent	<2
9275	2024-03-17 18:08:48	Bus Stop 14608 - Del Valle Rd & Silver St	Slight sandy smell	34.448721	-118.655184	Persistent	<2
9274	2024-03-17 18:09:22	Bus Stop 14608 - Del Valle Rd & Silver St	Prairie grass smell	34.448717	-118.655185	Persistent	<2
9328	2024-03-17 18:12:55	LA County Fire Department Del Valle Regional Training Center	No odor	34.43232342	-118.6594945	Persistent	15
9294	2024-03-17 18:14:39	LA County Fire Department Del Valle Regional Training Center		34.432046	-118.659334	Persistent	15
9287	2024-03-17 18:16:19	Lot in front of Fire Station 143	Sandy smell	34.454791	-118.634494	Intermittent	<2
9283	2024-03-17 18:17:08	Lot in front of Fire Station 143	Noticeable tree smell	34.454648	-118.634336	Persistent	<2
9293	2024-03-17 18:17:45	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438498	-118.656997	Persistent	7
9290	2024-03-17 18:25:35	Ave Penn and Witherspoon Pkwy	No detectable odor	34.448368	-118.638589	Persistent	<2
9285	2024-03-17 18:26:12	Ave Penn and Witherspoon Pkwy		34.44933	-118.638333	Persistent	<2
9284	2024-03-17 18:31:06	Castaic Union School District Building	Smelled woody with hints of Cinnamon	34.441676	-118.626111	Persistent	<2
9288	2024-03-17 18:31:38	Castaic Union School District Building	Slightly grassy and beach smell	34.441706	-118.626187	Intermittent	<2
9299	2024-03-17 18:38:42	Starbucks / store by Bruce sushi	Smelled like car exhaust and cigarettes	34.451004	-118.62513	Persistent	<2
9286	2024-03-17 18:46:49	Starbucks / store by Bruce sushi	Slight plant smell	34.451214	-118.624751	Persistent	<2
9307	2024-03-17 18:50:53	Lincoln Ave near intersection with Chiquita Canyon Rd	Slight garbage smell	34.43843904	-118.6571393	Intermittent	2
9289	2024-03-17 18:53:22	Park behind Live Oak Elementary school	Mostly grassy smell. Some wood burning/bonfire smell.	34.450472	-118.62106	Persistent	<2
9304	2024-03-17 18:54:25	Park behind Live Oak Elementary school		34.450333	-118.621054	Persistent	2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
1	400 - Earthy	417 - Woody	Partly Cloudy	None	SW	2.8	71.9	33.6	28.78
0	400 - Earthy	415 - Stale	Partly Cloudy	None	S	4	70.9	34.4	28.82
2	400 - Earthy	406 - Grassy	Sunny	None	S	4	70.9	34.4	28.82
-3	500 - Offensive	506 - Garbage	Sunny	None	SE	2	66	39.0	30.05
-4	500 - Offensive	506 - Garbage	Partly Cloudy	None	SE	2	66	39	30.05
0	400 - Earthy	415 - Stale	Partly Cloudy	None	NE	1.1	76.6	36.1	28.86
2	400 - Earthy	413 - Pine	Sunny	None	NE	1.1	76.6	36.1	28.86
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	2	68	37	30.04
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	E	4.2	76	32.5	28.81
0	000 - No Odor	000 - No Odor	Sunny	None	E	4.2	76	32.5	28.81
3	400 - Earthy	413 - Pine	Mostly Cloudy	None	NW	2	78.7	30.4	28.98
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	NW	2	78.7	30.4	28.98
-2	700 - Chemical	702 - Car Exhaust	Mostly Cloudy	None		0	84.1	29.2	28.94
0	100 - Floral	106 - Herbal	Partly Cloudy	None		0	84.1	29.2	28.94
-2	500 - Offensive	506 - Garbage	Sunny	None	SE	2	68	37.0	30.04
1	400 - Earthy	406 - Grassy	Partly Cloudy	None		0	82.2	33.0	29.01
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None		0	82.2	33.0	29.01

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9292	2024-03-17 18:56:43	Lincoln Ave and Taylor St	No odor detected	34.442958	-118.655804		ND
9311	2024-03-17 18:57:06	Lincoln Ave and Taylor St	No odor	34.442723	-118.655802		ND
9301	2024-03-17 19:00:23	Cambridge Ave across from house number 29862	No noticeable odor	34.459521	-118.626763	Persistent	<2
9305	2024-03-17 19:00:32	Cambridge Ave across from house number 29862		34.459489	-118.626776		<2
9321	2024-03-17 19:01:26	San Martinez Rd and Verdale Ave	No odor	34.44951085	-118.6787837		ND
9296	2024-03-17 19:06:46	San Martinez Rd and Verdale Ave		34.449661	-118.678617	Persistent	<2
9295	2024-03-17 19:13:03	Bus Stop at San Martinez and Val Verde Rd		34.446817	-118.664053	Persistent	<2
9322	2024-03-17 19:13:21	Bus Stop at San Martinez and Val Verde Rd	Grassy smell	34.446869	-118.664032	Persistent	2
9302	2024-03-17 19:15:20	Front of Castaic Elementary School	No detectable odor	34.47146	-118.630194	Persistent	<2
9291	2024-03-17 19:16:23	Val Verde Rd and Oakwood Ave	No odor detected	34.450326	-118.661837		ND
9324	2024-03-17 19:16:42	Val Verde Rd and Oakwood Ave	No odor	34.450311	-118.661875		ND
9303	2024-03-17 19:18:08	Front of Castaic Elementary School		34.471458	-118.630179	Persistent	<2
9327	2024-03-17 19:21:54	Front of Castaic Elementary School	No odor	34.471763	-118.630579		ND
9297	2024-03-17 19:21:54	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448536	-118.655166		ND
9298	2024-03-17 19:24:02	Ralph's parking lot facing Bank of America	Slight plant/grassy smell.	34.456881	-118.617767	Persistent	<2
9300	2024-03-17 19:26:18	Ralph's parking lot facing Bank of America	Smell of car exhaust and a faint smell of burnt rubber	34.456852	-118.617779	Persistent	<2
9323	2024-03-17 22:02:20	Front of Castaic Elementary School	No odor	34.471536	-118.630205		ND
9326	2024-03-17 22:02:24	Front of Castaic Elementary School		34.471533	-118.630188	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None	N	2	67	35	29.95
			Sunny	None	N	2	67	35.0	29.95
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	NE	6.1	72.2	32.9	28.77
4	100 - Floral	105 - Fragrant	Mostly Cloudy	None	NE	6.1	72.2	32.9	28.77
			Sunny	None	SE	1	68	35.0	29.95
-2	500 - Offensive	508 - Manure	Partly Cloudy	None	SE	1	68	35	29.95
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	SE	1	68	35	29.95
0	400 - Earthy	406 - Grassy	Sunny	None	SE	1	68	35.0	29.95
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	SE	4	79.7	29.6	28.72
			Partly Cloudy	None	SE	2	71	35	29.95
			Sunny	None	SE	2	71	35.0	29.95
0	000 - No Odor	000 - No Odor	Mostly Cloudy	None	SE	4	79.7	29.6	28.72
			Sunny	None	N	7	71	34.0	29.95
			Partly Cloudy	None	SE	7	68	34	29.95
0	400 - Earthy	406 - Grassy	Partly Cloudy	None	NW	4.6	81.3	28.0	28.97
-1	700 - Chemical	702 - Car Exhaust	Mostly Cloudy	None	NW	4.6	81.3	28.0	28.97
			Sunny	None	NW	2	71	34.0	29.99
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	NW	2	71	34	29.99

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9341	2024-03-17 22:05:58	LA County Fire Department Del Valle Regional Training Center	Slight garbage smell	34.432194	-118.659439	Persistent	<2
9317	2024-03-17 22:08:18	Ralph's parking lot facing Bank of America	No odor	34.456663	-118.618334		ND
9343	2024-03-17 22:08:51	LA County Fire Department Del Valle Regional Training Center	Didn't smell it at first but the breeze brought the smell in	34.43219	-118.659423	Intermittent	4
9329	2024-03-17 22:10:08	Ralph's parking lot facing Bank of America		34.456899	-118.617771	Persistent	<2
9337	2024-03-17 22:14:38	Lincoln Ave near intersection with Chiquito Canyon Rd	Noticeable garbage/sewer smell	34.438606	-118.657177	Persistent	2
9312	2024-03-17 22:14:44	Cambridge Ave across from house number 29862	No odor	34.459501	-118.626778		ND
9314	2024-03-17 22:16:45	Cambridge Ave across from house number 29862		34.459499	-118.62674	Persistent	<2
9313	2024-03-17 22:23:17	Park behind Live Oak Elementary school		34.450648	-118.62108	Persistent	<2
9325	2024-03-17 22:23:32	Park behind Live Oak Elementary school	No odor	34.450613	-118.621114		ND
9342	2024-03-17 22:25:18	Lincoln Ave near intersection with Chiquito Canyon Rd	The strength varied but it always smelled like garbage	34.438604	-118.657165	Persistent	2
9336	2024-03-17 22:26:26	Lincoln Ave and Taylor St	No detectable odor	34.442926	-118.655898	Persistent	ND
9340	2024-03-17 22:28:17	Lincoln Ave and Taylor St	Faint garbage smell	34.442937	-118.655932	Persistent	<2
9315	2024-03-17 22:29:51	Starbucks / store by Bruce sushi		34.451326	-118.625079	Persistent	<2
9308	2024-03-17 22:29:54	Starbucks / store by Bruce sushi	No odor	34.451341	-118.625092		ND
9318	2024-03-17 22:35:19	Lot in front of Fire Station 143		34.454545	-118.634407	Persistent	<2
9310	2024-03-17 22:35:28	Lot in front of Fire Station 143	Slight floral smell	34.454576	-118.634448	Intermittent	2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None		0	77.2	30.1	28.9
			Sunny	None	SE	0	72	30.0	29.92
-4	500 - Offensive	506 - Garbage	Sunny			0	77.2	30.1	28.9
-1	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None		0	72	30	29.92
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	2.8	80.9	27.3	28.88
			Sunny	None	SE	0	72	30.0	29.92
2	100 - Floral	106 - Herbal	Partly Cloudy	None		0	72	30	29.92
1	400 - Earthy	406 - Grassy	Partly Cloudy	None		0	72	30	29.92
			Sunny	None	N	7	71	34.0	29.95
-4	500 - Offensive	506 - Garbage	Sunny	None	W	2.8	80.9	27.3	28.88
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	SW	1.2	81.9	26.5	28.83
-1	500 - Offensive	506 - Garbage	Sunny	None	SW	1.2	81.9	26.5	28.83
4	400 - Earthy	404 - Coffee	Partly Cloudy	None	SE	2	73	29	29.9
			Sunny	None	SE	2	73	29.0	29.9
3	100 - Floral	105 - Fragrant	Partly Cloudy	None	SE	2	73	29	29.9
1	100 - Floral	105 - Fragrant	Sunny	None	SE	2	73	29.0	29.9

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9333	2024-03-17 22:36:30	San Martinez Rd and Verdale Ave	No detectable odor	34.450121	-118.679149	Persistent	ND
9330	2024-03-17 22:37:35	San Martinez Rd and Verdale Ave		34.449577	-118.679131	Persistent	<2
9334	2024-03-17 22:42:05	Bus Stop at San Martinez and Val Verde Rd		34.447153	-118.663824	Persistent	<2
9306	2024-03-17 22:42:48	Ave Penn and Witherspoon Pkwy	No odor	34.449501	-118.6382		ND
9319	2024-03-17 22:42:53	Ave Penn and Witherspoon Pkwy	No odor detected	34.449516	-118.638175		ND
9335	2024-03-17 22:46:06	Bus Stop at San Martinez and Val Verde Rd	No detectable odor	34.447218	-118.663905	Persistent	ND
9309	2024-03-17 22:48:23	Castaic Union School District Building	No odor	34.441497	-118.626022		ND
9320	2024-03-17 22:48:25	Castaic Union School District Building	No odor detected	34.441507	-118.626018		ND
9338	2024-03-17 22:51:19	Val Verde Rd and Oakwood Ave	Slight plant/grassy smell	34.450345	-118.6619	Intermittent	<2
9331	2024-03-17 22:54:03	Val Verde Rd and Oakwood Ave		34.450345	-118.661884	Persistent	<2
9339	2024-03-17 22:54:57	Bus Stop 14608 - Del Valle Rd & Silver St	No detectable smell	34.448713	-118.655169	Persistent	<2
9332	2024-03-17 22:58:46	Bus Stop 14608 - Del Valle Rd & Silver St	Smells like prairie grass	34.448714	-118.65518	Persistent	<2
9354	2024-03-17 23:01:49	Lot in front of Fire Station 143	Slight stale/sandy smell	34.4546	-118.63438	Persistent	<2
9359	2024-03-17 23:02:13	LA County Fire Department Del Valle Regional Training Center	No odor	34.432276	-118.659499		ND
9348	2024-03-17 23:02:23	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432301	-118.659482		ND
9344	2024-03-17 23:07:52	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438531	-118.657044		ND
9358	2024-03-17 23:08:09	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor	34.438511	-118.65702		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	E	2.5	82.2	26.6	28.6
-1	400 - Earthy	411 - Musty	Sunny	None	E	2.5	82.2	26.6	28.6
0	000 - No Odor	000 - No Odor	Sunny	None	SW	4.2	80.7	26.0	28.75
			Sunny	None	SE	2	73	29.0	29.9
			Partly Cloudy	None	SE	2	73	29	29.9
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	SW	4.2	80.7	26.0	28.75
			Sunny	None	NE	5	72	29.0	29.91
			Partly Cloudy	None	NE	5	72	29	29.91
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	NW	5.9	80.8	27.1	28.7
1	400 - Earthy	406 - Grassy	Sunny	None	NW	5.9	80.8	27.1	28.7
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	NE	3.6	80.1	27.3	28.77
2	400 - Earthy	406 - Grassy	Sunny	None	NE	3.6	80.1	27.3	28.77
0	400 - Earthy	415 - Stale	Partly Cloudy	None	NE	3.3	76.5	32.0	28.79
			Sunny	None	NW	6	72	28.0	29.9
			Partly Cloudy	None	NW	6	72	28	29.9
			Partly Cloudy	None	NE	9	72	30	29.9
			Sunny	None	NE	9	72	30.0	29.9



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9360	2024-03-17 23:10:56	Lincoln Ave and Taylor St	No odor	34.444101	-118.656597		ND
9349	2024-03-17 23:13:17	Lincoln Ave and Taylor St		34.442982	-118.655798	Persistent	<2
9363	2024-03-17 23:16:50	Lot in front of Fire Station 143		34.454614	-118.634443	Persistent	<2
9361	2024-03-17 23:18:48	Castaic Union School District Building	Noticeable trash/sewer smell	34.441602	-118.626128	Persistent	<2
9347	2024-03-17 23:18:52	Bus Stop at San Martinez and Val Verde Rd		34.446915	-118.66411	Persistent	<2
9364	2024-03-17 23:22:52	Ave Penn and Witherspoon Pkwy		34.449352	-118.638292	Persistent	2
9357	2024-03-17 23:23:15	Bus Stop at San Martinez and Val Verde Rd	No odor	34.446889	-118.664144		ND
9346	2024-03-17 23:28:10	San Martinez Rd and Verdale Ave		34.449625	-118.678609	Persistent	<2
9365	2024-03-17 23:28:32	Castaic Union School District Building		34.441535	-118.626142	Persistent	2
9362	2024-03-17 23:28:33	San Martinez Rd and Verdale Ave	No odor	34.449608	-118.678556		ND
9351	2024-03-17 23:28:37	Starbucks / store by Bruce sushi	Garbage/sewer smell	34.451117	-118.625103	Persistent	<2
9356	2024-03-17 23:33:06	Val Verde Rd and Oakwood Ave	No odor	34.449884	-118.662491		ND
9345	2024-03-17 23:35:46	Val Verde Rd and Oakwood Ave		34.450425	-118.662015	Persistent	<2
9353	2024-03-17 23:43:32	Bus Stop 14608 - Del Valle Rd & Silver St	No odor	34.448568	-118.655138		ND
9350	2024-03-17 23:43:41	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448577	-118.655144		ND
9352	2024-03-17 23:44:08	Starbucks / store by Bruce sushi	Slight trash/sewer smell	34.451243	-118.62484	Persistent	<2
9366	2024-03-17 23:46:59	Starbucks / store by Bruce sushi		34.451005	-118.625129	Persistent	2
9355	2024-03-17 23:48:14	Park behind Live Oak Elementary school	Noticeable grass smell	34.450413	-118.621048	Persistent	<2
9367	2024-03-17 23:52:51	Park behind Live Oak Elementary school		34.450389	-118.621162	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny	None	NE	2	72	35.0	29.97
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	NE	2	72	35	29.97
-1	400 - Earthy	415 - Stale	Sunny	None	NE	3.3	76.5	32.0	28.79
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	2.7	78.5	33.8	28.74
1	400 - Earthy	402 - Burnt Wood	Partly Cloudy	None	NE	2	72	35	29.97
-3	500 - Offensive	506 - Garbage	Sunny	None	S	2.7	78.5	33.8	28.74
			Sunny	None	NE	2	72	35.0	29.97
-4	500 - Offensive	508 - Manure	Partly Cloudy	None	NE	2	73	35	29.97
-2	500 - Offensive	506 - Garbage	Sunny	None	W	2.7	78.9	37.8	28.91
			Sunny	None	NE	2	73	35.0	29.97
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	2.7	78.9	37.8	28.91
			Sunny	None	NE	3	73	32.0	29.97
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	NE	3	73	32	29.97
			Sunny	None	S	3	72	34.0	29.9
			Partly Cloudy	None	S	3	72	34	29.9
-1	500 - Offensive	515 - Sewer	Partly Cloudy	None	SE	3.8	79.1	32.7	28.87
-3	500 - Offensive	506 - Garbage	Sunny	None	SE	3.8	79.1	32.7	28.87
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	S	9.8	74.1	39.2	28.94
1	400 - Earthy	406 - Grassy	Sunny	None	S	9.8	74.1	39.2	28.94

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9372	2024-03-17 23:57:55	Cambridge Ave across from house number 29862	Faint garbage smell	34.459508	-118.626493	Persistent	<2
9368	2024-03-17 23:59:02	Cambridge Ave across from house number 29862		34.459425	-118.626722	Persistent	2
9369	2024-03-18 00:07:07	Front of Castaic Elementary School		34.471463	-118.630192	Persistent	<2
9373	2024-03-18 00:08:15	Front of Castaic Elementary School	Slight dirt like smell. Reading taken on street of location.	34.471521	-118.630274	Intermittent	<2
9371	2024-03-18 00:18:12	Ralph's parking lot facing Bank of America	Might be a food smell? Had a slight sweaty socks smell.	34.456785	-118.618249	Intermittent	<2
9370	2024-03-18 00:18:58	Ralph's parking lot facing Bank of America	Mainly garbage smell, but also smells like fried chicken	34.456842	-118.617815	Persistent	<2
9403	2024-03-18 00:21:48	Ralph's parking lot facing Bank of America	No odor	34.45666	-118.61796		ND
9389	2024-03-18 00:22:47	Ralph's parking lot facing Bank of America	No odor detected	34.456681	-118.617941		ND
9400	2024-03-18 00:26:24	Front of Castaic Elementary School	No odor	34.471508	-118.630208		2
9386	2024-03-18 00:31:14	LA County Fire Department Del Valle Regional Training Center	Slight dirt/soil smell	34.432139	-118.659399	Persistent	<2
9374	2024-03-18 00:31:55	LA County Fire Department Del Valle Regional Training Center		34.43217	-118.659472	Persistent	<2
9390	2024-03-18 00:33:01	Front of Castaic Elementary School		34.471503	-118.630214	Persistent	<2
9379	2024-03-18 00:35:14	Lincoln Ave near intersection with Chiquita Canyon Rd	Sandy/beachy smell	34.438586	-118.657169	Persistent	<2
9380	2024-03-18 00:35:25	Lincoln Ave near intersection with Chiquita Canyon Rd	Smelled like a chicken coop	34.438606	-118.6572	Intermittent	<2
9398	2024-03-18 00:37:30	Cambridge Ave across from house number 29862	Flower smell	34.459506	-118.626747	Intermittent	2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	SE	9.2	71.3	42.9	28.71
-3	500 - Offensive	506 - Garbage	Sunny	None	SE	9.2	71.3	42.9	28.71
0	000 - No Odor	000 - No Odor	Sunny	None	S	9.8	70	40.8	28.66
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	S	9.8	70	40.8	28.66
-1	300 - Vegetable	310 - Onion	Partly Cloudy	None	SW	4.9	73.3	40.3	28.92
-1	500 - Offensive	506 - Garbage	Sunny	None	SW	4.9	73.3	40.3	28.92
			Sunny	None	S	3	67	50.0	29.9
			Sunny	None	S	3	67	50	29.9
1	100 - Floral	105 - Fragrant	Sunny	None	S	3	67	51.1	29.9
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	E	2.4	69.4	46.4	28.89
0	000 - No Odor	000 - No Odor	Sunny	None	E	2.4	69.4	46.4	28.89
1	400 - Earthy	406 - Grassy	Sunny	None	S	3	67	51	29.9
0	400 - Earthy	415 - Stale	Partly Cloudy	None	S	6.7	67.4	50.5	28.87
-1	500 - Offensive	508 - Manure	Sunny	None	S	6.7	67.4	50.5	28.87
0	100 - Floral	105 - Fragrant	Sunny	None	S	3	67	51.1	29.9

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9388	2024-03-18 00:45:55	Cambridge Ave across from house number 29862		34.459495	-118.626767	Persistent	<2
9385	2024-03-18 00:50:20	Lincoln Ave and Taylor St	Smelled like a bonfire.	34.443071	-118.655901	Persistent	<2
9387	2024-03-18 00:50:56	Lincoln Ave and Taylor St	Smells like a campfire	34.442876	-118.65588	Persistent	<2
9402	2024-03-18 00:52:47	Park behind Live Oak Elementary school	Garbage Smell	34.450598	-118.62109	Persistent	7
9393	2024-03-18 00:52:57	Park behind Live Oak Elementary school		34.450601	-118.621128	Persistent	7
9376	2024-03-18 00:59:52	San Martinez Rd and Verdale Ave	Farm animal smell and some grass smell	34.449606	-118.679127	Persistent	<2
9392	2024-03-18 01:00:09	Starbucks / store by Bruce sushi		34.451319	-118.625112	Persistent	2
9397	2024-03-18 01:00:11	Starbucks / store by Bruce sushi	No odor	34.451319	-118.62509		ND
9382	2024-03-18 01:00:27	San Martinez Rd and Verdale Ave	Smelled strongly of farm animal	34.449581	-118.67914	Persistent	4
9394	2024-03-18 01:06:06	Lot in front of Fire Station 143	No odor detected	34.454777	-118.634116		ND
9401	2024-03-18 01:06:10	Lot in front of Fire Station 143	No odor	34.45479	-118.634081		ND
9378	2024-03-18 01:06:36	Bus Stop at San Martinez and Val Verde Rd	No detectable smell.	34.447184	-118.664248	Persistent	<2
9375	2024-03-18 01:12:53	Bus Stop at San Martinez and Val Verde Rd	Smells faintly like chlorine	34.44714	-118.663893	Persistent	<2
9399	2024-03-18 01:13:29	Ave Penn and Witherspoon Pkwy	No odor	34.449492	-118.638162		ND
9391	2024-03-18 01:14:01	Ave Penn and Witherspoon Pkwy		34.449516	-118.638181	Persistent	<2
9381	2024-03-18 01:16:02	Val Verde Rd and Oakwood Ave	Barbecue smell	34.450311	-118.662551	Persistent	<2
9384	2024-03-18 01:16:04	Val Verde Rd and Oakwood Ave	Smells like barbecue and smokey	34.45028	-118.662543	Persistent	2
9395	2024-03-18 01:19:21	Castaic Union School District Building		34.441569	-118.626032	Persistent	30
9396	2024-03-18 01:19:25	Castaic Union School District Building	Garbage smell	34.441579	-118.626015	Persistent	2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
1	400 - Earthy	406 - Grassy	Sunny	None	S	3	67	51	29.9
3	400 - Earthy	414 - Smokey	Partly Cloudy	None	S	2.5	72	41.7	28.83
2	400 - Earthy	414 - Smokey	Sunny	None	S	2.5	72	41.7	28.83
-2	500 - Offensive	506 - Garbage	Sunny	None	SW	12	65	55.0	29.91
-5	500 - Offensive	506 - Garbage	Sunny	None	SW	12	65	55	29.91
-2	500 - Offensive	508 - Manure	Partly Cloudy	None	SE	4.1	65	48.2	28.6
2	400 - Earthy	404 - Coffee	Sunny	None	SW	8	64	56	29.91
			Sunny	None	SW	8	64	56.0	29.91
-2	500 - Offensive	508 - Manure	Sunny	None	SE	4.1	65	48.2	28.6
			Sunny	None	SW	12	64	56	29.91
			Sunny	None	SW	12	64	56.0	29.91
0	000 - No Odor	000 - No Odor	Partly Cloudy	None	SW	3	67.9	49.4	28.75
-1	800 - Medicinal	805 - Chlorinou	Sunny	None	SW	3	67.9	49.4	28.75
			Sunny	None	SW	6	64	56.0	29.91
-3	500 - Offensive	506 - Garbage	Sunny	None	SW	6	64	56	29.91
2	400 - Earthy	414 - Smokey	Partly Cloudy	None	W	2.5	67.5	51.1	28.72
3	300 - Vegetable	305 - Garlic	Sunny	None	W	2.5	67.5	51.1	28.72
-7	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	9	64	56	29.91
-2	500 - Offensive	506 - Garbage	Sunny	None	SW	9	64	56.0	29.91

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9377	2024-03-18 01:24:46	Bus Stop 14608 - Del Valle Rd & Silver St	Slight dirt/soil smell	34.448692	-118.65519	Persistent	<2
9383	2024-03-18 01:25:26	Bus Stop 14608 - Del Valle Rd & Silver St	Faintly smelled of prairie grass	34.448675	-118.655162	Persistent	<2
9457	2024-03-18 13:57:50	Front of Castaic Elementary School	No odor	34.471486	-118.630212		ND
9419	2024-03-18 13:58:08	Front of Castaic Elementary School	No odors detected	34.471503	-118.630181		ND
9406	2024-03-18 13:58:22	LA County Fire Department Del Valle Regional Training Center		34.432247	-118.659393	Persistent	<2
9415	2024-03-18 14:02:05	LA County Fire Department Del Valle Regional Training Center	Smells like dirt	34.432155	-118.659437	Persistent	<2
9405	2024-03-18 14:06:10	Lincoln Ave near intersection with Chiquita Canyon Rd		34.43854	-118.657222	Persistent	<2
9417	2024-03-18 14:07:12	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438618	-118.657187	Persistent	<2
9420	2024-03-18 14:08:43	Ralph's parking lot facing Bank of America	Next to the freeway	34.456911	-118.617783		<2
9453	2024-03-18 14:09:25	Ralph's parking lot facing Bank of America	No odor	34.456945	-118.617747		ND
9407	2024-03-18 14:11:27	Lincoln Ave and Taylor St	Smelled like farm animals and some burnt wood.	34.442327	-118.655646	Persistent	<2
9412	2024-03-18 14:12:42	Lincoln Ave and Taylor St	Smells mainly like burnt wood and an intermittent farm animal smell	34.442928	-118.655794	Persistent	<2
9449	2024-03-18 14:12:47	Cambridge Ave across from house number 29862	Flower smell	34.459474	-118.62676	Persistent	2
9422	2024-03-18 14:16:03	Cambridge Ave across from house number 29862		34.459487	-118.626764	Persistent	<2
9455	2024-03-18 14:18:36	Park behind Live Oak Elementary school	Grassy smell	34.450163	-118.62107		2
9404	2024-03-18 14:20:20	San Martinez Rd and Verdale Ave		34.450036	-118.678821	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	S	4.6	67.1	59.1	28.76
1	400 - Earthy	406 - Grassy	Sunny	None	S	4.6	67.1	59.1	28.76
			Sunny	None		0	43	97.0	29.97
			Sunny	None		0	43	97	29.97
1	400 - Earthy	406 - Grassy	Overcast	None	SW	2	48.5	69.7	28.97
1	400 - Earthy	412 - Peat-like	Overcast	None	SW	2	48.5	69.7	28.97
2	400 - Earthy	402 - Burnt Wood	Overcast	None	E	1.5	46.5	55.7	28.95
1	400 - Earthy	402 - Burnt Wood	Overcast	None	E	1.5	46.5	65.7	28.95
-1	700 - Chemical	702 - Car Exhaust	Sunny	None		0	43	96	29.97
			Sunny	None		0	43	96.0	29.97
-1	500 - Offensive	508 - Manure	Overcast	None	E	2.5	46.6	76.1	28.9
1	400 - Earthy	402 - Burnt Wood	Overcast	None	E	2.5	46.6	76.1	28.9
2	100 - Floral	105 - Fragrant	Sunny	None		0	43	96.0	29.97
-1	400 - Earthy	411 - Musty	Sunny	None		0	43	96	29.97
0	400 - Earthy	406 - Grassy	Sunny	None		0	43	95.0	29.98
0	400 - Earthy	406 - Grassy	Sunny	None	NW	1.6	48.3	70.5	28.66



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9416	2024-03-18 14:21:18	San Martinez Rd and Verdale Ave	Smells like farm animal	34.449558	-118.679058	Persistent	<2
9421	2024-03-18 14:23:07	Park behind Live Oak Elementary school		34.450146	-118.621079	Persistent	2
9410	2024-03-18 14:27:15	Bus Stop at San Martinez and Val Verde Rd		34.44716186	-118.663889	Persistent	<2
9411	2024-03-18 14:27:58	Bus Stop at San Martinez and Val Verde Rd		34.447104	-118.663845	Persistent	<2
9408	2024-03-18 14:31:27	Val Verde Rd and Oakwood Ave	Woody/forest smell	34.450294	-118.662558	Persistent	<2
9456	2024-03-18 14:31:33	Starbucks / store by Bruce sushi	No odor	34.451032	-118.625056		ND
9413	2024-03-18 14:32:22	Val Verde Rd and Oakwood Ave		34.450317	-118.662553	Persistent	<2
9418	2024-03-18 14:36:08	Starbucks / store by Bruce sushi		34.451015	-118.625062	Persistent	<2
9409	2024-03-18 14:38:48	Bus Stop 14608 - Del Valle Rd & Silver St	No detectable odor.	34.448623	-118.655148		ND
9414	2024-03-18 14:38:51	Bus Stop 14608 - Del Valle Rd & Silver St		34.448586	-118.655115	Persistent	<2
9454	2024-03-18 14:44:15	Castaic Union School District Building	No odor	34.441659	-118.625721		ND
9423	2024-03-18 14:44:16	Castaic Union School District Building	No odor detected	34.441591	-118.626036		ND
9429	2024-03-18 14:45:57	Lot in front of Fire Station 143	Smelled like a strong plant and slight manure smell.	34.454694	-118.63443	Persistent	<2
9432	2024-03-18 14:46:15	Lot in front of Fire Station 143		34.454723	-118.634358	Persistent	<2
9424	2024-03-18 14:51:04	Ave Penn and Witherspoon Pkwy	No odor detected	34.449404	-118.638269		ND
9447	2024-03-18 14:51:09	Ave Penn and Witherspoon Pkwy	No odor	34.449401	-118.638289		ND
9431	2024-03-18 14:51:49	Starbucks / store by Bruce sushi		34.451188	-118.624944	Intermittent	<2
9433	2024-03-18 14:52:44	Starbucks / store by Bruce sushi		34.451203	-118.624921	Persistent	<2
9450	2024-03-18 14:54:20	Lot in front of Fire Station 143	Slight floral smell	34.454507	-118.634573	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	500 - Offensive	508 - Manure	Sunny	None	NW	1.6	48.3	70.5	28.66
2	400 - Earthy	406 - Grassy	Sunny	None		0	43	95	29.98
-1	500 - Offensive	508 - Manure	Sunny	None	W	1.8	51.3	67.0	28.83
1	400 - Earthy	410 - Musky	Overcast	None	W	1.8	51.3	67.0	28.83
1	400 - Earthy	417 - Woody	Sunny	None	E	1.5	49.3	70.3	28.79
			Sunny	None	NW	1	45	93.0	29.97
1	400 - Earthy	406 - Grassy	Overcast	None	E	1.5	49.3	70.3	28.79
3	400 - Earthy	404 - Coffee	Sunny	None	NW	1	45	93	29.97
			Sunny	None		0	48.9	61.5	28.84
2	400 - Earthy	406 - Grassy	Overcast	None	E	0	48.9	61.5	28.84
			Sunny	None	NW	0	46	90.0	29.97
			Sunny	None		0	46	90	29.97
-2	100 - Floral	106 - Herbal	Sunny	None		0	56.4	62.6	28.88
1	100 - Floral	108 - Licorice	Sunny	None		0	56.4	62.6	28.88
			Sunny	None	NE	2	47	87	29.98
			Sunny	None	NE	2	47	87.0	29.98
5	400 - Earthy	404 - Coffee	Sunny	None	N	1.3	57.2	60.3	28.97
4	200 - Fruity	212 - Sweet	Sunny	None	N	1.3	57.2	60.3	28.97
0	100 - Floral	105 - Fragrant	Sunny	None	NE	0	48	84.0	29.98

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9425	2024-03-18 14:59:24	Lot in front of Fire Station 143	No odor detected	34.454507	-118.634597		ND
9428	2024-03-18 15:04:50	Front of Castaic Elementary School		34.471524	-118.629995	Intermittent	<2
9434	2024-03-18 15:05:35	Front of Castaic Elementary School		34.471434	-118.630213	Intermittent	<2
9446	2024-03-18 15:08:23	Bus Stop 14608 - Del Valle Rd & Silver St	No odor	34.447812	-118.655187		ND
9438	2024-03-18 15:08:25	Bus Stop 14608 - Del Valle Rd & Silver St		34.448607	-118.655149	Persistent	<2
9430	2024-03-18 15:12:21	Ralph's parking lot facing Bank of America	Trash/sewer smell	34.456941	-118.617764	Persistent	<2
9435	2024-03-18 15:12:50	Ralph's parking lot facing Bank of America	Noticable car exhaust smell faint garbage smell	34.45692	-118.617785	Persistent	<2
9448	2024-03-18 15:15:00	Val Verde Rd and Oakwood Ave	No odor	34.450239	-118.661849		ND
9437	2024-03-18 15:15:20	Val Verde Rd and Oakwood Ave	No odor detected	34.450246	-118.661824		ND
9426	2024-03-18 15:17:55	Cambridge Ave across from house number 29862	Flowery/plant smell	34.459664	-118.626447	Persistent	<2
9427	2024-03-18 15:18:42	Cambridge Ave across from house number 29862		34.45943	-118.626769	Persistent	<2
9436	2024-03-18 15:22:55	San Martinez Rd and Verdale Ave		34.449615	-118.678602	Persistent	<2
9443	2024-03-18 15:23:05	San Martinez Rd and Verdale Ave	No odor	34.449614	-118.678626		ND
9464	2024-03-18 15:23:41	Park behind Live Oak Elementary school		34.450409	-118.621092	Persistent	<2
9458	2024-03-18 15:24:26	Park behind Live Oak Elementary school		34.450356	-118.621016	Persistent	2
9444	2024-03-18 15:26:19	Bus Stop at San Martinez and Val Verde Rd	No odor	34.447261	-118.66426		ND
9442	2024-03-18 15:29:27	Bus Stop at San Martinez and Val Verde Rd		34.447009	-118.663861	Persistent	<2
9459	2024-03-18 15:35:27	Ave Penn and Witherspoon Pkwy		34.44938	-118.638291	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny	None		0	48	84	29.98
1	500 - Offensive	503 - Burnt Rubber	Sunny	None		0	57.7	56.4	28.75
-1	700 - Chemical	701 - Burnt Plastic	Sunny	None		0	57.7	56.4	28.75
			Sunny	None	NE	0	49	81.0	29.98
0	400 - Earthy	410 - Musky	Sunny	None		0	49	81	29.98
-2	500 - Offensive	506 - Garbage	Sunny	None	SW	2.7	56.6	57.5	29.02
-3	700 - Chemical	702 - Car Exhaust	Sunny	None	SW	2.7	56.6	57.5	29.02
			Sunny	None	NE	0	48	81.0	29.98
			Sunny	None		0	48	81	29.98
3	100 - Floral	105 - Fragrant	Sunny	None		0	60.9	55.5	28.8
2	100 - Floral	105 - Fragrant	Sunny	None		0	60.9	55.5	28.8
-2	500 - Offensive	508 - Manure	Sunny	None		0	49	79	29.97
			Sunny	None	NE	0	49	79.0	29.97
1	400 - Earthy	406 - Grassy	Sunny	None	NE	1.4	58.3	62.4	29.06
2	400 - Earthy	406 - Grassy	Sunny	None	NE	1.4	58.3	62.4	29.06
			Sunny	None	NE	0	51	79.0	29.97
1	400 - Earthy	406 - Grassy	Sunny	None		0	51	79	29.97
-1	400 - Earthy	412 - Peat-like	Sunny	None	NW	2	60.7	55.1	28.82

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9465	2024-03-18 15:35:33	Ave Penn and Witherspoon Pkwy		34.449302	-118.638325	Intermittent	<2
9440	2024-03-18 15:36:00	Lincoln Ave and Taylor St		34.442922	-118.655839	Persistent	<2
9452	2024-03-18 15:36:22	Lincoln Ave and Taylor St	No odor	34.442959	-118.655862		ND
9460	2024-03-18 15:41:15	Castaic Union School District Building	Faint smell of paint	34.44166	-118.626139	Persistent	<2
9451	2024-03-18 15:41:31	LA County Fire Department Del Valle Regional Training Center	No odor	34.432172	-118.659356		ND
9439	2024-03-18 15:41:32	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438542	-118.657089	Persistent	<2
9473	2024-03-18 15:42:34	Castaic Union School District Building		34.441728	-118.626165		ND
9441	2024-03-18 15:49:43	LA County Fire Department Del Valle Regional Training Center		34.432128	-118.659384	Persistent	<2
9467	2024-03-18 15:55:46	LA County Fire Department Del Valle Regional Training Center		34.432215	-118.659463	Persistent	4
9445	2024-03-18 15:56:23	LA County Fire Department Del Valle Regional Training Center	Slight garbage smell	34.432112	-118.659397	Persistent	2
9462	2024-03-18 15:56:41	LA County Fire Department Del Valle Regional Training Center	Strong garbage smell	34.432242	-118.659474	Persistent	7
9472	2024-03-18 16:01:59	Lincoln Ave near intersection with Chiquita Canyon Rd	Smells like a forest and a slight bonfire smell.	34.438872	-118.656857	Persistent	2
9461	2024-03-18 16:03:40	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438568	-118.657135	Persistent	<2
9463	2024-03-18 16:05:01	Lincoln Ave and Taylor St		34.442913	-118.655836	Persistent	<2
9470	2024-03-18 16:07:08	Lincoln Ave and Taylor St	Slight garbage/sewer smell	34.442701	-118.655675	Persistent	2
9478	2024-03-18 16:11:44	San Martinez Rd and Verdale Ave		34.449546	-118.679094	Persistent	<2
9466	2024-03-18 16:15:21	San Martinez Rd and Verdale Ave	Farm animal smell	34.44957	-118.679088	Persistent	2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	500 - Offensive	503 - Burnt Rubber	Sunny	None	NW	2	60.7	55.1	28.82
-2	500 - Offensive	506 - Garbage	Sunny	None		0	53	72	29.98
			Sunny	None	NE	0	53	72.0	29.9
-1	700 - Chemical	714 - Paint	Sunny	None	W	1	64.2	53.0	29.01
			Sunny	None	NE	0	54	71.0	29.98
-2	500 - Offensive	506 - Garbage	Sunny	None		0	54	71	29.98
			Sunny	None	W	1	64.2	53.0	29.01
-2	500 - Offensive	506 - Garbage	Sunny	None		0	55	71	29.98
-3	500 - Offensive	506 - Garbage	Sunny	None		0	64.5	64.8	28.97
-2	500 - Offensive	506 - Garbage	Sunny	None	NE	0	54	71.0	29.98
-5	500 - Offensive	506 - Garbage	Sunny	None		0	64.5	64.8	28.97
3	400 - Earthy	417 - Woody	Sunny	None		0	67.1	55.2	28.98
2	400 - Earthy	402 - Burnt Wood	Sunny	None		0	67.1	55.2	28.98
1	100 - Floral	102 - Cinnamon	Sunny	None	NE	1.6	65.8	50.2	28.93
-1	500 - Offensive	506 - Garbage	Sunny	None	NE	1.6	65.8	50.2	28.93
-1	500 - Offensive	508 - Manure	Sunny	None		0	69.1	57.8	28.67
-1	500 - Offensive	508 - Manure	Sunny	None		0	69.1	57.8	28.67

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9469	2024-03-18 16:22:11	Bus Stop at San Martinez and Val Verde Rd	No detectable odor	34.447243	-118.663936		ND
9475	2024-03-18 16:22:56	Bus Stop at San Martinez and Val Verde Rd		34.447106	-118.663819		ND
9468	2024-03-18 16:26:14	Bus Stop 14608 - Del Valle Rd & Silver St	Slight damp odor	34.448599	-118.655133	Persistent	<2
9476	2024-03-18 16:27:18	Val Verde Rd and Oakwood Ave		34.450241	-118.662489		<2
9474	2024-03-18 16:33:01	Bus Stop 14608 - Del Valle Rd & Silver St		34.448594	-118.655146	Persistent	<2
9495	2024-03-18 16:33:02	Ralph's parking lot facing Bank of America	Near the freeway	34.456808	-118.618148	Persistent	<2
9504	2024-03-18 16:33:05	Ralph's parking lot facing Bank of America	No odor	34.456909	-118.618189		ND
9471	2024-03-18 16:33:05	Bus Stop 14608 - Del Valle Rd & Silver St	No detectable odor.	34.44863	-118.655142		ND
9483	2024-03-18 16:38:54	Lot in front of Fire Station 143	Occasional car exhaust odor	34.45462	-118.634435	Intermittent	<2
9477	2024-03-18 16:39:34	Lot in front of Fire Station 143		34.454638	-118.634426	Persistent	<2
9505	2024-03-18 16:41:02	Front of Castaic Elementary School	No odor	34.471644	-118.630154		ND
9500	2024-03-18 16:41:09	Front of Castaic Elementary School	No odors detected	34.471673	-118.630184		ND
9491	2024-03-18 16:47:13	Ave Penn and Witherspoon Pkwy	Slight rubbery smell	34.448762	-118.638727	Intermittent	<2
9479	2024-03-18 16:47:52	Ave Penn and Witherspoon Pkwy		34.449343	-118.638326	Persistent	<2
9507	2024-03-18 16:51:30	Cambridge Ave across from house number 29862	Slight floral smell	34.459496	-118.626774	Intermittent	<2
9501	2024-03-18 16:51:41	Cambridge Ave across from house number 29862		34.459491	-118.626749	Persistent	2
9492	2024-03-18 16:52:31	Castaic Union School District Building	No detectable odor.	34.44171	-118.626191		ND
9480	2024-03-18 16:53:14	Castaic Union School District Building		34.441699	-118.62616		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny	None		0	70.9	46.0	28.83
			Sunny	None		0	70.9	46.0	28.83
-1	400 - Earthy	411 - Musty	Sunny	None	SW	1.7	65.3	53.4	28.79
-1	500 - Offensive	506 - Garbage	Sunny	None	SW	1.7	65.3	53.4	28.79
2	400 - Earthy	406 - Grassy	Sunny	None	SE	1.5	66.1	40.5	28.83
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	SE	1	60	59	29.98
			Sunny	None	SE	1	60	59.0	29.98
			Sunny	None	SE	1.5	66.1	50.5	28.83
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	NE	2.8	65.1	49.6	28.87
-2	700 - Chemical	702 - Car Exhaust	Sunny	None	NE	2.8	65.1	49.6	28.87
			Sunny	None	SE	1	62	50.0	29.97
			Sunny	None		0	62	50	29.97
-1	700 - Chemical	718 - Rubber	Sunny	None	NE	1.6	71.6	47.3	28.81
-3	500 - Offensive	506 - Garbage	Sunny	None	NE	1.6	71.6	47.3	28.81
0	100 - Floral	105 - Fragrant	Sunny	None	SE	1	62	56.0	29.97
3	100 - Floral	105 - Fragrant	Sunny	None		0	62	56	29.97
			Sunny	None	SE	1.9	65.5	46.9	29
			Sunny	None	SE	1.9	65.5	46.9	29



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9497	2024-03-18 16:58:41	Park behind Live Oak Elementary school		34.451656	-118.621151	Persistent	<2
9508	2024-03-18 16:58:42	Park behind Live Oak Elementary school	No odor	34.451835	-118.621184		ND
9489	2024-03-18 16:59:48	Starbucks / store by Bruce sushi	Smelled like baked goods, slight sugary smell	34.451123	-118.62483	Persistent	2
9487	2024-03-18 17:01:07	Starbucks / store by Bruce sushi	Smelled like fried fish	34.45121	-118.625147	Persistent	<2
9502	2024-03-18 17:05:03	Starbucks / store by Bruce sushi	No odor	34.451192	-118.625147		ND
9498	2024-03-18 17:05:18	Starbucks / store by Bruce sushi		34.451197	-118.625145	Persistent	<2
9490	2024-03-18 17:06:38	Park behind Live Oak Elementary school	Readings taken approx 25ft N of location.	34.451729	-118.621099	Persistent	<2
9485	2024-03-18 17:06:38	Park behind Live Oak Elementary school	25ft north of the site 11	34.451749	-118.621098		ND
9496	2024-03-18 17:11:57	Lot in front of Fire Station 143		34.454516	-118.634493	Persistent	<2
9503	2024-03-18 17:12:01	Lot in front of Fire Station 143	Flower smell	34.454515	-118.634505	Persistent	4
9481	2024-03-18 17:12:12	Cambridge Ave across from house number 29862	Soil/dirt odor	34.459431	-118.626739	Persistent	<2
9486	2024-03-18 17:12:35	Cambridge Ave across from house number 29862		34.459464	-118.626766	Persistent	<2
9506	2024-03-18 17:19:16	Ave Penn and Witherspoon Pkwy	No odor	34.449413	-118.638288		ND
9499	2024-03-18 17:19:18	Ave Penn and Witherspoon Pkwy	No odor detected	34.449395	-118.638258		ND
9493	2024-03-18 17:21:07	Front of Castaic Elementary School		34.471441	-118.630233		ND
9488	2024-03-18 17:21:09	Front of Castaic Elementary School	Reading taken on street of location	34.471421	-118.630193	Persistent	<2
9509	2024-03-18 17:22:24	Castaic Union School District Building	No odor	34.441729	-118.626117		ND
9494	2024-03-18 17:25:42	Castaic Union School District Building	No odor detected	34.441645	-118.626114		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
4	100 - Floral	106 - Herbal	Sunny	None	SE	1	63	54	29.97
			Sunny	None	SE	1	63	54.0	29.97
6	100 - Floral	101 - Almond	Sunny	None	NE	2.2	69	47.7	28.95
-1	300 - Vegetable	310 - Onion	Sunny	None	NE	2.2	69	47.7	28.95
			Sunny	None	SE	1	64	51.0	29.97
2	400 - Earthy	404 - Coffee	Sunny	None	SE	1	64	51	29.97
2	400 - Earthy	406 - Grassy	Sunny	None		0	77.7	38.6	29.02
			Sunny	None		0	77.7	38.6	29.02
4	100 - Floral	105 - Fragrant	Sunny	None	SE	1	64	51	29.97
3	100 - Floral	105 - Fragrant	Sunny	None	SE	1	64	51.0	29.97
0	400 - Earthy	412 - Peat-like	Sunny	None	SE	1.7	66.9	48.8	28.78
2	100 - Floral	105 - Fragrant	Sunny	None	SE	1.7	66.9	48.8	28.78
			Sunny	None	SE	2	65	50.0	29.97
			Sunny	None	SE	2	65	50	29.97
			Sunny	None		0	72.6	40.5	28.73
1	400 - Earthy	406 - Grassy	Sunny	None		0	72.6	40.5	28.73
			Sunny	None	SE	0	60	48.0	29.96
			Sunny	None	SE	0	66	48	29.96

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9484	2024-03-18 17:26:08	Ralph's parking lot facing Bank of America	Occasional car exhaust smell.	34.456921	-118.617846	Intermittent	<2
9482	2024-03-18 17:26:32	Ralph's parking lot facing Bank of America	Smells like fried chicken	34.456939	-118.617823	Persistent	<2
9531	2024-03-18 20:06:42	Val Verde Rd and Oakwood Ave	No odor	34.449672	-118.66226		ND
9523	2024-03-18 20:07:08	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449329	-118.654752		ND
9528	2024-03-18 20:13:16	Val Verde Rd and Oakwood Ave	No odor detected	34.450278	-118.661901		ND
9534	2024-03-18 20:13:49	Val Verde Rd and Oakwood Ave	No odor	34.450296	-118.661857		ND
9517	2024-03-18 20:15:57	LA County Fire Department Del Valle Regional Training Center		34.432188	-118.659446	Persistent	<2
9510	2024-03-18 20:16:25	LA County Fire Department Del Valle Regional Training Center	Noticable smell of garbage	34.432181	-118.659434	Persistent	<2
9527	2024-03-18 20:20:12	San Martinez Rd and Verdale Ave		34.449591	-118.678621	Persistent	<2
9532	2024-03-18 20:20:28	San Martinez Rd and Verdale Ave	No odor	34.449627	-118.678615		ND
9514	2024-03-18 20:20:46	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438892	-118.656874	Persistent	<2
9518	2024-03-18 20:21:26	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438504	-118.657174	Persistent	<2
9533	2024-03-18 20:24:11	Lincoln Ave and Taylor St	No odor	34.442662	-118.655636		ND
9516	2024-03-18 20:24:41	Lincoln Ave and Taylor St	No detectable odor	34.442941	-118.655919		ND
9515	2024-03-18 20:24:45	Lincoln Ave and Taylor St		34.442933	-118.655924	Persistent	<2
9530	2024-03-18 20:26:23	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.44683	-118.664003		ND
9513	2024-03-18 20:26:54	San Martinez Rd and Verdale Ave		34.449585	-118.67925	Intermittent	<2
9525	2024-03-18 20:33:21	San Martinez Rd and Verdale Ave		34.449536	-118.679144	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	W	2.1	70.2	41.8	28.9
2	300 - Vegetable	306 - Green Pepper	Sunny	None	W	2.1	70.2	41.8	28.99
			Sunny	None	SE	4	73	23.0	29.93
			Sunny	None	SE	4	73	23	29.9
			Sunny	None	SE	4	73	23	29.9
			Sunny	None	SE	4	73	23.0	29.93
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	E	4.2	81.3	23.4	28.9
-4	500 - Offensive	506 - Garbage	Sunny	None	E	4.2	81.3	23.4	28.9
-2	500 - Offensive	508 - Manure	Sunny	None	SE	4	75	23	29.9
			Sunny	None	SE	4	75	23.0	29.93
0	400 - Earthy	415 - Stale	Partly Cloudy	None	N	5.5	78.9	23.7	28.89
-1	400 - Earthy	415 - Stale	Sunny	None	N	5.5	78.9	23.7	28.89
			Sunny	None	SE	4	76	23.0	29.93
			Partly Cloudy	None	NW	2.2	81.4	23.6	28.84
-1	400 - Earthy	415 - Stale	Sunny	None	NW	2.2	81.4	23.6	28.84
			Sunny	None	SE	4	76	23	29.9
-1	500 - Offensive	508 - Manure	Partly Cloudy	None	E	4	77.7	25.3	28.64
-2	500 - Offensive	508 - Manure	Sunny	None	E	4	77.7	25.3	28.64

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9511	2024-03-18 20:34:57	Bus Stop at San Martinez and Val Verde Rd	Hot pavement smell	34.44710894	-118.6638242	Persistent	<2
9537	2024-03-18 20:35:00	Lincoln Ave and Taylor St	Slight musky smell	34.442945	-118.655806	Intermittent	2
9522	2024-03-18 20:35:24	Lincoln Ave and Taylor St	No odor detected	34.442907	-118.655815		ND
9524	2024-03-18 20:38:27	Bus Stop at San Martinez and Val Verde Rd		34.447172	-118.663858		ND
9519	2024-03-18 20:39:40	Val Verde Rd and Oakwood Ave		34.450134	-118.662593	Persistent	<2
9521	2024-03-18 20:39:52	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438564	-118.657094		ND
9526	2024-03-18 20:42:13	Val Verde Rd and Oakwood Ave		34.450277	-118.662584	Persistent	2
9512	2024-03-18 20:42:56	Bus Stop 14608 - Del Valle Rd & Silver St		34.448658	-118.655223		ND
9536	2024-03-18 20:43:28	LA County Fire Department Del Valle Regional Training Center	Strong garbage smell	34.43216	-118.659437		15
9520	2024-03-18 20:47:10	Bus Stop 14608 - Del Valle Rd & Silver St		34.448769	-118.655139	Persistent	<2
9538	2024-03-18 20:51:04	Lot in front of Fire Station 143		34.454666	-118.634458		ND
9547	2024-03-18 20:51:29	Lot in front of Fire Station 143		34.454722	-118.634452	Persistent	<2
9529	2024-03-18 20:51:59	LA County Fire Department Del Valle Regional Training Center		34.432164	-118.659432	Persistent	30
9541	2024-03-18 20:53:48	Ave Penn and Witherspoon Pkwy	No detectable odor.	34.44979	-118.637978		ND
9549	2024-03-18 20:58:04	Ave Penn and Witherspoon Pkwy		34.449331	-118.638315	Persistent	<2
9542	2024-03-18 21:00:44	Castaic Union School District Building		34.441654	-118.626297		ND
9546	2024-03-18 21:03:52	Castaic Union School District Building		34.441681	-118.626111		ND
9540	2024-03-18 21:05:35	Starbucks / store by Bruce sushi	Smells like food	34.452202	-118.625201	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	400 - Earthy	415 - Stale	Partly Cloudy	None	SE	1.4	82.5	23.3	28.76
-1	400 - Earthy	410 - Musky	Sunny	None	NW	4	76	23.0	30
			Sunny	None	NW	4	76	23	30
			Sunny	None	SE	1.4	82.5	23.3	28.76
2	400 - Earthy	406 - Grassy	Partly Cloudy	None	N	3.5	81.8	22.5	28.72
			Sunny	None	NE	12	73	23	29.92
1	400 - Earthy	406 - Grassy	Sunny	None	N	3.5	81.8	22.5	28.72
			Partly Cloudy	None	NE	7.6	80.8	23.1	28.77
-4	500 - Offensive	506 - Garbage	Sunny	None	SW	2	73	23.0	29.92
2	400 - Earthy	406 - Grassy	Sunny	None	NE	7.6	80.8	22.1	28.77
			Partly Cloudy	None	N	3.3	82	23.1	28.81
2	200 - Fruity	212 - Sweet	Sunny	None	N	3.3	82	23.1	28.81
-5	500 - Offensive	506 - Garbage	Sunny	None	SE	2	73	23	29.92
			Partly Cloudy	None	SW	2.5	83.4	22.8	28.75
-1	700 - Chemical	706 - Diesel	Sunny	None	SW	2.5	83.4	22.8	28.75
			Partly Cloudy	None	SE	4.2	80.8	22.5	28.92
			Sunny	None	SE	4.2	80.8	22.5	28.92
3	300 - Vegetable	307 - Nutty	Mostly Cloudy	None	SE	4.2	80.4	23.8	28.88

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9554	2024-03-18 21:09:45	Starbucks / store by Bruce sushi	No odor	34.451157	-118.624934		ND
9548	2024-03-18 21:09:46	Starbucks / store by Bruce sushi	Smells like hamburgers	34.45112	-118.625244	Persistent	<2
9561	2024-03-18 21:09:48	Starbucks / store by Bruce sushi		34.451128	-118.62499	Persistent	<2
9539	2024-03-18 21:12:08	Park behind Live Oak Elementary school	Readings taken approx 125 ft N. from location.	34.452437	-118.620624	Persistent	<2
9555	2024-03-18 21:16:16	Lot in front of Fire Station 143	Flower smell	34.454813	-118.634145	Persistent	2
9562	2024-03-18 21:16:21	Lot in front of Fire Station 143		34.454739	-118.634134	Persistent	<2
9544	2024-03-18 21:16:37	Park behind Live Oak Elementary school	Approximately 125 feet north of site 11	34.452464	-118.620664	Persistent	<2
9543	2024-03-18 21:19:18	Cambridge Ave across from house number 29862		34.45961	-118.626762	Persistent	<2
9545	2024-03-18 21:23:09	Cambridge Ave across from house number 29862		34.45958	-118.626745	Persistent	<2
9552	2024-03-18 21:23:30	Ave Penn and Witherspoon Pkwy	No odor	34.449357	-118.638322		ND
9567	2024-03-18 21:24:37	Ave Penn and Witherspoon Pkwy	No odor detected	34.449357	-118.638341		ND
9550	2024-03-18 21:25:33	Front of Castaic Elementary School		34.471451	-118.630163	Persistent	<2
9557	2024-03-18 21:29:49	Castaic Union School District Building	No odor	34.441551	-118.626005		ND
9568	2024-03-18 21:30:48	Castaic Union School District Building	No odor detected	34.441516	-118.62604		ND
9563	2024-03-18 21:39:46	Cambridge Ave across from house number 29862		34.459483	-118.626779	Persistent	<2
9558	2024-03-18 21:40:06	Cambridge Ave across from house number 29862	Flower smell	34.459481	-118.626739	Persistent	2
9560	2024-03-18 21:43:30	Park behind Live Oak Elementary school	No odor	34.450584	-118.621073		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny	None	SE	9	73	26.0	29.99
3	300 - Vegetable	310 - Onion	Sunny	None	SE	4.2	80.4	23.8	28.88
3	400 - Earthy	404 - Coffee	Partly Cloudy	None	SE	9	74	26	29.99
1	400 - Earthy	406 - Grassy	Mostly Cloudy	None	NE	2.5	79.6	23.9	28.96
1	100 - Floral	105 - Fragrant	Sunny	None	E	9	73	26.0	29.92
4	100 - Floral	105 - Fragrant	Partly Cloudy	None	E	9	73	26	29.92
1	400 - Earthy	411 - Musty	Sunny	None	NE	2.5	79.6	23.9	28.96
2	100 - Floral	106 - Herbal	Overcast	None	N	5.2	76.4	26.6	28.72
2	100 - Floral	105 - Fragrant	Sunny	None	N	5.2	76.4	26.6	28.72
			Sunny	None	NE	4	73	26.0	29.92
			Partly Cloudy	None	NE	4	73	26	29.92
0	400 - Earthy	411 - Musty	Mostly Cloudy	None	NW	2.2	74.2	28.9	28.68
			Sunny	None	NE	4	72	26.0	29.92
			Partly Cloudy	None	NE	4	72	26	29.92
3	100 - Floral	106 - Herbal	Partly Cloudy	None	N	1	72	26	29.91
1	100 - Floral	105 - Fragrant	Sunny	None	N	1	72	26.0	29.91
			Sunny	None	NE	2	74	25.0	29.91



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9564	2024-03-18 21:47:49	Park behind Live Oak Elementary school	No odor detected	34.450578	-118.621128		ND
9571	2024-03-18 21:51:12	Front of Castaic Elementary School		34.471428	-118.630249		ND
9551	2024-03-18 21:52:41	Ralph's parking lot facing Bank of America		34.456905	-118.617859	Intermittent	<2
9556	2024-03-18 21:54:45	Front of Castaic Elementary School	Slight flower smell	34.471544	-118.630198	Persistent	2
9566	2024-03-18 21:56:51	Front of Castaic Elementary School	No odor detected	34.471536	-118.630223		ND
9569	2024-03-18 21:57:04	Ralph's parking lot facing Bank of America		34.456922	-118.617793	Persistent	<2
9553	2024-03-18 22:06:14	Ralph's parking lot facing Bank of America	No odor	34.456839	-118.618074		ND
9572	2024-03-18 22:06:21	LA County Fire Department Del Valle Regional Training Center		34.432232	-118.659485	Persistent	<2
9570	2024-03-18 22:09:45	LA County Fire Department Del Valle Regional Training Center		34.432209	-118.659418		ND
9577	2024-03-18 22:11:11	Lincoln Ave near intersection with Chiquito Canyon Rd	Soil/dirt-like smell	34.438587	-118.657181	Persistent	<2
9575	2024-03-18 22:13:59	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438555	-118.657244	Persistent	<2
9579	2024-03-18 22:14:46	Lincoln Ave and Taylor St		34.442944	-118.655922	Persistent	2
9576	2024-03-18 22:16:41	Lincoln Ave and Taylor St		34.442941	-118.655967	Persistent	<2
9565	2024-03-18 22:18:07	Ralph's parking lot facing Bank of America	No odor detected	34.45683	-118.618094		ND
9574	2024-03-18 22:19:20	San Martinez Rd and Verdale Ave	Musty/petrichor smell	34.449537	-118.679084	Persistent	<2
9578	2024-03-18 22:25:44	San Martinez Rd and Verdale Ave		34.449576	-118.679131	Persistent	<2
9614	2024-03-18 22:26:11	Bus Stop 14608 - Del Valle Rd & Silver St	No odor	34.449401	-118.654655		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None	NE	2	74	25	29.91
			Mostly Cloudy	None	NW	2.2	74.2	28.9	28.68
-1	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None	N	5.2	76.1	26.3	28.93
1	100 - Floral	105 - Fragrant	Sunny	None	NW	8	72	29.0	29.91
			Partly Cloudy	None	NW	8	72	29	29.91
-1	700 - Chemical	702 - Car Exhaust	Mostly Cloudy	None	N	5.2	76.1	26.3	28.93
			Sunny	None	NW	8	72	29.0	29.9
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	NW	5.4	73.3	38.0	28.91
			Mostly Cloudy	None	NW	5.4	73.3	38.0	28.91
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	N	5.3	74	35.5	28.89
-1	400 - Earthy	415 - Stale	Mostly Cloudy	None	N	5.3	74	35.5	28.89
1	400 - Earthy	414 - Smokey	Mostly Cloudy	None	NW	7.2	68.3	42.6	28.84
-1	400 - Earthy	411 - Musty	Mostly Cloudy	None	NW	7.2	68.3	42.6	28.84
			Partly Cloudy	None	NW	8	72	29	29.99
-1	400 - Earthy	411 - Musty	Mostly Cloudy	None	NW	4.6	75.6	37.9	28.61
-1	500 - Offensive	508 - Manure	Mostly Cloudy	None	NW	4.6	75.6	37.9	28.64
			Sunny	None	NW	8	71	34.0	29.98

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9602	2024-03-18 22:26:25	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449393	-118.654662		ND
9582	2024-03-18 22:26:58	Bus Stop at San Martinez and Val Verde Rd		34.447154	-118.66386	Persistent	<2
9610	2024-03-18 22:30:41	Val Verde Rd and Oakwood Ave	No odor	34.449998	-118.662236		ND
9580	2024-03-18 22:30:49	Bus Stop at San Martinez and Val Verde Rd	Chlorine smell	34.447186	-118.663829	Persistent	<2
9601	2024-03-18 22:33:52	Val Verde Rd and Oakwood Ave		34.450304	-118.661828	Persistent	<2
9584	2024-03-18 22:34:09	Val Verde Rd and Oakwood Ave		34.45035	-118.661926	Persistent	<2
9581	2024-03-18 22:35:15	Val Verde Rd and Oakwood Ave		34.450355	-118.66193	Persistent	<2
9573	2024-03-18 22:37:40	Bus Stop 14608 - Del Valle Rd & Silver St	No detectable odor	34.44878	-118.655156		ND
9583	2024-03-18 22:40:01	Bus Stop 14608 - Del Valle Rd & Silver St		34.448843	-118.65509		ND
9605	2024-03-18 22:42:33	San Martinez Rd and Verdale Ave		34.449716	-118.678587	Persistent	<2
9612	2024-03-18 22:42:59	San Martinez Rd and Verdale Ave	No odor	34.449648	-118.678574		ND
9588	2024-03-18 22:44:10	Lot in front of Fire Station 143	No detectable odor.	34.454674	-118.634434		ND
9590	2024-03-18 22:46:54	Lot in front of Fire Station 143		34.454698	-118.634473		ND
9609	2024-03-18 22:47:55	Bus Stop at San Martinez and Val Verde Rd	No odor	34.446846	-118.663927		ND
9604	2024-03-18 22:48:24	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.44686	-118.663936		ND
9587	2024-03-18 22:49:30	Starbucks / store by Bruce sushi	No detectable smell	34.451225	-118.62498		ND
9589	2024-03-18 22:50:24	Starbucks / store by Bruce sushi		34.45121	-118.624946		ND
9608	2024-03-18 22:52:33	Lincoln Ave and Taylor St	No odor	34.442945	-118.655836		ND
9585	2024-03-18 22:52:35	Park behind Live Oak Elementary school		34.450468	-118.621118	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None	NW	8	71	34	29.98
-1	400 - Earthy	411 - Musty	Partly Cloudy	None	W	6.4	76.5	33.9	28.77
			Sunny	None	NW	7	71	33.0	29.98
-1	800 - Medicinal	805 - Chlorinou	Mostly Cloudy	None	W	6.4	76.5	33.9	28.77
3	100 - Floral	105 - Fragrant	Partly Cloudy	None	NW	7	71	33	29.98
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	N	6.8	73.5	39.1	28.71
1	400 - Earthy	406 - Grassy	Mostly Cloudy	None	N	6.8	73.5	39.1	28.71
			Partly Cloudy	None	SW	13.1	70.6	37.9	28.76
			Mostly Cloudy	None	SW	13.1	70.6	37.9	28.76
-3	500 - Offensive	508 - Manure	Partly Cloudy	None	NW	7	72	33	29.9
			Sunny	None	NW	7	72	33.0	29.9
			Partly Cloudy	None	SW	4.6	74.4	36.2	28.8
			Mostly Cloudy	None	SW	4.6	74.4	36.2	28.8
			Sunny	None	NW	7	72	33.0	29.9
			Partly Cloudy	None	NW	7	72	33	29.9
			Partly Cloudy	None	NW	3.6	76.7	34.9	28.89
			Mostly Cloudy	None	NW	3.6	76.7	43.9	28.89
			Sunny	None	NW	5	72	35.0	29.9
-1	400 - Earthy	411 - Musty	Mostly Cloudy	None	E	8.1	73.3	34.3	28.96

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9603	2024-03-18 22:53:54	Lincoln Ave and Taylor St	No odor detected	34.442955	-118.655823		ND
9591	2024-03-18 22:55:27	Park behind Live Oak Elementary school		34.450445	-118.621157		ND
9586	2024-03-18 22:56:41	Front of Castaic Elementary School	Fresh laundry smell	34.471663	-118.630185		<2
9606	2024-03-18 22:58:08	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438596	-118.657077		ND
9613	2024-03-18 22:58:17	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor	34.438566	-118.657081		ND
9611	2024-03-18 23:01:49	LA County Fire Department Del Valle Regional Training Center	No odor	34.432087	-118.659348		ND
9592	2024-03-18 23:03:12	Front of Castaic Elementary School		34.471687	-118.630165	Intermittent	<2
9607	2024-03-18 23:05:22	LA County Fire Department Del Valle Regional Training Center		34.43211	-118.659372	Persistent	<2
9596	2024-03-18 23:08:59	Ralph's parking lot facing Bank of America	Some sprinkle of rain beginning as we finished the readings.	34.45685	-118.617809		ND
9598	2024-03-18 23:10:29	Ralph's parking lot facing Bank of America		34.456815	-118.61777	Persistent	<2
9600	2024-03-18 23:12:52	Cambridge Ave across from house number 29862	No detectable odor	34.459572	-118.626785		ND
9593	2024-03-18 23:15:36	Cambridge Ave across from house number 29862		34.459555	-118.626755	Persistent	<2
9599	2024-03-18 23:17:53	Ave Penn and Witherspoon Pkwy	Slight soil/dirt smell	34.449387	-118.638268	Persistent	<2
9597	2024-03-18 23:21:25	Ave Penn and Witherspoon Pkwy		34.449376	-118.63832	Persistent	<2
9595	2024-03-18 23:22:28	Castaic Union School District Building		34.440664	-118.62616	Intermittent	<2
9594	2024-03-18 23:24:45	Castaic Union School District Building		34.441598	-118.626255	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None	NW	5	72	35	29.9
			Mostly Cloudy	None	E	8.1	73.3	34.3	28.96
	700 - Chemical	703 - Cleaning Fluid	Overcast	None	E	4.4	75.8	31.1	28.69
			Partly Cloudy	None	NW	9	68	41	30
			Sunny	None	NW	9	68	41.0	30
			Sunny	None	NW	8	69	43.0	30
-1	500 - Offensive	503 - Burnt Rubber	Mostly Cloudy	None	E	4.4	75.8	31.1	28.69
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	NW	8	69	43	30
			Overcast	None	NW	3.5	72.9	34.4	28.93
-1	700 - Chemical	702 - Car Exhaust	Mostly Cloudy	None	NW	3.5	72.9	34.4	28.93
			Mostly Cloudy	None	N	9.7	70.1	35.5	28.71
2	100 - Floral	105 - Fragrant	Mostly Cloudy	None	N	9.7	70.1	35.5	28.71
0	400 - Earthy	412 - Peat-like	Mostly Cloudy	None	NW	5.1	70.2	35.7	28.74
-1	400 - Earthy	412 - Peat-like	Mostly Cloudy	None	NW	5.1	70.2	35.7	28.74
-1	400 - Earthy	411 - Musty	Partly Cloudy	None	NW	3.3	73.3	35.2	28.92
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None	NW	3.3	73.3	35.2	28.92

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9631	2024-03-19 14:10:01	LA County Fire Department Del Valle Regional Training Center	Slight garbage smell	34.432066	-118.659354	Intermittent	2
9637	2024-03-19 14:14:03	LA County Fire Department Del Valle Regional Training Center		34.432087	-118.659376	Persistent	4
9615	2024-03-19 14:16:24	Front of Castaic Elementary School		34.471902	-118.629943	Persistent	<2
9618	2024-03-19 14:16:27	Front of Castaic Elementary School		34.471461	-118.630206		ND
9627	2024-03-19 14:28:10	Lincoln Ave near intersection with Chiquita Canyon Rd	Slight smoky smell	34.438482	-118.65698	Intermittent	<2
9642	2024-03-19 14:28:48	Lincoln Ave near intersection with Chiquita Canyon Rd		34.43846046	-118.6571339	Persistent	<2
9617	2024-03-19 14:32:37	Ralph's parking lot facing Bank of America	Slight damp smell	34.456876	-118.617814	Persistent	<2
9621	2024-03-19 14:33:16	Ralph's parking lot facing Bank of America		34.45687	-118.617794	Persistent	<2
9636	2024-03-19 14:35:42	Lincoln Ave and Taylor St	No odor detected	34.44327697	-118.6558431		ND
9633	2024-03-19 14:35:42	Lincoln Ave and Taylor St	No odor	34.442573	-118.655728		ND
9619	2024-03-19 14:39:18	Cambridge Ave across from house number 29862	Slight damp smell	34.459483	-118.62679	Persistent	<2
9620	2024-03-19 14:39:49	Cambridge Ave across from house number 29862		34.459498	-118.626773	Persistent	<2
9616	2024-03-19 14:47:08	Park behind Live Oak Elementary school	Approx. 50 ft. NE of location.	34.451934	-118.621079	Persistent	<2
9623	2024-03-19 14:47:24	Park behind Live Oak Elementary school	50 ft north east of the site 11	34.45103252	-118.62111	Persistent	<2
9639	2024-03-19 14:47:51	San Martinez Rd and Verdale Ave		34.449624	-118.67861	Persistent	<2
9630	2024-03-19 14:48:09	San Martinez Rd and Verdale Ave	No odor	34.449612	-118.678635		ND
9629	2024-03-19 14:53:57	Bus Stop at San Martinez and Val Verde Rd	Slight smoky smell	34.447139	-118.664016	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-2	500 - Offensive	506 - Garbage	Sunny	None	N	2	47	92.0	30.04
-2	500 - Offensive	506 - Garbage	Sunny	None	N	2	47	92	30.04
2	400 - Earthy	406 - Grassy	Sunny	None		0	54.8	58.4	28.71
			Sunny	None		0	54.8	58.4	28.71
0	400 - Earthy	414 - Smokey	Sunny	None	SE	2	47	93.0	30.04
0	400 - Earthy	414 - Smokey	Sunny	None	SE	2	47	93	30.04
-1	400 - Earthy	411 - Musty	Sunny	None		0	59.1	52.2	28.98
-1	700 - Chemical	702 - Car Exhaust	Sunny	None		0	59.1	52.2	28.98
			Sunny	None	N	1	44	92	29.95
			Sunny	None	N	1	44	92.0	29.95
-1	400 - Earthy	411 - Musty	Sunny	None		0	60.5	51.7	28.77
3	100 - Floral	105 - Fragrant	Sunny	None		0	60.5	51.7	28.77
1	400 - Earthy	406 - Grassy	Sunny	None		0	56.6	52.0	29.03
1	400 - Earthy	406 - Grassy	Sunny	None		0	56.6	52.0	29.03
-1	500 - Offensive	508 - Manure	Sunny	None	N	1	45	90	29.95
			Sunny	None	N	1	45	90.0	29.95
-1	400 - Earthy	414 - Smokey	Sunny	None	N	1	45	85.0	29.89



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9622	2024-03-19 14:55:23	Starbucks / store by Bruce sushi	Smelled like food	34.451202	-118.624934	Persistent	<2
9624	2024-03-19 14:55:29	Starbucks / store by Bruce sushi	Smells like cooked ground beef	34.451189	-118.624937	Persistent	<2
9638	2024-03-19 14:57:40	Bus Stop at San Martinez and Val Verde Rd		34.447022	-118.663959	Persistent	4
9625	2024-03-19 15:02:20	Lot in front of Fire Station 143	Smelled like fresh cut grass	34.45466	-118.634369	Persistent	2
9626	2024-03-19 15:02:24	Lot in front of Fire Station 143	Smells like fresh cut grass	34.454644	-118.634347	Persistent	2
9641	2024-03-19 15:05:20	Val Verde Rd and Oakwood Ave		34.450226	-118.661834	Persistent	<2
9628	2024-03-19 15:05:40	Val Verde Rd and Oakwood Ave	No odor	34.450231	-118.661853		ND
9635	2024-03-19 15:10:08	Ave Penn and Witherspoon Pkwy	No detectable odor	34.449515	-118.638167		ND
9654	2024-03-19 15:12:05	Ave Penn and Witherspoon Pkwy	Smells like construction vehicle exhaust	34.449532	-118.638168	Persistent	<2
9640	2024-03-19 15:12:26	Bus Stop 14608 - Del Valle Rd & Silver St		34.44882	-118.655093	Persistent	<2
9632	2024-03-19 15:12:47	Bus Stop 14608 - Del Valle Rd & Silver St	No odor	34.448816	-118.6551		ND
9634	2024-03-19 15:16:41	Castaic Union School District Building	Slight damp smell	34.441713	-118.626138	Persistent	<2
9650	2024-03-19 15:17:46	Castaic Union School District Building		34.4417	-118.626167	Persistent	<2
9647	2024-03-19 15:28:57	LA County Fire Department Del Valle Regional Training Center		34.432217	-118.659442	Persistent	<2
9651	2024-03-19 15:29:24	LA County Fire Department Del Valle Regional Training Center	Slight dirt smell	34.432214	-118.659424	Persistent	<2
9674	2024-03-19 15:34:55	Lot in front of Fire Station 143	No odor	34.454496	-118.634591		ND
9646	2024-03-19 15:35:07	Lincoln Ave near intersection with Chiquito Canyon Rd	Slight sandy smell	34.43854376	-118.6570545	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
2	300 - Vegetable	310 - Onion	Sunny	None		0	56.2	61.2	28.95
1	300 - Vegetable	310 - Onion	Sunny	None		0	56.2	61.2	28.95
0	400 - Earthy	414 - Smokey	Sunny	None	N	1	45	85	29.89
1	400 - Earthy	406 - Grassy	Sunny	None		0	59.2	58.8	28.88
2	400 - Earthy	406 - Grassy	Sunny	None		0	59.2	58.8	28.88
1	400 - Earthy	406 - Grassy	Sunny	None	N	2	45	85	29.89
			Sunny	None	N	1	45	85.0	29.89
			Sunny	None		0	60	55.7	28.8
-1	700 - Chemical	706 - Diesel	Sunny	None		0	60	55.7	28.8
1	400 - Earthy	406 - Grassy	Sunny	None	N	3	45	80	29.92
			Sunny	None	N	1	45	85.0	29.92
-1	400 - Earthy	411 - Musty	Sunny	None		0	57.7	56.4	29
2	100 - Floral	106 - Herbal	Sunny	None		0	57.7	56.4	29
1	400 - Earthy	406 - Grassy	Sunny	None	NE	1.5	57	60.5	28.96
-1	400 - Earthy	412 - Peat-like	Sunny	None	NE	1.5	57	60.5	28.96
			Sunny	None	N	0	53	70.0	29.98
-1	400 - Earthy	415 - Stale	Sunny	None	SE	1	54.9	64.0	28.95

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9652	2024-03-19 15:36:11	Lincoln Ave near intersection with Chiquita Canyon Rd	Garbage smell	34.438567	-118.657109	Persistent	<2
9659	2024-03-19 15:37:59	Lot in front of Fire Station 143		34.454478	-118.634571	Persistent	2
9643	2024-03-19 15:40:18	Lincoln Ave and Taylor St		34.442942	-118.655822	Persistent	<2
9653	2024-03-19 15:41:17	Lincoln Ave and Taylor St		34.442943	-118.655799	Persistent	<2
9672	2024-03-19 15:49:51	Ave Penn and Witherspoon Pkwy	No odor	34.449352	-118.638296		ND
9644	2024-03-19 15:50:09	San Martinez Rd and Verdale Ave	Some car exhaust as well	34.44959	-118.679081	Persistent	<2
9660	2024-03-19 15:50:11	Ave Penn and Witherspoon Pkwy	No odors detected	34.449378	-118.638276		ND
9655	2024-03-19 15:51:41	San Martinez Rd and Verdale Ave		34.449551	-118.679095		ND
9645	2024-03-19 15:56:43	Bus Stop at San Martinez and Val Verde Rd	No detectable smell	34.447125	-118.663899		ND
9656	2024-03-19 15:57:32	Bus Stop at San Martinez and Val Verde Rd		34.447092	-118.663932	Persistent	<2
9667	2024-03-19 15:58:50	Castaic Union School District Building	No odor	34.441636	-118.626068		ND
9662	2024-03-19 15:58:55	Castaic Union School District Building	No odor detected	34.441637	-118.626075		ND
9648	2024-03-19 16:00:06	Val Verde Rd and Oakwood Ave		34.450266	-118.662533	Persistent	<2
9657	2024-03-19 16:01:09	Val Verde Rd and Oakwood Ave	Smells like a chicken coop	34.450289	-118.662543	Persistent	<2
9676	2024-03-19 16:03:17	Starbucks / store by Bruce sushi	No odor	34.451186	-118.625139		ND
9649	2024-03-19 16:05:27	Bus Stop 14608 - Del Valle Rd & Silver St	Pine/woody smell	34.447857	-118.655256	Persistent	2
9658	2024-03-19 16:05:43	Bus Stop 14608 - Del Valle Rd & Silver St	Prairie grass smell	34.448868	-118.655096	Persistent	<2
9661	2024-03-19 16:09:09	Starbucks / store by Bruce sushi		34.451172	-118.625134	Persistent	<2
9663	2024-03-19 16:15:09	Park behind Live Oak Elementary school		34.450198	-118.621077	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-2	500 - Offensive	506 - Garbage	Sunny	None	SE	1	54.9	64.0	28.95
3	100 - Floral	105 - Fragrant	Sunny	None		0	53	70	29.95
-1	400 - Earthy	415 - Stale	Sunny	None		0	59.2	57.7	28.89
-1	400 - Earthy	415 - Stale	Sunny	None		0	59.2	57.7	28.89
			Sunny	None	SE	3	54	66.0	29.96
-1	500 - Offensive	508 - Manure	Sunny	None	N	1	67.3	47.0	28.65
			Sunny	None	SE	3	54	66	29.96
			Sunny	None	N	1.1	67.3	47.0	28.65
			Sunny	None		0	67.3	43.7	28.82
-1	400 - Earthy	410 - Musky	Sunny	None		1.1	67.3	43.7	28.82
			Sunny	None	SE	3	54	66.0	29.96
			Sunny	None	SE	3	54	66	29.96
-1	500 - Offensive	508 - Manure	Sunny	None	E	2.2	59.3	51.8	28.77
-1	500 - Offensive	508 - Manure	Sunny	None	E	2.2	59.3	51.8	28.77
			Sunny	None	SE	3	54	66.0	29.95
3	400 - Earthy	413 - Pine	Sunny	None	E	0	65.7	48.2	28.82
2	400 - Earthy	406 - Grassy	Sunny	None		0	65.7	48.2	28.82
3	400 - Earthy	404 - Coffee	Sunny	None	SE	3	54	66	20.95
1	400 - Earthy	406 - Grassy	Sunny	None	SE	2	56	62	29.95

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9668	2024-03-19 16:15:19	Park behind Live Oak Elementary school	Slight grassy smell	34.450179	-118.621107	Persistent	<2
9670	2024-03-19 16:27:29	Cambridge Ave across from house number 29862	Slight flower smell.	34.459522	-118.626769		<2
9665	2024-03-19 16:28:12	Cambridge Ave across from house number 29862		34.459473	-118.62675	Persistent	<2
9678	2024-03-19 16:37:35	Lot in front of Fire Station 143		34.454685	-118.634451	Intermittent	<2
9677	2024-03-19 16:42:52	Lot in front of Fire Station 143	Noticable car exhaust smell	34.45467251	-118.6343652	Persistent	<2
9664	2024-03-19 16:43:46	Ralph's parking lot facing Bank of America	Near freeway	34.456876	-118.618199	Intermittent	<2
9680	2024-03-19 16:50:13	Ave Penn and Witherspoon Pkwy		34.449352	-118.63832	Intermittent	<2
9669	2024-03-19 16:50:59	Ave Penn and Witherspoon Pkwy	Kinda smelled like a fresh baked bread	34.449368	-118.638273	Persistent	<2
9666	2024-03-19 16:52:15	Front of Castaic Elementary School		34.471606	-118.630163	Persistent	<2
9671	2024-03-19 16:53:06	Ralph's parking lot facing Bank of America	Exhaust smell	34.45657259	-118.6176959		<2
9673	2024-03-19 16:55:09	Castaic Union School District Building		34.441692	-118.626164		ND
9679	2024-03-19 16:55:19	Castaic Union School District Building	Slight damp smell	34.441729	-118.626229	Persistent	<2
9675	2024-03-19 16:55:30	Front of Castaic Elementary School	No odor	34.47173	-118.630247		ND
9699	2024-03-19 17:11:36	LA County Fire Department Del Valle Regional Training Center	Very strong garbage smell	34.432027	-118.65935	Intermittent	30
9682	2024-03-19 17:12:51	LA County Fire Department Del Valle Regional Training Center	Very strong odor	34.432066	-118.659337	Persistent	30
9685	2024-03-19 17:14:17	Starbucks / store by Bruce sushi		34.45106	-118.625154	Persistent	<2
9684	2024-03-19 17:14:40	Starbucks / store by Bruce sushi		34.451065	-118.625183	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
0	400 - Earthy	406 - Grassy	Sunny	None	SE	2	56	62.0	29.95
1	100 - Floral	105 - Fragrant	Sunny	None	SE	2	56	62.0	29.95
1	400 - Earthy	406 - Grassy	Sunny	None	SE	2	56	62	29.95
1	400 - Earthy	406 - Grassy	Sunny	None		0	72.9	44.3	28.87
-2	700 - Chemical	702 - Car Exhaust	Sunny	None		0	72.9	44.3	28.87
-1	700 - Chemical	702 - Car Exhaust	Sunny	None		0	59	56	29.95
-2	700 - Chemical	706 - Diesel	Sunny	None		0	69.4	40.5	28.79
2	200 - Fruity	212 - Sweet	Sunny	None		0	69.4	40.5	28.79
1	400 - Earthy	406 - Grassy	Sunny	None		0	61	52	29.95
-2	700 - Chemical	702 - Car Exhaust	Sunny	None	SE	0	59	59.0	29.95
			Sunny	None	NE	1	64.7	45.4	28.97
-1	400 - Earthy	411 - Musty	Sunny	None	NE	1	64.7	45.4	28.97
			Sunny	None	SE	0	61	52.0	29.95
-5	500 - Offensive	506 - Garbage	Sunny	None	SE	0	65	46.0	29.94
-8	500 - Offensive	506 - Garbage	Sunny	None	SE	1	64	51	30.03
	700 - Chemical	702 - Car Exhaust	Sunny	None	NW	2	70	37.8	28.92
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	NW	2	70	36.8	28.92

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9703	2024-03-19 17:16:51	Lincoln Ave near intersection with Chiquito Canyon Rd	Slight garbage smell	34.438469	-118.657011	Intermittent	<2
9697	2024-03-19 17:17:02	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438484	-118.656965	Persistent	<2
9687	2024-03-19 17:19:52	Park behind Live Oak Elementary school		34.450266	-118.621072	Persistent	<2
9693	2024-03-19 17:21:31	Lincoln Ave and Taylor St		34.442945	-118.655874	Persistent	<2
9704	2024-03-19 17:21:39	Lincoln Ave and Taylor St	No odor	34.44327835	-118.655843		ND
9692	2024-03-19 17:21:40	Park behind Live Oak Elementary school		34.450298	-118.62111	Persistent	<2
9700	2024-03-19 17:23:48	San Martinez Rd and Verdale Ave	No odor	34.449607	-118.678587		ND
9681	2024-03-19 17:29:06	Cambridge Ave across from house number 29862		34.459451	-118.626749	Persistent	<2
9696	2024-03-19 17:29:35	Cambridge Ave across from house number 29862		34.45924796	-118.6267349		ND
9688	2024-03-19 17:29:52	San Martinez Rd and Verdale Ave		34.449573	-118.678595	Persistent	<2
9701	2024-03-19 17:32:39	Bus Stop at San Martinez and Val Verde Rd	No odor	34.447025	-118.663861		ND
9689	2024-03-19 17:36:35	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446993	-118.663924		ND
9690	2024-03-19 17:40:22	Front of Castaic Elementary School	Reading taken on street of location	34.471522	-118.629988	Persistent	<2
9691	2024-03-19 17:41:13	Val Verde Rd and Oakwood Ave		34.450289	-118.661839	Persistent	<2
9702	2024-03-19 17:41:17	Val Verde Rd and Oakwood Ave	No odor	34.450272	-118.661837		ND
9694	2024-03-19 17:41:19	Front of Castaic Elementary School		34.471433	-118.630215		ND
9686	2024-03-19 17:46:44	Ralph's parking lot facing Bank of America		34.456866	-118.617822	Persistent	<2
9698	2024-03-19 17:46:51	Bus Stop 14608 - Del Valle Rd & Silver St	No odor	34.448553	-118.655169		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	500 - Offensive	506 - Garbage	Sunny	None	SE	0	64	50.0	30.03
-2	500 - Offensive	506 - Garbage	Sunny	None	E	1	64	50	30.03
1	400 - Earthy	406 - Grassy	Sunny	None		0	72.9	37.6	29
4	100 - Floral	105 - Fragrant	Sunny	None	E	1	64	50	30.03
			Sunny	None	SE	1	64	50.0	30.03
1	400 - Earthy	406 - Grassy	Sunny	None	NW	2	72.9	37.6	29
			Sunny	None	E	0	64	50.0	30.03
0	100 - Floral	105 - Fragrant	Sunny	None	S	3.5	67.4	39.9	28.78
			Sunny	None	S	3.5	67.4	39.9	28.78
-2	500 - Offensive	508 - Manure	Sunny	None		0	64	50	30.03
			Sunny	None	E	0	64	50.0	30.03
			Sunny	None		0	64	50	30.03
3	100 - Floral	105 - Fragrant	Sunny	None		0	77.9	37.0	28.7
1	400 - Earthy	406 - Grassy	Sunny	None		0	68	50	30.03
			Sunny	None	E	0	68	50.0	30.03
			Sunny	None	S	0	77.9	37.0	28.7
-1	700 - Chemical	702 - Car Exhaust	Sunny	None		0	79.9	30.6	28.96
			Sunny	None	E	0	6	38.0	29.94



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9683	2024-03-19 17:47:07	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448644	-118.655133		ND
9695	2024-03-19 17:47:39	Ralph's parking lot facing Bank of America		34.456846	-118.617833	Persistent	<2
9705	2024-03-19 20:39:40	LA County Fire Department Del Valle Regional Training Center	Smells like dirt	34.432268	-118.659467		<2
9731	2024-03-19 20:39:49	Castaic Union School District Building	Slight floral scent.	34.441503	-118.626067	Persistent	2
9721	2024-03-19 20:39:58	Castaic Union School District Building	Slight floral smell	34.441485	-118.626078	Persistent	2
9725	2024-03-19 20:49:11	Ave Penn and Witherspoon Pkwy	No odor detected.	34.448988	-118.637967		ND
9719	2024-03-19 20:49:16	Ave Penn and Witherspoon Pkwy	No odor detected	34.449365	-118.638301		ND
9711	2024-03-19 20:54:21	LA County Fire Department Del Valle Regional Training Center		34.432278	-118.659512	Persistent	<2
9733	2024-03-19 20:58:42	Lot in front of Fire Station 143	Slight floral scent.	34.454517	-118.63445	Persistent	2
9722	2024-03-19 20:58:54	Lot in front of Fire Station 143		34.454512	-118.634452	Persistent	<2
9708	2024-03-19 21:02:45	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438481	-118.657146		ND
9713	2024-03-19 21:03:49	Lincoln Ave near intersection with Chiquito Canyon Rd	Smells like sand	34.438619	-118.657188	Persistent	<2
9723	2024-03-19 21:03:59	Starbucks / store by Bruce sushi	No odor detected.	34.451218	-118.624819		ND
9724	2024-03-19 21:04:29	Starbucks / store by Bruce sushi	No odor detected	34.451209	-118.625145		ND
9707	2024-03-19 21:05:59	Lincoln Ave and Taylor St		34.442928	-118.655845		ND
9714	2024-03-19 21:09:02	Lincoln Ave and Taylor St		34.442938	-118.655887		ND
9726	2024-03-19 21:10:59	Cambridge Ave across from house number 29862		34.459444	-118.626755	Persistent	2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny	None		0	69	38	29.94
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	S	0	79.9	30.6	28.96
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	W	5.7	75.4	42.3	28.89
1	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	10	72	42.0	29.91
2	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	10	72	42	29.91
			Partly Cloudy	None	SW	7	72	40.0	29.9
			Partly Cloudy	None	SW	7	72	40	29.9
-1	400 - Earthy	415 - Stale	Sunny		W	5.7	75.4	42.3	28.89
2	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	7	72	40.0	29.99
3	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	7	72	40	29.99
			Partly Cloudy	None	SE	1.6	80.9	39.8	28.87
-1	400 - Earthy	415 - Stale	Sunny		SE	1.6	80.9	39.8	28.87
			Partly Cloudy	None	SW	7	71	42.0	29.9
			Partly Cloudy	None	SW	7	71	42	29.9
			Partly Cloudy	None	S	4.4	76.1	40.0	28.18
			Sunny		S	4.4	76.1	40.0	28.82
3	100 - Floral	106 - Herbal	Partly Cloudy	None	SW	7	71	42	29.9

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9720	2024-03-19 21:11:06	Cambridge Ave across from house number 29862	Slight floral scent.	34.459194	-118.62655		2
9709	2024-03-19 21:15:33	San Martinez Rd and Verdale Ave		34.449563	-118.679105	Intermittent	<2
9712	2024-03-19 21:17:26	San Martinez Rd and Verdale Ave		34.449532	-118.679036	Persistent	<2
9728	2024-03-19 21:17:35	Ralph's parking lot facing Bank of America	Near freeway	34.456871	-118.61811	Persistent	<2
9732	2024-03-19 21:17:35	Ralph's parking lot facing Bank of America	Tow truck running near sampling location, near freeway as well.	34.456818	-118.618153	Persistent	<2
9710	2024-03-19 21:24:41	Bus Stop at San Martinez and Val Verde Rd		34.447101	-118.663797		ND
9717	2024-03-19 21:28:35	Bus Stop at San Martinez and Val Verde Rd		34.447136	-118.663833		ND
9706	2024-03-19 21:32:42	Val Verde Rd and Oakwood Ave		34.450274	-118.662527	Persistent	<2
9718	2024-03-19 21:32:57	Val Verde Rd and Oakwood Ave		34.45029	-118.662515	Persistent	<2
9729	2024-03-19 21:36:42	Front of Castaic Elementary School	No odor detected	34.471622	-118.630225		ND
9727	2024-03-19 21:37:53	Park behind Live Oak Elementary school	No odor detected.	34.450568	-118.621064		ND
9715	2024-03-19 21:38:32	Bus Stop 14608 - Del Valle Rd & Silver St		34.448867	-118.655106		ND
9716	2024-03-19 21:39:24	Bus Stop 14608 - Del Valle Rd & Silver St	Smells like prairie grass	34.448829	-118.655108	Persistent	<2
9736	2024-03-19 21:44:27	Lot in front of Fire Station 143		34.454593	-118.634408	Persistent	<2
9744	2024-03-19 21:45:39	Lot in front of Fire Station 143		34.454648	-118.634441	Intermittent	<2
9746	2024-03-19 21:47:08	Ave Penn and Witherspoon Pkwy	Faint garbage smell	34.449345	-118.63833	Intermittent	<2
9735	2024-03-19 21:48:52	Ave Penn and Witherspoon Pkwy		34.449344	-118.638318		ND
9730	2024-03-19 21:53:04	Park behind Live Oak Elementary school	No odor detected	34.450599	-118.621112		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
1	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	7	71	42.0	29.9
6	400 - Earthy	406 - Grassy	Partly Cloudy	None	W	4	77.6	36.4	28.61
0	400 - Earthy	412 - Peat-like	Sunny		W	4	77.6	36.4	28.61
-1	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None	SW	6	72	41	29.89
-3	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None	SW	6	72	41.0	29.89
			Partly Cloudy	None	SW	6.2	75.8	42.3	28.74
			Sunny		SW	6.2	75.8	42.3	28.74
2	400 - Earthy	406 - Grassy	Partly Cloudy	None	S	5.3	76.4	37.2	28.7
1	400 - Earthy	406 - Grassy	Sunny		S	5.3	76.4	37.2	28.7
			Partly Cloudy	None	SW	4	72	43	29.89
			Partly Cloudy	None	SW	4	72	43.0	29.89
			Partly Cloudy	None	S	4.9	75.4	38.5	28.74
2	400 - Earthy	406 - Grassy	Sunny		S	4.9	75.4	38.5	28.74
7	100 - Floral	111 - Rose-like	Partly Cloudy	None	W	5.2	77.2	34.4	28.78
2	100 - Floral	106 - Herbal	Sunny		W	5.2	77.2	34.4	28.78
-1	500 - Offensive	506 - Garbage	Sunny		SE	1.6	80.4	33.4	28.74
			Partly Cloudy	None	SE	1.6	80.4	33.4	28.74
			Partly Cloudy	None	SW	3	72	42	29.89

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9734	2024-03-19 21:53:52	Park behind Live Oak Elementary school	No odor detected.	34.450581	-118.621101		ND
9745	2024-03-19 21:57:41	Castaic Union School District Building		34.441612	-118.626261		ND
9738	2024-03-19 21:57:41	Castaic Union School District Building		34.441598	-118.626441		ND
9737	2024-03-19 22:00:35	Starbucks / store by Bruce sushi		34.451118	-118.625106		2
9743	2024-03-19 22:04:01	Starbucks / store by Bruce sushi	Noticable garbage/ sewage smell	34.451134	-118.625221	Persistent	<2
9740	2024-03-19 22:08:55	Park behind Live Oak Elementary school		34.451341	-118.621112	Intermittent	<2
9792	2024-03-19 22:09:31	LA County Fire Department Del Valle Regional Training Center	Slight smell of grass.	34.43203	-118.659386	Persistent	<2
9757	2024-03-19 22:10:00	LA County Fire Department Del Valle Regional Training Center		34.432097	-118.659382	Persistent	<2
9741	2024-03-19 22:11:40	Park behind Live Oak Elementary school	Strong smell of garbage/ sewage that was stronger with wind	34.451351	-118.621125	Intermittent	4
9752	2024-03-19 22:16:05	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438605	-118.656936		ND
9785	2024-03-19 22:16:12	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.439112	-118.657407		ND
9742	2024-03-19 22:16:27	Cambridge Ave across from house number 29862		34.459461	-118.626744		ND
9739	2024-03-19 22:18:27	Cambridge Ave across from house number 29862		34.459447	-118.626728	Persistent	<2
9751	2024-03-19 22:20:40	Lincoln Ave and Taylor St	No odors detected	34.442958	-118.655815		ND
9774	2024-03-19 22:20:58	Lincoln Ave and Taylor St	No odor detected	34.442913	-118.655815		ND
9753	2024-03-19 22:28:16	Bus Stop at San Martinez and Val Verde Rd		34.447087	-118.664053	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None	SW	3	72	42.0	29.89
			Partly Cloudy		SW	6	76.6	39.8	28.92
			Partly Cloudy	None	SW	6	76.6	39.8	28.92
-7	500 - Offensive	515 - Sewer	Partly Cloudy	None	SE	3.4	77.7	35.9	28.86
-4	500 - Offensive	506 - Garbage	Partly Cloudy		SE	3.4	77.7	35.9	28.86
-7	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	3.1	78.2	40.7	28.92
0	400 - Earthy	406 - Grassy	Partly Cloudy	None	W	7	72	41.0	29.89
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	W	7	72	41	29.89
-4	500 - Offensive	506 - Garbage	Partly Cloudy		S	3.1	78.2	40.7	28.92
			Mostly Cloudy	None	SW	8	74	41	29.96
			Mostly Cloudy	None	SW	8	74	41.0	29.96
			Partly Cloudy	Rain	S	4	74.5	37.3	28.7
2	100 - Floral	105 - Fragrant	Sunny		S	4	74.5	37.3	28.7
			Mostly Cloudy	None	W	6	74	41	29.96
			Mostly Cloudy	None	W	6	74	41.0	29.96
0	400 - Earthy	410 - Musky	Overcast	None	W	6	75	41	29.96

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9793	2024-03-19 22:28:25	Bus Stop at San Martinez and Val Verde Rd	Slight musky smell.	34.447022	-118.66406	Persistent	<2
9773	2024-03-19 22:40:00	San Martinez Rd and Verdale Ave	Scent of manure, next to horse farm.	34.449584	-118.678597	Persistent	2
9756	2024-03-19 22:40:08	San Martinez Rd and Verdale Ave	Next to horses and chicken	34.44964	-118.678612	Persistent	2
9747	2024-03-19 22:40:57	Front of Castaic Elementary School	Just after rainfall; "after-rain" smell	34.471454	-118.630166	Persistent	2
9748	2024-03-19 22:42:30	Front of Castaic Elementary School	Smelled like car exhaust or sweaty socks	34.471415	-118.630215	Persistent	<2
9781	2024-03-19 22:47:08	Val Verde Rd and Oakwood Ave	Slight smell of grass.	34.450994	-118.661515	Persistent	<2
9754	2024-03-19 22:47:13	Val Verde Rd and Oakwood Ave		34.450458	-118.661952	Persistent	<2
9749	2024-03-19 22:49:24	Ralph's parking lot facing Bank of America		34.456931	-118.617731	Persistent	<2
9750	2024-03-19 22:49:27	Ralph's parking lot facing Bank of America		34.456926	-118.617785	Persistent	<2
9794	2024-03-19 22:53:28	Bus Stop 14608 - Del Valle Rd & Silver St	Slight grassy smell.	34.448818	-118.65509	Persistent	<2
9755	2024-03-19 22:53:35	Bus Stop 14608 - Del Valle Rd & Silver St		34.448908	-118.655139	Persistent	<2
9784	2024-03-19 23:02:47	Ralph's parking lot facing Bank of America	Light exhaust smell while in parking lot.	34.456844	-118.618221	Persistent	<2
9763	2024-03-19 23:03:27	LA County Fire Department Del Valle Regional Training Center		34.43224	-118.659382		<2
9765	2024-03-19 23:04:10	LA County Fire Department Del Valle Regional Training Center		34.432229	-118.659484	Persistent	<2
9758	2024-03-19 23:09:29	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438587	-118.657284		<2
9760	2024-03-19 23:10:25	Lincoln Ave near intersection with Chiquito Canyon Rd	Smells like sand	34.438562	-118.657214	Persistent	<2
9780	2024-03-19 23:11:00	Ralph's parking lot facing Bank of America	Near a freeway	34.456858	-118.618042	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	400 - Earthy	410 - Musky	Overcast	None	W	6	75	41.0	29.96
-2	500 - Offensive	508 - Manure	Mostly Cloudy	None	SW	8	73	41.0	29.96
-3	500 - Offensive	508 - Manure	Mostly Cloudy	None	W	6	73	41	29.96
4	400 - Earthy	411 - Musty	Partly Cloudy	Rain		0	73.9	42.7	28.65
-2	700 - Chemical	702 - Car Exhaust	Sunny	None		0	73.9	42.70	28.65
1	400 - Earthy	406 - Grassy	Mostly Cloudy	None	SW	0	70	41.0	29.96
1	400 - Earthy	406 - Grassy	Mostly Cloudy	None		0	70	41	29.96
3	400 - Earthy	411 - Musty	Partly Cloudy	Rain	S	1.5	74.2	42.5	28.9
-2	700 - Chemical	702 - Car Exhaust	Sunny	None	S	1.5	74.2	42.5	28.9
1	400 - Earthy	406 - Grassy	Mostly Cloudy	None	SW	6	70	38.0	29.89
1	400 - Earthy	406 - Grassy	Mostly Cloudy	None		6	70	38	29.89
-1	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None	SE	6	70	38.0	29.88
2	400 - Earthy	406 - Grassy	Partly Cloudy	None	NW	1.4	70.5	50.6	28.87
-1	400 - Earthy	411 - Musty	Mostly Cloudy	None	NW	1.4	70.5	50.6	28.87
3	400 - Earthy	412 - Peat-like	Partly Cloudy	None	S	1.09	72.9	51.1	28.85
-1	400 - Earthy	415 - Stale	Mostly Cloudy	None	S	0.9	72.9	51.1	28.85
-2	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None	SE	6	70	38	29.88



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9768	2024-03-19 23:15:16	Lincoln Ave and Taylor St		34.442968	-118.655803	Persistent	<2
9771	2024-03-19 23:15:27	Lincoln Ave and Taylor St		34.442964	-118.655981	Persistent	<2
9767	2024-03-19 23:25:36	San Martinez Rd and Verdale Ave		34.449574	-118.679133	Persistent	<2
9764	2024-03-19 23:25:48	San Martinez Rd and Verdale Ave		34.449665	-118.679102		<2
9772	2024-03-19 23:27:05	Front of Castaic Elementary School	Light grassy scent.	34.471582	-118.629946	Persistent	<2
9786	2024-03-19 23:27:08	Front of Castaic Elementary School		34.471532	-118.630178	Persistent	<2
9787	2024-03-19 23:31:54	Cambridge Ave across from house number 29862	No odor detected.	34.459492	-118.626748		ND
9759	2024-03-19 23:32:08	Bus Stop at San Martinez and Val Verde Rd	Very faint soil odor	34.447189	-118.663747		<2
9770	2024-03-19 23:32:26	Bus Stop at San Martinez and Val Verde Rd	Faint smell of chlorine	34.447167	-118.663839	Persistent	<2
9776	2024-03-19 23:36:02	Cambridge Ave across from house number 29862	Smell slight hint of flowers	34.45941	-118.626728	Intermittent	<2
9761	2024-03-19 23:36:22	Val Verde Rd and Oakwood Ave		34.450345	-118.662531		ND
9769	2024-03-19 23:36:34	Val Verde Rd and Oakwood Ave		34.450313	-118.662564	Persistent	<2
9782	2024-03-19 23:41:58	Park behind Live Oak Elementary school	No odor detected.	34.450657	-118.621091		ND
9766	2024-03-19 23:42:26	Bus Stop 14608 - Del Valle Rd & Silver St		34.448923	-118.655071		ND
9790	2024-03-19 23:42:49	Park behind Live Oak Elementary school	No odor detected	34.450656	-118.621105		ND
9762	2024-03-19 23:43:50	Bus Stop 14608 - Del Valle Rd & Silver St	Prairie grass smell	34.448855	-118.655079	Persistent	<2
9779	2024-03-19 23:48:20	Starbucks / store by Bruce sushi	No odor detected	34.45105	-118.625129		ND
9789	2024-03-19 23:48:23	Starbucks / store by Bruce sushi	No odor detected.	34.450953	-118.625065		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
3	400 - Earthy	406 - Grassy	Partly Cloudy	None	S	1.5	74.9	49.7	28.8
1	400 - Earthy	406 - Grassy	Mostly Cloudy	None	S	1.5	74.9	49.7	28.8
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	N	1.6	79.4	43.3	28.57
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	N	1.6	79.4	43.3	28.57
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	SW	6	70	38.0	29.88
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	SW	6	70	38	29.88
			Partly Cloudy	None	SW	2	70	44.0	29.88
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	NE	2.6	79.1	45.7	28.72
-1	800 - Medicinal	805 - Chlorinou	Partly Cloudy	None	NE	2.6	79.1	45.7	28.72
3	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	2	70	44	29.88
			Partly Cloudy	None	S	1.8	79.2	37.5	28.68
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	S	1.8	79.2	37.5	28.68
			Partly Cloudy	None	SW	4	71	43.0	29.88
			Partly Cloudy	None	S	4.3	76.4	38.2	28.72
			Partly Cloudy	None	SW	4	71	43	29.88
2	400 - Earthy	406 - Grassy	Partly Cloudy	None	S	4.3	76.4	38.2	28.72
			Partly Cloudy	None	SW	5	72	40	29.88
			Partly Cloudy	None	SW	5	72	40.0	29.88

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9804	2024-03-19 23:48:33	Lot in front of Fire Station 143		34.454757	-118.634518	Persistent	<2
9797	2024-03-19 23:50:14	Lot in front of Fire Station 143	Faint garbage smell	34.454662	-118.634459	Intermittent	<2
9778	2024-03-19 23:54:00	Lot in front of Fire Station 143	Slight floral smell.	34.454871	-118.634947	Persistent	<2
9783	2024-03-19 23:54:00	Lot in front of Fire Station 143		34.454474	-118.634699	Persistent	<2
9798	2024-03-19 23:55:58	Ave Penn and Witherspoon Pkwy	Smells like dirt	34.449346	-118.638313	Persistent	<2
9803	2024-03-19 23:56:04	Ave Penn and Witherspoon Pkwy		34.449357	-118.638353	Persistent	<2
9775	2024-03-19 23:59:54	Ave Penn and Witherspoon Pkwy	No odor detected.	34.449382	-118.638298		ND
9777	2024-03-20 00:00:14	Ave Penn and Witherspoon Pkwy	No odor detected	34.449295	-118.638336		ND
9802	2024-03-20 00:00:43	Castaic Union School District Building	Like cooked meat	34.441261	-118.626575	Intermittent	<2
9796	2024-03-20 00:01:50	Castaic Union School District Building	Faint garbage smell stronger with wind	34.441639	-118.626253	Intermittent	<2
9788	2024-03-20 00:05:11	Castaic Union School District Building		34.441507	-118.626266	Persistent	4
9791	2024-03-20 00:05:14	Castaic Union School District Building		34.440755	-118.625809	Persistent	4
9799	2024-03-20 00:08:53	Starbucks / store by Bruce sushi		34.451068	-118.625107	Persistent	<2
9795	2024-03-20 00:08:53	Starbucks / store by Bruce sushi		34.451038	-118.625207		ND
9801	2024-03-20 00:18:28	Ralph's parking lot facing Bank of America	Buttery smell	34.456914	-118.617792	Intermittent	<2
9800	2024-03-20 00:21:06	Ralph's parking lot facing Bank of America	Fried chicken smell	34.456899	-118.617831	Persistent	<2
9807	2024-03-20 16:09:10	LA County Fire Department Del Valle Regional Training Center		34.432177	-118.659428	Persistent	<2
9810	2024-03-20 16:10:47	LA County Fire Department Del Valle Regional Training Center		34.43222	-118.659515	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
6	100 - Floral	105 - Fragrant	Sunny	None	SW	2.9	77.4	38.8	28.77
-1	500 - Offensive	506 - Garbage	Partly Cloudy		SW	2.9	77.4	38.8	28.77
1	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	6	72	40.0	29.88
3	100 - Floral	106 - Herbal	Partly Cloudy	None	SW	6	72	40	29.88
-1	400 - Earthy	412 - Peat-like	Partly Cloudy		SE	2.4	78.5	33.3	28.7
6	100 - Floral	105 - Fragrant	Partly Cloudy	None	SE	2.4	78.5	33.3	28.71
			Partly Cloudy	None	SW	8	72	43.0	29.8
			Partly Cloudy	None	SW	8	72	43	29.8
-2	300 - Vegetable	310 - Onion	Partly Cloudy	None	W	1.5	77.3	38.2	28.88
-1	500 - Offensive	506 - Garbage	Partly Cloudy		W	1.5	77.3	38.2	28.88
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	8	72	43	29.8
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	8	72	43.0	29.8
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	S	4.4	80.3	34.2	28.84
			Partly Cloudy		S	4.4	80.3	34.2	28.84
2	300 - Vegetable	310 - Onion	Partly Cloudy	None	S	3.4	75.8	36.3	28.88
-1	300 - Vegetable	310 - Onion	Sunny		S	3.4	75.8	36.3	28.88
2	400 - Earthy	406 - Grassy	Sunny	None	NE	3.2	70.6	48.6	28.91
-1	400 - Earthy	412 - Peat-like	Sunny		NE	3.2	70.6	48.6	28.91

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9820	2024-03-20 16:12:39	Front of Castaic Elementary School		34.471493	-118.630197	Persistent	<2
9838	2024-03-20 16:13:42	Front of Castaic Elementary School	Slight flower scent.	34.47169993	-118.6305172	Persistent	<2
9816	2024-03-20 16:17:10	Lincoln Ave near intersection with Chiquita Canyon Rd	Smells like sand and dirt	34.43855	-118.657178	Persistent	<2
9812	2024-03-20 16:18:24	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438566	-118.657157	Persistent	<2
9831	2024-03-20 16:21:13	Ralph's parking lot facing Bank of America	No odor detected.	34.456616	-118.617816		ND
9811	2024-03-20 16:23:15	Lincoln Ave and Taylor St		34.442969	-118.655875	Intermittent	<2
9806	2024-03-20 16:23:45	Lincoln Ave and Taylor St		34.442994	-118.655799	Persistent	<2
9817	2024-03-20 16:23:50	Ralph's parking lot facing Bank of America		34.456615	-118.617991	Persistent	<2
9815	2024-03-20 16:25:15	San Martinez Rd and Verdale Ave		34.449573	-118.679169	Persistent	<2
9837	2024-03-20 16:30:59	Cambridge Ave across from house number 29862	Slight floral scent.	34.459457	-118.626748	Persistent	<2
9814	2024-03-20 16:31:47	San Martinez Rd and Verdale Ave	Grassy smell	34.44956	-118.679135	Persistent	<2
9829	2024-03-20 16:32:04	Cambridge Ave across from house number 29862		34.459466	-118.626775	Persistent	<2
9832	2024-03-20 16:36:46	Park behind Live Oak Elementary school	Slight grassy smell.	34.450375	-118.621286	Persistent	<2
9819	2024-03-20 16:40:21	Park behind Live Oak Elementary school		34.450347	-118.621107	Persistent	<2
9813	2024-03-20 16:44:28	Bus Stop at San Martinez and Val Verde Rd		34.447113	-118.663865		ND
9827	2024-03-20 16:45:17	Bus Stop at San Martinez and Val Verde Rd	Chlorine smell	34.447124	-118.66382	Persistent	<2
9830	2024-03-20 16:47:08	Starbucks / store by Bruce sushi	No odor detected.	34.451118	-118.625107		ND
9808	2024-03-20 16:50:05	Val Verde Rd and Oakwood Ave		34.450254	-118.662535		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
3	100 - Floral	105 - Fragrant	Sunny	None		0	60	61	29.92
1	100 - Floral	105 - Fragrant	Sunny	None		0	60	61.00	29.92
2	400 - Earthy	412 - Peat-like	Sunny	None	NE	1.8	66.8	61.0	28.89
-1	400 - Earthy	415 - Stale	Sunny		NE	1.8	66.8	61.0	28.89
			Sunny	None	SE	1	61	57.0	29.92
1	400 - Earthy	406 - Grassy	Sunny	None		0	69.5	51.8	28.84
-1	400 - Earthy	415 - Stale	Sunny			0	69.5	51.8	28.84
-1	700 - Chemical	702 - Car Exhaust	Sunny	None	SE	1	61	57	29.92
2	400 - Earthy	417 - Woody	Sunny		N	2.1	68.2	53.0	28.61
1	100 - Floral	105 - Fragrant	Sunny	None	SE	1	61	58.0	29.92
2	400 - Earthy	406 - Grassy	Sunny	None	N	2.1	68.2	53.0	28.61
3	100 - Floral	105 - Fragrant	Sunny	None	SE	1	61	58	29.92
0	400 - Earthy	406 - Grassy	Sunny	None		0	63	54.0	29.92
1	400 - Earthy	406 - Grassy	Sunny	None		0	63	54	29.92
			Sunny	None	N	2.5	72.4	44.7	28.77
-1	800 - Medicinal	805 - Chlorinou	Sunny		N	2.5	72.4	44.7	28.77
			Sunny	None	SW	2	65	51.0	29.92
			Sunny	None		0	68.3	49.9	28.73

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9828	2024-03-20 16:50:41	Val Verde Rd and Oakwood Ave		34.45026	-118.662528	Persistent	<2
9818	2024-03-20 16:54:30	Starbucks / store by Bruce sushi	No odor detected	34.451063	-118.625126		ND
9839	2024-03-20 16:56:47	Castaic Union School District Building	Slight smell of garbage.	34.441512	-118.626033	Persistent	<2
9805	2024-03-20 16:59:03	Bus Stop 14608 - Del Valle Rd & Silver St		34.448457	-118.655156	Persistent	<2
9824	2024-03-20 16:59:06	Bus Stop 14608 - Del Valle Rd & Silver St	Prairie grass smell	34.44857	-118.655172	Persistent	<2
9822	2024-03-20 17:02:38	Castaic Union School District Building		34.441644	-118.626105	Persistent	<2
9833	2024-03-20 17:06:38	Ave Penn and Witherspoon Pkwy	Smell of garbage.	34.449402	-118.638253	Persistent	2
9809	2024-03-20 17:07:03	Lot in front of Fire Station 143		34.454668	-118.634446		ND
9825	2024-03-20 17:07:38	Lot in front of Fire Station 143		34.454635	-118.634451	Persistent	<2
9823	2024-03-20 17:10:17	Ave Penn and Witherspoon Pkwy		34.449409	-118.638268	Persistent	2
9834	2024-03-20 17:14:23	Lot in front of Fire Station 143	Slight floral scent.	34.454696	-118.634575	Persistent	<2
9859	2024-03-20 17:17:00	Ave Penn and Witherspoon Pkwy		34.449512	-118.638171		7
9840	2024-03-20 17:18:38	Ave Penn and Witherspoon Pkwy	Strong smell of garbage	34.449536	-118.638195	Persistent	<2
9821	2024-03-20 17:19:12	Lot in front of Fire Station 143		34.45453	-118.634457	Persistent	<2
9836	2024-03-20 17:21:24	Bus Stop 14608 - Del Valle Rd & Silver St	Slight grassy smell.	34.449252	-118.654699	Persistent	<2
9857	2024-03-20 17:24:36	Castaic Union School District Building		34.441583	-118.626244		<2
9841	2024-03-20 17:24:49	Castaic Union School District Building	Intermittent garbage smell that grew stronger with wind	34.441558	-118.626319	Persistent	<2
9835	2024-03-20 17:26:05	Bus Stop 14608 - Del Valle Rd & Silver St		34.44932	-118.654751	Persistent	<2
9875	2024-03-20 17:32:24	Val Verde Rd and Oakwood Ave	Slight floral scent	34.450235	-118.661826	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
1	400 - Earthy	406 - Grassy	Sunny			0	68.3	49.9	28.73
			Sunny	None	SW	2	65	51	29.92
-1	500 - Offensive	506 - Garbage	Sunny	None	SW	1	65	51.0	29.92
0	400 - Earthy	412 - Peat-like	Sunny	None	SW	1.7	72	43.8	28.79
2	400 - Earthy	406 - Grassy	Sunny		SW	1.7	72	43.8	28.79
-1	500 - Offensive	506 - Garbage	Sunny	None	SW	1	65	51	29.92
-2	500 - Offensive	506 - Garbage	Sunny	None	S	2	65	51.0	29.92
			Sunny	None	NE	1.3	73	43.6	28.82
2	100 - Floral	106 - Herbal	Sunny		NE	1.3	73	43.6	28.82
-4	500 - Offensive	506 - Garbage	Sunny	None	S	2	65	51	29.92
1	100 - Floral	105 - Fragrant	Sunny	None	S	3	64	51.0	29.93
-8	500 - Offensive	506 - Garbage	Sunny	None	S	3.9	76.6	43.7	28.76
-4	500 - Offensive	506 - Garbage	Sunny		S	3.9	76.6	43.7	28.76
3	100 - Floral	105 - Fragrant	Sunny	None	S	3	64	51	29.93
1	400 - Earthy	406 - Grassy	Sunny	None	S	3	65	51.0	29.93
-1	400 - Earthy	406 - Grassy	Sunny	None	SE	3.3	71.4	48.5	28.94
-2	500 - Offensive	506 - Garbage	Sunny		SE	3.3	71.4	48.5	28.94
1	400 - Earthy	406 - Grassy	Sunny	None	S	3	65	51	29.93
1	100 - Floral	105 - Fragrant	Sunny	None	S	3	66	50.0	29.93



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9851	2024-03-20 17:36:01	Starbucks / store by Bruce sushi		34.451262	-118.625118	Persistent	<2
9845	2024-03-20 17:36:08	Val Verde Rd and Oakwood Ave		34.450277	-118.661768	Persistent	2
9843	2024-03-20 17:38:18	Starbucks / store by Bruce sushi		34.451204	-118.625028	Persistent	<2
9879	2024-03-20 17:43:14	San Martinez Rd and Verdale Ave	Smell of manure, location is next to a horse farm.	34.449697	-118.678594	Persistent	<2
9848	2024-03-20 17:44:03	San Martinez Rd and Verdale Ave		34.44961	-118.678597	Persistent	<2
9871	2024-03-20 17:45:52	Bus Stop at San Martinez and Val Verde Rd	Slight grass smell.	34.44702	-118.663883	Persistent	<2
9849	2024-03-20 17:49:19	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447032	-118.663853		ND
9858	2024-03-20 17:50:53	Park behind Live Oak Elementary school		34.450897	-118.621148		ND
9842	2024-03-20 17:51:47	Park behind Live Oak Elementary school		34.450962	-118.621089	Persistent	<2
9868	2024-03-20 17:55:31	Lincoln Ave and Taylor St	No odor detected.	34.442925	-118.655846		ND
9854	2024-03-20 17:57:37	Cambridge Ave across from house number 29862		34.459746	-118.626688		<2
9846	2024-03-20 17:57:51	Lincoln Ave and Taylor St	No odor detected	34.442911	-118.655813		ND
9844	2024-03-20 17:57:51	Cambridge Ave across from house number 29862	Garbage and marijuana smell	34.459724	-118.626708	Persistent	<2
9881	2024-03-20 18:00:03	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected.	34.438523	-118.657062		ND
9847	2024-03-20 18:02:42	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.43859	-118.657087		ND
9874	2024-03-20 18:04:52	LA County Fire Department Del Valle Regional Training Center	No odor detected.	34.432043	-118.65934		ND
9853	2024-03-20 18:09:41	Front of Castaic Elementary School		34.471414	-118.630204	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-3	500 - Offensive	506 - Garbage	Sunny	None	SW	5	67.3	46.7	28.9
2	100 - Floral	105 - Fragrant	Sunny	None	S	3	66	50	29.93
-2	500 - Offensive	506 - Garbage	Sunny		SW	5	67.3	46.7	28.9
-1	500 - Offensive	508 - Manure	Sunny	None	S	3	68	50.0	29.93
-2	500 - Offensive	508 - Manure	Sunny	None	S	3	68	50	29.93
1	400 - Earthy	406 - Grassy	Sunny	None	S	3	70	48.0	29.9
			Sunny	None	S	3	70	48	29.9
			Sunny	None	SW	1.1	75.5	43.1	28.97
-2	500 - Offensive	506 - Garbage	Sunny		SW	1.1	75.5	43.1	28.97
			Sunny	None	S	4	68	49.0	29.92
-5	500 - Offensive	506 - Garbage	Sunny	None	S	3.4	70.7	44.9	28.72
			Sunny	None	S	4	68	49	29.92
-2	500 - Offensive	506 - Garbage	Sunny		S	3.4	70.7	44.9	28.72
			Sunny	None	E	1	68	57.0	30.01
			Sunny	None	E	1	68	57	30.01
			Sunny	None	E	7	68	54.0	30.01
-3	500 - Offensive	506 - Garbage	Sunny	None	E	1.4	78.8	38.1	28.68

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9856	2024-03-20 18:10:02	Front of Castaic Elementary School	Faint smell of garbage	34.471388	-118.630142	Persistent	<2
9850	2024-03-20 18:11:55	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.431967	-118.659294		ND
9878	2024-03-20 18:14:31	Front of Castaic Elementary School	Slight floral scent.	34.471504	-118.630163	Persistent	<2
9852	2024-03-20 18:19:22	Ralph's parking lot facing Bank of America		34.456931	-118.617805	Persistent	<2
9855	2024-03-20 18:20:02	Ralph's parking lot facing Bank of America	Smells like car exhaust and cooked ground beef	34.456819	-118.617825	Persistent	<2
9860	2024-03-20 18:27:57	Front of Castaic Elementary School		34.471471	-118.6302	Persistent	<2
9873	2024-03-20 18:31:22	Ralph's parking lot facing Bank of America	No odor detected.	34.456828	-118.618157		ND
9863	2024-03-20 18:38:12	Ralph's parking lot facing Bank of America	No odor detected	34.45688	-118.618183		ND
9884	2024-03-20 18:52:37	LA County Fire Department Del Valle Regional Training Center		34.432196	-118.659448	Intermittent	<2
9892	2024-03-20 18:53:23	LA County Fire Department Del Valle Regional Training Center	Smells like dirt	34.432195	-118.659486	Persistent	<2
9887	2024-03-20 18:56:54	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438567	-118.657159		ND
9877	2024-03-20 18:57:21	Cambridge Ave across from house number 29862	Slight garbage scent	34.459557	-118.626746	Persistent	<2
9894	2024-03-20 18:57:31	Lincoln Ave near intersection with Chiquito Canyon Rd	Smells like dirt	34.438562	-118.65711	Persistent	<2
9861	2024-03-20 18:58:09	Cambridge Ave across from house number 29862		34.459509	-118.626745	Persistent	<2
9889	2024-03-20 19:01:05	Lincoln Ave and Taylor St		34.442921	-118.655818	Persistent	<2
9882	2024-03-20 19:01:11	Lincoln Ave and Taylor St		34.442978	-118.655803		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-2	500 - Offensive	506 - Garbage	Sunny		E	1.4	78.8	38.1	28.68
			Sunny	None	E	7	68	54	30.01
1	100 - Floral	105 - Fragrant	Sunny	None	N	4	70	43.0	29.92
0	300 - Vegetable	310 - Onion	Sunny	None	W	1.6	75.7	39.8	28.96
-2	700 - Chemical	702 - Car Exhaust	Sunny		W	1.6	75.7	39.8	28.96
3	100 - Floral	105 - Fragrant	Sunny	None	N	4	70	43	29.92
			Sunny	None	W	5	69	46.0	29.92
			Sunny	None	W	5	69	46	29.92
2	400 - Earthy	406 - Grassy	Sunny	None	SE	2.9	81.6	37.3	28.9
-1	400 - Earthy	412 - Peat-like	Sunny		SE	2.9	81.6	38.3	28.9
			Sunny	None	SW	4.5	74.4	53.2	28.87
-1	500 - Offensive	506 - Garbage	Sunny	None	S	7	70	41.0	29.92
-1	400 - Earthy	415 - Stale	Sunny		SW	4.5	74.4	53.2	28.87
-2	500 - Offensive	506 - Garbage	Sunny	None	S	7	70	41	29.92
-1	400 - Earthy	415 - Stale	Sunny		E	3.2	81.3	35.9	28.83
			Sunny	None	E	3.2	81.3	35.9	28.83

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9870	2024-03-20 19:03:28	Park behind Live Oak Elementary school	No odor detected.	34.451294	-118.621146		ND
9864	2024-03-20 19:04:17	Park behind Live Oak Elementary school	No odor detected	34.451349	-118.621136		ND
9869	2024-03-20 19:06:41	Starbucks / store by Bruce sushi	No odor detected.	34.451251	-118.625153		ND
9862	2024-03-20 19:09:47	Starbucks / store by Bruce sushi	No odors detected	34.451245	-118.625127		ND
9885	2024-03-20 19:11:12	San Martinez Rd and Verdale Ave		34.449577	-118.679106		ND
9890	2024-03-20 19:11:30	San Martinez Rd and Verdale Ave	Smells like dirt	34.449518	-118.679148	Persistent	<2
9872	2024-03-20 19:13:36	Lot in front of Fire Station 143	Strong floral scent, location near large patch of flowers	34.454552	-118.634537	Persistent	4
9867	2024-03-20 19:16:00	Lot in front of Fire Station 143		34.454516	-118.634496	Persistent	2
9880	2024-03-20 19:18:37	Ave Penn and Witherspoon Pkwy	Strong garbage scent.	34.449452	-118.638567	Persistent	<2
9891	2024-03-20 19:20:39	Bus Stop at San Martinez and Val Verde Rd		34.447128	-118.663901		ND
9883	2024-03-20 19:20:41	Bus Stop at San Martinez and Val Verde Rd		34.447144	-118.663864		ND
9865	2024-03-20 19:22:45	Ave Penn and Witherspoon Pkwy		34.449359	-118.638328	Persistent	2
9893	2024-03-20 19:23:20	Val Verde Rd and Oakwood Ave	Smells like grass and faintly of tacos	34.450245	-118.662534	Persistent	<2
9876	2024-03-20 19:25:11	Castaic Union School District Building	No odor detected.	34.441655	-118.626031		ND
9886	2024-03-20 19:25:59	Val Verde Rd and Oakwood Ave	Like grilled meat	34.450251	-118.662537	Intermittent	<2
9866	2024-03-20 19:27:54	Castaic Union School District Building	No odor detected	34.441606	-118.626027		ND
9888	2024-03-20 19:33:56	Bus Stop 14608 - Del Valle Rd & Silver St		34.448462	-118.655108	Intermittent	<2
9895	2024-03-20 19:33:57	Bus Stop 14608 - Del Valle Rd & Silver St		34.448505	-118.655187	Persistent	2
9946	2024-03-20 22:09:28	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449356	-118.654766		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny	None	S	8	69	45.0	29.92
			Sunny	None	S	8	69	45	29.92
			Sunny	None	W	7	70	45.0	29.92
			Sunny	None	W	7	70	45	29.92
			Sunny	None	S	1.3	83.1	35.5	28.6
-1	400 - Earthy	412 - Peat-like	Sunny		S	1.3	83.1	35.5	28.6
2	100 - Floral	105 - Fragrant	Sunny	None	W	4	69	47.0	29.91
3	100 - Floral	105 - Fragrant	Sunny	None	W	4	69	47	29.91
-2	500 - Offensive	506 - Garbage	Sunny	None	W	4	69	47.0	29.91
			Sunny		SW	2.9	77.4	48.3	28.75
			Sunny	None	SW	2.9	77.4	48.3	28.75
-3	500 - Offensive	506 - Garbage	Sunny	None	W	4	69	47	29.91
1	400 - Earthy	406 - Grassy	Sunny		S	2.3	80.7	35.6	28.71
			Sunny	None	S	7	71	39.0	29.91
2	700 - Chemical	704 - Coal	Sunny	None	S	2.3	80.7	35.6	28.71
			Sunny	None	S	7	71	39	29.91
2	400 - Earthy	406 - Grassy	Sunny	None	W	5.2	78.6	37.3	28.76
1	400 - Earthy	406 - Grassy	Sunny		W	5.2	78.6	37.3	28.76
			Partly Cloudy	None	SW	9	74	36.0	29.87

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9911	2024-03-20 22:17:49	Front of Castaic Elementary School		34.471462	-118.63018		ND
9896	2024-03-20 22:20:47	Front of Castaic Elementary School		34.471411	-118.630175		ND
9897	2024-03-20 22:27:31	Ralph's parking lot facing Bank of America	Smells mainly like fried chicken	34.456878	-118.617772	Persistent	<2
9908	2024-03-20 22:27:43	Ralph's parking lot facing Bank of America	"Fried chicken" smell	34.456869	-118.617748	Intermittent	<2
9904	2024-03-20 22:30:00	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449344	-118.654766		ND
9959	2024-03-20 22:33:37	Val Verde Rd and Oakwood Ave	No odor detected	34.45043	-118.661856		ND
9902	2024-03-20 22:37:08	Val Verde Rd and Oakwood Ave	No odor detected	34.450287	-118.661881		ND
9954	2024-03-20 22:39:01	San Martinez Rd and Verdale Ave	No odor detected	34.449613	-118.678638		ND
9914	2024-03-20 22:40:19	Cambridge Ave across from house number 29862		34.459538	-118.626721	Intermittent	<2
9898	2024-03-20 22:40:47	Cambridge Ave across from house number 29862		34.459481	-118.626776	Persistent	<2
9900	2024-03-20 22:44:20	San Martinez Rd and Verdale Ave	No odor detected	34.44965	-118.678636		ND
9948	2024-03-20 22:48:02	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446876	-118.663976	Persistent	2
9912	2024-03-20 22:49:08	Park behind Live Oak Elementary school		34.450616	-118.621084		ND
9899	2024-03-20 22:49:10	Park behind Live Oak Elementary school	Smelled like garbage	34.450693	-118.621185	Intermittent	<2
9901	2024-03-20 22:50:43	Bus Stop at San Martinez and Val Verde Rd		34.446896	-118.66399	Persistent	2
9958	2024-03-20 22:53:23	Lincoln Ave and Taylor St	No odor detected	34.442874	-118.655934		ND
9903	2024-03-20 22:55:42	Lincoln Ave and Taylor St	No odor detected	34.442905	-118.655925		ND
9909	2024-03-20 22:57:24	Ave Penn and Witherspoon Pkwy		34.449388	-118.638268		ND
9916	2024-03-20 22:57:48	Ave Penn and Witherspoon Pkwy		34.449378	-118.638298		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None	S	3.7	76.9	33.7	28.63
			Sunny		S	3.7	76.9	33.7	28.63
-1	300 - Vegetable	305 - Garlic	Sunny		S	2.4	81.1	31.1	28.88
5	300 - Vegetable	310 - Onion	Partly Cloudy	None	S	2.4	81.1	31.1	28.88
			Partly Cloudy	None	SW	9	74	36	29.87
			Partly Cloudy	None	SW	9	75	36.0	29.87
			Partly Cloudy	None	SW	9	75	36	29.87
			Sunny	None	SW	7	74	32.0	29.87
8	100 - Floral	111 - Rose-like	Partly Cloudy	None	S	7.5	80.3	40.4	28.67
1	100 - Floral	105 - Fragrant	Sunny		S	7.5	80.3	40.3	28.67
			Sunny	None	SW	7	74	32	29.87
1	400 - Earthy	406 - Grassy	Sunny	None	SW	5	77	32.0	29.87
			Partly Cloudy	None	S	2.2	84.2	31.7	28.91
-1	500 - Offensive	506 - Garbage	Sunny		S	2.2	84.2	31.7	28.91
1	400 - Earthy	406 - Grassy	Sunny	None	SW	5	77	32	29.87
			Sunny	None	SW	7	73	38.0	29.87
			Sunny	None	SW	7	73	38	29.87
			Partly Cloudy	None	S	3.1	82.6	36.4	28.7
			Sunny		S	3.1	82.6	36.4	28.7



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9951	2024-03-20 22:57:55	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438618	-118.657189		ND
9906	2024-03-20 23:00:05	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438515	-118.657207		ND
9910	2024-03-20 23:00:37	Castaic Union School District Building		34.44172	-118.626195	Intermittent	2
9956	2024-03-20 23:02:13	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432007	-118.659291		ND
9918	2024-03-20 23:05:26	Castaic Union School District Building	Garbage smell that smelled worse with wind	34.441612	-118.626241	Intermittent	<2
9905	2024-03-20 23:06:05	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432015	-118.659329		ND
9953	2024-03-20 23:08:18	Starbucks / store by Bruce sushi	No odor detected	34.451059	-118.624831		ND
9913	2024-03-20 23:13:55	Starbucks / store by Bruce sushi		34.451116	-118.625123	Intermittent	2
9917	2024-03-20 23:14:11	Starbucks / store by Bruce sushi		34.451088	-118.625181	Persistent	<2
9937	2024-03-20 23:21:55	Starbucks / store by Bruce sushi	No odor detected	34.451064	-118.625168		ND
9907	2024-03-20 23:22:51	Lot in front of Fire Station 143		34.454646	-118.634417		ND
9920	2024-03-20 23:23:12	Lot in front of Fire Station 143		34.454648	-118.634411		ND
9927	2024-03-20 23:36:44	LA County Fire Department Del Valle Regional Training Center		34.432254	-118.659453		ND
9919	2024-03-20 23:36:46	LA County Fire Department Del Valle Regional Training Center	Smells like dirt	34.432215	-118.659471	Persistent	<2
9926	2024-03-20 23:41:20	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438546	-118.657124		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny	None	W	1	74	39.0	29.95
			Sunny	None	W	1	74	39	29.95
-3	300 - Vegetable	310 - Onion	Partly Cloudy	None	W	3	84.2	32.6	28.88
			Partly Cloudy	None	W	5	74	38.0	29.95
-2	500 - Offensive	506 - Garbage	Sunny		W	3	84.2	32.6	28.88
			Partly Cloudy	None	W	5	74	38	29.95
			Partly Cloudy	None	SW	6	72	41.0	29.87
-6	500 - Offensive	503 - Burnt Rubber	Partly Cloudy	None	W	3.8	78.1	33.2	28.83
-3	500 - Offensive	503 - Burnt Rubber	Sunny		W	3.8	78.1	33.2	28.83
			Partly Cloudy	None	SW	6	72	41	29.87
			Partly Cloudy	None	W	2.7	82.7	32.8	28.75
			Sunny		W	2.7	82.7	32.8	28.75
			Partly Cloudy	None	W	2.1	80.3	40.5	28.84
0	400 - Earthy	412 - Peat-like	Sunny		W	2.1	80.3	40.5	28.84
			Partly Cloudy	None	W	4.7	76.7	43.4	28.83

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9915	2024-03-20 23:41:31	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438548	-118.657172		ND
9930	2024-03-20 23:43:23	Lincoln Ave and Taylor St		34.442989	-118.655783		ND
9924	2024-03-20 23:45:09	Lincoln Ave and Taylor St		34.44304	-118.65579		ND
9928	2024-03-20 23:53:18	San Martinez Rd and Verdale Ave		34.4496	-118.679142	Persistent	<2
9925	2024-03-20 23:53:31	San Martinez Rd and Verdale Ave	Smells faintly like farm animals	34.449545	-118.679066	Persistent	<2
9921	2024-03-20 23:58:34	Bus Stop at San Martinez and Val Verde Rd		34.447053	-118.664266	Persistent	<2
9931	2024-03-20 23:58:37	Bus Stop at San Martinez and Val Verde Rd		34.447037	-118.664199		ND
9955	2024-03-21 00:02:45	Front of Castaic Elementary School	No odor detected	34.471648	-118.630157		ND
9940	2024-03-21 00:03:38	Front of Castaic Elementary School	No odor detected	34.471657	-118.630175		ND
9938	2024-03-21 00:06:20	Ralph's parking lot facing Bank of America	No odor detected	34.457041	-118.618581		ND
9947	2024-03-21 00:06:21	Ralph's parking lot facing Bank of America	No odor detected	34.457037	-118.618476		ND
9932	2024-03-21 00:09:48	Val Verde Rd and Oakwood Ave	Sand-like smell	34.450319	-118.661921	Persistent	<2
9923	2024-03-21 00:10:41	Val Verde Rd and Oakwood Ave		34.450245	-118.661851	Persistent	<2
9922	2024-03-21 00:16:13	Bus Stop 14608 - Del Valle Rd & Silver St		34.448533	-118.655181	Intermittent	<2
9929	2024-03-21 00:16:18	Bus Stop 14608 - Del Valle Rd & Silver St	Smells like a campfire	34.448421	-118.655116	Persistent	<2
9945	2024-03-21 00:19:07	Cambridge Ave across from house number 29862	No odor detected	34.459475	-118.62667		ND
9934	2024-03-21 00:23:24	Lot in front of Fire Station 143		34.454646	-118.634439		ND
9939	2024-03-21 00:23:47	Cambridge Ave across from house number 29862	No odor detected	34.459512	-118.626759		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny		W	4.7	76.7	43.4	28.83
			Sunny		S	3	78.4	42.3	28.78
			Partly Cloudy	None	S	3	78.4	42.3	28.78
2	400 - Earthy	406 - Grassy	Partly Cloudy	None	W	4.7	78.6	38.6	28.56
-1	500 - Offensive	508 - Manure	Sunny		W	4.7	78.6	38.6	28.56
7	100 - Floral	111 - Rose-like	Partly Cloudy	None	S	4.4	73.8	36.5	28.7
			Sunny		S	4.4	73.8	36.5	28.7
			Sunny	None	SW	8	72	43.0	29.87
			Sunny	None	SW	8	72	43	29.87
			Sunny	None	SW	6	71	44	29.87
			Sunny	None	SW	6	71	44.0	29.87
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	SW	0.9	78.8	48.8	28.66
1	400 - Earthy	406 - Grassy	Sunny		W	0.9	78.8	48.8	28.66
3	400 - Earthy	406 - Grassy	Partly Cloudy	None	S	4.2	76.1	37.5	28.74
-1	400 - Earthy	402 - Burnt Wood	Sunny		S	4.2	76.1	37.5	28.74
			Sunny	None	W	5	71	44.0	29.88
			Sunny		S	1.5	79.2	32.4	28.76
			Sunny	None	W	5	71	44	29.88

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9964	2024-03-21 00:25:29	Lot in front of Fire Station 143		34.454662	-118.634398	Intermittent	<2
9950	2024-03-21 00:26:30	Park behind Live Oak Elementary school	Slight grass scent.	34.450555	-118.621009	Persistent	<2
9943	2024-03-21 00:31:22	Park behind Live Oak Elementary school		34.450638	-118.62111	Persistent	<2
9965	2024-03-21 00:31:28	Ave Penn and Witherspoon Pkwy		34.449463	-118.638203	Intermittent	<2
9936	2024-03-21 00:32:14	Ave Penn and Witherspoon Pkwy		34.449607	-118.638148		ND
9957	2024-03-21 00:33:45	Ave Penn and Witherspoon Pkwy	No odor detected.	34.449358	-118.638301		ND
9961	2024-03-21 00:36:40	Castaic Union School District Building		34.441768	-118.626143	Persistent	7
9935	2024-03-21 00:36:51	Castaic Union School District Building	Stronger with wind but always a noticeable garbage smell	34.441657	-118.626172	Persistent	2
9942	2024-03-21 00:38:33	Ave Penn and Witherspoon Pkwy	No odor detected	34.44937	-118.638309		ND
9952	2024-03-21 00:41:36	Castaic Union School District Building	Noticeable garbage odor	34.441512	-118.626028	Persistent	4
9962	2024-03-21 00:44:39	Starbucks / store by Bruce sushi		34.451072	-118.625168		<2
9944	2024-03-21 00:44:59	Castaic Union School District Building		34.441541	-118.626047	Persistent	7
9933	2024-03-21 00:45:26	Starbucks / store by Bruce sushi	Noticable smell of garbage	34.451085	-118.62516	Persistent	2
9949	2024-03-21 00:47:07	Lot in front of Fire Station 143	No odor detected	34.454552	-118.634853		ND
9941	2024-03-21 00:51:10	Lot in front of Fire Station 143		34.454511	-118.634672	Persistent	<2
9973	2024-03-21 00:54:40	Bus Stop 14608 - Del Valle Rd & Silver St	Slight grassy scent.	34.449301	-118.654742	Persistent	<2
9960	2024-03-21 00:57:06	Park behind Live Oak Elementary school		34.450584	-118.621121		ND
9970	2024-03-21 00:57:08	Bus Stop 14608 - Del Valle Rd & Silver St		34.449336	-118.654771	Persistent	<2
9979	2024-03-21 00:59:19	Val Verde Rd and Oakwood Ave	No odor detected	34.450349	-118.661921		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
4	100 - Floral	111 - Rose-like	Partly Cloudy	None	S	1.5	79.2	32.4	28.76
1	400 - Earthy	406 - Grassy	Sunny	None	SW	4	72	44.0	29.88
1	400 - Earthy	406 - Grassy	Sunny	None	SW	4	72	44	29.88
1	400 - Earthy	412 - Peat-like	Partly Cloudy	None	S	2.1	77	35.2	28.7
			Sunny		S	2.1	77	35.2	28.7
			Sunny	None	SW	8	71	44.0	29.88
-7	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	1.8	78.9	36.5	28.88
-4	500 - Offensive	506 - Garbage	Sunny		W	1.8	78.9	36.5	28.88
			Sunny	None	SW	8	71	44	29.88
-3	500 - Offensive	506 - Garbage	Sunny	None	W	9	71	44.0	29.88
-6	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	2	78.6	38.4	28.84
-5	500 - Offensive	506 - Garbage	Sunny	None	W	9	71	44	29.88
-2	500 - Offensive	506 - Garbage	Sunny		S	2	78.6	38.4	28.84
			Sunny	None	SW	3	70	43.0	29.88
4	100 - Floral	105 - Fragrant	Sunny	None	SW	3	70	43	29.88
1	400 - Earthy	406 - Grassy	Sunny	None	W	3	70	44.0	29.88
			Partly Cloudy	None	E	5	76.8	37.5	28.91
1	400 - Earthy	406 - Grassy	Sunny	None	W	3	70	44	29.88
			Sunny	None	W	3	72	44.0	29.88

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9983	2024-03-21 01:01:03	Park behind Live Oak Elementary school	Noticable smell of garbage	34.45047	-118.621087	Persistent	<2
9966	2024-03-21 01:02:33	Val Verde Rd and Oakwood Ave	No odor detected	34.450341	-118.661974		ND
9969	2024-03-21 01:04:32	San Martinez Rd and Verdale Ave	No odor detected.	34.449809	-118.678548		ND
9981	2024-03-21 01:08:08	Cambridge Ave across from house number 29862		34.45946	-118.626735		ND
9963	2024-03-21 01:08:13	Cambridge Ave across from house number 29862		34.459498	-118.626715		ND
9978	2024-03-21 01:09:11	San Martinez Rd and Verdale Ave	No odor	34.449608	-118.678634		ND
9971	2024-03-21 01:10:26	Bus Stop at San Martinez and Val Verde Rd	No odor detected.	34.447008	-118.663879		ND
9967	2024-03-21 01:13:40	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447024	-118.664069		ND
9972	2024-03-21 01:17:36	Lincoln Ave and Taylor St	No odor detected	34.442903	-118.655873		ND
9974	2024-03-21 01:19:36	Lincoln Ave and Taylor St	No odor detected	34.442962	-118.655841		ND
9985	2024-03-21 01:20:41	Front of Castaic Elementary School		34.471487	-118.6302	Intermittent	<2
9968	2024-03-21 01:21:10	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438595	-118.656955		ND
9980	2024-03-21 01:21:28	Front of Castaic Elementary School	Like an earthy good smell	34.471431	-118.630204	Persistent	<2
9977	2024-03-21 01:22:57	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438563	-118.657141		ND
9975	2024-03-21 01:24:34	LA County Fire Department Del Valle Regional Training Center	No odor detected.	34.432176	-118.659413		ND
9976	2024-03-21 01:27:39	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432023	-118.659418		ND
9984	2024-03-21 01:29:17	Ralph's parking lot facing Bank of America	French fry smell	34.456857	-118.617831	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-2	500 - Offensive	506 - Garbage	Sunny		E	5	76.8	37.5	28.91
			Sunny	None	W	3	72	44	29.88
			Sunny	None	W	3	69	44.0	29.88
			Sunny		E	2.4	73.8	37.6	28.68
			Partly Cloudy	None	S	2.4	73.8	37.6	28.68
			Sunny	None	W	3	69	44	29.88
			Sunny	None	W	3	69	44.0	29.88
			Sunny	None	W	3	69	44	29.88
			Sunny	None	SW	4	69	46.0	29.89
			Sunny	None	SW	4	69	46	29.89
1	300 - Vegetable	308 - Potato	Partly Cloudy	None	E	1.8	72.9	42.5	28.64
			Sunny	None	W	5	70	56.0	29.97
1	300 - Vegetable	308 - Potato	Sunny		E	1.8	72.9	42.5	28.64
			Sunny	None	W	5	70	56	29.97
			Sunny	None	SW	1	69	46.0	29.89
			Sunny	None	SW	1	69	46	29.97
4	300 - Vegetable	308 - Potato	Partly Cloudy	None	S	1.3	75.1	42.2	28.89



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9982	2024-03-21 01:29:45	Ralph's parking lot facing Bank of America	Smells like French fries	34.45689	-118.617751	Persistent	<2
9996	2024-03-21 14:04:09	Front of Castaic Elementary School		34.471487	-118.630192		ND
9987	2024-03-21 14:06:02	Front of Castaic Elementary School		34.471587	-118.63021	Persistent	<2
9998	2024-03-21 14:14:35	Ralph's parking lot facing Bank of America		34.456832	-118.617932		ND
10032	2024-03-21 14:14:42	LA County Fire Department Del Valle Regional Training Center	Garbage odor detected.	34.432031	-118.65935	Persistent	2
10005	2024-03-21 14:14:53	LA County Fire Department Del Valle Regional Training Center		34.432063	-118.659369	Persistent	2
9990	2024-03-21 14:15:15	Ralph's parking lot facing Bank of America		34.456853	-118.617969	Persistent	<2
10001	2024-03-21 14:19:42	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438483	-118.657028		ND
10029	2024-03-21 14:19:53	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.43847	-118.656979		ND
9993	2024-03-21 14:20:50	Cambridge Ave across from house number 29862		34.459443	-118.626768	Persistent	<2
9989	2024-03-21 14:21:45	Cambridge Ave across from house number 29862		34.45949	-118.626794	Persistent	<2
10034	2024-03-21 14:22:36	Lincoln Ave and Taylor St	No odor detected	34.442933	-118.655611		ND
10003	2024-03-21 14:23:50	Lincoln Ave and Taylor St	No odor detected	34.442934	-118.655816		ND
10026	2024-03-21 14:26:01	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446913	-118.663968		ND
9995	2024-03-21 14:30:53	Park behind Live Oak Elementary school		34.450959	-118.621183		2
9991	2024-03-21 14:31:29	Park behind Live Oak Elementary school		34.450975	-118.62121		ND
10002	2024-03-21 14:37:57	San Martinez Rd and Verdale Ave	No odor detected	34.44941944	-118.678757		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
2	300 - Vegetable	308 - Potato	Sunny		S	1.3	75.1	42.2	28.89
			Sunny	None		0	54.3	61.3	28.75
-1	700 - Chemical	716 - Plastic	Sunny			0	54.3	61.3	28.75
			Sunny	None	W	2	46.7	57.2	29.03
-2	500 - Offensive	506 - Garbage	Overcast	None		0	45	99.0	30.06
-4	500 - Offensive	506 - Garbage	Overcast	None		0	45	99	30.06
-2	700 - Chemical	702 - Car Exhaust	Sunny		W	2	46.7	57.2	29.03
			Overcast	None		0	45	99	30.06
			Overcast	None		0	45	99.0	30.06
5	100 - Floral	105 - Fragrant	Sunny	None		0	58.1	63.8	28.79
2	100 - Floral	105 - Fragrant	Sunny			0	58.1	63.8	29.79
			Hazy	None		0	43	93.0	29.97
			Hazy	None		0	43	93	29.97
			Hazy	None		0	43	93.0	29.97
2	400 - Earthy	413 - Pine	Sunny	None		0	56	58.5	29.04
			Sunny			0	56	58.5	29.04
			Hazy	None		0	43	93	29.97

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
9999	2024-03-21 14:40:38	Starbucks / store by Bruce sushi		34.451015	-118.625115		<2
9986	2024-03-21 14:41:37	Starbucks / store by Bruce sushi		34.451084	-118.625152	Persistent	<2
10006	2024-03-21 14:46:31	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447032	-118.66393		ND
10045	2024-03-21 14:46:35	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.44701	-118.663756		ND
9994	2024-03-21 14:50:21	Ave Penn and Witherspoon Pkwy	Like candy	34.449596	-118.638239	Persistent	<2
9992	2024-03-21 14:51:28	Ave Penn and Witherspoon Pkwy	Smells like pancakes and dirt	34.449527	-118.63821	Persistent	<2
9997	2024-03-21 14:56:38	Castaic Union School District Building		34.441682	-118.626332		ND
9988	2024-03-21 14:56:53	Castaic Union School District Building		34.441658	-118.626352		ND
10036	2024-03-21 15:01:24	Val Verde Rd and Oakwood Ave	No odor detected	34.450423	-118.661913		ND
10008	2024-03-21 15:02:18	Val Verde Rd and Oakwood Ave	No odor detected	34.450349	-118.661879		ND
10044	2024-03-21 15:03:31	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448787	-118.655104		ND
10000	2024-03-21 15:07:14	Lot in front of Fire Station 143		34.454705	-118.634453		ND
10004	2024-03-21 15:07:31	Lot in front of Fire Station 143		34.454633	-118.6344	Persistent	<2
10007	2024-03-21 15:09:27	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448877	-118.655141		ND
10009	2024-03-21 15:22:21	LA County Fire Department Del Valle Regional Training Center		34.432154	-118.659396	Persistent	<2
10011	2024-03-21 15:25:22	LA County Fire Department Del Valle Regional Training Center	Strong smell of garbage	34.432178	-118.65944	Persistent	7
10015	2024-03-21 15:29:47	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438546	-118.657115		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
3	700 - Chemical	703 - Cleaning Fluid	Sunny	None		0	59.9	51.8	28.97
-1	700 - Chemical	702 - Car Exhaust	Sunny			0	59.9	51.8	28.97
			Sunny	None		0	43	94	29.98
			Sunny	None		0	43	94.0	29.98
9	100 - Floral	110 - Perfumy	Sunny	None		0	61.7	54.7	28.82
1	200 - Fruity	212 - Sweet	Sunny			0	61.7	54.7	28.82
			Sunny	None		0	58.5	52.2	29.02
			Sunny			0	58.5	52.2	29.02
			Sunny	None		0	46	94.0	29.98
			Sunny	None		0	46	94	29.98
			Sunny	None		0	49	76.0	29.99
			Sunny	None		0	61.6	56.1	28.89
-1	400 - Earthy	411 - Musty	Sunny	None		0	61.6	56.1	28.89
			Sunny	None		0	49	76	29.99
-4	500 - Offensive	506 - Garbage	Sunny	None	W	2	56.9	69.8	28.99
-4	500 - Offensive	506 - Garbage	Sunny	None	W	2	56.9	69.8	28.99
			Sunny		N	1.7	54.3	64.4	28.97

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10010	2024-03-21 15:30:55	Lincoln Ave near intersection with Chiquita Canyon Rd	Mainly smelled of sand but an intermittent very faint garbage smell was present with the wind	34.438551	-118.657103	Persistent	<2
10040	2024-03-21 15:31:09	Ralph's parking lot facing Bank of America	No odor detected	34.457014	-118.618484		ND
10023	2024-03-21 15:33:22	Ralph's parking lot facing Bank of America	No odor detected	34.457096	-118.618543		ND
10037	2024-03-21 15:34:12	Front of Castaic Elementary School	Slight floral scent	34.471775	-118.630151	Persistent	<2
10028	2024-03-21 15:42:29	Front of Castaic Elementary School		34.471563	-118.6302	Persistent	<2
10013	2024-03-21 15:42:47	Lincoln Ave and Taylor St	Like fried fair food oily odor	34.442962	-118.655791	Intermittent	<2
10022	2024-03-21 15:43:55	Lincoln Ave and Taylor St		34.442931	-118.655738	Persistent	<2
10043	2024-03-21 15:44:10	Cambridge Ave across from house number 29862 San Martinez Rd and Verdale Ave	Slight floral scent	34.459472	-118.626728	Persistent	<2
10020	2024-03-21 15:52:07	Cambridge Ave across from house number 29862 San Martinez Rd and Verdale Ave		34.449571	-118.679176	Persistent	<2
10030	2024-03-21 15:52:33	Cambridge Ave across from house number 29862 San Martinez Rd and Verdale Ave		34.459491	-118.626767	Persistent	<2
10018	2024-03-21 15:53:47	Verdale Ave	Smells like farm animals	34.449543	-118.679035	Persistent	<2
10042	2024-03-21 15:54:28	Park behind Live Oak Elementary school	No odor detected	34.450585	-118.62117		ND
10033	2024-03-21 15:59:41	Park behind Live Oak Elementary school	No odor detected	34.450602	-118.621101		ND
10012	2024-03-21 16:00:55	Bus Stop at San Martinez and Val Verde Rd		34.447181	-118.663897		<2
10041	2024-03-21 16:01:26	Starbucks / store by Bruce sushi	No odor detected	34.45103	-118.624932		ND
10017	2024-03-21 16:01:32	Bus Stop at San Martinez and Val Verde Rd	Faint smell of chlorine	34.447151	-118.6639	Persistent	2
10021	2024-03-21 16:05:47	Val Verde Rd and Oakwood Ave		34.450275	-118.661871	Persistent	<2
10027	2024-03-21 16:05:51	Starbucks / store by Bruce sushi	No odor detected	34.451035	-118.625091		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	400 - Earthy	415 - Stale	Sunny	None	N	1.7	54.3	64.4	28.97
			Sunny	None	E	1	51	72.0	30
			Sunny	None	E	1	51	72	30
1	100 - Floral	105 - Fragrant	Sunny	None	E	1	52	68.0	30
3	100 - Floral	105 - Fragrant	Sunny	None	E	1	52	68	30
5	700 - Chemical	708 - Grease	Sunny	None			68.1	49.1	28.92
-1	400 - Earthy	415 - Stale	Sunny	None		0	68.1	49.1	28.92
1	100 - Floral	105 - Fragrant	Sunny	None	E	1	53	67.0	29.99
2	400 - Earthy	406 - Grassy	Sunny		S	1.4	65.8	56.8	28.69
2	100 - Floral	105 - Fragrant	Sunny	None	E	1	53	67	29.99
-1	500 - Offensive	508 - Manure	Sunny	None	S	1.4	65.8	56.8	28.69
			Sunny	None			54	66.0	29.99
			Sunny	None		0	54	66	29.99
2	400 - Earthy	406 - Grassy	Sunny			0	68.8	53.5	28.84
			Sunny	None	E	1	55	62.0	29.99
-1	800 - Medicinal	805 - Chlorinou	Sunny	None		0	68.8	53.5	28.84
1		406 - Grassy	Sunny	None		0	65.2	53.4	28.8
			Sunny	None	E	1	55	62	29.99

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10014	2024-03-21 16:06:20	Val Verde Rd and Oakwood Ave		34.450274	-118.661873	Persistent	<2
10019	2024-03-21 16:12:09	Bus Stop 14608 - Del Valle Rd & Silver St		34.448451	-118.655226	Persistent	<2
10016	2024-03-21 16:12:39	Bus Stop 14608 - Del Valle Rd & Silver St	Prairie grass smell	34.448431	-118.655208	Persistent	<2
10035	2024-03-21 16:19:13	Lot in front of Fire Station 143	Slight floral scent	34.454498	-118.634551	Persistent	<2
10024	2024-03-21 16:19:27	Lot in front of Fire Station 143		34.454526	-118.634537	Persistent	<2
10047	2024-03-21 16:19:29	Lot in front of Fire Station 143		34.454618	-118.634409	Persistent	<2
10053	2024-03-21 16:19:32	Lot in front of Fire Station 143		34.454744	-118.634632		<2
10052	2024-03-21 16:22:06	Front of Castaic Elementary School		34.471583	-118.630158	Persistent	<2
10046	2024-03-21 16:22:38	Ave Penn and Witherspoon Pkwy	Strong pleasant sweet smell, a mobile detail was cleaning a car at the end of the street.	34.449385	-118.638219	Persistent	4
10038	2024-03-21 16:27:19	Ave Penn and Witherspoon Pkwy	There was a detailing vehicle in the area cleaning vehicles	34.449365	-118.638332	Persistent	2
10025	2024-03-21 16:30:43	Castaic Union School District Building	No odor detected	34.441882	-118.62602		ND
10050	2024-03-21 16:30:49	Front of Castaic Elementary School		34.471579	-118.630235		ND
10031	2024-03-21 16:34:27	Castaic Union School District Building	No odor detected	34.441645	-118.626055		ND
10051	2024-03-21 16:37:39	Ralph's parking lot facing Bank of America		34.456911	-118.617806		ND
10048	2024-03-21 16:38:26	Ralph's parking lot facing Bank of America		34.456921	-118.617817	Persistent	<2
10058	2024-03-21 16:44:00	Cambridge Ave across from house number 29862		34.459489	-118.626756	Intermittent	<2
10049	2024-03-21 16:44:56	Cambridge Ave across from house number 29862		34.459529	-118.626795	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
1	100 - Floral	106 - Herbal	Sunny	None		0	65.2	53.4	28.8
8	200 - Fruity	203 - Citrus	Sunny	None		0	69.7	53.7	28.86
3	400 - Earthy	406 - Grassy	Sunny	None		0	69.7	53.7	28.86
1	100 - Floral	105 - Fragrant	Sunny	None			57	58.0	30
3	100 - Floral	105 - Fragrant	Sunny	None		0	57	58	30
1	100 - Floral	106 - Herbal	Sunny			0	66	44.7	28.9
1	400 - Earthy	406 - Grassy	Sunny	None		0	66	44.7	28.9
1	400 - Earthy	406 - Grassy	Sunny	None	E	0.9	67.9	47.5	28.7
3	200 - Fruity	212 - Sweet	Sunny	None	E	1	58	56.0	30
4	200 - Fruity	212 - Sweet	Sunny	None	E	1	58	56	30
			Sunny	None	SE	1	59	62.0	30.09
			Sunny		E	0.9	67.9	47.5	28.7
			Sunny	None	SE	1	59	62	30.09
			Sunny	None		0	67.4	66.8	29.03
-2	700 - Chemical	702 - Car Exhaust	Sunny			0	66.8	47.5	29.03
5	100 - Floral	105 - Fragrant	Sunny	None		0	69.4	47.7	28.81
3	100 - Floral	105 - Fragrant	Sunny			0	69.4	47.7	28.81



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10064	2024-03-21 16:46:27	LA County Fire Department Del Valle Regional Training Center	Strong persistent garbage odor.	34.43180147	-118.659036	Persistent	30
10059	2024-03-21 16:50:14	Park behind Live Oak Elementary school	Contractor vehicle present	34.450968	-118.621183	Intermittent	2
10060	2024-03-21 16:50:47	Park behind Live Oak Elementary school	Smells like gasoline	34.451024	-118.621242	Persistent	2
10056	2024-03-21 16:58:46	Starbucks / store by Bruce sushi		34.451036	-118.625133	Persistent	2
10057	2024-03-21 17:00:01	Starbucks / store by Bruce sushi		34.451111	-118.625153	Persistent	<2
10070	2024-03-21 17:02:08	LA County Fire Department Del Valle Regional Training Center	Very strong odor	34.432033	-118.65934	Persistent	30
10065	2024-03-21 17:04:21	Lincoln Ave near intersection with Chiquita Canyon Rd	Garbage odor detected.	34.438509	-118.657038	Persistent	7
10071	2024-03-21 17:06:21	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438496	-118.657034	Persistent	7
10068	2024-03-21 17:09:12	Lincoln Ave and Taylor St	Garbage odor detected.	34.44291	-118.655796	Persistent	<2
10072	2024-03-21 17:10:35	Lincoln Ave and Taylor St		34.442952	-118.655813	Persistent	<2
10067	2024-03-21 17:12:56	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447022	-118.663875		ND
10073	2024-03-21 17:15:25	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446964	-118.663906		ND
10055	2024-03-21 17:15:51	Ave Penn and Witherspoon Pkwy		34.44955	-118.638154	Intermittent	<2
10054	2024-03-21 17:16:25	Ave Penn and Witherspoon Pkwy	Smells like a construction site	34.449532	-118.638131	Persistent	<2
10076	2024-03-21 17:21:39	San Martinez Rd and Verdale Ave		34.44964	-118.678598	Persistent	2
10061	2024-03-21 17:21:41	Castaic Union School District Building		34.441575	-118.626263	Intermittent	<2
10069	2024-03-21 17:22:15	San Martinez Rd and Verdale Ave	Garbage odor detected	34.449615	-118.678592	Persistent	2
10062	2024-03-21 17:24:57	Castaic Union School District Building	Smelled like cleaning supplies and gasoline	34.441579	-118.626384	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-4	500 - Offensive	506 - Garbage	Sunny	None			63	47.0	30.01
-3	700 - Chemical	702 - Car Exhaust	Sunny	None	W	1.3	68.4	44.4	29.09
-1	700 - Chemical	707 - Gasoline	Sunny		W	1.3	68.4	44.4	29.09
1	400 - Earthy	412 - Peat-like	Sunny	None		0	71.1	37.8	28.98
-1	700 - Chemical	702 - Car Exhaust	Sunny			0	71.1	37.8	28.98
-5	500 - Offensive	506 - Garbage	Sunny	None		0	63	47	30.01
-2	500 - Offensive	506 - Garbage	Sunny	None	SE	2	63	49.0	30.09
-3	500 - Offensive	506 - Garbage	Sunny	None	SE	2	63	49	30.09
-2	500 - Offensive	506 - Garbage	Sunny	None	W	1	63	46.0	30
-3	500 - Offensive	506 - Garbage	Sunny	None	W	1	63	46	30
			Sunny	None	W	1	64	46.0	30
			Sunny	None	W	1	64	46	30
6	100 - Floral	105 - Fragrant	Sunny	None		0	78.4	31.7	28.85
-2	700 - Chemical	706 - Diesel	Sunny			0	78.4	31.7	28.85
-3	500 - Offensive	506 - Garbage	Sunny	None	W	1	64	46	30
3	700 - Chemical	703 - Cleaning Fluid	Sunny	None	SE	0.9	79.7	36.6	29.02
-2	500 - Offensive	506 - Garbage	Sunny	None	W	1	64	46.0	30
1	700 - Chemical	703 - Cleaning Fluid	Sunny		SE	0.9	79.7	36.6	29.02

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10066	2024-03-21 17:29:48	Val Verde Rd and Oakwood Ave	Garbage odor detected	34.450348	-118.661907	Persistent	7
10074	2024-03-21 17:30:54	Val Verde Rd and Oakwood Ave		34.450364	-118.661875	Persistent	7
10063	2024-03-21 17:34:37	Bus Stop 14608 - Del Valle Rd & Silver St		34.448576	-118.655267	Persistent	7
10075	2024-03-21 17:35:13	Bus Stop 14608 - Del Valle Rd & Silver St	Very strong odor detected	34.448556	-118.655175	Persistent	15
10078	2024-03-21 17:41:06	San Martinez Rd and Verdale Ave	Smells like farm animals, not necessarily manure	34.449591	-118.679127		<2
10077	2024-03-21 17:41:14	San Martinez Rd and Verdale Ave	Smells like farm animals	34.449579	-118.678998	Persistent	<2
10095	2024-03-21 20:06:15	Front of Castaic Elementary School	No odor detected	34.471675	-118.630173		ND
10088	2024-03-21 20:06:23	Front of Castaic Elementary School	No odor detected	34.471671	-118.630215		ND
10087	2024-03-21 20:09:01	Ralph's parking lot facing Bank of America	Faint garbage smell.	34.456698	-118.618057	Persistent	<2
10098	2024-03-21 20:14:12	Ralph's parking lot facing Bank of America	Faint garbage smell	34.456637	-118.617987	Persistent	<2
10093	2024-03-21 20:16:09	Cambridge Ave across from house number 29862	No odor detected	34.459991	-118.626604		ND
10084	2024-03-21 20:17:15	LA County Fire Department Del Valle Regional Training Center		34.432251	-118.659457		ND
10103	2024-03-21 20:20:00	LA County Fire Department Del Valle Regional Training Center	Smells like dirt	34.432264	-118.659425	Persistent	<2
10101	2024-03-21 20:22:41	Cambridge Ave across from house number 29862	No odor detected	34.459495	-118.626771		ND
10082	2024-03-21 20:24:38	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438579	-118.657123	Persistent	<2
10104	2024-03-21 20:25:39	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438623	-118.657039		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-3	500 - Offensive	506 - Garbage	Sunny	None	W	1	63	46.0	29.93
-3	500 - Offensive	506 - Garbage	Sunny	None	W	1	63	46	29.93
-3	500 - Offensive	506 - Garbage	Sunny	None	SW	1	64	42.0	30
-5	500 - Offensive	506 - Garbage	Sunny	None	SW	1	64	42	30
-4	500 - Offensive	508 - Manure	Sunny	None	E	1.5	80.3	33.4	29.69
-1	500 - Offensive	508 - Manure	Sunny		E	1.5	80.3	33.4	29.69
			Sunny	None	SW	9	70	45.0	29.97
			Sunny	None	SW	9	70	45	29.97
-1	500 - Offensive	506 - Garbage	Sunny	None	SW	7	70	46.0	29.97
-2	500 - Offensive	506 - Garbage	Sunny	None	SW	7	70	46	29.97
			Sunny	None	SW	9	70	50.0	29.97
			Sunny	None	SE	2.3	74.4	44.4	28.96
-1	400 - Earthy	412 - Peat-like	Sunny		SE	2.3	74.4	44.4	28.96
			Sunny	None	SW	9	70	50	29.97
1	400 - Earthy	406 - Grassy	Sunny	None	SW	6.3	73.5	46.4	28.94
			Sunny		SW	6.3	73.5	46.4	28.94

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10094	2024-03-21 20:28:42	Park behind Live Oak Elementary school		34.450371	-118.6211	Persistent	<2
10081	2024-03-21 20:28:51	Lincoln Ave and Taylor St		34.442832	-118.655852		ND
10092	2024-03-21 20:29:54	Park behind Live Oak Elementary school	Smell of laundry detergent	34.450403	-118.621081	Persistent	<2
10107	2024-03-21 20:29:54	Lincoln Ave and Taylor St		34.44298	-118.655804		ND
10105	2024-03-21 20:34:12	Bus Stop at San Martinez and Val Verde Rd	Chlorine smell	34.447149	-118.663849	Persistent	<2
10079	2024-03-21 20:34:29	Bus Stop at San Martinez and Val Verde Rd		34.447204	-118.663859		ND
10096	2024-03-21 20:35:57	Starbucks / store by Bruce sushi		34.451035	-118.625065	Persistent	<2
10090	2024-03-21 20:35:59	Starbucks / store by Bruce sushi	Garbage scent detected.	34.450988	-118.625048	Persistent	<2
10083	2024-03-21 20:39:32	Val Verde Rd and Oakwood Ave		34.450156	-118.662569	Intermittent	<2
10102	2024-03-21 20:40:37	Val Verde Rd and Oakwood Ave		34.450238	-118.662524	Intermittent	<2
10097	2024-03-21 20:41:03	Lot in front of Fire Station 143		34.45473131	-118.6342742	Persistent	<2
10086	2024-03-21 20:42:24	Lot in front of Fire Station 143	Slight floral scent	34.454523	-118.63449	Persistent	<2
10111	2024-03-21 20:46:22	Bus Stop 14608 - Del Valle Rd & Silver St	Prairie grass smell	34.448502	-118.655189	Persistent	<2
10080	2024-03-21 20:46:26	Bus Stop 14608 - Del Valle Rd & Silver St		34.448205	-118.655104		ND
10119	2024-03-21 20:48:58	Lot in front of Fire Station 143	Like dryer sheets	34.454714	-118.63448	Persistent	<2
10085	2024-03-21 20:49:31	Ave Penn and Witherspoon Pkwy	Garbage odor detected, faint.	34.449348	-118.638327	Persistent	<2
10100	2024-03-21 20:49:49	Ave Penn and Witherspoon Pkwy	Slight odor in area	34.449382	-118.63838	Persistent	<2
10091	2024-03-21 20:52:12	Castaic Union School District Building	Slight garbage scent.	34.441468	-118.626074	Persistent	<2
10099	2024-03-21 20:55:30	Castaic Union School District Building		34.441495	-118.626085	Persistent	<2
10106	2024-03-21 20:55:51	Lot in front of Fire Station 143		34.454628	-118.634416		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
3	100 - Floral	110 - Perfumy	Sunny	None	SW	9	69	51	29.97
			Sunny	None	S	7.1	76.2	41.2	28.89
2	100 - Floral	110 - Perfumy	Sunny	None	SW	9	69	51.0	29.97
			Sunny		S	7.1	76.2	41.2	28.89
-1	800 - Medicinal	805 - Chlorinou	Sunny		W	4.7	72.4	48.5	28.81
			Sunny	None	W	4.7	72.4	48.5	28.81
-1	500 - Offensive	506 - Garbage	Sunny	None	SW	8	69	51	29.96
-1	500 - Offensive	506 - Garbage	Sunny	None	SW	8	69	51.0	29.96
2	400 - Earthy	417 - Woody	Sunny	None	SW	4.4	76.3	49.4	28.77
1	100 - Floral	110 - Perfumy	Sunny		SW	4.4	76.3	49.4	28.77
2	100 - Floral	105 - Fragrant	Sunny	None	SW	11	69	51	29.96
1	100 - Floral	105 - Fragrant	Sunny	None	SW	11	69	51.0	29.96
2	400 - Earthy	406 - Grassy	Sunny		S	7.8	73.1	44.2	28.82
			Sunny	None	S	7.8	73.1	44.2	28.82
3	700 - Chemical	703 - Cleaning Fluid	Sunny	None	SW	6.7	78.5	38.3	28.87
-1	500 - Offensive	506 - Garbage	Sunny	None	SW	11	69	52.0	29.97
-1	500 - Offensive	506 - Garbage	Sunny	None	SW	11	69	52	29.97
-1	500 - Offensive	506 - Garbage	Sunny	None	SW	6	70	47.0	29.96
-2	500 - Offensive	506 - Garbage	Sunny	None	SW	6	70	47	29.96
			Sunny		SW	6.7	78.5	38.3	28.87

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10120	2024-03-21 21:04:35	Cambridge Ave across from house number 29862		34.459564	-118.626728	Intermittent	<2
10112	2024-03-21 21:05:13	Cambridge Ave across from house number 29862		34.459543	-118.626797	Persistent	<2
10117	2024-03-21 21:13:47	Park behind Live Oak Elementary school	Air sampled approximately 150 feet north east of the original sampling location because concurrent with school pick up	34.452855	-118.619536	Intermittent	2
10108	2024-03-21 21:14:15	Park behind Live Oak Elementary school	200 ft north east of site 11	34.452869	-118.61958	Persistent	2
10115	2024-03-21 21:25:25	Front of Castaic Elementary School	Approximately 150 feet south of usual sampling location because concurrent west school release. Multiple vehicles running within 20 feet of sample location.	34.47146062	-118.6304782	Persistent	<2
10110	2024-03-21 21:25:42	Front of Castaic Elementary School	150 ft south of site 15	34.470266	-118.63001		ND
10127	2024-03-21 21:29:55	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432042	-118.659334		ND
10156	2024-03-21 21:29:57	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432002	-118.659272		ND
10153	2024-03-21 21:32:14	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438478	-118.65695		ND
10116	2024-03-21 21:34:41	Ralph's parking lot facing Bank of America		34.456822	-118.617817	Intermittent	<2
10124	2024-03-21 21:35:55	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438521	-118.657027		ND
10113	2024-03-21 21:37:00	Ralph's parking lot facing Bank of America	Smells like fried chicken and car exhaust	34.456703	-118.617915	Persistent	<2
10152	2024-03-21 21:40:18	Lincoln Ave and Taylor St	No odor detected	34.443129	-118.655885		ND
10122	2024-03-21 21:41:45	Lincoln Ave and Taylor St	No odor detected	34.443003	-118.655837		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
8	100 - Floral	111 - Rose-like	Sunny	None	S	9.6	72.2	44.4	28.77
2	100 - Floral	105 - Fragrant	Sunny		S	9.6	72.2	44.4	28.77
-3	300 - Vegetable	310 - Onion	Sunny	None	S	5.5	74.2	42.3	29
-3	500 - Offensive	506 - Garbage	Sunny		SW	5.5	74.2	42.3	29
-3	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None	E	6.5	74.4	38.9	28.7
			Sunny		E	6.5	74.4	38.9	28.7
			Sunny	None	SW	13	70	47	29.96
			Sunny	None	SW	13	70	47.0	29.96
			Sunny	None	NW	8	73	37.0	30.04
7	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	5.7	76.8	43.6	28.97
			Sunny	None	NW	8	73	37	30.04
2	300 - Vegetable	310 - Onion	Sunny		SW	5.7	76.8	43.6	28.97
			Partly Cloudy	None	W	6	70	46.0	29.96
			Partly Cloudy	None	W	6	70	46	29.96



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10159	2024-03-21 21:43:30	San Martinez Rd and Verdale Ave	No odor detected	34.450507	-118.681884		ND
10118	2024-03-21 21:45:24	Ave Penn and Witherspoon Pkwy		34.449541	-118.638186		ND
10109	2024-03-21 21:47:25	Ave Penn and Witherspoon Pkwy		34.449552	-118.638183		ND
10114	2024-03-21 21:52:21	Castaic Union School District Building		34.441597	-118.626244	Intermittent	<2
10137	2024-03-21 21:52:49	Castaic Union School District Building	Noticable garbage smell the smell varied intensity with wind	34.441589	-118.626259	Persistent	2
10125	2024-03-21 21:54:37	San Martinez Rd and Verdale Ave	No odor detected	34.449722	-118.678635		ND
10149	2024-03-21 21:56:51	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447006	-118.664281		ND
10123	2024-03-21 22:01:12	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446934	-118.663983		ND
10151	2024-03-21 22:04:42	Val Verde Rd and Oakwood Ave	No odor detected	34.450328	-118.661875		ND
10126	2024-03-21 22:05:31	Val Verde Rd and Oakwood Ave	No odor detected	34.450403	-118.661865		ND
10161	2024-03-21 22:08:10	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448372	-118.655237		ND
10128	2024-03-21 22:09:22	Starbucks / store by Bruce sushi		34.451121	-118.62513	Persistent	<2
10142	2024-03-21 22:11:26	Starbucks / store by Bruce sushi		34.451062	-118.625174	Persistent	<2
10121	2024-03-21 22:16:03	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448579	-118.655188		ND
10150	2024-03-21 22:30:36	Starbucks / store by Bruce sushi		34.451118	-118.625123	Persistent	<2
10164	2024-03-21 22:30:51	Starbucks / store by Bruce sushi	Slight fruity scent, like laundry detergent	34.451031	-118.625192	Persistent	<2
10129	2024-03-21 22:31:56	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438554	-118.65705		ND
10143	2024-03-21 22:32:46	LA County Fire Department Del Valle Regional Training Center		34.432245	-118.659454		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None	W	7	70	45.0	29.96
			Partly Cloudy	None	SW	6.8	77.8	38.0	28.79
			Sunny		SW	6.8	77.8	38.0	28.79
4	100 - Floral	101 - Almond	Partly Cloudy	None	SW	3.4	78.1	40.4	28.97
-3	500 - Offensive	506 - Garbage	Sunny		SW	3.4	78.1	40.4	28.97
			Partly Cloudy	None	W	7	70	45	29.96
			Partly Cloudy	None	W	7	72	45.0	29.96
			Partly Cloudy	None	W	7	72	45	29.96
			Partly Cloudy	None	W	7	72	45.0	29.96
			Partly Cloudy	None	W	7	72	45	29.96
			Partly Cloudy	None	SW	12	70	44.0	29.96
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	3.1	81.5	33.6	28.92
-1	700 - Chemical	702 - Car Exhaust	Sunny		S	3.1	81.5	33.6	28.92
			Partly Cloudy	None	SW	12	70	44	29.96
2	200 - Fruity	212 - Sweet	Partly Cloudy	None	SW	7	70	43	29.96
1	200 - Fruity	212 - Sweet	Partly Cloudy	None	SW	7	70	43.0	29.96
			Partly Cloudy	None	NW	4.1	79.8	43.3	28.92
			Sunny		NW	4.1	79.8	43.3	28.92

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10166	2024-03-21 22:36:33	Lot in front of Fire Station 143		34.454578	-118.634776	Persistent	<2
10154	2024-03-21 22:36:54	Lot in front of Fire Station 143	Slight floral scent	34.454532	-118.634795	Persistent	<2
10131	2024-03-21 22:38:38	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438591	-118.657058		<2
10139	2024-03-21 22:39:54	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438542	-118.657193		ND
10136	2024-03-21 22:42:46	Lincoln Ave and Taylor St	Smells like dirt	34.442994	-118.655806	Persistent	<2
10132	2024-03-21 22:42:52	Lincoln Ave and Taylor St		34.442626	-118.655668	Persistent	<2
10146	2024-03-21 22:43:31	Ave Penn and Witherspoon Pkwy	No odor detected	34.449307	-118.638374		ND
10167	2024-03-21 22:44:04	Ave Penn and Witherspoon Pkwy	No odor detected	34.449419	-118.63832		ND
10157	2024-03-21 22:46:27	Castaic Union School District Building		34.44152	-118.625969	Persistent	<2
10168	2024-03-21 22:55:31	Castaic Union School District Building		34.441582	-118.625999	Persistent	<2
10148	2024-03-21 22:57:19	Cambridge Ave across from house number 29862	No odor detected	34.459693	-118.626652		ND
10130	2024-03-21 23:00:07	San Martinez Rd and Verdale Ave		34.449609	-118.679085		ND
10140	2024-03-21 23:00:44	San Martinez Rd and Verdale Ave	Smells faintly like farm animals	34.449585	-118.679092	Persistent	<2
10133	2024-03-21 23:05:27	Bus Stop at San Martinez and Val Verde Rd		34.447171	-118.663859		ND
10138	2024-03-21 23:05:37	Bus Stop at San Martinez and Val Verde Rd		34.447126	-118.663953		ND
10135	2024-03-21 23:09:43	Val Verde Rd and Oakwood Ave	Like barbecued meat	34.450271	-118.662533		<2
10145	2024-03-21 23:09:43	Val Verde Rd and Oakwood Ave	Smells like tacos	34.450289	-118.66253	Persistent	<2
10144	2024-03-21 23:16:54	Bus Stop 14608 - Del Valle Rd & Silver St		34.448481	-118.655234	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
3	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	4	70	44	29.95
1	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	4	70	44.0	29.95
3	400 - Earthy	412 - Peat-like	Partly Cloudy	None	S	8.5	76.7	46.4	28.91
-1	400 - Earthy	412 - Peat-like	Sunny		S	8.5	76.7	46.4	28.91
-1	400 - Earthy	412 - Peat-like	Sunny		SW	2.6	75.7	42.8	28.87
4	400 - Earthy	406 - Grassy	Partly Cloudy	None	SW	2.6	75.7	42.8	28.87
			Partly Cloudy	None	W	4	72	41.0	29.96
			Partly Cloudy	None	W	4	72	41	29.96
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	8	70	43.0	29.95
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	8	70	43	29.95
			Partly Cloudy	None	SW	11	69	47.0	29.96
			Partly Cloudy	None	NW	3.7	79.1	39.4	28.64
-2	500 - Offensive	508 - Manure	Sunny		NW	3.7	79.1	39.4	28.64
			Partly Cloudy	None	SW	1.7	82.2	35.9	28.79
			Sunny		NW	1.7	82.2	35.9	28.79
3	700 - Chemical	704 - Coal	Partly Cloudy	None	E	1.1	76.5	45.2	28.75
2	300 - Vegetable	310 - Onion	Sunny		E	1.1	76.5	45.2	28.75
2	400 - Earthy	406 - Grassy	Sunny		S	4.1	74.1	45.6	28.8

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10134	2024-03-21 23:17:15	Bus Stop 14608 - Del Valle Rd & Silver St		34.448499	-118.655204	Persistent	<2
10162	2024-03-21 23:19:13	Cambridge Ave across from house number 29862	No odor detected	34.459547	-118.626763		ND
10155	2024-03-21 23:21:10	Park behind Live Oak Elementary school		34.450594	-118.621074	Persistent	<2
10163	2024-03-21 23:24:54	Park behind Live Oak Elementary school		34.450622	-118.621076	Persistent	<2
10158	2024-03-21 23:26:44	Front of Castaic Elementary School	Slight floral scent	34.472065	-118.629883	Persistent	<2
10141	2024-03-21 23:30:19	Lot in front of Fire Station 143		34.454687	-118.634455		ND
10160	2024-03-21 23:32:25	Front of Castaic Elementary School		34.471525	-118.630189	Persistent	<2
10147	2024-03-21 23:34:08	Ralph's parking lot facing Bank of America	No odor detected	34.457015	-118.618287		ND
10165	2024-03-21 23:38:26	Ralph's parking lot facing Bank of America	No odor detected	34.457016	-118.618259		ND
10172	2024-03-22 14:05:09	LA County Fire Department Del Valle Regional Training Center		34.432253	-118.659507	Persistent	<2
10181	2024-03-22 14:06:14	LA County Fire Department Del Valle Regional Training Center		34.432339	-118.659507	Persistent	<2
10194	2024-03-22 14:12:40	Front of Castaic Elementary School	Slight floral scent	34.471688	-118.630267	Persistent	<2
10183	2024-03-22 14:12:56	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438584	-118.657177	Persistent	<2
10171	2024-03-22 14:13:54	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438511	-118.657203		ND
10180	2024-03-22 14:19:07	Lincoln Ave and Taylor St		34.442947	-118.655815	Intermittent	<2
10170	2024-03-22 14:19:15	Lincoln Ave and Taylor St	Smells like raw biscuit dough	34.442962	-118.65585	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
3	400 - Earthy	406 - Grassy	Partly Cloudy	None	S	4.1	74.1	55.6	28.8
			Partly Cloudy	None	SW	11	69	47	29.96
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	2	68	48.0	29.96
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	2	68	48	29.96
1	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	9	69	47.0	29.95
			Sunny		SW	4.8	75.4	40.6	28.84
2	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	9	69	47	29.95
			Partly Cloudy	None	SW	5	69	48.0	29.95
			Partly Cloudy	None	SW	5	69	48	29.95
2	400 - Earthy	417 - Woody	Partly Cloudy			0	55.7	41.8	28.99
0	400 - Earthy	406 - Grassy	Partly Cloudy	None		0	55.7	41.8	28.98
1	100 - Floral	105 - Fragrant	Partly Cloudy	None			44	98.0	29.99
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	N	2.2	55.7	71.5	28.97
			Partly Cloudy		N	2.2	55.7	71.5	28.97
1	400 - Earthy	412 - Peat-like	Partly Cloudy	None	N	1.9	50.2	64.9	28.92
2	200 - Fruity	212 - Sweet	Partly Cloudy		N	1.9	50.2	64.9	28.92

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10184	2024-03-22 14:25:47	Front of Castaic Elementary School		34.471543	-118.630202		<2
10198	2024-03-22 14:28:39	Ralph's parking lot facing Bank of America	No odor detected	34.456785	-118.618057		ND
10182	2024-03-22 14:33:49	San Martinez Rd and Verdale Ave		34.44957	-118.679145		ND
10176	2024-03-22 14:35:00	San Martinez Rd and Verdale Ave		34.449527	-118.679038		ND
10185	2024-03-22 14:35:03	Ralph's parking lot facing Bank of America	No odor detected	34.456802	-118.618037		ND
10193	2024-03-22 14:39:51	Cambridge Ave across from house number 29862	Slight floral scent	34.459862	-118.62636	Persistent	<2
10178	2024-03-22 14:41:56	Bus Stop at San Martinez and Val Verde Rd		34.447131	-118.663881	Persistent	<2
10175	2024-03-22 14:42:14	Bus Stop at San Martinez and Val Verde Rd	Smells like a campfire	34.447131	-118.663929	Persistent	<2
10186	2024-03-22 14:43:52	Cambridge Ave across from house number 29862		34.459478	-118.626753	Persistent	<2
10197	2024-03-22 14:45:42	Park behind Live Oak Elementary school	Slight grassy scent	34.451517	-118.621127	Persistent	<2
10174	2024-03-22 14:46:17	Val Verde Rd and Oakwood Ave		34.450268	-118.661859	Persistent	<2
10179	2024-03-22 14:46:27	Val Verde Rd and Oakwood Ave		34.450259	-118.661815	Persistent	<2
10177	2024-03-22 14:51:39	Bus Stop 14608 - Del Valle Rd & Silver St		34.44845	-118.655159	Persistent	<2
10173	2024-03-22 14:52:26	Bus Stop 14608 - Del Valle Rd & Silver St		34.448462	-118.655175	Persistent	<2
10187	2024-03-22 14:52:59	Park behind Live Oak Elementary school		34.451542	-118.621145	Persistent	<2
10213	2024-03-22 14:54:20	Lot in front of Fire Station 143		34.454653	-118.634488	Persistent	<2
10192	2024-03-22 14:56:58	Starbucks / store by Bruce sushi	Slight coffee smell	34.451098	-118.624965	Persistent	<2
10200	2024-03-22 14:59:13	Lot in front of Fire Station 143		34.454571	-118.634392	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
2	100 - Floral	105 - Fragrant	Partly Cloudy	None		0	44	98	29.99
			Partly Cloudy	None			46	96.0	29.99
			Partly Cloudy	None		0	55.4	62.9	28.68
			Partly Cloudy			0	55.4	62.9	28.68
			Partly Cloudy	None		0	46	96	29.99
1	100 - Floral	105 - Fragrant	Partly Cloudy	None			46	94.0	29.99
1	400 - Earthy	406 - Grassy	Partly Cloudy	None		0	55.8	60.0	28.84
2	400 - Earthy	402 - Burnt Wood	Partly Cloudy			0	55.8	60.6	28.84
3	100 - Floral	105 - Fragrant	Partly Cloudy	None		0	46	94	29.99
1	400 - Earthy	406 - Grassy	Partly Cloudy	None			46	92.0	29.99
2	400 - Earthy	406 - Grassy	Partly Cloudy			0	57.9	58.8	28.79
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None		0	57.9	58.8	28.79
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	NE	1.1	58.1	57.9	28.86
2	400 - Earthy	406 - Grassy	Partly Cloudy		NE	1.1	58.1	57.9	28.86
1	400 - Earthy	406 - Grassy	Partly Cloudy	None		0	46	92	29.99
5	100 - Floral	105 - Fragrant	Mostly Cloudy	None	E	2	53.2	71.6	28.9
2	400 - Earthy	404 - Coffee	Partly Cloudy	None			46	91.0	29.99
1	100 - Floral	102 - Cinnamon	Sunny		E	2	53.2	71.6	28.9



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10189	2024-03-22 15:04:28	Starbucks / store by Bruce sushi		34.451094	-118.62452	Persistent	<2
10201	2024-03-22 15:05:01	Cambridge Ave across from house number 29862		34.459807	-118.626708	Persistent	<2
10212	2024-03-22 15:05:07	Cambridge Ave across from house number 29862		34.459652	-118.626589	Persistent	<2
10214	2024-03-22 15:10:59	Park behind Live Oak Elementary school		34.451031	-118.621144	Intermittent	2
10204	2024-03-22 15:11:00	Park behind Live Oak Elementary school		34.450981	-118.6212	Persistent	<2
10188	2024-03-22 15:15:34	Castaic Union School District Building		34.441624	-118.626081	Persistent	<2
10196	2024-03-22 15:18:31	Ave Penn and Witherspoon Pkwy	Slight car exhaust smell	34.449263	-118.638233	Persistent	<2
10209	2024-03-22 15:21:14	Front of Castaic Elementary School		34.471402	-118.630176		ND
10203	2024-03-22 15:21:50	Front of Castaic Elementary School		34.4714	-118.630207	Persistent	<2
10190	2024-03-22 15:22:54	Ave Penn and Witherspoon Pkwy		34.449328	-118.638325	Persistent	<2
10199	2024-03-22 15:26:09	Lot in front of Fire Station 143	Slight floral scent	34.454601	-118.634542	Persistent	<2
10202	2024-03-22 15:29:14	Ralph's parking lot facing Bank of America		34.456837	-118.617758	Persistent	<2
10191	2024-03-22 15:29:39	Lot in front of Fire Station 143		34.454525	-118.634508	Intermittent	<2
10215	2024-03-22 15:30:28	Ralph's parking lot facing Bank of America		34.456809	-118.617804	Intermittent	<2
10256	2024-03-22 15:36:28	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449304	-118.654705		ND
10206	2024-03-22 15:37:18	Starbucks / store by Bruce sushi		34.451228	-118.62511	Persistent	<2
10205	2024-03-22 15:37:27	Starbucks / store by Bruce sushi		34.451261	-118.625056		ND
10216	2024-03-22 15:37:48	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449342	-118.654685		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
3	400 - Earthy	404 - Coffee	Partly Cloudy	None		0	46	91	29.99
1	100 - Floral	106 - Herbal	Sunny			0	59.4	66.0	28.8
0	400 - Earthy	406 - Grassy	Mostly Cloudy	None		0	59.4	66.0	28.8
-2	700 - Chemical	722 - Tar/Asphalt	Mostly Cloudy	None		0	61.5	51.5	29.06
1	400 - Earthy	406 - Grassy	Sunny			0	61.5	51.5	29.06
-1	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None		0	47	91	30
-1	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None			47	90.0	30
			Mostly Cloudy	None	S	2.5	57.7	54.7	28.77
1	400 - Earthy	406 - Grassy	Sunny		S	2.5	57.7	54.7	28.77
-1	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None		0	47	90	30
1	100 - Floral	105 - Fragrant	Partly Cloudy	None			48	89.0	30
-2	700 - Chemical	702 - Car Exhaust	Sunny			0	61	55.2	29.03
3	100 - Floral	105 - Fragrant	Partly Cloudy	None		0	48	89	30
-5	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None		0	61	55.2	29.03
			Partly Cloudy	None	S	1	48	89.0	30
-2	700 - Chemical	702 - Car Exhaust	Sunny		NE	1.2	60.2	52.3	28.99
			Partly Cloudy	None	NE	1.2	60.2	52.3	28.99
			Partly Cloudy	None	S	1	48	89	30

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10242	2024-03-22 15:42:34	Val Verde Rd and Oakwood Ave	Slight grass scent	34.450202	-118.661697	Persistent	<2
10218	2024-03-22 15:43:18	Val Verde Rd and Oakwood Ave		34.45024	-118.661847	Persistent	<2
10253	2024-03-22 15:44:33	Bus Stop at San Martinez and Val Verde Rd	Slight grass scent	34.44699	-118.664318	Persistent	<2
10219	2024-03-22 15:46:26	Bus Stop at San Martinez and Val Verde Rd		34.447022	-118.66386	Persistent	<2
10208	2024-03-22 15:49:43	Ave Penn and Witherspoon Pkwy		34.449477	-118.638168	Persistent	<2
10210	2024-03-22 15:50:01	Ave Penn and Witherspoon Pkwy	Smelled like baked goods	34.449448	-118.638184	Persistent	<2
10247	2024-03-22 15:50:33	San Martinez Rd and Verdale Ave	Manure scent, near chicken and horse farm.	34.449869	-118.678626	Persistent	<2
10222	2024-03-22 15:53:11	San Martinez Rd and Verdale Ave		34.449605	-118.678615	Persistent	<2
10246	2024-03-22 15:54:42	Lincoln Ave and Taylor St		34.442926	-118.655843	Persistent	2
10207	2024-03-22 15:54:56	Castaic Union School District Building	Cinnamon Baked good smell	34.441567	-118.626265	Persistent	<2
10211	2024-03-22 15:55:10	Castaic Union School District Building		34.441565	-118.626234	Persistent	<2
10220	2024-03-22 15:59:36	Lincoln Ave and Taylor St		34.442915	-118.655824	Persistent	2
10249	2024-03-22 16:02:44	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438539	-118.657126	Persistent	<2
10217	2024-03-22 16:02:51	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438544	-118.657119	Persistent	<2
10252	2024-03-22 16:04:37	LA County Fire Department Del Valle Regional Training Center		34.431759	-118.65899	Persistent	<2
10221	2024-03-22 16:08:12	LA County Fire Department Del Valle Regional Training Center		34.432067	-118.65936	Persistent	<2
10254	2024-03-22 16:10:27	Ralph's parking lot facing Bank of America		34.457045	-118.618377		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	S	1	51	89.0	30
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	S	1	51	89	30
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	S	1	52	84.0	29.98
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	S	1	52	84	29.98
9	200 - Fruity	212 - Sweet	Partly Cloudy	None	S	1.4	65.9	49.5	28.85
2	200 - Fruity	212 - Sweet	Sunny		S	1.4	65.9	49.5	28.85
-1	500 - Offensive	508 - Manure	Partly Cloudy	None	S	1	54	84.0	29.98
-2	500 - Offensive	508 - Manure	Partly Cloudy	None	S	1	54	84	29.98
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	E	1	52	82.0	30.01
2	100 - Floral	102 - Cinnamon	Sunny		SE	1.7	58.9	56.6	29.04
2	400 - Earthy	406 - Grassy	Partly Cloudy	None	SE	1.7	58.9	56.6	29.04
-4	500 - Offensive	506 - Garbage	Partly Cloudy	None	E	1	52	82	30.01
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	8	53	84.0	30.1
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	8	53	84	30.1
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	2	54	82.0	30.1
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	2	54	82	30.1
			Partly Cloudy	None	E	1	57	71.0	30.01

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10224	2024-03-22 16:11:04	LA County Fire Department Del Valle Regional Training Center		34.432167	-118.659384	Persistent	2
10230	2024-03-22 16:11:09	LA County Fire Department Del Valle Regional Training Center		34.432149	-118.659435	Persistent	2
10228	2024-03-22 16:17:05	Lincoln Ave near intersection with Chiquito Canyon Rd	Like garbage/rancid smell with cinnamon intermittently	34.438542	-118.65716	Persistent	4
10225	2024-03-22 16:18:00	Lincoln Ave near intersection with Chiquito Canyon Rd	It's a garbage mixed with cinnamon smell	34.438535	-118.657105	Persistent	7
10235	2024-03-22 16:22:41	Lincoln Ave and Taylor St	Very strong rancid garbage and cinnamon smell	34.44297	-118.655824	Persistent	30
10223	2024-03-22 16:23:07	Lincoln Ave and Taylor St		34.44297	-118.655804	Persistent	4
10236	2024-03-22 16:32:44	San Martinez Rd and Verdale Ave	Smells like farm animals, but an intermittent rotten egg smell did appear	34.449577	-118.679138	Persistent	<2
10226	2024-03-22 16:33:20	San Martinez Rd and Verdale Ave	Like farm animals	34.449581	-118.679132	Intermittent	<2
10233	2024-03-22 16:41:33	Bus Stop at San Martinez and Val Verde Rd		34.447215	-118.663885		7
10258	2024-03-22 16:42:00	Ralph's parking lot facing Bank of America	No odor detected	34.456952	-118.618365		ND
10231	2024-03-22 16:42:10	Bus Stop at San Martinez and Val Verde Rd	Very strong rancid garbage smell	34.447103	-118.66386	Persistent	60
10255	2024-03-22 16:43:02	Front of Castaic Elementary School	No odor detected	34.47159	-118.629998		ND
10227	2024-03-22 16:47:47	Val Verde Rd and Oakwood Ave		34.449972	-118.662396	Persistent	30
10234	2024-03-22 16:48:48	Val Verde Rd and Oakwood Ave		34.450314	-118.661876	Persistent	30
10232	2024-03-22 16:55:02	Bus Stop 14608 - Del Valle Rd & Silver St		34.44865935	-118.6551684		15
10229	2024-03-22 16:55:14	Bus Stop 14608 - Del Valle Rd & Silver St		34.448496	-118.655182	Persistent	30
10260	2024-03-22 16:55:50	Front of Castaic Elementary School	No odor detected	34.471485	-118.630146		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-4	500 - Offensive	506 - Garbage	Partly Cloudy	None	SE	2.3	60.5	54.8	29
-1	100 - Floral	102 - Cinnamon	Sunny		SE	2.3	60.5	54.8	29
-7	500 - Offensive	511 - Rancid	Partly Cloudy	None	S	1.9	60.3	60.7	28.98
-2	500 - Offensive	506 - Garbage	Sunny		S	1.9	60.3	60.7	28.98
-3	500 - Offensive	506 - Garbage	Sunny		S	2.7	64.9	50.2	28.93
-6	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	2.7	64.9	50.2	28.93
-1	500 - Offensive	508 - Manure	Sunny		S	1.8	68.9	51.3	28.7
-3	500 - Offensive	508 - Manure	Partly Cloudy	None	S	1.8	68.9	51.3	28.7
-9	500 - Offensive	506 - Garbage	Partly Cloudy	None	E	2.7	70.8	44.7	28.85
			Partly Cloudy	None	E	1	54	71	30.01
-6	500 - Offensive	506 - Garbage	Sunny		E	2.7	70.8	44.7	28.85
			Partly Cloudy	None	E	2	58	70.0	30
-9	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	2.3	65.4	50.0	28.81
-6	500 - Offensive	506 - Garbage	Sunny		S	2.3	65.4	50.0	28.81
-8	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	3.7	62.2	54.5	28.86
-6	500 - Offensive	506 - Garbage	Sunny		S	3.7	62.2	54.5	28.86
			Partly Cloudy	None	E	2	58	70	30

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10250	2024-03-22 16:57:59	Cambridge Ave across from house number 29862	No odor detected	34.459261	-118.626617		ND
10238	2024-03-22 17:03:48	Lot in front of Fire Station 143		34.454687	-118.634411	Persistent	<2
10264	2024-03-22 17:06:53	Cambridge Ave across from house number 29862	No odor detected	34.459481	-118.626732		ND
10269	2024-03-22 17:07:35	Lot in front of Fire Station 143		34.454669	-118.634515		ND
10245	2024-03-22 17:09:37	Park behind Live Oak Elementary school		34.451462	-118.621126	Persistent	<2
10265	2024-03-22 17:12:40	Cambridge Ave across from house number 29862		34.45953	-118.62671		ND
10237	2024-03-22 17:12:43	Cambridge Ave across from house number 29862		34.459549	-118.626752		ND
10257	2024-03-22 17:13:10	Park behind Live Oak Elementary school	No odor detected	34.451503	-118.621089		ND
10251	2024-03-22 17:14:53	Starbucks / store by Bruce sushi	No odor detected	34.450977	-118.625001		ND
10259	2024-03-22 17:18:01	Starbucks / store by Bruce sushi	Bo odor detected	34.450997	-118.624977		ND
10239	2024-03-22 17:18:07	Park behind Live Oak Elementary school		34.450195	-118.621154	Persistent	<2
10267	2024-03-22 17:18:14	Park behind Live Oak Elementary school		34.450204	-118.621147		ND
10241	2024-03-22 17:28:59	Front of Castaic Elementary School		34.470785	-118.630215		ND
10266	2024-03-22 17:29:00	Front of Castaic Elementary School		34.470849	-118.630186	Intermittent	<2
10243	2024-03-22 17:29:45	Ave Penn and Witherspoon Pkwy		34.449313	-118.638244	Persistent	<2
10240	2024-03-22 17:36:07	Ralph's parking lot facing Bank of America		34.456856	-118.617737	Persistent	<2
10268	2024-03-22 17:36:10	Ralph's parking lot facing Bank of America		34.456826	-118.617776		<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None	E	1	60	66.0	30
-1	400 - Earthy	415 - Stale	Sunny			0	74.1	41.1	28.9
			Partly Cloudy	None	E	1	60	66	30
			Sunny	None		0	74.1	41.1	28.9
1	400 - Earthy	406 - Grassy	Partly Cloudy	None			60	66.0	30
			Partly Cloudy	None	S	2.8	67	42.4	28.81
			Sunny		S	2.8	67	42.4	28.81
			Partly Cloudy	None		0	60	66	30
			Partly Cloudy	None	E	2	61	63.0	30
			Partly Cloudy	None	E	2	61	63	30
1	400 - Earthy	406 - Grassy	Sunny			0	76.2	44.9	29.05
			Partly Cloudy	None		0	76.2	44.9	29.05
			Sunny		SW	1.3	71.7	46.0	28.75
2	400 - Earthy	406 - Grassy	Partly Cloudy	None	SW	1.3	71.7	46.0	28.75
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	1	63	59.0	30
-2	700 - Chemical	702 - Car Exhaust	Sunny		E	2.4	75.4	40.4	29.02
-5	700 - Chemical	724 - Varnish	Partly Cloudy	None	E	2.4	75.4	40.4	29.02



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10261	2024-03-22 17:36:39	Ave Penn and Witherspoon Pkwy		34.449327	-118.638296	Persistent	<2
10244	2024-03-22 17:43:25	Lot in front of Fire Station 143		34.454522	-118.635067	Persistent	<2
10262	2024-03-22 17:44:37	Lot in front of Fire Station 143		34.454528	-118.634425	Persistent	<2
10248	2024-03-22 17:46:55	Castaic Union School District Building	No odor detected	34.441638	-118.626265		ND
10263	2024-03-22 17:54:37	Castaic Union School District Building	No odor detected	34.441628	-118.625996		ND
10285	2024-03-22 20:16:45	Starbucks / store by Bruce sushi	Smells like dirt	34.451104	-118.625163	Persistent	<2
10289	2024-03-22 20:17:28	Starbucks / store by Bruce sushi	Intermittent noticable garbage and marijuana smell	34.451089	-118.625137	Intermittent	<2
10282	2024-03-22 20:30:03	Ave Penn and Witherspoon Pkwy		34.449432	-118.638244		ND
10287	2024-03-22 20:30:33	Ave Penn and Witherspoon Pkwy	Smells like dirt	34.449454	-118.638141	Persistent	<2
10281	2024-03-22 20:38:02	Castaic Union School District Building		34.441716	-118.626309		ND
10288	2024-03-22 20:39:25	Castaic Union School District Building		34.441626	-118.626288		ND
10324	2024-03-22 20:41:56	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449347	-118.654581		ND
10278	2024-03-22 20:53:03	LA County Fire Department Del Valle Regional Training Center		34.432203	-118.659407	Intermittent	<2
10293	2024-03-22 20:54:53	LA County Fire Department Del Valle Regional Training Center		34.4322	-118.659485		ND
10270	2024-03-22 20:55:35	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449355	-118.654752		ND
10313	2024-03-22 20:58:33	Val Verde Rd and Oakwood Ave		34.450215	-118.661835	Persistent	<2
10286	2024-03-22 20:59:20	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438593	-118.657056		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	1	63	59	30
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	3	63	59.0	29.99
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	3	63	59	29.99
			Partly Cloudy	None	W	4	64	55.0	29.99
			Partly Cloudy	None	W	4	64	55	29.99
1	400 - Earthy	412 - Peat-like	Partly Cloudy	None	S	3.2	72.5	36.1	28.93
-2	500 - Offensive	506 - Garbage	Sunny		SW	3.2	72.5	36.1	28.93
			Partly Cloudy	None	SW	1.7	79.4	35.5	28.78
-1	400 - Earthy	412 - Peat-like	Sunny		SW	1.7	79.4	35.5	28.78
			Partly Cloudy	None	SE	4	73.6	41.1	28.95
			Sunny		SE	4	73.6	41.1	28.95
			Partly Cloudy	None	S	4	69	48.0	29.94
3	400 - Earthy	406 - Grassy	Partly Cloudy	None	NW	3.9	77.8	43.0	28.92
			Sunny		NW	3.9	77.8	43.0	28.92
			Partly Cloudy	None	S	4	69	48	29.94
1	400 - Earthy	417 - Woody	Partly Cloudy	None	S	4	71	48.0	29.94
			Partly Cloudy	None	SE	3.3	77.1	45.0	28.89

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10295	2024-03-22 21:00:41	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438599	-118.657061	Persistent	<2
10297	2024-03-22 21:04:39	Lincoln Ave and Taylor St		34.443022	-118.655793		ND
10283	2024-03-22 21:04:39	Lincoln Ave and Taylor St		34.442848	-118.655804		ND
10271	2024-03-22 21:06:35	Val Verde Rd and Oakwood Ave		34.450257	-118.661894	Persistent	<2
10307	2024-03-22 21:08:08	San Martinez Rd and Verdale Ave	No odor detected	34.449874	-118.678638		ND
10284	2024-03-22 21:12:38	San Martinez Rd and Verdale Ave	Farm animal-like odor	34.44957	-118.679108	Persistent	<2
10296	2024-03-22 21:13:14	San Martinez Rd and Verdale Ave		34.449572	-118.6791	Persistent	<2
10276	2024-03-22 21:17:42	San Martinez Rd and Verdale Ave	No odor detected	34.449667	-118.678669		ND
10280	2024-03-22 21:19:38	Bus Stop at San Martinez and Val Verde Rd		34.447181	-118.663863		ND
10320	2024-03-22 21:21:18	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.44701	-118.663878		ND
10290	2024-03-22 21:22:08	Bus Stop at San Martinez and Val Verde Rd		34.447143	-118.663856		ND
10275	2024-03-22 21:26:03	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.44704	-118.663941		ND
10322	2024-03-22 21:26:19	Lincoln Ave and Taylor St	No odor detected	34.442927	-118.655767		ND
10292	2024-03-22 21:28:50	Val Verde Rd and Oakwood Ave		34.450277	-118.661871	Persistent	<2
10279	2024-03-22 21:28:53	Val Verde Rd and Oakwood Ave		34.450236	-118.6619	Persistent	<2
10273	2024-03-22 21:29:19	Lincoln Ave and Taylor St	No odor detected	34.442951	-118.655845		ND
10321	2024-03-22 21:31:46	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.43854	-118.657106		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	400 - Earthy	415 - Stale	Partly Cloudy		SE	3.3	77.1	45.0	28.89
			Partly Cloudy		S	2.2	75.9	43.3	28.85
			Partly Cloudy	None	S	2.2	75.9	43.3	28.85
1	400 - Earthy	417 - Woody	Partly Cloudy	None	S	4	71	48	29.94
			Partly Cloudy	None	S	3	70	46.0	29.94
-8	500 - Offensive	508 - Manure	Partly Cloudy	None	SW	0.9	80.9	39.5	28.61
-1	500 - Offensive	508 - Manure	Partly Cloudy		SW	0.9	80.9	39.5	28.61
			Partly Cloudy	None	S	3	70	46	29.94
			Partly Cloudy	None	NE	3	80.3	39.0	28.77
			Partly Cloudy	None	S	3	70	46.0	29.94
			Partly Cloudy		NE	3	80.3	39.0	28.77
			Partly Cloudy	None	S	3	70	46	29.94
			Partly Cloudy	None	S	8	68	45.0	29.92
2	400 - Earthy	406 - Grassy	Partly Cloudy			0	83.9	38.7	28.72
	400 - Earthy	406 - Grassy	Partly Cloudy	None		0	83.9	38.7	28.72
			Partly Cloudy	None	S	8	68	45	29.92
			Partly Cloudy	None	S	8	68	45.0	29.92

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10274	2024-03-22 21:33:30	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438588	-118.657138		ND
10311	2024-03-22 21:35:32	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432084	-118.659371		ND
10277	2024-03-22 21:36:12	Bus Stop 14608 - Del Valle Rd & Silver St		34.447307	-118.655883	Persistent	<2
10291	2024-03-22 21:36:26	Bus Stop 14608 - Del Valle Rd & Silver St		34.448525	-118.655214		ND
10272	2024-03-22 21:38:46	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432106	-118.659436		ND
10314	2024-03-22 21:53:48	Ralph's parking lot facing Bank of America	No odor detected	34.457032	-118.618414		ND
10331	2024-03-22 21:57:19	Lot in front of Fire Station 143		34.45468	-118.634441	Persistent	<2
10305	2024-03-22 21:59:20	Ralph's parking lot facing Bank of America	No odor detected	34.457063	-118.618436		ND
10294	2024-03-22 21:59:29	Lot in front of Fire Station 143		34.454632	-118.634431		ND
10316	2024-03-22 22:01:44	Front of Castaic Elementary School	No odor detected	34.471505	-118.630212		ND
10333	2024-03-22 22:05:02	Cambridge Ave across from house number 29862		34.459546	-118.626721		ND
10310	2024-03-22 22:06:38	Front of Castaic Elementary School	No odor detected	34.471556	-118.630198		ND
10325	2024-03-22 22:08:38	Park behind Live Oak Elementary school	No odor detected	34.450506	-118.621083		ND
10298	2024-03-22 22:09:49	Cambridge Ave across from house number 29862		34.45955	-118.626819	Persistent	<2
10329	2024-03-22 22:14:26	Park behind Live Oak Elementary school		34.450998	-118.621145	Intermittent	<2
10300	2024-03-22 22:14:33	Park behind Live Oak Elementary school		34.451082	-118.621153	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None	S	8	68	45	29.92
			Partly Cloudy	None	S	7	72	43.0	30.01
2	400 - Earthy	406 - Grassy	Partly Cloudy	None	SW	5.7	75.4	42.8	28.77
			Partly Cloudy		SW	5.7	75.4	42.8	28.77
			Partly Cloudy	None	S	7	72	43	30.01
			Partly Cloudy	None	S	6	70	42.0	29.92
8	100 - Floral	111 - Rose-like	Partly Cloudy	None	SW	5	72	42.8	28.8
			Partly Cloudy	None	S	6	70	42	29.92
			Partly Cloudy		SW	5	72	42.8	28.8
			Partly Cloudy	None	S	3	69	43.0	29.92
			Mostly Cloudy	None	S	4.3	74.7	39.5	28.7
			Partly Cloudy	None	S	3	69	43	29.92
			Partly Cloudy	None	S	7	70	42.0	29.9
2	100 - Floral	105 - Fragrant	Sunny		S	4.3	74.7	39.5	28.7
-6	500 - Offensive	506 - Garbage	Mostly Cloudy	None	N	1.6	75	41.3	28.94
1	400 - Earthy	406 - Grassy	Sunny		N	1.6	75	41.3	28.94

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10312	2024-03-22 22:17:44	Park behind Live Oak Elementary school	No odor detected	34.450542	-118.621068		ND
10318	2024-03-22 22:20:27	Starbucks / store by Bruce sushi	No odor detected	34.451044	-118.625124		ND
10303	2024-03-22 22:24:23	Starbucks / store by Bruce sushi	No odor detected	34.451102	-118.625106		ND
10326	2024-03-22 22:26:10	Front of Castaic Elementary School		34.471363	-118.630175	Intermittent	<2
10299	2024-03-22 22:26:29	Front of Castaic Elementary School		34.471388	-118.630069		ND
10308	2024-03-22 22:29:11	Lot in front of Fire Station 143	No odor detected	34.454557	-118.634504		ND
10304	2024-03-22 22:31:53	Lot in front of Fire Station 143	No odor detected	34.454602	-118.63444		ND
10309	2024-03-22 22:33:55	Ave Penn and Witherspoon Pkwy	No odor detected	34.449313	-118.638355		ND
10301	2024-03-22 22:35:50	Ralph's parking lot facing Bank of America	Smells like fried chicken	34.456769	-118.61771	Persistent	<2
10327	2024-03-22 22:38:22	Ralph's parking lot facing Bank of America	Like fried potatoes	34.456839	-118.617761	Intermittent	<2
10306	2024-03-22 22:38:31	Ave Penn and Witherspoon Pkwy	No odor detected	34.449388	-118.638328		ND
10317	2024-03-22 22:40:19	Castaic Union School District Building		34.441493	-118.626016	Persistent	2
10315	2024-03-22 22:43:20	Castaic Union School District Building		34.441559	-118.62604	Persistent	<2
10323	2024-03-22 22:46:39	Cambridge Ave across from house number 29862	No odor detected	34.459465	-118.62671		ND
10332	2024-03-22 22:50:25	Starbucks / store by Bruce sushi		34.451211	-118.625156	Persistent	<2
10302	2024-03-22 22:51:32	Starbucks / store by Bruce sushi		34.451168	-118.625134	Persistent	<2
10319	2024-03-22 22:52:03	Cambridge Ave across from house number 29862	No odor detected	34.45951	-118.626649		ND
10352	2024-03-22 22:54:59	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449329	-118.65476		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None	S	7	70	42	29.9
			Partly Cloudy	None	S	9	68	43.0	29.9
			Partly Cloudy	None	S	9	68	43	29.9
0	400 - Earthy	412 - Peat-like	Mostly Cloudy	None	SW	5.6	72.4	42.2	28.66
			Sunny		SW	5.6	72.4	42.2	28.66
			Partly Cloudy	None	SE	2	69	42.0	29.9
			Partly Cloudy	None	SE	2	69	42	29.9
			Partly Cloudy	None	S	11	69	42.0	29.9
1	300 - Vegetable	310 - Onion	Sunny		N	2.2	77.1	40.1	28.91
3	300 - Vegetable	308 - Potato	Mostly Cloudy	None	N	2.2	77.1	40.1	28.91
			Partly Cloudy	None	S	11	69	42	29.9
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	8	69	42.0	29.9
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	8	69	42	29.9
			Partly Cloudy	None	S	8	69	42.0	29.9
1	400 - Earthy	406 - Grassy	Mostly Cloudy	None	W	2	78.7	40.4	28.86
-1	700 - Chemical	702 - Car Exhaust	Sunny		W	2	78.7	40.4	28.86
			Partly Cloudy	None	S	8	69	42	29.9
			Partly Cloudy	None	S	7	70	50.0	29.89



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10328	2024-03-22 23:00:16	Ave Penn and Witherspoon Pkwy		34.449339	-118.638297		ND
10335	2024-03-22 23:01:00	Ave Penn and Witherspoon Pkwy		34.449354	-118.638331		ND
10348	2024-03-22 23:04:30	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449372	-118.654697		ND
10330	2024-03-22 23:06:19	Castaic Union School District Building		34.441592	-118.626293	Persistent	2
10353	2024-03-22 23:06:45	Val Verde Rd and Oakwood Ave	No odor detected	34.450298	-118.661847		ND
10336	2024-03-22 23:07:22	Castaic Union School District Building		34.441635	-118.626298	Persistent	2
10346	2024-03-22 23:10:07	Val Verde Rd and Oakwood Ave	No odor detected	34.450287	-118.661829		ND
10357	2024-03-22 23:11:30	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446934	-118.664062		ND
10347	2024-03-22 23:16:41	San Martinez Rd and Verdale Ave	No odor detected	34.449686	-118.678611		ND
10355	2024-03-22 23:18:23	San Martinez Rd and Verdale Ave	No odor detected	34.449627	-118.6786		ND
10340	2024-03-22 23:18:58	LA County Fire Department Del Valle Regional Training Center		34.432242	-118.659423		ND
10334	2024-03-22 23:19:10	LA County Fire Department Del Valle Regional Training Center		34.432189	-118.659479		ND
10343	2024-03-22 23:24:35	Lincoln Ave near intersection with Chiquito Canyon Rd	Smells like sand	34.438625	-118.657117	Persistent	<2
10337	2024-03-22 23:24:59	Lincoln Ave near intersection with Chiquito Canyon Rd	Smells like sand	34.438592	-118.657115	Persistent	<2
10349	2024-03-22 23:27:38	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.44704	-118.663949		ND
10341	2024-03-22 23:29:13	Lincoln Ave and Taylor St		34.442977	-118.655838		ND
10356	2024-03-22 23:32:00	Lincoln Ave and Taylor St	No odor detected	34.443005	-118.655645		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Mostly Cloudy	None	SW	2.3	75.9	42.2	28.73
			Sunny		SW	2.3	75.9	42.2	28.73
			Partly Cloudy	None	S	7	70	50	29.89
-6	500 - Offensive	506 - Garbage	Mostly Cloudy	None	N	7.5	71.8	53.9	28.9
			Partly Cloudy	None	S	7	70	50.0	29.89
-2	500 - Offensive	506 - Garbage	Sunny		N	7.5	71.8	53.9	28.9
			Partly Cloudy	None	S	7	70	50	29.89
			Partly Cloudy	None	W	7	72	50.0	29.9
			Partly Cloudy	None	W	8	69	50	29.9
			Partly Cloudy	None	W	8	69	50.0	29.9
			Mostly Cloudy	None	NW	4	70.1	51.2	28.87
			Sunny		N	4	70.1	51.2	28.87
2	400 - Earthy	412 - Peat-like	Mostly Cloudy	None	E	4.5	74.5	48.4	28.85
-1	400 - Earthy	415 - Stale	Sunny		E	4.5	74.5	48.4	28.85
			Partly Cloudy	None	W	7	72	50	29.9
			Mostly Cloudy	None	E	0	76	46.8	28.8
			Partly Cloudy	None	SW	9	67	58.0	29.88

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10339	2024-03-22 23:32:05	Lincoln Ave and Taylor St		34.442972	-118.655782		ND
10344	2024-03-22 23:34:07	Lincoln Ave and Taylor St	No odor detected	34.442896	-118.655841		ND
10354	2024-03-22 23:38:24	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438531	-118.657141		ND
10342	2024-03-22 23:39:13	Bus Stop 14608 - Del Valle Rd & Silver St		34.448542	-118.655197	Persistent	<2
10338	2024-03-22 23:39:23	Bus Stop 14608 - Del Valle Rd & Silver St		34.448501	-118.655193	Persistent	<2
10350	2024-03-22 23:45:14	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438571	-118.657163		ND
10345	2024-03-22 23:47:12	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432143	-118.659382		ND
10351	2024-03-22 23:47:21	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432131	-118.659411		ND
10374	2024-03-23 17:13:56	Front of Castaic Elementary School		34.471516	-118.630193		ND
10387	2024-03-23 17:14:27	Front of Castaic Elementary School		34.472028	-118.629958	Persistent	<2
10362	2024-03-23 17:31:23	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432006	-118.659289		ND
10384	2024-03-23 17:32:07	Ralph's parking lot facing Bank of America		34.456773	-118.617985	Persistent	<2
10373	2024-03-23 17:33:41	Ralph's parking lot facing Bank of America		34.456818	-118.617901	Persistent	<2
10380	2024-03-23 17:38:39	Park behind Live Oak Elementary school		34.450359	-118.621127	Persistent	<2
10361	2024-03-23 17:47:23	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432019	-118.65926		ND
10358	2024-03-23 17:50:20	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438493	-118.656986		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny			0	76	46.8	28.8
			Partly Cloudy	None	SW	9	67	58	29.88
			Partly Cloudy	None	N	1	72	51.0	29.97
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None	S	5.7	72.1	48.2	28.74
2	400 - Earthy	406 - Grassy	Sunny		S	5.7	72.1	48.2	28.74
			Partly Cloudy	None	N	1	72	51	29.97
			Partly Cloudy	None	S	1	71	52	29.96
			Partly Cloudy	None	S	1	71	52.0	29.96
			Overcast			0	61.2	63.8	28.58
3	400 - Earthy	406 - Grassy	Overcast	None		0	61.2	63.8	28.58
			Overcast	None	S	5	55	92.0	29.89
2	400 - Earthy	411 - Musty	Overcast	Rain	NE	1.5	63.9	64.1	28.83
-1	700 - Chemical	702 - Car Exhaust	Overcast		NE	1.5	63.9	64.1	28.83
1	400 - Earthy	406 - Grassy	Overcast	Rain	S	2.5	61.2	58.4	28.86
			Overcast	None	S	5	55	92	29.89
			Overcast	None	S	6	55	90.0	29.89

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10359	2024-03-23 17:50:33	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438526	-118.656991		ND
10367	2024-03-23 17:52:28	Lincoln Ave and Taylor St	No odor detected	34.442885	-118.655748		ND
10368	2024-03-23 17:54:12	Lincoln Ave and Taylor St	No odor detected	34.442998	-118.655781		ND
10360	2024-03-23 17:55:37	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446967	-118.663758		ND
10376	2024-03-23 17:58:35	Park behind Live Oak Elementary school		34.450395	-118.621044		ND
10371	2024-03-23 17:58:42	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446909	-118.663605		ND
10364	2024-03-23 18:01:33	San Martinez Rd and Verdale Ave	No odor detected	34.449633	-118.678595		ND
10365	2024-03-23 18:05:48	San Martinez Rd and Verdale Ave	No odor detected	34.44963	-118.678595		ND
10366	2024-03-23 18:06:57	Val Verde Rd and Oakwood Ave	No odor detected	34.450357	-118.661877		ND
10382	2024-03-23 18:09:34	Starbucks / store by Bruce sushi		34.451094	-118.625096	Intermittent	<2
10372	2024-03-23 18:10:20	Starbucks / store by Bruce sushi		34.451022	-118.625114	Persistent	<2
10370	2024-03-23 18:12:07	Val Verde Rd and Oakwood Ave	No odor detected	34.450367	-118.661881		ND
10363	2024-03-23 18:14:29	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448472	-118.655227		ND
10369	2024-03-23 18:17:16	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448611	-118.65512		ND
10385	2024-03-23 18:17:39	Ave Penn and Witherspoon Pkwy		34.44942	-118.638268		ND
10375	2024-03-23 18:17:48	Ave Penn and Witherspoon Pkwy		34.449452	-118.638222		ND
10397	2024-03-23 18:19:49	Lot in front of Fire Station 143	No odor detected	34.454545	-118.634447	Persistent	<2
10388	2024-03-23 18:23:22	Lot in front of Fire Station 143		34.454568	-118.634343	Persistent	<2
10386	2024-03-23 18:23:48	Castaic Union School District Building		34.44158	-118.626334	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Overcast	None	S	6	55	90	29.89
			Overcast	None	SE	2	53	95.0	29.8
			Overcast	None	SE	2	53	95	29.8
			Overcast	None	S	6	55	95.0	29.8
			Overcast		S	2.5	61.2	58.4	28.86
			Overcast	None	S	6	55	95	29.8
			Overcast	None	S	4	55	95.0	29.8
			Overcast	None	S	4	55	95	29.8
			Mostly Cloudy	None	S	5	55	94.0	29.91
1	400 - Earthy	412 - Peat-like	Mostly Cloudy	Rain	S	1.7	65.6	63.0	28.79
-1	700 - Chemical	702 - Car Exhaust	Overcast		S	1.7	65.6	63.0	28.79
			Mostly Cloudy	None	S	5	55	94	29.91
			Mostly Cloudy	None			54	86.0	29.8
			Mostly Cloudy	None		0	54	86	29.8
			Mostly Cloudy	None	NW	2	62.6	53.5	28.64
			Overcast		NW	2	62.6	53.5	28.64
1	100 - Floral	105 - Fragrant	Mostly Cloudy	None	S	2	55	85.0	29.8
3	100 - Floral	105 - Fragrant	Mostly Cloudy	None	S	2	55	85	29.8
3	200 - Fruity	209 - Minty	Overcast	None	SW	1.3	70.1	53.2	28.82

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10377	2024-03-23 18:24:19	Castaic Union School District Building		34.441565	-118.626327		ND
10401	2024-03-23 18:24:56	Ave Penn and Witherspoon Pkwy	No odor detected	34.449308	-118.638302		ND
10389	2024-03-23 18:30:55	Ave Penn and Witherspoon Pkwy	No odor detected	34.449378	-118.638307		ND
10379	2024-03-23 18:31:36	Cambridge Ave across from house number 29862		34.459546	-118.626745		ND
10381	2024-03-23 18:31:55	Cambridge Ave across from house number 29862		34.459574	-118.62671	Persistent	2
10402	2024-03-23 18:32:50	Castaic Union School District Building	No odor detected	34.441248	-118.625977		ND
10390	2024-03-23 18:36:12	Castaic Union School District Building	No odor detected	34.441708	-118.625998		ND
10403	2024-03-23 18:37:35	Starbucks / store by Bruce sushi	No odor detected	34.451202	-118.624966		ND
10383	2024-03-23 18:38:04	Lot in front of Fire Station 143		34.454663	-118.634455	Persistent	<2
10378	2024-03-23 18:39:02	Lot in front of Fire Station 143		34.454651	-118.634433		ND
10396	2024-03-23 18:53:23	Park behind Live Oak Elementary school		34.450579	-118.621148	Persistent	<2
10420	2024-03-23 18:56:20	San Martinez Rd and Verdale Ave		34.449561	-118.679079	Persistent	<2
10405	2024-03-23 18:56:58	San Martinez Rd and Verdale Ave		34.449585	-118.679107	Intermittent	2
10393	2024-03-23 18:58:05	Park behind Live Oak Elementary school		34.450611	-118.621078	Persistent	<2
10400	2024-03-23 19:01:42	Cambridge Ave across from house number 29862		34.459513	-118.626757	Persistent	2
10422	2024-03-23 19:02:45	Bus Stop at San Martinez and Val Verde Rd		34.447209	-118.663967	Persistent	<2
10411	2024-03-23 19:02:48	Bus Stop at San Martinez and Val Verde Rd		34.447189	-118.664008	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Overcast		SW	1.3	70.1	53.2	28.82
			Mostly Cloudy	None	S	7	55	85.0	29.8
			Mostly Cloudy	None	S	7	55	85	29.8
			Overcast	None		0	68.4	56.3	28.6
2	100 - Floral	105 - Fragrant	Overcast			0	68.4	56.3	28.6
			Mostly Cloudy	None	S	4	55	82.0	29.79
			Mostly Cloudy	None	S	4	55	82	29.79
			Mostly Cloudy	None	SW	6	57	79.0	29.79
1	400 - Earthy	406 - Grassy	Mostly Cloudy	None		0	69.9	54.4	28.69
			Mostly Cloudy			0	69.9	54.4	28.69
-1	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	3	56	78.0	29.78
4	400 - Earthy	412 - Peat-like	Mostly Cloudy	None		0	68	51.7	28.48
-3	500 - Offensive	508 - Manure	Mostly Cloudy			0	68	51.7	28.48
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	3	56	78	29.78
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	7	57	80.0	29.78
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None	W	3.9	61.1	63.2	28.63
2	100 - Floral	102 - Cinnamon	Overcast		W	3.9	61.1	63.2	28.63



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10392	2024-03-23 19:05:53	Cambridge Ave across from house number 29862		34.459505	-118.626757	Persistent	4
10418	2024-03-23 19:07:22	Val Verde Rd and Oakwood Ave		34.450271	-118.661842	Persistent	<2
10407	2024-03-23 19:07:37	Val Verde Rd and Oakwood Ave		34.450323	-118.66187	Persistent	<2
10399	2024-03-23 19:10:26	Ralph's parking lot facing Bank of America	No odor detected	34.456996	-118.618561		ND
10424	2024-03-23 19:12:39	Lincoln Ave and Taylor St		34.44292	-118.655863	Persistent	<2
10404	2024-03-23 19:12:42	Lincoln Ave and Taylor St		34.442901	-118.655868	Persistent	<2
10395	2024-03-23 19:15:15	Ralph's parking lot facing Bank of America	No odor detected	34.456878	-118.617903		ND
10398	2024-03-23 19:17:05	Front of Castaic Elementary School		34.471593	-118.630332	Persistent	<2
10423	2024-03-23 19:18:38	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438553	-118.657035	Intermittent	2
10408	2024-03-23 19:19:30	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438618	-118.65706	Persistent	2
10391	2024-03-23 19:23:27	Front of Castaic Elementary School		34.471579	-118.630193	Persistent	<2
10421	2024-03-23 19:24:07	LA County Fire Department Del Valle Regional Training Center		34.432268	-118.659496	Persistent	<2
10409	2024-03-23 19:24:08	LA County Fire Department Del Valle Regional Training Center		34.432284	-118.659464	Persistent	<2
10413	2024-03-23 19:27:23	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.43228	-118.659482		ND
10419	2024-03-23 19:30:14	Bus Stop 14608 - Del Valle Rd & Silver St		34.448486	-118.655169	Intermittent	<2
10410	2024-03-23 19:31:49	Bus Stop 14608 - Del Valle Rd & Silver St		34.448451	-118.655229		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-4	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	7	57	80	29.78
2	400 - Earthy	412 - Peat-like	Mostly Cloudy	None	SW	2.2	65	58.5	28.59
1	400 - Earthy	406 - Grassy	Overcast		SW	2.2	65	58.5	28.59
			Mostly Cloudy	None	SE	3	57	80.0	29.78
2	400 - Earthy	406 - Grassy	Partly Cloudy	None	SE	4.7	65.7	56.4	28.7
2	400 - Earthy	406 - Grassy	Overcast		SE	4.7	65.7	56.4	28.7
			Mostly Cloudy	None	SE	3	57	80	29.78
-1	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	8	57	79.0	29.77
-2	400 - Earthy	412 - Peat-like	Mostly Cloudy	None	S	4.3	64.6	62.7	28.74
-1	400 - Earthy	412 - Peat-like	Mostly Cloudy		S	4.3	64.6	62.7	28.74
-3	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	8	57	79	29.77
2	400 - Earthy	412 - Peat-like	Mostly Cloudy	None	SE	3	66.6	56.1	28.76
1	400 - Earthy	412 - Peat-like	Mostly Cloudy		SE	3	66.6	56.1	28.76
			Mostly Cloudy	None	S	4	59	73.0	29.77
4	100 - Floral	111 - Rose-like	Mostly Cloudy	None	S	3.5	63.8	59.2	28.63
			Mostly Cloudy		S	3.5	63.8	59.2	28.63

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10416	2024-03-23 19:40:43	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432021	-118.659288		ND
10417	2024-03-23 19:43:08	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438487	-118.656934		ND
10412	2024-03-23 19:46:08	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438548	-118.656937		ND
10415	2024-03-23 19:48:34	Lincoln Ave and Taylor St	No odor detected	34.443207	-118.655777		ND
10414	2024-03-23 19:50:37	Lincoln Ave and Taylor St	No odor detected	34.442937	-118.655809		ND
10449	2024-03-23 22:20:06	Front of Castaic Elementary School		34.471539	-118.630012	Intermittent	<2
10425	2024-03-23 22:24:52	Front of Castaic Elementary School		34.471429	-118.630158		ND
10431	2024-03-23 22:24:56	San Martinez Rd and Verdale Ave	No odor detected	34.449625	-118.678611		ND
10443	2024-03-23 22:31:23	Ralph's parking lot facing Bank of America		34.456811	-118.617911	Persistent	<2
10434	2024-03-23 22:31:59	Ralph's parking lot facing Bank of America	Faint fried chicken smell	34.456868	-118.617787	Persistent	<2
10445	2024-03-23 22:37:31	Cambridge Ave across from house number 29862		34.459443	-118.626655	Persistent	<2
10435	2024-03-23 22:37:43	Cambridge Ave across from house number 29862		34.459512	-118.626753	Persistent	<2
10433	2024-03-23 22:40:33	San Martinez Rd and Verdale Ave	No odor detected	34.449715	-118.678612		ND
10429	2024-03-23 22:42:10	San Martinez Rd and Verdale Ave	Phone wouldn't populate coordinates, manually entered using numbers from Patty.	34.449715	-118.678612	Persistent	<2
10427	2024-03-23 22:45:04	Bus Stop at San Martinez and Val Verde Rd		34.446928	-118.663634	Persistent	<2
10432	2024-03-23 22:46:47	Val Verde Rd and Oakwood Ave		34.450354	-118.661828	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Mostly Cloudy	None	S	4	59	73	29.77
			Mostly Cloudy	None	S	5	61	74.0	29.86
			Mostly Cloudy	None	S	5	61	74	29.87
			Mostly Cloudy	None	S	5	58	74.0	29.97
			Mostly Cloudy	None	S	5	58	74	29.97
1	400 - Earthy	406 - Grassy	Mostly Cloudy	None	SE	2.5	65.2	48.2	28.4
			Mostly Cloudy		SE	2.5	65.2	48.2	28.46
			Partly Cloudy	None	SE	4	61	68.0	28.97
3	300 - Vegetable	308 - Potato	Mostly Cloudy	None	S	5.6	67.9	47.3	28.73
-1	300 - Vegetable	310 - Onion	Sunny		S	5.6	67.9	47.3	28.73
-6	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	9.4	62.8	57.2	28.52
-3	500 - Offensive	506 - Garbage	Sunny		S	9.4	62.8	57.2	28.52
			Partly Cloudy	None	SE	4	61	68	28.97
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	SE	5	63	68.0	28.97
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	SE	5	63	68	28.97
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	SE	5	63	68.0	28.97

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10448	2024-03-23 22:48:37	Park behind Live Oak Elementary school		34.450252	-118.621035		ND
10426	2024-03-23 22:49:09	Val Verde Rd and Oakwood Ave	No odor detected	34.450406	-118.661869		ND
10437	2024-03-23 22:50:29	Park behind Live Oak Elementary school	Smells like pet waste	34.450189	-118.621064	Persistent	<2
10430	2024-03-23 22:52:44	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448389	-118.655363		ND
10428	2024-03-23 22:55:08	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448649	-118.655148		ND
10440	2024-03-23 22:58:01	Ave Penn and Witherspoon Pkwy		34.449472	-118.638293	Intermittent	2
10436	2024-03-23 22:59:42	Ave Penn and Witherspoon Pkwy		34.449458	-118.638214	Persistent	2
10450	2024-03-23 23:00:46	Lot in front of Fire Station 143		34.454707	-118.634409	Persistent	<2
10493	2024-03-23 23:01:06	Lot in front of Fire Station 143		34.454629	-118.63444	Persistent	<2
10489	2024-03-23 23:03:18	Ave Penn and Witherspoon Pkwy		34.449537	-118.638086	Persistent	<2
10447	2024-03-23 23:06:06	Castaic Union School District Building		34.44158	-118.626324		ND
10455	2024-03-23 23:09:49	Ave Penn and Witherspoon Pkwy		34.449385	-118.638273	Persistent	<2
10487	2024-03-23 23:11:45	Castaic Union School District Building		34.441667	-118.626148	Persistent	<2
10454	2024-03-23 23:15:14	Castaic Union School District Building		34.441724	-118.626109	Persistent	<2
10438	2024-03-23 23:15:26	Castaic Union School District Building		34.441547	-118.626376		ND
10478	2024-03-23 23:17:25	Starbucks / store by Bruce sushi	No odor detected	34.451221	-118.625016		ND
10441	2024-03-23 23:20:03	Starbucks / store by Bruce sushi		34.451158	-118.625102	Intermittent	<2
10444	2024-03-23 23:22:02	Starbucks / store by Bruce sushi		34.451079	-118.6251		ND
10452	2024-03-23 23:23:06	Starbucks / store by Bruce sushi	No odor detected	34.4512	-118.625119		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Mostly Cloudy	None	S	11.2	62.6	50.1	28.75
			Partly Cloudy	None	SE	5	63	68	28.97
-3	500 - Offensive	508 - Manure	Sunny		S	11.2	62.6	50.1	28.75
			Partly Cloudy	None	SE	7	58	62.0	28.71
			Partly Cloudy	None	S	7	58	62	28.71
-6	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	1.3	67	46.2	28.54
-3	500 - Offensive	506 - Garbage	Sunny		S	1.3	67	46.2	28.54
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	7	58	60	28.71
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	7	58	60.0	28.71
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	11	58	60.0	29.71
			Partly Cloudy	None	SW	6.3	68.7	44.0	28.72
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	11	58	60	29.71
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	8	58	59.0	29.71
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	8	58	59	29.71
			Sunny		S	6.3	68.7	44.0	28.72
			Partly Cloudy	None	SW	5	59	56.0	29.71
-5	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	7.2	65.4	47.3	28.67
			Sunny		S	6.3	68.7	44.0	28.72
			Partly Cloudy	None	SW	5	59	56	29.71

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10439	2024-03-23 23:24:42	Starbucks / store by Bruce sushi		34.451092	-118.625116	Persistent	<2
10446	2024-03-23 23:32:21	Lot in front of Fire Station 143		34.454772	-118.63443	Persistent	<2
10442	2024-03-23 23:33:24	Lot in front of Fire Station 143		34.454635	-118.634422	Persistent	<2
10476	2024-03-23 23:35:08	Cambridge Ave across from house number 29862		34.459508	-118.626723	Persistent	<2
10451	2024-03-23 23:36:03	Cambridge Ave across from house number 29862		34.459509	-118.626817	Persistent	<2
10491	2024-03-23 23:38:45	Park behind Live Oak Elementary school		34.450654	-118.621058	Persistent	<2
10459	2024-03-23 23:42:27	LA County Fire Department Del Valle Regional Training Center		34.432273	-118.659456		ND
10466	2024-03-23 23:43:08	LA County Fire Department Del Valle Regional Training Center		34.43228	-118.659462		ND
10457	2024-03-23 23:46:56	Park behind Live Oak Elementary school		34.450644	-118.621094	Persistent	<2
10462	2024-03-23 23:50:26	Lincoln Ave near intersection with Chiquito Canyon Rd		34.43834878	-118.6575546	Persistent	<2
10465	2024-03-23 23:50:52	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438548	-118.657072		ND
10485	2024-03-23 23:52:52	Ralph's parking lot facing Bank of America	No odor detected	34.456723	-118.617695		ND
10456	2024-03-23 23:54:22	Ralph's parking lot facing Bank of America	No odor detected	34.456723	-118.617719		ND
10458	2024-03-23 23:56:25	Lincoln Ave and Taylor St		34.442966	-118.655818	Persistent	<2
10470	2024-03-23 23:58:37	Lincoln Ave and Taylor St		34.442967	-118.655735		ND
10453	2024-03-24 00:05:00	Front of Castaic Elementary School	No odor detected	34.471513	-118.630199		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	700 - Chemical	702 - Car Exhaust	Sunny		S	7.2	65.4	47.3	28.67
2	200 - Fruity	212 - Sweet	Partly Cloudy	None	SW	11.2	60.6	51.3	28.59
-3	500 - Offensive	506 - Garbage	Sunny		SW	11.2	60.6	51.3	28.59
1	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	14	58	53.0	29.7
2	100 - Floral	105 - Fragrant	Partly Cloudy	None	S	14	58	53	29.7
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	SW	14	57	58.0	29.7
			Partly Cloudy	None	SE	5.8	63.1	47.7	28.67
			Sunny		SE	5.8	63.1	47.7	28.67
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	SW	14	57	58	29.7
3	400 - Earthy	412 - Peat-like	Partly Cloudy	None	S	7.2	61	57.3	23.66
			Sunny		S	7.2	61	57.3	28.66
			Partly Cloudy	None	S	9	57	58.0	29.7
			Partly Cloudy	None	S	9	57	58	29.7
2	400 - Earthy	412 - Peat-like	Partly Cloudy	None	SE	2	61.5	52.5	28.61
			Sunny		SE	2	61.5	52.5	28.61
			Partly Cloudy	None	SW	12	57	60	29.69



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10467	2024-03-24 00:07:19	San Martinez Rd and Verdale Ave		34.449568	-118.67904	Persistent	2
10460	2024-03-24 00:08:15	San Martinez Rd and Verdale Ave		34.449586	-118.679038	Intermittent	<2
10482	2024-03-24 00:12:00	Front of Castaic Elementary School	No odor detected	34.471587	-118.630198		ND
10464	2024-03-24 00:13:58	Bus Stop at San Martinez and Val Verde Rd		34.447334	-118.663482	Intermittent	<2
10468	2024-03-24 00:14:14	Bus Stop at San Martinez and Val Verde Rd	Chlorine smell	34.447119	-118.663835	Persistent	<2
10463	2024-03-24 00:21:39	Val Verde Rd and Oakwood Ave	Like burnt or burning barbecued meats	34.449997	-118.662373	Intermittent	4
10469	2024-03-24 00:21:51	Val Verde Rd and Oakwood Ave		34.450268	-118.661823	Persistent	<2
10461	2024-03-24 00:28:50	Bus Stop 14608 - Del Valle Rd & Silver St		34.44849	-118.655193		ND
10471	2024-03-24 00:29:44	Bus Stop 14608 - Del Valle Rd & Silver St	Chicken coop smell	34.448478	-118.655226	Persistent	<2
10492	2024-03-24 00:33:13	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432018	-118.659305		ND
10502	2024-03-24 00:34:37	Lot in front of Fire Station 143		34.454628	-118.634419	Intermittent	<2
10472	2024-03-24 00:35:24	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.43208	-118.659323		ND
10510	2024-03-24 00:38:58	Lot in front of Fire Station 143		34.454646	-118.634433		<2
10473	2024-03-24 00:40:01	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438494	-118.656936		ND
10475	2024-03-24 00:40:06	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438535	-118.656962		ND
10490	2024-03-24 00:43:59	Lincoln Ave and Taylor St	No odor detected	34.442942	-118.655909		ND
10474	2024-03-24 00:44:25	Lincoln Ave and Taylor St	No odor detected	34.442959	-118.65591		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
2	400 - Earthy	406 - Grassy	Sunny		SW	2.4	64.3	49.1	28.38
2	400 - Earthy	406 - Grassy	Partly Cloudy	None	SW	2.4	64.3	49.1	28.38
			Partly Cloudy	None	SW	12	57	60.0	29.69
3	400 - Earthy	412 - Peat-like	Partly Cloudy	None	E	3.4	65.7	50.0	28.53
-1	800 - Medicinal	805 - Chlorinou	Sunny		E	3.4	65.7	50.0	28.53
-4	700 - Chemical	704 - Coal	Partly Cloudy	None	SE	2.7	63.7	49.8	28.48
2	400 - Earthy	402 - Burnt Wood	Mostly Cloudy		SE	2.7	63.7	49.8	28.48
			Partly Cloudy	None	S	8.3	61.8	56.9	28.54
-1	500 - Offensive	508 - Manure	Mostly Cloudy		S	8.3	61.8	56.9	28.54
			Partly Cloudy	None	SW	3	58	65.0	29.77
-1	500 - Offensive	506 - Garbage	Mostly Cloudy		SW	10.5	59.1	55.2	28.58
			Partly Cloudy	None	SW	3	58	65	29.77
2	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	10.5	59.1	55.2	28.58
			Partly Cloudy	None	W	1	58	65.0	29.78
			Partly Cloudy	None	W	1	58	65	29.78
			Partly Cloudy	None	S	5	56	63.0	29.69
			Partly Cloudy	None	S	5	56	63	29.69

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10513	2024-03-24 00:45:36	Cambridge Ave across from house number 29862		34.459567	-118.626686	Persistent	4
10504	2024-03-24 00:47:21	Cambridge Ave across from house number 29862		34.45954	-118.626717	Persistent	2
10480	2024-03-24 00:52:41	San Martinez Rd and Verdale Ave	No odor detected	34.449627	-118.678678		ND
10515	2024-03-24 00:53:03	Park behind Live Oak Elementary school		34.45033	-118.62099		ND
10503	2024-03-24 00:53:09	Park behind Live Oak Elementary school		34.450374	-118.621062	Persistent	<2
10481	2024-03-24 00:53:44	San Martinez Rd and Verdale Ave	No odor detected	34.449649	-118.678542		ND
10479	2024-03-24 00:57:52	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447208	-118.664149		ND
10486	2024-03-24 00:59:58	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446855	-118.663958		ND
10512	2024-03-24 01:04:38	Ave Penn and Witherspoon Pkwy		34.449421	-118.63785	Persistent	2
10477	2024-03-24 01:04:56	Val Verde Rd and Oakwood Ave	No odor detected	34.449948	-118.662449		ND
10507	2024-03-24 01:06:10	Ave Penn and Witherspoon Pkwy		34.449514	-118.638159	Persistent	<2
10483	2024-03-24 01:06:26	Val Verde Rd and Oakwood Ave	No odor detected	34.450307	-118.661925		ND
10488	2024-03-24 01:08:13	Bus Stop 14608 - Del Valle Rd & Silver St		34.448541	-118.655292	Persistent	<2
10484	2024-03-24 01:11:29	Bus Stop 14608 - Del Valle Rd & Silver St		34.448684	-118.655251	Persistent	<2
10514	2024-03-24 01:11:45	Castaic Union School District Building		34.441478	-118.626196	Persistent	<2
10506	2024-03-24 01:12:05	Castaic Union School District Building		34.441614	-118.626359	Persistent	<2
10498	2024-03-24 01:16:26	Lot in front of Fire Station 143		34.45466	-118.634288	Persistent	<2
10495	2024-03-24 01:16:37	Lot in front of Fire Station 143		34.454689	-118.634289	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-6	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	9.3	59.3	62.6	28.49
-2	500 - Offensive	506 - Garbage	Mostly Cloudy		S	9.3	59.3	62.6	28.49
			Partly Cloudy	None	S	6	57	63	29.69
			Partly Cloudy	None	SW	8.7	62.7	53.7	28.73
1	400 - Earthy	406 - Grassy	Mostly Cloudy		SW	8.7	62.7	53.7	28.73
			Partly Cloudy	None	S	6	57	63.0	29.69
			Partly Cloudy	None	S	5	59	54.0	28.97
			Partly Cloudy	None	S	5	59	54	28.97
-7	500 - Offensive	506 - Garbage	Sunny	None	NE	2	64.5	50.7	28.51
			Partly Cloudy	None	S	5	60	54.0	28.97
-2	500 - Offensive	506 - Garbage	Mostly Cloudy		SW	2	64.5	50.7	28.51
			Partly Cloudy	None	S	5	60	54	28.97
2	100 - Floral	110 - Perfumy	Partly Cloudy	None	SW	7	54	68.0	29.69
3	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	7	54	68	29.69
3	100 - Floral	106 - Herbal	Sunny	None	SE	2.3	63.7	53.4	28.7
0	100 - Floral	106 - Herbal	Mostly Cloudy		SE	2.3	63.7	53.4	28.7
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	4	54	69	29.69
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	4	54	69.0	29.69

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10494	2024-03-24 01:18:53	Castaic Union School District Building	No odor detected	34.441599	-118.625992		ND
10501	2024-03-24 01:22:39	Starbucks / store by Bruce sushi	Noticable garbage smell that was more intense with wind	34.451077	-118.625148	Persistent	<2
10508	2024-03-24 01:22:50	Starbucks / store by Bruce sushi		34.451162	-118.624964	Persistent	7
10496	2024-03-24 01:23:01	Castaic Union School District Building	No odor detected	34.441539	-118.626058		ND
10499	2024-03-24 01:24:40	Ralph's parking lot facing Bank of America	No odor detected	34.456473	-118.617768		ND
10497	2024-03-24 01:30:08	Ralph's parking lot facing Bank of America	No odor detected	34.456895	-118.61784		ND
10511	2024-03-24 01:30:46	Front of Castaic Elementary School		34.471512	-118.630207		ND
10505	2024-03-24 01:31:35	Front of Castaic Elementary School		34.4715	-118.630201		ND
10509	2024-03-24 01:37:45	Ralph's parking lot facing Bank of America	Like fried foods	34.456762	-118.617938	Persistent	<2
10500	2024-03-24 01:38:21	Ralph's parking lot facing Bank of America	Smells like fried chicken	34.456714	-118.617886	Persistent	<2
10525	2024-03-24 16:06:07	LA County Fire Department Del Valle Regional Training Center	Always a noticable garbage/ rancid smell but it did get stronger with wind	34.43221	-118.659468	Persistent	7
10529	2024-03-24 16:06:19	LA County Fire Department Del Valle Regional Training Center	Odor became faint as wind died down.	34.432202	-118.659472	Persistent	2
10517	2024-03-24 16:10:42	Lincoln Ave near intersection with Chiquito Canyon Rd	Persistent intense garbage odor	34.438521	-118.657143	Persistent	15
10539	2024-03-24 16:11:02	Ralph's parking lot facing Bank of America	No odor detected	34.456999	-118.618029		ND
10530	2024-03-24 16:11:06	Ralph's parking lot facing Bank of America	No odor detected	34.457032	-118.618032		ND
10521	2024-03-24 16:12:54	Lincoln Ave near intersection with Chiquito Canyon Rd	Very strong consistent smell of rancid garbage	34.438525	-118.657192	Persistent	15
10535	2024-03-24 16:14:34	Front of Castaic Elementary School	No odor detected	34.471444	-118.630125		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None	SW	6	54	70.0	29.69
-2	500 - Offensive	506 - Garbage	Mostly Cloudy		S	3.8	60.4	56.2	28.66
-6	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	3.8	60.4	56.2	28.66
			Partly Cloudy	None	SW	6	54	70	29.69
			Partly Cloudy	None	S	11	53	71.0	29.69
			Partly Cloudy	None	S	11	53	71	29.69
			Mostly Cloudy	None	N	2.4	62.1	50.8	28.45
			Mostly Cloudy		N	2.4	62.1	50.8	28.45
4	300 - Vegetable	308 - Potato	Mostly Cloudy	None	S	2.3	62.4	50.6	28.71
2	300 - Vegetable	305 - Garlic	Mostly Cloudy		S	2.3	62.4	50.6	28.71
-4	500 - Offensive	511 - Rancid	Mostly Cloudy		SE	4	61.5	58.8	28.74
-8	500 - Offensive	511 - Rancid	Partly Cloudy	None	SE	4	61.5	58.8	28.74
-8	500 - Offensive	506 - Garbage	Partly Cloudy	None	SE	2.4	53.6	75.1	28.72
			Partly Cloudy	None			44	93.0	29.73
			Partly Cloudy	None		0	44	93	29.73
-5	500 - Offensive	511 - Rancid	Mostly Cloudy		SE	2.4	53.6	75.1	28.72
			Partly Cloudy	None	N	1	43	95.0	29.73

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10519	2024-03-24 16:17:50	Lincoln Ave and Taylor St	Nauseating and consistent smell of rancid garbage	34.442962	-118.655798	Persistent	15
10518	2024-03-24 16:18:00	Lincoln Ave and Taylor St	Very intense odor of garbage	34.443004	-118.65583	Persistent	30
10531	2024-03-24 16:18:50	Front of Castaic Elementary School	No odor detected	34.471589	-118.630205		ND
10532	2024-03-24 16:26:59	Cambridge Ave across from house number 29862	No odor detected	34.459548	-118.626746		ND
10537	2024-03-24 16:27:18	Cambridge Ave across from house number 29862		34.459518	-118.626774		<2
10528	2024-03-24 16:29:56	San Martinez Rd and Verdale Ave		34.449597	-118.679109	Persistent	2
10545	2024-03-24 16:31:17	Park behind Live Oak Elementary school	No odor detected	34.450538	-118.62108		ND
10520	2024-03-24 16:31:48	San Martinez Rd and Verdale Ave		34.449576	-118.679084	Persistent	<2
10542	2024-03-24 16:33:05	Park behind Live Oak Elementary school	No odor detected	34.450476	-118.62114		ND
10523	2024-03-24 16:37:13	Bus Stop at San Martinez and Val Verde Rd	Persistent garbage smell.	34.447163	-118.663835	Persistent	2
10533	2024-03-24 16:39:31	Starbucks / store by Bruce sushi	No odor detected	34.451179	-118.625171		ND
10516	2024-03-24 16:39:39	Bus Stop at San Martinez and Val Verde Rd	Very strong consistent rancid garbage smell	34.447154	-118.663882	Persistent	15
10536	2024-03-24 16:39:41	Starbucks / store by Bruce sushi	No odor detected	34.451108	-118.625225		ND
10524	2024-03-24 16:45:41	Val Verde Rd and Oakwood Ave	Intense odor of garbage	34.450282	-118.661829	Persistent	7
10526	2024-03-24 16:47:05	Val Verde Rd and Oakwood Ave	Strong rancid and garbage odor	34.450299	-118.661884	Persistent	4
10543	2024-03-24 16:49:48	Castaic Union School District Building		34.440795	-118.626301	Persistent	<2
10534	2024-03-24 16:53:46	Castaic Union School District Building		34.441641	-118.626094	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-5	500 - Offensive	506 - Garbage	Mostly Cloudy		SE	1.2	57.3	60.8	28.67
-9	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	1.2	57.3	60.8	28.67
			Partly Cloudy	None	N	1	43	95	29.73
			Partly Cloudy	None	N	1	43	95	29.73
1	100 - Floral	105 - Fragrant	Partly Cloudy	None	N	1	43	95.0	29.73
2	400 - Earthy	402 - Burnt Wood	Partly Cloudy	None	S	1.3	60.3	51.7	28.44
			Partly Cloudy	None	N	2	44	94	29.74
1	400 - Earthy	402 - Burnt Wood	Mostly Cloudy		S	1.3	60.3	51.7	28.44
			Partly Cloudy	None	N	2	44	94.0	29.74
-8	500 - Offensive	506 - Garbage	Partly Cloudy	None	SE	1.8	58.3	56.2	28.59
			Partly Cloudy	None	N	2	44	93	29.74
-5	500 - Offensive	511 - Rancid	Mostly Cloudy		SE	1.8	58.3	56.2	28.59
			Partly Cloudy	None	N	2	44	93.0	29.74
-8	500 - Offensive	506 - Garbage	Partly Cloudy	None	E	1.4	56.5	60.1	28.55
-4	500 - Offensive	511 - Rancid	Mostly Cloudy		E	1.4	56.5	60.1	28.55
1	200 - Fruity	212 - Sweet	Partly Cloudy	None			46	87.0	29.74
2	200 - Fruity	212 - Sweet	Partly Cloudy	None		0	46	87	29.74



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10527	2024-03-24 16:55:26	Bus Stop 14608 - Del Valle Rd & Silver St	Odor was always present during small sample, but the intensity increased and decreased while we were here	34.447514	-118.655577	Persistent	4
10544	2024-03-24 16:55:43	Ave Penn and Witherspoon Pkwy	No odor detected	34.448891	-118.638172		ND
10540	2024-03-24 16:55:53	Ave Penn and Witherspoon Pkwy	No odor detected	34.449803	-118.637918		ND
10522	2024-03-24 16:57:51	Bus Stop 14608 - Del Valle Rd & Silver St	Strong rancid garbage smell, increased intensity with wind	34.448454	-118.655214	Persistent	15
10541	2024-03-24 17:03:02	Lot in front of Fire Station 143	No odor detected	34.454603	-118.634517		ND
10538	2024-03-24 17:03:36	Lot in front of Fire Station 143	No odor detected	34.454553	-118.634532		ND
10569	2024-03-24 17:04:58	Lot in front of Fire Station 143		34.454834	-118.634702		ND
10562	2024-03-24 17:06:52	Lot in front of Fire Station 143		34.454643	-118.63451		ND
10573	2024-03-24 17:12:34	Cambridge Ave across from house number 29862		34.459566	-118.626755	Intermittent	<2
10564	2024-03-24 17:13:11	Cambridge Ave across from house number 29862		34.459575	-118.626742	Persistent	<2
10548	2024-03-24 17:13:12	Bus Stop 14608 - Del Valle Rd & Silver St		34.449428	-118.654488	Persistent	2
10553	2024-03-24 17:13:17	Bus Stop 14608 - Del Valle Rd & Silver St		34.449466	-118.654462	Persistent	2
10557	2024-03-24 17:14:37	Val Verde Rd and Oakwood Ave		34.450345	-118.661854	Persistent	2
10547	2024-03-24 17:18:08	Val Verde Rd and Oakwood Ave		34.450303	-118.661906	Persistent	2
10572	2024-03-24 17:18:32	Park behind Live Oak Elementary school		34.450241	-118.621194	Intermittent	<2
10566	2024-03-24 17:19:50	Park behind Live Oak Elementary school	Faint gasoline/ paint smell	34.450251	-118.62119	Persistent	<2
10559	2024-03-24 17:23:51	San Martinez Rd and Verdale Ave		34.449923	-118.678617	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-9	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	1.2	62.3	53.1	28.61
			Partly Cloudy	None			47	85.0	29.74
			Partly Cloudy	None		0	47	85	29.74
-5	500 - Offensive	506 - Garbage	Sunny		E	1.2	62.3	53.1	28.61
			Partly Cloudy	None	N	1	47	82.0	29.74
			Partly Cloudy	None	N	1	47	82	29.74
			Partly Cloudy	None	SE	2.3	62.1	50.0	28.64
			Sunny		SE	2.3	62.1	50.0	28.64
5	100 - Floral	105 - Fragrant	Partly Cloudy	None	S	1.7	58.2	50.2	28.55
-1	400 - Earthy	415 - Stale	Sunny		S	1.7	58.2	50.2	28.55
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	1	47	80.0	29.74
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	1	47	80	29.74
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	1	52	80	29.74
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	1	52	80.0	29.74
3	400 - Earthy	406 - Grassy	Partly Cloudy	None	SE	2.1	57.8	46.5	28.8
-1	700 - Chemical	707 - Gasoline	Sunny		SE	2.1	57.8	46.5	28.8
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	1	47	80	29.74

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10556	2024-03-24 17:24:38	San Martinez Rd and Verdale Ave		34.449652	-118.67861	Persistent	<2
10549	2024-03-24 17:28:32	Bus Stop at San Martinez and Val Verde Rd		34.446977	-118.664113	Persistent	4
10567	2024-03-24 17:28:51	Front of Castaic Elementary School		34.47154	-118.630213		ND
10554	2024-03-24 17:29:09	Bus Stop at San Martinez and Val Verde Rd		34.447066	-118.663862	Persistent	2
10565	2024-03-24 17:30:08	Front of Castaic Elementary School		34.471511	-118.630241		ND
10550	2024-03-24 17:33:33	Lincoln Ave and Taylor St	No odor detected	34.442984	-118.655849		ND
10555	2024-03-24 17:35:59	Lincoln Ave and Taylor St	No odor detected	34.442963	-118.655818		ND
10558	2024-03-24 17:37:21	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438611	-118.657156		ND
10574	2024-03-24 17:37:48	Ralph's parking lot facing Bank of America	Smelled odor without nasal ranger; when, using nasal ranger, cannot smell. When nasal ranger was removed, did not smell odor anymore.	34.456826	-118.618012	Intermittent	<2
10552	2024-03-24 17:39:02	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438553	-118.65713		ND
10561	2024-03-24 17:39:23	Ralph's parking lot facing Bank of America	Semi strong intermittent smell of gasoline	34.456894	-118.617833	Intermittent	2
10546	2024-03-24 17:40:57	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.43186	-118.659062		ND
10551	2024-03-24 17:43:12	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432256	-118.659461		ND
10575	2024-03-24 17:48:18	Ave Penn and Witherspoon Pkwy		34.449088	-118.637806		ND
10563	2024-03-24 17:50:35	Ave Penn and Witherspoon Pkwy		34.449566	-118.63821	Persistent	<2
10570	2024-03-24 17:55:48	Castaic Union School District Building		34.441645	-118.626336	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	1	47	80.0	29.74
-5	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	1	55	80	29.74
			Mostly Cloudy	None		0	71	37.7	28.51
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	1	55	80.0	29.74
			Mostly Cloudy			0	71	37.7	28.51
			Partly Cloudy	None	N	1	52	67	29.74
			Partly Cloudy	None	N	1	52	67.0	29.74
			Partly Cloudy	None	N	1	55	57	29.74
-3	700 - Chemical	707 - Gasoline	Mostly Cloudy	None	W	1.7	68.2	41.7	28.78
			Partly Cloudy	None	N	1	55	57.0	29.74
-2	700 - Chemical	707 - Gasoline	Mostly Cloudy		W	1.7	68.2	41.7	28.78
			Partly Cloudy	None		0	55	57	29.74
			Partly Cloudy	None			55	57.0	29.74
			Mostly Cloudy	None	SE	1.2	69.1	40.6	28.59
-2	500 - Offensive	506 - Garbage	Mostly Cloudy		SE	1.2	69.1	40.6	28.59
6	100 - Floral	102 - Cinnamon	Mostly Cloudy	None	NW	0.7	71.2	38.9	28.77

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10560	2024-03-24 17:56:31	Castaic Union School District Building	Smells like cinnamon	34.441517	-118.626249	Persistent	<2
10576	2024-03-24 17:58:18	Front of Castaic Elementary School	No odor detected	34.471573	-118.630188		ND
10588	2024-03-24 17:58:22	Front of Castaic Elementary School	No odor detected	34.471593	-118.630209		ND
10578	2024-03-24 18:01:41	Ralph's parking lot facing Bank of America	No odor detected	34.45717	-118.617923		ND
10568	2024-03-24 18:02:00	Starbucks / store by Bruce sushi	There was generally no older, but for about five seconds, I smelled garbage	34.451161	-118.625146	Intermittent	<2
10571	2024-03-24 18:02:41	Starbucks / store by Bruce sushi		34.451131	-118.625048	Intermittent	<2
10589	2024-03-24 18:03:51	Ralph's parking lot facing Bank of America	No odor detected	34.457052	-118.618152		ND
10601	2024-03-24 18:22:40	LA County Fire Department Del Valle Regional Training Center		34.432256	-118.659503		ND
10587	2024-03-24 18:22:48	Park behind Live Oak Elementary school	GPS wasn't calculating, had to manually enter using Patty's coordinates.	34.450616	-118.621094	Persistent	<2
10591	2024-03-24 18:22:55	Park behind Live Oak Elementary school		34.450616	-118.621094	Persistent	<2
10592	2024-03-24 18:23:45	LA County Fire Department Del Valle Regional Training Center		34.432276	-118.659476		ND
10603	2024-03-24 18:27:22	Lincoln Ave near intersection with Chiquito Canyon Rd	Like wet sand	34.438491	-118.657198	Persistent	<2
10593	2024-03-24 18:28:28	Lincoln Ave near intersection with Chiquito Canyon Rd	Smells like wet sand, beachy smell	34.43859	-118.657193	Persistent	<2
10582	2024-03-24 18:28:31	Cambridge Ave across from house number 29862		34.459545	-118.626656	Persistent	<2
10585	2024-03-24 18:29:47	Cambridge Ave across from house number 29862		34.459496	-118.62669	Persistent	<2
10599	2024-03-24 18:32:19	Lincoln Ave and Taylor St		34.442442	-118.655816		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
2	100 - Floral	102 - Cinnamon	Mostly Cloudy		NW	0.7	71.2	38.9	28.77
			Partly Cloudy	None		0	54	60	29.74
			Partly Cloudy	None			54	60.0	29.74
			Partly Cloudy	None	N	4	54	59	29.75
-6	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	2.4	64.8	38.2	28.73
-2	500 - Offensive	506 - Garbage	Mostly Cloudy		S	2.4	64.8	38.2	28.73
			Partly Cloudy	None	N	4	54	59.0	29.75
			Mostly Cloudy	None	SE	4.4	61.5	34.9	28.73
1	100 - Floral	110 - Perfumy	Partly Cloudy	None	N	5	53	59.0	29.74
3	100 - Floral	110 - Perfumy	Partly Cloudy	None	N	5	53	59	29.74
			Mostly Cloudy		SE	4.4	61.5	34.9	28.73
3	400 - Earthy	412 - Peat-like	Mostly Cloudy	None	SW	2.6	65.7	42.3	28.72
1	400 - Earthy	415 - Stale	Mostly Cloudy		SW	2.6	65.7	42.3	28.72
2	100 - Floral	105 - Fragrant	Partly Cloudy	None	NE	4	53	59	29.74
1	100 - Floral	105 - Fragrant	Partly Cloudy	None	NE	4	53	59.0	29.74
			Mostly Cloudy	None		0	71	39.7	28.67

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10594	2024-03-24 18:33:25	Lincoln Ave and Taylor St		34.44289	-118.655726		ND
10605	2024-03-24 18:40:25	San Martinez Rd and Verdale Ave	Like animal waste	34.449943	-118.678731	Intermittent	<2
10595	2024-03-24 18:41:04	San Martinez Rd and Verdale Ave		34.44957	-118.678983	Persistent	<2
10590	2024-03-24 18:46:42	Starbucks / store by Bruce sushi	No odor detected	34.451126	-118.625238		ND
10577	2024-03-24 18:46:42	Starbucks / store by Bruce sushi	No odor detected	34.451177	-118.625209		ND
10600	2024-03-24 18:48:05	Bus Stop at San Martinez and Val Verde Rd		34.447292	-118.664202	Intermittent	<2
10596	2024-03-24 18:48:08	Bus Stop at San Martinez and Val Verde Rd		34.447202	-118.663919		ND
10579	2024-03-24 18:51:24	Lot in front of Fire Station 143	No odor detected	34.454712	-118.634392		ND
10580	2024-03-24 18:51:30	Lot in front of Fire Station 143	No odor detected	34.454695	-118.634359		ND
10602	2024-03-24 18:53:29	Val Verde Rd and Oakwood Ave		34.449988	-118.662319	Persistent	<2
10597	2024-03-24 18:55:04	Val Verde Rd and Oakwood Ave		34.45043	-118.661962	Persistent	<2
10584	2024-03-24 18:58:15	Ave Penn and Witherspoon Pkwy	No odor detected	34.449522	-118.63816		ND
10581	2024-03-24 18:58:16	Ave Penn and Witherspoon Pkwy	No odor detected	34.449441	-118.638138		ND
10598	2024-03-24 19:03:46	Bus Stop 14608 - Del Valle Rd & Silver St		34.448484	-118.655211	Persistent	2
10586	2024-03-24 19:04:24	Castaic Union School District Building	No odor detected	34.441494	-118.626082		ND
10583	2024-03-24 19:04:25	Castaic Union School District Building	No odor detected	34.441516	-118.62613		ND
10604	2024-03-24 19:05:26	Bus Stop 14608 - Del Valle Rd & Silver St		34.44868956	-118.655113		ND
10607	2024-03-24 19:11:55	Lot in front of Fire Station 143	Mostly a sweet smile, but some smaller notes of garbage	34.454817	-118.63468	Intermittent	<2
10615	2024-03-24 19:12:03	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.44947	-118.654477		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Mostly Cloudy			0	71	39.7	28.67
-7	500 - Offensive	505 - Fecal	Mostly Cloudy	None		0	69.8	39.1	28.43
-2	500 - Offensive	508 - Manure	Mostly Cloudy			0	69.8	39.1	28.43
			Partly Cloudy	None	N	5	55	55.0	29.73
			Partly Cloudy	None	N	5	55	55	29.73
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None	SW	2.8	67.5	39.6	28.58
			Mostly Cloudy		SW	2.8	67.5	39.6	28.58
			Partly Cloudy	None	N	3	56	52.0	29.73
			Partly Cloudy	None	N	3	56	52	29.73
3	400 - Earthy	406 - Grassy	Mostly Cloudy	None	NW	2.2	65.9	48.1	28.53
2	400 - Earthy	406 - Grassy	Mostly Cloudy		NW	2.2	65.9	48.1	28.53
			Partly Cloudy	None	N	3	56	52	29.74
			Partly Cloudy	None	N	3	56	52.0	29.74
2	400 - Earthy	406 - Grassy	Overcast		S	3.2	62.1	43.2	28.6
			Partly Cloudy	None	N	1	56	51	29.72
			Partly Cloudy	None	N	1	56	51.0	29.72
			Overcast	None	S	3.2	62.1	43.2	28.6
1	700 - Chemical	703 - Cleaning Fluid	Overcast	Rain	W	2.3	64.2	43.7	28.63
			Partly Cloudy	None	N	6	56	51	29.72



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10623	2024-03-24 19:12:03	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449488	-118.654498		ND
10616	2024-03-24 19:14:52	Val Verde Rd and Oakwood Ave	No odor detected	34.450282	-118.661896		ND
10611	2024-03-24 19:15:02	Lot in front of Fire Station 143	Faint rancid garbage smell	34.454708	-118.63444	Persistent	<2
10625	2024-03-24 19:16:06	Val Verde Rd and Oakwood Ave	No odor detected	34.450264	-118.66186		ND
10613	2024-03-24 19:18:24	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446995	-118.663907		ND
10624	2024-03-24 19:22:01	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447028	-118.663896		ND
10621	2024-03-24 19:22:39	San Martinez Rd and Verdale Ave	No odor detected	34.449656	-118.678617		ND
10606	2024-03-24 19:23:49	Cambridge Ave across from house number 29862		34.459622	-118.626694	Persistent	<2
10610	2024-03-24 19:24:38	Cambridge Ave across from house number 29862		34.459627	-118.626695	Persistent	<2
10618	2024-03-24 19:25:56	San Martinez Rd and Verdale Ave	No odor detected	34.449729	-118.678559		ND
10622	2024-03-24 19:26:35	Lincoln Ave and Taylor St	No odor detected	34.442901	-118.655675		ND
10609	2024-03-24 19:29:16	Park behind Live Oak Elementary school		34.451003	-118.621233		ND
10614	2024-03-24 19:30:34	Lincoln Ave and Taylor St	No odor detected	34.442896	-118.655826		ND
10608	2024-03-24 19:30:44	Park behind Live Oak Elementary school		34.451083	-118.621112	Persistent	<2
10612	2024-03-24 19:32:58	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438581	-118.657111		ND
10620	2024-03-24 19:33:00	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438572	-118.657128		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None	N	6	55	51.0	29.73
			Partly Cloudy	None	N	5	57	51	29.72
-2	500 - Offensive	506 - Garbage	Overcast		W	2.3	64.2	43.7	28.63
			Partly Cloudy	None	N	5	57	51.0	29.73
			Partly Cloudy	None	N	4	55	49	29.71
			Partly Cloudy	None	N	4	55	49.0	29.71
			Partly Cloudy	None	N	4	55	49.0	29.71
3	100 - Floral	105 - Fragrant	Overcast	Rain	S	5.6	62.1	46.3	28.54
2	100 - Floral	105 - Fragrant	Overcast		S	5.6	62.1	46.3	28.54
			Partly Cloudy	None	N	4	55	49	29.71
			Partly Cloudy	None	N	4	56	51.0	29.73
			Overcast	None	SE	2.2	66.7	38.6	28.78
			Partly Cloudy	None	N	4	56	51	29.73
2	400 - Earthy	406 - Grassy	Overcast		SE	2.2	66.7	38.6	28.78
			Partly Cloudy	None		0	55	52	29.72
			Partly Cloudy	None			55	52.0	29.72

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10617	2024-03-24 19:34:15	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432148	-118.659424		ND
10619	2024-03-24 19:34:24	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432169	-118.659349		ND
10651	2024-03-25 14:14:01	LA County Fire Department Del Valle Regional Training Center		34.431922	-118.659406	Persistent	2
10646	2024-03-25 14:18:14	Front of Castaic Elementary School		34.471644	-118.629926	Intermittent	<2
10631	2024-03-25 14:19:19	Front of Castaic Elementary School		34.471415	-118.630124		ND
10643	2024-03-25 14:29:51	Ralph's parking lot facing Bank of America		34.456774	-118.617782		ND
10630	2024-03-25 14:31:28	Ralph's parking lot facing Bank of America		34.45675	-118.617798		ND
10644	2024-03-25 14:36:45	Cambridge Ave across from house number 29862		34.459478	-118.626751		ND
10627	2024-03-25 14:37:39	Cambridge Ave across from house number 29862		34.459514	-118.626776	Persistent	<2
10626	2024-03-25 14:44:01	Park behind Live Oak Elementary school		34.45013	-118.621132	Persistent	<2
10640	2024-03-25 14:44:03	Park behind Live Oak Elementary school		34.450197	-118.621127	Intermittent	2
10633	2024-03-25 14:49:23	LA County Fire Department Del Valle Regional Training Center		34.43201	-118.659288	Persistent	4
10632	2024-03-25 14:55:14	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438479	-118.656975		ND
10649	2024-03-25 14:55:16	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438516	-118.656986		ND
10628	2024-03-25 14:55:59	Ave Penn and Witherspoon Pkwy		34.449445	-118.638228		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None		0	56	51	29.72
			Partly Cloudy	None			56	51.0	29.72
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	NW	1	48	74.0	29.91
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	SW	1.4	58.7	43.9	28.59
			Sunny		SW	1.4	58.7	43.9	28.59
			Partly Cloudy	None	N	4.1	56.3	48.2	28.85
			Sunny		N	4.1	56.3	48.2	28.85
			Partly Cloudy	None	N	5.7	53.7	52.2	28.64
2	100 - Floral	105 - Fragrant	Sunny		N	5.7	53.7	52.2	28.64
-2	700 - Chemical	702 - Car Exhaust	Sunny		S	4.3	55.2	44.6	28.88
-2	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None	S	4.3	55.2	44.6	28.88
-4	500 - Offensive	506 - Garbage	Partly Cloudy	None	NE	1	48	74	29.91
			Partly Cloudy	None	NE	3	49	72	29.91
			Partly Cloudy	None	NW	3	49	72.0	29.91
			Sunny			0	65.8	69.5	28.66

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10642	2024-03-25 14:56:19	Ave Penn and Witherspoon Pkwy		34.449404	-118.638202		ND
10648	2024-03-25 15:01:02	Lincoln Ave and Taylor St	No odor detected	34.442916	-118.65584		ND
10634	2024-03-25 15:01:13	Lincoln Ave and Taylor St	No odor detected	34.442916	-118.655823		ND
10639	2024-03-25 15:01:51	Castaic Union School District Building	Like prepared foods	34.441546	-118.62626	Intermittent	<2
10629	2024-03-25 15:01:55	Castaic Union School District Building		34.44158	-118.626238		ND
10635	2024-03-25 15:06:22	Bus Stop at San Martinez and Val Verde Rd	No wind detected	34.447019	-118.664006		ND
10654	2024-03-25 15:06:58	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447031	-118.664027		ND
10645	2024-03-25 15:12:43	Starbucks / store by Bruce sushi		34.451104	-118.625089		ND
10658	2024-03-25 15:13:43	Starbucks / store by Bruce sushi		34.451089	-118.625139	Persistent	<2
10638	2024-03-25 15:13:50	San Martinez Rd and Verdale Ave	No odor detected	34.449623	-118.678582		ND
10652	2024-03-25 15:14:29	San Martinez Rd and Verdale Ave	No odor detected	34.449602	-118.678623		ND
10637	2024-03-25 15:24:01	Val Verde Rd and Oakwood Ave	No odor detected	34.450276	-118.661812		ND
10650	2024-03-25 15:24:22	Val Verde Rd and Oakwood Ave	No odor detected	34.450288	-118.661871		ND
10653	2024-03-25 15:29:12	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.44885	-118.655103		ND
10636	2024-03-25 15:29:17	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448821	-118.655065		ND
10641	2024-03-25 15:30:45	Lot in front of Fire Station 143		34.454678	-118.634433	Persistent	<2
10656	2024-03-25 15:31:35	Lot in front of Fire Station 143		34.454644	-118.634434		ND
10668	2024-03-25 15:43:40	LA County Fire Department Del Valle Regional Training Center	Odor was substantially more intense before using nasal Rader, but diminished	34.432161	-118.659388	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None		0	65.8	39.5	28.66
			Partly Cloudy	None			49	72.0	29.92
			Partly Cloudy	None			49	72	29.92
4	300 - Vegetable	308 - Potato	Sunny	None	W	1.9	54.6	50.9	28.86
			Sunny		W	1.9	54.6	50.9	28.86
			Partly Cloudy	None	N	1	52	72	29.92
			Partly Cloudy	None	N	1	52	72.0	29.92
			Sunny	None	NW	1.6	59.7	45.4	28.81
-1	700 - Chemical	702 - Car Exhaust	Sunny		NW	1.6	59.7	45.4	28.81
			Partly Cloudy	None	N	1	52	72	29.92
			Partly Cloudy	None	N	1	52	72.0	29.92
			Partly Cloudy	None	E	5	47	69	29.82
			Partly Cloudy	None	E	5	47	69.0	29.82
			Partly Cloudy	None	E	6	48	68.0	29.82
			Partly Cloudy	None	E	6	48	68	29.82
2	700 - Chemical	703 - Cleaning Fluid	Sunny	None	NE	2.1	59.7	51.8	28.74
			Sunny		NE	2.1	59.7	51.8	28.74
-8	500 - Offensive	506 - Garbage	Sunny	None	NW	2.6	63.3	39.7	28.82

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10657	2024-03-25 15:46:15	LA County Fire Department Del Valle Regional Training Center	Smell weakened when I was reading, but it was pretty strong	34.432127	-118.659418	Persistent	<2
10676	2024-03-25 15:48:53	Ralph's parking lot facing Bank of America	No odor detected	34.457125	-118.618424		ND
10647	2024-03-25 15:50:49	Ralph's parking lot facing Bank of America	No odor detected	34.45708	-118.618444		ND
10655	2024-03-25 15:52:24	Lincoln Ave near intersection with Chiquita Canyon Rd	Smells like sand	34.438571	-118.657096	Persistent	<2
10673	2024-03-25 15:52:25	Front of Castaic Elementary School	No odor detected	34.471495	-118.630176		ND
10660	2024-03-25 15:52:38	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438552	-118.657155	Persistent	<2
10664	2024-03-25 15:58:12	Lincoln Ave and Taylor St		34.442967	-118.655777	Persistent	<2
10663	2024-03-25 16:00:04	Lincoln Ave and Taylor St	Smells like sand	34.442965	-118.655757	Persistent	<2
10669	2024-03-25 16:08:47	San Martinez Rd and Verdale Ave		34.449883	-118.679183	Intermittent	<2
10671	2024-03-25 16:09:17	San Martinez Rd and Verdale Ave	Smells like a chicken coop and farm animals	34.449543	-118.67915	Persistent	2
10685	2024-03-25 16:11:01	Front of Castaic Elementary School	No odor detected	34.471457	-118.630174		ND
10680	2024-03-25 16:14:23	Cambridge Ave across from house number 29862		34.459517	-118.626734		<2
10659	2024-03-25 16:14:50	Bus Stop at San Martinez and Val Verde Rd	Chlorine smell	34.447156	-118.663915	Persistent	<2
10666	2024-03-25 16:15:08	Bus Stop at San Martinez and Val Verde Rd		34.44718	-118.663909	Intermittent	<2
10672	2024-03-25 16:19:28	Val Verde Rd and Oakwood Ave		34.45025	-118.662552	Persistent	<2
10667	2024-03-25 16:19:32	Val Verde Rd and Oakwood Ave		34.450244	-118.662511	Persistent	<2
10679	2024-03-25 16:23:06	Cambridge Ave across from house number 29862		34.459487	-118.626747	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-2	500 - Offensive	506 - Garbage	Sunny		NW	2.6	63.3	39.7	28.82
			Partly Cloudy	None	N	1	52	61	29.82
			Partly Cloudy	None	N	1	52	61.0	29.82
-1	400 - Earthy	415 - Stale	Sunny		N	3.8	62.4	41.1	28.8
			Partly Cloudy	None	N	2	55	55.0	29.82
2	400 - Earthy	412 - Peat-like	Sunny	None	N	3.8	62.4	41.1	28.8
2	400 - Earthy	412 - Peat-like	Sunny	None	NW	3.6	67.7	38.5	28.75
-1	400 - Earthy	415 - Stale	Sunny		NW	3.6	67.7	38.5	28.75
2	400 - Earthy	412 - Peat-like	Sunny	None		0	71.7	33.8	28.52
-2	500 - Offensive	508 - Manure	Sunny			0	71.7	33.8	28.52
			Partly Cloudy	None	N	2	55	55	29.82
1	100 - Floral	105 - Fragrant	Partly Cloudy	None	SE	1	56	53	29.82
-1	800 - Medicinal	805 - Chlorinou	Sunny		N	1.9	65.6	38.7	28.67
2	400 - Earthy	406 - Grassy	Sunny	None	N	1.9	65.6	38.7	28.67
1	400 - Earthy	406 - Grassy	Sunny		NW	4.2	63.5	35.5	28.63
2	400 - Earthy	406 - Grassy	Sunny	None	NW	4.2	63.5	35.5	28.63
3	100 - Floral	105 - Fragrant	Partly Cloudy	None	SE	1	56	53	29.82



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10670	2024-03-25 16:25:12	Bus Stop 14608 - Del Valle Rd & Silver St		34.448478	-118.655178	Intermittent	<2
10678	2024-03-25 16:27:25	Park behind Live Oak Elementary school	No odor detected	34.450687	-118.620774		ND
10662	2024-03-25 16:27:41	Bus Stop 14608 - Del Valle Rd & Silver St	Prairie grass smell	34.448427	-118.655209	Persistent	<2
10687	2024-03-25 16:30:01	Park behind Live Oak Elementary school	No odor detected	34.450631	-118.621094		ND
10684	2024-03-25 16:32:17	Park behind Live Oak Elementary school	No odor detected	34.452042	-118.621164		ND
10677	2024-03-25 16:36:08	Starbucks / store by Bruce sushi	No odor detected	34.451039	-118.625106		ND
10674	2024-03-25 16:47:48	Lot in front of Fire Station 143		34.454547	-118.634566	Persistent	<2
10665	2024-03-25 16:49:26	Lot in front of Fire Station 143		34.454634	-118.634438	Intermittent	<2
10683	2024-03-25 16:49:59	Lot in front of Fire Station 143		34.454525	-118.634523	Persistent	<2
10661	2024-03-25 16:50:43	Lot in front of Fire Station 143		34.454673	-118.634469	Persistent	<2
10675	2024-03-25 16:57:46	Ave Penn and Witherspoon Pkwy	No odor detected	34.449306	-118.638356		ND
10681	2024-03-25 16:58:06	Ave Penn and Witherspoon Pkwy	No odor detected	34.449349	-118.63829		ND
10686	2024-03-25 17:00:28	Ave Penn and Witherspoon Pkwy	No odor detected	34.448689	-118.638681		ND
10692	2024-03-25 17:00:32	Cambridge Ave across from house number 29862		34.459569	-118.626732	Persistent	<2
10689	2024-03-25 17:00:36	Cambridge Ave across from house number 29862		34.459539	-118.62678	Persistent	<2
10682	2024-03-25 17:03:54	Castaic Union School District Building	No odor detected	34.441584	-118.626038		ND
10695	2024-03-25 17:06:51	Park behind Live Oak Elementary school		34.450253	-118.621138	Persistent	2
10690	2024-03-25 17:08:44	Park behind Live Oak Elementary school		34.45019	-118.621199	Persistent	2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-3	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None	N	3.9	64.3	40.4	28.69
			Partly Cloudy	None	SE	2	56	53	29.82
2	400 - Earthy	406 - Grassy	Sunny		N	3.9	64.3	40.4	28.69
			Partly Cloudy	None	SE	2	56	53	29.82
			Partly Cloudy	None	S	2	56	51	29.82
			Partly Cloudy	None	S	2	56	51	29.82
1	100 - Floral	105 - Fragrant	Partly Cloudy	None	S	2	56	51	29.82
4	100 - Floral	105 - Fragrant	Sunny	None	W	1.6	67.7	30.3	28.72
2	100 - Floral	105 - Fragrant	Partly Cloudy	None	E	3	56	51	29.82
1	100 - Floral	106 - Herbal	Sunny		W	1.6	67.7	30.3	28.72
			Partly Cloudy	None	W	2	57	46	29.83
			Partly Cloudy	None	W	2	57	46	29.83
			Partly Cloudy	None	E	1	57	48	29.82
4	100 - Floral	105 - Fragrant	Sunny	None	NW	10.5	62.1	39.4	28.68
2	100 - Floral	102 - Cinnamon	Sunny		NW	10.5	62.1	39.4	28.64
			Partly Cloudy	None	E	1	57	48	29.82
5	400 - Earthy	413 - Pine	Sunny	None	N	7.2	62.9	33.8	28.88
2	400 - Earthy	406 - Grassy	Sunny		N	7.2	62.9	33.8	28.88

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10706	2024-03-25 17:14:07	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432217	-118.659438		ND
10700	2024-03-25 17:15:44	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432136	-118.659346		ND
10693	2024-03-25 17:17:35	Front of Castaic Elementary School		34.471442	-118.630211		ND
10691	2024-03-25 17:19:13	Front of Castaic Elementary School		34.47141	-118.630233		ND
10697	2024-03-25 17:20:46	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438491	-118.657002		ND
10698	2024-03-25 17:28:13	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438477	-118.656988		ND
10694	2024-03-25 17:28:28	Ralph's parking lot facing Bank of America		34.456559	-118.618058	Intermittent	<2
10699	2024-03-25 17:31:40	Lincoln Ave and Taylor St	No odor detected	34.44296	-118.655863		ND
10688	2024-03-25 17:31:46	Ralph's parking lot facing Bank of America		34.456772	-118.617955	Persistent	<2
10702	2024-03-25 17:31:56	Lincoln Ave and Taylor St	No odor detected	34.442975	-118.655823		ND
10701	2024-03-25 17:40:19	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446959	-118.663876		ND
10708	2024-03-25 17:40:50	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447017	-118.663857		ND
10696	2024-03-25 17:44:12	San Martinez Rd and Verdale Ave		34.44951427	-118.6785928	Persistent	<2
10709	2024-03-25 17:47:11	San Martinez Rd and Verdale Ave		34.449627	-118.678591	Persistent	<2
10704	2024-03-25 17:48:23	Val Verde Rd and Oakwood Ave	No odor detected	34.450315	-118.661885		ND
10707	2024-03-25 17:51:58	Val Verde Rd and Oakwood Ave	No odor detected	34.450307	-118.661833		ND
10705	2024-03-25 17:53:14	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448782	-118.655155		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None	NW	5	57	49	29.92
			Partly Cloudy	None	NW	5	57	49	29.92
			Sunny	None	N	2.1	67.3	32.7	28.59
			Sunny		N	2.1	67.3	32.7	28.59
			Partly Cloudy	None	N	3	57	49	29.92
			Partly Cloudy	None	N	3	57	49	29.92
4	100 - Floral	102 - Cinnamon	Partly Cloudy	None	E	4.7	68.9	33.0	28.86
			Partly Cloudy	None	E	1	60	42	29.92
2	100 - Floral	102 - Cinnamon	Sunny		N	4.7	68.9	33.0	28.86
			Partly Cloudy	None	E	1	60	42	29.92
			Partly Cloudy	None	E	1	64	42	29.92
			Partly Cloudy	None	E	1	64	42	29.92
-2	500 - Offensive	508 - Manure	Partly Cloudy	None	E	1	64	42	29.92
-2	500 - Offensive	508 - Manure	Partly Cloudy	None	E	1	64	42	29.92
			Partly Cloudy	None	E	1	63	42	29.92
			Partly Cloudy	None	E	1	63	42	29.92
			Partly Cloudy	None	SW	2	60	42	29.83

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10703	2024-03-25 17:55:31	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.44883	-118.655081		ND
10722	2024-03-25 20:23:26	Castaic Union School District Building		34.441599	-118.626275		ND
10728	2024-03-25 20:24:35	Castaic Union School District Building		34.441567	-118.626186		ND
10750	2024-03-25 20:25:00	Front of Castaic Elementary School	No odor detected	34.471501	-118.630188		ND
10711	2024-03-25 20:25:17	Front of Castaic Elementary School	No odor detected	34.471524	-118.630197		ND
10721	2024-03-25 20:30:39	Ave Penn and Witherspoon Pkwy		34.449478	-118.638163		ND
10730	2024-03-25 20:31:07	Ave Penn and Witherspoon Pkwy		34.449503	-118.638143		ND
10739	2024-03-25 20:32:35	Ralph's parking lot facing Bank of America	No odor detected	34.456908	-118.617809		ND
10714	2024-03-25 20:32:40	Ralph's parking lot facing Bank of America	No odor detected	34.456914	-118.617835		ND
10720	2024-03-25 20:36:40	Starbucks / store by Bruce sushi		34.45104	-118.625072	Intermittent	<2
10753	2024-03-25 20:38:06	Cambridge Ave across from house number 29862		34.459494	-118.626761	Persistent	<2
10710	2024-03-25 20:38:09	Cambridge Ave across from house number 29862		34.459489	-118.626772	Persistent	<2
10732	2024-03-25 20:38:41	Starbucks / store by Bruce sushi		34.45106	-118.625066	Persistent	<2
10715	2024-03-25 20:44:20	Park behind Live Oak Elementary school	No odor detected	34.450437	-118.621089		ND
10752	2024-03-25 20:44:23	Park behind Live Oak Elementary school	No odor detected	34.450409	-118.621133		ND
10725	2024-03-25 20:48:04	LA County Fire Department Del Valle Regional Training Center		34.432204	-118.659478		ND
10735	2024-03-25 20:50:01	LA County Fire Department Del Valle Regional Training Center		34.432233	-118.659462		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None	SW	2	60	42	29.83
			Partly Cloudy	None		0	74.8	45.1	28.82
			Partly Cloudy			0	74.8	45.1	28.82
			Partly Cloudy	None	S	1	65	30	29.8
			Partly Cloudy	None	S	1	65	30	29.8
			Partly Cloudy	None	SW	5.6	76.3	28.3	28.64
			Partly Cloudy		SW	5.6	76.3	28.3	28.64
			Partly Cloudy	None	NW	4	64	35	29.79
			Partly Cloudy	None	NW	4	64	35	29.79
-4	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None	SE	4.3	77.3	33.5	28.78
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	7	66	32	29.79
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	7	66	32	29.79
-2	700 - Chemical	702 - Car Exhaust	Partly Cloudy		SE	4.3	77.35	33.5	28.78
			Partly Cloudy	None	SW	4	66	32	29.79
			Partly Cloudy	None	SW	4	66	32	29.79
			Partly Cloudy	None	SE	4.3	74.1	33.4	28.78
			Partly Cloudy		SE	4.3	74.1	33.4	28.78

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10716	2024-03-25 20:51:51	Starbucks / store by Bruce		34.45116	-118.625232	Persistent	<2
		sushi					
10751	2024-03-25 20:52:27	Starbucks / store by Bruce		34.451142	-118.625253	Persistent	<2
		sushi					
10719	2024-03-25 20:53:52	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438606	-118.657122	Persistent	<2
10727	2024-03-25 20:53:58	Lincoln Ave near intersection with Chiquita Canyon Rd	Smells like sand	34.438591	-118.657093	Persistent	<2
10737	2024-03-25 20:57:01	Lincoln Ave and Taylor St	Smells like sand	34.442988	-118.655792	Persistent	<2
10724	2024-03-25 20:57:16	Lincoln Ave and Taylor St		34.442961	-118.655771	Intermittent	<2
10744	2024-03-25 21:03:56	Lot in front of Fire Station 143		34.454523	-118.634525	Persistent	<2
10712	2024-03-25 21:03:59	Lot in front of Fire Station 143		34.45457	-118.634549	Persistent	<2
10718	2024-03-25 21:05:59	San Martinez Rd and Verdale Ave		34.449605	-118.679143	Intermittent	<2
10734	2024-03-25 21:08:56	San Martinez Rd and Verdale Ave		34.449596	-118.679064	Persistent	2
10754	2024-03-25 21:10:54	Ave Penn and Witherspoon Pkwy	No odor detected	34.449349	-118.638383		ND
10713	2024-03-25 21:11:03	Ave Penn and Witherspoon Pkwy	No odor detected	34.449406	-118.638407		ND
10736	2024-03-25 21:14:30	Bus Stop at San Martinez and Val Verde Rd	Chlorine smell	34.447159	-118.663864	Persistent	<2
10726	2024-03-25 21:15:05	Bus Stop at San Martinez and Val Verde Rd		34.447173	-118.663876		ND
10723	2024-03-25 21:18:37	Val Verde Rd and Oakwood Ave		34.450341	-118.6619	Intermittent	<2
10717	2024-03-25 21:21:09	Castaic Union School District Building		34.441665	-118.625994	Persistent	<2
10757	2024-03-25 21:21:29	Castaic Union School District Building		34.441526	-118.626081	Persistent	<2
10738	2024-03-25 21:21:40	Val Verde Rd and Oakwood Ave		34.450265	-118.661865	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	11	65	33	29.79
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	11	65	33	29.79
2	400 - Earthy	406 - Grassy	Partly Cloudy	None	SE	9.3	73.8	35.8	28.76
-1	400 - Earthy	415 - Stale	Partly Cloudy		SE	9.3	73.8	35.8	28.76
-1	400 - Earthy	415 - Stale	Partly Cloudy		N	2.4	74.9	31.8	28.72
2	400 - Earthy	412 - Peat-like	Partly Cloudy	None	N	2.4	74.9	31.8	28.72
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	7	64	35	29.79
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	7	64	35	29.79
-5	500 - Offensive	508 - Manure	Mostly Cloudy	None	N	2.6	69	32.5	28.49
-2	500 - Offensive	508 - Manure	Partly Cloudy		N	2.6	69	32.5	28.49
			Partly Cloudy	None	SW	4	64	38	29.79
			Partly Cloudy	None	SW	4	64	38	29.79
-1	800 - Medicinal	805 - Chlorinou	Partly Cloudy		W	4.1	72.2	30.5	28.64
			Mostly Cloudy	None	W	4.1	72.2	30.5	28.64
3	400 - Earthy	406 - Grassy	Mostly Cloudy	None	SW	7.3	68.3	36.9	28.6
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	5	64	39	29.79
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	5	64	39	29.79
3	400 - Earthy	406 - Grassy	Partly Cloudy		SW	7.3	68.3	36.9	28.6



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10729	2024-03-25 21:26:54	Bus Stop 14608 - Del Valle Rd & Silver St	Intermittent gasoline smell but a constant grass smell	34.448554	-118.655184	Intermittent	<2
10773	2024-03-25 21:27:28	Bus Stop 14608 - Del Valle Rd & Silver St		34.448528	-118.65523		ND
10767	2024-03-25 21:33:31	Lot in front of Fire Station 143		34.454706	-118.634415	Intermittent	2
10756	2024-03-25 21:33:50	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432052	-118.659341		ND
10731	2024-03-25 21:35:07	Lot in front of Fire Station 143		34.454609	-118.634438	Persistent	<2
10742	2024-03-25 21:35:13	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432122	-118.659376		ND
10758	2024-03-25 21:39:27	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438493	-118.657009		ND
10740	2024-03-25 21:40:07	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438581	-118.657009	Persistent	<2
10775	2024-03-25 21:40:43	Cambridge Ave across from house number 29862		34.459351	-118.626701	Persistent	<2
10733	2024-03-25 21:40:52	Cambridge Ave across from house number 29862		34.459569	-118.626763	Intermittent	<2
10749	2024-03-25 21:44:13	Lincoln Ave and Taylor St	No odor detected	34.442958	-118.655609		ND
10762	2024-03-25 21:44:31	Park behind Live Oak Elementary school		34.450997	-118.621162	Intermittent	<2
10759	2024-03-25 21:45:29	Lincoln Ave and Taylor St	No odor detected	34.442998	-118.655813		ND
10772	2024-03-25 21:46:41	Park behind Live Oak Elementary school		34.451023	-118.621188	Persistent	<2
10755	2024-03-25 21:49:09	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447065	-118.663981		ND
10743	2024-03-25 21:49:27	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447133	-118.663935		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	700 - Chemical	707 - Gasoline	Partly Cloudy		S	6.6	67.2	31.3	28.65
			Mostly Cloudy	None	S	6.6	67.2	31.3	28.65
2	700 - Chemical	703 - Cleaning Fluid	Mostly Cloudy	None	W	4.2	74.9	29.6	28.68
			Partly Cloudy	None	W	5	64	42	29.88
2	100 - Floral	105 - Fragrant	Partly Cloudy		W	4.2	74.9	29.6	28.68
			Partly Cloudy	None	W	5	64	42	29.88
			Partly Cloudy	None	W	7	65	42	29.87
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	7	65	42	29.87
7	100 - Floral	105 - Fragrant	Mostly Cloudy	None	S	4.5	70.5	33.4	28.59
-1	700 - Chemical	702 - Car Exhaust	Partly Cloudy		S	4.5	70.5	33.4	28.59
			Partly Cloudy	None	SW	10	64	39	29.78
-2	500 - Offensive	506 - Garbage	Mostly Cloudy		SE	6.2	73.9	24.7	28.83
			Partly Cloudy	None	SW	10	64	39	29.78
2	300 - Vegetable	308 - Potato	Mostly Cloudy	None	SE	6.2	73.9	24.7	28.83
			Partly Cloudy	None	SW	10	68	39	29.78
			Partly Cloudy	None	SW	10	68	39	29.78

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10769	2024-03-25 22:00:38	Front of Castaic Elementary School		34.471485	-118.630163	Intermittent	<2
10763	2024-03-25 22:01:10	Front of Castaic Elementary School		34.471495	-118.630203	Persistent	<2
10760	2024-03-25 22:01:25	San Martinez Rd and Verdale Ave		34.449644	-118.678636	Persistent	<2
10748	2024-03-25 22:01:38	San Martinez Rd and Verdale Ave		34.449756	-118.678622	Persistent	<2
10747	2024-03-25 22:07:21	Val Verde Rd and Oakwood Ave	No odor detected	34.450322	-118.661869		ND
10745	2024-03-25 22:07:25	Val Verde Rd and Oakwood Ave	No odor detected	34.450428	-118.661825		ND
10774	2024-03-25 22:08:18	Ralph's parking lot facing Bank of America		34.45682	-118.618019	Persistent	<2
10765	2024-03-25 22:08:25	Ralph's parking lot facing Bank of America	Fried chicken smell	34.456893	-118.617982	Persistent	<2
10741	2024-03-25 22:11:50	Bus Stop 14608 - Del Valle Rd & Silver St		34.448848	-118.655119	Persistent	<2
10746	2024-03-25 22:12:05	Bus Stop 14608 - Del Valle Rd & Silver St		34.448925	-118.655093	Persistent	<2
10766	2024-03-25 22:14:45	Starbucks / store by Bruce sushi	Noticable garbage smell	34.451104	-118.625124	Persistent	<2
10771	2024-03-25 22:17:01	Starbucks / store by Bruce sushi		34.45083035	-118.6252193	Persistent	<2
10768	2024-03-25 22:24:01	Ave Penn and Witherspoon Pkwy		34.449485	-118.63817		ND
10764	2024-03-25 22:24:25	Ave Penn and Witherspoon Pkwy		34.449493	-118.638222		ND
10770	2024-03-25 22:28:43	Castaic Union School District Building		34.441651	-118.626319	Persistent	2
10761	2024-03-25 22:29:41	Castaic Union School District Building		34.441617	-118.626259	Persistent	2
10791	2024-03-25 22:45:23	LA County Fire Department Del Valle Regional Training Center		34.432189	-118.659425		ND
10781	2024-03-25 22:47:03	LA County Fire Department Del Valle Regional Training Center		34.432219	-118.659431		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None	SE	2.2	76.7	31.2	28.56
-2	700 - Chemical	716 - Plastic	Mostly Cloudy		SE	2.2	76.7	31.2	28.56
-1	500 - Offensive	508 - Manure	Partly Cloudy	None	SW	10	65	39	29.78
-2	500 - Offensive	508 - Manure	Partly Cloudy	None	SW	10	65	39	29.78
			Partly Cloudy	None	SW	10	65	39	29.78
			Partly Cloudy	None	SW	10	65	39	29.78
2	300 - Vegetable	308 - Potato	Mostly Cloudy	None	S	3.7	74.5	29.3	28.81
2	300 - Vegetable	310 - Onion	Mostly Cloudy		S	3.7	74.5	29.3	28.81
2	100 - Floral	105 - Fragrant	Partly Cloudy	None	W	8	64	42	29.88
3	100 - Floral	105 - Fragrant	Partly Cloudy	None	W	8	64	42	29.88
-2	500 - Offensive	506 - Garbage	Mostly Cloudy		SW	2.4	72.8	40.4	28.76
2	400 - Earthy	412 - Peat-like	Mostly Cloudy	None	SW	2.4	72.8	40.4	28.76
			Mostly Cloudy	None	S	8.4	66.6	29.5	28.62
			Mostly Cloudy		S	8.4	66.6	29.5	28.62
-9	500 - Offensive	506 - Garbage	Mostly Cloudy	None	SW	7.9	66.2	33.9	28.81
-3	500 - Offensive	506 - Garbage	Mostly Cloudy		SW	7.9	66.2	33.9	28.81
			Mostly Cloudy	None	E	2.6	73.3	27.7	28.77
			Mostly Cloudy		E	2.6	73.3	27.7	28.77

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10783	2024-03-25 22:51:14	Lincoln Ave near intersection with Chiquito Canyon Rd	Smells like sand	34.438589	-118.657135	Persistent	<2
10788	2024-03-25 22:51:15	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438604	-118.657082	Persistent	<2
10807	2024-03-25 22:55:07	Front of Castaic Elementary School		34.47152	-118.630201	Persistent	<2
10794	2024-03-25 22:55:27	Front of Castaic Elementary School		34.471609	-118.630137	Persistent	<2
10790	2024-03-25 22:55:33	Lincoln Ave and Taylor St		34.44315939	-118.6558143	Persistent	<2
10780	2024-03-25 22:57:10	Lincoln Ave and Taylor St	Sandy smell	34.442908	-118.65582	Persistent	<2
10804	2024-03-25 23:03:11	Ralph's parking lot facing Bank of America	No odor detected	34.456458	-118.617948		ND
10800	2024-03-25 23:03:16	Ralph's parking lot facing Bank of America	No odor detected	34.45655	-118.61785		ND
10779	2024-03-25 23:03:59	San Martinez Rd and Verdale Ave	Farm animal smell	34.449589	-118.679147	Persistent	<2
10784	2024-03-25 23:04:51	San Martinez Rd and Verdale Ave	Initially, I smelled only grass. I took three steps and smelled a burst of manure odor.	34.449582	-118.679044	Intermittent	<2
10798	2024-03-25 23:10:47	Park behind Live Oak Elementary school		34.450606	-118.621119	Persistent	4
10795	2024-03-25 23:10:55	Park behind Live Oak Elementary school		34.450642	-118.621095	Persistent	4
10787	2024-03-25 23:13:49	Bus Stop at San Martinez and Val Verde Rd		34.447181	-118.663897		ND
10777	2024-03-25 23:15:39	Bus Stop at San Martinez and Val Verde Rd		34.447112	-118.663862		ND
10793	2024-03-25 23:16:46	Cambridge Ave across from house number 29862		34.459497	-118.626722	Persistent	<2
10806	2024-03-25 23:17:25	Cambridge Ave across from house number 29862		34.459484	-118.626736	Persistent	<2
10786	2024-03-25 23:18:36	Val Verde Rd and Oakwood Ave		34.45037	-118.661915	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	400 - Earthy	415 - Stale	Mostly Cloudy		SW	3.3	70	31.3	28.76
2	400 - Earthy	412 - Peat-like	Overcast	None	SW	3.3	70	31.3	28.76
1	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	5	62	43	29.79
3	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	5	62	43	29.79
2	400 - Earthy	412 - Peat-like	Overcast	None	S	3.5	70.1	29.3	28.72
-1	400 - Earthy	415 - Stale	Mostly Cloudy		S	3.5	70.1	29.3	28.72
			Partly Cloudy	None	W	7	62	41	29.79
			Partly Cloudy	None	W	7	62	41	29.79
-2	500 - Offensive	508 - Manure	Mostly Cloudy		W	3.4	66.4	45.5	28.5
2	500 - Offensive	508 - Manure	Overcast	None	W	3.4	66.4	45.5	28.5
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	8	61	42	29.79
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	8	61	42	29.79
			Overcast	None	W	2.3	68.5	35.5	28.66
			Mostly Cloudy		W	2.3	68.5	35.5	28.66
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	7	61	42	29.79
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	7	61	42	29.79
2	400 - Earthy	412 - Peat-like	Overcast	None	SE	4.5	67.3	34.7	28.59

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10778	2024-03-25 23:18:57	Val Verde Rd and Oakwood Ave		34.450302	-118.661863	Persistent	<2
10797	2024-03-25 23:24:46	Starbucks / store by Bruce sushi	No odor detected	34.451289	-118.624907		ND
10782	2024-03-25 23:24:52	Bus Stop 14608 - Del Valle Rd & Silver St		34.448466	-118.655205	Persistent	<2
10789	2024-03-25 23:24:56	Bus Stop 14608 - Del Valle Rd & Silver St		34.448483	-118.655255	Intermittent	<2
10796	2024-03-25 23:25:27	Starbucks / store by Bruce sushi	No odor detected	34.451317	-118.624949		ND
10776	2024-03-25 23:29:21	Lot in front of Fire Station 143		34.454685	-118.634445		ND
10799	2024-03-25 23:32:05	Lot in front of Fire Station 143		34.454544	-118.634545	Persistent	<2
10801	2024-03-25 23:32:09	Lot in front of Fire Station 143		34.454556	-118.634597	Persistent	<2
10785	2024-03-25 23:32:12	Lot in front of Fire Station 143		34.454654	-118.634443	Persistent	<2
10803	2024-03-25 23:46:43	Ave Penn and Witherspoon Pkwy	No odor detected	34.44932	-118.638272		ND
10792	2024-03-25 23:47:20	Ave Penn and Witherspoon Pkwy	No odor detected	34.449377	-118.63843		ND
10805	2024-03-25 23:51:40	Castaic Union School District Building		34.441593	-118.626332	Persistent	2
10802	2024-03-25 23:53:38	Castaic Union School District Building		34.441622	-118.626368	Persistent	4
10811	2024-03-26 14:14:04	LA County Fire Department Del Valle Regional Training Center		34.432208	-118.65942	Intermittent	<2
10817	2024-03-26 14:16:40	LA County Fire Department Del Valle Regional Training Center		34.432169	-118.659415	Intermittent	<2
10822	2024-03-26 14:16:43	Front of Castaic Elementary School	No odor detected	34.471558	-118.630201		ND
10847	2024-03-26 14:20:09	Front of Castaic Elementary School	No odor detected	34.471527	-118.630163		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
2	100 - Floral	106 - Herbal	Mostly Cloudy		SE	4.5	67.3	34.7	28.59
			Partly Cloudy	None	W	9	61	43	29.79
2	400 - Earthy	406 - Grassy	Mostly Cloudy		SW	7.1	64.7	42.5	28.65
3	400 - Earthy	406 - Grassy	Overcast	None	SW	7.1	64.7	42.5	28.65
			Partly Cloudy	None	W	9	61	43	29.79
			Mostly Cloudy		SW	2.9	68.9	36.0	28.68
2	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	7	61	44	29.78
2	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	7	61	44	29.78
3	700 - Chemical	703 - Cleaning Fluid	Overcast	None	SW	2.9	68.9	36.0	28.68
			Partly Cloudy	None	W	6	60	47	29.79
			Partly Cloudy	None	W	6	60	47	29.79
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	7	60	48	29.79
-4	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	7	60	48	29.79
-6	500 - Offensive	506 - Garbage	Sunny	None	N	1.5	47.9	45.5	28.9
-1	500 - Offensive	506 - Garbage	Sunny		N	1.5	47.9	45.5	28.9
			Sunny	None		0	39	100	29.89
			Sunny	None			39	100	29.89



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10808	2024-03-26 14:21:26	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438541	-118.657144	Persistent	<2
10816	2024-03-26 14:21:35	Lincoln Ave near intersection with Chiquito Canyon Rd		34.43853	-118.657014		ND
10818	2024-03-26 14:25:50	Lincoln Ave and Taylor St		34.442972	-118.655767	Persistent	<2
10812	2024-03-26 14:26:03	Lincoln Ave and Taylor St		34.442921	-118.65584		ND
10836	2024-03-26 14:29:34	Ralph's parking lot facing Bank of America	No odor detected	34.457031	-118.618346		ND
10825	2024-03-26 14:36:44	Ralph's parking lot facing Bank of America	No odor detected	34.457069	-118.61836		ND
10809	2024-03-26 14:40:41	San Martinez Rd and Verdale Ave		34.449565	-118.679123	Persistent	2
10832	2024-03-26 14:41:14	Cambridge Ave across from house number 29862	No odor detected	34.459718	-118.626638		ND
10824	2024-03-26 14:41:28	Cambridge Ave across from house number 29862	No odor detected	34.459737	-118.626706		ND
10819	2024-03-26 14:42:05	San Martinez Rd and Verdale Ave	Smells mainly of smoke and grass	34.449484	-118.678927	Persistent	<2
10821	2024-03-26 14:50:06	Bus Stop at San Martinez and Val Verde Rd		34.447103	-118.663826	Persistent	<2
10810	2024-03-26 14:51:09	Bus Stop at San Martinez and Val Verde Rd		34.447166	-118.66394	Persistent	<2
10815	2024-03-26 14:56:44	Val Verde Rd and Oakwood Ave		34.45023	-118.662462	Persistent	<2
10814	2024-03-26 14:56:49	Val Verde Rd and Oakwood Ave		34.450303	-118.662561		ND
10827	2024-03-26 15:03:03	Starbucks / store by Bruce sushi	No odor detected	34.451039	-118.625178		ND
10820	2024-03-26 15:04:31	Bus Stop 14608 - Del Valle Rd & Silver St	Faint intermittent garbage smell	34.448449	-118.655224	Intermittent	<2
10813	2024-03-26 15:04:33	Bus Stop 14608 - Del Valle Rd & Silver St		34.448357	-118.655248	Intermittent	<2
10846	2024-03-26 15:04:39	Starbucks / store by Bruce sushi	No odor detected	34.451062	-118.625174		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
2	400 - Earthy	412 - Peat-like	Sunny	None	NW	1.3	46.5	48.6	28.88
			Sunny		NW	1.3	46.5	48.6	28.88
-1	400 - Earthy	415 - Stale	Sunny		SW	1	47	67.3	28.83
			Sunny	None	SW	1	47	67.3	28.83
			Sunny	None	W	1	40	100	29.9
			Sunny	None	W	1	40	100	29.9
-3	400 - Earthy	402 - Burnt Wood	Sunny	None	W	1.3	50.1	62.4	28.6
			Sunny	None			41	100	29.9
			Sunny	None		0	41	100	29.9
-1	400 - Earthy	402 - Burnt Wood	Sunny		W	1.3	50.1	62.4	28.6
-1	700 - Chemical	702 - Car Exhaust	Sunny		W	1.3	58.8	39.3	28.77
-1	400 - Earthy	402 - Burnt Wood	Sunny	None	W	1.3	58.8	39.3	28.77
2	200 - Fruity	209 - Minty	Sunny		E	1.2	53.3	53.5	28.73
			Sunny	None	E	1.2	53.3	53.5	28.73
			Sunny	None	N	1	44	92	29.92
-1	500 - Offensive	506 - Garbage	Sunny			0	56.8	49.7	28.79
3	200 - Fruity	203 - Citrus	Sunny	None		0	56.8	49.7	28.79
			Sunny	None	N	1	44	92	29.92

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10829	2024-03-26 15:08:19	Lot in front of Fire Station 143	No odor detected	34.45477	-118.634363		ND
10842	2024-03-26 15:08:29	Lot in front of Fire Station 143	No odor detected	34.45472	-118.634372		ND
10828	2024-03-26 15:16:10	Ave Penn and Witherspoon Pkwy		34.449497	-118.6382	Persistent	<2
10843	2024-03-26 15:16:13	Ave Penn and Witherspoon Pkwy		34.449516	-118.63816	Persistent	<2
10834	2024-03-26 15:17:33	Lot in front of Fire Station 143		34.454635	-118.634366		ND
10858	2024-03-26 15:17:44	Lot in front of Fire Station 143		34.454646	-118.634361	Intermittent	<2
10856	2024-03-26 15:25:05	Cambridge Ave across from house number 29862		34.459531	-118.62671		ND
10839	2024-03-26 15:25:55	Cambridge Ave across from house number 29862		34.459536	-118.626727	Persistent	<2
10826	2024-03-26 15:27:24	Castaic Union School District Building	No odor detected	34.441805	-118.626167		ND
10849	2024-03-26 15:27:44	Castaic Union School District Building	No odor detected	34.441782	-118.626186		ND
10835	2024-03-26 15:34:56	Park behind Live Oak Elementary school		34.45024	-118.62114	Persistent	<2
10845	2024-03-26 15:35:52	Park behind Live Oak Elementary school	No odor detected	34.450314	-118.621055		ND
10823	2024-03-26 15:35:53	Park behind Live Oak Elementary school	No odor detected	34.45027	-118.621048		ND
10853	2024-03-26 15:40:20	Park behind Live Oak Elementary school		34.450208	-118.621081	Intermittent	<2
10854	2024-03-26 15:48:53	Front of Castaic Elementary School		34.471656	-118.630004	Intermittent	<2
10833	2024-03-26 15:49:13	Front of Castaic Elementary School	Smelled intermittently like a boiled hotdog and then faded into a grass smell	34.471407	-118.630172	Intermittent	<2
10851	2024-03-26 15:57:55	Ralph's parking lot facing Bank of America		34.456957	-118.617742	Intermittent	<2
10837	2024-03-26 16:01:35	Ralph's parking lot facing Bank of America		34.456894	-118.617802		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny	None		0	45	91	29.92
			Sunny	None			45	91	29.92
0	400 - Earthy	412 - Peat-like	Sunny	None	N	1	45	88	29.92
0	400 - Earthy	412 - Peat-like	Sunny	None	N	1	45	88	29.92
			Sunny			0	66.4	47.9	28.82
-3	700 - Chemical	702 - Car Exhaust	Sunny	None		0	66.4	47.9	28.82
			Sunny	None	N	1.5	56.8	47.4	28.74
2	100 - Floral	105 - Fragrant	Sunny		N	1.5	56.8	47.4	28.74
			Sunny	None	N	1	47	85	29.92
			Sunny	None	N	1	47	85	29.92
2	400 - Earthy	406 - Grassy	Sunny		NW	2.1	57.4	56.1	28.98
			Sunny	None	N	1	47	85	29.92
			Sunny	None	N	1	47	85	29.92
-5	700 - Chemical	702 - Car Exhaust	Sunny	None	NW	2.1	57.4	56.1	28.98
4	400 - Earthy	406 - Grassy	Sunny	None	NW	2	56.7	51.2	28.7
-1	300 - Vegetable	310 - Onion	Sunny		NW	2	56.7	51.2	28.7
-3	700 - Chemical	702 - Car Exhaust	Sunny	None		0	63.8	49.6	28.97
			Sunny			0	63.8	49.6	28.97

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10844	2024-03-26 16:08:03	LA County Fire Department Del Valle Regional Training Center		34.432305	-118.659474	Persistent	7
10831	2024-03-26 16:08:13	LA County Fire Department Del Valle Regional Training Center		34.432322	-118.659486	Persistent	15
10852	2024-03-26 16:09:53	Ave Penn and Witherspoon Pkwy		34.449435	-118.638226	Persistent	<2
10830	2024-03-26 16:10:08	Ave Penn and Witherspoon Pkwy		34.449397	-118.638293		ND
10850	2024-03-26 16:13:30	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.43849	-118.656871		ND
10838	2024-03-26 16:13:42	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438511	-118.6569		ND
10857	2024-03-26 16:15:45	Castaic Union School District Building		34.441774	-118.626327	Intermittent	<2
10840	2024-03-26 16:16:59	Castaic Union School District Building		34.441742	-118.626306	Persistent	<2
10848	2024-03-26 16:17:43	Lincoln Ave and Taylor St	No odor detected	34.442923	-118.655833		ND
10841	2024-03-26 16:17:51	Lincoln Ave and Taylor St	No odor detected	34.442937	-118.655835		ND
10865	2024-03-26 16:21:01	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446966	-118.66396		ND
10861	2024-03-26 16:24:11	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446946	-118.663892		ND
10855	2024-03-26 16:25:03	Starbucks / store by Bruce sushi	Like prepared foods	34.451091	-118.625138	Intermittent	<2
10870	2024-03-26 16:26:56	Starbucks / store by Bruce sushi		34.451098	-118.62516	Persistent	<2
10860	2024-03-26 16:37:01	San Martinez Rd and Verdale Ave	No odor detected	34.449658	-118.678586		ND
10864	2024-03-26 16:37:17	San Martinez Rd and Verdale Ave	No odor detected	34.449594	-118.678616		ND
10893	2024-03-26 16:38:16	Bus Stop 14608 - Del Valle Rd & Silver St		34.448496	-118.655166		ND
10871	2024-03-26 16:39:28	Bus Stop 14608 - Del Valle Rd & Silver St		34.448527	-118.655175	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-5	500 - Offensive	506 - Garbage	Sunny	None	E	2	52	76	30.03
-5	500 - Offensive	506 - Garbage	Sunny	None	E	2	52	76	30.03
5	200 - Fruity	212 - Sweet	Sunny	None		0	70.3	41.8	28.78
			Sunny			0	70.3	41.8	28.78
			Sunny	None	E	2	53	75	30.04
			Sunny	None	E	2	53	75	30.04
5	200 - Fruity	212 - Sweet	Sunny	None		0	71.5	47.5	28.96
-2	400 - Earthy	411 - Musty	Sunny			0	71.5	47.5	28.96
			Sunny	None	NE	2	53	75	30.03
			Sunny	None	NE	2	53	75	30.03
			Sunny	None		0	58	75	28.78
			Sunny	None			58	75	28.78
4	300 - Vegetable	308 - Potato	Sunny	None	E	1.2	69.2	42.7	28.92
-1	700 - Chemical	702 - Car Exhaust	Sunny		E	1.2	69.2	42.7	28.92
			Sunny	None	N	2	53	75	30.03
			Sunny	None	N	2	53	75	30.03
			Sunny	None		0	71.7	41.8	28.8
2	400 - Earthy	406 - Grassy	Sunny			0	71.7	41.8	28.8

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10863	2024-03-26 16:46:17	Val Verde Rd and Oakwood Ave	No odor detected	34.450279	-118.661818		ND
10898	2024-03-26 16:46:37	San Martinez Rd and Verdale Ave	Very faint farm animal smell at some spots near this location	34.449618	-118.679098	Intermittent	<2
10866	2024-03-26 16:46:40	Val Verde Rd and Oakwood Ave	No odor detected	34.450257	-118.66182		ND
10874	2024-03-26 16:48:40	San Martinez Rd and Verdale Ave	Faint farm animal smell	34.449634	-118.679068	Persistent	<2
10859	2024-03-26 16:51:18	Bus Stop 14608 - Del Valle Rd & Silver St		34.448836	-118.655098	Persistent	4
10862	2024-03-26 16:52:01	Bus Stop 14608 - Del Valle Rd & Silver St		34.448889	-118.655036	Persistent	4
10899	2024-03-26 16:54:18	Bus Stop at San Martinez and Val Verde Rd		34.447219	-118.663804	Persistent	2
10872	2024-03-26 16:55:19	Bus Stop at San Martinez and Val Verde Rd		34.447115	-118.663867	Persistent	2
10867	2024-03-26 16:59:30	Val Verde Rd and Oakwood Ave		34.450349	-118.661857	Intermittent	<2
10894	2024-03-26 16:59:32	Val Verde Rd and Oakwood Ave		34.450338	-118.661806		ND
10881	2024-03-26 17:01:42	Castaic Union School District Building	No odor detected	34.441709	-118.626025		ND
10878	2024-03-26 17:01:50	Castaic Union School District Building	No odor detected	34.44163	-118.626061		ND
10895	2024-03-26 17:05:46	Lincoln Ave and Taylor St		34.442924	-118.655826	Persistent	2
10873	2024-03-26 17:07:20	Lincoln Ave and Taylor St		34.442958	-118.655764	Persistent	2
10876	2024-03-26 17:07:36	Ave Penn and Witherspoon Pkwy	No odor detected	34.449566	-118.638204	Persistent	<2
10880	2024-03-26 17:07:56	Ave Penn and Witherspoon Pkwy		34.449524	-118.63818	Persistent	<2
10897	2024-03-26 17:11:34	Lincoln Ave near intersection with Chiquito Canyon Rd		34.43859	-118.657016	Persistent	<2
10868	2024-03-26 17:12:05	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438586	-118.657032	Persistent	<2
10877	2024-03-26 17:13:59	Lot in front of Fire Station 143		34.454558	-118.634481	Persistent	2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny	None		0	53	75	30.03
-4	500 - Offensive	508 - Manure	Sunny	None		0	72.3	38.1	28.64
			Sunny	None			53	75	30.03
-1	500 - Offensive	506 - Garbage	Sunny			0	72.3	38.1	28.64
-3	500 - Offensive	506 - Garbage	Sunny	None	N	5	54	68	29.94
-4	500 - Offensive	506 - Garbage	Sunny	None	N	5	54	68	29.94
-8	500 - Offensive	506 - Garbage	Sunny	None		0	69.9	46.6	28.79
-2	500 - Offensive	506 - Garbage	Sunny			0	69.9	46.6	28.79
2	400 - Earthy	406 - Grassy	Sunny		S	1	70.2	42.2	28.74
			Sunny	None	S	1	70.2	42.2	28.74
			Sunny	None	N	2	55	63	29.93
			Sunny	None	N	2	55	63	29.93
-8	500 - Offensive	506 - Garbage	Sunny	None	S	2.7	66.6	45.9	28.87
-2	500 - Offensive	506 - Garbage	Sunny		S	2.7	66.6	45.9	28.87
-2	500 - Offensive	506 - Garbage	Sunny	None	N	3	55	62	29.93
-2	500 - Offensive	506 - Garbage	Sunny	None	N	3	55	62	29.93
-8	500 - Offensive	506 - Garbage	Sunny	None		0	75.7	42.3	28.92
-1	400 - Earthy	415 - Stale	Sunny			0	75.7	42.3	28.92
-3	500 - Offensive	506 - Garbage	Sunny	None	N	7	56	61	29.94



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10882	2024-03-26 17:14:40	Lot in front of Fire Station 143		34.454579	-118.634489	Persistent	<2
10896	2024-03-26 17:16:40	LA County Fire Department Del Valle Regional Training Center		34.432297	-118.659434	Persistent	<2
10869	2024-03-26 17:17:11	LA County Fire Department Del Valle Regional Training Center		34.432302	-118.659494	Persistent	<2
10875	2024-03-26 17:21:19	Starbucks / store by Bruce sushi		34.451066	-118.62504	Persistent	2
10883	2024-03-26 17:21:25	Starbucks / store by Bruce sushi		34.45105	-118.625048	Persistent	<2
10884	2024-03-26 17:41:48	Park behind Live Oak Elementary school		34.451083	-118.621196	Persistent	<2
10879	2024-03-26 17:42:19	Park behind Live Oak Elementary school		34.451058	-118.62124	Persistent	<2
10886	2024-03-26 19:18:05	Front of Castaic Elementary School		34.471548	-118.630217	Persistent	<2
10887	2024-03-26 19:18:08	Front of Castaic Elementary School		34.47155	-118.630175	Persistent	<2
10885	2024-03-26 19:21:40	Ralph's parking lot facing Bank of America	No odor detected	34.457078	-118.618272		ND
10889	2024-03-26 19:31:00	Ralph's parking lot facing Bank of America	No odor detected	34.45704	-118.618293		ND
10891	2024-03-26 19:49:03	Cambridge Ave across from house number 29862		34.459517	-118.626738	Persistent	<2
10890	2024-03-26 19:49:08	Cambridge Ave across from house number 29862		34.459509	-118.626771	Persistent	<2
10888	2024-03-26 19:55:49	Park behind Live Oak Elementary school	No odor detected	34.450516	-118.621095		ND
10892	2024-03-26 19:56:24	Park behind Live Oak Elementary school	No odor detected	34.450506	-118.621057		ND
10938	2024-03-26 20:14:13	Front of Castaic Elementary School		34.471578	-118.629954	Persistent	<2
10901	2024-03-26 20:14:22	Front of Castaic Elementary School		34.471435	-118.630186		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-2	500 - Offensive	506 - Garbage	Sunny	None	N	7	56	61	29.94
0	400 - Earthy	406 - Grassy	Sunny	None	E	2.6	72.7	41.9	28.93
-1	500 - Offensive	506 - Garbage	Sunny	None	E	2.6	72.7	41.9	28.93
-3	500 - Offensive	506 - Garbage	Sunny	None	N	7	56	61	29.94
-2	500 - Offensive	506 - Garbage	Sunny	None	N	7	56	61	29.94
-2	400 - Earthy	417 - Woody	Sunny	None	N	3	57	57	29.93
1	400 - Earthy	417 - Woody	Sunny	None	N	3	57	57	29.93
-2	500 - Offensive	506 - Garbage	Sunny	None	N	1	62	47	29.94
-2	500 - Offensive	506 - Garbage	Sunny	None	N	1	62	47	29.94
			Sunny	None	N	4	61	46	29.94
			Sunny	None	N	4	61	46	29.94
1	100 - Floral	105 - Fragrant	Sunny	None	S	2	65	45	30.04
2	100 - Floral	105 - Fragrant	Sunny	None	S	2	65	45	30.04
			Sunny	None	S	6	62	47	29.93
			Sunny	None	S	6	62	47	29.93
2	400 - Earthy	406 - Grassy	Sunny	None	S	3.2	71	42.6	28.69
			Sunny	None	S	3.2	71	42.6	28.69

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10927	2024-03-26 20:28:05	Ralph's parking lot facing Bank of America		34.456912	-118.617843	Intermittent	<2
10900	2024-03-26 20:29:53	Ralph's parking lot facing Bank of America	Smells like fried chicken	34.456906	-118.617784	Persistent	<2
10902	2024-03-26 20:35:27	Cambridge Ave across from house number 29862		34.459571	-118.62676	Persistent	2
10926	2024-03-26 20:35:28	Cambridge Ave across from house number 29862		34.459535	-118.626725	Intermittent	<2
10906	2024-03-26 20:42:19	Park behind Live Oak Elementary school	Very faint sewer smell	34.450208	-118.621126	Persistent	<2
10930	2024-03-26 20:42:22	Park behind Live Oak Elementary school		34.45025	-118.621159	Intermittent	<2
10922	2024-03-26 20:54:03	Ave Penn and Witherspoon Pkwy		34.449485	-118.638215	Intermittent	<2
10905	2024-03-26 20:55:07	Ave Penn and Witherspoon Pkwy		34.449532	-118.638238	Persistent	<2
10929	2024-03-26 20:59:26	Castaic Union School District Building	Initially, the predominant odor was a sweet smell, but as we captured weather information, the odor return to the garbage like smell	34.441741	-118.626344	Persistent	<2
10903	2024-03-26 21:00:24	Castaic Union School District Building		34.441748	-118.626279	Intermittent	<2
10923	2024-03-26 21:09:11	Starbucks / store by Bruce sushi		34.451214	-118.625107	Persistent	<2
10904	2024-03-26 21:09:30	Starbucks / store by Bruce sushi		34.451189	-118.625128	Persistent	<2
10919	2024-03-26 21:14:04	Lot in front of Fire Station 143		34.454701	-118.634418	Persistent	<2
10925	2024-03-26 21:14:38	Lot in front of Fire Station 143		34.454741	-118.634351	Persistent	<2
10950	2024-03-26 21:17:36	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449322	-118.654652		ND
10912	2024-03-26 21:19:14	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.4494	-118.654676		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-5	700 - Chemical	702 - Car Exhaust	Sunny	None	S	6.1	74.1	30.6	28.95
1	300 - Vegetable	305 - Garlic	Sunny		S	6.1	74.1	30.6	28.95
2	100 - Floral	105 - Fragrant	Sunny		S	10.2	70.9	37.3	28.74
6	100 - Floral	105 - Fragrant	Sunny	None	S	10.2	70.9	37.3	28.74
-1	500 - Offensive	515 - Sewer	Sunny		SW	2.6	72.2	39.1	28.97
3	400 - Earthy	412 - Peat-like	Sunny	None	SW	2.6	72.2	39.1	28.97
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None	S	7.2	77.4	38.8	28.76
-2	700 - Chemical	706 - Diesel	Sunny		S	7.2	72.4	38.8	28.76
5	200 - Fruity	212 - Sweet	Partly Cloudy	None	S	4.3	81.8	36.6	28.95
-2	500 - Offensive	506 - Garbage	Sunny		S	4.3	81.8	36.6	28.95
-3	700 - Chemical	722 - Tar/Asphalt	Partly Cloudy	None	NW	1.5	78.4	37.1	28.9
-2	700 - Chemical	702 - Car Exhaust	Sunny		NW	1.5	78.4	37.1	28.9
-1	700 - Chemical	703 - Cleaning Fluid	Sunny		SW	2.6	74.3	41.4	28.92
3	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	3.7	75.1	31.6	28.82
			Partly Cloudy	None	SW	10	62	52	29.92
			Partly Cloudy	None	SW	10	62	52	29.92

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10928	2024-03-26 21:24:54	LA County Fire Department Del Valle Regional Training Center		34.432257	-118.659427	Intermittent	<2
10908	2024-03-26 21:25:29	Val Verde Rd and Oakwood Ave	No odor detected	34.45028	-118.661832		ND
10949	2024-03-26 21:27:06	Val Verde Rd and Oakwood Ave	No odor detected	34.450305	-118.661844		ND
10956	2024-03-26 21:31:34	San Martinez Rd and Verdale Ave	No odor detected	34.449611	-118.678594		ND
10924	2024-03-26 21:31:42	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438589	-118.657078	Intermittent	<2
10911	2024-03-26 21:32:12	San Martinez Rd and Verdale Ave	No odor detected	34.449675	-118.678599		ND
10921	2024-03-26 21:33:08	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438562	-118.657142	Persistent	<2
10913	2024-03-26 21:36:34	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446943	-118.663994		ND
10945	2024-03-26 21:36:39	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446895	-118.664001		ND
10932	2024-03-26 21:37:08	Lincoln Ave and Taylor St		34.442954	-118.655787		ND
10916	2024-03-26 21:37:15	Lincoln Ave and Taylor St		34.443022	-118.655801	Persistent	<2
10918	2024-03-26 21:40:32	LA County Fire Department Del Valle Regional Training Center		34.432212	-118.659448	Persistent	<2
10951	2024-03-26 21:40:43	Lincoln Ave and Taylor St	No odor detected	34.442948	-118.655813		ND
10907	2024-03-26 21:43:21	Lincoln Ave and Taylor St	No odor detected	34.44299	-118.655804		ND
10910	2024-03-26 21:46:55	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438597	-118.657068		ND
10962	2024-03-26 21:47:39	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438586	-118.657074		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
5	400 - Earthy	413 - Pine	Partly Cloudy	None	SW	2.6	74.3	41.4	28.92
			Partly Cloudy	None	SW	10	65	52	29.92
			Partly Cloudy	None	SW	10	65	52	29.92
			Partly Cloudy	None	SW	10	65	52	29.92
-4	400 - Earthy	412 - Peat-like	Sunny	None	E	3.4	76.6	39.4	28.89
			Partly Cloudy	None	SW	10	65	52	29.92
-1	400 - Earthy	415 - Stale	Sunny		E	3.4	76.6	39.4	28.89
			Partly Cloudy	None	SW	9	66	51	29.92
			Partly Cloudy	None	SW	9	66	51	29.92
			Sunny	None	SE	1.7	74.4	43.3	28.84
-1	400 - Earthy	415 - Stale	Sunny		SE	1.7	74.4	43.3	28.84
-1	400 - Earthy	412 - Peat-like	Sunny		SW	1.2	81.8	36.5	28.91
			Partly Cloudy	None	SW	12	63	52	29.92
			Partly Cloudy	None	SW	12	63	52	29.92
			Partly Cloudy	None	NW	5	65	51	30
			Partly Cloudy	None	NW	5	65	51	30

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10958	2024-03-26 21:51:23	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432012	-118.659291		ND
10909	2024-03-26 21:53:48	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.43207	-118.65931		ND
10934	2024-03-26 21:58:39	San Martinez Rd and Verdale Ave		34.449606	-118.679099	Persistent	2
10915	2024-03-26 21:58:42	San Martinez Rd and Verdale Ave		34.44959	-118.6791	Persistent	<2
10935	2024-03-26 22:05:08	Bus Stop at San Martinez and Val Verde Rd		34.447192	-118.66397		ND
10920	2024-03-26 22:06:25	Bus Stop at San Martinez and Val Verde Rd		34.447154	-118.664005		ND
10933	2024-03-26 22:09:55	Val Verde Rd and Oakwood Ave	Grass odor was only noticeable when the wind picked up	34.450307	-118.661809	Intermittent	<2
10917	2024-03-26 22:09:59	Val Verde Rd and Oakwood Ave		34.450312	-118.661853	Persistent	<2
10960	2024-03-26 22:13:30	Front of Castaic Elementary School	No odor detected	34.471593	-118.630181		ND
10955	2024-03-26 22:14:04	Front of Castaic Elementary School	No odor detected	34.4715	-118.630233		ND
10914	2024-03-26 22:16:14	Bus Stop 14608 - Del Valle Rd & Silver St	Lost the smell when the wind picked up	34.44853	-118.655179	Intermittent	<2
10937	2024-03-26 22:16:16	Bus Stop 14608 - Del Valle Rd & Silver St		34.448521	-118.655187	Persistent	<2
10944	2024-03-26 22:19:23	Ralph's parking lot facing Bank of America	No odor detected	34.456649	-118.61793		ND
10952	2024-03-26 22:21:08	Ralph's parking lot facing Bank of America	No odor detected	34.456724	-118.617923		ND
10946	2024-03-26 22:32:41	Park behind Live Oak Elementary school	No odor detected	34.45058	-118.621076		ND
10948	2024-03-26 22:33:48	Park behind Live Oak Elementary school	No odor detected	34.450615	-118.621102		ND
10931	2024-03-26 22:36:53	Lot in front of Fire Station 143		34.454729	-118.634393	Persistent	<2
10942	2024-03-26 22:37:59	Lot in front of Fire Station 143		34.454651	-118.634428	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None	NW	1	63	51	29.92
			Partly Cloudy	None	NW	1	63	51	29.92
2	400 - Earthy	406 - Grassy	Sunny	None	N	2.8	74.1	34.6	28.61
-2	500 - Offensive	508 - Manure	Sunny		N	2.8	74.1	34.6	28.61
			Sunny	None	W	3.4	74.5	38.7	28.77
			Sunny		W	3.4	74.5	38.7	28.77
2	400 - Earthy	406 - Grassy	Sunny	None	S	3.1	75	37.6	28.73
2	100 - Floral	106 - Herbal	Sunny		S	3.1	75	37.6	28.73
			Sunny	None	N	5	66	46	30
			Partly Cloudy	None	N	5	65	46	30
1	400 - Earthy	406 - Grassy	Sunny		SW	9.7	70.6	36.7	28.79
3	400 - Earthy	406 - Grassy	Sunny	None	SW	9.7	70.6	36.7	28.79
			Sunny	None	N	7	63	54	29.92
			Sunny	None	N	7	63	54	29.92
			Sunny	None	N	9	63	54	29.92
			Partly Cloudy	None		9	63	54	29.92
7	200 - Fruity	212 - Sweet	Sunny	None	W	3.2	78.8	39.3	28.81
-2	700 - Chemical	703 - Cleaning Fluid	Sunny		W	3.2	78.8	39.3	28.81



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10954	2024-03-26 22:43:38	Cambridge Ave across from house number 29862		34.459472	-118.626749	Persistent	<2
10965	2024-03-26 22:44:30	Cambridge Ave across from house number 29862		34.459613	-118.62678	Persistent	<2
10939	2024-03-26 22:50:20	Cambridge Ave across from house number 29862		34.459553	-118.626701	Intermittent	<2
10957	2024-03-26 22:51:46	Starbucks / store by Bruce sushi	No odor detected	34.451179	-118.625173		ND
10940	2024-03-26 22:51:59	Cambridge Ave across from house number 29862		34.459543	-118.626739	Persistent	<2
10966	2024-03-26 22:52:17	Starbucks / store by Bruce sushi	No odor detected	34.451221	-118.625161		ND
10941	2024-03-26 22:56:49	Park behind Live Oak Elementary school		34.450216	-118.621174	Persistent	4
10936	2024-03-26 22:57:04	Park behind Live Oak Elementary school		34.450156	-118.621143	Persistent	4
10973	2024-03-26 23:07:46	Front of Castaic Elementary School		34.471472	-118.630167	Intermittent	<2
10943	2024-03-26 23:07:47	Front of Castaic Elementary School		34.471456	-118.630184	Intermittent	2
10964	2024-03-26 23:09:56	Castaic Union School District Building		34.441551	-118.626023	Persistent	<2
10963	2024-03-26 23:10:03	Castaic Union School District Building		34.441584	-118.625977	Persistent	2
10953	2024-03-26 23:16:15	Ave Penn and Witherspoon Pkwy	No odor detected	34.449315	-118.638276		ND
10959	2024-03-26 23:16:48	Ave Penn and Witherspoon Pkwy	No detection	34.449378	-118.638321		ND
10947	2024-03-26 23:24:37	Lot in front of Fire Station 143		34.454563	-118.634355	Persistent	<2
10961	2024-03-26 23:24:42	Lot in front of Fire Station 143		34.454547	-118.634396	Persistent	<2
10968	2024-03-26 23:25:04	Ralph's parking lot facing Bank of America	Like freshly baked bread	34.456825	-118.618003	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
1	100 - Floral	105 - Fragrant	Sunny	None	SW	5	63	56	29.92
3	100 - Floral	105 - Fragrant	Sunny	None	SW	5	63	56	29.92
7	100 - Floral	105 - Fragrant	Sunny	None	SE	3.8	75.2	38.5	28.72
			Sunny	None	N	5	62	46	29.91
1	100 - Floral	106 - Herbal	Sunny		SE	3.8	75.2	38.5	28.72
			Sunny	None	N	5	62	46	29.91
-2	500 - Offensive	506 - Garbage	Sunny		SE	3.2	73.1	35.0	28.96
-7	500 - Offensive	506 - Garbage	Sunny	None	SE	3.2	73.1	35.0	28.96
4	100 - Floral	105 - Fragrant	Sunny	None	SE	3.5	74.1	37.9	28.67
-2	500 - Offensive	503 - Burnt Rubber	Sunny		SE	3.5	74.1	37.9	28.67
-2	500 - Offensive	506 - Garbage	Sunny	None	S	5	62	57	29.91
-3	500 - Offensive	506 - Garbage	Sunny	None	S	5	62	57	29.91
			Sunny	None	S	13	62	57	29.91
			Sunny	None	S	13	62	57	29.91
1	100 - Floral	105 - Fragrant	Sunny	None	W	8	63	56	29.91
3	100 - Floral	105 - Fragrant	Sunny	None	W	8	63	56	29.91
9	300 - Vegetable	308 - Potato	Sunny	None	S	2.1	74.4	42.5	28.93

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
10972	2024-03-26 23:25:20	Ralph's parking lot facing Bank of America	Fried chicken smell	34.456803	-118.617969	Persistent	<2
10978	2024-03-26 23:29:02	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449262	-118.654809		ND
10983	2024-03-26 23:31:11	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449355	-118.654864		ND
10971	2024-03-26 23:31:44	Starbucks / store by Bruce sushi		34.451099	-118.625035	Intermittent	<2
10970	2024-03-26 23:32:08	Starbucks / store by Bruce sushi	Odor left with wind	34.451183	-118.625144	Intermittent	2
10977	2024-03-26 23:36:11	Val Verde Rd and Oakwood Ave	No odor detected	34.450229	-118.661685		ND
10981	2024-03-26 23:36:54	Val Verde Rd and Oakwood Ave	No odor detected	34.45023	-118.661846		ND
10969	2024-03-26 23:37:43	Ave Penn and Witherspoon Pkwy		34.449335	-118.63832		ND
10967	2024-03-26 23:38:34	Ave Penn and Witherspoon Pkwy		34.449408	-118.638305		ND
10975	2024-03-26 23:42:21	Castaic Union School District Building		34.441587	-118.626285	Persistent	7
10974	2024-03-26 23:43:56	Castaic Union School District Building		34.441622	-118.626326	Persistent	4
10979	2024-03-26 23:44:29	San Martinez Rd and Verdale Ave	No odor detected	34.449599	-118.678595		ND
10984	2024-03-26 23:44:32	San Martinez Rd and Verdale Ave	No odor detected	34.449579	-118.678593		ND
10976	2024-03-26 23:50:14	Lincoln Ave and Taylor St	No odor detected	34.442941	-118.655826		ND
10980	2024-03-26 23:50:43	Lincoln Ave and Taylor St	No odor detected	34.443008	-118.655839		ND
10985	2024-03-26 23:54:29	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432098	-118.659364		ND
10982	2024-03-26 23:56:16	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432145	-118.659408		ND
10993	2024-03-27 16:01:18	Front of Castaic Elementary School	It smells like fabric softener or dryer sheets	34.471503	-118.630138	Persistent	<2
10994	2024-03-27 16:02:52	Front of Castaic Elementary School		34.471523	-118.630111	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
1	300 - Vegetable	310 - Onion	Sunny		S	2.1	74.4	42.5	28.93
			Sunny	None	S	6	63	57	29.91
			Sunny	None	S	6	63	57	29.91
-6	700 - Chemical	702 - Car Exhaust	Sunny	None	S	7.4	70.4	46.2	28.89
-2	500 - Offensive	506 - Garbage	Sunny		S	7.4	70.4	46.2	28.89
			Sunny	None	S	6	63	57	29.91
			Sunny	None	S	6	63	57	29.91
			Sunny	None	SW	4.2	73	43.2	28.75
			Sunny		SW	4.2	73	43.2	28.75
-9	500 - Offensive	506 - Garbage	Sunny	None	NW	4.3	69	44.8	28.93
-5	500 - Offensive	506 - Garbage	Sunny		SW	4.3	69	44.8	28.93
			Sunny	None	S	5	64	56	29.91
			Sunny	None	S	5	64	56	29.91
			Sunny	None	S	8	62	57	29.91
			Sunny	None	S	8	62	57	29.91
			Sunny	None	SW	13	61	59	29.91
			Sunny	None	S	13	61	59	29.91
6	100 - Floral	105 - Fragrant	Partly Cloudy	None		0	61.7	51.4	28.83
2	100 - Floral	105 - Fragrant	Sunny			0	61.7	51.4	28.83

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11001	2024-03-27 16:10:48	Ralph's parking lot facing Bank of America	Smells like fried chicken	34.456768	-118.617875	Persistent	<2
10990	2024-03-27 16:12:44	Ralph's parking lot facing Bank of America		34.456828	-118.617923	Intermittent	<2
10995	2024-03-27 16:14:24	Cambridge Ave across from house number 29862		34.459524	-118.626749	Persistent	<2
10986	2024-03-27 16:21:01	Cambridge Ave across from house number 29862		34.459513	-118.626654	Intermittent	<2
10992	2024-03-27 16:28:55	Park behind Live Oak Elementary school		34.450261	-118.621109		ND
10996	2024-03-27 16:29:50	Park behind Live Oak Elementary school		34.450215	-118.621151		ND
10989	2024-03-27 16:38:53	Ave Penn and Witherspoon Pkwy	Very faint sugar cookie, sweet smell	34.449522	-118.638129	Intermittent	<2
10999	2024-03-27 16:41:54	Ave Penn and Witherspoon Pkwy	Sweet and dirt smell	34.449568	-118.638147	Persistent	<2
11013	2024-03-27 16:42:13	LA County Fire Department Del Valle Regional Training Center	Garbage scent very strong.	34.432003	-118.659301	Persistent	60
11005	2024-03-27 16:43:05	LA County Fire Department Del Valle Regional Training Center	Very strong odor detected	34.43198	-118.659272	Persistent	60
10987	2024-03-27 16:46:37	Castaic Union School District Building		34.441593	-118.626168	Intermittent	<2
11014	2024-03-27 16:47:35	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438481	-118.657156	Persistent	2
11004	2024-03-27 16:48:00	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438578	-118.657069	Persistent	4
10997	2024-03-27 16:48:13	Castaic Union School District Building		34.441626	-118.626257		ND
11011	2024-03-27 16:50:31	Lincoln Ave and Taylor St		34.442934	-118.655816	Persistent	2
11006	2024-03-27 16:52:24	Lincoln Ave and Taylor St		34.442935	-118.655807	Persistent	2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
1	300 - Vegetable	310 - Onion	Sunny		NE	1.6	61.7	50.3	29.1
-3	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None	NE	1.6	61.7	50.3	29.1
2	100 - Floral	105 - Fragrant	Sunny		S	2.4	55.6	50.3	28.89
-3	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None	S	2.4	55.6	50.3	28.89
			Partly Cloudy	None		0	69.7	40.8	29.14
			Sunny			0	69.7	40.8	29.14
9	100 - Floral	113 - Vanilla	Partly Cloudy	None	SE	1.6	67.1	41.2	28.92
1	200 - Fruity	212 - Sweet	Sunny		SE	1.6	67.1	41.2	29.92
-7	500 - Offensive	506 - Garbage	Partly Cloudy	None	NE	2	54	58	30.17
-8	500 - Offensive	506 - Garbage	Overcast		NE	2	54	58	30.17
2	100 - Floral	105 - Fragrant	Partly Cloudy	None		0	64.7	54.1	29.11
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	1	54	59	30.17
-4	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	1	54	59	30.17
			Sunny			0	64.7	54.1	29.11
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None			55	50	30.08
-4	500 - Offensive	506 - Garbage	Partly Cloudy	None		0	55	50	30.08

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11000	2024-03-27 16:57:10	Starbucks / store by Bruce sushi	Mainly a sweet smell but there was an intermittent garbage smell mixed in	34.45105	-118.625145	Intermittent	<2
10991	2024-03-27 16:57:10	Starbucks / store by Bruce sushi	Delightful, sweet aroma. Smells like a freshly baked fruity cake.	34.451063	-118.625128	Persistent	<2
11008	2024-03-27 16:58:05	Bus Stop at San Martinez and Val Verde Rd		34.447042	-118.663829	Persistent	<2
11012	2024-03-27 16:58:17	Bus Stop at San Martinez and Val Verde Rd		34.447031	-118.663861	Persistent	<2
10988	2024-03-27 17:04:43	Lot in front of Fire Station 143	Like a sweet, baked good; maybe like a freshly baked strawberry, orange, or pineapple cake	34.454698	-118.634393	Persistent	<2
10998	2024-03-27 17:05:48	Lot in front of Fire Station 143	Mainly a sweet cereal fruity smell but I am getting a faint garbage smell	34.454628	-118.63443	Persistent	<2
11015	2024-03-27 17:07:37	San Martinez Rd and Verdale Ave	Horse and chicken farm nearby	34.449606	-118.678603	Persistent	2
11007	2024-03-27 17:11:31	San Martinez Rd and Verdale Ave		34.449673	-118.678581	Persistent	2
11020	2024-03-27 17:12:25	Bus Stop 14608 - Del Valle Rd & Silver St		34.448518	-118.655178	Persistent	<2
11030	2024-03-27 17:12:32	Bus Stop 14608 - Del Valle Rd & Silver St		34.448462	-118.655168	Intermittent	<2
11009	2024-03-27 17:16:10	Val Verde Rd and Oakwood Ave	No odor detected	34.450313	-118.661858		ND
11003	2024-03-27 17:19:41	Val Verde Rd and Oakwood Ave	No odor detected	34.450335	-118.661812		ND
11025	2024-03-27 17:20:46	San Martinez Rd and Verdale Ave	It smells like farm animals, and there is a sweet smell, intermittently	34.449538	-118.679088	Persistent	<2
11018	2024-03-27 17:20:56	San Martinez Rd and Verdale Ave	Farm animal smell	34.44956	-118.679107	Persistent	<2
11010	2024-03-27 17:20:59	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448625	-118.655241		ND
11002	2024-03-27 17:25:42	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448601	-118.655136		ND
11023	2024-03-27 17:27:35	Bus Stop at San Martinez and Val Verde Rd		34.447104	-118.663719	Persistent	4
11022	2024-03-27 17:27:38	Bus Stop at San Martinez and Val Verde Rd	Strong garbage smell	34.44714	-118.663939	Persistent	4

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-2	500 - Offensive	506 - Garbage	Sunny			0	68.5	38.6	29.07
7	200 - Fruity	212 - Sweet	Partly Cloudy	None		0	68.5	38.6	29.07
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None		0	55	50	30.08
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	1	55	59	30.08
9	200 - Fruity	212 - Sweet	Partly Cloudy	None	NE	1.3	70.2	35.7	28.97
-1	200 - Fruity	212 - Sweet	Sunny		NE	1.3	70.2	35.7	28.97
-2	500 - Offensive	508 - Manure			S	1	58	49	30.08
-3	500 - Offensive	508 - Manure	Partly Cloudy	None	S	1	58	49	30.08
2	400 - Earthy	406 - Grassy	Sunny			0	69.2	41.8	28.94
0	400 - Earthy	406 - Grassy	Partly Cloudy	None		0	69.2	41.8	28.94
					S	2	58	49	30.08
			Partly Cloudy	None	S	2	58	49	30.08
-6	500 - Offensive	508 - Manure	Partly Cloudy	None		0	75.4	36.5	28.8
-1	500 - Offensive	508 - Manure	Sunny			0	75.4	36.5	28.8
					S	1	59	48	30.08
			Partly Cloudy	None	S	1	59	48	30.08
-7	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	3.1	63	41.2	28.95
-4	500 - Offensive	506 - Garbage	Sunny		S	3.1	63	41.2	28.95



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11040	2024-03-27 17:32:02	Lot in front of Fire Station 143		34.454508	-118.634546	Persistent	<2
11033	2024-03-27 17:32:29	Lot in front of Fire Station 143		34.454563	-118.634561	Persistent	<2
11026	2024-03-27 17:35:21	Val Verde Rd and Oakwood Ave		34.450288	-118.661859	Persistent	<2
11016	2024-03-27 17:37:04	Val Verde Rd and Oakwood Ave	Very noticeable smell of garbage and a faint smell of grass	34.450289	-118.661827	Persistent	<2
11043	2024-03-27 17:37:42	Ave Penn and Witherspoon Pkwy	No odor detected	34.449345	-118.638324		ND
11036	2024-03-27 17:39:20	Ave Penn and Witherspoon Pkwy	No odor detected	34.449366	-118.638281		ND
11035	2024-03-27 17:40:51	Castaic Union School District Building	No odor detected	34.441567	-118.625984		ND
11037	2024-03-27 17:44:00	Castaic Union School District Building	No odor detected	34.44167	-118.626003		ND
11027	2024-03-27 17:50:45	Lincoln Ave and Taylor St		34.442958	-118.655826	Persistent	2
11019	2024-03-27 17:51:31	Lincoln Ave and Taylor St		34.442971	-118.655819	Persistent	2
11021	2024-03-27 17:56:15	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438568	-118.65709	Persistent	<2
11029	2024-03-27 17:56:19	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438567	-118.657083	Intermittent	<2
11034	2024-03-27 17:56:38	Starbucks / store by Bruce sushi	No odor detected	34.451016	-118.625		ND
11032	2024-03-27 17:58:15	Starbucks / store by Bruce sushi	No odor detected	34.451016	-118.62497		ND
11028	2024-03-27 18:01:26	LA County Fire Department Del Valle Regional Training Center		34.432195	-118.659438	Persistent	<2
11046	2024-03-27 18:03:02	Cambridge Ave across from house number 29862		34.459477	-118.626745	Persistent	<2
11041	2024-03-27 18:03:10	Cambridge Ave across from house number 29862		34.459521	-118.626712	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
1	100 - Floral	105 - Fragrant	Partly Cloudy	None			60	47	30.08
3	100 - Floral	105 - Fragrant	Partly Cloudy	None		0	60	47	30.08
-7	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	2.1	69.2	32.5	28.89
-3	500 - Offensive	506 - Garbage	Sunny		SW	2.1	69.2	32.5	28.89
			Partly Cloudy	None			60	46	30.08
			Partly Cloudy	None		0	60	46	30.08
			Partly Cloudy	None	E	2	60	46	30.08
			Partly Cloudy	None	E	2	60	46	30.08
-8	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	3.7	65.4	37.4	29.01
-4	500 - Offensive	506 - Garbage	Sunny		SW	3.7	65.4	37.1	29.01
-2	500 - Offensive	506 - Garbage	Sunny			0	74.2	37.7	29.06
-4	500 - Offensive	506 - Garbage	Partly Cloudy	None		0	74.2	37.7	29.06
			Partly Cloudy	None	SE	1	61	45	30.08
			Partly Cloudy	None	SE	1	61	45	30.08
3	100 - Floral	102 - Cinnamon	Partly Cloudy	None	SE	3.6	72.2	39.7	29.07
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	SE	1	60	45	30.08
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	SE	1	60	45	30.08

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11017	2024-03-27 18:04:01	LA County Fire Department Del Valle Regional Training Center	Intermittent sweet cinnamon smell, but there was also a raw fish smell to it	34.432215	-118.659452	Intermittent	<2
11039	2024-03-27 18:08:58	Park behind Live Oak Elementary school	No odor detected	34.450473	-118.621044		ND
11031	2024-03-27 18:10:09	Park behind Live Oak Elementary school	No odor detected	34.45051	-118.621037		ND
11048	2024-03-27 18:14:54	Castaic Union School District Building	Faint garbage smell	34.441602	-118.626188	Persistent	<2
11038	2024-03-27 18:15:03	Ralph's parking lot facing Bank of America		34.456998	-118.61795	Persistent	<2
11045	2024-03-27 18:15:04	Ralph's parking lot facing Bank of America		34.456994	-118.617995	Persistent	<2
11024	2024-03-27 18:17:47	Castaic Union School District Building	Like sweet, -smelling garbage	34.441598	-118.626284	Persistent	<2
11062	2024-03-27 18:20:05	Ave Penn and Witherspoon Pkwy	The odor was pretty strong upon arrival to the site, but as we exited the vehicle and began our nasal Ranger assessment, the smell diminished	34.449822	-118.637925	Intermittent	<2
11042	2024-03-27 18:23:46	Front of Castaic Elementary School		34.471454	-118.630163	Persistent	<2
11047	2024-03-27 18:24:01	Ave Penn and Witherspoon Pkwy	Very noticable smell of garbage	34.449516	-118.638212	Persistent	4
11044	2024-03-27 18:24:10	Front of Castaic Elementary School		34.471518	-118.63015	Persistent	<2
11049	2024-03-27 18:30:58	Starbucks / store by Bruce sushi	Strong garbage smell	34.450979	-118.625127	Persistent	4
11065	2024-03-27 18:31:21	Starbucks / store by Bruce sushi		34.451188	-118.624955	Intermittent	<2
11069	2024-03-27 18:40:47	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.431998	-118.659283		ND
11053	2024-03-27 18:41:31	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432028	-118.65925		ND
11070	2024-03-27 18:45:09	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438468	-118.65695	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	100 - Floral	102 - Cinnamon	Sunny		SE	3.6	72.2	39.7	29.07
			Partly Cloudy	None	SE	2	63	42	30.08
			Partly Cloudy	None	SE	2	63	42	30.08
-1	500 - Offensive	506 - Garbage	Sunny		E	2	71.9	34.0	29.11
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	2	63	42	30.08
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	2	63	42	30.08
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	E	2	71.9	34.0	29.11
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	4.6	72.5	37.1	28.923
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	6	62	46	30.08
-5	500 - Offensive	506 - Garbage	Sunny		S	4.6	72.5	37.1	28.92
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	6	62	46	30.08
-5	500 - Offensive	506 - Garbage	Sunny			0	77.1	37.0	29.06
-4	500 - Offensive	503 - Burnt Rubber	Partly Cloudy	None		0	77.1	37.0	29.06
			Partly Cloudy	None	W	2	61	46	30.07
			Partly Cloudy	None	W	2	61	46	30.07
2	400 - Earthy	406 - Grassy	Partly Cloudy	None	W	3	63	46	30.17

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11057	2024-03-27 18:46:31	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438523	-118.65695	Persistent	<2
11072	2024-03-27 18:48:05	Lincoln Ave and Taylor St	No odor detected	34.442876	-118.655809		ND
11051	2024-03-27 18:50:01	Lot in front of Fire Station 143		34.454696	-118.634416	Persistent	<2
11055	2024-03-27 18:50:05	Lincoln Ave and Taylor St	No odor detected	34.442892	-118.655798		ND
11063	2024-03-27 18:50:09	Lot in front of Fire Station 143	It smells like fresh laundry detergent or fresh dryers sheets	34.454206	-118.634645		<2
11056	2024-03-27 18:53:55	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447046	-118.663871		ND
11071	2024-03-27 18:54:14	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447074	-118.66388		ND
11066	2024-03-27 18:58:25	Cambridge Ave across from house number 29862		34.459516	-118.626453	Persistent	<2
11050	2024-03-27 18:58:47	Cambridge Ave across from house number 29862		34.459538	-118.626751	Persistent	<2
11074	2024-03-27 19:02:01	San Martinez Rd and Verdale Ave	No odor detected	34.449616	-118.678633		ND
11060	2024-03-27 19:05:26	Park behind Live Oak Elementary school		34.450226	-118.621201		ND
11059	2024-03-27 19:05:52	San Martinez Rd and Verdale Ave	No odor detected	34.449595	-118.678599		ND
11052	2024-03-27 19:06:03	Park behind Live Oak Elementary school		34.45025	-118.621174	Persistent	2
11075	2024-03-27 19:11:52	Val Verde Rd and Oakwood Ave	No odor detected	34.450341	-118.661861		ND
11058	2024-03-27 19:12:03	Val Verde Rd and Oakwood Ave	No odor detected	34.450302	-118.661823		ND
11064	2024-03-27 19:15:11	Front of Castaic Elementary School		34.471638	-118.630022	Intermittent	<2
11082	2024-03-27 19:15:55	Front of Castaic Elementary School		34.471615	-118.630127	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	W	3	63	46	30.17
			Partly Cloudy	None	W	3	67	46	30.17
2	100 - Floral	105 - Fragrant	Sunny		N	2	75.8	32.8	28.98
			Partly Cloudy	None	W	3	67	46	30.17
	100 - Floral	105 - Fragrant	Partly Cloudy	None	N	2	75.8	32.8	28.98
			Partly Cloudy	None	W	4	67	45	30.07
			Partly Cloudy	None	W	4	67	45	30.07
7	100 - Floral	105 - Fragrant	Partly Cloudy	None	S	5.8	70.9	35.4	28.89
4	100 - Floral	105 - Fragrant	Sunny		N	5.8	70.9	35.4	28.89
			Partly Cloudy	None	W	3	66	47	30.07
			Partly Cloudy	None	S	1.8	76.1	32.8	29.13
			Partly Cloudy	None	W	3	66	47	30.07
1	400 - Earthy	406 - Grassy	Sunny		S	1.8	76.1	32.8	29.13
			Partly Cloudy	None	W	1	65	47	30.07
			Partly Cloudy	None	W	1	65	47	30.07
-4	700 - Chemical	702 - Car Exhaust	Partly Cloudy	None		0	81.2	32.1	28.83
-2	700 - Chemical	702 - Car Exhaust	Sunny			0	81.2	32.1	28.83

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11073	2024-03-27 19:16:03	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449265	-118.654683		ND
11054	2024-03-27 19:16:32	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449389	-118.654632		ND
11061	2024-03-27 19:23:59	Ralph's parking lot facing Bank of America	Like prepared food	34.456784	-118.618154	Intermittent	2
11076	2024-03-27 19:24:31	Starbucks / store by Bruce sushi		34.45094	-118.624983	Persistent	2
11078	2024-03-27 19:25:13	Starbucks / store by Bruce sushi		34.450979	-118.62496	Persistent	2
11081	2024-03-27 19:25:47	Ralph's parking lot facing Bank of America	Intermittent food and garbage smell	34.456908	-118.617752	Intermittent	<2
11068	2024-03-27 19:32:00	Lot in front of Fire Station 143		34.454491	-118.634524	Persistent	<2
11080	2024-03-27 19:32:54	Lot in front of Fire Station 143		34.454496	-118.634513	Persistent	<2
11077	2024-03-27 19:38:04	Ave Penn and Witherspoon Pkwy	No odor detected	34.449317	-118.63832		ND
11079	2024-03-27 19:51:43	Castaic Union School District Building	No odor detected	34.441596	-118.626043		ND
11067	2024-03-27 19:51:44	Castaic Union School District Building	No odor detected	34.441617	-118.625993		ND
11084	2024-03-27 22:15:59	Cambridge Ave across from house number 29862		34.459551	-118.626731	Persistent	<2
11090	2024-03-27 22:16:27	Cambridge Ave across from house number 29862		34.459505	-118.626729	Persistent	<2
11102	2024-03-27 22:19:10	LA County Fire Department Del Valle Regional Training Center		34.432368	-118.659419	Intermittent	<2
11088	2024-03-27 22:21:45	Park behind Live Oak Elementary school		34.45063	-118.621097	Persistent	<2
11092	2024-03-27 22:22:31	LA County Fire Department Del Valle Regional Training Center		34.432265	-118.659447	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None	E	1	64	45	30.08
			Partly Cloudy	None	E	1	64	45	30.08
1	300 - Vegetable	308 - Potato	Partly Cloudy	None		0	81	29.2	29.09
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	E	2	64	45	30.06
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	E	2	64	45	30.06
-2	500 - Offensive	506 - Garbage	Sunny			0	81	29.2	29.09
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	1	65	43	30.07
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	1	65	43	30.07
			Partly Cloudy	None	N	4	65	43	30.06
			Partly Cloudy	None	S	2	64	43	30.06
			Partly Cloudy	None	S	2	64	43	30.06
3	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	4	73	42	28.89
1	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	4	79	42	28.89
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None	NW	2.1	74.4	45.2	29
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	9	67	44	30.01
2	400 - Earthy	406 - Grassy	Partly Cloudy		NW	2.1	74.4	45.2	29



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11091	2024-03-27 22:25:38	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438575	-118.657105	Persistent	<2
11099	2024-03-27 22:25:47	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438619	-118.657024	Persistent	<2
11083	2024-03-27 22:25:59	Park behind Live Oak Elementary school		34.450655	-118.621058	Persistent	<2
11096	2024-03-27 22:29:46	Lincoln Ave and Taylor St		34.442966	-118.655784	Persistent	<2
11101	2024-03-27 22:29:47	Lincoln Ave and Taylor St		34.442992	-118.655724	Intermittent	<2
11104	2024-03-27 22:37:56	San Martinez Rd and Verdale Ave	Grass smell was intense at beginning of nasal ranger use, but as our time at this location increased the odor diminished	34.449718	-118.679084	Intermittent	4
11093	2024-03-27 22:38:10	San Martinez Rd and Verdale Ave		34.449586	-118.679083	Persistent	<2
11085	2024-03-27 22:39:01	Ralph's parking lot facing Bank of America	No odor detected	34.456873	-118.617773		ND
11087	2024-03-27 22:39:10	Ralph's parking lot facing Bank of America	No odor detected	34.456929	-118.617751		ND
11098	2024-03-27 22:46:32	Bus Stop at San Martinez and Val Verde Rd		34.447104	-118.664581	Intermittent	<2
11094	2024-03-27 22:46:56	Bus Stop at San Martinez and Val Verde Rd		34.447158	-118.663871		ND
11105	2024-03-27 22:51:47	Val Verde Rd and Oakwood Ave		34.45037	-118.661852	Intermittent	2
11095	2024-03-27 22:51:54	Val Verde Rd and Oakwood Ave	Sweet candy and grass smell	34.450386	-118.661872	Persistent	2
11086	2024-03-27 22:54:04	Front of Castaic Elementary School	No odor detected	34.47144	-118.630175		ND
11089	2024-03-27 22:54:24	Front of Castaic Elementary School	No odor detected	34.471437	-118.63016		ND
11103	2024-03-27 22:58:04	Bus Stop 14608 - Del Valle Rd & Silver St		34.447572	-118.655669	Intermittent	<2
11097	2024-03-27 22:59:53	Bus Stop 14608 - Del Valle Rd & Silver St		34.44846	-118.655201		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	400 - Earthy	415 - Stale	Partly Cloudy		S	3.5	73.4	39.7	29.01
2	400 - Earthy	412 - Peat-like	Mostly Cloudy	None	S	3.5	73.4	39.7	29.01
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	W	9	67	44	30.01
-1	400 - Earthy	415 - Stale	Partly Cloudy			0	76.6	43.0	28.94
1	400 - Earthy	412 - Peat-like	Mostly Cloudy	None		0	76.6	43.0	28.94
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None	W	3.4	80	37.4	28.71
-1	500 - Offensive	508 - Manure	Partly Cloudy		W	3.4	80	37.4	28.71
			Partly Cloudy	None	SW	9	67	47	30.01
			Partly Cloudy	None	SW	9	67	47	30.01
0	400 - Earthy	406 - Grassy	Mostly Cloudy	None	NW	4.4	71.7	44.7	28.86
			Partly Cloudy		NW	4.4	71.7	44.7	28.86
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None	SE	3.8	73.4	43.9	28.81
2	200 - Fruity	212 - Sweet	Partly Cloudy		SE	3.8	73.4	43.9	28.81
			Partly Cloudy	None	W	5	67	50	30.01
			Partly Cloudy	None	W	5	67	50	30.01
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	NW	5.8	69.1	45.3	28.86
			Partly Cloudy		NW	5.8	69.1	45.3	28.86

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11108	2024-03-27 23:05:41	Lot in front of Fire Station 143		34.45469	-118.634432		ND
11100	2024-03-27 23:06:12	Lot in front of Fire Station 143		34.454676	-118.634455	Intermittent	<2
11109	2024-03-27 23:16:41	Cambridge Ave across from house number 29862		34.459606	-118.626731		ND
11133	2024-03-27 23:17:08	Cambridge Ave across from house number 29862		34.459577	-118.626722	Persistent	<2
11134	2024-03-27 23:23:32	Park behind Live Oak Elementary school		34.451036	-118.621177	Intermittent	<2
11106	2024-03-27 23:24:56	Park behind Live Oak Elementary school		34.451049	-118.620993		ND
11118	2024-03-27 23:31:41	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432068	-118.65934		ND
11116	2024-03-27 23:33:24	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.43211	-118.659331		ND
11122	2024-03-27 23:38:40	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.43848	-118.65706		ND
11129	2024-03-27 23:39:07	Front of Castaic Elementary School	The parking immediately near the school was occupied. We were approximately 150ft SE of original location.	34.470343	-118.630494		ND
11115	2024-03-27 23:39:47	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438546	-118.657062		ND
11107	2024-03-27 23:41:04	Front of Castaic Elementary School	150ft south east of the school	34.470355	-118.63051		ND
11123	2024-03-27 23:43:45	Lincoln Ave and Taylor St	No odor detected	34.442956	-118.655883		ND
11112	2024-03-27 23:43:46	Lincoln Ave and Taylor St	No odor detected	34.442882	-118.655918		ND
11117	2024-03-27 23:46:44	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446949	-118.663799		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy		W	6.8	71.4	41.0	28.9
7	200 - Fruity	212 - Sweet	Partly Cloudy	None	W	6.8	71.4	41.0	28.9
			Partly Cloudy		S	7	67.4	48.8	28.8
6	100 - Floral	105 - Fragrant	Partly Cloudy	None	S	7	67.4	48.8	28.8
0	400 - Earthy	406 - Grassy	Partly Cloudy	None	S	4.9	71.5	45.1	29.06
			Partly Cloudy		S	4.9	71.5	45.1	29.06
			Partly Cloudy	None	S	1	69	51	30.09
			Partly Cloudy	None	S	1	69	51	30.09
			Partly Cloudy	None	W	3	69	53	30.08
			Partly Cloudy	None	SW	1.4	75.6	41.2	28.74
			Partly Cloudy	None	W	3	69	53	30.08
			Partly Cloudy		SW	1.4	75.6	41.2	28.74
			Partly Cloudy	None	W	13	65	55	30.01
			Partly Cloudy	None	W	13	65	55	30.01
			Partly Cloudy	None	W	13	67	55	30.01

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11110	2024-03-27 23:48:06	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447033	-118.663852		ND
11130	2024-03-27 23:49:04	Ralph's parking lot facing Bank of America	Like prepared food	34.456705	-118.618182	Persistent	2
11126	2024-03-27 23:49:18	Ralph's parking lot facing Bank of America	Smells like fried chicken	34.456851	-118.617903	Persistent	<2
11113	2024-03-27 23:56:26	San Martinez Rd and Verdale Ave	No odor detected	34.449592	-118.67864		ND
11119	2024-03-27 23:56:54	San Martinez Rd and Verdale Ave	No odor detected	34.449588	-118.678602		ND
11120	2024-03-27 23:59:54	Val Verde Rd and Oakwood Ave	No odor detected	34.450326	-118.661859		ND
11111	2024-03-28 00:03:04	Val Verde Rd and Oakwood Ave	No odor detected	34.450343	-118.66189		ND
11121	2024-03-28 00:05:09	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449261	-118.654675		ND
11114	2024-03-28 00:07:30	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449429	-118.654635		ND
11125	2024-03-28 00:08:29	Starbucks / store by Bruce sushi		34.451092	-118.625124	Persistent	<2
11132	2024-03-28 00:08:45	Starbucks / store by Bruce sushi		34.451065	-118.625047	Intermittent	<2
11128	2024-03-28 00:15:54	Ave Penn and Witherspoon Pkwy		34.449508	-118.638193		ND
11124	2024-03-28 00:16:52	Ave Penn and Witherspoon Pkwy		34.449464	-118.638189		ND
11131	2024-03-28 00:20:48	Castaic Union School District Building		34.441931	-118.626023	Persistent	2
11127	2024-03-28 00:22:17	Castaic Union School District Building		34.441626	-118.626328	Persistent	4
11147	2024-03-28 00:28:19	Front of Castaic Elementary School	No odor detected	34.471509	-118.630259		ND
11137	2024-03-28 00:28:50	LA County Fire Department Del Valle Regional Training Center		34.4318784	-118.6591175	Persistent	<2
11153	2024-03-28 00:28:53	Front of Castaic Elementary School	No odor detected	34.471487	-118.63016		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None	W	13	67	55	30.01
6	300 - Vegetable	308 - Potato	Partly Cloudy	None	S	5.2	75.7	41.2	29.02
1	300 - Vegetable	310 - Onion	Partly Cloudy		S	5.2	75.7	41.2	29.02
			Partly Cloudy	None	W	13	67	55	30.01
			Partly Cloudy	None	W	13	67	55	30.01
			Partly Cloudy	None	W	6	67	54	30.01
			Partly Cloudy	None	W	6	67	54	30.01
			Partly Cloudy	None	SW	7	64	58	30
			Partly Cloudy	None	SW	7	64	58	30
2	400 - Earthy	404 - Coffee	Partly Cloudy		SW	3	73	45.5	28.98
4	400 - Earthy	417 - Woody	Partly Cloudy	None	SW	3	73	45.5	28.98
			Partly Cloudy	None	W	5.3	70.1	47.1	28.84
			Partly Cloudy		W	5.3	70.1	47.1	28.84
-8	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	4.7	67	49.8	29.02
-4	500 - Offensive	506 - Garbage	Partly Cloudy		S	4.7	67	49.8	29.02
			Partly Cloudy	None	W	7	63	60	30
2	400 - Earthy	406 - Grassy	Partly Cloudy			0	72.5	43.4	28.99
			Partly Cloudy	None	W	7	63	60	30

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11162	2024-03-28 00:32:14	LA County Fire Department Del Valle Regional Training Center		34.4322	-118.659397		ND
11160	2024-03-28 00:35:49	Lincoln Ave near intersection with Chiquito Canyon Rd		34.439456	-118.657071	Persistent	<2
11135	2024-03-28 00:36:39	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438558	-118.657155		ND
11154	2024-03-28 00:39:41	Ralph's parking lot facing Bank of America	No odor detected	34.456926	-118.618265		ND
11166	2024-03-28 00:40:40	Lincoln Ave and Taylor St		34.442624	-118.656045	Persistent	<2
11139	2024-03-28 00:40:49	Lincoln Ave and Taylor St	Smells like dirt	34.442994	-118.655786	Persistent	<2
11148	2024-03-28 00:45:43	Ralph's parking lot facing Bank of America	No odor detected	34.456896	-118.618311		ND
11151	2024-03-28 00:48:43	Cambridge Ave across from house number 29862	No odor detected	34.45953	-118.62675		ND
11165	2024-03-28 00:48:58	San Martinez Rd and Verdale Ave		34.449749	-118.679124	Persistent	4
11144	2024-03-28 00:50:16	Cambridge Ave across from house number 29862		34.459544	-118.626772	Persistent	<2
11136	2024-03-28 00:50:43	San Martinez Rd and Verdale Ave		34.449572	-118.679043	Persistent	<2
11161	2024-03-28 00:55:51	Bus Stop at San Martinez and Val Verde Rd		34.447158	-118.663862		ND
11143	2024-03-28 00:56:42	Park behind Live Oak Elementary school	No odor detected	34.450608	-118.621153		ND
11156	2024-03-28 00:56:49	Park behind Live Oak Elementary school	No odor detected	34.450609	-118.621107		ND
11141	2024-03-28 00:57:08	Bus Stop at San Martinez and Val Verde Rd		34.447143	-118.66387		ND
11150	2024-03-28 00:59:01	Starbucks / store by Bruce sushi	No odor detected	34.451031	-118.625119		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Mostly Cloudy	None		0	72.5	43.4	28.99
1	400 - Earthy	406 - Grassy	Mostly Cloudy	None	N	1.1	69.8	49.1	28.97
			Partly Cloudy		N	1.1	69.8	49.1	28.97
			Partly Cloudy	None	SW	3	62	62	30.01
1	400 - Earthy	412 - Peat-like	Mostly Cloudy	None		0	70.8	45.1	28.92
-1	400 - Earthy	412 - Peat-like	Partly Cloudy			0	70.8	45.1	28.92
			Partly Cloudy	None	SW	3	62	62	30.01
			Partly Cloudy	None	SW	5	62	61	30.01
4	400 - Earthy	406 - Grassy	Mostly Cloudy	None	W	5	64.1	50.4	28.69
3	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	5	62	61	30.01
-1	500 - Offensive	508 - Manure	Partly Cloudy		W	5	64.1	50.4	28.69
			Mostly Cloudy	None	W	5.8	64.8	48.4	28.85
			Partly Cloudy	None	W	8	61	61	30.01
			Partly Cloudy	None	W	8	61	61	30.01
			Partly Cloudy		W	5.8	64.8	48.4	28.85
			Partly Cloudy	None	W	7	61	61	30.01



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11140	2024-03-28 00:59:56	Val Verde Rd and Oakwood Ave	Laundry detergent smell	34.450263	-118.661855	Persistent	2
11149	2024-03-28 01:02:02	Starbucks / store by Bruce sushi	No odor detected	34.451042	-118.625203		ND
11146	2024-03-28 01:06:51	Lot in front of Fire Station 143		34.45473	-118.634227	Persistent	<2
11157	2024-03-28 01:07:21	Lot in front of Fire Station 143		34.454679	-118.634219	Persistent	<2
11167	2024-03-28 01:08:27	Bus Stop 14608 - Del Valle Rd & Silver St		34.448432	-118.655172	Persistent	<2
11138	2024-03-28 01:09:31	Bus Stop 14608 - Del Valle Rd & Silver St		34.448489	-118.655156	Persistent	<2
11152	2024-03-28 01:12:38	Ave Penn and Witherspoon Pkwy	No odor detected	34.44934	-118.638325		ND
11142	2024-03-28 01:13:01	Ave Penn and Witherspoon Pkwy	No odor detected	34.449358	-118.63837		ND
11155	2024-03-28 01:20:52	Castaic Union School District Building		34.44172	-118.62621	Persistent	2
11145	2024-03-28 01:21:24	Castaic Union School District Building		34.441742	-118.626269	Persistent	2
11158	2024-03-28 01:23:26	Lot in front of Fire Station 143		34.454666	-118.63439		ND
11164	2024-03-28 01:24:12	Lot in front of Fire Station 143		34.454664	-118.634415		ND
11163	2024-03-28 01:33:22	Park behind Live Oak Elementary school		34.450315	-118.621146	Persistent	<2
11159	2024-03-28 01:35:21	Park behind Live Oak Elementary school		34.450207	-118.621151	Persistent	<2
11172	2024-03-28 14:09:35	LA County Fire Department Del Valle Regional Training Center	Noticable somewhat strong smell of garbage	34.432257	-118.659476	Persistent	2
11179	2024-03-28 14:09:36	LA County Fire Department Del Valle Regional Training Center	Very strong odor	34.43181406	-118.6591471	Persistent	7
11176	2024-03-28 14:15:21	Lincoln Ave near intersection with Chiquita Canyon Rd	While at this location, I smelled grass, smoke, and soil. The predominant odor was smoke	34.438616	-118.657021	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	700 - Chemical	703 - Cleaning Fluid	Partly Cloudy		S	1.6	67.3	47.7	28.81
			Partly Cloudy	None	W	7	61	61	30.01
3	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	9	61	62	30.01
1	100 - Floral	105 - Fragrant	Partly Cloudy	None	SW	9	61	62	30.01
2	400 - Earthy	406 - Grassy	Partly Cloudy	None	S	5.6	66.8	49.6	28.86
2	400 - Earthy	406 - Grassy	Partly Cloudy		S	5.6	66.8	49.6	28.86
			Partly Cloudy	None	SW	5	61	61	30.01
			Partly Cloudy	None	SW	5	61	61	30.01
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	5	61	61	30.01
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	5	61	61	30.01
			Partly Cloudy	None	SW	5.1	66.8	48.2	28.91
			Partly Cloudy		SW	5.1	66.8	48.2	28.91
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None		0	70	42.4	29.07
2	400 - Earthy	406 - Grassy	Partly Cloudy			0	70	42.4	29.07
-4	500 - Offensive	506 - Garbage	Sunny		SW	1.2	56.4	48.5	29.01
-9	500 - Offensive	506 - Garbage	Mostly Cloudy	None	SW	1.2	56.4	48.5	29.01
-3	400 - Earthy	414 - Smokey	Mostly Cloudy	None	NW	1.6	51.6	61.1	28.98

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11168	2024-03-28 14:15:21	Lincoln Ave near intersection with Chiquita Canyon Rd	Smells like marijuana	34.438545	-118.657106	Persistent	4
11171	2024-03-28 14:20:36	Lincoln Ave and Taylor St		34.442972	-118.655829	Persistent	<2
11178	2024-03-28 14:20:37	Lincoln Ave and Taylor St		34.442511	-118.655755	Persistent	<2
11192	2024-03-28 14:23:20	Front of Castaic Elementary School	No odor detected	34.471473	-118.630183		ND
11190	2024-03-28 14:23:28	Front of Castaic Elementary School	No odor detected	34.471494	-118.630177		ND
11180	2024-03-28 14:29:38	San Martinez Rd and Verdale Ave	Very strong smell	34.449825	-118.678923	Persistent	4
11193	2024-03-28 14:31:33	Ralph's parking lot facing Bank of America	No odor detected	34.456762	-118.618139		ND
11188	2024-03-28 14:31:46	Ralph's parking lot facing Bank of America	No odor detected	34.456803	-118.618208		ND
11170	2024-03-28 14:32:24	San Martinez Rd and Verdale Ave	Very strong smell of garbage	34.449572	-118.679004	Persistent	15
11182	2024-03-28 14:38:31	Bus Stop at San Martinez and Val Verde Rd	Very faint intermittent grassy smell	34.447199	-118.664274	Intermittent	<2
11169	2024-03-28 14:40:38	Bus Stop at San Martinez and Val Verde Rd	Faint chlorine smell	34.447109	-118.663943	Persistent	<2
11175	2024-03-28 14:44:55	Val Verde Rd and Oakwood Ave	Grassy smell predominantly; I also smell citrus	34.450065	-118.662231	Persistent	<2
11186	2024-03-28 14:47:24	Cambridge Ave across from house number 29862	No odor detected	34.45948	-118.62673		ND
11196	2024-03-28 14:47:50	Cambridge Ave across from house number 29862	No odor detected	34.459479	-118.626737		ND
11173	2024-03-28 14:47:55	Val Verde Rd and Oakwood Ave		34.450335	-118.66184	Persistent	2
11187	2024-03-28 14:54:37	Starbucks / store by Bruce sushi	No odor detected	34.450988	-118.625053		ND
11181	2024-03-28 14:55:37	Bus Stop 14608 - Del Valle Rd & Silver St		34.447868	-118.655216	Persistent	<2
11174	2024-03-28 14:56:28	Bus Stop 14608 - Del Valle Rd & Silver St	Smells like campfire smoke	34.448513	-118.655183	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-2	100 - Floral	106 - Herbal	Sunny		NW	1.6	51.6	61.1	28.98
-1	400 - Earthy	412 - Peat-like	Sunny			0	59.6	51.4	28.93
1	400 - Earthy	412 - Peat-like	Mostly Cloudy	None		0	59.6	6951.4	28.93
			Overcast	None	N	2	44	97	30
			Overcast	None	N	2	44	97	30
-9	500 - Offensive	506 - Garbage	Mostly Cloudy	None		0	61.5	54.7	28.69
			Mostly Cloudy	None	N	2	44	96	30
			Mostly Cloudy	None	N	2	44	96	30
-6	500 - Offensive	506 - Garbage	Partly Cloudy			0	61.5	54.7	28.69
0	400 - Earthy	406 - Grassy	Mostly Cloudy	None		0	61.2	50.1	28.85
-1	800 - Medicinal	805 - Chlorinou	Partly Cloudy			0	61.2	50.1	28.85
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None		0	63.6	51.1	28.8
			Mostly Cloudy	None	N	2	45	96	29.99
			Mostly Cloudy	None	N	2	45	96	29.99
1		406 - Grassy	Partly Cloudy			0	63.6	51.1	28.8
			Mostly Cloudy	None	E	1	45	95	29.99
-1	400 - Earthy	402 - Burnt Wood	Partly Cloudy	None		0	59.8	53.5	28.86
2	400 - Earthy	402 - Burnt Wood	Partly Cloudy			0	59.8	53.5	28.86

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11199	2024-03-28 15:01:37	Lot in front of Fire Station 143		34.454651	-118.634461	Persistent	<2
11195	2024-03-28 15:02:09	Starbucks / store by Bruce sushi	No odor detected	34.451015	-118.625041		ND
11177	2024-03-28 15:02:27	Lot in front of Fire Station 143		34.454692	-118.634149	Persistent	<2
11184	2024-03-28 15:06:43	Park behind Live Oak Elementary school		34.450586	-118.62107	Persistent	<2
11197	2024-03-28 15:11:03	Park behind Live Oak Elementary school		34.450569	-118.6211	Persistent	<2
11213	2024-03-28 15:16:23	Starbucks / store by Bruce sushi	It smells like prepared food	34.451111	-118.625128	Persistent	<2
11183	2024-03-28 15:18:27	Castaic Union School District Building	No odor detected	34.441606	-118.626077		ND
11200	2024-03-28 15:18:37	Starbucks / store by Bruce sushi	Breakfast, eggs smell	34.45109	-118.625127	Persistent	<2
11194	2024-03-28 15:19:23	Castaic Union School District Building	No odor detected	34.441616	-118.626066		ND
11185	2024-03-28 15:24:48	Ave Penn and Witherspoon Pkwy	No odor detected	34.44933	-118.638312		ND
11191	2024-03-28 15:25:20	Ave Penn and Witherspoon Pkwy	No odor detected	34.44934	-118.638325		ND
11210	2024-03-28 15:36:27	Front of Castaic Elementary School		34.471494	-118.630162		ND
11198	2024-03-28 15:38:09	Lot in front of Fire Station 143	No odor detected	34.454812	-118.634051		ND
11189	2024-03-28 15:38:38	Lot in front of Fire Station 143	No odor detected	34.454831	-118.634042		ND
11201	2024-03-28 15:39:59	Front of Castaic Elementary School		34.471496	-118.630216		ND
11227	2024-03-28 15:45:13	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449341	-118.654755		ND
11218	2024-03-28 15:46:06	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449347	-118.654742		ND
11212	2024-03-28 15:49:35	Ralph's parking lot facing Bank of America		34.456817	-118.617892		ND
11217	2024-03-28 15:51:16	Val Verde Rd and Oakwood Ave	Smelled like someone may be burning something	34.450255	-118.661843	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
2	100 - Floral	106 - Herbal	Partly Cloudy			0	60.5	56.4	28.89
			Mostly Cloudy	None	E	1	45	95	29.99
6	200 - Fruity	212 - Sweet	Partly Cloudy	None		0	60.5	56.4	28.89
-1	500 - Offensive	513 - Rotten Eggs	Mostly Cloudy	None	E	1	47	91	29.99
-2	500 - Offensive	513 - Rotten Eggs	Mostly Cloudy	None	E	1	47	91	29.99
3	300 - Vegetable	308 - Potato	Partly Cloudy	None		0	66.8	44.2	28.98
			Partly Cloudy	None	E	1	47	91	29.99
1	300 - Vegetable	310 - Onion	Partly Cloudy			0	66.8	44.2	28.98
			Partly Cloudy	None	E	1	47	91	29.99
			Sunny	None			49	86	29.98
			Sunny	None	E	1	49	86	29.98
			Partly Cloudy	None		0	62.4	48.4	28.75
			Partly Cloudy	None		0	52	78	29.99
			Partly Cloudy	None			52	78	29.99
			Partly Cloudy			0	62.4	48.4	28.75
			Partly Cloudy	None	W	2	53	75	29.99
			Partly Cloudy	None	W	2	53	75	29.99
			Sunny	None	NE	1.9	62	47.1	29.02
0	400 - Earthy	414 - Smokey	Partly Cloudy	None	W	2	52	75	29.99

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11221	2024-03-28 15:51:18	Val Verde Rd and Oakwood Ave	Smelled like someone nearby was burning tree limbs.	34.450273	-118.661895	Persistent	<2
11202	2024-03-28 15:52:07	Ralph's parking lot facing Bank of America		34.456778	-118.617916		ND
11207	2024-03-28 15:57:35	Cambridge Ave across from house number 29862		34.459426	-118.626724	Persistent	<2
11203	2024-03-28 16:00:42	Cambridge Ave across from house number 29862		34.459477	-118.626752	Persistent	<2
11219	2024-03-28 16:01:12	San Martinez Rd and Verdale Ave		34.44962	-118.678591	Persistent	<2
11226	2024-03-28 16:02:46	San Martinez Rd and Verdale Ave	Smells like someone is burning tree limbs nearby.	34.449582	-118.678614	Persistent	<2
11209	2024-03-28 16:06:34	Park behind Live Oak Elementary school		34.451408	-118.621203		ND
11204	2024-03-28 16:08:37	Park behind Live Oak Elementary school		34.450945	-118.621189	Persistent	<2
11216	2024-03-28 16:11:41	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447009	-118.663878		ND
11220	2024-03-28 16:12:39	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447012	-118.663862		ND
11211	2024-03-28 16:16:41	Ave Penn and Witherspoon Pkwy	Very sweet, sugary cereal smell	34.449274	-118.638301	Persistent	7
11215	2024-03-28 16:18:24	Lincoln Ave and Taylor St	No odor detected	34.442839	-118.655749		ND
11214	2024-03-28 16:18:29	Lincoln Ave and Taylor St	No odor detected	34.442867	-118.655797		ND
11205	2024-03-28 16:19:29	Ave Penn and Witherspoon Pkwy	Fruity sweet smell	34.449519	-118.638177	Persistent	15
11222	2024-03-28 16:22:06	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438553	-118.657129		ND
11223	2024-03-28 16:22:11	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438531	-118.657154		ND
11208	2024-03-28 16:24:46	Castaic Union School District Building		34.441717	-118.625885		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
0	400 - Earthy	414 - Smokey	Partly Cloudy	None	W	2	52	75	29.99
			Partly Cloudy		NE	1.9	62	47.1	29.02
6	100 - Floral	111 - Rose-like	Sunny	None	N	1.2	64.5	49.6	28.8
2	100 - Floral	105 - Fragrant	Sunny		N	1.2	64.5	49.6	28.8
0	400 - Earthy	414 - Smokey	Partly Cloudy	None	W	1	51	75	29.99
0	400 - Earthy	414 - Smokey	Partly Cloudy	None	W	1	51	75	29.99
			Sunny	None	SE	1.5	63.4	49.2	29.05
1	400 - Earthy	406 - Grassy	Sunny		SE	1.5	63.4	49.2	29.05
			Partly Cloudy	None	W	1	52	72	29.98
			Partly Cloudy	None	W	1	52	72	29.98
8	200 - Fruity	212 - Sweet	Sunny	None	S	1.3	64.5	48.9	28.83
			Partly Cloudy	None			54	77	30.08
			Partly Cloudy	None		0	54	77	30.08
1	200 - Fruity	212 - Sweet	Sunny		S	1.3	64.5	48.9	28.83
			Partly Cloudy	None	E	2	54	77	30.08
			Partly Cloudy	None	E	2	54	77	30.08
			Sunny	None		0	71.2	43.5	29.02



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11206	2024-03-28 16:25:31	Castaic Union School District Building		34.441603	-118.626281		ND
11224	2024-03-28 16:27:42	LA County Fire Department Del Valle Regional Training Center		34.431946	-118.65927	Persistent	<2
11225	2024-03-28 16:27:43	LA County Fire Department Del Valle Regional Training Center		34.431975	-118.659281	Persistent	<2
11245	2024-03-28 16:35:30	LA County Fire Department Del Valle Regional Training Center	It smells like garbage, but there's also a Sweet Odor to it. It's like sweet garbage.	34.432744	-118.659344	Persistent	7
11234	2024-03-28 16:35:55	LA County Fire Department Del Valle Regional Training Center		34.432187	-118.659428	Persistent	4
11233	2024-03-28 16:41:07	Lincoln Ave near intersection with Chiquito Canyon Rd	Overwhelming smell of rancid garbage smell	34.438564	-118.657074	Persistent	60
11242	2024-03-28 16:41:09	Lincoln Ave near intersection with Chiquito Canyon Rd	Very offensive and intense garbage and spoiled milk smell.	34.438628	-118.656966	Persistent	15
11232	2024-03-28 16:46:22	Lincoln Ave and Taylor St	Sweet garbage smell	34.442975	-118.655771	Persistent	4
11244	2024-03-28 16:46:28	Lincoln Ave and Taylor St	Sweet and garbage odor	34.442953	-118.655823	Persistent	2
11258	2024-03-28 16:49:20	Ralph's parking lot facing Bank of America	No odor detected	34.45684	-118.618194		ND
11254	2024-03-28 16:49:27	Ralph's parking lot facing Bank of America	No odor detected	34.456871	-118.618249		ND
11237	2024-03-28 16:54:23	San Martinez Rd and Verdale Ave	Like grass predominantly, but I also smell farm animals	34.44993	-118.679003	Intermittent	<2
11229	2024-03-28 16:54:25	San Martinez Rd and Verdale Ave	Smells like farm animal	34.449483	-118.679148	Persistent	<2
11255	2024-03-28 16:55:07	Front of Castaic Elementary School	No odor detected	34.471472	-118.630181		ND
11252	2024-03-28 16:56:07	Front of Castaic Elementary School	No odor detected	34.471484	-118.630175		ND
11228	2024-03-28 17:02:15	Bus Stop at San Martinez and Val Verde Rd		34.446917	-118.663892	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny			0	71.2	43.5	29.02
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	SE	1	57	65	29.98
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	SE	1	57	65	29.98
-6	500 - Offensive	506 - Garbage	Sunny	None	N	3.5	69.8	47.3	28.97
-4	500 - Offensive	506 - Garbage	Sunny		N	3.5	69.8	47.3	28.97
-10	500 - Offensive	506 - Garbage	Sunny		S	1.7	70.5	48.8	28.95
-9	500 - Offensive	506 - Garbage	Sunny	None	S	1.7	70.5	48.8	28.95
-3	500 - Offensive	506 - Garbage	Sunny		S	2.2	64.1	53.0	28.9
-2	500 - Offensive	506 - Garbage	Sunny	None	S	2.2	64.1	53.0	28.9
			Partly Cloudy	None	SW	2	58	64	29.98
			Partly Cloudy	None	SW	2	58	64	29.98
-5	400 - Earthy	406 - Grassy	Partly Cloudy	None	NW	1	72.2	49.5	28.67
-1	500 - Offensive	508 - Manure	Sunny		NW	1	72.2	49.5	28.67
			Partly Cloudy	None			58	63	29.98
			Partly Cloudy	None		0	58	63	29.98
-1	500 - Offensive	506 - Garbage	Sunny			0	77	38.1	28.83

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11239	2024-03-28 17:02:32	Bus Stop at San Martinez and Val Verde Rd	As I took my nasal ranger reading at the bus stop location, I did not detect any odor. However, as I walked around the area and beyond 100 feet from the designated sample location, I smelled a faint, garbage odor intermittently.	34.447169	-118.6638		ND
11253	2024-03-28 17:06:10	Cambridge Ave across from house number 29862		34.45948	-118.626747	Persistent	<2
11259	2024-03-28 17:06:15	Cambridge Ave across from house number 29862		34.459483	-118.626771	Persistent	<2
11249	2024-03-28 17:11:50	Park behind Live Oak Elementary school	No odor detected	34.450547	-118.621113		ND
11251	2024-03-28 17:11:51	Park behind Live Oak Elementary school	No odor detected	34.450575	-118.621073		ND
11241	2024-03-28 17:14:20	Val Verde Rd and Oakwood Ave	While it predominately smelled like grass, I also smelled very faint garbage odors at this location	34.450259	-118.661789	Persistent	2
11235	2024-03-28 17:14:28	Val Verde Rd and Oakwood Ave	Garbage odor faded into a noticable grassy smell	34.450282	-118.661877	Intermittent	2
11261	2024-03-28 17:15:50	Starbucks / store by Bruce sushi	No odor detected	34.451141	-118.62517		ND
11250	2024-03-28 17:18:32	Starbucks / store by Bruce sushi	No odor detected	34.451184	-118.625139		ND
11236	2024-03-28 17:22:16	Bus Stop 14608 - Del Valle Rd & Silver St	Very faint odor at 1/2 dilution	34.447926	-118.655283	Persistent	2
11230	2024-03-28 17:22:50	Bus Stop 14608 - Del Valle Rd & Silver St		34.448477	-118.655216	Persistent	<2
11257	2024-03-28 17:25:41	Lot in front of Fire Station 143		34.454545	-118.634582	Persistent	<2
11247	2024-03-28 17:25:58	Lot in front of Fire Station 143		34.454512	-118.634545	Persistent	<2
11243	2024-03-28 17:30:18	Lot in front of Fire Station 143	Initially, the odor wasn't intense at all, but as I stayed at this location, the odor became more intense. My reading was from when the odor was less intense.	34.454769	-118.634564	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None		0	77	38.1	28.83
2	100 - Floral	105 - Fragrant	Partly Cloudy	None		0	58	63	29.98
1	100 - Floral	105 - Fragrant	Partly Cloudy	None			58	63	29.98
			Partly Cloudy	None	W	1	58	64	29.98
			Partly Cloudy	None	W	1	58	64	29.98
-3	400 - Earthy	406 - Grassy	Partly Cloudy	None		0	73.2	42.0	28.79
-2	500 - Offensive	506 - Garbage	Sunny			0	73.2	42.0	28.79
			Partly Cloudy	None			58	64	29.98
			Partly Cloudy	None		0	58	64	29.98
-6	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	2.2	68.9	45.3	28.84
-3	500 - Offensive	506 - Garbage	Sunny		S	2.2	68.9	45.3	28.84
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	E	2	60	59	29.98
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	E	2	60	59	29.98
-8	500 - Offensive	506 - Garbage	Partly Cloudy	None	NE	1.5	66.7	47.1	28.87

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11231	2024-03-28 17:36:26	Lot in front of Fire Station 143		34.454696	-118.634458	Persistent	2
11248	2024-03-28 17:39:56	Ave Penn and Witherspoon Pkwy		34.449305	-118.638321	Persistent	<2
11256	2024-03-28 17:40:39	Ave Penn and Witherspoon Pkwy		34.449327	-118.638299	Persistent	<2
11240	2024-03-28 17:42:27	Cambridge Ave across from house number 29862		34.459608	-118.626696	Persistent	2
11238	2024-03-28 17:42:34	Cambridge Ave across from house number 29862		34.459571	-118.626706	Persistent	<2
11260	2024-03-28 17:45:29	Castaic Union School District Building	No odor detected	34.441647	-118.626129		ND
11246	2024-03-28 17:45:32	Castaic Union School District Building	No odor detected	34.441657	-118.626094		ND
11267	2024-03-28 20:15:38	Front of Castaic Elementary School		34.47149	-118.630207	Persistent	<2
11265	2024-03-28 20:21:07	Front of Castaic Elementary School		34.471568	-118.63019	Intermittent	<2
11268	2024-03-28 20:29:39	Ralph's parking lot facing Bank of America	Like prepared foods	34.45694	-118.617912	Intermittent	<2
11269	2024-03-28 20:30:31	Ralph's parking lot facing Bank of America		34.456856	-118.617933	Persistent	<2
11262	2024-03-28 20:35:16	Park behind Live Oak Elementary school	Mostly a grassy smell, but I also smelled some cooked fish odor	34.451077	-118.621237	Intermittent	<2
11270	2024-03-28 20:35:27	Park behind Live Oak Elementary school		34.450979	-118.621158	Persistent	<2
11287	2024-03-28 20:38:52	Bus Stop 14608 - Del Valle Rd & Silver St	No for detected	34.449289	-118.654746		ND
11286	2024-03-28 20:39:04	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449351	-118.654749		ND
11272	2024-03-28 20:44:08	Starbucks / store by Bruce sushi	Garbage smell came with the wind	34.451083	-118.625141	Intermittent	<2
11266	2024-03-28 20:44:12	Starbucks / store by Bruce sushi		34.45111	-118.625101	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-2	500 - Offensive	506 - Garbage	Sunny		NE	1.5	66.7	47.1	28.87
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	6	60	58	29.97
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	6	60	58	29.97
-6	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	1.7	71.7	43.9	28.79
-2	500 - Offensive	506 - Garbage	Sunny		N	1.7	71.7	43.9	28.79
			Partly Cloudy	None	SW	3	59	57	29.97
			Partly Cloudy	None	SW	3	59	57	29.97
-1	500 - Offensive	506 - Garbage	Sunny		SE	2.1	71.5	39.1	28.68
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	SE	2.1	71.5	39.1	28.68
4	300 - Vegetable	308 - Potato	Partly Cloudy	None	S	4.8	72.7	44.8	28.92
-1	700 - Chemical	702 - Car Exhaust	Sunny		S	4.8	72.7	44.8	28.92
2	400 - Earthy	406 - Grassy	Partly Cloudy	None	SE	6.1	71.4	33.3	28.95
1	400 - Earthy	406 - Grassy	Sunny		SE	6.1	71.4	33.3	28.95
			Partly Cloudy	None	SE	5	65	51	29.91
			Partly Cloudy	None	SE	5	65	51	29.91
-4	500 - Offensive	506 - Garbage	Sunny		SW	3.3	72.5	36.9	28.88
-9	500 - Offensive	507 - Landfill Leachate	Partly Cloudy	None	SW	3.3	72.5	36.9	28.88

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11264	2024-03-28 20:51:45	Ave Penn and Witherspoon Pkwy	When using the nasal ranger, I did not pick up anything, however, when I remove the nasal Ranger, I smelled dirt and a sewer like smell combined with grass. There was construction and active machines moving dirt 25 feet from our location.	34.449875	-118.637811	Persistent	<2
11271	2024-03-28 20:53:03	Ave Penn and Witherspoon Pkwy	Smells mainly like dirt, but a garbage smell did come with wind	34.449544	-118.638163	Persistent	2
11263	2024-03-28 20:58:51	Castaic Union School District Building		34.441625	-118.626264	Intermittent	<2
11273	2024-03-28 21:00:08	Castaic Union School District Building	Smells like fresh tortillas	34.441556	-118.626335	Persistent	<2
11282	2024-03-28 21:08:58	San Martinez Rd and Verdale Ave	No odor detected	34.449666	-118.67864		ND
11277	2024-03-28 21:09:21	San Martinez Rd and Verdale Ave	No odor detected	34.449597	-118.678623		ND
11296	2024-03-28 21:10:05	LA County Fire Department Del Valle Regional Training Center		34.43218	-118.659425	Persistent	<2
11301	2024-03-28 21:11:41	LA County Fire Department Del Valle Regional Training Center		34.43222	-118.659451		ND
11283	2024-03-28 21:12:25	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446838	-118.66402		ND
11274	2024-03-28 21:14:42	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446895	-118.664012		ND
11299	2024-03-28 21:15:55	Lincoln Ave near intersection with Chiquito Canyon Rd		34.43848849	-118.6570573		ND
11297	2024-03-28 21:15:56	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438537	-118.657117		ND
11280	2024-03-28 21:19:02	Val Verde Rd and Oakwood Ave		34.450337	-118.661884	Persistent	<2
11281	2024-03-28 21:19:11	Val Verde Rd and Oakwood Ave		34.450368	-118.661878	Persistent	<2
11298	2024-03-28 21:20:28	Lincoln Ave and Taylor St		34.442395	-118.655772	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-6	500 - Offensive	515 - Sewer	Partly Cloudy	None	SW	3.4	78.3	38.1	28.74
-2	400 - Earthy	412 - Peat-like	Sunny		SW	3.4	78.3	38.1	28.74
3	100 - Floral	102 - Cinnamon	Partly Cloudy	None	S	7.1	73	42.7	28.92
1	300 - Vegetable	308 - Potato	Sunny		S	7.1	73	42.7	28.92
			Partly Cloudy	None	SE	3	67	51	29.91
			Partly Cloudy	None	SE	3	67	51	29.91
6	200 - Fruity	212 - Sweet	Mostly Cloudy	None	SE	7.5	74	47.8	28.88
			Sunny		SE	7.5	74	47.8	28.88
			Partly Cloudy	None	SE	3	69	50	29.91
			Partly Cloudy	None	SE	3	69	50	29.91
			Mostly Cloudy	None	S	6.5	68.3	43.0	28.86
			Sunny		S	6.5	68.3	43.0	28.86
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	SE	3	70	50	29.91
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	SE	3	70	50	29.91
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None	S	5.8	73.8	45.5	28.81



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11292	2024-03-28 21:21:21	Lincoln Ave and Taylor St		34.44296	-118.655747		ND
11276	2024-03-28 21:24:26	Lincoln Ave and Taylor St	No odor detected	34.442908	-118.655783		ND
11279	2024-03-28 21:24:54	Lincoln Ave and Taylor St	No odor detected	34.442917	-118.655794		ND
11285	2024-03-28 21:28:22	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438576	-118.657127		ND
11288	2024-03-28 21:28:29	San Martinez Rd and Verdale Ave		34.449595	-118.679108	Persistent	<2
11278	2024-03-28 21:28:34	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438543	-118.65716		ND
11293	2024-03-28 21:28:47	San Martinez Rd and Verdale Ave		34.449589	-118.679082	Persistent	<2
11275	2024-03-28 21:33:19	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432014	-118.659283		ND
11284	2024-03-28 21:33:45	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432005	-118.65926		ND
11300	2024-03-28 21:34:27	Bus Stop at San Martinez and Val Verde Rd		34.447124	-118.664106		ND
11294	2024-03-28 21:36:05	Bus Stop at San Martinez and Val Verde Rd		34.447134	-118.663894		ND
11295	2024-03-28 21:40:00	Val Verde Rd and Oakwood Ave		34.450064	-118.66228	Intermittent	<2
11290	2024-03-28 21:40:02	Val Verde Rd and Oakwood Ave		34.450287	-118.661856	Persistent	<2
11312	2024-03-28 21:46:35	Ralph's parking lot facing Bank of America	No odor detected	34.456722	-118.618471		ND
11304	2024-03-28 21:47:30	Ralph's parking lot facing Bank of America		34.456782	-118.618425	Persistent	<2
11291	2024-03-28 21:50:51	Bus Stop 14608 - Del Valle Rd & Silver St		34.448567	-118.655103	Persistent	<2
11289	2024-03-28 21:53:10	Bus Stop 14608 - Del Valle Rd & Silver St		34.448545	-118.655149	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Sunny		W	5.8	73.8	45.5	28.81
			Partly Cloudy	None	SW	7	65	52	29.89
			Partly Cloudy	None	SW	7	65	52	29.89
			Partly Cloudy	None	W	4	67	51	29.97
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None	NW	4.1	71.4	47.9	28.58
			Partly Cloudy	None	W	4	67	51	29.97
2	400 - Earthy	406 - Grassy	Sunny		NW	4.1	71.4	47.9	28.58
			Partly Cloudy	None	W	2	67	50	29.97
			Partly Cloudy	None	W	2	67	50	29.97
			Partly Cloudy	None	W	11.6	72.9	46.4	28.74
			Sunny		W	11.6	72.9	46.4	28.74
0	400 - Earthy	406 - Grassy	Partly Cloudy	None	N	2.6	70.7	45.0	28.69
1	400 - Earthy	406 - Grassy	Sunny		N	2.9	70.7	45.0	28.69
			Partly Cloudy	None	S	7	65	50	29.88
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	7	65	50	29.88
2	400 - Earthy	406 - Grassy	Sunny		S	6.7	72.4	39.4	28.74
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	S	6.7	72.4	39.4	28.74

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11308	2024-03-28 22:08:48	Front of Castaic Elementary School	No odor detected	34.47158	-118.630188		ND
11317	2024-03-28 22:08:49	Front of Castaic Elementary School	No odor detected	34.471531	-118.630208		ND
11347	2024-03-28 22:14:25	Lot in front of Fire Station 143	Smells like diesel with an intermittent garbage smell	34.454681	-118.634468	Persistent	<2
11334	2024-03-28 22:19:16	Lot in front of Fire Station 143		34.45463	-118.634463	Intermittent	<2
11307	2024-03-28 22:19:22	Cambridge Ave across from house number 29862		34.459563	-118.626736	Persistent	<2
11313	2024-03-28 22:20:26	Cambridge Ave across from house number 29862		34.459515	-118.626762	Persistent	<2
11335	2024-03-28 22:23:57	Cambridge Ave across from house number 29862		34.459477	-118.626784	Persistent	<2
11332	2024-03-28 22:24:05	Cambridge Ave across from house number 29862	Cinnamon/ fragrant floral smell	34.459527	-118.626858	Persistent	<2
11305	2024-03-28 22:24:47	Park behind Live Oak Elementary school	No odor detected	34.450596	-118.621015		ND
11316	2024-03-28 22:24:49	Park behind Live Oak Elementary school	No odor detected	34.450608	-118.621121		ND
11306	2024-03-28 22:32:19	Starbucks / store by Bruce sushi	No odor detected	34.451161	-118.625159		ND
11310	2024-03-28 22:40:37	Starbucks / store by Bruce sushi	No odor detected	34.451224	-118.625167		ND
11311	2024-03-28 22:44:23	Castaic Union School District Building	No odor detected	34.441492	-118.626077		ND
11302	2024-03-28 22:44:51	Castaic Union School District Building	No odor detected	34.441524	-118.62603		ND
11315	2024-03-28 22:48:52	Ave Penn and Witherspoon Pkwy		34.449148	-118.638398	Persistent	<2
11303	2024-03-28 22:49:04	Ave Penn and Witherspoon Pkwy		34.449187	-118.638412	Persistent	<2
11337	2024-03-28 22:54:50	Front of Castaic Elementary School		34.47135	-118.630154		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Partly Cloudy	None	W	10	65	53	29.88
			Partly Cloudy	None	W	10	65	53	29.88
-2	700 - Chemical	706 - Diesel	Sunny		W	5.5	73.2	45.0	28.79
2	200 - Fruity	212 - Sweet	Partly Cloudy	None	W	5.5	73.2	45.0	28.79
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	6	64	55	29.87
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	6	64	55	29.87
9	200 - Fruity	212 - Sweet	Partly Cloudy	None	S	8.4	68.5	40.5	28.69
3	100 - Floral	102 - Cinnamon	Sunny		S	8.4	68.5	40.5	28.69
			Partly Cloudy	None	SW	11	65	55	29.87
			Partly Cloudy	None	SW	11	65	55	29.87
			Partly Cloudy	None	SW	11	68	55	29.87
			Partly Cloudy	None	SW	11	68	55	29.87
			Partly Cloudy	None	SW	15	62	61	29.87
			Partly Cloudy	None	SW	15	62	61	29.87
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	8	63	61	29.88
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	8	63	61	29.88
			Mostly Cloudy		N	3.6	65.4	49.9	28.64

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11309	2024-03-28 22:54:51	Lot in front of Fire Station 143		34.454565	-118.634419	Persistent	<2
11314	2024-03-28 22:55:14	Lot in front of Fire Station 143		34.454546	-118.634433	Persistent	<2
11336	2024-03-28 22:56:30	Front of Castaic Elementary School		34.471511	-118.630204	Persistent	<2
11327	2024-03-28 22:59:48	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449276	-118.654781		ND
11318	2024-03-28 22:59:53	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449337	-118.654752		ND
11333	2024-03-28 23:01:26	Ralph's parking lot facing Bank of America	Gasoline/ car exhaust smell	34.456827	-118.61794	Persistent	2
11339	2024-03-28 23:02:35	Ralph's parking lot facing Bank of America	It smells like prepared foods; specifically, it smells like fried chicken and onion rings	34.456888	-118.617892	Persistent	<2
11324	2024-03-28 23:04:14	Val Verde Rd and Oakwood Ave		34.450229	-118.661815	Persistent	<2
11329	2024-03-28 23:04:14	Val Verde Rd and Oakwood Ave		34.450259	-118.66185	Persistent	<2
11328	2024-03-28 23:07:28	San Martinez Rd and Verdale Ave		34.44963	-118.67852		<2
11322	2024-03-28 23:10:29	San Martinez Rd and Verdale Ave		34.449644	-118.678604	Persistent	<2
11330	2024-03-28 23:13:59	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446962	-118.663786		ND
11319	2024-03-28 23:14:34	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447019	-118.663885		ND
11345	2024-03-28 23:16:39	Park behind Live Oak Elementary school		34.450195	-118.621175		ND
11344	2024-03-28 23:16:55	Park behind Live Oak Elementary school		34.450252	-118.621117		ND
11323	2024-03-28 23:20:18	Lincoln Ave and Taylor St	No odor detected	34.442894	-118.655769		ND
11331	2024-03-28 23:20:20	Lincoln Ave and Taylor St	No odor detected	34.442875	-118.655777		ND
11326	2024-03-28 23:22:33	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438528	-118.657127		ND
11321	2024-03-28 23:23:07	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438558	-118.657109		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
2	100 - Floral	105 - Fragrant	Partly Cloudy	None	W	14	63	60	29.88
1	100 - Floral	105 - Fragrant	Partly Cloudy	None	W	14	63	60	29.88
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None	N	3.6	65.4	49.9	28.64
			Partly Cloudy	None	SW	11	62	61	29.88
			Partly Cloudy	None	SW	11	62	61	29.88
-2	700 - Chemical	707 - Gasoline	Mostly Cloudy		SE	4.5	70.1	41.7	28.9
5	300 - Vegetable	310 - Onion	Mostly Cloudy	None	SE	4.5	70.1	41.7	28.9
1	400 - Earthy	406 - Grassy	Overcast	None	SW	8	63	61	29.88
1	400 - Earthy	406 - Grassy	Overcast	None	SW	8	63	61	29.88
-1	500 - Offensive	508 - Manure	Overcast	None	SW	4	62	60	29.88
-2	500 - Offensive	508 - Manure	Overcast	None	SW	4	62	60	29.88
			Overcast	None	W	5	61	62	29.87
			Overcast	None	W	5	61	62	29.87
			Overcast		SE	6.4	67	48.1	28.92
			Mostly Cloudy	None	SE	6.4	67	48.1	28.92
			Overcast	None	SW	13	60	66	29.88
			Overcast	None	SW	13	60	66	29.88
			Overcast	None	S	2	63	64	29.96
			Overcast	None	S	2	63	64	29.96

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11343	2024-03-28 23:24:00	Starbucks / store by Bruce sushi		34.451213	-118.625132	Persistent	4
11341	2024-03-28 23:24:01	Starbucks / store by Bruce sushi	There was an idling car nearby (within 10 feet)	34.451117	-118.624892	Persistent	<2
11325	2024-03-28 23:25:44	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432057	-118.659343		ND
11320	2024-03-28 23:29:02	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432084	-118.659347		ND
11342	2024-03-28 23:31:28	Ave Penn and Witherspoon Pkwy		34.449451	-118.638174	Persistent	15
11340	2024-03-28 23:31:34	Ave Penn and Witherspoon Pkwy		34.4497	-118.638052	Persistent	15
11346	2024-03-28 23:36:37	Castaic Union School District Building		34.441577	-118.626243		ND
11338	2024-03-28 23:38:08	Castaic Union School District Building		34.441173	-118.626213		ND
11374	2024-03-29 14:06:06	Front of Castaic Elementary School		34.471456	-118.63014	Persistent	<2
11348	2024-03-29 14:09:11	Front of Castaic Elementary School		34.471411	-118.630239		ND
11373	2024-03-29 14:18:50	Ralph's parking lot facing Bank of America		34.456771	-118.61777	Intermittent	<2
11351	2024-03-29 14:18:58	Ralph's parking lot facing Bank of America		34.456803	-118.61777	Persistent	<2
11372	2024-03-29 14:26:06	Cambridge Ave across from house number 29862		34.459466	-118.626741	Persistent	<2
11367	2024-03-29 14:26:47	LA County Fire Department Del Valle Regional Training Center		34.432211	-118.659434	Persistent	<2
11352	2024-03-29 14:27:11	Cambridge Ave across from house number 29862		34.459559	-118.626776	Persistent	<2
11354	2024-03-29 14:27:40	LA County Fire Department Del Valle Regional Training Center		34.432251	-118.659472	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-3	500 - Offensive	506 - Garbage	Overcast		W	1.6	69.1	48.6	28.86
-7	700 - Chemical	702 - Car Exhaust	Overcast	None	W	1.6	69.1	48.6	28.86
			Overcast	None	W	2	63	65	29.96
			Overcast	None	W	2	63	65	29.96
-7	500 - Offensive	506 - Garbage	Overcast		S	3.9	68.4	47.2	28.71
-8	500 - Offensive	506 - Garbage	Overcast	None	S	3.9	68.4	47.2	28.71
			Overcast		SW	5.9	66.6	50.1	28.89
			Overcast	None	SW	5.9	66.6	50.1	28.89
1	400 - Earthy	406 - Grassy	Sunny	None		0	54.6	59.8	28.61
			Mostly Cloudy			0	54.6	59.8	28.61
-6	700 - Chemical	722 - Tar/Asphalt	Partly Cloudy	None		0	63.4	52.0	28.87
-2	700 - Chemical	702 - Car Exhaust	Mostly Cloudy			0	63.4	52.0	28.87
8	100 - Floral	105 - Fragrant	Partly Cloudy	None		0	64.5	59.6	28.64
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	3	48	87	29.92
4	100 - Floral	105 - Fragrant	Sunny			0	64.5	59.6	28.64
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	3	48	87	29.92



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11350	2024-03-29 14:31:58	Park behind Live Oak Elementary school	Mainly a grass smell but it did smell of car exhaust as well	34.450147	-118.621113	Persistent	<2
11364	2024-03-29 14:32:48	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438486	-118.656949		ND
11356	2024-03-29 14:32:53	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438495	-118.656979		ND
11370	2024-03-29 14:33:06	Park behind Live Oak Elementary school		34.4502	-118.621149	Intermittent	<2
11358	2024-03-29 14:37:59	Lincoln Ave and Taylor St	No odor detected	34.442894	-118.655782		ND
11360	2024-03-29 14:38:12	Lincoln Ave and Taylor St	No odor detected	34.443204	-118.655733		ND
11376	2024-03-29 14:43:25	Ave Penn and Witherspoon Pkwy	It smells like a coconut vanilla cake. It was very pleasant.	34.449488	-118.63812	Persistent	4
11353	2024-03-29 14:43:29	Ave Penn and Witherspoon Pkwy	Smells like a Blueberry muffin	34.449516	-118.638143		<2
11357	2024-03-29 14:44:20	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447022	-118.663916		ND
11366	2024-03-29 14:44:30	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447107	-118.663927		ND
11359	2024-03-29 14:49:10	San Martinez Rd and Verdale Ave		34.449617	-118.678608	Persistent	2
11369	2024-03-29 14:51:52	Castaic Union School District Building	It smells like gasoline predominantly, but I also smell garbage intermittently	34.441557	-118.626277	Persistent	4
11349	2024-03-29 14:53:22	Castaic Union School District Building		34.441571	-118.626346	Persistent	4
11365	2024-03-29 14:55:04	San Martinez Rd and Verdale Ave		34.449613	-118.67857		2
11361	2024-03-29 15:01:03	Val Verde Rd and Oakwood Ave	No odor detected	34.450304	-118.661861		ND
11355	2024-03-29 15:01:08	Val Verde Rd and Oakwood Ave	No odor detected	34.450307	-118.661818		ND
11363	2024-03-29 15:06:55	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448578	-118.655135		ND
11362	2024-03-29 15:07:06	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448565	-118.655114		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	400 - Earthy	406 - Grassy	Sunny			0	63.1	49.3	28.89
			Partly Cloudy	None	S	2	48	86	29.91
			Partly Cloudy	None	S	2	48	86	29.91
-4	500 - Offensive	506 - Garbage	Partly Cloudy	None		0	63.1	49.3	28.89
			Partly Cloudy	None		0	45	91	29.83
			Partly Cloudy	None			45	91	29.83
10	100 - Floral	103 - Coconut	Partly Cloudy	None		0	69.1	44.8	28.68
	200 - Fruity	212 - Sweet	Sunny			0	69.1	44.8	28.68
			Partly Cloudy	None		0	44	91	29.83
			Partly Cloudy	None			44	91	29.83
-2	500 - Offensive	513 - Rotten Eggs	Partly Cloudy	None	S	1	45	91	29.9
-7	700 - Chemical	707 - Gasoline	Partly Cloudy	None		0	67.1	41.7	28.87
-3	500 - Offensive	506 - Garbage	Sunny			0	67.1	41.7	28.87
-2	500 - Offensive	513 - Rotten Eggs	Partly Cloudy	None	S	1	45	91	29.9
			Partly Cloudy	None	S	1	47	91	29.9
			Partly Cloudy	None	S	1	47	91	29.9
			Partly Cloudy	None	W	5	46	86	29.83
			Partly Cloudy	None	W	5	46	86	29.83

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11371	2024-03-29 15:07:57	Starbucks / store by Bruce sushi	I was observing multiple odor characters here. It was predominantly a sweet smell, but I also picked up a garbage smell and a asphalt smell.	34.451142	-118.625016	Intermittent	<2
11368	2024-03-29 15:09:13	Starbucks / store by Bruce sushi		34.451197	-118.625127	Persistent	<2
11375	2024-03-29 15:16:21	Lot in front of Fire Station 143	The primary odor character was a sweet smell, but I also observed an intermittent car exhaust smell at this location	34.454667	-118.634449	Persistent	<2
11377	2024-03-29 15:17:23	Lot in front of Fire Station 143		34.454581	-118.634413	Persistent	<2
11410	2024-03-29 15:29:15	LA County Fire Department Del Valle Regional Training Center		34.432212	-118.659418	Persistent	<2
11384	2024-03-29 15:29:17	LA County Fire Department Del Valle Regional Training Center		34.432198	-118.659481	Persistent	4
11391	2024-03-29 15:31:17	Ralph's parking lot facing Bank of America	No odor detected	34.456852	-118.618071		ND
11387	2024-03-29 15:31:40	Ralph's parking lot facing Bank of America	No odor detected	34.456828	-118.618198		ND
11406	2024-03-29 15:34:40	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438539	-118.657032	Persistent	<2
11378	2024-03-29 15:35:03	Lincoln Ave near intersection with Chiquito Canyon Rd	Smells like sand	34.438542	-118.65707	Persistent	<2
11408	2024-03-29 15:41:19	Lincoln Ave and Taylor St	A man nearby is cutting grass	34.442914	-118.655741	Persistent	<2
11397	2024-03-29 15:41:29	Front of Castaic Elementary School	No odor detected	34.471617	-118.630156		ND
11389	2024-03-29 15:41:39	Front of Castaic Elementary School	No odor detected	34.471618	-118.630196		ND
11382	2024-03-29 15:42:44	Lincoln Ave and Taylor St		34.442929	-118.655751	Persistent	<2
11409	2024-03-29 15:50:15	San Martinez Rd and Verdale Ave		34.449547	-118.679096	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	200 - Fruity	212 - Sweet	Partly Cloudy	None		0	65.1	50.1	28.82
-2	700 - Chemical	702 - Car Exhaust	Sunny			0	65.1	50.1	28.82
-2	200 - Fruity	212 - Sweet	Partly Cloudy	None		0	71.7	39.1	28.74
2	100 - Floral	106 - Herbal	Sunny			0	71.7	39.1	28.74
-7	500 - Offensive	506 - Garbage	Partly Cloudy	None		0	64.2	55.9	28.83
-4	500 - Offensive	506 - Garbage	Sunny			0	64.2	55.9	28.83
			Partly Cloudy	None	W	4	47	82	29.83
			Partly Cloudy	None	W	4	47	82	29.83
1	400 - Earthy	412 - Peat-like	Partly Cloudy	None		0	66.6	45.9	28.81
-1	400 - Earthy	415 - Stale	Sunny			0	66.6	45.9	28.81
2	400 - Earthy	406 - Grassy	Partly Cloudy	None	S	1.7	62.7	44.8	28.76
			Partly Cloudy	None			51	80	29.92
			Partly Cloudy	None		0	51	80	29.92
2	400 - Earthy	413 - Pine	Sunny		S	1.7	62.7	44.8	28.76
0	400 - Earthy	412 - Peat-like	Partly Cloudy	None		0	65.8	50.2	28.52

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11388	2024-03-29 15:50:34	Cambridge Ave across from house number 29862		34.459342	-118.626773	Persistent	<2
11396	2024-03-29 15:50:41	Cambridge Ave across from house number 29862		34.459327	-118.626772	Persistent	<2
11383	2024-03-29 15:51:31	San Martinez Rd and Verdale Ave		34.449523	-118.679106	Persistent	<2
11379	2024-03-29 15:56:19	Bus Stop at San Martinez and Val Verde Rd		34.447121	-118.663934	Persistent	<2
11401	2024-03-29 15:56:32	Bus Stop at San Martinez and Val Verde Rd		34.447117	-118.663869	Intermittent	<2
11393	2024-03-29 15:58:25	Park behind Live Oak Elementary school	No odor detected	34.450264	-118.621063		ND
11385	2024-03-29 15:58:56	Park behind Live Oak Elementary school	No odor detected	34.450248	-118.621065		ND
11411	2024-03-29 16:00:51	Val Verde Rd and Oakwood Ave		34.450214	-118.661815	Persistent	<2
11380	2024-03-29 16:01:32	Val Verde Rd and Oakwood Ave		34.450263	-118.661944	Persistent	<2
11386	2024-03-29 16:03:40	Starbucks / store by Bruce sushi	No odor detected	34.451049	-118.625125		ND
11398	2024-03-29 16:03:55	Starbucks / store by Bruce sushi	No odor detected	34.451046	-118.625134		ND
11381	2024-03-29 16:05:53	Bus Stop 14608 - Del Valle Rd & Silver St		34.448513	-118.65521	Persistent	<2
11404	2024-03-29 16:06:48	Bus Stop 14608 - Del Valle Rd & Silver St		34.448471	-118.655182	Persistent	<2
11407	2024-03-29 16:12:01	Lot in front of Fire Station 143	I've primarily detected a sweet smell, but there was also an intermittent garbage smell	34.454667	-118.63438	Persistent	4
11412	2024-03-29 16:13:21	Lot in front of Fire Station 143	Mainly a garbage smell, but it was mixed with a sweet cake smell	34.454628	-118.634417	Persistent	7
11390	2024-03-29 16:16:03	Lot in front of Fire Station 143		34.454486	-118.634759	Persistent	2
11395	2024-03-29 16:16:13	Lot in front of Fire Station 143		34.454482	-118.634747	Persistent	2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
2	100 - Floral	105 - Fragrant	Partly Cloudy	None		0	51	80	29.92
1	100 - Floral	105 - Fragrant	Partly Cloudy	None			51	80	29.92
2	400 - Earthy	406 - Grassy	Sunny			0	65.8	50.2	28.52
-1	800 - Medicinal	805 - Chlorinou	Sunny		W	4.7	57.1	47.8	28.7
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	W	4.7	57.1	47.8	28.7
			Partly Cloudy	None	N	4	49	77	29.84
			Partly Cloudy	None	N	4	49	77	29.84
1	400 - Earthy	412 - Peat-like	Mostly Cloudy	None		0	66.1	45.8	28.64
2	400 - Earthy	406 - Grassy	Sunny			0	66.1	45.8	28.64
			Partly Cloudy	None	N	5	48	78	29.86
			Partly Cloudy	None	N	5	48	78	29.86
2	400 - Earthy	406 - Grassy	Sunny		SW	5.8	56.3	47.4	28.71
1	400 - Earthy	406 - Grassy	Mostly Cloudy	None	SW	5.8	56.3	47.4	28.71
-3	200 - Fruity	212 - Sweet	Mostly Cloudy	None	E	2.7	60.3	51.6	28.73
-3	500 - Offensive	506 - Garbage	Mostly Cloudy		E	2.7	60.3	51.6	28.73
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	5	48	78	29.83
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	5	48	78	29.83

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11415	2024-03-29 16:21:58	Cambridge Ave across from house number 29862	Mainly smells of flowers, but it also faintly smells of garbage	34.459467	-118.626736	Persistent	2
11402	2024-03-29 16:22:41	Cambridge Ave across from house number 29862		34.459502	-118.626721	Persistent	2
11394	2024-03-29 16:22:54	Ave Penn and Witherspoon Pkwy		34.449323	-118.638301	Persistent	2
11399	2024-03-29 16:25:08	Ave Penn and Witherspoon Pkwy		34.449342	-118.638321	Persistent	2
11414	2024-03-29 16:27:58	Park behind Live Oak Elementary school	Grassy and fertilizer smell	34.450931	-118.621177	Persistent	<2
11400	2024-03-29 16:28:35	Castaic Union School District Building		34.441644	-118.626061	Persistent	<2
11405	2024-03-29 16:28:37	Park behind Live Oak Elementary school		34.450961	-118.621166		ND
11392	2024-03-29 16:29:27	Castaic Union School District Building		34.4416	-118.626114	Persistent	<2
11403	2024-03-29 16:37:31	Front of Castaic Elementary School		34.471468	-118.630174	Persistent	<2
11413	2024-03-29 16:37:55	Front of Castaic Elementary School		34.471437	-118.630219		ND
11418	2024-03-29 16:38:23	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432152	-118.659399		ND
11419	2024-03-29 16:38:53	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432146	-118.659441		ND
11426	2024-03-29 16:42:52	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438559	-118.657112		ND
11421	2024-03-29 16:43:09	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438548	-118.657123		ND
11428	2024-03-29 16:45:30	Lincoln Ave and Taylor St	No odor detected	34.442913	-118.655803		ND
11437	2024-03-29 16:46:30	Ralph's parking lot facing Bank of America		34.456839	-118.617789	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	100 - Floral	105 - Fragrant	Mostly Cloudy		E	2.4	61.7	57.3	28.64
8	200 - Fruity	212 - Sweet	Mostly Cloudy	None	SW	2.4	61.7	57.3	28.64
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	3	49	79	29.83
-3	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	3	49	79	29.83
2	400 - Earthy	406 - Grassy	Mostly Cloudy			0	67.2	43.4	28.89
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	3	50	75	29.83
			Mostly Cloudy	None		0	67.2	43.4	28.89
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	3	50	75	29.83
1	400 - Earthy	406 - Grassy	Mostly Cloudy	None	SE	3.4	64.8	50.7	28.6
			Mostly Cloudy		SE	3.4	64.8	50.7	28.6
			Mostly Cloudy	None	N	5	49	75	29.83
			Mostly Cloudy	None	N	5	49	75	29.83
			Mostly Cloudy	None	N	5	52	75	29.92
			Mostly Cloudy	None	N	5	52	75	29.92
			Mostly Cloudy	None	N	5	52	73	29.93
-4	700 - Chemical	702 - Car Exhaust	Mostly Cloudy	None		0	67.2	42.5	28.87



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11424	2024-03-29 16:46:35	Lincoln Ave and Taylor St	No odor detected	34.442929	-118.655773		ND
11430	2024-03-29 16:46:41	Ralph's parking lot facing Bank of America		34.456841	-118.617786	Persistent	<2
11425	2024-03-29 16:53:10	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446974	-118.663846		ND
11417	2024-03-29 16:53:11	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446976	-118.663859		ND
11423	2024-03-29 17:00:14	San Martinez Rd and Verdale Ave	No odor detected	34.449628	-118.678622		ND
11422	2024-03-29 17:02:06	San Martinez Rd and Verdale Ave	No odor detected	34.449658	-118.678607		ND
11438	2024-03-29 17:04:39	Starbucks / store by Bruce sushi	There is a vehicle idling within 10 feet of our sampling location	34.451238	-118.625131	Persistent	<2
11433	2024-03-29 17:05:02	Starbucks / store by Bruce sushi		34.451178	-118.625146	Persistent	<2
11427	2024-03-29 17:08:36	Val Verde Rd and Oakwood Ave		34.450213	-118.661822	Persistent	<2
11420	2024-03-29 17:08:38	Val Verde Rd and Oakwood Ave		34.450222	-118.661825	Persistent	<2
11432	2024-03-29 17:13:04	Ave Penn and Witherspoon Pkwy		34.449508	-118.638161		ND
11436	2024-03-29 17:13:26	Castaic Union School District Building	Very subtle rancid odor	34.441569	-118.626256	Persistent	<2
11429	2024-03-29 17:15:10	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448821	-118.655102		ND
11416	2024-03-29 17:15:29	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448778	-118.655076		ND
11497	2024-03-29 17:22:49	Starbucks / store by Bruce sushi		34.451069	-118.625127	Persistent	2
11431	2024-03-29 17:23:04	Castaic Union School District Building		34.441543	-118.62624	Intermittent	2
11439	2024-03-29 17:25:02	Castaic Union School District Building		34.441624	-118.626284	Persistent	<2
11453	2024-03-29 17:25:43	Starbucks / store by Bruce sushi		34.451017	-118.625092	Persistent	2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Mostly Cloudy	None	N	5	52	73	29.93
-3	700 - Chemical	702 - Car Exhaust	Mostly Cloudy			0	67.2	42.5	28.87
			Mostly Cloudy	None	N	3	55	73	29.93
			Mostly Cloudy	None	N	3	55	73	29.93
			Mostly Cloudy	None	N	3	54	73	29.93
			Mostly Cloudy	None	N	3	54	73	29.93
-5	700 - Chemical	702 - Car Exhaust	Mostly Cloudy	None		0	72	42.0	28.82
2	300 - Vegetable	305 - Garlic	Mostly Cloudy			0	72	42.0	28.82
2	100 - Floral	105 - Fragrant	Mostly Cloudy	None	N	2	54	73	29.93
1	100 - Floral	105 - Fragrant	Mostly Cloudy	None	N	2	54	73	29.93
			Mostly Cloudy		SW	3.6	58.8	60.3	28.67
-3	500 - Offensive	511 - Rancid	Mostly Cloudy	None	SW	3.6	58.8	60.3	28.67
			Mostly Cloudy	None	N	4	51	72	29.83
			Mostly Cloudy	None	N	4	51	72	29.83
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	2	52	70	29.84
-2	700 - Chemical	702 - Car Exhaust	Mostly Cloudy		SW	4.5	59.2	44.5	28.86
-3	700 - Chemical	702 - Car Exhaust	Mostly Cloudy	None	SW	4.5	59.2	44.5	28.86
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	2	52	70	29.84

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11435	2024-03-29 17:35:08	LA County Fire Department Del Valle Regional Training Center		34.432204	-118.659401		ND
11434	2024-03-29 17:36:21	LA County Fire Department Del Valle Regional Training Center	Smells like dry cheerios	34.432239	-118.659502	Persistent	<2
11445	2024-03-29 20:26:53	Lincoln Ave near intersection with Chiquito Canyon Rd		34.43854	-118.657015		ND
11468	2024-03-29 20:27:16	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438597	-118.657133		ND
11440	2024-03-29 20:33:59	Lincoln Ave and Taylor St		34.44299	-118.655727		ND
11462	2024-03-29 20:34:09	Lincoln Ave and Taylor St		34.44296	-118.655845		ND
11476	2024-03-29 20:42:17	San Martinez Rd and Verdale Ave		34.449512	-118.678812	Persistent	<2
11441	2024-03-29 20:42:44	San Martinez Rd and Verdale Ave		34.449512	-118.678782	Persistent	<2
11464	2024-03-29 20:47:29	Bus Stop at San Martinez and Val Verde Rd		34.447178	-118.663807		ND
11444	2024-03-29 20:47:30	Bus Stop at San Martinez and Val Verde Rd		34.447157	-118.663842		ND
11448	2024-03-29 20:50:02	Ralph's parking lot facing Bank of America	No odor detected	34.456886	-118.617721		ND
11484	2024-03-29 20:50:32	Ralph's parking lot facing Bank of America	No odor detected	34.456904	-118.617766		ND
11442	2024-03-29 20:51:03	Val Verde Rd and Oakwood Ave	Smells like beef jerky	34.450323	-118.661834	Persistent	<2
11470	2024-03-29 20:51:07	Val Verde Rd and Oakwood Ave	Like a sweet burning wood	34.450276	-118.661816		<2
11452	2024-03-29 20:55:50	Cambridge Ave across from house number 29862		34.459532	-118.626742	Persistent	<2
11487	2024-03-29 20:55:51	Cambridge Ave across from house number 29862		34.459452	-118.626768	Persistent	<2
11474	2024-03-29 20:56:46	Bus Stop 14608 - Del Valle Rd & Silver St	Very faint	34.448533	-118.65519	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Mostly Cloudy	None	SE	1.6	64.5	46.4	28.82
-1	400 - Earthy	415 - Stale	Mostly Cloudy		SE	1.6	64.5	46.4	28.82
			Overcast		S	4	60.6	46.0	28.78
			Overcast	None	S	4	60.6	46.0	28.78
			Overcast		SW	5.5	59.9	45.9	28.73
			Overcast	None	SW	5.5	59.9	45.9	28.73
1	400 - Earthy	406 - Grassy	Overcast	None	NW	5	65.2	38.9	28.49
-1	400 - Earthy	412 - Peat-like	Overcast		NW	5	65.2	38.9	28.49
			Overcast	None	W	7.2	60.4	36.0	28.64
			Overcast		W	7.2	60.4	36.0	28.64
			Mostly Cloudy	None	E	4	56	50	29.8
			Mostly Cloudy	None	E	4	56	50	29.8
-1	400 - Earthy	402 - Burnt Wood	Overcast		S	3.1	68.1	39.6	28.59
4	400 - Earthy	402 - Burnt Wood	Mostly Cloudy	None	S	3.1	68.1	39.6	28.59
2	100 - Floral	105 - Fragrant	Mostly Cloudy	None	S	7	56	50	29.8
1	100 - Floral	105 - Fragrant	Mostly Cloudy	None	S	7	56	50	29.8
1	400 - Earthy	412 - Peat-like	Mostly Cloudy	None	S	4.9	63.2	38.1	28.65

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11443	2024-03-29 20:56:48	Bus Stop 14608 - Del Valle Rd & Silver St		34.448526	-118.655197	Persistent	<2
11451	2024-03-29 21:00:50	Lot in front of Fire Station 143		34.45473	-118.634391	Persistent	<2
11482	2024-03-29 21:01:40	Lot in front of Fire Station 143		34.454716	-118.634381	Persistent	<2
11467	2024-03-29 21:03:15	Lot in front of Fire Station 143		34.454697	-118.634452	Persistent	<2
11460	2024-03-29 21:03:39	Lot in front of Fire Station 143		34.454689	-118.634428	Persistent	<2
11446	2024-03-29 21:08:19	Ave Penn and Witherspoon Pkwy		34.449336	-118.638264	Persistent	2
11471	2024-03-29 21:08:25	Cambridge Ave across from house number 29862		34.459491	-118.626726	Persistent	<2
11495	2024-03-29 21:08:33	Ave Penn and Witherspoon Pkwy		34.449326	-118.638297	Persistent	<2
11461	2024-03-29 21:09:02	Cambridge Ave across from house number 29862		34.45962	-118.626794	Persistent	<2
11485	2024-03-29 21:12:26	Castaic Union School District Building	No odor detected	34.441509	-118.626025		ND
11447	2024-03-29 21:13:08	Castaic Union School District Building	No odor detected	34.441553	-118.625999		ND
11475	2024-03-29 21:13:59	Park behind Live Oak Elementary school		34.449955	-118.621138	Persistent	<2
11454	2024-03-29 21:14:17	Park behind Live Oak Elementary school	Smells like barbecue	34.449944	-118.621115	Persistent	<2
11449	2024-03-29 21:21:53	Park behind Live Oak Elementary school	No odor detected	34.451714	-118.621701		ND
11493	2024-03-29 21:22:04	Park behind Live Oak Elementary school	No odor detected	34.451695	-118.621735		ND
11458	2024-03-29 21:23:06	Front of Castaic Elementary School	300 ft Southeast of the school	34.47038125	-118.6296245	Intermittent	<2
11465	2024-03-29 21:25:20	Front of Castaic Elementary School	Approx 300 ft SE of usual sampling loc due to coinciding school pick up. Odor was like sweet garbage, but the sweet smell dominated.	34.470461	-118.630502	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
2	100 - Floral	106 - Herbal	Overcast		S	4.9	63.2	38.1	28.65
2	100 - Floral	105 - Fragrant	Mostly Cloudy	None	S	3	56	48	29.79
1	100 - Floral	105 - Fragrant	Mostly Cloudy	None	S	3	56	48	29.79
3	200 - Fruity	212 - Sweet	Mostly Cloudy	None	N	3.8	68.1	33.1	28.68
2	100 - Floral	106 - Herbal	Overcast		N	3.8	68.1	33.1	28.68
-3	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	7	57	45	29.78
7	100 - Floral	105 - Fragrant	Mostly Cloudy	None	S	4.3	63.8	40.7	28.59
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	7	57	45	29.78
2	100 - Floral	105 - Fragrant	Overcast		S	4.3	63.8	40.7	28.59
			Mostly Cloudy	None	S	12	57	46	29.78
			Mostly Cloudy	None	S	12	57	46	29.78
-3	500 - Offensive	503 - Burnt Rubber	Mostly Cloudy	None	SE	2.5	65.1	36.5	28.83
1	300 - Vegetable	310 - Onion	Overcast		SE	2.5	65.1	36.5	28.83
			Mostly Cloudy	None	S	8	56	46	29.78
			Mostly Cloudy	None	S	8	56	46	29.78
-2	500 - Offensive	511 - Rancid	Overcast		S	2.4	70.5	30.0	28.51
-2	200 - Fruity	212 - Sweet	Mostly Cloudy	None	S	2.4	70.5	30.0	28.51

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11456	2024-03-29 21:33:07	Ralph's parking lot facing Bank of America	Smells like car exhaust with an intermittent cigarette smoke smell	34.456933	-118.617757	Persistent	<2
11472	2024-03-29 21:33:09	Ralph's parking lot facing Bank of America	Like a barbecue	34.456932	-118.617811	Persistent	2
11477	2024-03-29 21:39:55	Front of Castaic Elementary School		34.471394	-118.630182	Persistent	<2
11450	2024-03-29 21:40:10	Front of Castaic Elementary School		34.47144	-118.630166	Persistent	<2
11466	2024-03-29 21:53:54	Starbucks / store by Bruce sushi	It smelled like burning wood and barbecue. I also smelled faint garbage intermittently.	34.45115	-118.625146	Persistent	<2
11459	2024-03-29 21:54:00	Starbucks / store by Bruce sushi	Very faint garbage smell	34.451138	-118.625146	Persistent	<2
11498	2024-03-29 21:56:04	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.431989	-118.659291		ND
11480	2024-03-29 21:56:14	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432058	-118.659333		ND
11483	2024-03-29 21:59:43	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438467	-118.656994		ND
11488	2024-03-29 22:00:05	Lincoln Ave near intersection with Chiquito Canyon Rd	No odor detected	34.438538	-118.656994		ND
11489	2024-03-29 22:01:27	Lincoln Ave and Taylor St	No odor detected	34.442949	-118.65561		ND
11469	2024-03-29 22:01:33	Ave Penn and Witherspoon Pkwy		34.449503	-118.638151	Persistent	4
11455	2024-03-29 22:02:40	Ave Penn and Witherspoon Pkwy		34.449528	-118.638164	Persistent	4
11479	2024-03-29 22:03:05	Lincoln Ave and Taylor St	No odor detected	34.442998	-118.655807		ND
11491	2024-03-29 22:06:26	San Martinez Rd and Verdale Ave	No odor detected	34.449611	-118.678633		ND
11457	2024-03-29 22:07:21	Castaic Union School District Building		34.44154	-118.626195		ND
11463	2024-03-29 22:07:34	Castaic Union School District Building		34.44106958	-118.6285604		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-2	700 - Chemical	702 - Car Exhaust	Overcast		S	4.6	69.1	29.5	28.8
8	400 - Earthy	402 - Burnt Wood	Mostly Cloudy	None	S	4.6	69.1	29.5	28.8
-1	500 - Offensive	506 - Garbage	Mostly Cloudy	None	W	4	57	41	29.77
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None	W	4	57	41	29.77
2	400 - Earthy	402 - Burnt Wood	Mostly Cloudy	None	SW	2.1	72.3	72.5	28.74
-2	500 - Offensive	506 - Garbage	Overcast		SW	2.1	72.3	27.5	28.74
			Mostly Cloudy	None	SE	4	59	30	29.85
			Mostly Cloudy	None	SE	4	59	38	29.85
			Mostly Cloudy	None	S	12	59	30	29.85
			Mostly Cloudy	None	S	12	59	38	29.85
			Mostly Cloudy	None	S	12	63	30	29.85
-6	500 - Offensive	506 - Garbage	Mostly Cloudy	None	W	8.1	69.3	26.4	28.6
-4	500 - Offensive	506 - Garbage	Overcast		W	8.1	69.3	26.4	28.6
			Mostly Cloudy	None	S	12	63	38	29.85
			Mostly Cloudy	None	S	5	60	38	29.85
			Overcast		W	7.1	65.6	27.3	28.78
			Mostly Cloudy	None	W	7.1	65.6	27.3	28.78



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11494	2024-03-29 22:10:07	San Martinez Rd and Verdale Ave	No odor detected	34.449685	-118.67855		ND
11481	2024-03-29 22:14:45	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447104	-118.66387		ND
11486	2024-03-29 22:15:46	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.44702	-118.66389		ND
11473	2024-03-29 22:17:44	LA County Fire Department Del Valle Regional Training Center		34.432261	-118.659421		ND
11499	2024-03-29 22:17:57	LA County Fire Department Del Valle Regional Training Center		34.432232	-118.659469	Intermittent	<2
11496	2024-03-29 22:18:06	Val Verde Rd and Oakwood Ave		34.450286	-118.66189	Persistent	<2
11492	2024-03-29 22:18:09	Val Verde Rd and Oakwood Ave		34.450349	-118.661845	Persistent	<2
11502	2024-03-29 22:20:09	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438654	-118.657168		ND
11490	2024-03-29 22:21:37	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.448695	-118.655191		ND
11478	2024-03-29 22:22:00	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.4486	-118.655157		ND
11504	2024-03-29 22:22:01	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438563	-118.657112		ND
11501	2024-03-29 22:25:14	Lincoln Ave and Taylor St		34.443066	-118.655802	Persistent	<2
11500	2024-03-29 22:25:19	Lincoln Ave and Taylor St		34.443012	-118.655838	Persistent	2
11519	2024-03-29 22:29:39	Starbucks / store by Bruce sushi		34.451131	-118.625151	Persistent	<2
11521	2024-03-29 22:30:24	Starbucks / store by Bruce sushi		34.451007	-118.625149	Persistent	<2
11505	2024-03-29 22:32:51	San Martinez Rd and Verdale Ave		34.449628	-118.679132	Persistent	<2
11508	2024-03-29 22:33:53	San Martinez Rd and Verdale Ave	Smelled like farm animal	34.449551	-118.679055	Persistent	<2
11516	2024-03-29 22:38:12	Lot in front of Fire Station 143		34.454532	-118.63463	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Mostly Cloudy	None	S	5	60	38	29.85
			Mostly Cloudy	None	S	5	61	40	29.85
			Mostly Cloudy	None	S	5	61	40	29.85
			Mostly Cloudy	None	SE	7.5	64.9	25.1	28.75
-2	500 - Offensive	503 - Burnt Rubber	Overcast		SE	7.5	64.9	25.1	28.75
1	400 - Earthy	406 - Grassy	Mostly Cloudy	None	S	5	62	38	29.85
1	400 - Earthy	406 - Grassy	Mostly Cloudy	None	S	5	62	40	29.85
			Overcast	None	S	5.8	64.6	26.8	28.74
			Mostly Cloudy	None	SE	6	57	38	29.76
			Mostly Cloudy	None	SE	6	57	38	29.76
			Overcast		S	5.8	64.6	26.8	28.74
-1	400 - Earthy	402 - Burnt Wood	Overcast		S	3.9	66.3	31.7	28.68
3	400 - Earthy	402 - Burnt Wood	Overcast	None	S	3.9	66.3	31.7	28.68
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	5	57	38	29.75
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	5	57	38	29.75
4	400 - Earthy	406 - Grassy	Overcast	None	SW	1.6	69.5	29.8	28.45
-1	500 - Offensive	508 - Manure	Overcast		SW	1.6	69.5	29.8	28.45
2	100 - Floral	105 - Fragrant	Mostly Cloudy	None	S	2	57	39	29.75

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11503	2024-03-29 22:38:19	Bus Stop at San Martinez and Val Verde Rd	Very faint grass smell without the nasal ranger	34.447207	-118.663855	Intermittent	<2
11511	2024-03-29 22:38:27	Bus Stop at San Martinez and Val Verde Rd		34.447125	-118.663912		ND
11527	2024-03-29 22:39:24	Lot in front of Fire Station 143		34.45447	-118.634678	Persistent	<2
11506	2024-03-29 22:43:57	Val Verde Rd and Oakwood Ave	It smells like laundry detergent or dryer sheets.	34.450356	-118.661863	Persistent	<2
11507	2024-03-29 22:44:05	Val Verde Rd and Oakwood Ave	Smells like laundry detergent	34.450312	-118.661858	Persistent	<2
11520	2024-03-29 22:46:45	Ave Penn and Witherspoon Pkwy		34.449306	-118.638411	Persistent	<2
11528	2024-03-29 22:46:51	Ave Penn and Witherspoon Pkwy		34.449227	-118.638391	Persistent	<2
11509	2024-03-29 22:50:01	Bus Stop 14608 - Del Valle Rd & Silver St		34.44849	-118.655175		ND
11524	2024-03-29 22:50:48	Castaic Union School District Building	No odor detected	34.441533	-118.626026		ND
11510	2024-03-29 22:50:50	Bus Stop 14608 - Del Valle Rd & Silver St		34.448518	-118.655227	Persistent	<2
11522	2024-03-29 22:51:11	Castaic Union School District Building		34.441535	-118.626005	Persistent	<2
11525	2024-03-29 22:57:53	Park behind Live Oak Elementary school	No odor detected	34.45018	-118.621101		ND
11529	2024-03-29 22:57:54	Park behind Live Oak Elementary school	No odor detected	34.450225	-118.621119		ND
11532	2024-03-29 22:58:15	Lot in front of Fire Station 143	Like Dawn soap with more subtle sweet notes	34.454728	-118.63449	Intermittent	<2
11513	2024-03-29 22:58:24	Lot in front of Fire Station 143		34.454689	-118.634392	Persistent	<2
11517	2024-03-29 23:03:51	Cambridge Ave across from house number 29862		34.459502	-118.626722	Persistent	<2
11526	2024-03-29 23:04:04	Cambridge Ave across from house number 29862		34.459475	-118.626743	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
1	400 - Earthy	406 - Grassy	Overcast	None	W	6.4	62.5	34.0	28.6
			Overcast		W	6.4	62.5	34.0	28.6
1	100 - Floral	105 - Fragrant	Mostly Cloudy	None	S	2	57	39	29.75
8	100 - Floral	110 - Perfumy	Overcast	None	S	3.4	63.8	33.6	28.56
3	100 - Floral	110 - Perfumy	Overcast		S	3.4	63.8	33.6	28.56
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None	SE	10	57	39	29.75
-1	500 - Offensive	506 - Garbage	Mostly Cloudy	None	SE	10	57	39	29.75
			Overcast		S	3.6	64.6	35.8	28.61
			Mostly Cloudy	None	S	6	57	39	29.75
1	400 - Earthy	406 - Grassy	Overcast	None	S	3.6	64.6	35.8	28.61
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	6	57	39	29.75
			Mostly Cloudy	None	S	7	56	41	29.75
			Mostly Cloudy	None	S	7	56	41	29.75
1	800 - Medicinal	808 - Soapy	Overcast	None	SE	6.7	65.1	35.4	28.65
2	100 - Floral	106 - Herbal	Overcast		SE	6.7	65.1	35.4	28.65
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	16	56	42	29.75
-1	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	16	56	42	29.75

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11512	2024-03-29 23:04:17	Cambridge Ave across from house number 29862	Mainly a cinnamon/ floral smell but an intermittent garbage smell did come with wind	34.45961	-118.62675	Intermittent	2
11535	2024-03-29 23:04:21	Cambridge Ave across from house number 29862	As we walked to the car to leave the site, I detected a very subtle garbage odor in addition to the prevailing floral scent.	34.459603	-118.626676	Persistent	<2
11534	2024-03-29 23:09:58	Starbucks / store by Bruce sushi		34.45127	-118.62505	Persistent	4
11514	2024-03-29 23:09:59	Starbucks / store by Bruce sushi		34.451267	-118.625097	Persistent	4
11531	2024-03-29 23:12:56	Front of Castaic Elementary School	No odor detected	34.471517	-118.630183		ND
11518	2024-03-29 23:13:54	Front of Castaic Elementary School	No odor detected	34.471517	-118.63017		ND
11533	2024-03-29 23:15:48	Park behind Live Oak Elementary school		34.45022	-118.621115	Persistent	<2
11515	2024-03-29 23:15:50	Park behind Live Oak Elementary school		34.450216	-118.621089	Persistent	<2
11523	2024-03-29 23:20:48	Ralph's parking lot facing Bank of America	No odor detected	34.456703	-118.618071		ND
11530	2024-03-29 23:21:19	Ralph's parking lot facing Bank of America	No odor detected	34.456681	-118.618051		ND
11537	2024-03-30 17:53:04	LA County Fire Department Del Valle Regional Training Center	Overwhelming rancid garbage smell	34.432235	-118.659467	Persistent	30
11567	2024-03-30 17:54:11	LA County Fire Department Del Valle Regional Training Center	The odor was offensive, but there were multiple tones in the offensive odor. Primarily, it was putrid, but there were also garbage and acid odors. I was coughing.	34.432183	-118.659505	Persistent	30
11553	2024-03-30 17:59:35	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438538	-118.657075		ND
11539	2024-03-30 17:59:37	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438541	-118.65707		ND
11543	2024-03-30 18:01:09	Front of Castaic Elementary School	No odor detected	34.47144	-118.63022		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
2	100 - Floral	102 - Cinnamon	Overcast		SE	7.8	59.4	40.9	28.56
8	100 - Floral	110 - Perfumy	Overcast	None	SE	7.8	59.4	40.9	28.56
-7	500 - Offensive	506 - Garbage	Overcast	None	W	4.2	62.9	38.5	28.73
-3	500 - Offensive	506 - Garbage	Overcast		W	4.2	62.9	38.5	28.73
			Mostly Cloudy	None	SE	5	55	44	29.74
			Mostly Cloudy	None	SE	5	55	44	29.74
-4	500 - Offensive	503 - Burnt Rubber	Overcast	None	S	8.5	60.1	38.8	28.8
1	400 - Earthy	406 - Grassy	Overcast		S	8.5	60.1	38.8	28.8
			Mostly Cloudy	None	SE	9	55	46	29.75
			Mostly Cloudy	None	SE	9	55	46	29.75
-8	500 - Offensive	506 - Garbage	Mostly Cloudy		N	3.7	56.8	60.1	28.64
-10	500 - Offensive	510 - Putrid	Mostly Cloudy	None	N	3.7	56.8	60.1	28.64
			Mostly Cloudy	None	SE	1.6	63.6	53.0	28.62
			Mostly Cloudy		SE	1.6	63.6	53.0	28.62
			Overcast	None	E	3	49	82	29.63

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11557	2024-03-30 18:01:11	Front of Castaic Elementary School	No odor detected	34.471444	-118.63017		ND
11551	2024-03-30 18:03:23	Lincoln Ave and Taylor St		34.442937	-118.655759	Intermittent	<2
11536	2024-03-30 18:04:10	Lincoln Ave and Taylor St	Faint dirt smell	34.442932	-118.655752	Intermittent	<2
11544	2024-03-30 18:09:42	Ralph's parking lot facing Bank of America	No odor detected	34.456816	-118.618061		ND
11542	2024-03-30 18:13:22	San Martinez Rd and Verdale Ave		34.449466	-118.678859	Persistent	2
11558	2024-03-30 18:14:01	San Martinez Rd and Verdale Ave		34.449531	-118.678935	Persistent	<2
11561	2024-03-30 18:17:29	Ralph's parking lot facing Bank of America	No odor detected	34.45678	-118.618057		ND
11555	2024-03-30 18:21:06	Cambridge Ave across from house number 29862	No odor detected	34.459408	-118.626749		ND
11545	2024-03-30 18:21:06	Cambridge Ave across from house number 29862	No odor detected	34.459467	-118.626756		ND
11554	2024-03-30 18:23:30	Bus Stop at San Martinez and Val Verde Rd		34.447109	-118.66383	Persistent	<2
11538	2024-03-30 18:24:24	Bus Stop at San Martinez and Val Verde Rd	Chlorine smell	34.447079	-118.663846	Persistent	<2
11566	2024-03-30 18:27:33	Park behind Live Oak Elementary school	No odor detected	34.450575	-118.621098		ND
11565	2024-03-30 18:27:48	Park behind Live Oak Elementary school	No odor detected	34.450553	-118.621063		ND
11541	2024-03-30 18:29:32	Val Verde Rd and Oakwood Ave		34.450217	-118.661867	Persistent	2
11563	2024-03-30 18:29:32	Val Verde Rd and Oakwood Ave		34.450184	-118.661905	Persistent	<2
11548	2024-03-30 18:31:49	Starbucks / store by Bruce sushi	No odor detected	34.451141	-118.625146		ND
11562	2024-03-30 18:33:47	Starbucks / store by Bruce sushi	No odor detected	34.451181	-118.625206		ND
11559	2024-03-30 18:35:06	Bus Stop 14608 - Del Valle Rd & Silver St	I also smelled cat exhaust at this location, but it was very int and intermittent	34.448361	-118.655227	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Overcast	None	E	3	49	82	29.63
2	400 - Earthy	412 - Peat-like	Overcast	None	S	2.1	59	57.8	28.56
-1	400 - Earthy	412 - Peat-like	Mostly Cloudy		S	2.1	59	57.8	28.56
			Overcast	None	N	4	50	81	29.64
2	400 - Earthy	406 - Grassy	Sunny		S	1.2	60.4	52.8	28.34
2	400 - Earthy	406 - Grassy	Overcast	None	S	1.2	60.4	52.8	28.34
			Overcast	None	N	4	50	81	29.64
			Overcast	None	SE	4	49	81	29.64
			Overcast	None	SE	4	49	81	29.64
2	400 - Earthy	412 - Peat-like	Mostly Cloudy	None	E	1.3	67.4	46.2	28.49
-1	800 - Medicinal	805 - Chlorinou	Sunny		E	1.3	67.4	46.2	28.49
			Overcast	None	E	3	49	82	29.64
			Overcast	None	E	3	49	82	29.64
2	400 - Earthy	406 - Grassy	Sunny		NW	3.5	62.8	44.7	28.44
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None	NW	3.5	62.8	44.7	28.44
			Overcast	None	E	4	50	80	29.64
			Overcast	None	E	4	50	80	29.64
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None	E	2.1	64.1	49.0	28.5



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11540	2024-03-30 18:35:25	Bus Stop 14608 - Del Valle Rd & Silver St		34.448485	-118.655181	Persistent	<2
11550	2024-03-30 18:43:07	Castaic Union School District Building	No odor detected	34.441656	-118.626135		ND
11549	2024-03-30 18:43:51	Castaic Union School District Building	No odor detected	34.441549	-118.626298		ND
11556	2024-03-30 18:46:28	Ave Penn and Witherspoon Pkwy	No odor detected	34.449297	-118.638325		ND
11569	2024-03-30 18:46:40	Lot in front of Fire Station 143		34.454676	-118.634459	Persistent	<2
11547	2024-03-30 18:46:40	Lot in front of Fire Station 143		34.454669	-118.634433		<2
11564	2024-03-30 18:50:12	Ave Penn and Witherspoon Pkwy	No odor detected	34.449313	-118.63833		ND
11560	2024-03-30 18:54:46	Lot in front of Fire Station 143		34.454544	-118.634294	Persistent	<2
11552	2024-03-30 18:55:14	Lot in front of Fire Station 143	No odor detected	34.454563	-118.634292		ND
11546	2024-03-30 18:55:46	Cambridge Ave across from house number 29862		34.459448	-118.626769	Persistent	<2
11570	2024-03-30 18:57:07	Cambridge Ave across from house number 29862		34.459503	-118.62679	Persistent	<2
11572	2024-03-30 19:01:47	Park behind Live Oak Elementary school		34.450992	-118.621068	Persistent	2
11577	2024-03-30 19:02:12	Bus Stop 14608 - Del Valle Rd & Silver St		34.449287	-118.654828	Persistent	2
11579	2024-03-30 19:02:17	Bus Stop 14608 - Del Valle Rd & Silver St		34.449301	-118.654767	Persistent	4
11589	2024-03-30 19:02:32	Park behind Live Oak Elementary school		34.451011	-118.621171	Intermittent	<2
11578	2024-03-30 19:07:24	Val Verde Rd and Oakwood Ave	No odor detected	34.450209	-118.66188		ND
11581	2024-03-30 19:07:37	Val Verde Rd and Oakwood Ave	No odor detected	34.45027	-118.661852		ND
11568	2024-03-30 19:12:03	Front of Castaic Elementary School	Smells like a barbecue	34.4714	-118.630231	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
1	400 - Earthy	406 - Grassy	Sunny		E	2.1	64.3	49.0	28.5
			Overcast	None	S	5	50	78	29.65
			Overcast	None	S	5	50	78	29.65
			Overcast	None	S	5	50	78	29.65
2	100 - Floral	106 - Herbal	Overcast		E	7.1	55.5	53.4	28.54
	400 - Earthy	406 - Grassy	Mostly Cloudy	None	E	7.5	55.5	53.4	28.54
			Overcast	None	S	5	50	78	29.65
1	100 - Floral	105 - Fragrant	Overcast	None	SE	5	50	76	29.65
			Overcast	None	SE	5	50	76	29.65
5	100 - Floral	105 - Fragrant	Mostly Cloudy	None	S	3.5	60.1	56.8	28.463
2	100 - Floral	105 - Fragrant	Overcast		S	3.5	60.1	56.8	28.46
2	400 - Earthy	406 - Grassy	Overcast		SE	3.2	64.6	49.5	28.69
-3	500 - Offensive	506 - Garbage	Overcast	None	S	12	50	76	29.64
-2	500 - Offensive	506 - Garbage	Overcast	None	S	12	50	76	29.64
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None	SE	3.2	64.6	49.5	28.69
			Overcast	None	S	12	56	76	29.64
			Overcast	None	S	12	56	76	29.64
1	400 - Earthy	414 - Smokey	Overcast		N	2.4	62.2	54.6	28.39

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11587	2024-03-30 19:15:13	Front of Castaic Elementary School		34.471445	-118.630199	Persistent	<2
11574	2024-03-30 19:18:24	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446814	-118.663892		ND
11580	2024-03-30 19:18:31	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446788	-118.663906		ND
11584	2024-03-30 19:25:15	San Martinez Rd and Verdale Ave	No odor detected	34.449693	-118.678549		ND
11573	2024-03-30 19:25:25	Ralph's parking lot facing Bank of America		34.456807	-118.617941	Persistent	2
11588	2024-03-30 19:26:12	Ralph's parking lot facing Bank of America		34.456818	-118.617929	Persistent	<2
11582	2024-03-30 19:32:42	San Martinez Rd and Verdale Ave	No odor detected	34.449625	-118.678611		ND
11575	2024-03-30 19:37:19	Lincoln Ave and Taylor St	No odor detected	34.442893	-118.65582		ND
11571	2024-03-30 19:40:23	Starbucks / store by Bruce sushi	Smells like a bakery	34.451018	-118.625125	Persistent	<2
11586	2024-03-30 19:40:41	Starbucks / store by Bruce sushi		34.451033	-118.62512	Persistent	<2
11585	2024-03-30 19:41:20	Lincoln Ave and Taylor St	No odor detected	34.442885	-118.655821		ND
11583	2024-03-30 19:43:33	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438506	-118.65698		ND
11576	2024-03-30 19:44:47	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438518	-118.656971		ND
11597	2024-03-30 22:17:19	Ave Penn and Witherspoon Pkwy	Very faint smell of sewage	34.449529	-118.638171	Persistent	<2
11615	2024-03-30 22:17:23	Ave Penn and Witherspoon Pkwy		34.449212	-118.638235	Persistent	<2
11593	2024-03-30 22:24:13	Castaic Union School District Building		34.44161	-118.626299	Intermittent	<2
11621	2024-03-30 22:24:50	Castaic Union School District Building		34.441647	-118.626181	Persistent	<2
11592	2024-03-30 22:36:31	LA County Fire Department Del Valle Regional Training Center		34.432224	-118.659413	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
3	100 - Floral	105 - Fragrant	Mostly Cloudy	None	N	2.4	62.2	54.6	28.39
			Overcast	None	S	12	56	76	29.64
			Overcast	None	S	12	56	76	29.64
			Overcast	None	S	12	56	76	29.64
-2	700 - Chemical	702 - Car Exhaust	Overcast		E	5	62.7	46.4	28.67
0	400 - Earthy	411 - Musty	Overcast	None	E	5	62.7	46.4	28.67
			Overcast	None	S	12	56	76	29.64
			Overcast	None	E	8	51	77	29.64
2	200 - Fruity	212 - Sweet	Overcast		S	4.4	65	36.6	28.62
3	100 - Floral	105 - Fragrant	Overcast	Rain	S	4.4	65	36.9	28.62
			Overcast	None	E	8	51	77	29.64
			Overcast	None	S	8	51	75	29.64
			Overcast	None	S	8	51	75	29.64
-2	500 - Offensive	515 - Sewer	Overcast		S	2.9	60.4	52.8	28.46
-5	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	2.9	60.4	52.8	28.46
1	100 - Floral	102 - Cinnamon	Overcast		S	4.7	60.7	41.0	28.63
6	100 - Floral	102 - Cinnamon	Mostly Cloudy	None	S	4.7	60.7	41.0	28.63
1	400 - Earthy	406 - Grassy	Overcast		SE	7.9	63	42.4	28.59

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11617	2024-03-30 22:36:31	LA County Fire Department Del Valle Regional Training Center		34.432246	-118.659375	Persistent	<2
11590	2024-03-30 22:40:50	Lincoln Ave near intersection with Chiquita Canyon Rd	Smells like sand	34.438527	-118.656965	Persistent	<2
11622	2024-03-30 22:43:06	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438558	-118.656969	Persistent	<2
11608	2024-03-30 22:45:59	Front of Castaic Elementary School	No odor detected	34.471528	-118.630298		ND
11607	2024-03-30 22:46:02	Front of Castaic Elementary School	No odor detected	34.471487	-118.630142		ND
11591	2024-03-30 22:47:15	Lincoln Ave and Taylor St	Smells mainly like garbage, mixed with a barbecue smell	34.442996	-118.655744	Persistent	<2
11620	2024-03-30 22:48:47	Lincoln Ave and Taylor St	I got a smell of burnt garbage at this location, but when I use the nasal ranger and after I cannot smell that anymore	34.443001	-118.655782	Intermittent	<2
11609	2024-03-30 22:53:37	Ralph's parking lot facing Bank of America		34.456725	-118.617996	Persistent	<2
11612	2024-03-30 22:53:38	Ralph's parking lot facing Bank of America	No odor detected	34.456704	-118.618004		ND
11595	2024-03-30 23:00:03	San Martinez Rd and Verdale Ave		34.449559	-118.679161	Persistent	<2
11624	2024-03-30 23:00:11	San Martinez Rd and Verdale Ave		34.449601	-118.679107	Persistent	<2
11594	2024-03-30 23:05:49	Bus Stop at San Martinez and Val Verde Rd		34.447147	-118.663783		ND
11619	2024-03-30 23:05:52	Bus Stop at San Martinez and Val Verde Rd		34.447138	-118.663758	Persistent	<2
11614	2024-03-30 23:07:04	Cambridge Ave across from house number 29862		34.459542	-118.626771	Persistent	<2
11610	2024-03-30 23:07:05	Cambridge Ave across from house number 29862		34.459483	-118.626724	Persistent	<2
11598	2024-03-30 23:10:07	Val Verde Rd and Oakwood Ave		34.450276	-118.661864	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None	SE	7.9	63	42.4	28.59
-1	400 - Earthy	415 - Stale	Overcast		S	6.1	60.5	45.1	28.57
2	400 - Earthy	412 - Peat-like	Mostly Cloudy	None	S	6.1	60.5	45.1	28.57
			Mostly Cloudy	None	NE	4	51	85	29.61
			Mostly Cloudy	None	NE	4	51	85	29.61
-2	500 - Offensive	506 - Garbage	Overcast		S	4.7	62.5	43.8	28.53
-1	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	4.7	62.5	43.8	28.53
-2	400 - Earthy	410 - Musky	Mostly Cloudy	None	SE	11	51	80	29.61
			Mostly Cloudy	None	SE	11	51	80	29.61
-2	500 - Offensive	508 - Manure	Overcast		SE	4	62.3	41.1	28.3
3	400 - Earthy	417 - Woody	Mostly Cloudy	Rain	SE	4	62.3	41.1	28.3
			Overcast		E	9.5	58.5	44.3	28.45
2	400 - Earthy	412 - Peat-like	Mostly Cloudy	None	E	9.5	58.5	44.3	28.45
3	100 - Floral	105 - Fragrant	Mostly Cloudy	None	SE	6	51	79	29.6
1	100 - Floral	105 - Fragrant	Mostly Cloudy	None	SE	6	51	79	29.6
1	400 - Earthy	406 - Grassy	Overcast		S	4.1	58.8	45.1	28.4

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11618	2024-03-30 23:10:10	Val Verde Rd and Oakwood Ave		34.450213	-118.661865	Persistent	<2
11601	2024-03-30 23:12:53	Park behind Live Oak Elementary school	No odor detected	34.450591	-118.621058		ND
11602	2024-03-30 23:13:03	Park behind Live Oak Elementary school	No odor detected	34.450617	-118.621106		ND
11600	2024-03-30 23:16:54	Starbucks / store by Bruce sushi	No odor detected	34.451	-118.624769		ND
11613	2024-03-30 23:16:54	Starbucks / store by Bruce sushi	No odor detected	34.450986	-118.62484		ND
11596	2024-03-30 23:17:41	Bus Stop 14608 - Del Valle Rd & Silver St	Overwhelming smell of garbage	34.448548	-118.65516	Persistent	7
11623	2024-03-30 23:17:46	Bus Stop 14608 - Del Valle Rd & Silver St		34.448373	-118.655039	Persistent	2
11604	2024-03-30 23:25:54	Castaic Union School District Building	No odor detected	34.441511	-118.626334		ND
11611	2024-03-30 23:26:11	Castaic Union School District Building	No odor detected	34.441568	-118.626318		ND
11599	2024-03-30 23:31:25	Ave Penn and Witherspoon Pkwy	No odor detected	34.44937	-118.63836		ND
11606	2024-03-30 23:31:44	Ave Penn and Witherspoon Pkwy	No odor detected	34.449361	-118.638323		ND
11603	2024-03-30 23:39:30	Lot in front of Fire Station 143		34.454599	-118.634221	Persistent	<2
11605	2024-03-30 23:39:59	Lot in front of Fire Station 143		34.454641	-118.634285	Persistent	<2
11626	2024-03-30 23:44:33	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449343	-118.654729		ND
11628	2024-03-30 23:44:45	Bus Stop 14608 - Del Valle Rd & Silver St	No odor detected	34.449349	-118.654735		ND
11636	2024-03-30 23:49:51	Val Verde Rd and Oakwood Ave		34.450233	-118.661849	Persistent	2
11634	2024-03-30 23:49:53	Val Verde Rd and Oakwood Ave		34.45026	-118.661878	Persistent	2
11643	2024-03-30 23:51:56	Ralph's parking lot facing Bank of America	Fried chicken smell	34.456843	-118.61798	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None	S	4.1	58.8	45.1	28.4
			Mostly Cloudy	None	S	14	50	79	29.61
			Mostly Cloudy	None	S	14	50	79	29.61
			Mostly Cloudy	None	S	5	49	81	29.61
			Mostly Cloudy	None	S	5	49	81	29.61
-5	500 - Offensive	506 - Garbage	Overcast		SE	3.6	57.9	49.5	28.46
-5	500 - Offensive	506 - Garbage	Mostly Cloudy	None	SE	3.6	57.9	49.15	28.46
			Mostly Cloudy	None	SE	7	49	86	29.61
			Mostly Cloudy	None	SE	7	49	86	29.61
			Mostly Cloudy	None	SE	7	49	86	29.61
			Mostly Cloudy	None	SE	7	49	86	29.61
1	100 - Floral	105 - Fragrant	Mostly Cloudy	None	SE	13	50	83	29.61
2	100 - Floral	105 - Fragrant	Mostly Cloudy	None	SE	13	50	83	29.61
			Mostly Cloudy	None	S	11	49	84	29.61
			Mostly Cloudy	None	S	11	49	84	29.61
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	11	51	84	29.61
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	11	41	84	29.61
1	300 - Vegetable	305 - Garlic	Overcast		NW	3.2	64.6	49.4	28.64



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11616	2024-03-30 23:53:39	Ralph's parking lot facing Bank of America	Like prepared foods. While potato was the dominant odor, I also perceived notes of garbage and car exhaust.	34.456822	-118.617948	Intermittent	<2
11627	2024-03-30 23:57:46	San Martinez Rd and Verdale Ave		34.449646	-118.678635	Persistent	<2
11638	2024-03-30 23:58:46	San Martinez Rd and Verdale Ave		34.449563	-118.678628	Persistent	<2
11635	2024-03-31 00:00:18	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.446932	-118.663811		ND
11625	2024-03-31 00:02:34	Bus Stop at San Martinez and Val Verde Rd	No odor detected	34.447054	-118.664012		ND
11673	2024-03-31 00:05:09	Front of Castaic Elementary School		34.471532	-118.629941		ND
11642	2024-03-31 00:05:14	Front of Castaic Elementary School		34.471457	-118.630221		ND
11630	2024-03-31 00:05:47	Lincoln Ave and Taylor St		34.443112	-118.655423	Persistent	<2
11632	2024-03-31 00:06:13	Lincoln Ave and Taylor St		34.442897	-118.655765	Persistent	<2
11633	2024-03-31 00:08:46	Lincoln Ave near intersection with Chiquita Canyon Rd		34.438529	-118.656992	Persistent	7
11631	2024-03-31 00:09:01	Lincoln Ave near intersection with Chiquita Canyon Rd		34.43856	-118.656961	Persistent	7
11629	2024-03-31 00:13:45	LA County Fire Department Del Valle Regional Training Center		34.43211	-118.659366	Persistent	<2
11637	2024-03-31 00:14:04	LA County Fire Department Del Valle Regional Training Center	No odor detected	34.432122	-118.659382	Persistent	<2
11641	2024-03-31 00:16:21	Cambridge Ave across from house number 29862		34.459549	-118.626803	Persistent	<2
11669	2024-03-31 00:16:27	Cambridge Ave across from house number 29862		34.4595	-118.626768	Persistent	2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
1	300 - Vegetable	308 - Potato	Mostly Cloudy	None	NW	3.2	64.6	49.4	28.64
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	10	41	85	29.61
-1	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	10	41	85	29.61
			Mostly Cloudy	None	S	8	43	85	29.6
			Mostly Cloudy	None	S	8	43	85	29.6
			Mostly Cloudy	None	NE	2	61.4	54.2	28.37
			Overcast		NE	2	61.4	54.2	28.37
-1	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	5	49	83	29.61
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	5	49	83	29.61
-3	500 - Offensive	506 - Garbage	Mostly Cloudy	None	SE	4	51	86	29.7
-4	500 - Offensive	506 - Garbage	Mostly Cloudy	None	SE	4	51	86	29.7
-1	500 - Offensive	506 - Garbage	Mostly Cloudy	None	SE	4	51	81	29.7
-2	500 - Offensive	506 - Garbage	Mostly Cloudy	None	SE	4	51	81	29.7
2	100 - Floral	105 - Fragrant	Overcast		SE	4	64.3	43.8	28.42
7	100 - Floral	105 - Fragrant	Mostly Cloudy	None	SE	4	64.3	43.8	28.42

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11639	2024-03-31 00:22:15	Lot in front of Fire Station 143		34.454699	-118.634511		ND
11654	2024-03-31 00:25:12	Lot in front of Fire Station 143		34.454711	-118.634429	Persistent	<2
11644	2024-03-31 00:31:46	Starbucks / store by Bruce sushi		34.451194	-118.625216		ND
11649	2024-03-31 00:32:09	Starbucks / store by Bruce sushi		34.451179	-118.625193	Persistent	<2
11640	2024-03-31 00:38:42	Ave Penn and Witherspoon Pkwy		34.449488	-118.638219		ND
11660	2024-03-31 00:39:02	Ave Penn and Witherspoon Pkwy		34.449456	-118.638236		ND
11645	2024-03-31 00:48:28	Castaic Union School District Building		34.441541	-118.62631		ND
11648	2024-03-31 00:48:44	Castaic Union School District Building		34.441583	-118.626297	Persistent	<2
11659	2024-03-31 00:54:12	Ralph's parking lot facing Bank of America		34.456621	-118.618263		ND
11661	2024-03-31 00:57:00	Ralph's parking lot facing Bank of America	No odor detected	34.457131	-118.618063		ND
11664	2024-03-31 01:03:28	Front of Castaic Elementary School	No odor detected	34.471508	-118.630246		ND
11672	2024-03-31 01:03:30	Front of Castaic Elementary School	No odor detected	34.471526	-118.630224		ND
11666	2024-03-31 01:07:49	LA County Fire Department Del Valle Regional Training Center		34.432176	-118.659399		ND
11670	2024-03-31 01:07:57	LA County Fire Department Del Valle Regional Training Center		34.432186	-118.659458	Persistent	<2
11653	2024-03-31 01:12:40	Cambridge Ave across from house number 29862		34.459482	-118.626753	Persistent	<2
11656	2024-03-31 01:13:12	Cambridge Ave across from house number 29862	No odor detected	34.459501	-118.626774	Persistent	<2
11650	2024-03-31 01:16:56	Park behind Live Oak Elementary school		34.450579	-118.621321	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Overcast		S	4.3	62.5	39.3	28.51
5	100 - Floral	105 - Fragrant	Mostly Cloudy	None	S	4.3	62.5	39.3	28.51
			Overcast		W	6	59.9	43.8	28.59
2	400 - Earthy	411 - Musty	Mostly Cloudy	None	W	6	59.9	43.8	28.59
			Overcast		SW	1.5	67	41.1	28.45
			Overcast	None	SW	1.5	67	41.1	28.45
			Overcast		SW	4.3	67.3	37.8	28.65
2	100 - Floral	105 - Fragrant	Overcast	None	SE	4.3	67.3	37.8	28.65
			Overcast	None	N	6	50	75	29.61
			Overcast	None	N	6	50	75	29.61
			Overcast	None	S	5	50	76	29.61
			Overcast	None	S	5	50	76	29.61
			Overcast	None	SW	1.3	64.3	43.2	28.6
-1	400 - Earthy	412 - Peat-like	Overcast		SW	1.3	64.3	43.2	28.6
1	100 - Floral	105 - Fragrant	Overcast	None	SE	4	50	77	29.61
2	100 - Floral	105 - Fragrant	Overcast	None	SE	4	50	77	29.61
-1	400 - Earthy	414 - Smokey	Overcast	None	SW	3	50	78	29.62

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11668	2024-03-31 01:17:24	Bus Stop at San Martinez and Val Verde Rd		34.446964	-118.663954		ND
11671	2024-03-31 01:17:51	Bus Stop at San Martinez and Val Verde Rd		34.446815	-118.663995		ND
11652	2024-03-31 01:18:49	Park behind Live Oak Elementary school		34.450579	-118.621096	Persistent	<2
11663	2024-03-31 01:22:19	Starbucks / store by Bruce sushi	No odor detected	34.451164	-118.625205		ND
11657	2024-03-31 01:23:21	Starbucks / store by Bruce sushi	No odor detected	34.451153	-118.625194		ND
11674	2024-03-31 01:23:56	San Martinez Rd and Verdale Ave		34.449606	-118.679209	Persistent	<2
11655	2024-03-31 01:27:28	Lot in front of Fire Station 143	No odor detected	34.454658	-118.634464		ND
11665	2024-03-31 01:27:42	Lot in front of Fire Station 143	No odor detected	34.454618	-118.634459		ND
11662	2024-03-31 01:33:34	Ave Penn and Witherspoon Pkwy	No odor detected	34.449331	-118.638355		ND
11658	2024-03-31 01:33:34	Ave Penn and Witherspoon Pkwy	No odor detected	34.449335	-118.638344		ND
11651	2024-03-31 01:34:25	Bus Stop 14608 - Del Valle Rd & Silver St	There was also a smoked meat smell	34.448506	-118.655199	Intermittent	2
11646	2024-03-31 01:35:16	Bus Stop 14608 - Del Valle Rd & Silver St	Persistent taco smell, but I did smell garbage with the wind	34.448472	-118.655215	Intermittent	<2
11667	2024-03-31 01:35:38	Castaic Union School District Building	No odor detected	34.441573	-118.626375		ND
11647	2024-03-31 01:37:48	Castaic Union School District Building	No odor detected	34.441577	-118.62634		ND
11676	2024-03-31 17:24:41	Lot in front of Fire Station 143		34.454582	-118.634436		ND
11696	2024-03-31 17:27:43	Lot in front of Fire Station 143		34.454612	-118.634412		ND
11701	2024-03-31 17:56:19	Cambridge Ave across from house number 29862		34.459542	-118.62673	Intermittent	<2
11677	2024-03-31 17:57:40	Cambridge Ave across from house number 29862		34.459565	-118.626725		ND

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Overcast	None		0	66.3	44.8	28.46
			Overcast			0	68.2	43.4	28.31
1	400 - Earthy	414 - Smokey	Overcast	None	SW	3	50	78	29.62
			Overcast	None	S	6	50	77	29.61
			Overcast	None	S	6	50	77	29.61
2	100 - Floral	105 - Fragrant	Overcast	None		0	68.2	43.4	28.31
			Overcast	None	SE	4	50	77	29.61
			Overcast	None	SE	4	50	77	29.61
			Overcast	None	SE	4	50	77	29.61
			Overcast	None	SE	5	50	77	29.61
-2	500 - Offensive	506 - Garbage	Overcast	None	NE	2.6	57.8	57.4	28.48
-2	500 - Offensive	506 - Garbage	Overcast		NE	2.6	57.8	57.4	28.48
			Overcast	None	S	8	50	77	29.62
			Overcast	None	S	8	50	77	29.62
			Overcast		NE	1	60	52.6	28.63
			Overcast	None	NE	1	60	52.6	28.63
2	100 - Floral	105 - Fragrant	Overcast	None	SE	2.4	58.6	40.1	28.54
			Overcast		SE	2.4	58.6	40.1	28.54

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11695	2024-03-31 18:04:07	Park behind Live Oak Elementary school		34.450154	-118.621182	Intermittent	<2
11680	2024-03-31 18:04:32	LA County Fire Department Del Valle Regional Training Center		34.432122	-118.659408	Persistent	<2
11675	2024-03-31 18:04:46	Park behind Live Oak Elementary school		34.450176	-118.62114	Persistent	<2
11688	2024-03-31 18:04:54	LA County Fire Department Del Valle Regional Training Center		34.432147	-118.659403	Persistent	2
11682	2024-03-31 18:09:29	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.43849	-118.657026		ND
11681	2024-03-31 18:09:29	Lincoln Ave near intersection with Chiquita Canyon Rd	No odor detected	34.438488	-118.657041		ND
11685	2024-03-31 18:13:05	Lincoln Ave and Taylor St	No odor detected	34.442596	-118.655644		ND
11686	2024-03-31 18:13:46	Lincoln Ave and Taylor St	No odor detected	34.442978	-118.655755		ND
11679	2024-03-31 18:18:23	Front of Castaic Elementary School		34.471426	-118.630162	Persistent	<2
11699	2024-03-31 18:18:40	Front of Castaic Elementary School		34.471464	-118.630224	Intermittent	<2
11684	2024-03-31 18:18:55	Bus Stop at San Martinez and Val Verde Rd		34.447047	-118.664157		2
11691	2024-03-31 18:19:35	Bus Stop at San Martinez and Val Verde Rd		34.447015	-118.664155	Persistent	2
11678	2024-03-31 18:26:25	Ralph's parking lot facing Bank of America		34.456827	-118.617865	Persistent	<2
11683	2024-03-31 18:28:53	San Martinez Rd and Verdale Ave	No odor detected	34.449605	-118.678604		ND
11702	2024-03-31 18:29:00	Ralph's parking lot facing Bank of America		34.456791	-118.617964	Intermittent	<2
11689	2024-03-31 18:29:48	San Martinez Rd and Verdale Ave	No odor detected	34.449616	-118.678635		ND
11692	2024-03-31 18:33:58	Val Verde Rd and Oakwood Ave		34.450321	-118.661867	Persistent	<2
11698	2024-03-31 18:37:16	Starbucks / store by Bruce sushi		34.451081	-118.625104	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-1	400 - Earthy	411 - Musty	Overcast	None		0	69.1	42.5	28.74
-2	500 - Offensive	506 - Garbage	Overcast	None	N	1	55	71	29.81
-2	700 - Chemical	707 - Gasoline	Overcast			0	69.1	42.5	28.74
-4	500 - Offensive	506 - Garbage	Overcast	None	N	1	55	71	29.81
			Overcast	None		0	55	71	29.81
			Overcast	None			55	71	29.81
			Overcast	None	W	4	55	64	29.72
			Overcast	None	W	4	55	64	29.72
2	100 - Floral	106 - Herbal	Overcast			0	72.2	42.6	28.48
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None		0	72.2	42.6	28.48
			Overcast	None	W	1	55	66	29.72
-2	500 - Offensive	506 - Garbage	Overcast	None	W	1	55	66	29.72
-2	700 - Chemical	702 - Car Exhaust	Overcast		W	1.6	70.6	38.7	28.74
			Mostly Cloudy	None	N	4	56	64	29.71
-3	700 - Chemical	702 - Car Exhaust	Mostly Cloudy	None	W	1.6	70.6	38.7	28.74
			Mostly Cloudy	None	N	4	56	64	29.71
-1	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	4	55	64	29.71
5	100 - Floral	105 - Fragrant	Mostly Cloudy	None	SW	1.6	68.4	43.7	28.7



id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11693	2024-03-31 18:37:26	Val Verde Rd and Oakwood Ave		34.450215	-118.661857	Persistent	<2
11719	2024-03-31 18:37:46	Starbucks / store by Bruce sushi		34.451152	-118.625016	Persistent	<2
11687	2024-03-31 18:40:00	Bus Stop 14608 - Del Valle Rd & Silver St		34.448564	-118.655273	Persistent	2
11690	2024-03-31 18:41:51	Bus Stop 14608 - Del Valle Rd & Silver St		34.448526	-118.65518	Persistent	2
11711	2024-03-31 18:51:45	Starbucks / store by Bruce sushi	No odor detected	34.450963	-118.624784		ND
11710	2024-03-31 18:52:18	Starbucks / store by Bruce sushi	No odor detected	34.451019	-118.625131		ND
11694	2024-03-31 18:55:39	Ave Penn and Witherspoon Pkwy		34.449449	-118.638219	Intermittent	<2
11725	2024-03-31 18:57:57	Ave Penn and Witherspoon Pkwy		34.449543	-118.638262		ND
11717	2024-03-31 18:58:14	Front of Castaic Elementary School	No odor detected	34.471515	-118.630163		ND
11707	2024-03-31 18:58:32	Front of Castaic Elementary School	No odor detected	34.471471	-118.630188		ND
11720	2024-03-31 19:01:33	Castaic Union School District Building		34.441607	-118.62626	Persistent	<2
11697	2024-03-31 19:01:48	Castaic Union School District Building		34.441541	-118.62631	Intermittent	<2
11718	2024-03-31 19:05:36	Ralph's parking lot facing Bank of America	No odor detected	34.456646	-118.617901		ND
11714	2024-03-31 19:05:37	Ralph's parking lot facing Bank of America	No odor detected	34.456708	-118.617825		ND
11716	2024-03-31 19:11:22	Cambridge Ave across from house number 29862		34.459456	-118.626808	Persistent	<2
11703	2024-03-31 19:11:52	Cambridge Ave across from house number 29862	No odor detected	34.459465	-118.626757		ND
11700	2024-03-31 19:15:40	LA County Fire Department Del Valle Regional Training Center		34.43225	-118.659467	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	N	4	55	64	29.71
2	100 - Floral	102 - Cinnamon	Overcast		SW	1.6	68.4	43.7	28.7
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	5	57	67	29.71
-2	500 - Offensive	506 - Garbage	Partly Cloudy	None	SW	5	57	67	29.71
			Partly Cloudy	None	S	6	57	60	29.71
			Partly Cloudy	None	S	6	57	60	29.71
1	400 - Earthy	406 - Grassy	Partly Cloudy	None	S	2.8	64.5	48.5	28.56
			Overcast		S	2.8	64.5	48.5	28.56
			Partly Cloudy	None	SW	5	57	59	29.7
			Partly Cloudy	None	SE	5	57	59	29.7
2	100 - Floral	102 - Cinnamon	Overcast		S	1.2	71.4	37.0	28.73
3	100 - Floral	105 - Fragrant	Partly Cloudy	None	S	1.2	71.4	37.0	28.73
			Partly Cloudy	None	SE	3	57	59	29.7
			Partly Cloudy	None	SE	3	57	59	29.7
1	100 - Floral	105 - Fragrant	Mostly Cloudy	None	SE	3	57	59	29.7
			Mostly Cloudy	None	SE	3	57	59	29.7
2	400 - Earthy	406 - Grassy	Mostly Cloudy	None	SE	5.6	61.9	53.0	28.7

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11721	2024-03-31 19:16:04	LA County Fire Department Del Valle Regional Training Center		34.432238	-118.659468		ND
11724	2024-03-31 19:22:13	Lincoln Ave near intersection with Chiquito Canyon Rd	Smells like sand	34.438554	-118.657153	Persistent	<2
11748	2024-03-31 19:22:29	Lincoln Ave near intersection with Chiquito Canyon Rd		34.438568	-118.657144		ND
11715	2024-03-31 19:22:44	Park behind Live Oak Elementary school	No odor detected	34.450577	-118.621075		ND
11706	2024-03-31 19:22:47	Park behind Live Oak Elementary school	No odor detected	34.450597	-118.621112		ND
11737	2024-03-31 19:28:36	Lincoln Ave and Taylor St		34.44326599	-118.6558412	Persistent	2
11727	2024-03-31 19:28:56	Lincoln Ave and Taylor St	Stronger with wind	34.442968	-118.655766	Persistent	<2
11713	2024-03-31 19:29:53	Lot in front of Fire Station 143	No odor detected	34.454681	-118.634393		ND
11704	2024-03-31 19:31:53	Lot in front of Fire Station 143	No odor detected	34.454758	-118.63444		ND
11722	2024-03-31 19:34:46	Bus Stop at San Martinez and Val Verde Rd		34.447048	-118.664172	Intermittent	<2
11745	2024-03-31 19:35:21	Bus Stop at San Martinez and Val Verde Rd		34.447051	-118.664145	Intermittent	<2
11709	2024-03-31 19:35:35	Ave Penn and Witherspoon Pkwy	No odor detected	34.449379	-118.638224		ND
11705	2024-03-31 19:37:20	Ave Penn and Witherspoon Pkwy	No odor detected	34.449371	-118.638279		ND
11708	2024-03-31 19:37:55	Castaic Union School District Building	No odor detected	34.44167	-118.626151		ND
11741	2024-03-31 19:40:54	San Martinez Rd and Verdale Ave		34.449585	-118.679095	Persistent	<2
11712	2024-03-31 19:40:55	Castaic Union School District Building	No odor detected	34.441615	-118.626273		ND
11726	2024-03-31 19:40:58	San Martinez Rd and Verdale Ave		34.44956	-118.679106	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
			Mostly Cloudy		SE	5.6	61.9	53.0	28.7
-1	400 - Earthy	415 - Stale	Mostly Cloudy		S	5.4	68.2	43.7	28.68
			Mostly Cloudy	None	S	5.4	68.2	43.7	28.68
			Mostly Cloudy	None	W	1	58	58	29.7
			Mostly Cloudy	None	W	1	58	58	29.71
-6	500 - Offensive	506 - Garbage	Mostly Cloudy	None	S	3	71.2	39.3	28.63
-3	500 - Offensive	506 - Garbage	Mostly Cloudy		S	3	71.2	39.3	28.63
			Mostly Cloudy	None	SW	5	58	58	29.71
			Mostly Cloudy	None	SW	5	58	58	29.7
-2	500 - Offensive	506 - Garbage	Mostly Cloudy			0	78.5	36.1	28.55
-5	500 - Offensive	506 - Garbage	Mostly Cloudy	None		0	78.5	36.1	28.55
			Mostly Cloudy	None	W	4	57	59	29.7
			Mostly Cloudy	None	W	4	57	59	29.7
			Mostly Cloudy	None	S	3	57	59	29.7
1	400 - Earthy	412 - Peat-like	Mostly Cloudy	None	NW	4.5	70	38.9	28.39
			Mostly Cloudy	None	S	3	57	59	29.7
-1	500 - Offensive	508 - Manure	Mostly Cloudy		NW	4.5	70	38.9	28.39

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11723	2024-03-31 19:55:30	Val Verde Rd and Oakwood Ave	Got stronger while at the site	34.450234	-118.662495	Persistent	<2
11742	2024-03-31 19:55:46	Val Verde Rd and Oakwood Ave		34.450192	-118.662519	Intermittent	4
11746	2024-03-31 20:05:22	Bus Stop 14608 - Del Valle Rd & Silver St		34.448462	-118.655161	Persistent	2
11728	2024-03-31 20:05:41	Bus Stop 14608 - Del Valle Rd & Silver St		34.448477	-118.655215	Persistent	7
11749	2024-03-31 20:11:14	Lot in front of Fire Station 143		34.454597	-118.634457	Intermittent	<2
11729	2024-03-31 20:11:49	Lot in front of Fire Station 143		34.454682	-118.63439		ND
11730	2024-03-31 20:18:04	Cambridge Ave across from house number 29862		34.45954	-118.626782	Persistent	<2
11739	2024-03-31 20:18:31	Cambridge Ave across from house number 29862		34.459619	-118.6266	Persistent	<2
11731	2024-03-31 20:23:28	Park behind Live Oak Elementary school		34.4502	-118.621155		ND
11744	2024-03-31 20:23:31	Park behind Live Oak Elementary school		34.450239	-118.621109		ND
11732	2024-03-31 20:29:17	Starbucks / store by Bruce sushi		34.451093	-118.625179		ND
11740	2024-03-31 20:30:35	Starbucks / store by Bruce sushi	Like prepared food	34.451085	-118.625131	Persistent	<2
11747	2024-03-31 20:35:51	Ave Penn and Witherspoon Pkwy		34.449318	-118.638307		ND
11734	2024-03-31 20:36:11	Ave Penn and Witherspoon Pkwy		34.4494	-118.638284		ND
11738	2024-03-31 20:39:41	Castaic Union School District Building		34.441625	-118.626122	Intermittent	<2
11733	2024-03-31 20:39:59	Castaic Union School District Building		34.441637	-118.626294		ND
11750	2024-03-31 20:49:12	Front of Castaic Elementary School		34.471594	-118.630139	Intermittent	<2
11736	2024-03-31 20:49:14	Front of Castaic Elementary School		34.471509	-118.630224	Persistent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
-3	500 - Offensive	506 - Garbage	Mostly Cloudy		S	2.6	72.3	33.9	28.51
-4	500 - Offensive	506 - Garbage	Partly Cloudy	None	S	2.6	72.3	33.9	28.51
-7	500 - Offensive	506 - Garbage	Partly Cloudy	None	SE	2.5	71.2	36.2	28.56
-5	500 - Offensive	506 - Garbage	Mostly Cloudy		SE	2.5	71.2	36.2	28.56
2	100 - Floral	105 - Fragrant	Partly Cloudy	None	E	2.9	73.5	36.8	28.59
			Mostly Cloudy		E	2.9	73.5	36.8	28.59
1	100 - Floral	102 - Cinnamon	Mostly Cloudy		SE	3.6	69.6	37.9	28.5
5	100 - Floral	105 - Fragrant	Partly Cloudy	None	SE	3.6	69.6	37.9	28.5
			Mostly Cloudy			0	71.7	39.9	28.74
			Partly Cloudy	None		0	71.7	39.9	28.74
			Mostly Cloudy		SW	3.4	69.5	34.7	28.66
4	300 - Vegetable	308 - Potato	Mostly Cloudy	None	SW	3.4	69.5	34.7	28.66
			Mostly Cloudy	None	SW	0	73.8	34.5	28.52
			Mostly Cloudy			0	73.8	34.5	28.52
3	100 - Floral	105 - Fragrant	Mostly Cloudy	None	E	1.2	71	39.8	28.7
			Mostly Cloudy		E	1.2	71	39.8	28.7
2	400 - Earthy	411 - Musty	Mostly Cloudy	None	S	6.2	67.3	37.1	28.44
-1	400 - Earthy	411 - Musty	Mostly Cloudy		E	6.2	67.3	37.1	28.44

id	observed_at	location_description	comments	latitude	longitude	odor_duration	odor_dilution_ratio_dt
11743	2024-03-31 20:59:26	Ralph's parking lot facing Bank of America	Like prepared foods	34.456883	-118.617768	Persistent	<2
11735	2024-03-31 20:59:30	Ralph's parking lot facing Bank of America	Smells like fried chicken	34.456892	-118.617835	Persistent	<2
11751	2024-03-31 23:17:22	LA County Fire Department Del Valle Regional Training Center		34.432237	-118.659498	Persistent	<2
11752	2024-03-31 23:18:07	LA County Fire Department Del Valle Regional Training Center		34.432276	-118.659439	Intermittent	<2

odor_hedonic_tone	primary_odor_group	primary_odor	cloud_cover	precipitation	wind_direction_blowing_from	wind_speed_mph	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg
7	300 - Vegetable	308 - Potato	Mostly Cloudy	None	SE	3.4	72.5	31.9	28.69
1	300 - Vegetable	310 - Onion	Mostly Cloudy		SE	3.4	72.5	31.9	28.69
2	400 - Earthy	406 - Grassy	Overcast		SE	3.2	62.3	40.7	28.64
2	400 - Earthy	411 - Musty	Overcast	None	SE	3.2	62.3	40.7	28.64



**APPENDIX H. NASAL RANGER ® DATA FROM JUNE 2024  
ODOR STUDY**

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12268	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	22:53.0	6/17/2024	16:22:53	ND		
12255	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	20:03.0	6/17/2024	16:20:03	<2	5	100 - Floral
12263	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	13:12.0	6/17/2024	16:13:12	ND		
12254	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	10:17.0	6/17/2024	16:10:17	ND		
12266	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	57:51.0	6/17/2024	15:57:51	ND		
12257	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	55:01.0	6/17/2024	15:55:01	ND		
12261	OS002	Lincoln Ave near intersection with Chiquita Canyon Rd	34.438443	-118.657207	42:59.0	6/17/2024	15:42:59	ND		
12270	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	38:49.0	6/17/2024	15:38:49	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	7.3	W	83	41	28.3	2024-06-24 12:22 CDT		
105 - Fragrant	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	5.3	W	81.5	44.9	28.3	2024-06-24 12:22 CDT		
		Sunny	None	1.2	SW	82.9	45.9	28.41	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	0.8	SE	88	37.1	28.39	2024-06-24 12:22 CDT		
		Sunny	None	4	SW	85.3	44.7	28.52	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	4.6	SE	82.7	36.3	28.51	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	4	SW	85	37.2	28.56	2024-06-24 12:22 CDT		
		Sunny	None	2.5	N	89.1	37.1	28.53	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12256	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	34:58.0	6/17/2024	15:34:58	ND		
12250	OS015	Front of Castaic Elementary School	34.47172	-118.63062	01:40.0	6/17/2024	15:01:40	ND		
12251	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	50:11.0	6/17/2024	14:50:11	ND		
12244	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	38:24.0	6/17/2024	14:38:24	ND		
12249	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	19:44.0	6/17/2024	14:19:44	2	-4	500 - Offensive
12229	OS015	Front of Castaic Elementary School	34.47172	-118.63062	58:13.0	6/17/2024	14:58:13	ND		
12233	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	46:48.0	6/17/2024	14:46:48	ND		
12241	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	29:28.0	6/17/2024	13:29:28	ND		
12243	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	04:15.0	6/17/2024	14:04:15	ND		
12247	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	25:46.0	6/17/2024	13:25:46	ND		
12228	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	22:05.0	6/17/2024	13:22:05	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	4.6	W	82.7	40.3	28.52	2024-06-24 12:22 CDT		
		Sunny	None	2	SW	84.1	42.9	28.37	2024-06-24 12:22 CDT		
		Sunny	None	5.5	SW	83.1	41.7	28.41	2024-06-24 12:22 CDT		
		Sunny	None	9.6	S	81.1	44.9	28.65	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	4.6	SW	83.3	42.8	28.59	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	2	SW	85.6	39.8	28.35	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	4.9	S	84.6	39.5	28.43	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	2.8	S	81.1	43.2	28.46	2024-06-24 12:22 CDT		
		Sunny	None	2.2	SW	85.2	39.7	28.46	2024-06-24 12:22 CDT		
		Sunny	None	1.5	S	82.8	41.5	28.43	2024-06-24 12:22 CDT		
		Sunny	None	3.1	SE	85	44.1	28.43	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12219	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	03:42.0	6/17/2024	11:03:42	ND		
12236	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	00:30.0	6/17/2024	11:00:30	<2	3	100 - Floral
12216	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	53:13.0	6/17/2024	10:53:13	ND		
12240	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	48:50.0	6/17/2024	10:48:50	ND		
12217	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	41:01.0	6/17/2024	10:41:01	ND		
12221	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	33:45.0	6/17/2024	10:33:45	ND		
12232	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	29:11.0	6/17/2024	10:29:11	ND		
12242	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	11:10.0	6/17/2024	13:11:10	ND		
12234	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	06:39.0	6/17/2024	13:06:39	<2	0	100 - Floral

primary_odor	comments	cloud_cover	precip-itation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	7.8	S	81.3	40.4	28.51	2024-06-24 12:22 CDT		
110 - Perfumy	Laundry odors; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	5	S	77.2	38.9	28.49	2024-06-24 12:22 CDT		
		Sunny	None	2.2	W	82.1	40.7	28.35	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	3.2	W	79.2	36.5	28.35	2024-06-24 12:22 CDT		
		Sunny	None	5.4	SW	76.9	44.1	28.57	2024-06-24 12:22 CDT		
		Sunny	None	5	SW	78	41.8	28.71	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region. The	Sunny	None	4.7	S	79.4	38	28.61	2024-06-24 12:22 CDT		
		Sunny	None	0.9	S	85.5	41.4	28.64	2024-06-24 12:22 CDT		
105 - Fragrant	Intermittent garbage odors; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	2.4	SE	84.2	40.2	28.64	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12239	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	36:40.0	6/17/2024	10:36:40	ND		
12224	OS009	Castaic Union School District Building	34.4411358	-118.626827	20:55.0	6/17/2024	9:20:55	ND		
12222	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	24:56.0	6/17/2024	10:24:56	ND		
12209	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	00:37.0	6/17/2024	9:00:37	<2	-4	500 - Offensive
12198	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	00:31.0	6/17/2024	9:00:31	<2	-2	500 - Offensive
12193	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	42:14.0	6/17/2024	8:42:14	7	-4	500 - Offensive
12212	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	33:36.0	6/17/2024	8:33:36	<2	-7	500 - Offensive



primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	3.5	S	79.6	37.1	28.58	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.6	W	70.3	53.2	28.67	2024-06-24 12:22 CDT		
		Sunny	None	5.8	SW	78.6	44	28.58	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	2.8	S	72	49	28.58	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.6	SW	72.6	52.3	28.56	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.5	SW	71.6	52.3	28.64	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	1.1	S	67.8	58.7	28.67	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12197	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	27:34.0	6/17/2024	8:27:34	ND		
12207	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	22:39.0	6/17/2024	8:22:39	<2	1	400 - Earthy
12201	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	18:03.0	6/17/2024	8:18:03	ND		
12223	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	11:47.0	6/17/2024	9:11:47	ND		
12210	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	08:21.0	6/17/2024	9:08:21	<2	-4	500 - Offensive

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.5	SW	73.5	48.4	28.52	2024-06-24 12:22 CDT		
406 - Grassy	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	2.2	SW	72.4	52.6	28.52	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.1	W	70.6	52.8	28.5	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.7	W	74.1	49.1	28.5	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	1.1	W	71.1	45.2	28.5	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12215	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	13:47.0	6/17/2024	8:13:47	<2	4	100 - Floral
12214	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	42:09.0	6/17/2024	7:42:09	<2	5	100 - Floral
12200	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	37:12.0	6/17/2024	7:37:12	<2	1	300 - Vegetable
12203	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	31:58.0	6/17/2024	7:31:58	<2	2	300 - Vegetable
12205	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	03:03.0	6/17/2024	8:03:03	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
105 - Fragrant	Jasmine odor; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	2.3	W	70.2	54.2	28.52	2024-06-24 12:22 CDT		
105 - Fragrant	Jasmine; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	2.7	S	65.3	62.2	28.58	2024-06-24 12:22 CDT		
301 - Celery	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.3	E	64.9	57.7	28.73	2024-06-24 12:22 CDT		
310 - Onion	Chicken broth odor; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	1.6	SE	66.3	56.6	28.63	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	5.8	W	65.3	67.9	28.36	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12208	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	51:11.0	6/17/2024	7:51:11	ND		
12175	OS009	Castaic Union School District Building	34.4411358	-118.626827	49:56.0	6/16/2024	18:49:56	4	-6	500 - Offensive
12192	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	31:10.0	6/16/2024	18:31:10	ND		
12177	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	26:32.0	6/16/2024	18:26:32	ND		
12183	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	23:16.0	6/16/2024	18:23:16	<2	4	100 - Floral

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	3.5	S	69.2	58.3	28.49	2024-06-24 12:22 CDT		
506 - Garbage	Also smells putrid. The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.7	W	79.9	38.1	28.63	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	0	SW	84	39.3	28.51	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.5	S	80.2	38.5	28.48	2024-06-24 12:22 CDT		
105 - Fragrant	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.6	S	78.7	38.1	28.48	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12188	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	15:49.0	6/16/2024	18:15:49	ND		
12185	OS009	Castaic Union School District Building	34.4411358	-118.626827	49:48.0	6/16/2024	18:49:48	7	-7	500 - Offensive
12172	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	45:32.0	6/16/2024	18:45:32	ND		
12184	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	42:17.0	6/16/2024	18:42:17	ND		
12180	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	34:23.0	6/16/2024	18:34:23	ND		
12171	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	18:58.0	6/16/2024	18:18:58	ND		



primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	0.8	SW	81.6	41.6	28.47	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.9	W	79.6	38.4	28.63	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.4	W	79.9	41.9	28.45	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.6	SW	82.2	36.6	28.45	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	0	SW	81.3	42.4	28.51	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.7	NW	81.4	37.5	28.45	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12179	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	09:35.0	6/16/2024	18:09:35	2	-5	500 - Offensive
12187	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	06:33.0	6/16/2024	18:06:33	<2	-4	500 - Offensive
12174	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	59:39.0	6/16/2024	17:59:39	<2	5	400 - Earthy
12191	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	17:50.0	6/16/2024	17:17:50	ND		
12170	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	00:16.0	6/16/2024	17:00:16	<2	2	700 - Chemical
12154	OS009	Castaic Union School District Building	34.4411358	-118.626827	57:29.0	6/16/2024	15:57:29	<2	-5	500 - Offensive

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
508 - Manure	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.2	W	81.5	37.5	28.32	2024-06-24 12:22 CDT		
508 - Manure	Floral and smoky odors as well; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	0	W	83.9	38.7	28.32	2024-06-24 12:22 CDT		
414 - Smokey	Smells like barbecue.	Hazy	None	1.7	W	81.1	40.3	28.43	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.4	W	84	37.3	28.54	2024-06-24 12:22 CDT		
708 - Grease	Smells like fried chicken.The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4.9	SW	84.6	40.5	28.63	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.1	SW	84	34.6	28.62	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12161	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	53:12.0	6/16/2024	15:53:12	ND		
12167	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	43:33.0	6/16/2024	15:43:33	ND		
12147	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	40:12.0	6/16/2024	15:40:12	ND		
12145	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	29:30.0	6/16/2024	15:29:30	ND		
12146	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	05:45.0	6/16/2024	15:05:45	ND		
12142	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	52:57.0	6/16/2024	12:52:57	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.3	W	86.1	39	28.46	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.8	W	84.8	37.8	28.52	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.6	SW	83.5	36.6	28.52	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4.4	SW	83.9	38.3	28.46	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4	S	84.4	38.2	28.43	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	9.1	SW	86.7	33.2	28.51	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12148	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	50:11.0	6/16/2024	12:50:11	<2	4	100 - Floral
12144	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	27:52.0	6/16/2024	12:27:52	ND		
12150	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	23:33.0	6/16/2024	12:23:33	ND		
12129	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	39:04.0	6/16/2024	11:39:04	<2	-5	400 - Earthy
12141	OS009	Castaic Union School District Building	34.4411358	-118.626827	18:55.0	6/16/2024	11:18:55	7	-4	500 - Offensive
12218	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	38:10.0	6/17/2024	9:38:10	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
105 - Fragrant	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	11.2	SW	84.6	32.7	28.5	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.2	SW	83.8	36.2	28.58	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4.6	SW	87.4	36	28.52	2024-06-24 12:22 CDT		
414 - Smokey		Hazy	None	8.7	S	83.7	31.2	28.47	2024-06-24 12:22 CDT		
506 - Garbage	Garbage smell is intermittent, trading off with fecal and smokey smells. The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.3	W	85.4	30.1	28.67	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	6.2	SW	70.9	53.4	28.7	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12213	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	06:44.0	6/17/2024	10:06:44	ND		
12211	OS015	Front of Castaic Elementary School	34.47172	-118.63062	47:13.0	6/17/2024	9:47:13	<2	1	400 - Earthy
12206	OS009	Castaic Union School District Building	34.4411358	-118.626827	17:08.0	6/17/2024	9:17:08	7	-7	500 - Offensive
12204	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	33:08.0	6/17/2024	9:33:08	<2	-6	500 - Offensive
12199	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	27:32.0	6/17/2024	7:27:32	ND		
12196	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	46:34.0	6/17/2024	7:46:34	ND		



primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	7.6	S	73.4	43.9	28.45	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	3.6	S	74.8	40.9	28.41	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	6.1	W	70.9	51.9	28.673	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	4.7	S	71.1	48.4	28.7	2024-06-24 12:22 CDT		
	NR90201542 The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4.4	SW	62.7	65.6	28.58	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.5	E	68.5	53.5	28.58	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12195	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	07:04.0	6/17/2024	8:07:04	ND		
12194	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	55:49.0	6/17/2024	7:55:49	ND		
12190	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	56:37.0	6/16/2024	18:56:37	<2	1	400 - Earthy
12189	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	47:00.0	6/16/2024	17:47:00	ND		
12186	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	55:26.0	6/16/2024	17:55:26	2	5	400 - Earthy

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.4	W	65.7	56.7	28.36	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.7	S	66.9	54.5	28.46	2024-06-24 12:22 CDT		
406 - Grassy	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.8	W	80.8	33.8	28.59	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	6	N	81.2	37.2	28.54	2024-06-24 12:22 CDT		
414 - Smokey	Smells like grilled meat; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.3	SW	83.6	38.9	28.42	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12182	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	34:18.0	6/16/2024	17:34:18	ND		
12181	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	23:31.0	6/16/2024	17:23:31	ND		
12178	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	50:11.0	6/16/2024	17:50:11	ND		
12176	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	37:21.0	6/16/2024	17:37:21	ND		
12173	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	00:37.0	6/16/2024	19:00:37	ND		
12169	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	20:01.0	6/16/2024	16:20:01	<2	-2	500 - Offensive

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4	S	82.7	34.6	28.59	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.3	SW	85.5	35	28.55	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.4	NW	85.1	32.9	28.55	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.5	S	88.8	32.1	28.59	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2	W	80	39.2	28.59	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4.5	S	84.7	38	28.66	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12168	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	29:06.0	6/16/2024	16:29:06	ND		
12166	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	09:51.0	6/16/2024	16:09:51	4	-4	500 - Offensive
12165	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	25:09.0	6/16/2024	15:25:09	ND		
12164	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	33:29.0	6/16/2024	15:33:29	ND		
12163	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	09:55.0	6/16/2024	15:09:55	ND		
12162	OS015	Front of Castaic Elementary School	34.47172	-118.63062	41:48.0	6/16/2024	16:41:48	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	7	S	84.4	39	28.42	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.8	W	85.7	37.6	28.59	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	0.7	W	88.6	37.7	28.34	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3	W	86.7	37.9	28.47	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4	W	85.5	38.8	28.43	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.5	W	83	37.2	28.37	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12160	OS009	Castaic Union School District Building	34.4411358	-118.626827	01:00.0	6/16/2024	16:01:00	<2	-2	500 - Offensive
12159	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	50:15.0	6/16/2024	15:50:15	ND		
12158	OS015	Front of Castaic Elementary School	34.47172	-118.63062	38:18.0	6/16/2024	16:38:18	ND		
12157	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	06:24.0	6/16/2024	16:06:24	2	-5	500 - Offensive
12156	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	26:20.0	6/16/2024	16:26:20	<2	3	300 - Vegetable



primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.6	W	86.3	36.2	28.63	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.3	SW	84.9	36.2	28.45	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	8.5	S	88.2	37.4	28.37	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.8	S	87	34.3	28.58	2024-06-24 12:22 CDT		
301 - Celery	Mustard smell; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	6.2	S	84.2	37.4	28.41	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12155	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	39:48.0	6/16/2024	12:39:48	ND		
12153	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	31:58.0	6/16/2024	12:31:58	ND		
12152	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	16:47.0	6/16/2024	16:16:47	<2	-7	500 - Offensive
12151	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	17:57.0	6/16/2024	15:17:57	30	-8	500 - Offensive
12149	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	49:46.0	6/16/2024	16:49:46	<2	-2	700 - Chemical

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2	S	87.4	31	28.57	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4.3	S	85.2	33.4	28.61	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.4	S	83.8	37.7	28.66	2024-06-24 12:22 CDT		
508 - Manure	Livestock odors; chickens heard on nearby property; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.8	SW	85.4	37.5	28.33	2024-06-24 12:22 CDT		
708 - Grease	Fried chicken; tacos (taco stand set up in parking lot) and floral odors; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region	Hazy	None	6.3	S	83.1	35.5	28.64	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12136	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	42:55.0	6/16/2024	12:42:55	ND		
12135	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	35:24.0	6/16/2024	12:35:24	ND		
12123	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	29:40.0	6/16/2024	11:29:40	<2	-5	500 - Offensive
12110	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	38:53.0	6/15/2024	18:38:53	<2	-2	400 - Earthy
12078	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	12:12.0	6/15/2024	17:12:12	4	-2	500 - Offensive
12086	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	53:56.0	6/15/2024	15:53:56	ND		
12072	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	49:09.0	6/15/2024	15:49:09	ND		
12089	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	43:45.0	6/15/2024	15:43:45	<2	2	400 - Earthy
12070	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	39:50.0	6/15/2024	15:39:50	ND		
12096	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	35:37.0	6/15/2024	15:35:37	2	3	400 - Earthy
12074	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	21:10.0	6/15/2024	15:21:10	ND		
12090	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	14:04.0	6/15/2024	15:14:04	<2	4	100 - Floral

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.3	SW	87	33.3	28.58	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.3	SW	86.4	35.9	28.62	2024-06-24 12:22 CDT		
506 - Garbage	Garbage and smoke odors; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2	S	86	31.8	28.7	2024-06-24 12:22 CDT		
414 - Smokey	Wildfire in Gorman, CA; occasional floral odor	Hazy	None	1.8	S	88	31.9	28.51	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	3.3	S	91	28.4	28.7	2024-06-24 12:22 CDT		
		Sunny	None	3.3	S	92.6	28.8	28.47	2024-06-24 12:22 CDT		
		Sunny	None	4	S	93.4	27.7	28.6	2024-06-24 12:22 CDT		
406 - Grassy	Grass and laundry odors	Sunny	None	5.8	S	92.4	27.1	28.58	2024-06-24 12:22 CDT		
		Sunny	None	1.8	W	97.2	25.8	28.64	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	3	SW	95.8	25.5	28.62	2024-06-24 12:22 CDT		
		Sunny	None	5.6	S	93.7	32.3	28.54	2024-06-24 12:22 CDT		
105 - Fragrant		Sunny	None	6.3	S	93.7	28.5	28.53	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12077	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	02:12.0	6/15/2024	15:02:12	<2	-2	500 - Offensive
12092	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	59:04.0	6/15/2024	14:59:04	<2	-6	500 - Offensive
12064	OS009	Castaic Union School District Building	34.4411358	-118.626827	54:04.0	6/15/2024	12:54:04	ND		
12055	OS009	Castaic Union School District Building	34.4411358	-118.626827	51:30.0	6/15/2024	12:51:30	ND		
12063	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	46:50.0	6/15/2024	12:46:50	ND		
12058	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	44:08.0	6/15/2024	12:44:08	ND		
12069	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	30:58.0	6/15/2024	15:30:58	ND		
12091	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	27:30.0	6/15/2024	15:27:30	ND		
12061	OS015	Front of Castaic Elementary School	34.47172	-118.63062	53:36.0	6/15/2024	11:53:36	<2	2	400 - Earthy
12068	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	37:48.0	6/15/2024	12:37:48	2	-3	500 - Offensive
12060	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	34:02.0	6/15/2024	12:34:02	<2	-4	500 - Offensive
12067	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	26:18.0	6/15/2024	12:26:18	<2	-2	500 - Offensive
12057	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	23:32.0	6/15/2024	12:23:32	<2	-4	500 - Offensive
12065	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	17:05.0	6/15/2024	12:17:05	<2	-4	500 - Offensive
12059	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	13:49.0	6/15/2024	12:13:49	ND		
12062	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	07:59.0	6/15/2024	12:07:59	7	-3	700 - Chemical
12056	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	04:37.0	6/15/2024	12:04:37	2	2	300 - Vegetable
12066	OS015	Front of Castaic Elementary School	34.47172	-118.63062	57:48.0	6/15/2024	11:57:48	ND		
12033	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	39:18.0	6/15/2024	11:39:18	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
506 - Garbage		Sunny	None	5.5	SW	99.5	25	28.68	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	6.1	SW	96.2	24.6	28.65	2024-06-24 12:22 CDT		
		Sunny	None	5.3	W	95.8	23.6	28.72	2024-06-24 12:22 CDT		
		Sunny	None	5.3	W	96	23.5	28.71	2024-06-24 12:22 CDT		
		Sunny	None	1.7	S	95.5	23	28.55	2024-06-24 12:22 CDT		
		Sunny	None	2.2	S	95	21.6	28.55	2024-06-24 12:22 CDT		
		Sunny	None	3.6	W	97.1	29.7	28.61	2024-06-24 12:22 CDT		
		Sunny	None	3.6	SW	97	29.7	28.6	2024-06-24 12:22 CDT		
417 - Woody		Sunny	None	2	NW	93.3	20.3	28.48	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	3.2	W	95.1	21.9	28.61	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	1.4	SW	95.3	20.5	28.6	2024-06-24 12:22 CDT		
506 - Garbage	Also smell laundry and wood	Sunny	None	2.1	SE	93.5	17.4	28.76	2024-06-24 12:22 CDT		
506 - Garbage	Occasional garbage odors, in addition to laundry and floral odors	Sunny	None	4	SE	94.4	18.6	28.75	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	4.6	S	94.1	17.8	28.53	2024-06-24 12:22 CDT		
		Sunny	None	3.5	S	94.7	18.1	28.52	2024-06-24 12:22 CDT		
702 - Car Exhaust	A few cars driving right by at time of sampling	Sunny	None	1.2	N	94.8	17.2	28.73	2024-06-24 12:22 CDT		
309 - Tomato	Pizza smells; Pizza Hut in shopping center	Sunny	None	2.8	N	94	21.3	28.73	2024-06-24 12:22 CDT		
		Sunny	None	2.1	N	91.3	19.2	28.49	2024-06-24 12:22 CDT		
		Sunny	None	3.9	NW	92.8	18.4	28.59	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12040	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	38:05.0	6/15/2024	11:38:05	ND		
12039	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	22:54.0	6/15/2024	11:22:54	60	-7	500 - Offensive
12043	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	20:32.0	6/15/2024	11:20:32	30	-8	500 - Offensive
12035	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	13:26.0	6/15/2024	11:13:26	ND		
12041	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	09:55.0	6/15/2024	11:09:55	ND		
12038	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	05:49.0	6/15/2024	11:05:49	ND		
12047	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	02:07.0	6/15/2024	11:02:07	ND		
12037	OS002	Lincoln Ave near intersection with Chiquita Canyon Rd	34.438443	-118.657207	58:09.0	6/15/2024	10:58:09	ND		
12036	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	48:50.0	6/15/2024	10:48:50	ND		
12044	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	48:48.0	6/15/2024	10:48:48	ND		
12034	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	39:08.0	6/15/2024	10:39:08	2	4	100 - Floral
12031	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	23:47.0	6/15/2024	10:23:47	ND		
12042	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	20:35.0	6/15/2024	10:20:35	ND		
12046	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	18:46.0	6/15/2024	9:18:46	<2	6	100 - Floral
12053	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	30:00.0	6/15/2024	9:30:00	ND		
12029	OS015	Front of Castaic Elementary School	34.47172	-118.63062	09:52.0	6/15/2024	9:09:52	<2	-1	400 - Earthy
12109	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	29:33.0	6/15/2024	18:29:33	<2	-2	400 - Earthy
12108	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	47:13.0	6/15/2024	18:47:13	ND		



primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	3	W	94.1	17.8	28.59	2024-06-24 12:22 CDT		
508 - Manure		Sunny	None	2.2	E	93.6	20.3	28.45	2024-06-24 12:22 CDT		
508 - Manure	Chickens heard on property next door; sample collected	Sunny	None	2.5	W	93.5	27.5	28.44	2024-06-24 12:22 CDT		
		Sunny	None	2.8	S	93.3	19.1	28.56	2024-06-24 12:22 CDT		
		Sunny	None	2.8	S	91.5	18	28.55	2024-06-24 12:22 CDT		
		Sunny	None	3.3	E	100.5	15.7	28.68	2024-06-24 12:22 CDT		
		Sunny	None	3.8	N	95.5	16.8	28.66	2024-06-24 12:22 CDT		
		Sunny	None	2	E	100.2	16.5	28.72	2024-06-24 12:22 CDT		
		Sunny	None	1.4	N	103.6	16.3	28.69	2024-06-24 12:22 CDT		
		Sunny	None	2.1	W	94.5	18.1	28.67	2024-06-24 12:22 CDT		
111 - Rose-like		Sunny	None	5.4	SW	91.5	18.2	28.62	2024-06-24 12:22 CDT		
		Sunny	None	2.5	N	91.9	19.4	28.73	2024-06-24 12:22 CDT		
		Sunny	None	4.3	N	91	17.6	28.72	2024-06-24 12:22 CDT		
105 - Fragrant	Jasmine; grass	Sunny	None	2.2	N	85.6	18	28.78	2024-06-24 12:22 CDT		
		Sunny	None	5.3	N	85.7	19.8	28.81	2024-06-24 12:22 CDT		
406 - Grassy	NR90201542	Sunny	None	2	W	84.9	20.2	28.54	2024-06-24 12:22 CDT		
414 - Smokey	Wildfire reported in Gorman, CA	Hazy	None	0	S	90.2	35.2	28.59	2024-06-24 12:22 CDT		
		Hazy	None	1.9	S	87.6	33.2	28.45	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12107	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	19:59.0	6/15/2024	18:19:59	ND		
12106	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	54:00.0	6/15/2024	18:54:00	ND		
12105	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	52:56.0	6/15/2024	17:52:56	ND		
12104	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	58:04.0	6/15/2024	18:58:04	ND		
12103	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	23:56.0	6/15/2024	18:23:56	2	1	400 - Earthy
12102	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	40:42.0	6/15/2024	17:40:42	7	-4	500 - Offensive
12101	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	33:16.0	6/15/2024	18:33:16	ND		
12100	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	42:13.0	6/15/2024	18:42:13	2	-2	400 - Earthy
12099	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	50:35.0	6/15/2024	18:50:35	ND		
12098	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	57:09.0	6/15/2024	17:57:09	ND		
12097	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	17:45.0	6/15/2024	17:17:45	ND		
12095	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	38:53.0	6/15/2024	16:38:53	4	5	700 - Chemical
12094	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	04:17.0	6/15/2024	16:04:17	<2	5	100 - Floral
12093	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	55:24.0	6/15/2024	16:55:24	ND		
12088	OS015	Front of Castaic Elementary School	34.47172	-118.63062	28:55.0	6/15/2024	16:28:55	ND		
12087	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	37:22.0	6/15/2024	17:37:22	15	-7	500 - Offensive
12085	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	12:41.0	6/15/2024	16:12:41	ND		
12084	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	08:44.0	6/15/2024	17:08:44	<2	-6	500 - Offensive
12083	OS009	Castaic Union School District Building	34.4411358	-118.626827	28:13.0	6/15/2024	17:28:13	ND		
12082	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	59:13.0	6/15/2024	16:59:13	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Hazy	None	2.6	W	88.8	35	28.58	2024-06-24 12:22 CDT		
		Hazy	None	1.1	S	87.9	36.5	28.5	2024-06-24 12:22 CDT		
		Sunny	None	2.3	S	90.1	31	28.63	2024-06-24 12:22 CDT		
		Hazy	None	0		86.7	37.5	28.51	2024-06-24 12:22 CDT		
406 - Grassy		Hazy	None	2.2	SW	87.8	38	28.58	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	1.1	W	90.8	29.8	28.49	2024-06-24 12:22 CDT		
		Hazy	None	0		87.4	42.1	28.58	2024-06-24 12:22 CDT		
414 - Smokey	Smells like wildfire. Fire in Gorman, CA nearby.	Hazy	None	1.7	S	87.6	34.8	28.51	2024-06-24 12:22 CDT		
		Hazy	None	1.7	SE	86.1	37.5	28.46	2024-06-24 12:22 CDT		
		Sunny	None	1.6	SW	91	31.3	28.63	2024-06-24 12:22 CDT		
		Sunny	None	5.1	SW	90	28.4	28.55	2024-06-24 12:22 CDT		
708 - Grease	Fried chicken odor	Sunny	None	1.3	S	92.9	27.7	28.67	2024-06-24 12:22 CDT		
105 - Fragrant	Alternating floral and manure odors	Sunny	None	4.8	SW	92	30.7	28.37	2024-06-24 12:22 CDT		
		Sunny	None	6.8	S	90	27.4	28.46	2024-06-24 12:22 CDT		
		Sunny	None	5.4	SW	90.7	30	28.42	2024-06-24 12:22 CDT		
506 - Garbage	Sample collected	Sunny	None	1.7	S	90	30.3	28.48	2024-06-24 12:22 CDT		
		Sunny	None	5.2	S	90.7	29.5	28.52	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	3.3	SE	90.8	27.8	28	2024-06-24 12:22 CDT		
		Sunny	None	4.7	SW	91.4	27.9	28.66	2024-06-24 12:22 CDT		
		Sunny	None	3.7	S	89.6	29.7	28.47	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12081	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	22:14.0	6/15/2024	17:22:14	ND		
12080	OS009	Castaic Union School District Building	34.4411358	-118.626827	32:12.0	6/15/2024	17:32:12	ND		
12079	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	42:56.0	6/15/2024	16:42:56	<2	2	400 - Earthy
12076	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	57:49.0	6/15/2024	15:57:49	ND		
12075	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	15:51.0	6/15/2024	16:15:51	ND		
12073	OS015	Front of Castaic Elementary School	34.47172	-118.63062	32:10.0	6/15/2024	16:32:10	ND		
12071	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	07:13.0	6/15/2024	16:07:13	<2	-3	500 - Offensive
12054	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	39:59.0	6/15/2024	9:39:59	ND		
12052	OS015	Front of Castaic Elementary School	34.47172	-118.63062	05:34.0	6/15/2024	9:05:34	<2	-2	300 - Vegetable
12051	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	36:18.0	6/15/2024	10:36:18	<2	7	100 - Floral
12050	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	50:35.0	6/15/2024	9:50:35	ND		
12049	OS002	Lincoln Ave near intersection with Chiquita Canyon Rd	34.438443	-118.657207	53:21.0	6/15/2024	10:53:21	ND		
12048	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	00:33.0	6/15/2024	10:00:33	ND		
12045	OS009	Castaic Union School District Building	34.4411358	-118.626827	15:13.0	6/15/2024	10:15:13	ND		
12032	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	54:49.0	6/15/2024	9:54:49	ND		
12030	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	33:45.0	6/15/2024	9:33:45	2	1	400 - Earthy
12028	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	23:41.0	6/15/2024	9:23:41	ND		
12027	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	43:30.0	6/15/2024	9:43:30	ND		
12026	OS009	Castaic Union School District Building	34.4411358	-118.626827	15:33.0	6/15/2024	10:15:33	ND		
12025	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	06:49.0	6/15/2024	10:06:49	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	2.8	SW	90.8	35.3	28.56	2024-06-24 12:22 CDT		
		Sunny	None	2.8	W	91.3	28.2	28.67	2024-06-24 12:22 CDT		
414 - Smokey	Smells like fried chicken	Sunny	None	3.1	S	91.9	29	28.68	2024-06-24 12:22 CDT		
		Sunny	None	1.4	S	92.1	30.5	28.48	2024-06-24 12:22 CDT		
		Sunny	None	2.8	E	93.4	30.3	28.52	2024-06-24 12:22 CDT		
		Sunny	None	4	S	91	29.2	28.42	2024-06-24 12:22 CDT		
508 - Manure	Also smells like flowers	Sunny	None	4.4	W	94.6	28.8	28.38	2024-06-24 12:22 CDT		
		Sunny	None	6	N	85.2	17.7	28.57	2024-06-24 12:22 CDT		
310 - Onion	SN: 90202374	Sunny	None	2	W	84.1	19.6	28.53	2024-06-24 12:22 CDT		
105 - Fragrant	Jasmine	Sunny	None	4.4	S	90.8	19.7	28.61	2024-06-24 12:22 CDT		
		Sunny	None	2.3	W	91	20.9	28.65	2024-06-24 12:22 CDT		
		Sunny	None	2	N	94	17.2	28.71	2024-06-24 12:22 CDT		
		Sunny	None	5.4	NE	88.1	19.7	28.59	2024-06-24 12:22 CDT		
		Sunny	None	4.1	NE	90.7	17.1	28.77	2024-06-24 12:22 CDT		
		Sunny	None	0.8	NE	95.7	41	28.66	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	5	N	85.6	20	28.82	2024-06-24 12:22 CDT		
		Sunny	None	5.1	NE	85	18.9	28.79	2024-06-24 12:22 CDT		
		Sunny	None	6.8	N	90.1	17.5	28.58	2024-06-24 12:22 CDT		
		Sunny	None	1.2	SE	91.2	17.5	28.77	2024-06-24 12:22 CDT		
		Sunny	None	1.8	NE	87.7	21.6	28.6	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12010	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	58:34.0	6/14/2024	16:58:34	15	-4	500 - Offensive
12024	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	56:03.0	6/14/2024	16:56:03	4	-5	500 - Offensive
12017	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	36:10.0	6/14/2024	15:36:10	<2	2	400 - Earthy
12018	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	25:42.0	6/14/2024	15:25:42	ND		
11999	OS009	Castaic Union School District Building	34.4411358	-118.626827	20:17.0	6/14/2024	14:20:17	4	-7	500 - Offensive
11988	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	12:29.0	6/14/2024	14:12:29	ND		
11996	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	08:33.0	6/14/2024	14:08:33	ND		
11986	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	56:28.0	6/14/2024	13:56:28	ND		
12000	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	52:29.0	6/14/2024	13:52:29	<2	-1	400 - Earthy
11987	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	47:21.0	6/14/2024	13:47:21	ND		
11995	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	44:13.0	6/14/2024	13:44:13	ND		
11983	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	36:12.0	6/14/2024	13:36:12	ND		
12001	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	32:50.0	6/14/2024	13:32:50	<2	1	400 - Earthy
11994	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	22:46.0	6/14/2024	13:22:46	15	-6	500 - Offensive
11981	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	55:01.0	6/14/2024	10:55:01	ND		
11977	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	51:54.0	6/14/2024	10:51:54	<2	5	100 - Floral
11976	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	43:28.0	6/14/2024	10:43:28	<2	3	400 - Earthy
11984	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	25:58.0	6/14/2024	13:25:58	<2	-4	500 - Offensive

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
506 - Garbage		Sunny	None	4.5	S	88.9	39.2	28.82	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	4.4	S	89.8	37	28.81	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	3.4	S	90.8	37.6	28.74	2024-06-24 12:22 CDT		
		Sunny	None	9.2	SE	88.8	39.9	28.71	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	1.3	SW	90.2	39.4	28.8	2024-06-24 12:22 CDT		
		Sunny	None	3.2	W	91.4	66.3	28.63	2024-06-24 12:22 CDT		
		Sunny	None	0.8	S	92.8	38	28.62	2024-06-24 12:22 CDT		
		Sunny	None	1.6	SW	90.6	41.4	28.77	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	1.5	S	91	37.4	28.77	2024-06-24 12:22 CDT		
		Sunny	None	5.9	SW	87.1	39.1	28.69	2024-06-24 12:22 CDT		
		Sunny	None	4.5	S	88.9	39	28.99	2024-06-24 12:22 CDT		
		Sunny	None	1.3	SW	88.1	41.4	28.65	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	4.4	S	88.2	40.6	28.64	2024-06-24 12:22 CDT		
508 - Manure	Livestock and manure odors; chickens can be heard on neighboring property	Sunny	None	3.6	W	86.5	40.1	28.61	2024-06-24 12:22 CDT		
		Sunny	None	2.1	S	86.1	63.8	28.77	2024-06-24 12:22 CDT		
105 - Fragrant		Sunny	None	2.6	SW	85.9	40.9	28.76	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	3.8	S	80.7	44.6	20.6	2024-06-24 12:22 CDT		
508 - Manure		Sunny	None	0.9	W	87.7	41.9	28.59	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11985	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	15:46.0	6/14/2024	13:15:46	ND		
11993	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	11:11.0	6/14/2024	13:11:11	ND		
11978	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	03:20.0	6/14/2024	11:03:20	ND		
11974	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	59:41.0	6/14/2024	10:59:41	ND		
11979	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	47:22.0	6/14/2024	10:47:22	<2	5	100 - Floral
11975	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	34:28.0	6/14/2024	10:34:28	<2	0	400 - Earthy
11982	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	22:14.0	6/14/2024	10:22:14	4	1	400 - Earthy
11958	OS015	Front of Castaic Elementary School	34.47172	-118.63062	11:01.0	6/14/2024	10:11:01	ND		
11980	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	39:17.0	6/14/2024	10:39:17	2	1	400 - Earthy
11947	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	36:00.0	6/14/2024	8:36:00	2	-2	500 - Offensive
11968	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	14:46.0	6/14/2024	7:14:46	ND		
11943	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	53:07.0	6/13/2024	16:53:07	<2	4	100 - Floral
11941	OS015	Front of Castaic Elementary School	34.47172	-118.63062	33:07.0	6/13/2024	16:33:07	ND		
11925	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	33:40.0	6/13/2024	15:33:40	<2	-5	500 - Offensive
11922	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	36:11.0	6/13/2024	14:36:11	ND		
11938	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	30:50.0	6/13/2024	14:30:50	ND		
11924	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	27:13.0	6/13/2024	14:27:13	ND		
11937	OS009	Castaic Union School District Building	34.4411358	-118.626827	17:33.0	6/13/2024	14:17:33	<2	-1	400 - Earthy
11919	OS009	Castaic Union School District Building	34.4411358	-118.626827	13:55.0	6/13/2024	14:13:55	<2	-2	400 - Earthy



primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	4.1	S	87.7	40.8	28.62	2024-06-24 12:22 CDT		
		Sunny	None	4.1	S	86.8	42.1	28.61	2024-06-24 12:22 CDT		
		Sunny	None	2.2	S	84.5	46.1	28.7	2024-06-24 12:22 CDT		
		Sunny	None	9.4	S	83.1	38.9	28.7	2024-06-24 12:22 CDT		
103 - Coconut		Sunny	None	1.2	SW	88.1	52.9	28.81	2024-06-24 12:22 CDT		
414 - Smokey		Sunny	None	1.4	S	80.9	44.6	28.77	2024-06-24 12:22 CDT		
414 - Smokey	Smells like someone's cooking	Sunny	None	0.9	S	84.5	38.8	28.87	2024-06-24 12:22 CDT		
		Sunny	None	2.1	E	79.4	39.1	28.61	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	1.6	SW	83.9	45.6	28.77	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	1.9	S	69.5	65.3	28.68	2024-06-24 12:22 CDT		
	SN: 90202374	Overcast	Fog	0.8	NW	61.7	68.8	28.8	2024-06-24 12:22 CDT		
110 - Perfumy	Laundry/dryer sheet odor	Sunny	None	2	S	83.6	34.5	28	2024-06-24 12:22 CDT		
		Sunny	None	3.2	S	80.9	35.2	28.61	2024-06-24 12:22 CDT		
508 - Manure	Occasional livestock odors	Sunny	None	2.1	SW	80.6	41	28.57	2024-06-24 12:22 CDT		
		Sunny	None	3.5	S	82.6	42.8	28.67	2024-06-24 12:22 CDT		
		Sunny	None	0.8	S	84.9	49.1	28.74	2024-06-24 12:22 CDT		
		Sunny	None	6.7	S	79.8	42	28.73	2024-06-24 12:22 CDT		
414 - Smokey		Sunny	None	4.1	SW	84.6	39.7	28.89	2024-06-24 12:22 CDT		
414 - Smokey	Alternating smoky and garbage odors	Sunny	None	3.7	S	86.2	35.9	28.87	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11912	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	07:19.0	6/13/2024	14:07:19	ND		
11920	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	03:00.0	6/13/2024	14:03:00	ND		
11929	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	55:54.0	6/13/2024	13:55:54	ND		
11913	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	52:29.0	6/13/2024	13:52:29	ND		
11930	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	43:45.0	6/13/2024	13:43:45	<2	2	400 - Earthy
11923	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	43:38.0	6/13/2024	13:43:38	<2	2	400 - Earthy
11928	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	34:39.0	6/13/2024	13:34:39	ND		
11926	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	31:28.0	6/13/2024	13:31:28	ND		
11939	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	22:44.0	6/13/2024	13:22:44	<2	1	700 - Chemical
11918	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	22:16.0	6/13/2024	13:22:16	<2	-4	700 - Chemical
11935	OS015	Front of Castaic Elementary School	34.47172	-118.63062	10:13.0	6/13/2024	13:10:13	ND		
11914	OS015	Front of Castaic Elementary School	34.47172	-118.63062	06:02.0	6/13/2024	13:06:02	ND		
11910	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	03:16.0	6/13/2024	11:03:16	2	1	400 - Earthy
11909	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	02:18.0	6/13/2024	11:02:18	<2	-5	700 - Chemical
11896	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	09:32.0	6/13/2024	10:09:32	ND		
11901	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	47:45.0	6/13/2024	9:47:45	<2	2	400 - Earthy
11911	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	48:17.0	6/13/2024	10:48:17	ND		
11890	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	28:40.0	6/13/2024	10:28:40	ND		
11887	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	51:45.0	6/13/2024	9:51:45	2	2	400 - Earthy

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	3.6	W	85.3	40	28.7	2024-06-24 12:22 CDT		
		Sunny	None	2.5	S	84.8	40	28.7	2024-06-24 12:22 CDT		
		Sunny	None	2.5	SW	84.5	40.9	28.77	2024-06-24 12:22 CDT		
		Sunny	None	3.5	S	83.8	40.7	28.79	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	0.9	S	85.4	43.5	28.85	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	1.4	S	85.1	45	28.84	2024-06-24 12:22 CDT		
		Sunny	None	9.2	S	81	43.4	28.68	2024-06-24 12:22 CDT		
		Sunny	None	5.9	S	82.3	40.4	28.68	2024-06-24 12:22 CDT		
708 - Grease	Smells like fried chicken	Sunny	None	2.9	S	85	39.8	28.88	2024-06-24 12:22 CDT		
708 - Grease	Fried food odors interspersed with occasional floral	Sunny	None	4.4	S	83.5	41.1	28.88	2024-06-24 12:22 CDT		
		Sunny	None	2.3	SE	81.2	45.4	28.63	2024-06-24 12:22 CDT		
		Sunny	None	1.4	S	82.7	40.2	28.63	2024-06-24 12:22 CDT		
406 - Grassy	Also smell putrid garbage, and Mexican food	Sunny	None	2	S	78.1	51.1	28.85	2024-06-24 12:22 CDT		
708 - Grease	Intermittent mixture of grassy, garbage, and fried food odors	Sunny	None	3.2	S	75.8	55.6	28.85	2024-06-24 12:22 CDT		
		Sunny	None	4.3	S	70.1	61.1	28.8	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	2.5	S	69	56.5	28.72	2024-06-24 12:22 CDT		
		Sunny	None	1.8	S	75.5	64.2	28.68	2024-06-24 12:22 CDT		
		Sunny	None	2.5	S	76.6	50.6	28.81	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	1	E	72	58.3	28.73	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11889	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	20:11.0	6/13/2024	9:20:11	<2	1	400 - Earthy
11885	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	31:56.0	6/13/2024	8:31:56	2	-2	500 - Offensive
11906	OS015	Front of Castaic Elementary School	34.47172	-118.63062	08:34.0	6/13/2024	7:08:34	4	-6	500 - Offensive
11895	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	26:35.0	6/13/2024	7:26:35	<2	-4	500 - Offensive
11970	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	26:19.0	6/14/2024	9:26:19	ND		
11969	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	08:34.0	6/14/2024	9:08:34	ND		
11967	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	47:12.0	6/14/2024	7:47:12	4	-6	500 - Offensive
11966	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	57:38.0	6/14/2024	8:57:38	ND		
11965	OS009	Castaic Union School District Building	34.4411358	-118.626827	38:54.0	6/14/2024	9:38:54	ND		
11964	OS002	Lincoln Ave near intersection with Chiquita Canyon Rd	34.438443	-118.657207	24:48.0	6/14/2024	7:24:48	7	-6	500 - Offensive
11963	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	46:24.0	6/14/2024	8:46:24	4	5	100 - Floral
11962	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	32:16.0	6/14/2024	8:32:16	4	-6	500 - Offensive
11961	OS015	Front of Castaic Elementary School	34.47172	-118.63062	10:16.0	6/14/2024	10:10:16	ND		
11960	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	17:31.0	6/14/2024	10:17:31	15	8	100 - Floral
11959	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	57:48.0	6/14/2024	9:57:48	ND		
11957	OS009	Castaic Union School District Building	34.4411358	-118.626827	38:33.0	6/14/2024	9:38:33	ND		
11956	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	01:42.0	6/14/2024	9:01:42	<2	0	400 - Earthy
11955	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	11:19.0	6/14/2024	9:11:19	2	1	400 - Earthy
11954	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	07:23.0	6/14/2024	8:07:23	7	-3	500 - Offensive
11953	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	30:13.0	6/14/2024	9:30:13	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
406 - Grassy		Sunny	None	3.1	SE	71.1	55.5	28.74	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	0	N	67.7	71.9	28.78	2024-06-24 12:22 CDT		
506 - Garbage	SN: 90202574	Overcast	None	2.1	E	56.8	82.7	28.63	2024-06-24 12:22 CDT		
506 - Garbage		Overcast	None	0	E	60	75.2	28.9	2024-06-24 12:22 CDT		
		Sunny	None	1	SW	75.3	51.6	28.69	2024-06-24 12:22 CDT		
		Sunny	None	1.1	SW	73	54.5	28.83	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	2.2	SE	66	55.6	28.8	2024-06-24 12:22 CDT		
		Sunny	None	2	S	72.5	52	28.74	2024-06-24 12:22 CDT		
		Sunny	None	0	SE	74.2	52.9	28.866	2024-06-24 12:22 CDT		
506 - Garbage	Sample collected	Sunny	None	1.8	S	56.5	81.4	28.85	2024-06-24 12:22 CDT		
105 - Fragrant		Sunny	None	3	S	67.2	64.1	28.72	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	1.2	S	76.2	48.7	28.67	2024-06-24 12:22 CDT		
		Sunny	None	2.1	E	78.5	46	28.86	2024-06-24 12:22 CDT		
105 - Fragrant		Sunny	None	2.5	SE	78.5	39.4	28.85	2024-06-24 12:22 CDT		
		Sunny	None	0.7	SE	86.4	47	28.66	2024-06-24 12:22 CDT		
		Sunny	None	0	SE	78.6	48.4	28.87	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	1.4	S	74.7	48.9	28.77	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	1.4	NE	75.5	50.6	28.84	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	0	E	72	59.9	28.58	2024-06-24 12:22 CDT		
		Sunny	None	2.1	SE	76.6	49.4	28.69	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11952	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	17:27.0	6/14/2024	8:17:27	7	-2	500 - Offensive
11951	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	30:41.0	6/14/2024	7:30:41	15	-1	500 - Offensive
11950	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	50:25.0	6/14/2024	7:50:25	15	-2	500 - Offensive
11949	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	48:46.0	6/14/2024	8:48:46	4	-2	500 - Offensive
11948	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	20:46.0	6/14/2024	7:20:46	ND		
11946	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	46:59.0	6/13/2024	16:46:59	2	-2	500 - Offensive
11945	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	05:55.0	6/13/2024	17:05:55	ND		
11944	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	43:47.0	6/13/2024	16:43:47	<2	-2	700 - Chemical
11942	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	57:24.0	6/13/2024	16:57:24	ND		
11940	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	02:50.0	6/13/2024	17:02:50	ND		
11936	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	19:28.0	6/13/2024	16:19:28	ND		
11934	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	37:54.0	6/13/2024	15:37:54	<2	-2	500 - Offensive
11933	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	49:35.0	6/13/2024	15:49:35	ND		
11932	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	04:19.0	6/13/2024	16:04:19	ND		
11931	OS015	Front of Castaic Elementary School	34.47172	-118.63062	37:17.0	6/13/2024	16:37:17	ND		
11927	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	12:27.0	6/13/2024	16:12:27	ND		
11921	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	02:09.0	6/13/2024	16:02:09	ND		
11917	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	45:08.0	6/13/2024	15:45:08	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
506 - Garbage	sample collected	Sunny	None	2	S	67.4	61.5	28.72	2024-06-24 12:22 CDT		
506 - Garbage	Sample collected - kes	Overcast	Fog	1.8	E	56.5	81.4	28.85	2024-06-24 12:22 CDT		
506 - Garbage		Overcast	Fog	1.2	E	63.5	73.6	28.8	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	2.1	S	70	75.8	28.73	2024-06-24 12:22 CDT		
	NR90201542	Overcast	Fog	1.3	E	59.9	80	28.8	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	5.1	SW	82.9	38.2	28.88	2024-06-24 12:22 CDT		
		Sunny	None	6	SW	81.6	36	28.66	2024-06-24 12:22 CDT		
708 - Grease	Fried food odor	Sunny	None	4.7	S	85.8	32.9	28.87	2024-06-24 12:22 CDT		
		Sunny	None	2.2	SW	83.1	39.3	28.9	2024-06-24 12:22 CDT		
		Sunny	None	7.1	S	80.8	35.6	28	2024-06-24 12:22 CDT		
		Sunny	None	1.5	W	83.6	44.2	28.78	2024-06-24 12:22 CDT		
508 - Manure		Sunny	None	2.1	W	83.9	42.7	28.57	2024-06-24 12:22 CDT		
		Sunny	None	0.9	W	85	46.9	28.71	2024-06-24 12:22 CDT		
		Sunny	None	5.3	W	86.3	56.2	28.79	2024-06-24 12:22 CDT		
		Sunny	None	1.3	W	83.4	40.1	28.62	2024-06-24 12:22 CDT		
		Sunny	None	4	W	83	39.9	28.83	2024-06-24 12:22 CDT		
		Sunny	None	7.2	S	82.1	38.9	28.79	2024-06-24 12:22 CDT		
		Sunny	None	0.8	S	82.3	39	28.7	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11916	OS002	Lincoln Ave near intersection with Chiquita Canyon Rd	34.438443	-118.657207	08:44.0	6/13/2024	16:08:44	<2	2	400 - Earthy
11915	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	16:01.0	6/13/2024	16:16:01	ND		
11907	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	14:22.0	6/13/2024	8:14:22	<2	-5	500 - Offensive
11904	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	58:36.0	6/13/2024	7:58:36	<2	-4	500 - Offensive
11903	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	26:55.0	6/13/2024	8:26:55	2	-6	500 - Offensive
11902	OS009	Castaic Union School District Building	34.4411358	-118.626827	41:24.0	6/13/2024	8:41:24	<2	-6	500 - Offensive
11900	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	44:36.0	6/13/2024	10:44:36	<2	5	100 - Floral
11899	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	15:14.0	6/13/2024	9:15:14	<2	1	400 - Earthy
11898	OS002	Lincoln Ave near intersection with Chiquita Canyon Rd	34.438443	-118.657207	02:17.0	6/13/2024	10:02:17	<2	3	300 - Vegetable
11897	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	49:26.0	6/13/2024	8:49:26	15	-7	500 - Offensive
11894	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	34:45.0	6/13/2024	9:34:45	30	-5	500 - Offensive
11892	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	54:09.0	6/13/2024	8:54:09	4	-2	500 - Offensive
11888	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	38:19.0	6/13/2024	9:38:19	15	-4	500 - Offensive
11886	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	44:39.0	6/13/2024	7:44:39	2	-3	500 - Offensive
11884	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	02:32.0	6/13/2024	8:02:32	2	-1	500 - Offensive
11883	OS009	Castaic Union School District Building	34.4411358	-118.626827	43:06.0	6/13/2024	8:43:06	<2	2	400 - Earthy
11882	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	32:32.0	6/13/2024	7:32:32	2	-1	500 - Offensive
11881	OS015	Front of Castaic Elementary School	34.47172	-118.63062	16:56.0	6/13/2024	7:16:56	4	-3	500 - Offensive
11880	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	20:04.0	6/13/2024	8:20:04	2	-2	500 - Offensive



primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
406 - Grassy		Sunny	None	4.9	S	83.9	39.5	28.82	2024-06-24 12:22 CDT		
		Sunny	None	2.1	S	84	36.9	28.78	2024-06-24 12:22 CDT		
506 - Garbage		Partly Cloudy	None	1.8	S	67.6	60.7	28.86	2024-06-24 12:22 CDT		
506 - Garbage		Overcast	None	0	S	10.2	54.6	28.93	2024-06-24 12:22 CDT		
506 - Garbage		Partly Cloudy	None	1	SE	71.3	54	28.78	2024-06-24 12:22 CDT		
506 - Garbage	Intermittent woody and garbage smells	Overcast	None	1.3	SW	68	66.1	28.91	2024-06-24 12:22 CDT		
110 - Perfumy	Laundry/dryer sheet odor	Sunny	None	4.3	S	75.1	79.2	28.62	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	4.7	S	63.7	72.9	28.74	2024-06-24 12:22 CDT		
302 - Corn	Grassy, corn odor interspersed with celery and cilantro	Sunny	None	4.2	S	73.1	63	28.84	2024-06-24 12:22 CDT		
506 - Garbage	Sample collected	Sunny	None	1.3	S	69.9	55.6	28.73	2024-06-24 12:22 CDT		
508 - Manure	Sample collected; livestock odors; chickens can be heard on property nearby	Sunny	None	1.2	S	74.1	50.2	28.57	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	1.8	E	68.3	61.1	28.73	2024-06-24 12:22 CDT		
508 - Manure		Sunny	None	2.9	SE	71	64.9	28.59	2024-06-24 12:22 CDT		
506 - Garbage		Overcast	Fog	1.2	N	60.9	66.8	28.68	2024-06-24 12:22 CDT		
506 - Garbage	NR90201542	Overcast	Fog	2	N	58	88.5	28.93	2024-06-24 12:22 CDT		
417 - Woody		Sunny	None	2.9	N	64.7	65.9	28.9	2024-06-24 12:22 CDT		
506 - Garbage		Overcast	Fog	2	E	62.4	72.4	28.91	2024-06-24 12:22 CDT		
506 - Garbage	NR90201542	Overcast	Fog	0.9	NE	60.4	79.4	28.64	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	0.7	N	65.1	69.8	28.86	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11878	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	58:12.0	6/12/2024	18:58:12	ND		
11873	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	00:48.0	6/12/2024	19:00:48	ND		
11879	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	52:36.0	6/12/2024	18:52:36	<2	1	100 - Floral
11876	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	47:27.0	6/12/2024	18:47:27	<2	2	400 - Earthy
11877	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	42:18.0	6/12/2024	18:42:18	ND		
11872	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	37:45.0	6/12/2024	18:37:45	ND		
11858	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	29:21.0	6/12/2024	18:29:21	ND		
11870	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	28:30.0	6/12/2024	18:28:30	ND		
11856	OS009	Castaic Union School District Building	34.4411358	-118.626827	20:04.0	6/12/2024	18:20:04	ND		
11871	OS009	Castaic Union School District Building	34.4411358	-118.626827	15:22.0	6/12/2024	18:15:22	ND		
11857	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	07:25.0	6/12/2024	18:07:25	<2	1	100 - Floral
11874	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	02:53.0	6/12/2024	18:02:53	<2	-5	500 - Offensive
11854	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	54:25.0	6/12/2024	17:54:25	ND		
11855	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	43:50.0	6/12/2024	17:43:50	2	-3	500 - Offensive
11861	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	42:49.0	6/12/2024	17:42:49	<2	-5	500 - Offensive
11853	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	29:37.0	6/12/2024	17:29:37	<2	5	100 - Floral
11852	OS015	Front of Castaic Elementary School	34.47172	-118.63062	15:52.0	6/12/2024	17:15:52	<2	3	400 - Earthy
11863	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	27:33.0	6/12/2024	15:27:33	<2	1	400 - Earthy

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	4.4	SW	78.8	51.1	28.74	2024-06-24 12:22 CDT		
		Sunny	None	23.1	SW	78.5	50.4	28.73	2024-06-24 12:22 CDT		
105 - Fragrant	Smells like a flower I can't identify. Almost like pepperoni	Sunny	None	3	SW	80.5	49.1	28.79	2024-06-24 12:22 CDT		
406 - Grassy	Sweet grassy odor	Sunny	None	2.3	SE	81.2	44.8	28.79	2024-06-24 12:22 CDT		
		Sunny	None	4.6	SW	81.8	46.1	28.66	2024-06-24 12:22 CDT		
		Sunny	None	4.2	SE	82.4	40.5	28.66	2024-06-24 12:22 CDT		
		Sunny	None	1.2	SW	82.5	49	28.65	2024-06-24 12:22 CDT		
		Sunny	None	2.5	SE	83.7	43	28.64	2024-06-24 12:22 CDT		
		Sunny	None	1.8	SW	84.4	47.9	28.83	2024-06-24 12:22 CDT		
		Sunny	None	4.7	SW	83.4	45.3	28.82	2024-06-24 12:22 CDT		
111 - Rose-like		Sunny	None	2.1	SW	83.3	54	28.71	2024-06-24 12:22 CDT		
506 - Garbage	Intermittent floral and garbage odors	Sunny	None	2	S	85.2	45.6	28.7	2024-06-24 12:22 CDT		
		Sunny	None	2	S	85	39.1	28.85	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	7.4	SW	83.3	41.6	28.62	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	5.2	S	84.3	37.7	28.62	2024-06-24 12:22 CDT		
111 - Rose-like		Sunny	None	3	SW	87.4	39.5	28.84	2024-06-24 12:22 CDT		
406 - Grassy	Smells like trees	Sunny	None	1.4	S	86.7	41.1	28.57	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	5.2	S	87.5	30.3	28.79	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11847	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	19:50.0	6/12/2024	15:19:50	ND		
11826	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	44:22.0	6/12/2024	11:44:22	2	-1	500 - Offensive
11841	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	47:25.0	6/12/2024	10:47:25	ND		
11832	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	31:31.0	6/12/2024	9:31:31	2	-5	500 - Offensive
11835	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	18:59.0	6/12/2024	9:18:59	<2	-5	500 - Offensive
11763	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	18:27.0	6/11/2024	8:18:27	30	-5	500 - Offensive
11811	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	04:22.0	6/11/2024	18:04:22	ND		
11797	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	26:44.0	6/11/2024	17:26:44	<2	4	100 - Floral
11810	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	28:17.0	6/11/2024	17:28:17	ND		
11794	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	31:52.0	6/11/2024	17:31:52	<2	-1	200 - Fruity
11807	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	37:22.0	6/11/2024	17:37:22	ND		
11796	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	45:39.0	6/11/2024	17:45:39	<2	4	100 - Floral
11808	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	51:25.0	6/11/2024	17:51:25	ND		
11791	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	59:19.0	6/11/2024	17:59:19	ND		
11793	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	15:48.0	6/11/2024	17:15:48	ND		
11809	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	07:25.0	6/11/2024	17:07:25	ND		
11801	OS009	Castaic Union School District Building	34.4411358	-118.626827	12:20.0	6/11/2024	16:12:20	ND		
11805	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	22:23.0	6/11/2024	15:22:23	2	1	400 - Earthy

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	nr	Sunny	None	2.3		90.3	32	28.77	2024-06-24 12:22 CDT		
506 - Garbage	Also smells putrid	Sunny	None	0.9	SW	80	55	28.78	2024-06-24 12:22 CDT		
		Sunny	None	3.9	S	77.3	45	28.72	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	1.7	SW	67.5	67.8	28.86	2024-06-24 12:22 CDT		
506 - Garbage	SN: 9202374	Sunny	None	1.7	SW	75.9	48.8	28.82	2024-06-24 12:22 CDT		
506 - Garbage	NR90201542; sample collected	Sunny	None	0		74.8	68.8	28.74	2024-06-24 12:22 CDT		
		Sunny	None	2.6	S	82.8	48.4	28.6	2024-06-24 12:22 CDT		
105 - Fragrant	Intermittent honeysuckle odor	Sunny	None	2.8	SW	89.7	37.8	28.55	2024-06-24 12:22 CDT		
		Sunny	None	3.6	SW	84.5	47.1	28.56	2024-06-24 12:22 CDT		
	Intermittent Spoiled fruit odor	Sunny	None	2.8	SW	84.9	43	28.59	2024-06-24 12:22 CDT		
		Sunny	None	1.4	SW	83.8	49.1	28.59	2024-06-24 12:22 CDT		
105 - Fragrant	Intermittent honeysuckle odor	Sunny	None	2	W	83.6	51	28.44	2024-06-24 12:22 CDT		
		Sunny	None	1.5	W	81.2	53.3	28.45	2024-06-24 12:22 CDT		
		Sunny	None	6.3	S	82.6	43.9	28.6	2024-06-24 12:22 CDT		
		Sunny	None	5.2	N	87.4	41.1	28.66	2024-06-24 12:22 CDT		
		Sunny	None	2.3	SW	85.8	46.6	28.72	2024-06-24 12:22 CDT		
		Sunny	None	4.1	SW	91.5	34.6	28.75	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	2.1	S	90.5	35.6	28.71	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11800	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	11:06.0	6/11/2024	15:11:06	ND		
11772	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	23:10.0	6/11/2024	11:23:10	<2	3	100 - Floral
11779	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	54:13.0	6/11/2024	11:54:13	30	2	400 - Earthy
11780	OS009	Castaic Union School District Building	34.4411358	-118.626827	06:07.0	6/11/2024	11:06:07	ND		
11761	OS002	Lincoln Ave near intersection with Chiquita Canyon Rd	34.438443	-118.657207	33:39.0	6/11/2024	8:33:39	<2	-2	500 - Offensive
11755	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	12:23.0	6/11/2024	8:12:23	7	-5	500 - Offensive
11875	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	13:50.0	6/12/2024	16:13:50	ND		
11869	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	35:40.0	6/12/2024	16:35:40	ND		
11868	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	53:37.0	6/12/2024	17:53:37	ND		
11867	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	18:44.0	6/12/2024	15:18:44	ND		
11866	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	49:21.0	6/12/2024	15:49:21	<2	-7	500 - Offensive
11865	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	01:27.0	6/12/2024	16:01:27	ND		
11864	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	32:43.0	6/12/2024	15:32:43	<2	5	100 - Floral
11862	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	28:35.0	6/12/2024	16:28:35	ND		
11860	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	27:22.0	6/12/2024	17:27:22	15	6	100 - Floral
11859	OS015	Front of Castaic Elementary School	34.47172	-118.63062	09:43.0	6/12/2024	17:09:43	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	2.8	S	91.2	34.2	28.67	2024-06-24 12:22 CDT		
105 - Fragrant	Grassy, flower	Sunny	None	6.4	S	82.4	34.5	28.83	2024-06-24 12:22 CDT		
	Yard work being done down wind about a block away. Can hear the weed whackers. Multiple houses in the area with yard workers present.										
406 - Grassy	Sample collected	Sunny	None	5	S	81.8	49.7	28.61	2024-06-24 12:22 CDT		
		Sunny	None	2.2	S	84.6	47.5	28.83	2024-06-24 12:22 CDT		
506 - Garbage	SN: 9202374	Sunny	None	1.4	SE	70.1	52.9	28.77	2024-06-24 12:22 CDT		
506 - Garbage	Garbage odor; SN: 9202374; sample collected	Sunny	None	0.8	NW	70	59.8	28.73	2024-06-24 12:22 CDT		
		Sunny	None	2.1	S	88.7	32.2	28.62	2024-06-24 12:22 CDT		
		Sunny	None	2.9	S	86.1	35	28.79	2024-06-24 12:22 CDT		
		Sunny	None	2.9	SE	85.6	35	28.85	2024-06-24 12:22 CDT		
		Sunny	None	2.8	S	89	34.9	28.76	2024-06-24 12:22 CDT		
508 - Manure	Livestock odor	Sunny	None	1.3	S	87.3	30.6	28.52	2024-06-24 12:22 CDT		
		Sunny	None	6.2	SW	85	30.8	28.66	2024-06-24 12:22 CDT		
105 - Fragrant		Sunny	None	1.5	S	87.4	30.4	28.75	2024-06-24 12:22 CDT		
		Sunny	None	2.1	S	87.9	33.1	28.68	2024-06-24 12:22 CDT		
105 - Fragrant	Honeysuckle/jasmine odor; sample collected	Sunny	None	0.9	S	88.6	35	28.82	2024-06-24 12:22 CDT		
		Sunny	None	1.7	S	84.5	38	28.56	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11851	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	28:44.0	6/12/2024	15:28:44	ND		
11850	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	29:11.0	6/12/2024	16:29:11	ND		
11849	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	15:29.0	6/12/2024	16:15:29	ND		
11848	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	49:57.0	6/12/2024	15:49:57	4	-4	500 - Offensive
12226	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	32:28.0	6/17/2024	14:32:28	<2	-6	500 - Offensive
12227	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	16:51.0	6/17/2024	14:16:51	2	-7	500 - Offensive
12246	OS009	Castaic Union School District Building	34.4411358	-118.626827	11:20.0	6/17/2024	14:11:20	<2	-1	500 - Offensive
12237	OS009	Castaic Union School District Building	34.4411358	-118.626827	08:34.0	6/17/2024	14:08:34	<2	-5	500 - Offensive
12231	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	01:22.0	6/17/2024	14:01:22	ND		
12248	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	54:57.0	6/17/2024	13:54:57	ND		



primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	1.6	SW	92.2	33.6	28.82	2024-06-24 12:22 CDT		
		Sunny	None	2	SW	89.7	33.8	28.68	2024-06-24 12:22 CDT		
		Sunny	None	4.2	SW	87.1	35.2	28.62	2024-06-24 12:22 CDT		
508 - Manure	Livestock upwind	Sunny	None	1.4	S	87.8	37.9	28.53	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	9.4	S	82.3	43.7	28.66	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	3.7	SW	82.5	40.8	28.58	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	4.4	SW	84.7	40.4	28.63	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	4.4	W	82.3	38.3	28.62	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	2.1	SW	86.9	37.6	28.45	2024-06-24 12:22 CDT		
		Sunny	None	4.3	SW	81	44	28.51	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12230	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	51:57.0	6/17/2024	13:51:57	ND		
12245	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	33:00.0	6/17/2024	13:33:00	ND		
12133	OS009	Castaic Union School District Building	34.4411358	-118.626827	18:30.0	6/16/2024	11:18:30	<2	-5	400 - Earthy
12121	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	08:28.0	6/16/2024	12:08:28	<2	-5	400 - Earthy
12138	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	11:41.0	6/16/2024	12:11:41	2	-3	400 - Earthy
12140	OS015	Front of Castaic Elementary School	34.47172	-118.63062	57:24.0	6/16/2024	11:57:24	2	-5	400 - Earthy

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	4.4	SW	84.7	38.4	28.52	2024-06-24 12:22 CDT		
		Sunny	None	1.8	S	82.4	45.3	28.47	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.7	W	84.3	29.9	28.67	2024-06-24 12:22 CDT		
414 - Smokey	Smoke and fried food odors; occasional floral; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.2	SW	85.9	31.5	28.66	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.6	SW	85.6	33.4	28.67	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.5	SW	83.5	34.3	28.42	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12130	OS015	Front of Castaic Elementary School	34.47172	-118.63062	54:28.0	6/16/2024	11:54:28	<2	-5	400 - Earthy
12139	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	45:31.0	6/16/2024	11:45:31	7	-4	400 - Earthy
12137	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	34:05.0	6/16/2024	11:34:05	7	-4	500 - Offensive
12132	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	25:58.0	6/16/2024	10:25:58	4	-5	400 - Earthy
12111	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	20:43.0	6/16/2024	10:20:43	7	-4	400 - Earthy
12124	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	15:47.0	6/16/2024	10:15:47	<2	-5	400 - Earthy
12126	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	10:08.0	6/16/2024	11:10:08	<2	-5	400 - Earthy

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4.6	S	83.66	34.6	28.41	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	8.5	SW	82.9	34.5	28.47	2024-06-24 12:22 CDT		
506 - Garbage		Hazy	None	1.8	W	85.2	31.7	28.7	2024-06-24 12:22 CDT		
414 - Smokey		Hazy	None	4.2	S	83.9	32.1	28.52	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.5	S	76.5	34.7	28.47	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.1	SW	79.7	31.6	28.47	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4.5	S	83	30.8	28.49	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12143	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	13:28.0	6/16/2024	11:13:28	2	-5	400 - Earthy
12113	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	56:09.0	6/16/2024	10:56:09	2	-4	400 - Earthy
12122	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	53:09.0	6/16/2024	10:53:09	<2	-6	500 - Offensive
12118	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	44:57.0	6/16/2024	10:44:57	60	-5	400 - Earthy
12125	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	41:52.0	6/16/2024	10:41:52	7	-5	400 - Earthy

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	7.4	SW	83.4	30.3	28.5	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.5	S	85.8	28.7	28.63	2024-06-24 12:22 CDT		
506 - Garbage	Smoky and garbage odors; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3	SW	83.9	30.4	28.62	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.4	SW	81.6	32.7	28.55	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.3	SW	82.7	32.8	28.55	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12114	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	29:02.0	6/16/2024	10:29:02	7	-5	400 - Earthy
12115	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	11:53.0	6/16/2024	10:11:53	2	-4	400 - Earthy
12127	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	08:13.0	6/16/2024	10:08:13	<2	-5	400 - Earthy
12116	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	57:45.0	6/16/2024	9:57:45	15	-5	400 - Earthy
12120	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	55:23.0	6/16/2024	9:55:23	15	-4	400 - Earthy



primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	6.1	S	82	34.6	28.52	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.9	W	81.4	38	28.51	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.2	SW	80.5	36.6	28.5	2024-06-24 12:22 CDT		
414 - Smokey	sample collected; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.2	E	79.4	37.8	28.37	2024-06-24 12:22 CDT		
414 - Smokey	Sample collected; Manure/livestock odors as well; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.7	W	78.7	35.8	28.37	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12117	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	42:11.0	6/16/2024	9:42:11	7	-5	400 - Earthy
12134	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	39:15.0	6/16/2024	9:39:15	4	-3	400 - Earthy
12112	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	33:52.0	6/16/2024	9:33:52	<2	-4	400 - Earthy
12131	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	28:00.0	6/16/2024	9:28:00	<2	-2	400 - Earthy
12119	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	20:20.0	6/16/2024	9:20:20	<2	-4	400 - Earthy

primary_odor	comments	cloud_cover	precip-itation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
414 - Smokey	Sample collected.The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4.5	SE	86.1	40.9	28.59	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.3	SE	80.8	37.5	28.59	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4	SE	80.4	42.3	28.63	2024-06-24 12:22 CDT		
414 - Smokey	Intermittent smoky, grassy, and celery odors detected; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.3	SE	80.1	42.2	28.63	2024-06-24 12:22 CDT		
414 - Smokey	NR90201542; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.6	SW	76.1	45.3	28.53	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12128	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	12:04.0	6/16/2024	9:12:04	<2	-2	400 - Earthy
12202	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	21:45.0	6/17/2024	7:21:45	ND		
12269	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	54:51.0	6/17/2024	16:54:51	ND		
12267	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	46:18.0	6/17/2024	16:46:18	ND		
12265	OS009	Castaic Union School District Building	34.4411358	-118.626827	00:47.0	6/17/2024	17:00:47	15	-4	500 - Offensive
12264	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	38:02.0	6/17/2024	16:38:02	ND		
12262	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	30:41.0	6/17/2024	16:30:41	ND		
12260	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	43:13.0	6/17/2024	16:43:13	ND		
12259	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	27:52.0	6/17/2024	16:27:52	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
414 - Smokey	SN: 9202374; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3	S	77	47	28.6	2024-06-24 12:22 CDT		
	SN: 9202374; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	4.6	SW	63	62.8	28.59	2024-06-24 12:22 CDT		
		Sunny	None	1.5	SW	79.7	46.1	28.43	2024-06-24 12:22 CDT		
		Sunny	None	4.1	SW	83.9	43.9	28.48	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	4.8	SW	80.9	46.3	28.59	2024-06-24 12:22 CDT		
		Sunny	None	4.7	SW	80.4	46	28.44	2024-06-24 12:22 CDT		
		Sunny	None	3.2	W	83.4	41.7	28.44	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	1.9	SW	83.1	40.3	28.48	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	6	W	81.7	40.2	28.44	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12258	OS009	Castaic Union School District Building	34.4411358	-118.626827	58:33.0	6/17/2024	16:58:33	4	-5	500 - Offensive
12253	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	52:00.0	6/17/2024	16:52:00	ND		
12252	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	34:49.0	6/17/2024	16:34:49	<2	5	100 - Floral
12235	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	21:05.0	6/17/2024	10:21:05	ND		
12225	OS015	Front of Castaic Elementary School	34.47172	-118.63062	50:24.0	6/17/2024	9:50:24	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	4.7	SW	82.8	40	28.59	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	5.1	SW	82.4	40	28.42	2024-06-24 12:22 CDT		
105 - Fragrant	Laundry odor; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	3.7	SW	81.3	41.3	28.44	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	4.6	S	77.2	45.3	28.57	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.7	SW	78	43.8	28.41	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12220	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	09:39.0	6/17/2024	10:09:39	ND		
11846	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	06:24.0	6/12/2024	16:06:24	ND		
11845	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	44:22.0	6/12/2024	16:44:22	ND		
11844	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	37:20.0	6/12/2024	15:37:20	ND		
11843	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	49:23.0	6/12/2024	9:49:23	<2	-5	500 - Offensive
11842	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	00:11.0	6/12/2024	10:00:11	ND		
11840	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	43:18.0	6/12/2024	11:43:18	ND		
11839	OS015	Front of Castaic Elementary School	34.47172	-118.63062	35:19.0	6/12/2024	10:35:19	ND		
11838	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	58:25.0	6/12/2024	12:58:25	ND		
11837	OS009	Castaic Union School District Building	34.4411358	-118.626827	57:00.0	6/12/2024	11:57:00	<2	-3	500 - Offensive
11836	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	51:26.0	6/12/2024	12:51:26	2	-3	500 - Offensive
11834	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	58:08.0	6/12/2024	10:58:08	4	6	100 - Floral
11833	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	35:14.0	6/12/2024	12:35:14	ND		
11831	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	16:02.0	6/12/2024	11:16:02	ND		
11830	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	25:03.0	6/12/2024	12:25:03	ND		
11829	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	32:26.0	6/12/2024	11:32:26	ND		
11828	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	14:17.0	6/12/2024	12:14:17	ND		
11827	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	53:25.0	6/12/2024	12:53:25	ND		



primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	7.6	S	74.2	46.8	28.46	2024-06-24 12:22 CDT		
		Sunny	None	6.4	W	86	36.4	28.64	2024-06-24 12:22 CDT		
		Sunny	None	4	SW	87.4	34.3	28.79	2024-06-24 12:22 CDT		
		Sunny	None	3.3	S	87.6	37.8	28.76	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	1	S	76	49.2	28.82	2024-06-24 12:22 CDT		
		Sunny	None	2	SE	79.6	42.7	28.73	2024-06-24 12:22 CDT		
		Sunny	None	1	SE	80.4	52.5	28.79	2024-06-24 12:22 CDT		
		Sunny	None	1.4	SW	73.7	42.1	28.64	2024-06-24 12:22 CDT		
		Sunny	None	5.9	SW	82.6	44.1	28.71	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	2.2	S	84.9	46.1	28.89	2024-06-24 12:22 CDT		
508 - Manure	Intermittent livestock odor	Sunny	None	5.2	SW	82.5	47.4	28.67	2024-06-24 12:22 CDT		
105 - Fragrant		Sunny	None	2.1	S	83.6	40.1	28.9	2024-06-24 12:22 CDT		
		Sunny	None	1.2	SW	84.8	46.5	28.67	2024-06-24 12:22 CDT		
		Sunny	None	3.2	SE	78.9	40.2	28.92	2024-06-24 12:22 CDT		
		Sunny	None	1.4	SW	850.5	55.5	28.73	2024-06-24 12:22 CDT		
		Sunny	None	2	SW	81.8	41	28.84	2024-06-24 12:22 CDT		
		Sunny	None	1.2	W	85.3	44.1	28.72	2024-06-24 12:22 CDT		
		Sunny	None	1.6	SW	83.3	54.9	28.57	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11825	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	21:30.0	6/12/2024	11:21:30	2	2	400 - Earthy
11824	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	29:43.0	6/12/2024	12:29:43	ND		
11823	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	40:36.0	6/12/2024	12:40:36	2	1	400 - Earthy
11822	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	02:28.0	6/12/2024	13:02:28	ND		
11821	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	14:23.0	6/12/2024	12:14:23	ND		
11820	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	34:42.0	6/12/2024	11:34:42	ND		
11819	OS009	Castaic Union School District Building	34.4411358	-118.626827	03:40.0	6/12/2024	12:03:40	ND		
11818	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	03:09.0	6/12/2024	10:03:09	2	-1	500 - Offensive
11817	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	51:54.0	6/12/2024	9:51:54	2	-4	500 - Offensive
11816	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	26:04.0	6/12/2024	9:26:04	4	-4	500 - Offensive
11815	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	51:41.0	6/12/2024	10:51:41	ND		
11814	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	06:16.0	6/12/2024	11:06:16	2	4	100 - Floral
11813	OS002	Lincoln Ave near intersection with Chiquita Canyon Rd	34.438443	-118.657207	35:55.0	6/12/2024	9:35:55	7	-5	500 - Offensive
11812	OS015	Front of Castaic Elementary School	34.47172	-118.63062	37:13.0	6/12/2024	10:37:13	ND		
11806	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	16:49.0	6/11/2024	17:16:49	ND		
11803	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	30:57.0	6/11/2024	16:30:57	ND		
11799	OS002	Lincoln Ave near intersection with Chiquita Canyon Rd	34.438443	-118.657207	03:29.0	6/11/2024	17:03:29	ND		
11798	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	53:15.0	6/11/2024	16:53:15	ND		
11795	OS015	Front of Castaic Elementary School	34.47172	-118.63062	15:24.0	6/11/2024	14:15:24	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
406 - Grassy		Sunny	None	2.1	S	77.6	61.7	28.94	2024-06-24 12:22 CDT		
		Sunny	None	2.3	S	82.6	50.5	28.74	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	1.8	S	83	49.2	28.68	2024-06-24 12:22 CDT		
		Sunny	None	3.7	W	80.8	53.1	28.71	2024-06-24 12:22 CDT		
		Sunny	None	2.7	S	85.6	72	28.72	2024-06-24 12:22 CDT		
		Sunny	None	0.7	S	80.9	59	28.85	2024-06-24 12:22 CDT		
		Sunny	None	2.1	S	82.8	50	28.89	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	2	SE	79.6	42.7	28.73	2024-06-24 12:22 CDT		
506 - Garbage	Also smells putrid, rancid	Sunny	None	0.8	S	83.6	46.2	28.82	2024-06-24 12:22 CDT		
506 - Garbage	NR90201542	Sunny	None	0		74.2	65.7	28.84	2024-06-24 12:22 CDT		
		Sunny	None	1.6	S	85.3	48.7	28.73	2024-06-24 12:22 CDT		
111 - Rose-like		Sunny	None	1.3	S	81.9	61.1	28.9	2024-06-24 12:22 CDT		
506 - Garbage	A sample was collected. Also smells putrid, rancid.	Sunny	None	1.1	S	78.1	64.3	28.86	2024-06-24 12:22 CDT		
		Sunny	None	1.8	S	73.1	60.8	28.65	2024-06-24 12:22 CDT		
		Sunny	None	3.9	N	88	43.9	28.67	2024-06-24 12:22 CDT		
		Sunny	None	0.7	SW	94.2	51.3	28.6	2024-06-24 12:22 CDT		
		Sunny	None	4.3	S	88.3	38.2	28.72	2024-06-24 12:22 CDT		
		Sunny	None	5.1	SW	87.1	39.1	28.67	2024-06-24 12:22 CDT		
		Sunny	None	3.5	S	90.3	41.9	28.53	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11792	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	36:30.0	6/11/2024	14:36:30	<2	-1	700 - Chemical
11790	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	53:34.0	6/11/2024	14:53:34	4	4	700 - Chemical
11789	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	31:37.0	6/11/2024	16:31:37	ND		
11788	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	58:15.0	6/11/2024	16:58:15	ND		
11787	OS009	Castaic Union School District Building	34.4411358	-118.626827	19:44.0	6/11/2024	16:19:44	ND		
11786	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	32:20.0	6/11/2024	15:32:20	2	1	400 - Earthy
11785	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	18:56.0	6/11/2024	15:18:56	ND		
11784	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	45:54.0	6/11/2024	15:45:54	<2	2	400 - Earthy
11783	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	47:05.0	6/11/2024	14:47:05	ND		
11782	OS015	Front of Castaic Elementary School	34.47172	-118.63062	23:27.0	6/11/2024	14:23:27	ND		
11781	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	58:17.0	6/11/2024	14:58:17	15	4	700 - Chemical
11778	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	40:37.0	6/11/2024	11:40:37	2	2	400 - Earthy
11777	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	47:06.0	6/11/2024	10:47:06	30	-3	500 - Offensive
11776	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	11:11.0	6/11/2024	12:11:11	ND		
11775	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	24:00.0	6/11/2024	11:24:00	<2	1	400 - Earthy
11774	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	30:55.0	6/11/2024	10:30:55	ND		
11773	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	48:50.0	6/11/2024	11:48:50	2		400 - Earthy
11771	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	07:32.0	6/11/2024	12:07:32	ND		
11770	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	16:01.0	6/11/2024	10:16:01	ND		
11769	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	38:54.0	6/11/2024	10:38:54	2	-1	500 - Offensive

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
722 - Tar/Asphalt	Intermittent asphalt odor when cars pass	Sunny	None	5.8	S	88	38.1	28.64	2024-06-24 12:22 CDT		
708 - Grease	Fried chicken odor	Sunny	None	3.3	S	88	41.1	28.79	2024-06-24 12:22 CDT		
		Sunny	None	0.7	SW	91	41.6	28.59	2024-06-24 12:22 CDT		
		Sunny	None	3.3	W	88.4	47	28.68	2024-06-24 12:22 CDT		
		Sunny	None	6.4		88.5	40.7	28.77	2024-06-24 12:22 CDT		
406 - Grassy	Smells grassy. Standing near some bushes and a tree	Sunny	None	2	SW	87.8	44.8	28.74	2024-06-24 12:22 CDT		
		Sunny	None	5.3	SW	86.4	44.5	28.66	2024-06-24 12:22 CDT		
414 - Smokey	Smells like barbecue.	Sunny	None	2.2	SW	89.2	43.9	28.8	2024-06-24 12:22 CDT		
		Sunny	None	3.3	S	88.7	45.2	28.57	2024-06-24 12:22 CDT		
		Sunny	None	5.3	S	87.5	41.8	28.55	2024-06-24 12:22 CDT		
708 - Grease	Smells like fried chicken!	Sunny	None	1.8	S	91.4	48.4	28.81	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	2.4	S	83	62.7	28.81	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	2.6	S	85.9	46.7	28.65	2024-06-24 12:22 CDT		
		Sunny	None	1.2	SW	86.8	47.4	28.71	2024-06-24 12:22 CDT		
417 - Woody		Sunny	None	2.9	S	79.4	56.4	28.83	2024-06-24 12:22 CDT		
		Sunny	None	1.2	S	79	53.3	28.77	2024-06-24 12:22 CDT		
406 - Grassy	Landscapers nearby on hillside	Sunny	None	7	SE	80.7	45.3	28.61	2024-06-24 12:22 CDT		
		Sunny	None	1.8	S	89.2	38.5	28.69	2024-06-24 12:22 CDT		
		Sunny	None	2.6	S	81.7	36.6	28.76	2024-06-24 12:22 CDT		
506 - Garbage	Intermittent garbage and sweet molasses odors	Sunny	None	1.7	SE	83.3	42	28.62	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11768	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	38:21.0	6/11/2024	11:38:21	2	4	100 - Floral
11767	OS009	Castaic Union School District Building	34.4411358	-118.626827	59:05.0	6/11/2024	10:59:05	ND		
11766	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	49:33.0	6/11/2024	8:49:33	<2	-2	500 - Offensive
11765	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	23:05.0	6/11/2024	9:23:05	2	-2	500 - Offensive
11764	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	49:56.0	6/11/2024	8:49:56	2	-3	500 - Offensive
11762	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	12:37.0	6/11/2024	10:12:37	ND		
11760	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	05:00.0	6/11/2024	9:05:00	2	-1	500 - Offensive
11759	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	33:29.0	6/11/2024	9:33:29	ND		
11758	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	13:06.0	6/11/2024	10:13:06	ND		
11757	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	56:37.0	6/11/2024	9:56:37	ND		
11756	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	22:40.0	6/11/2024	9:22:40	<2	-3	500 - Offensive
11908	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	23:43.0	6/13/2024	10:23:43	ND		
11891	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	15:14.0	6/13/2024	10:15:14	ND		
11893	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	04:40.0	6/13/2024	10:04:40	<2	4	100 - Floral
11905	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	42:42.0	6/13/2024	7:42:42	2	-6	500 - Offensive
12023	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	45:53.0	6/14/2024	16:45:53	ND		
12022	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	39:46.0	6/14/2024	15:39:46	ND		
12021	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	16:08.0	6/14/2024	16:16:08	ND		
12020	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	32:56.0	6/14/2024	16:32:56	<2	3	400 - Earthy

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
105 - Fragrant		Sunny	None	3.2	S	86.8	48.1	28.81	2024-06-24 12:22 CDT		
		Sunny	None	3.7	S	80.5	46.6	28.8	2024-06-24 12:22 CDT		
506 - Garbage	SN: 90202374	Sunny	None	3.2	S	71.7	55.1	28.76	2024-06-24 12:22 CDT		
506 - Garbage	NR90201542	Sunny	None	1.1	SE	84.1	50.1	28.5	2024-06-24 12:22 CDT		
506 - Garbage	NR90201542	Sunny	None	1	E	76	53	28.73	2024-06-24 12:22 CDT		
	SN: 90202374	Sunny	None	3.5	S	85.1	46.3	28.65	2024-06-24 12:22 CDT		
506 - Garbage	SN: 90202374 (intermittent floral odor)	Sunny	None	2.5	S	76.3	49.2	28.64	2024-06-24 12:22 CDT		
	SN: 9202374	Sunny	None	2	NE	86.3	43.7	28.49	2024-06-24 12:22 CDT		
	NR90201542	Sunny	None	1.4	S	79.6	54.6	28.65	2024-06-24 12:22 CDT		
	NR90201542	Sunny	None	0	NE	82.5	53.3	28.61	2024-06-24 12:22 CDT		
508 - Manure	Intermittent horse manure and livestock odor; SN: 9202374	Sunny	None	1.1	NE	85.8	49.6	28.49	2024-06-24 12:22 CDT		
		Sunny	None	2.6	W	77.2	51.9	28.8	2024-06-24 12:22 CDT		
		Sunny	None	1.8	SE	75.2	57.1	28.8	2024-06-24 12:22 CDT		
103 - Coconut		Sunny	None	2.8	SE	77.7	54.1	28.85	2024-06-24 12:22 CDT		
506 - Garbage		Overcast	None	1.3	N	68	70.7	28.69	2024-06-24 12:22 CDT		
		Sunny	None	4.6	S	87.8	37.7	28.57	2024-06-24 12:22 CDT		
		Sunny	None	2	SE	90.7	38	28.7	2024-06-24 12:22 CDT		
		Sunny	None	1.7	W	89.2	37.6	28.65	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	6.8	S	88.5	37.1	28.74	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12019	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	54:54.0	6/14/2024	15:54:54	<2	2	100 - Floral
12016	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	00:15.0	6/14/2024	16:00:15	ND		
12015	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	06:56.0	6/14/2024	16:06:56	ND		
12014	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	24:01.0	6/14/2024	16:24:01	ND		
12013	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	10:57.0	6/14/2024	16:10:57	ND		
12012	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	28:55.0	6/14/2024	16:28:55	ND		
12011	OS002	Lincoln Ave near intersection with Chiquita Canyon Rd	34.438443	-118.657207	36:32.0	6/14/2024	15:36:32	ND		
12009	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	35:59.0	6/14/2024	16:35:59	ND		
12008	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	55:21.0	6/14/2024	15:55:21	ND		
12007	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	18:50.0	6/14/2024	16:18:50	ND		
12006	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	42:25.0	6/14/2024	15:42:25	<2	0	100 - Floral
12005	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	29:15.0	6/14/2024	15:29:15	ND		
12004	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	48:43.0	6/14/2024	16:48:43	ND		
12003	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	02:59.0	6/14/2024	16:02:59	ND		
12002	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	13:03.0	6/14/2024	15:13:03	ND		
11998	OS015	Front of Castaic Elementary School	34.47172	-118.63062	34:06.0	6/14/2024	14:34:06	ND		
11997	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	09:43.0	6/14/2024	15:09:43	ND		
11992	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	50:41.0	6/14/2024	14:50:41	4	7	100 - Floral
11991	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	55:10.0	6/14/2024	14:55:10	ND		



primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
105 - Fragrant	Jasmine or honeysuckle odor	Sunny	None	5.9	W	86.1	41.7	28.48	2024-06-24 12:22 CDT		
		Sunny	None	2.3	W	88	38.5	28.61	2024-06-24 12:22 CDT		
		Sunny	None	1.3	W	87.4	38.1	28.58	2024-06-24 12:22 CDT		
		Sunny	None	2	S	89.4	39	28.66	2024-06-24 12:22 CDT		
		Sunny	None	3.8	NW	87.9	40.2	28.59	2024-06-24 12:22 CDT		
		Sunny	None	0.9	S	90.4	38.9	28.67	2024-06-24 12:22 CDT		
		Sunny	None	1.2	SW	94.2	37	28.75	2024-06-24 12:22 CDT		
		Sunny	None	4.9	SW	88.6	38.8	28.75	2024-06-24 12:22 CDT		
		Sunny	None	5.8	W	83.5	42.1	28.49	2024-06-24 12:22 CDT		
		Sunny	None	3.1	SW	90.1	40.7	28.64	2024-06-24 12:22 CDT		
112 - Spicy	Smells like peppercorn	Sunny	None	1.7	N	90.1	42.7	28.71	2024-06-24 12:22 CDT		
		Sunny	None	4.2	W	89.7	40.2	28.72	2024-06-24 12:22 CDT		
		Sunny	None	4.9	S	89.5	34.9	28.58	2024-06-24 12:22 CDT		
		Sunny	None	0.7	W	88.5	41.5	28.62	2024-06-24 12:22 CDT		
		Sunny	None	6.6	S	88.5	39.6	28.59	2024-06-24 12:22 CDT		
		Sunny	None	1.4	S	90.5	37.4	28.54	2024-06-24 12:22 CDT		
		Sunny	None	5.3	S	90	35.2	28.61	2024-06-24 12:22 CDT		
105 - Fragrant	Floral jasmine odor interspersed with fried food	Sunny	None	1.3	S	90.7	39.2	28.77	2024-06-24 12:22 CDT		
		Sunny	None	1.5	S	90.2	38.8	28.8	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11990	OS015	Front of Castaic Elementary School	34.47172	-118.63062	39:36.0	6/14/2024	14:39:36	ND		
11989	OS009	Castaic Union School District Building	34.4411358	-118.626827	22:38.0	6/14/2024	14:22:38	15	-7	500 - Offensive
11973	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	14:14.0	6/14/2024	8:14:14	2	-6	500 - Offensive
11972	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	03:50.0	6/14/2024	8:03:50	4	-6	500 - Offensive
11971	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	57:01.0	6/14/2024	9:57:01	ND		
11754	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	15:01.0	6/11/2024	9:15:01	<2	-2	500 - Offensive
11753	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	41:25.0	6/11/2024	8:41:25	4	-3	500 - Offensive

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	1.8	S	89.6	40.2	28.55	2024-06-24 12:22 CDT		
506 - Garbage	Also smells putrid, rancid	Sunny	None	5.7	W	89.2	38	28.82	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	2	S	67.4	61.5	28.72	2024-06-24 12:22 CDT		
506 - Garbage	Garbage and manure/livestock odors	Sunny	None	0.8	S	72.8	52.7	28.5	2024-06-24 12:22 CDT		
		Sunny	None	0	S	82	47	28.865	2024-06-24 12:22 CDT		
506 - Garbage	NR90201542	Sunny	None	1	E	84.5	49.6	28.65	2024-06-24 12:22 CDT		
506 - Garbage	NR90201542	Sunny	None	1	E	75.8	53.9	28.77	2024-06-24 12:22 CDT		

**APPENDIX H. NASAL RANGER ® DATA FROM JUNE 2024  
ODOR STUDY**

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12268	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	22:53.0	6/17/2024	16:22:53	ND		
12255	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	20:03.0	6/17/2024	16:20:03	<2	5	100 - Floral
12263	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	13:12.0	6/17/2024	16:13:12	ND		
12254	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	10:17.0	6/17/2024	16:10:17	ND		
12266	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	57:51.0	6/17/2024	15:57:51	ND		
12257	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	55:01.0	6/17/2024	15:55:01	ND		
12261	OS002	Lincoln Ave near intersection with Chiquita Canyon Rd	34.438443	-118.657207	42:59.0	6/17/2024	15:42:59	ND		
12270	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	38:49.0	6/17/2024	15:38:49	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	7.3	W	83	41	28.3	2024-06-24 12:22 CDT		
105 - Fragrant	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	5.3	W	81.5	44.9	28.3	2024-06-24 12:22 CDT		
		Sunny	None	1.2	SW	82.9	45.9	28.41	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	0.8	SE	88	37.1	28.39	2024-06-24 12:22 CDT		
		Sunny	None	4	SW	85.3	44.7	28.52	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	4.6	SE	82.7	36.3	28.51	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	4	SW	85	37.2	28.56	2024-06-24 12:22 CDT		
		Sunny	None	2.5	N	89.1	37.1	28.53	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12256	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	34:58.0	6/17/2024	15:34:58	ND		
12250	OS015	Front of Castaic Elementary School	34.47172	-118.63062	01:40.0	6/17/2024	15:01:40	ND		
12251	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	50:11.0	6/17/2024	14:50:11	ND		
12244	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	38:24.0	6/17/2024	14:38:24	ND		
12249	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	19:44.0	6/17/2024	14:19:44	2	-4	500 - Offensive
12229	OS015	Front of Castaic Elementary School	34.47172	-118.63062	58:13.0	6/17/2024	14:58:13	ND		
12233	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	46:48.0	6/17/2024	14:46:48	ND		
12241	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	29:28.0	6/17/2024	13:29:28	ND		
12243	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	04:15.0	6/17/2024	14:04:15	ND		
12247	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	25:46.0	6/17/2024	13:25:46	ND		
12228	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	22:05.0	6/17/2024	13:22:05	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	4.6	W	82.7	40.3	28.52	2024-06-24 12:22 CDT		
		Sunny	None	2	SW	84.1	42.9	28.37	2024-06-24 12:22 CDT		
		Sunny	None	5.5	SW	83.1	41.7	28.41	2024-06-24 12:22 CDT		
		Sunny	None	9.6	S	81.1	44.9	28.65	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	4.6	SW	83.3	42.8	28.59	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	2	SW	85.6	39.8	28.35	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	4.9	S	84.6	39.5	28.43	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	2.8	S	81.1	43.2	28.46	2024-06-24 12:22 CDT		
		Sunny	None	2.2	SW	85.2	39.7	28.46	2024-06-24 12:22 CDT		
		Sunny	None	1.5	S	82.8	41.5	28.43	2024-06-24 12:22 CDT		
		Sunny	None	3.1	SE	85	44.1	28.43	2024-06-24 12:22 CDT		



id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12219	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	03:42.0	6/17/2024	11:03:42	ND		
12236	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	00:30.0	6/17/2024	11:00:30	<2	3	100 - Floral
12216	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	53:13.0	6/17/2024	10:53:13	ND		
12240	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	48:50.0	6/17/2024	10:48:50	ND		
12217	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	41:01.0	6/17/2024	10:41:01	ND		
12221	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	33:45.0	6/17/2024	10:33:45	ND		
12232	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	29:11.0	6/17/2024	10:29:11	ND		
12242	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	11:10.0	6/17/2024	13:11:10	ND		
12234	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	06:39.0	6/17/2024	13:06:39	<2	0	100 - Floral

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	7.8	S	81.3	40.4	28.51	2024-06-24 12:22 CDT		
110 - Perfumy	Laundry odors; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	5	S	77.2	38.9	28.49	2024-06-24 12:22 CDT		
		Sunny	None	2.2	W	82.1	40.7	28.35	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	3.2	W	79.2	36.5	28.35	2024-06-24 12:22 CDT		
		Sunny	None	5.4	SW	76.9	44.1	28.57	2024-06-24 12:22 CDT		
		Sunny	None	5	SW	78	41.8	28.71	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region. The	Sunny	None	4.7	S	79.4	38	28.61	2024-06-24 12:22 CDT		
		Sunny	None	0.9	S	85.5	41.4	28.64	2024-06-24 12:22 CDT		
105 - Fragrant	Intermittent garbage odors; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	2.4	SE	84.2	40.2	28.64	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12239	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	36:40.0	6/17/2024	10:36:40	ND		
12224	OS009	Castaic Union School District Building	34.4411358	-118.626827	20:55.0	6/17/2024	9:20:55	ND		
12222	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	24:56.0	6/17/2024	10:24:56	ND		
12209	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	00:37.0	6/17/2024	9:00:37	<2	-4	500 - Offensive
12198	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	00:31.0	6/17/2024	9:00:31	<2	-2	500 - Offensive
12193	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	42:14.0	6/17/2024	8:42:14	7	-4	500 - Offensive
12212	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	33:36.0	6/17/2024	8:33:36	<2	-7	500 - Offensive

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	3.5	S	79.6	37.1	28.58	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.6	W	70.3	53.2	28.67	2024-06-24 12:22 CDT		
		Sunny	None	5.8	SW	78.6	44	28.58	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	2.8	S	72	49	28.58	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.6	SW	72.6	52.3	28.56	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.5	SW	71.6	52.3	28.64	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	1.1	S	67.8	58.7	28.67	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12197	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	27:34.0	6/17/2024	8:27:34	ND		
12207	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	22:39.0	6/17/2024	8:22:39	<2	1	400 - Earthy
12201	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	18:03.0	6/17/2024	8:18:03	ND		
12223	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	11:47.0	6/17/2024	9:11:47	ND		
12210	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	08:21.0	6/17/2024	9:08:21	<2	-4	500 - Offensive

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.5	SW	73.5	48.4	28.52	2024-06-24 12:22 CDT		
406 - Grassy	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	2.2	SW	72.4	52.6	28.52	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.1	W	70.6	52.8	28.5	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.7	W	74.1	49.1	28.5	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	1.1	W	71.1	45.2	28.5	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12215	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	13:47.0	6/17/2024	8:13:47	<2	4	100 - Floral
12214	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	42:09.0	6/17/2024	7:42:09	<2	5	100 - Floral
12200	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	37:12.0	6/17/2024	7:37:12	<2	1	300 - Vegetable
12203	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	31:58.0	6/17/2024	7:31:58	<2	2	300 - Vegetable
12205	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	03:03.0	6/17/2024	8:03:03	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
105 - Fragrant	Jasmine odor; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	2.3	W	70.2	54.2	28.52	2024-06-24 12:22 CDT		
105 - Fragrant	Jasmine; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	2.7	S	65.3	62.2	28.58	2024-06-24 12:22 CDT		
301 - Celery	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.3	E	64.9	57.7	28.73	2024-06-24 12:22 CDT		
310 - Onion	Chicken broth odor; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	1.6	SE	66.3	56.6	28.63	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	5.8	W	65.3	67.9	28.36	2024-06-24 12:22 CDT		



id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12208	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	51:11.0	6/17/2024	7:51:11	ND		
12175	OS009	Castaic Union School District Building	34.4411358	-118.626827	49:56.0	6/16/2024	18:49:56	4	-6	500 - Offensive
12192	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	31:10.0	6/16/2024	18:31:10	ND		
12177	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	26:32.0	6/16/2024	18:26:32	ND		
12183	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	23:16.0	6/16/2024	18:23:16	<2	4	100 - Floral

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	3.5	S	69.2	58.3	28.49	2024-06-24 12:22 CDT		
506 - Garbage	Also smells putrid. The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.7	W	79.9	38.1	28.63	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	0	SW	84	39.3	28.51	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.5	S	80.2	38.5	28.48	2024-06-24 12:22 CDT		
105 - Fragrant	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.6	S	78.7	38.1	28.48	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12188	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	15:49.0	6/16/2024	18:15:49	ND		
12185	OS009	Castaic Union School District Building	34.4411358	-118.626827	49:48.0	6/16/2024	18:49:48	7	-7	500 - Offensive
12172	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	45:32.0	6/16/2024	18:45:32	ND		
12184	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	42:17.0	6/16/2024	18:42:17	ND		
12180	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	34:23.0	6/16/2024	18:34:23	ND		
12171	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	18:58.0	6/16/2024	18:18:58	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	0.8	SW	81.6	41.6	28.47	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.9	W	79.6	38.4	28.63	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.4	W	79.9	41.9	28.45	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.6	SW	82.2	36.6	28.45	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	0	SW	81.3	42.4	28.51	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.7	NW	81.4	37.5	28.45	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12179	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	09:35.0	6/16/2024	18:09:35	2	-5	500 - Offensive
12187	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	06:33.0	6/16/2024	18:06:33	<2	-4	500 - Offensive
12174	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	59:39.0	6/16/2024	17:59:39	<2	5	400 - Earthy
12191	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	17:50.0	6/16/2024	17:17:50	ND		
12170	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	00:16.0	6/16/2024	17:00:16	<2	2	700 - Chemical
12154	OS009	Castaic Union School District Building	34.4411358	-118.626827	57:29.0	6/16/2024	15:57:29	<2	-5	500 - Offensive

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
508 - Manure	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.2	W	81.5	37.5	28.32	2024-06-24 12:22 CDT		
508 - Manure	Floral and smoky odors as well; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	0	W	83.9	38.7	28.32	2024-06-24 12:22 CDT		
414 - Smokey	Smells like barbecue.	Hazy	None	1.7	W	81.1	40.3	28.43	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.4	W	84	37.3	28.54	2024-06-24 12:22 CDT		
708 - Grease	Smells like fried chicken.The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4.9	SW	84.6	40.5	28.63	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.1	SW	84	34.6	28.62	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12161	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	53:12.0	6/16/2024	15:53:12	ND		
12167	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	43:33.0	6/16/2024	15:43:33	ND		
12147	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	40:12.0	6/16/2024	15:40:12	ND		
12145	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	29:30.0	6/16/2024	15:29:30	ND		
12146	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	05:45.0	6/16/2024	15:05:45	ND		
12142	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	52:57.0	6/16/2024	12:52:57	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.3	W	86.1	39	28.46	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.8	W	84.8	37.8	28.52	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.6	SW	83.5	36.6	28.52	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4.4	SW	83.9	38.3	28.46	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4	S	84.4	38.2	28.43	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	9.1	SW	86.7	33.2	28.51	2024-06-24 12:22 CDT		



id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12148	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	50:11.0	6/16/2024	12:50:11	<2	4	100 - Floral
12144	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	27:52.0	6/16/2024	12:27:52	ND		
12150	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	23:33.0	6/16/2024	12:23:33	ND		
12129	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	39:04.0	6/16/2024	11:39:04	<2	-5	400 - Earthy
12141	OS009	Castaic Union School District Building	34.4411358	-118.626827	18:55.0	6/16/2024	11:18:55	7	-4	500 - Offensive
12218	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	38:10.0	6/17/2024	9:38:10	ND		

primary_odor	comments	cloud_cover	precip-itation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
105 - Fragrant	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	11.2	SW	84.6	32.7	28.5	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.2	SW	83.8	36.2	28.58	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4.6	SW	87.4	36	28.52	2024-06-24 12:22 CDT		
414 - Smokey		Hazy	None	8.7	S	83.7	31.2	28.47	2024-06-24 12:22 CDT		
506 - Garbage	Garbage smell is intermittent, trading off with fecal and smokey smells. The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.3	W	85.4	30.1	28.67	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	6.2	SW	70.9	53.4	28.7	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12213	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	06:44.0	6/17/2024	10:06:44	ND		
12211	OS015	Front of Castaic Elementary School	34.47172	-118.63062	47:13.0	6/17/2024	9:47:13	<2	1	400 - Earthy
12206	OS009	Castaic Union School District Building	34.4411358	-118.626827	17:08.0	6/17/2024	9:17:08	7	-7	500 - Offensive
12204	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	33:08.0	6/17/2024	9:33:08	<2	-6	500 - Offensive
12199	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	27:32.0	6/17/2024	7:27:32	ND		
12196	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	46:34.0	6/17/2024	7:46:34	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	7.6	S	73.4	43.9	28.45	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	3.6	S	74.8	40.9	28.41	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	6.1	W	70.9	51.9	28.673	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	4.7	S	71.1	48.4	28.7	2024-06-24 12:22 CDT		
	NR90201542 The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4.4	SW	62.7	65.6	28.58	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.5	E	68.5	53.5	28.58	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12195	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	07:04.0	6/17/2024	8:07:04	ND		
12194	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	55:49.0	6/17/2024	7:55:49	ND		
12190	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	56:37.0	6/16/2024	18:56:37	<2	1	400 - Earthy
12189	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	47:00.0	6/16/2024	17:47:00	ND		
12186	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	55:26.0	6/16/2024	17:55:26	2	5	400 - Earthy

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.4	W	65.7	56.7	28.36	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.7	S	66.9	54.5	28.46	2024-06-24 12:22 CDT		
406 - Grassy	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.8	W	80.8	33.8	28.59	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	6	N	81.2	37.2	28.54	2024-06-24 12:22 CDT		
414 - Smokey	Smells like grilled meat; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.3	SW	83.6	38.9	28.42	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12182	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	34:18.0	6/16/2024	17:34:18	ND		
12181	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	23:31.0	6/16/2024	17:23:31	ND		
12178	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	50:11.0	6/16/2024	17:50:11	ND		
12176	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	37:21.0	6/16/2024	17:37:21	ND		
12173	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	00:37.0	6/16/2024	19:00:37	ND		
12169	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	20:01.0	6/16/2024	16:20:01	<2	-2	500 - Offensive

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4	S	82.7	34.6	28.59	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.3	SW	85.5	35	28.55	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.4	NW	85.1	32.9	28.55	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.5	S	88.8	32.1	28.59	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2	W	80	39.2	28.59	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4.5	S	84.7	38	28.66	2024-06-24 12:22 CDT		



id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12168	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	29:06.0	6/16/2024	16:29:06	ND		
12166	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	09:51.0	6/16/2024	16:09:51	4	-4	500 - Offensive
12165	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	25:09.0	6/16/2024	15:25:09	ND		
12164	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	33:29.0	6/16/2024	15:33:29	ND		
12163	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	09:55.0	6/16/2024	15:09:55	ND		
12162	OS015	Front of Castaic Elementary School	34.47172	-118.63062	41:48.0	6/16/2024	16:41:48	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	7	S	84.4	39	28.42	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.8	W	85.7	37.6	28.59	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	0.7	W	88.6	37.7	28.34	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3	W	86.7	37.9	28.47	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4	W	85.5	38.8	28.43	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.5	W	83	37.2	28.37	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12160	OS009	Castaic Union School District Building	34.4411358	-118.626827	01:00.0	6/16/2024	16:01:00	<2	-2	500 - Offensive
12159	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	50:15.0	6/16/2024	15:50:15	ND		
12158	OS015	Front of Castaic Elementary School	34.47172	-118.63062	38:18.0	6/16/2024	16:38:18	ND		
12157	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	06:24.0	6/16/2024	16:06:24	2	-5	500 - Offensive
12156	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	26:20.0	6/16/2024	16:26:20	<2	3	300 - Vegetable

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.6	W	86.3	36.2	28.63	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.3	SW	84.9	36.2	28.45	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	8.5	S	88.2	37.4	28.37	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.8	S	87	34.3	28.58	2024-06-24 12:22 CDT		
301 - Celery	Mustard smell; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	6.2	S	84.2	37.4	28.41	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12155	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	39:48.0	6/16/2024	12:39:48	ND		
12153	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	31:58.0	6/16/2024	12:31:58	ND		
12152	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	16:47.0	6/16/2024	16:16:47	<2	-7	500 - Offensive
12151	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	17:57.0	6/16/2024	15:17:57	30	-8	500 - Offensive
12149	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	49:46.0	6/16/2024	16:49:46	<2	-2	700 - Chemical

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2	S	87.4	31	28.57	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4.3	S	85.2	33.4	28.61	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.4	S	83.8	37.7	28.66	2024-06-24 12:22 CDT		
508 - Manure	Livestock odors; chickens heard on nearby property; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.8	SW	85.4	37.5	28.33	2024-06-24 12:22 CDT		
708 - Grease	Fried chicken; tacos (taco stand set up in parking lot) and floral odors; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region	Hazy	None	6.3	S	83.1	35.5	28.64	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12136	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	42:55.0	6/16/2024	12:42:55	ND		
12135	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	35:24.0	6/16/2024	12:35:24	ND		
12123	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	29:40.0	6/16/2024	11:29:40	<2	-5	500 - Offensive
12110	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	38:53.0	6/15/2024	18:38:53	<2	-2	400 - Earthy
12078	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	12:12.0	6/15/2024	17:12:12	4	-2	500 - Offensive
12086	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	53:56.0	6/15/2024	15:53:56	ND		
12072	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	49:09.0	6/15/2024	15:49:09	ND		
12089	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	43:45.0	6/15/2024	15:43:45	<2	2	400 - Earthy
12070	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	39:50.0	6/15/2024	15:39:50	ND		
12096	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	35:37.0	6/15/2024	15:35:37	2	3	400 - Earthy
12074	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	21:10.0	6/15/2024	15:21:10	ND		
12090	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	14:04.0	6/15/2024	15:14:04	<2	4	100 - Floral

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.3	SW	87	33.3	28.58	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.3	SW	86.4	35.9	28.62	2024-06-24 12:22 CDT		
506 - Garbage	Garbage and smoke odors; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2	S	86	31.8	28.7	2024-06-24 12:22 CDT		
414 - Smokey	Wildfire in Gorman, CA; occasional floral odor	Hazy	None	1.8	S	88	31.9	28.51	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	3.3	S	91	28.4	28.7	2024-06-24 12:22 CDT		
		Sunny	None	3.3	S	92.6	28.8	28.47	2024-06-24 12:22 CDT		
		Sunny	None	4	S	93.4	27.7	28.6	2024-06-24 12:22 CDT		
406 - Grassy	Grass and laundry odors	Sunny	None	5.8	S	92.4	27.1	28.58	2024-06-24 12:22 CDT		
		Sunny	None	1.8	W	97.2	25.8	28.64	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	3	SW	95.8	25.5	28.62	2024-06-24 12:22 CDT		
		Sunny	None	5.6	S	93.7	32.3	28.54	2024-06-24 12:22 CDT		
105 - Fragrant		Sunny	None	6.3	S	93.7	28.5	28.53	2024-06-24 12:22 CDT		



id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12077	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	02:12.0	6/15/2024	15:02:12	<2	-2	500 - Offensive
12092	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	59:04.0	6/15/2024	14:59:04	<2	-6	500 - Offensive
12064	OS009	Castaic Union School District Building	34.4411358	-118.626827	54:04.0	6/15/2024	12:54:04	ND		
12055	OS009	Castaic Union School District Building	34.4411358	-118.626827	51:30.0	6/15/2024	12:51:30	ND		
12063	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	46:50.0	6/15/2024	12:46:50	ND		
12058	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	44:08.0	6/15/2024	12:44:08	ND		
12069	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	30:58.0	6/15/2024	15:30:58	ND		
12091	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	27:30.0	6/15/2024	15:27:30	ND		
12061	OS015	Front of Castaic Elementary School	34.47172	-118.63062	53:36.0	6/15/2024	11:53:36	<2	2	400 - Earthy
12068	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	37:48.0	6/15/2024	12:37:48	2	-3	500 - Offensive
12060	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	34:02.0	6/15/2024	12:34:02	<2	-4	500 - Offensive
12067	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	26:18.0	6/15/2024	12:26:18	<2	-2	500 - Offensive
12057	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	23:32.0	6/15/2024	12:23:32	<2	-4	500 - Offensive
12065	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	17:05.0	6/15/2024	12:17:05	<2	-4	500 - Offensive
12059	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	13:49.0	6/15/2024	12:13:49	ND		
12062	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	07:59.0	6/15/2024	12:07:59	7	-3	700 - Chemical
12056	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	04:37.0	6/15/2024	12:04:37	2	2	300 - Vegetable
12066	OS015	Front of Castaic Elementary School	34.47172	-118.63062	57:48.0	6/15/2024	11:57:48	ND		
12033	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	39:18.0	6/15/2024	11:39:18	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
506 - Garbage		Sunny	None	5.5	SW	99.5	25	28.68	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	6.1	SW	96.2	24.6	28.65	2024-06-24 12:22 CDT		
		Sunny	None	5.3	W	95.8	23.6	28.72	2024-06-24 12:22 CDT		
		Sunny	None	5.3	W	96	23.5	28.71	2024-06-24 12:22 CDT		
		Sunny	None	1.7	S	95.5	23	28.55	2024-06-24 12:22 CDT		
		Sunny	None	2.2	S	95	21.6	28.55	2024-06-24 12:22 CDT		
		Sunny	None	3.6	W	97.1	29.7	28.61	2024-06-24 12:22 CDT		
		Sunny	None	3.6	SW	97	29.7	28.6	2024-06-24 12:22 CDT		
417 - Woody		Sunny	None	2	NW	93.3	20.3	28.48	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	3.2	W	95.1	21.9	28.61	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	1.4	SW	95.3	20.5	28.6	2024-06-24 12:22 CDT		
506 - Garbage	Also smell laundry and wood	Sunny	None	2.1	SE	93.5	17.4	28.76	2024-06-24 12:22 CDT		
506 - Garbage	Occasional garbage odors, in addition to laundry and floral odors	Sunny	None	4	SE	94.4	18.6	28.75	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	4.6	S	94.1	17.8	28.53	2024-06-24 12:22 CDT		
		Sunny	None	3.5	S	94.7	18.1	28.52	2024-06-24 12:22 CDT		
702 - Car Exhaust	A few cars driving right by at time of sampling	Sunny	None	1.2	N	94.8	17.2	28.73	2024-06-24 12:22 CDT		
309 - Tomato	Pizza smells; Pizza Hut in shopping center	Sunny	None	2.8	N	94	21.3	28.73	2024-06-24 12:22 CDT		
		Sunny	None	2.1	N	91.3	19.2	28.49	2024-06-24 12:22 CDT		
		Sunny	None	3.9	NW	92.8	18.4	28.59	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12040	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	38:05.0	6/15/2024	11:38:05	ND		
12039	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	22:54.0	6/15/2024	11:22:54	60	-7	500 - Offensive
12043	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	20:32.0	6/15/2024	11:20:32	30	-8	500 - Offensive
12035	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	13:26.0	6/15/2024	11:13:26	ND		
12041	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	09:55.0	6/15/2024	11:09:55	ND		
12038	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	05:49.0	6/15/2024	11:05:49	ND		
12047	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	02:07.0	6/15/2024	11:02:07	ND		
12037	OS002	Lincoln Ave near intersection with Chiquita Canyon Rd	34.438443	-118.657207	58:09.0	6/15/2024	10:58:09	ND		
12036	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	48:50.0	6/15/2024	10:48:50	ND		
12044	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	48:48.0	6/15/2024	10:48:48	ND		
12034	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	39:08.0	6/15/2024	10:39:08	2	4	100 - Floral
12031	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	23:47.0	6/15/2024	10:23:47	ND		
12042	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	20:35.0	6/15/2024	10:20:35	ND		
12046	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	18:46.0	6/15/2024	9:18:46	<2	6	100 - Floral
12053	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	30:00.0	6/15/2024	9:30:00	ND		
12029	OS015	Front of Castaic Elementary School	34.47172	-118.63062	09:52.0	6/15/2024	9:09:52	<2	-1	400 - Earthy
12109	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	29:33.0	6/15/2024	18:29:33	<2	-2	400 - Earthy
12108	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	47:13.0	6/15/2024	18:47:13	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	3	W	94.1	17.8	28.59	2024-06-24 12:22 CDT		
508 - Manure		Sunny	None	2.2	E	93.6	20.3	28.45	2024-06-24 12:22 CDT		
508 - Manure	Chickens heard on property next door; sample collected	Sunny	None	2.5	W	93.5	27.5	28.44	2024-06-24 12:22 CDT		
		Sunny	None	2.8	S	93.3	19.1	28.56	2024-06-24 12:22 CDT		
		Sunny	None	2.8	S	91.5	18	28.55	2024-06-24 12:22 CDT		
		Sunny	None	3.3	E	100.5	15.7	28.68	2024-06-24 12:22 CDT		
		Sunny	None	3.8	N	95.5	16.8	28.66	2024-06-24 12:22 CDT		
		Sunny	None	2	E	100.2	16.5	28.72	2024-06-24 12:22 CDT		
		Sunny	None	1.4	N	103.6	16.3	28.69	2024-06-24 12:22 CDT		
		Sunny	None	2.1	W	94.5	18.1	28.67	2024-06-24 12:22 CDT		
111 - Rose-like		Sunny	None	5.4	SW	91.5	18.2	28.62	2024-06-24 12:22 CDT		
		Sunny	None	2.5	N	91.9	19.4	28.73	2024-06-24 12:22 CDT		
		Sunny	None	4.3	N	91	17.6	28.72	2024-06-24 12:22 CDT		
105 - Fragrant	Jasmine; grass	Sunny	None	2.2	N	85.6	18	28.78	2024-06-24 12:22 CDT		
		Sunny	None	5.3	N	85.7	19.8	28.81	2024-06-24 12:22 CDT		
406 - Grassy	NR90201542	Sunny	None	2	W	84.9	20.2	28.54	2024-06-24 12:22 CDT		
414 - Smokey	Wildfire reported in Gorman, CA	Hazy	None	0	S	90.2	35.2	28.59	2024-06-24 12:22 CDT		
		Hazy	None	1.9	S	87.6	33.2	28.45	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12107	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	19:59.0	6/15/2024	18:19:59	ND		
12106	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	54:00.0	6/15/2024	18:54:00	ND		
12105	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	52:56.0	6/15/2024	17:52:56	ND		
12104	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	58:04.0	6/15/2024	18:58:04	ND		
12103	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	23:56.0	6/15/2024	18:23:56	2	1	400 - Earthy
12102	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	40:42.0	6/15/2024	17:40:42	7	-4	500 - Offensive
12101	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	33:16.0	6/15/2024	18:33:16	ND		
12100	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	42:13.0	6/15/2024	18:42:13	2	-2	400 - Earthy
12099	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	50:35.0	6/15/2024	18:50:35	ND		
12098	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	57:09.0	6/15/2024	17:57:09	ND		
12097	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	17:45.0	6/15/2024	17:17:45	ND		
12095	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	38:53.0	6/15/2024	16:38:53	4	5	700 - Chemical
12094	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	04:17.0	6/15/2024	16:04:17	<2	5	100 - Floral
12093	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	55:24.0	6/15/2024	16:55:24	ND		
12088	OS015	Front of Castaic Elementary School	34.47172	-118.63062	28:55.0	6/15/2024	16:28:55	ND		
12087	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	37:22.0	6/15/2024	17:37:22	15	-7	500 - Offensive
12085	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	12:41.0	6/15/2024	16:12:41	ND		
12084	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	08:44.0	6/15/2024	17:08:44	<2	-6	500 - Offensive
12083	OS009	Castaic Union School District Building	34.4411358	-118.626827	28:13.0	6/15/2024	17:28:13	ND		
12082	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	59:13.0	6/15/2024	16:59:13	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Hazy	None	2.6	W	88.8	35	28.58	2024-06-24 12:22 CDT		
		Hazy	None	1.1	S	87.9	36.5	28.5	2024-06-24 12:22 CDT		
		Sunny	None	2.3	S	90.1	31	28.63	2024-06-24 12:22 CDT		
		Hazy	None	0		86.7	37.5	28.51	2024-06-24 12:22 CDT		
406 - Grassy		Hazy	None	2.2	SW	87.8	38	28.58	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	1.1	W	90.8	29.8	28.49	2024-06-24 12:22 CDT		
		Hazy	None	0		87.4	42.1	28.58	2024-06-24 12:22 CDT		
414 - Smokey	Smells like wildfire. Fire in Gorman, CA nearby.	Hazy	None	1.7	S	87.6	34.8	28.51	2024-06-24 12:22 CDT		
		Hazy	None	1.7	SE	86.1	37.5	28.46	2024-06-24 12:22 CDT		
		Sunny	None	1.6	SW	91	31.3	28.63	2024-06-24 12:22 CDT		
		Sunny	None	5.1	SW	90	28.4	28.55	2024-06-24 12:22 CDT		
708 - Grease	Fried chicken odor	Sunny	None	1.3	S	92.9	27.7	28.67	2024-06-24 12:22 CDT		
105 - Fragrant	Alternating floral and manure odors	Sunny	None	4.8	SW	92	30.7	28.37	2024-06-24 12:22 CDT		
		Sunny	None	6.8	S	90	27.4	28.46	2024-06-24 12:22 CDT		
		Sunny	None	5.4	SW	90.7	30	28.42	2024-06-24 12:22 CDT		
506 - Garbage	Sample collected	Sunny	None	1.7	S	90	30.3	28.48	2024-06-24 12:22 CDT		
		Sunny	None	5.2	S	90.7	29.5	28.52	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	3.3	SE	90.8	27.8	28	2024-06-24 12:22 CDT		
		Sunny	None	4.7	SW	91.4	27.9	28.66	2024-06-24 12:22 CDT		
		Sunny	None	3.7	S	89.6	29.7	28.47	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12081	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	22:14.0	6/15/2024	17:22:14	ND		
12080	OS009	Castaic Union School District Building	34.4411358	-118.626827	32:12.0	6/15/2024	17:32:12	ND		
12079	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	42:56.0	6/15/2024	16:42:56	<2	2	400 - Earthy
12076	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	57:49.0	6/15/2024	15:57:49	ND		
12075	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	15:51.0	6/15/2024	16:15:51	ND		
12073	OS015	Front of Castaic Elementary School	34.47172	-118.63062	32:10.0	6/15/2024	16:32:10	ND		
12071	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	07:13.0	6/15/2024	16:07:13	<2	-3	500 - Offensive
12054	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	39:59.0	6/15/2024	9:39:59	ND		
12052	OS015	Front of Castaic Elementary School	34.47172	-118.63062	05:34.0	6/15/2024	9:05:34	<2	-2	300 - Vegetable
12051	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	36:18.0	6/15/2024	10:36:18	<2	7	100 - Floral
12050	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	50:35.0	6/15/2024	9:50:35	ND		
12049	OS002	Lincoln Ave near intersection with Chiquita Canyon Rd	34.438443	-118.657207	53:21.0	6/15/2024	10:53:21	ND		
12048	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	00:33.0	6/15/2024	10:00:33	ND		
12045	OS009	Castaic Union School District Building	34.4411358	-118.626827	15:13.0	6/15/2024	10:15:13	ND		
12032	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	54:49.0	6/15/2024	9:54:49	ND		
12030	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	33:45.0	6/15/2024	9:33:45	2	1	400 - Earthy
12028	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	23:41.0	6/15/2024	9:23:41	ND		
12027	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	43:30.0	6/15/2024	9:43:30	ND		
12026	OS009	Castaic Union School District Building	34.4411358	-118.626827	15:33.0	6/15/2024	10:15:33	ND		
12025	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	06:49.0	6/15/2024	10:06:49	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	2.8	SW	90.8	35.3	28.56	2024-06-24 12:22 CDT		
		Sunny	None	2.8	W	91.3	28.2	28.67	2024-06-24 12:22 CDT		
414 - Smokey	Smells like fried chicken	Sunny	None	3.1	S	91.9	29	28.68	2024-06-24 12:22 CDT		
		Sunny	None	1.4	S	92.1	30.5	28.48	2024-06-24 12:22 CDT		
		Sunny	None	2.8	E	93.4	30.3	28.52	2024-06-24 12:22 CDT		
		Sunny	None	4	S	91	29.2	28.42	2024-06-24 12:22 CDT		
508 - Manure	Also smells like flowers	Sunny	None	4.4	W	94.6	28.8	28.38	2024-06-24 12:22 CDT		
		Sunny	None	6	N	85.2	17.7	28.57	2024-06-24 12:22 CDT		
310 - Onion	SN: 90202374	Sunny	None	2	W	84.1	19.6	28.53	2024-06-24 12:22 CDT		
105 - Fragrant	Jasmine	Sunny	None	4.4	S	90.8	19.7	28.61	2024-06-24 12:22 CDT		
		Sunny	None	2.3	W	91	20.9	28.65	2024-06-24 12:22 CDT		
		Sunny	None	2	N	94	17.2	28.71	2024-06-24 12:22 CDT		
		Sunny	None	5.4	NE	88.1	19.7	28.59	2024-06-24 12:22 CDT		
		Sunny	None	4.1	NE	90.7	17.1	28.77	2024-06-24 12:22 CDT		
		Sunny	None	0.8	NE	95.7	41	28.66	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	5	N	85.6	20	28.82	2024-06-24 12:22 CDT		
		Sunny	None	5.1	NE	85	18.9	28.79	2024-06-24 12:22 CDT		
		Sunny	None	6.8	N	90.1	17.5	28.58	2024-06-24 12:22 CDT		
		Sunny	None	1.2	SE	91.2	17.5	28.77	2024-06-24 12:22 CDT		
		Sunny	None	1.8	NE	87.7	21.6	28.6	2024-06-24 12:22 CDT		



id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12010	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	58:34.0	6/14/2024	16:58:34	15	-4	500 - Offensive
12024	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	56:03.0	6/14/2024	16:56:03	4	-5	500 - Offensive
12017	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	36:10.0	6/14/2024	15:36:10	<2	2	400 - Earthy
12018	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	25:42.0	6/14/2024	15:25:42	ND		
11999	OS009	Castaic Union School District Building	34.4411358	-118.626827	20:17.0	6/14/2024	14:20:17	4	-7	500 - Offensive
11988	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	12:29.0	6/14/2024	14:12:29	ND		
11996	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	08:33.0	6/14/2024	14:08:33	ND		
11986	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	56:28.0	6/14/2024	13:56:28	ND		
12000	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	52:29.0	6/14/2024	13:52:29	<2	-1	400 - Earthy
11987	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	47:21.0	6/14/2024	13:47:21	ND		
11995	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	44:13.0	6/14/2024	13:44:13	ND		
11983	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	36:12.0	6/14/2024	13:36:12	ND		
12001	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	32:50.0	6/14/2024	13:32:50	<2	1	400 - Earthy
11994	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	22:46.0	6/14/2024	13:22:46	15	-6	500 - Offensive
11981	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	55:01.0	6/14/2024	10:55:01	ND		
11977	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	51:54.0	6/14/2024	10:51:54	<2	5	100 - Floral
11976	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	43:28.0	6/14/2024	10:43:28	<2	3	400 - Earthy
11984	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	25:58.0	6/14/2024	13:25:58	<2	-4	500 - Offensive

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
506 - Garbage		Sunny	None	4.5	S	88.9	39.2	28.82	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	4.4	S	89.8	37	28.81	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	3.4	S	90.8	37.6	28.74	2024-06-24 12:22 CDT		
		Sunny	None	9.2	SE	88.8	39.9	28.71	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	1.3	SW	90.2	39.4	28.8	2024-06-24 12:22 CDT		
		Sunny	None	3.2	W	91.4	66.3	28.63	2024-06-24 12:22 CDT		
		Sunny	None	0.8	S	92.8	38	28.62	2024-06-24 12:22 CDT		
		Sunny	None	1.6	SW	90.6	41.4	28.77	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	1.5	S	91	37.4	28.77	2024-06-24 12:22 CDT		
		Sunny	None	5.9	SW	87.1	39.1	28.69	2024-06-24 12:22 CDT		
		Sunny	None	4.5	S	88.9	39	28.99	2024-06-24 12:22 CDT		
		Sunny	None	1.3	SW	88.1	41.4	28.65	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	4.4	S	88.2	40.6	28.64	2024-06-24 12:22 CDT		
508 - Manure	Livestock and manure odors; chickens can be heard on neighboring property	Sunny	None	3.6	W	86.5	40.1	28.61	2024-06-24 12:22 CDT		
		Sunny	None	2.1	S	86.1	63.8	28.77	2024-06-24 12:22 CDT		
105 - Fragrant		Sunny	None	2.6	SW	85.9	40.9	28.76	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	3.8	S	80.7	44.6	20.6	2024-06-24 12:22 CDT		
508 - Manure		Sunny	None	0.9	W	87.7	41.9	28.59	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11985	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	15:46.0	6/14/2024	13:15:46	ND		
11993	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	11:11.0	6/14/2024	13:11:11	ND		
11978	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	03:20.0	6/14/2024	11:03:20	ND		
11974	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	59:41.0	6/14/2024	10:59:41	ND		
11979	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	47:22.0	6/14/2024	10:47:22	<2	5	100 - Floral
11975	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	34:28.0	6/14/2024	10:34:28	<2	0	400 - Earthy
11982	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	22:14.0	6/14/2024	10:22:14	4	1	400 - Earthy
11958	OS015	Front of Castaic Elementary School	34.47172	-118.63062	11:01.0	6/14/2024	10:11:01	ND		
11980	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	39:17.0	6/14/2024	10:39:17	2	1	400 - Earthy
11947	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	36:00.0	6/14/2024	8:36:00	2	-2	500 - Offensive
11968	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	14:46.0	6/14/2024	7:14:46	ND		
11943	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	53:07.0	6/13/2024	16:53:07	<2	4	100 - Floral
11941	OS015	Front of Castaic Elementary School	34.47172	-118.63062	33:07.0	6/13/2024	16:33:07	ND		
11925	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	33:40.0	6/13/2024	15:33:40	<2	-5	500 - Offensive
11922	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	36:11.0	6/13/2024	14:36:11	ND		
11938	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	30:50.0	6/13/2024	14:30:50	ND		
11924	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	27:13.0	6/13/2024	14:27:13	ND		
11937	OS009	Castaic Union School District Building	34.4411358	-118.626827	17:33.0	6/13/2024	14:17:33	<2	-1	400 - Earthy
11919	OS009	Castaic Union School District Building	34.4411358	-118.626827	13:55.0	6/13/2024	14:13:55	<2	-2	400 - Earthy

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	4.1	S	87.7	40.8	28.62	2024-06-24 12:22 CDT		
		Sunny	None	4.1	S	86.8	42.1	28.61	2024-06-24 12:22 CDT		
		Sunny	None	2.2	S	84.5	46.1	28.7	2024-06-24 12:22 CDT		
		Sunny	None	9.4	S	83.1	38.9	28.7	2024-06-24 12:22 CDT		
103 - Coconut		Sunny	None	1.2	SW	88.1	52.9	28.81	2024-06-24 12:22 CDT		
414 - Smokey		Sunny	None	1.4	S	80.9	44.6	28.77	2024-06-24 12:22 CDT		
414 - Smokey	Smells like someone's cooking	Sunny	None	0.9	S	84.5	38.8	28.87	2024-06-24 12:22 CDT		
		Sunny	None	2.1	E	79.4	39.1	28.61	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	1.6	SW	83.9	45.6	28.77	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	1.9	S	69.5	65.3	28.68	2024-06-24 12:22 CDT		
	SN: 90202374	Overcast	Fog	0.8	NW	61.7	68.8	28.8	2024-06-24 12:22 CDT		
110 - Perfumy	Laundry/dryer sheet odor	Sunny	None	2	S	83.6	34.5	28	2024-06-24 12:22 CDT		
		Sunny	None	3.2	S	80.9	35.2	28.61	2024-06-24 12:22 CDT		
508 - Manure	Occasional livestock odors	Sunny	None	2.1	SW	80.6	41	28.57	2024-06-24 12:22 CDT		
		Sunny	None	3.5	S	82.6	42.8	28.67	2024-06-24 12:22 CDT		
		Sunny	None	0.8	S	84.9	49.1	28.74	2024-06-24 12:22 CDT		
		Sunny	None	6.7	S	79.8	42	28.73	2024-06-24 12:22 CDT		
414 - Smokey		Sunny	None	4.1	SW	84.6	39.7	28.89	2024-06-24 12:22 CDT		
414 - Smokey	Alternating smoky and garbage odors	Sunny	None	3.7	S	86.2	35.9	28.87	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11912	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	07:19.0	6/13/2024	14:07:19	ND		
11920	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	03:00.0	6/13/2024	14:03:00	ND		
11929	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	55:54.0	6/13/2024	13:55:54	ND		
11913	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	52:29.0	6/13/2024	13:52:29	ND		
11930	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	43:45.0	6/13/2024	13:43:45	<2	2	400 - Earthy
11923	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	43:38.0	6/13/2024	13:43:38	<2	2	400 - Earthy
11928	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	34:39.0	6/13/2024	13:34:39	ND		
11926	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	31:28.0	6/13/2024	13:31:28	ND		
11939	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	22:44.0	6/13/2024	13:22:44	<2	1	700 - Chemical
11918	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	22:16.0	6/13/2024	13:22:16	<2	-4	700 - Chemical
11935	OS015	Front of Castaic Elementary School	34.47172	-118.63062	10:13.0	6/13/2024	13:10:13	ND		
11914	OS015	Front of Castaic Elementary School	34.47172	-118.63062	06:02.0	6/13/2024	13:06:02	ND		
11910	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	03:16.0	6/13/2024	11:03:16	2	1	400 - Earthy
11909	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	02:18.0	6/13/2024	11:02:18	<2	-5	700 - Chemical
11896	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	09:32.0	6/13/2024	10:09:32	ND		
11901	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	47:45.0	6/13/2024	9:47:45	<2	2	400 - Earthy
11911	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	48:17.0	6/13/2024	10:48:17	ND		
11890	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	28:40.0	6/13/2024	10:28:40	ND		
11887	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	51:45.0	6/13/2024	9:51:45	2	2	400 - Earthy

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	3.6	W	85.3	40	28.7	2024-06-24 12:22 CDT		
		Sunny	None	2.5	S	84.8	40	28.7	2024-06-24 12:22 CDT		
		Sunny	None	2.5	SW	84.5	40.9	28.77	2024-06-24 12:22 CDT		
		Sunny	None	3.5	S	83.8	40.7	28.79	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	0.9	S	85.4	43.5	28.85	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	1.4	S	85.1	45	28.84	2024-06-24 12:22 CDT		
		Sunny	None	9.2	S	81	43.4	28.68	2024-06-24 12:22 CDT		
		Sunny	None	5.9	S	82.3	40.4	28.68	2024-06-24 12:22 CDT		
708 - Grease	Smells like fried chicken	Sunny	None	2.9	S	85	39.8	28.88	2024-06-24 12:22 CDT		
708 - Grease	Fried food odors interspersed with occasional floral	Sunny	None	4.4	S	83.5	41.1	28.88	2024-06-24 12:22 CDT		
		Sunny	None	2.3	SE	81.2	45.4	28.63	2024-06-24 12:22 CDT		
		Sunny	None	1.4	S	82.7	40.2	28.63	2024-06-24 12:22 CDT		
406 - Grassy	Also smell putrid garbage, and Mexican food	Sunny	None	2	S	78.1	51.1	28.85	2024-06-24 12:22 CDT		
708 - Grease	Intermittent mixture of grassy, garbage, and fried food odors	Sunny	None	3.2	S	75.8	55.6	28.85	2024-06-24 12:22 CDT		
		Sunny	None	4.3	S	70.1	61.1	28.8	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	2.5	S	69	56.5	28.72	2024-06-24 12:22 CDT		
		Sunny	None	1.8	S	75.5	64.2	28.68	2024-06-24 12:22 CDT		
		Sunny	None	2.5	S	76.6	50.6	28.81	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	1	E	72	58.3	28.73	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11889	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	20:11.0	6/13/2024	9:20:11	<2	1	400 - Earthy
11885	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	31:56.0	6/13/2024	8:31:56	2	-2	500 - Offensive
11906	OS015	Front of Castaic Elementary School	34.47172	-118.63062	08:34.0	6/13/2024	7:08:34	4	-6	500 - Offensive
11895	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	26:35.0	6/13/2024	7:26:35	<2	-4	500 - Offensive
11970	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	26:19.0	6/14/2024	9:26:19	ND		
11969	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	08:34.0	6/14/2024	9:08:34	ND		
11967	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	47:12.0	6/14/2024	7:47:12	4	-6	500 - Offensive
11966	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	57:38.0	6/14/2024	8:57:38	ND		
11965	OS009	Castaic Union School District Building	34.4411358	-118.626827	38:54.0	6/14/2024	9:38:54	ND		
11964	OS002	Lincoln Ave near intersection with Chiquita Canyon Rd	34.438443	-118.657207	24:48.0	6/14/2024	7:24:48	7	-6	500 - Offensive
11963	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	46:24.0	6/14/2024	8:46:24	4	5	100 - Floral
11962	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	32:16.0	6/14/2024	8:32:16	4	-6	500 - Offensive
11961	OS015	Front of Castaic Elementary School	34.47172	-118.63062	10:16.0	6/14/2024	10:10:16	ND		
11960	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	17:31.0	6/14/2024	10:17:31	15	8	100 - Floral
11959	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	57:48.0	6/14/2024	9:57:48	ND		
11957	OS009	Castaic Union School District Building	34.4411358	-118.626827	38:33.0	6/14/2024	9:38:33	ND		
11956	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	01:42.0	6/14/2024	9:01:42	<2	0	400 - Earthy
11955	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	11:19.0	6/14/2024	9:11:19	2	1	400 - Earthy
11954	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	07:23.0	6/14/2024	8:07:23	7	-3	500 - Offensive
11953	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	30:13.0	6/14/2024	9:30:13	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
406 - Grassy		Sunny	None	3.1	SE	71.1	55.5	28.74	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	0	N	67.7	71.9	28.78	2024-06-24 12:22 CDT		
506 - Garbage	SN: 90202574	Overcast	None	2.1	E	56.8	82.7	28.63	2024-06-24 12:22 CDT		
506 - Garbage		Overcast	None	0	E	60	75.2	28.9	2024-06-24 12:22 CDT		
		Sunny	None	1	SW	75.3	51.6	28.69	2024-06-24 12:22 CDT		
		Sunny	None	1.1	SW	73	54.5	28.83	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	2.2	SE	66	55.6	28.8	2024-06-24 12:22 CDT		
		Sunny	None	2	S	72.5	52	28.74	2024-06-24 12:22 CDT		
		Sunny	None	0	SE	74.2	52.9	28.866	2024-06-24 12:22 CDT		
506 - Garbage	Sample collected	Sunny	None	1.8	S	56.5	81.4	28.85	2024-06-24 12:22 CDT		
105 - Fragrant		Sunny	None	3	S	67.2	64.1	28.72	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	1.2	S	76.2	48.7	28.67	2024-06-24 12:22 CDT		
		Sunny	None	2.1	E	78.5	46	28.86	2024-06-24 12:22 CDT		
105 - Fragrant		Sunny	None	2.5	SE	78.5	39.4	28.85	2024-06-24 12:22 CDT		
		Sunny	None	0.7	SE	86.4	47	28.66	2024-06-24 12:22 CDT		
		Sunny	None	0	SE	78.6	48.4	28.87	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	1.4	S	74.7	48.9	28.77	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	1.4	NE	75.5	50.6	28.84	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	0	E	72	59.9	28.58	2024-06-24 12:22 CDT		
		Sunny	None	2.1	SE	76.6	49.4	28.69	2024-06-24 12:22 CDT		



id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11952	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	17:27.0	6/14/2024	8:17:27	7	-2	500 - Offensive
11951	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	30:41.0	6/14/2024	7:30:41	15	-1	500 - Offensive
11950	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	50:25.0	6/14/2024	7:50:25	15	-2	500 - Offensive
11949	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	48:46.0	6/14/2024	8:48:46	4	-2	500 - Offensive
11948	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	20:46.0	6/14/2024	7:20:46	ND		
11946	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	46:59.0	6/13/2024	16:46:59	2	-2	500 - Offensive
11945	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	05:55.0	6/13/2024	17:05:55	ND		
11944	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	43:47.0	6/13/2024	16:43:47	<2	-2	700 - Chemical
11942	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	57:24.0	6/13/2024	16:57:24	ND		
11940	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	02:50.0	6/13/2024	17:02:50	ND		
11936	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	19:28.0	6/13/2024	16:19:28	ND		
11934	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	37:54.0	6/13/2024	15:37:54	<2	-2	500 - Offensive
11933	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	49:35.0	6/13/2024	15:49:35	ND		
11932	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	04:19.0	6/13/2024	16:04:19	ND		
11931	OS015	Front of Castaic Elementary School	34.47172	-118.63062	37:17.0	6/13/2024	16:37:17	ND		
11927	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	12:27.0	6/13/2024	16:12:27	ND		
11921	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	02:09.0	6/13/2024	16:02:09	ND		
11917	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	45:08.0	6/13/2024	15:45:08	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
506 - Garbage	sample collected	Sunny	None	2	S	67.4	61.5	28.72	2024-06-24 12:22 CDT		
506 - Garbage	Sample collected - kes	Overcast	Fog	1.8	E	56.5	81.4	28.85	2024-06-24 12:22 CDT		
506 - Garbage		Overcast	Fog	1.2	E	63.5	73.6	28.8	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	2.1	S	70	75.8	28.73	2024-06-24 12:22 CDT		
	NR90201542	Overcast	Fog	1.3	E	59.9	80	28.8	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	5.1	SW	82.9	38.2	28.88	2024-06-24 12:22 CDT		
		Sunny	None	6	SW	81.6	36	28.66	2024-06-24 12:22 CDT		
708 - Grease	Fried food odor	Sunny	None	4.7	S	85.8	32.9	28.87	2024-06-24 12:22 CDT		
		Sunny	None	2.2	SW	83.1	39.3	28.9	2024-06-24 12:22 CDT		
		Sunny	None	7.1	S	80.8	35.6	28	2024-06-24 12:22 CDT		
		Sunny	None	1.5	W	83.6	44.2	28.78	2024-06-24 12:22 CDT		
508 - Manure		Sunny	None	2.1	W	83.9	42.7	28.57	2024-06-24 12:22 CDT		
		Sunny	None	0.9	W	85	46.9	28.71	2024-06-24 12:22 CDT		
		Sunny	None	5.3	W	86.3	56.2	28.79	2024-06-24 12:22 CDT		
		Sunny	None	1.3	W	83.4	40.1	28.62	2024-06-24 12:22 CDT		
		Sunny	None	4	W	83	39.9	28.83	2024-06-24 12:22 CDT		
		Sunny	None	7.2	S	82.1	38.9	28.79	2024-06-24 12:22 CDT		
		Sunny	None	0.8	S	82.3	39	28.7	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11916	OS002	Lincoln Ave near intersection with Chiquita Canyon Rd	34.438443	-118.657207	08:44.0	6/13/2024	16:08:44	<2	2	400 - Earthy
11915	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	16:01.0	6/13/2024	16:16:01	ND		
11907	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	14:22.0	6/13/2024	8:14:22	<2	-5	500 - Offensive
11904	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	58:36.0	6/13/2024	7:58:36	<2	-4	500 - Offensive
11903	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	26:55.0	6/13/2024	8:26:55	2	-6	500 - Offensive
11902	OS009	Castaic Union School District Building	34.4411358	-118.626827	41:24.0	6/13/2024	8:41:24	<2	-6	500 - Offensive
11900	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	44:36.0	6/13/2024	10:44:36	<2	5	100 - Floral
11899	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	15:14.0	6/13/2024	9:15:14	<2	1	400 - Earthy
11898	OS002	Lincoln Ave near intersection with Chiquita Canyon Rd	34.438443	-118.657207	02:17.0	6/13/2024	10:02:17	<2	3	300 - Vegetable
11897	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	49:26.0	6/13/2024	8:49:26	15	-7	500 - Offensive
11894	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	34:45.0	6/13/2024	9:34:45	30	-5	500 - Offensive
11892	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	54:09.0	6/13/2024	8:54:09	4	-2	500 - Offensive
11888	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	38:19.0	6/13/2024	9:38:19	15	-4	500 - Offensive
11886	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	44:39.0	6/13/2024	7:44:39	2	-3	500 - Offensive
11884	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	02:32.0	6/13/2024	8:02:32	2	-1	500 - Offensive
11883	OS009	Castaic Union School District Building	34.4411358	-118.626827	43:06.0	6/13/2024	8:43:06	<2	2	400 - Earthy
11882	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	32:32.0	6/13/2024	7:32:32	2	-1	500 - Offensive
11881	OS015	Front of Castaic Elementary School	34.47172	-118.63062	16:56.0	6/13/2024	7:16:56	4	-3	500 - Offensive
11880	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	20:04.0	6/13/2024	8:20:04	2	-2	500 - Offensive

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
406 - Grassy		Sunny	None	4.9	S	83.9	39.5	28.82	2024-06-24 12:22 CDT		
		Sunny	None	2.1	S	84	36.9	28.78	2024-06-24 12:22 CDT		
506 - Garbage		Partly Cloudy	None	1.8	S	67.6	60.7	28.86	2024-06-24 12:22 CDT		
506 - Garbage		Overcast	None	0	S	10.2	54.6	28.93	2024-06-24 12:22 CDT		
506 - Garbage		Partly Cloudy	None	1	SE	71.3	54	28.78	2024-06-24 12:22 CDT		
506 - Garbage	Intermittent woody and garbage smells	Overcast	None	1.3	SW	68	66.1	28.91	2024-06-24 12:22 CDT		
110 - Perfumy	Laundry/dryer sheet odor	Sunny	None	4.3	S	75.1	79.2	28.62	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	4.7	S	63.7	72.9	28.74	2024-06-24 12:22 CDT		
302 - Corn	Grassy, corn odor interspersed with celery and cilantro	Sunny	None	4.2	S	73.1	63	28.84	2024-06-24 12:22 CDT		
506 - Garbage	Sample collected	Sunny	None	1.3	S	69.9	55.6	28.73	2024-06-24 12:22 CDT		
508 - Manure	Sample collected; livestock odors; chickens can be heard on property nearby	Sunny	None	1.2	S	74.1	50.2	28.57	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	1.8	E	68.3	61.1	28.73	2024-06-24 12:22 CDT		
508 - Manure		Sunny	None	2.9	SE	71	64.9	28.59	2024-06-24 12:22 CDT		
506 - Garbage		Overcast	Fog	1.2	N	60.9	66.8	28.68	2024-06-24 12:22 CDT		
506 - Garbage	NR90201542	Overcast	Fog	2	N	58	88.5	28.93	2024-06-24 12:22 CDT		
417 - Woody		Sunny	None	2.9	N	64.7	65.9	28.9	2024-06-24 12:22 CDT		
506 - Garbage		Overcast	Fog	2	E	62.4	72.4	28.91	2024-06-24 12:22 CDT		
506 - Garbage	NR90201542	Overcast	Fog	0.9	NE	60.4	79.4	28.64	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	0.7	N	65.1	69.8	28.86	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11878	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	58:12.0	6/12/2024	18:58:12	ND		
11873	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	00:48.0	6/12/2024	19:00:48	ND		
11879	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	52:36.0	6/12/2024	18:52:36	<2	1	100 - Floral
11876	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	47:27.0	6/12/2024	18:47:27	<2	2	400 - Earthy
11877	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	42:18.0	6/12/2024	18:42:18	ND		
11872	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	37:45.0	6/12/2024	18:37:45	ND		
11858	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	29:21.0	6/12/2024	18:29:21	ND		
11870	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	28:30.0	6/12/2024	18:28:30	ND		
11856	OS009	Castaic Union School District Building	34.4411358	-118.626827	20:04.0	6/12/2024	18:20:04	ND		
11871	OS009	Castaic Union School District Building	34.4411358	-118.626827	15:22.0	6/12/2024	18:15:22	ND		
11857	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	07:25.0	6/12/2024	18:07:25	<2	1	100 - Floral
11874	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	02:53.0	6/12/2024	18:02:53	<2	-5	500 - Offensive
11854	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	54:25.0	6/12/2024	17:54:25	ND		
11855	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	43:50.0	6/12/2024	17:43:50	2	-3	500 - Offensive
11861	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	42:49.0	6/12/2024	17:42:49	<2	-5	500 - Offensive
11853	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	29:37.0	6/12/2024	17:29:37	<2	5	100 - Floral
11852	OS015	Front of Castaic Elementary School	34.47172	-118.63062	15:52.0	6/12/2024	17:15:52	<2	3	400 - Earthy
11863	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	27:33.0	6/12/2024	15:27:33	<2	1	400 - Earthy

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	4.4	SW	78.8	51.1	28.74	2024-06-24 12:22 CDT		
		Sunny	None	23.1	SW	78.5	50.4	28.73	2024-06-24 12:22 CDT		
105 - Fragrant	Smells like a flower I can't identify. Almost like pepperoni	Sunny	None	3	SW	80.5	49.1	28.79	2024-06-24 12:22 CDT		
406 - Grassy	Sweet grassy odor	Sunny	None	2.3	SE	81.2	44.8	28.79	2024-06-24 12:22 CDT		
		Sunny	None	4.6	SW	81.8	46.1	28.66	2024-06-24 12:22 CDT		
		Sunny	None	4.2	SE	82.4	40.5	28.66	2024-06-24 12:22 CDT		
		Sunny	None	1.2	SW	82.5	49	28.65	2024-06-24 12:22 CDT		
		Sunny	None	2.5	SE	83.7	43	28.64	2024-06-24 12:22 CDT		
		Sunny	None	1.8	SW	84.4	47.9	28.83	2024-06-24 12:22 CDT		
		Sunny	None	4.7	SW	83.4	45.3	28.82	2024-06-24 12:22 CDT		
111 - Rose-like		Sunny	None	2.1	SW	83.3	54	28.71	2024-06-24 12:22 CDT		
506 - Garbage	Intermittent floral and garbage odors	Sunny	None	2	S	85.2	45.6	28.7	2024-06-24 12:22 CDT		
		Sunny	None	2	S	85	39.1	28.85	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	7.4	SW	83.3	41.6	28.62	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	5.2	S	84.3	37.7	28.62	2024-06-24 12:22 CDT		
111 - Rose-like		Sunny	None	3	SW	87.4	39.5	28.84	2024-06-24 12:22 CDT		
406 - Grassy	Smells like trees	Sunny	None	1.4	S	86.7	41.1	28.57	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	5.2	S	87.5	30.3	28.79	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11847	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	19:50.0	6/12/2024	15:19:50	ND		
11826	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	44:22.0	6/12/2024	11:44:22	2	-1	500 - Offensive
11841	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	47:25.0	6/12/2024	10:47:25	ND		
11832	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	31:31.0	6/12/2024	9:31:31	2	-5	500 - Offensive
11835	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	18:59.0	6/12/2024	9:18:59	<2	-5	500 - Offensive
11763	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	18:27.0	6/11/2024	8:18:27	30	-5	500 - Offensive
11811	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	04:22.0	6/11/2024	18:04:22	ND		
11797	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	26:44.0	6/11/2024	17:26:44	<2	4	100 - Floral
11810	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	28:17.0	6/11/2024	17:28:17	ND		
11794	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	31:52.0	6/11/2024	17:31:52	<2	-1	200 - Fruity
11807	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	37:22.0	6/11/2024	17:37:22	ND		
11796	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	45:39.0	6/11/2024	17:45:39	<2	4	100 - Floral
11808	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	51:25.0	6/11/2024	17:51:25	ND		
11791	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	59:19.0	6/11/2024	17:59:19	ND		
11793	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	15:48.0	6/11/2024	17:15:48	ND		
11809	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	07:25.0	6/11/2024	17:07:25	ND		
11801	OS009	Castaic Union School District Building	34.4411358	-118.626827	12:20.0	6/11/2024	16:12:20	ND		
11805	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	22:23.0	6/11/2024	15:22:23	2	1	400 - Earthy

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	nr	Sunny	None	2.3		90.3	32	28.77	2024-06-24 12:22 CDT		
506 - Garbage	Also smells putrid	Sunny	None	0.9	SW	80	55	28.78	2024-06-24 12:22 CDT		
		Sunny	None	3.9	S	77.3	45	28.72	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	1.7	SW	67.5	67.8	28.86	2024-06-24 12:22 CDT		
506 - Garbage	SN: 9202374	Sunny	None	1.7	SW	75.9	48.8	28.82	2024-06-24 12:22 CDT		
506 - Garbage	NR90201542; sample collected	Sunny	None	0		74.8	68.8	28.74	2024-06-24 12:22 CDT		
		Sunny	None	2.6	S	82.8	48.4	28.6	2024-06-24 12:22 CDT		
105 - Fragrant	Intermittent honeysuckle odor	Sunny	None	2.8	SW	89.7	37.8	28.55	2024-06-24 12:22 CDT		
		Sunny	None	3.6	SW	84.5	47.1	28.56	2024-06-24 12:22 CDT		
	Intermittent Spoiled fruit odor	Sunny	None	2.8	SW	84.9	43	28.59	2024-06-24 12:22 CDT		
		Sunny	None	1.4	SW	83.8	49.1	28.59	2024-06-24 12:22 CDT		
105 - Fragrant	Intermittent honeysuckle odor	Sunny	None	2	W	83.6	51	28.44	2024-06-24 12:22 CDT		
		Sunny	None	1.5	W	81.2	53.3	28.45	2024-06-24 12:22 CDT		
		Sunny	None	6.3	S	82.6	43.9	28.6	2024-06-24 12:22 CDT		
		Sunny	None	5.2	N	87.4	41.1	28.66	2024-06-24 12:22 CDT		
		Sunny	None	2.3	SW	85.8	46.6	28.72	2024-06-24 12:22 CDT		
		Sunny	None	4.1	SW	91.5	34.6	28.75	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	2.1	S	90.5	35.6	28.71	2024-06-24 12:22 CDT		



id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11800	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	11:06.0	6/11/2024	15:11:06	ND		
11772	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	23:10.0	6/11/2024	11:23:10	<2	3	100 - Floral
11779	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	54:13.0	6/11/2024	11:54:13	30	2	400 - Earthy
11780	OS009	Castaic Union School District Building	34.4411358	-118.626827	06:07.0	6/11/2024	11:06:07	ND		
11761	OS002	Lincoln Ave near intersection with Chiquita Canyon Rd	34.438443	-118.657207	33:39.0	6/11/2024	8:33:39	<2	-2	500 - Offensive
11755	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	12:23.0	6/11/2024	8:12:23	7	-5	500 - Offensive
11875	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	13:50.0	6/12/2024	16:13:50	ND		
11869	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	35:40.0	6/12/2024	16:35:40	ND		
11868	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	53:37.0	6/12/2024	17:53:37	ND		
11867	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	18:44.0	6/12/2024	15:18:44	ND		
11866	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	49:21.0	6/12/2024	15:49:21	<2	-7	500 - Offensive
11865	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	01:27.0	6/12/2024	16:01:27	ND		
11864	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	32:43.0	6/12/2024	15:32:43	<2	5	100 - Floral
11862	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	28:35.0	6/12/2024	16:28:35	ND		
11860	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	27:22.0	6/12/2024	17:27:22	15	6	100 - Floral
11859	OS015	Front of Castaic Elementary School	34.47172	-118.63062	09:43.0	6/12/2024	17:09:43	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	2.8	S	91.2	34.2	28.67	2024-06-24 12:22 CDT		
105 - Fragrant	Grassy, flower	Sunny	None	6.4	S	82.4	34.5	28.83	2024-06-24 12:22 CDT		
	Yard work being done down wind about a block away. Can hear the weed whackers. Multiple houses in the area with yard workers present.										
406 - Grassy	Sample collected	Sunny	None	5	S	81.8	49.7	28.61	2024-06-24 12:22 CDT		
		Sunny	None	2.2	S	84.6	47.5	28.83	2024-06-24 12:22 CDT		
506 - Garbage	SN: 9202374	Sunny	None	1.4	SE	70.1	52.9	28.77	2024-06-24 12:22 CDT		
506 - Garbage	Garbage odor; SN: 9202374; sample collected	Sunny	None	0.8	NW	70	59.8	28.73	2024-06-24 12:22 CDT		
		Sunny	None	2.1	S	88.7	32.2	28.62	2024-06-24 12:22 CDT		
		Sunny	None	2.9	S	86.1	35	28.79	2024-06-24 12:22 CDT		
		Sunny	None	2.9	SE	85.6	35	28.85	2024-06-24 12:22 CDT		
		Sunny	None	2.8	S	89	34.9	28.76	2024-06-24 12:22 CDT		
508 - Manure	Livestock odor	Sunny	None	1.3	S	87.3	30.6	28.52	2024-06-24 12:22 CDT		
		Sunny	None	6.2	SW	85	30.8	28.66	2024-06-24 12:22 CDT		
105 - Fragrant		Sunny	None	1.5	S	87.4	30.4	28.75	2024-06-24 12:22 CDT		
		Sunny	None	2.1	S	87.9	33.1	28.68	2024-06-24 12:22 CDT		
105 - Fragrant	Honeysuckle/jasmine odor; sample collected	Sunny	None	0.9	S	88.6	35	28.82	2024-06-24 12:22 CDT		
		Sunny	None	1.7	S	84.5	38	28.56	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11851	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	28:44.0	6/12/2024	15:28:44	ND		
11850	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	29:11.0	6/12/2024	16:29:11	ND		
11849	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	15:29.0	6/12/2024	16:15:29	ND		
11848	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	49:57.0	6/12/2024	15:49:57	4	-4	500 - Offensive
12226	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	32:28.0	6/17/2024	14:32:28	<2	-6	500 - Offensive
12227	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	16:51.0	6/17/2024	14:16:51	2	-7	500 - Offensive
12246	OS009	Castaic Union School District Building	34.4411358	-118.626827	11:20.0	6/17/2024	14:11:20	<2	-1	500 - Offensive
12237	OS009	Castaic Union School District Building	34.4411358	-118.626827	08:34.0	6/17/2024	14:08:34	<2	-5	500 - Offensive
12231	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	01:22.0	6/17/2024	14:01:22	ND		
12248	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	54:57.0	6/17/2024	13:54:57	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	1.6	SW	92.2	33.6	28.82	2024-06-24 12:22 CDT		
		Sunny	None	2	SW	89.7	33.8	28.68	2024-06-24 12:22 CDT		
		Sunny	None	4.2	SW	87.1	35.2	28.62	2024-06-24 12:22 CDT		
508 - Manure	Livestock upwind	Sunny	None	1.4	S	87.8	37.9	28.53	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	9.4	S	82.3	43.7	28.66	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	3.7	SW	82.5	40.8	28.58	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	4.4	SW	84.7	40.4	28.63	2024-06-24 12:22 CDT		
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	4.4	W	82.3	38.3	28.62	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	2.1	SW	86.9	37.6	28.45	2024-06-24 12:22 CDT		
		Sunny	None	4.3	SW	81	44	28.51	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12230	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	51:57.0	6/17/2024	13:51:57	ND		
12245	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	33:00.0	6/17/2024	13:33:00	ND		
12133	OS009	Castaic Union School District Building	34.4411358	-118.626827	18:30.0	6/16/2024	11:18:30	<2	-5	400 - Earthy
12121	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	08:28.0	6/16/2024	12:08:28	<2	-5	400 - Earthy
12138	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	11:41.0	6/16/2024	12:11:41	2	-3	400 - Earthy
12140	OS015	Front of Castaic Elementary School	34.47172	-118.63062	57:24.0	6/16/2024	11:57:24	2	-5	400 - Earthy

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	4.4	SW	84.7	38.4	28.52	2024-06-24 12:22 CDT		
		Sunny	None	1.8	S	82.4	45.3	28.47	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.7	W	84.3	29.9	28.67	2024-06-24 12:22 CDT		
414 - Smokey	Smoke and fried food odors; occasional floral; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.2	SW	85.9	31.5	28.66	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.6	SW	85.6	33.4	28.67	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.5	SW	83.5	34.3	28.42	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12130	OS015	Front of Castaic Elementary School	34.47172	-118.63062	54:28.0	6/16/2024	11:54:28	<2	-5	400 - Earthy
12139	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	45:31.0	6/16/2024	11:45:31	7	-4	400 - Earthy
12137	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	34:05.0	6/16/2024	11:34:05	7	-4	500 - Offensive
12132	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	25:58.0	6/16/2024	10:25:58	4	-5	400 - Earthy
12111	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	20:43.0	6/16/2024	10:20:43	7	-4	400 - Earthy
12124	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	15:47.0	6/16/2024	10:15:47	<2	-5	400 - Earthy
12126	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	10:08.0	6/16/2024	11:10:08	<2	-5	400 - Earthy

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4.6	S	83.66	34.6	28.41	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	8.5	SW	82.9	34.5	28.47	2024-06-24 12:22 CDT		
506 - Garbage		Hazy	None	1.8	W	85.2	31.7	28.7	2024-06-24 12:22 CDT		
414 - Smokey		Hazy	None	4.2	S	83.9	32.1	28.52	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.5	S	76.5	34.7	28.47	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.1	SW	79.7	31.6	28.47	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4.5	S	83	30.8	28.49	2024-06-24 12:22 CDT		



id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12143	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	13:28.0	6/16/2024	11:13:28	2	-5	400 - Earthy
12113	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	56:09.0	6/16/2024	10:56:09	2	-4	400 - Earthy
12122	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	53:09.0	6/16/2024	10:53:09	<2	-6	500 - Offensive
12118	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	44:57.0	6/16/2024	10:44:57	60	-5	400 - Earthy
12125	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	41:52.0	6/16/2024	10:41:52	7	-5	400 - Earthy

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	7.4	SW	83.4	30.3	28.5	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.5	S	85.8	28.7	28.63	2024-06-24 12:22 CDT		
506 - Garbage	Smoky and garbage odors; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3	SW	83.9	30.4	28.62	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.4	SW	81.6	32.7	28.55	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.3	SW	82.7	32.8	28.55	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12114	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	29:02.0	6/16/2024	10:29:02	7	-5	400 - Earthy
12115	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	11:53.0	6/16/2024	10:11:53	2	-4	400 - Earthy
12127	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	08:13.0	6/16/2024	10:08:13	<2	-5	400 - Earthy
12116	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	57:45.0	6/16/2024	9:57:45	15	-5	400 - Earthy
12120	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	55:23.0	6/16/2024	9:55:23	15	-4	400 - Earthy

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	6.1	S	82	34.6	28.52	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.9	W	81.4	38	28.51	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.2	SW	80.5	36.6	28.5	2024-06-24 12:22 CDT		
414 - Smokey	sample collected; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	5.2	E	79.4	37.8	28.37	2024-06-24 12:22 CDT		
414 - Smokey	Sample collected; Manure/livestock odors as well; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.7	W	78.7	35.8	28.37	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12117	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	42:11.0	6/16/2024	9:42:11	7	-5	400 - Earthy
12134	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	39:15.0	6/16/2024	9:39:15	4	-3	400 - Earthy
12112	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	33:52.0	6/16/2024	9:33:52	<2	-4	400 - Earthy
12131	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	28:00.0	6/16/2024	9:28:00	<2	-2	400 - Earthy
12119	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	20:20.0	6/16/2024	9:20:20	<2	-4	400 - Earthy

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
414 - Smokey	Sample collected.The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4.5	SE	86.1	40.9	28.59	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	2.3	SE	80.8	37.5	28.59	2024-06-24 12:22 CDT		
414 - Smokey	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	4	SE	80.4	42.3	28.63	2024-06-24 12:22 CDT		
414 - Smokey	Intermittent smoky, grassy, and celery odors detected; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3.3	SE	80.1	42.2	28.63	2024-06-24 12:22 CDT		
414 - Smokey	NR90201542; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.6	SW	76.1	45.3	28.53	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12128	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	12:04.0	6/16/2024	9:12:04	<2	-2	400 - Earthy
12202	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	21:45.0	6/17/2024	7:21:45	ND		
12269	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	54:51.0	6/17/2024	16:54:51	ND		
12267	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	46:18.0	6/17/2024	16:46:18	ND		
12265	OS009	Castaic Union School District Building	34.4411358	-118.626827	00:47.0	6/17/2024	17:00:47	15	-4	500 - Offensive
12264	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	38:02.0	6/17/2024	16:38:02	ND		
12262	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	30:41.0	6/17/2024	16:30:41	ND		
12260	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	43:13.0	6/17/2024	16:43:13	ND		
12259	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	27:52.0	6/17/2024	16:27:52	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
414 - Smokey	SN: 9202374; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	3	S	77	47	28.6	2024-06-24 12:22 CDT		
	SN: 9202374; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	4.6	SW	63	62.8	28.59	2024-06-24 12:22 CDT		
		Sunny	None	1.5	SW	79.7	46.1	28.43	2024-06-24 12:22 CDT		
		Sunny	None	4.1	SW	83.9	43.9	28.48	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	4.8	SW	80.9	46.3	28.59	2024-06-24 12:22 CDT		
		Sunny	None	4.7	SW	80.4	46	28.44	2024-06-24 12:22 CDT		
		Sunny	None	3.2	W	83.4	41.7	28.44	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	1.9	SW	83.1	40.3	28.48	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	6	W	81.7	40.2	28.44	2024-06-24 12:22 CDT		



id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12258	OS009	Castaic Union School District Building	34.4411358	-118.626827	58:33.0	6/17/2024	16:58:33	4	-5	500 - Offensive
12253	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	52:00.0	6/17/2024	16:52:00	ND		
12252	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	34:49.0	6/17/2024	16:34:49	<2	5	100 - Floral
12235	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	21:05.0	6/17/2024	10:21:05	ND		
12225	OS015	Front of Castaic Elementary School	34.47172	-118.63062	50:24.0	6/17/2024	9:50:24	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
506 - Garbage	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	4.7	SW	82.8	40	28.59	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	5.1	SW	82.4	40	28.42	2024-06-24 12:22 CDT		
105 - Fragrant	Laundry odor; The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	3.7	SW	81.3	41.3	28.44	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Sunny	None	4.6	S	77.2	45.3	28.57	2024-06-24 12:22 CDT		
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	1.7	SW	78	43.8	28.41	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12220	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	09:39.0	6/17/2024	10:09:39	ND		
11846	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	06:24.0	6/12/2024	16:06:24	ND		
11845	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	44:22.0	6/12/2024	16:44:22	ND		
11844	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	37:20.0	6/12/2024	15:37:20	ND		
11843	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	49:23.0	6/12/2024	9:49:23	<2	-5	500 - Offensive
11842	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	00:11.0	6/12/2024	10:00:11	ND		
11840	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	43:18.0	6/12/2024	11:43:18	ND		
11839	OS015	Front of Castaic Elementary School	34.47172	-118.63062	35:19.0	6/12/2024	10:35:19	ND		
11838	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	58:25.0	6/12/2024	12:58:25	ND		
11837	OS009	Castaic Union School District Building	34.4411358	-118.626827	57:00.0	6/12/2024	11:57:00	<2	-3	500 - Offensive
11836	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	51:26.0	6/12/2024	12:51:26	2	-3	500 - Offensive
11834	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	58:08.0	6/12/2024	10:58:08	4	6	100 - Floral
11833	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	35:14.0	6/12/2024	12:35:14	ND		
11831	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	16:02.0	6/12/2024	11:16:02	ND		
11830	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	25:03.0	6/12/2024	12:25:03	ND		
11829	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	32:26.0	6/12/2024	11:32:26	ND		
11828	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	14:17.0	6/12/2024	12:14:17	ND		
11827	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	53:25.0	6/12/2024	12:53:25	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
	The South Coast Air Quality Management District has issued an Air Quality Alert due to increased fine particle pollution from wildfire smoke in the region.	Hazy	None	7.6	S	74.2	46.8	28.46	2024-06-24 12:22 CDT		
		Sunny	None	6.4	W	86	36.4	28.64	2024-06-24 12:22 CDT		
		Sunny	None	4	SW	87.4	34.3	28.79	2024-06-24 12:22 CDT		
		Sunny	None	3.3	S	87.6	37.8	28.76	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	1	S	76	49.2	28.82	2024-06-24 12:22 CDT		
		Sunny	None	2	SE	79.6	42.7	28.73	2024-06-24 12:22 CDT		
		Sunny	None	1	SE	80.4	52.5	28.79	2024-06-24 12:22 CDT		
		Sunny	None	1.4	SW	73.7	42.1	28.64	2024-06-24 12:22 CDT		
		Sunny	None	5.9	SW	82.6	44.1	28.71	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	2.2	S	84.9	46.1	28.89	2024-06-24 12:22 CDT		
508 - Manure	Intermittent livestock odor	Sunny	None	5.2	SW	82.5	47.4	28.67	2024-06-24 12:22 CDT		
105 - Fragrant		Sunny	None	2.1	S	83.6	40.1	28.9	2024-06-24 12:22 CDT		
		Sunny	None	1.2	SW	84.8	46.5	28.67	2024-06-24 12:22 CDT		
		Sunny	None	3.2	SE	78.9	40.2	28.92	2024-06-24 12:22 CDT		
		Sunny	None	1.4	SW	85.5	55.5	28.73	2024-06-24 12:22 CDT		
		Sunny	None	2	SW	81.8	41	28.84	2024-06-24 12:22 CDT		
		Sunny	None	1.2	W	85.3	44.1	28.72	2024-06-24 12:22 CDT		
		Sunny	None	1.6	SW	83.3	54.9	28.57	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11825	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	21:30.0	6/12/2024	11:21:30	2	2	400 - Earthy
11824	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	29:43.0	6/12/2024	12:29:43	ND		
11823	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	40:36.0	6/12/2024	12:40:36	2	1	400 - Earthy
11822	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	02:28.0	6/12/2024	13:02:28	ND		
11821	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	14:23.0	6/12/2024	12:14:23	ND		
11820	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	34:42.0	6/12/2024	11:34:42	ND		
11819	OS009	Castaic Union School District Building	34.4411358	-118.626827	03:40.0	6/12/2024	12:03:40	ND		
11818	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	03:09.0	6/12/2024	10:03:09	2	-1	500 - Offensive
11817	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	51:54.0	6/12/2024	9:51:54	2	-4	500 - Offensive
11816	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	26:04.0	6/12/2024	9:26:04	4	-4	500 - Offensive
11815	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	51:41.0	6/12/2024	10:51:41	ND		
11814	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	06:16.0	6/12/2024	11:06:16	2	4	100 - Floral
11813	OS002	Lincoln Ave near intersection with Chiquita Canyon Rd	34.438443	-118.657207	35:55.0	6/12/2024	9:35:55	7	-5	500 - Offensive
11812	OS015	Front of Castaic Elementary School	34.47172	-118.63062	37:13.0	6/12/2024	10:37:13	ND		
11806	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	16:49.0	6/11/2024	17:16:49	ND		
11803	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	30:57.0	6/11/2024	16:30:57	ND		
11799	OS002	Lincoln Ave near intersection with Chiquita Canyon Rd	34.438443	-118.657207	03:29.0	6/11/2024	17:03:29	ND		
11798	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	53:15.0	6/11/2024	16:53:15	ND		
11795	OS015	Front of Castaic Elementary School	34.47172	-118.63062	15:24.0	6/11/2024	14:15:24	ND		

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
406 - Grassy		Sunny	None	2.1	S	77.6	61.7	28.94	2024-06-24 12:22 CDT		
		Sunny	None	2.3	S	82.6	50.5	28.74	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	1.8	S	83	49.2	28.68	2024-06-24 12:22 CDT		
		Sunny	None	3.7	W	80.8	53.1	28.71	2024-06-24 12:22 CDT		
		Sunny	None	2.7	S	85.6	72	28.72	2024-06-24 12:22 CDT		
		Sunny	None	0.7	S	80.9	59	28.85	2024-06-24 12:22 CDT		
		Sunny	None	2.1	S	82.8	50	28.89	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	2	SE	79.6	42.7	28.73	2024-06-24 12:22 CDT		
506 - Garbage	Also smells putrid, rancid	Sunny	None	0.8	S	83.6	46.2	28.82	2024-06-24 12:22 CDT		
506 - Garbage	NR90201542	Sunny	None	0		74.2	65.7	28.84	2024-06-24 12:22 CDT		
		Sunny	None	1.6	S	85.3	48.7	28.73	2024-06-24 12:22 CDT		
111 - Rose-like		Sunny	None	1.3	S	81.9	61.1	28.9	2024-06-24 12:22 CDT		
506 - Garbage	A sample was collected. Also smells putrid, rancid.	Sunny	None	1.1	S	78.1	64.3	28.86	2024-06-24 12:22 CDT		
		Sunny	None	1.8	S	73.1	60.8	28.65	2024-06-24 12:22 CDT		
		Sunny	None	3.9	N	88	43.9	28.67	2024-06-24 12:22 CDT		
		Sunny	None	0.7	SW	94.2	51.3	28.6	2024-06-24 12:22 CDT		
		Sunny	None	4.3	S	88.3	38.2	28.72	2024-06-24 12:22 CDT		
		Sunny	None	5.1	SW	87.1	39.1	28.67	2024-06-24 12:22 CDT		
		Sunny	None	3.5	S	90.3	41.9	28.53	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11792	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	36:30.0	6/11/2024	14:36:30	<2	-1	700 - Chemical
11790	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	53:34.0	6/11/2024	14:53:34	4	4	700 - Chemical
11789	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	31:37.0	6/11/2024	16:31:37	ND		
11788	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	58:15.0	6/11/2024	16:58:15	ND		
11787	OS009	Castaic Union School District Building	34.4411358	-118.626827	19:44.0	6/11/2024	16:19:44	ND		
11786	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	32:20.0	6/11/2024	15:32:20	2	1	400 - Earthy
11785	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	18:56.0	6/11/2024	15:18:56	ND		
11784	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	45:54.0	6/11/2024	15:45:54	<2	2	400 - Earthy
11783	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	47:05.0	6/11/2024	14:47:05	ND		
11782	OS015	Front of Castaic Elementary School	34.47172	-118.63062	23:27.0	6/11/2024	14:23:27	ND		
11781	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	58:17.0	6/11/2024	14:58:17	15	4	700 - Chemical
11778	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	40:37.0	6/11/2024	11:40:37	2	2	400 - Earthy
11777	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	47:06.0	6/11/2024	10:47:06	30	-3	500 - Offensive
11776	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	11:11.0	6/11/2024	12:11:11	ND		
11775	OS011	Park behind Live Oak Elementary school	34.450463	-118.620992	24:00.0	6/11/2024	11:24:00	<2	1	400 - Earthy
11774	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	30:55.0	6/11/2024	10:30:55	ND		
11773	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	48:50.0	6/11/2024	11:48:50	2		400 - Earthy
11771	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	07:32.0	6/11/2024	12:07:32	ND		
11770	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	16:01.0	6/11/2024	10:16:01	ND		
11769	OS008	Ave Penn and Witherspoon Pkwy	34.449486	-118.638138	38:54.0	6/11/2024	10:38:54	2	-1	500 - Offensive

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
722 - Tar/Asphalt	Intermittent asphalt odor when cars pass	Sunny	None	5.8	S	88	38.1	28.64	2024-06-24 12:22 CDT		
708 - Grease	Fried chicken odor	Sunny	None	3.3	S	88	41.1	28.79	2024-06-24 12:22 CDT		
		Sunny	None	0.7	SW	91	41.6	28.59	2024-06-24 12:22 CDT		
		Sunny	None	3.3	W	88.4	47	28.68	2024-06-24 12:22 CDT		
		Sunny	None	6.4		88.5	40.7	28.77	2024-06-24 12:22 CDT		
406 - Grassy	Smells grassy. Standing near some bushes and a tree	Sunny	None	2	SW	87.8	44.8	28.74	2024-06-24 12:22 CDT		
		Sunny	None	5.3	SW	86.4	44.5	28.66	2024-06-24 12:22 CDT		
414 - Smokey	Smells like barbecue.	Sunny	None	2.2	SW	89.2	43.9	28.8	2024-06-24 12:22 CDT		
		Sunny	None	3.3	S	88.7	45.2	28.57	2024-06-24 12:22 CDT		
		Sunny	None	5.3	S	87.5	41.8	28.55	2024-06-24 12:22 CDT		
708 - Grease	Smells like fried chicken!	Sunny	None	1.8	S	91.4	48.4	28.81	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	2.4	S	83	62.7	28.81	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	2.6	S	85.9	46.7	28.65	2024-06-24 12:22 CDT		
		Sunny	None	1.2	SW	86.8	47.4	28.71	2024-06-24 12:22 CDT		
417 - Woody		Sunny	None	2.9	S	79.4	56.4	28.83	2024-06-24 12:22 CDT		
		Sunny	None	1.2	S	79	53.3	28.77	2024-06-24 12:22 CDT		
406 - Grassy	Landscapers nearby on hillside	Sunny	None	7	SE	80.7	45.3	28.61	2024-06-24 12:22 CDT		
		Sunny	None	1.8	S	89.2	38.5	28.69	2024-06-24 12:22 CDT		
		Sunny	None	2.6	S	81.7	36.6	28.76	2024-06-24 12:22 CDT		
506 - Garbage	Intermittent garbage and sweet molasses odors	Sunny	None	1.7	SE	83.3	42	28.62	2024-06-24 12:22 CDT		



id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11768	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	38:21.0	6/11/2024	11:38:21	2	4	100 - Floral
11767	OS009	Castaic Union School District Building	34.4411358	-118.626827	59:05.0	6/11/2024	10:59:05	ND		
11766	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	49:33.0	6/11/2024	8:49:33	<2	-2	500 - Offensive
11765	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	23:05.0	6/11/2024	9:23:05	2	-2	500 - Offensive
11764	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	49:56.0	6/11/2024	8:49:56	2	-3	500 - Offensive
11762	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	12:37.0	6/11/2024	10:12:37	ND		
11760	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	05:00.0	6/11/2024	9:05:00	2	-1	500 - Offensive
11759	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	33:29.0	6/11/2024	9:33:29	ND		
11758	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	13:06.0	6/11/2024	10:13:06	ND		
11757	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	56:37.0	6/11/2024	9:56:37	ND		
11756	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	22:40.0	6/11/2024	9:22:40	<2	-3	500 - Offensive
11908	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	23:43.0	6/13/2024	10:23:43	ND		
11891	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	15:14.0	6/13/2024	10:15:14	ND		
11893	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	04:40.0	6/13/2024	10:04:40	<2	4	100 - Floral
11905	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	42:42.0	6/13/2024	7:42:42	2	-6	500 - Offensive
12023	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	45:53.0	6/14/2024	16:45:53	ND		
12022	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	39:46.0	6/14/2024	15:39:46	ND		
12021	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	16:08.0	6/14/2024	16:16:08	ND		
12020	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	32:56.0	6/14/2024	16:32:56	<2	3	400 - Earthy

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
105 - Fragrant		Sunny	None	3.2	S	86.8	48.1	28.81	2024-06-24 12:22 CDT		
		Sunny	None	3.7	S	80.5	46.6	28.8	2024-06-24 12:22 CDT		
506 - Garbage	SN: 90202374	Sunny	None	3.2	S	71.7	55.1	28.76	2024-06-24 12:22 CDT		
506 - Garbage	NR90201542	Sunny	None	1.1	SE	84.1	50.1	28.5	2024-06-24 12:22 CDT		
506 - Garbage	NR90201542	Sunny	None	1	E	76	53	28.73	2024-06-24 12:22 CDT		
	SN: 90202374	Sunny	None	3.5	S	85.1	46.3	28.65	2024-06-24 12:22 CDT		
506 - Garbage	SN: 90202374 (intermittent floral odor)	Sunny	None	2.5	S	76.3	49.2	28.64	2024-06-24 12:22 CDT		
	SN: 9202374	Sunny	None	2	NE	86.3	43.7	28.49	2024-06-24 12:22 CDT		
	NR90201542	Sunny	None	1.4	S	79.6	54.6	28.65	2024-06-24 12:22 CDT		
	NR90201542	Sunny	None	0	NE	82.5	53.3	28.61	2024-06-24 12:22 CDT		
508 - Manure	Intermittent horse manure and livestock odor; SN: 9202374	Sunny	None	1.1	NE	85.8	49.6	28.49	2024-06-24 12:22 CDT		
		Sunny	None	2.6	W	77.2	51.9	28.8	2024-06-24 12:22 CDT		
		Sunny	None	1.8	SE	75.2	57.1	28.8	2024-06-24 12:22 CDT		
103 - Coconut		Sunny	None	2.8	SE	77.7	54.1	28.85	2024-06-24 12:22 CDT		
506 - Garbage		Overcast	None	1.3	N	68	70.7	28.69	2024-06-24 12:22 CDT		
		Sunny	None	4.6	S	87.8	37.7	28.57	2024-06-24 12:22 CDT		
		Sunny	None	2	SE	90.7	38	28.7	2024-06-24 12:22 CDT		
		Sunny	None	1.7	W	89.2	37.6	28.65	2024-06-24 12:22 CDT		
406 - Grassy		Sunny	None	6.8	S	88.5	37.1	28.74	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
12019	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	54:54.0	6/14/2024	15:54:54	<2	2	100 - Floral
12016	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	00:15.0	6/14/2024	16:00:15	ND		
12015	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	06:56.0	6/14/2024	16:06:56	ND		
12014	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	24:01.0	6/14/2024	16:24:01	ND		
12013	OS006	Val Verde Rd and Oakwood Ave	34.450415	-118.662367	10:57.0	6/14/2024	16:10:57	ND		
12012	OS014	Lot in front of Fire Station 143	34.454696	-118.634449	28:55.0	6/14/2024	16:28:55	ND		
12011	OS002	Lincoln Ave near intersection with Chiquita Canyon Rd	34.438443	-118.657207	36:32.0	6/14/2024	15:36:32	ND		
12009	OS010	Starbucks / store by Bruce sushi	34.450975	-118.625063	35:59.0	6/14/2024	16:35:59	ND		
12008	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	55:21.0	6/14/2024	15:55:21	ND		
12007	OS007	Bus Stop 14608 - Del Valle Rd & Silver St	34.448756	-118.655091	18:50.0	6/14/2024	16:18:50	ND		
12006	OS003	Lincoln Ave and Taylor St	34.443291	-118.655898	42:25.0	6/14/2024	15:42:25	<2	0	100 - Floral
12005	OS001	LA County Fire Department Del Valle Regional Training Center	34.43173	-118.65893	29:15.0	6/14/2024	15:29:15	ND		
12004	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	48:43.0	6/14/2024	16:48:43	ND		
12003	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	02:59.0	6/14/2024	16:02:59	ND		
12002	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	13:03.0	6/14/2024	15:13:03	ND		
11998	OS015	Front of Castaic Elementary School	34.47172	-118.63062	34:06.0	6/14/2024	14:34:06	ND		
11997	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	09:43.0	6/14/2024	15:09:43	ND		
11992	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	50:41.0	6/14/2024	14:50:41	4	7	100 - Floral
11991	OS012	Ralph's parking lot facing Bank of America	34.456885	-118.617798	55:10.0	6/14/2024	14:55:10	ND		

primary_odor	comments	cloud_cover	precip-itation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
105 - Fragrant	Jasmine or honeysuckle odor	Sunny	None	5.9	W	86.1	41.7	28.48	2024-06-24 12:22 CDT		
		Sunny	None	2.3	W	88	38.5	28.61	2024-06-24 12:22 CDT		
		Sunny	None	1.3	W	87.4	38.1	28.58	2024-06-24 12:22 CDT		
		Sunny	None	2	S	89.4	39	28.66	2024-06-24 12:22 CDT		
		Sunny	None	3.8	NW	87.9	40.2	28.59	2024-06-24 12:22 CDT		
		Sunny	None	0.9	S	90.4	38.9	28.67	2024-06-24 12:22 CDT		
		Sunny	None	1.2	SW	94.2	37	28.75	2024-06-24 12:22 CDT		
		Sunny	None	4.9	SW	88.6	38.8	28.75	2024-06-24 12:22 CDT		
		Sunny	None	5.8	W	83.5	42.1	28.49	2024-06-24 12:22 CDT		
		Sunny	None	3.1	SW	90.1	40.7	28.64	2024-06-24 12:22 CDT		
112 - Spicy	Smells like peppercorn	Sunny	None	1.7	N	90.1	42.7	28.71	2024-06-24 12:22 CDT		
		Sunny	None	4.2	W	89.7	40.2	28.72	2024-06-24 12:22 CDT		
		Sunny	None	4.9	S	89.5	34.9	28.58	2024-06-24 12:22 CDT		
		Sunny	None	0.7	W	88.5	41.5	28.62	2024-06-24 12:22 CDT		
		Sunny	None	6.6	S	88.5	39.6	28.59	2024-06-24 12:22 CDT		
		Sunny	None	1.4	S	90.5	37.4	28.54	2024-06-24 12:22 CDT		
		Sunny	None	5.3	S	90	35.2	28.61	2024-06-24 12:22 CDT		
105 - Fragrant	Floral jasmine odor interspersed with fried food	Sunny	None	1.3	S	90.7	39.2	28.77	2024-06-24 12:22 CDT		
		Sunny	None	1.5	S	90.2	38.8	28.8	2024-06-24 12:22 CDT		

id	location_code	location_description	latitude	longitude	local_time	sample_day	sample_time	odor_dilution_ratio_dt	odor_hedonic_tone	primary_odor_group
11990	OS015	Front of Castaic Elementary School	34.47172	-118.63062	39:36.0	6/14/2024	14:39:36	ND		
11989	OS009	Castaic Union School District Building	34.4411358	-118.626827	22:38.0	6/14/2024	14:22:38	15	-7	500 - Offensive
11973	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	14:14.0	6/14/2024	8:14:14	2	-6	500 - Offensive
11972	OS005	San Martinez Rd and Verdale Ave	34.449537	-118.678894	03:50.0	6/14/2024	8:03:50	4	-6	500 - Offensive
11971	OS013	Cambridge Ave across from house number 29862	34.459322	-118.626815	57:01.0	6/14/2024	9:57:01	ND		
11754	OS004	Bus Stop at San Martinez and Val Verde Rd	34.447008	-118.663862	15:01.0	6/11/2024	9:15:01	<2	-2	500 - Offensive
11753	OS002	Lincoln Ave near intersection with Chiquito Canyon Rd	34.438443	-118.657207	41:25.0	6/11/2024	8:41:25	4	-3	500 - Offensive

primary_odor	comments	cloud_cover	precipitation	wind_speed_mph	wind_direction_blowing_from	temp_deg_f	relative_humidity_percent	barometric_pressure_in_hg	exported_at	change_log	record_last_updated_at
		Sunny	None	1.8	S	89.6	40.2	28.55	2024-06-24 12:22 CDT		
506 - Garbage	Also smells putrid, rancid	Sunny	None	5.7	W	89.2	38	28.82	2024-06-24 12:22 CDT		
506 - Garbage		Sunny	None	2	S	67.4	61.5	28.72	2024-06-24 12:22 CDT		
506 - Garbage	Garbage and manure/livestock odors	Sunny	None	0.8	S	72.8	52.7	28.5	2024-06-24 12:22 CDT		
		Sunny	None	0	S	82	47	28.865	2024-06-24 12:22 CDT		
506 - Garbage	NR90201542	Sunny	None	1	E	84.5	49.6	28.65	2024-06-24 12:22 CDT		
506 - Garbage	NR90201542	Sunny	None	1	E	75.8	53.9	28.77	2024-06-24 12:22 CDT		

## **APPENDIX A. CURRICULUM VITAE OF RICHARD C. PLEUS, PHD, MS**

## FIELDS OF EXPERTISE

*Toxicology and Pharmacology.* Neurological; Aerospace; Endocrinological; Respiratory; Reproductive; Developmental

## EDUCATION

Postdoctoral training, University of Nebraska Medical Center, 1992, Neuropharmacology  
Ph.D., University of Minnesota, 1991, Environmental Toxicology. Research conducted in the Department of Pharmacology. Dissertation title: Neurobehavioral assessment in offspring of the influence of maternal hypoxia and hypercapnia induced by injection of methadone in pregnant rats

M.S., University of Minnesota, 1983, Environmental Health

B.S., Michigan State University, 1977, Physiology, Honors Graduate

## CURRENT AND PREVIOUS POSITIONS

**Founder, Managing Director, & Chief Toxicologist**, Intertox, Inc., Seattle, WA (1995 – present)

**Co-Founder & Co-Director**, Aerospace Toxicology Association, WA (2022-)

**Co-Founder**, Intertox Decision Sciences, Inc., Seattle, WA (2009– 2015)

**Chair**, Working Group 3 – Health, Safety and Environment, ANSI-Accredited U.S. Technical Advisory Group, ISO/TC 229, Nanotechnologies (2007—present)

**Adjunct Associate Professor**, University of Nebraska Medical Center, Department of Pharmacology, Omaha, NE (1999 – 2014)

**Adjunct Associate Professor**, University of Nebraska, Center for Environmental Toxicology, Omaha, NE (2002 – 2012)

**President**, Environmental Toxicology International, Inc., Seattle, WA (1993 – 1995)

**Vice President**, Marketing & Communications, Environmental Toxicology International, Inc., Seattle, WA (1993)

**Senior Toxicologist**, Environmental Toxicology International, Inc., Seattle, WA (1992 – 1993)

**Community Faculty**, Metropolitan State University, St. Paul, MN (1989 – 1996; taught courses in physiological psychology and psychopharmacology)

**Research Associate**, Department of Pharmacology, College of Medicine, University of Nebraska Medical Center, Omaha, NE (1989 – 1992)

**Instructor**, General College, University of Minnesota, Minneapolis, MN (1985 – 1989)

**Research Assistant**, Department of Pharmacology, Medical School, University of Minnesota, Minneapolis, MN (1985 – 1989)



**Instructor**, Lowthian College, Minneapolis, MN (1983 – 1985)

**Instructor**, Department of Continuing Education and Extension, University of Minnesota, Minneapolis, MN (1979 – 1983; taught courses on toxicology of cosmetic products and physiological factors contributing to accident susceptibility)

## SELECT PROJECT EXPERIENCE

### AEROSPACE

- Member of the aerospace medical team conducting a Root Cause Corrective Action (RCCA) for the U.S. Navy (NavAir) for Physiologic Episodes (P.E.) for aircrew of the F/A-18A, F/A-18G, and T-45. As one of two toxicologists on the team, I reviewed possible chemical exposures to pilots and their potential contribution to P.E.s. The exposure route of concern was inhalation. Respiratory and neurologic systems were critical organ systems of evaluation.
- Led the Intertox team in toxicological assessments for two airlines' above-wing employees (e.g., aircrew). Evaluated laboratory data, as well as designed and conducted testing of uniforms for over 400 chemicals. The exposure route was absorption via the skin or by inhalation. Respiratory and skin were critical organ systems of evaluation.
- Conducted a toxicological assessment of data from the Bleed Air Extraction and Sampling System (BAESS) in a joint experiment with the U.S. Air Force, NASA, and the Boeing Company. This system simulated the ventilation of commercial aircraft. Jet oil was injected into the engine of a USAF C-17 Globemaster III, and samples of air were pulled from ports along the length of the ventilation system and assessed over 45 chemicals at a sample location comparable to where aircrew and passengers would be exposed. The exposure route was inhalation, and the health assessment of interest was the respiratory and neurological systems.
- Conducted a toxicity assessment of a composite for passenger aircraft and laboratory testing data for certification of a new aircraft. The toxicological evaluation evaluated short-term (acute) toxic hazards of gaseous combustion products relating to human survivability in an aircraft cabin fire. The assessment was conducted using U.S. Federal Aviation Agency report DOT/FAA/AR-95 guidance and submitted to an international authority.
- Conducted an exposure assessment of airborne nanoparticles to aerospace workers. Nano-sized particles are thought to be released from sanding or grinding composite materials containing carbon nanotubes. Exposure routes were absorption via skin, inhalation, or ingestion. The evaluation focused on the health effects of the respiratory system.

- Conducted over 45 toxicological assessments of human exposure to jet oil and hydraulic fluid combustion in commercial aircraft. Chemicals evaluated were a group of organophosphates that included tricresyl phosphate isomers, tributyl phosphate, and combustion by-products. The triggering events were foul odors. The exposure route was inhalation, and the health assessment of interest was for the respiratory and neurological systems.

## AIR

- Designed and monitored a developmental study for airborne cellulose insulation treated with boron (e.g., boric acid). Pregnant rats were administered four doses during gestation. The experiment results produced a NOAEL to develop acceptable exposures for women workers or women residing in environments where cellulose insulation is used as insulation or acoustic attenuation. The exposure route was inhalation, and the health assessment of interest was reproductive and fetal developmental effects.
- Conducted toxicological assessment for clean-up of lead and arsenic-contaminated soil from smelter operating in the 1900s. Conducted historical toxicological research on articles and records dating back to the 1700s. Assessed what was known and when regarding the toxicology of lead (Pb) and arsenic (As) for all body systems and all exposure pathways for both human and ecological endpoints.
- Assessed human health risks from gases released from a landfill. Triggering events for residents were from foul odors. Laboratory data was obtained, and carbon disulfide, formaldehyde, and hydrogen sulfide were identified as released chemicals. The route of exposure was inhalation. Cancer and non-cancer endpoints were assessed, focusing on the nervous system for non-cancer effects.
- A toxicological assessment was conducted for human exposure to chloroform and hydrogen sulfide. These chemicals were released as gases from the wastewater treatment system of a pulp and paper mill. Exposures to residents were via inhalation. Cancer and non-cancer effects were assessed, with non-cancer effects focused on the respiratory and neurological systems.
- Assessed adverse health consequences to an off-site neighborhood resident from an accidental release of chlorine gas from a manufacturing plant. Exposure was via inhalation. Toxicological assessment was focused on the respiratory system and assessed cancer and non-cancer endpoints.
- Assessed human health risks related to emissions from a composting facility to a nearby community and followed USEPA guidelines for the assessment. Triggering events were foul odors released. Exposure was via inhalation. Developed a monitoring program to measure 23 reduced sulfurs, volatile organic compounds, and ammonia.

The toxicological assessment consisted of all organ systems, focusing on the nervous system—assessed non-cancer endpoints.

- Conducted toxicological evaluation of sewer gases and their impact on community health and evaluated over 60 chemicals produced from plant, animal, and human waste degradation. All organ systems were evaluated, focusing on risk from adverse effects on the nervous system. The exposure to these gases was via inhalation.
- Conducted over 30 human and ecological health risk assessments of cement kilns. Chemicals of concern included metals (including As, Cu, Cr, Cd, Zn, Pb, Hg, Ni, Zn), dioxins, furans, and polycyclic aromatic hydrocarbons (PAHs), nitrogen oxides, sulfur oxides, and many other EPA- identified hazardous air pollutants. Depending on the case, assessments focused on specific endpoints, such as neuroanatomical effects, and vulnerable subpopulations, such as the developing fetuses of local pregnant women. Assessments included a review of laboratory data, a review of toxicological and medical literature, and a review of medical records. Considered routes of exposure included direct exposure from inhalation and multipathway exposures from oral and dermal exposures. USEPA guidelines for assessments were used. Cancer, non-cancer, and ecological endpoints were assessed.
- Conducted a toxicological assessment of residents living nearby a lead smelting and refining operation. The chemicals of concern were lead and arsenic. Considered multipathway exposure, but eventually focused on inhalation and ingestion as significant routes. The evaluation consisted of assessing laboratory data, reviewing the toxicological literature, and including information from government agencies. USEPA guidelines were used as a basis for the review. All body systems were evaluated.
- Evaluated a risk assessment for carcinogenic polycyclic aromatic hydrocarbons for a coal-burning power plant. The focus was eventually narrowed to assessing a system of toxic equivalency factors based on non-validated assumptions. USEPA guidelines were used as a basis for the assessment. Exposures were considered multipathway. Cancer and non-cancer endpoints were assessed.
- Conducted human health risk assessment from emissions of a thermoplastic extrusion plant. Assessed laboratory data, air dispersion modeling, and calculated estimates of hazards for acute exposures to residents living near the facility. USEPA guidelines were used as a basis for the evaluation. Chemicals evaluated included acrolein, 1,3-butadiene, 4-vinylcyclohexane, styrene, and triphenylphosphate. The exposure was via inhalation. Cancer and non-cancer endpoints for all body systems were considered.
- Assessed human health risks of workers in a facility that was being built to decommission chemical warfare agents. Evaluated human acute exposures to sarin and mustard gases. The route of exposure was inhalation. Compared and contrasted reported health effects from acute exposures to health effects reported to those

published in the toxicological literature. Thirteen non-cancer endpoints, with a focus on the nervous system, were assessed.

- Evaluated human health risks to residents living near an accidental chemical release and subsequent fire from rail cars filled with chlorine and methyl mercaptan. The route of exposure was via inhalation of parent chemical agents, and work included assessing the human health risk from by-products of pyrolysis. Non-cancer endpoints were evaluated.
- Evaluated human health risks from exposure to stack emissions from a proposed fluidized bed incinerator. Air dispersion monitoring was used to estimate air concentrations at critical receptors in nearby neighborhoods and followed USEPA guidelines for the assessment. The toxicological evaluation was conducted for metals (As, Cr, Cd, Pb, Hg, Ni), dioxins, furans, polyaromatic cyclic hydrocarbons, nitrogen oxides, sulfur oxides, and other USEPA-identified hazardous air pollutants and reviewed potential effects for all body systems for cancer and non-cancer endpoints. The results of this toxicological assessment were presented to the community.
- Conducted a review of a state's proposal for biological monitoring of residents and their pets in a town that built and operated a hazardous waste incinerator. Followed USEPA guidelines for the assessment. Assessed the reliability and accuracy of bio-monitoring parameters relative to chemicals of potential concern. The exposure route was inhalation. Non-cancer endpoints assessed.
- Conducted toxicological assessment of multiple emission sources within an industrial park in the Bahamas to nearby residents. Oil terminals, pharmaceutical plants, power plants, and chemical plants operated in the park and conducted extensive emissions inventories and source evaluation surveys to gather data to assess individual contributions and cumulative effects of emissions. Toxicological assessment consisted of all organ systems. Cancer and non-cancer endpoints were evaluated.
- Conducted multiple human health risk assessments for several different facilities in a U.S. state. Facilities included a newly designed bus manufacturing plant and several beet processing plants. These were the first air screening risk assessments conducted by this state and conducted toxicological reviews of nearly 100 chemicals, including metals (As, Cr, Cu, Cd, Pb, Hg, Ni, Zn) emitted from each facility and assessed oral, dermal and inhalation routes of exposures through multipathway analysis. Cancer and non-cancer endpoints were evaluated.
- Reviewed multipathway human health risk assessment for a medical waste facility for the 173-acre Chris Hani Baragwanath Academic Hospital in Soweto, South Africa. Chemicals evaluated included metals (As, Cr, Cu, Cd, Pb, Hg, Ni, Zn), dioxin, furans, and polycyclic aromatic hydrocarbons. Exposure was evaluated for residents living nearby. Cancer and non-cancer endpoints were assessed.

- Conducted human health risk assessments for emissions from several coal-fired electric generating stations in Texas, Illinois, Massachusetts, Michigan, and Washington and followed USEPA and pertinent state guidelines for the assessments. The evaluations included metals (As, Cr, Cd, Pb, Hg, Ni), dioxins, furans, and polyaromatic hydrocarbons, which became newly reportable under the USEPA's Toxic Release Inventory (TRI) program. Toxicological assessment was conducted for other additional metals. Exposure was via inhalation. Potential risks through oral, inhalation, and dermal pathways were assessed for some facilities, and all organ systems for cancer, non-cancer, and ecological endpoints were evaluated.
- A toxicological assessment of human health risks from lead deposited in agricultural soil was conducted. Lead was released from the operation of a steel manufacturing plant. The evaluation used the USEPA Uptake/Biokinetic Model for Lead to evaluate human exposure. Environmental fate was followed through the food chain from soil to human food sources. A review of the literature was conducted. The route of exposure was primarily ingestion. Non-cancer endpoints were assessed with a focus on nervous system risks.

## **POLICY AND LEGISLATION**

- Briefed Costa Rican governmental and private representatives on the principles that underlie the toxicological assessment of nanotechnology. Included in the briefing were the Minister of Science and Technology, the Vice minister of Science and Technology, the President of Instituto Tecnológico de Costa Rica, and the Vice president of Research at the Instituto Tecnológico de Costa Rica.
- Participated in technical discussions with several members of the European Parliament in Brussels, Belgium, on developing appropriate scientifically based regulations to prevent adverse health effects from burning hazardous waste in cement kilns.
- Participated in technical discussions with South African governmental and private industry representatives on land, water, and air legislation and the benefits of science and risk-based environmental legislation.

## **PHARMACEUTICALS**

- Conducted numerous toxicological assessments for ethanol as an agent of interest in legal proceedings. Tasks included reviewing case documents and testimony for relevant information regarding potential ethanol exposure, developing physiologically-based pharmacokinetic models to scientifically estimate the likely degree of alcohol intoxication during relevant events, and drafting expert reports or providing testimony based upon the above analysis.

- Provided a toxicological assessment for over 30 toxicological assessments related to the testing and evaluation of biologic tissue (e.g., urine, hair, serum) samples for concerns of drug exposure, including ethanol, methamphetamine, benzoylecgonine, phencyclidine, nortriptyline, and amphetamine. Tasks included evaluations of test results for indications of adulterants or dilution, assessing methodological techniques, and determining the toxicological impacts and the signs and symptoms that might be associated with the levels of drugs detected—routes of exposure where inhalation and ingestion. Research also focused on genetic determinants of nervous system affects, although other endpoints were included.
- Conducted numerous toxicological assessments for opiate and opioid narcotic analgesic agents as a possible cause of death. Assessments included analyzing laboratory data, medical records, and medical literature analyses. The route of exposure was ingestion. Toxicological assessment focuses on the neurological system, which includes respiratory and psychological effects.
- Conducted a toxicological assessment for an antibiotic agent as a possible cause of death. Assessments included analyzing laboratory data, medical records, and medical literature analyses. Toxicological assessment focused on numerous body organs.

## **PRODUCT SAFETY**

- Conducted product safety assessments of bacteria for human health safety. Specific organisms are used to preserve fruit, de-nitrify surface water, improve water quality in swimming pools, conduct microbiological risk assessments for human health effects, and provide scientific documents to international governmental authorities.
- Conducted product safety assessment for laser printing devices. Assessed the materials used in the cutting process and the fumes from the cutting process. Evaluated the emissions related to possible human health effects for acute and chronic exposures.
- Conducted a scientific assessment for fungus for a toy distributed to the U.S., Europe and Asia. Laboratory tests were conducted, biological assessment was performed, and an approach to possible disposal was developed to address possible disposal options. It also assisted in developing forensic analysis to determine the cause of the mold. We evaluated acute and subchronic exposures from contact with skin and breathing spores.
- Conducted toxicological assessment for consumer-used ink products for Japanese manufacturer and assessed human health risks using American Society for Testing and Materials (ASTM) standards. Over 50 chemicals were evaluated for various oral, dermal, and inhalation routes of exposure. Toxicological assessment for all body systems, and included cancer and non-cancer endpoints.

- A toxicological assessment of human exposure to chemicals found in a cell phone and its packaging was conducted. Employees were exposed to unknown chemicals and subsequently reported acute health effects. Developed a testing program to determine chemicals of potential concern. Identified several solvents and assessed toxicological effects from exposure via inhalation and dermal contact. Developed a forensic program to evaluate the source. Acute non-cancer endpoints evaluated.
- A toxicological human health assessment was conducted using several volatile organic compounds, silane, and siloxane released from weather-treating products. The route of exposure was inhalation, and the population of concern included children. Non-cancer endpoints were assessed and focused on the nervous and respiratory systems.
- A toxicological assessment of multiple chemical cleaning solutions and carbon monoxide on reproductive effects was conducted. Exposure to pregnant women occurred while visiting a commercial art store. Exposure was via inhalation. Toxicological assessment focused on reproductive and neurological systems. Research also focused on genetic determinants of nervous system affects.
- Conducted human and ecological risk assessment of ethylene vinyl alcohol, a chemical used to make shipping packaging "peanuts." Reviewed laboratory data, the toxicological literature, and the use and fate of the material as a consumer product. The endpoints of evaluation were human and ecological receptors. USEPA guidelines were used as a basis for the assessment. For human exposure, cancer and non-cancer endpoints were assessed.
- Conducted a toxicological assessment of a consumer product, an ink-pen barrel constructed of pressed recycled rubber-tire. Reviewed laboratory data and conducted a review of the toxicological literature. USEPA risk assessment guidelines were used as a basis for assessment. Chemicals evaluated included metals (As, Cr, Cd, Pb, Hg, Ni) and organic hydrocarbons. Cancer and non-cancer endpoints for all body systems were considered.
- Prepared a human health risk assessment of occupational exposures to cellulose insulation. Conducted a review of the toxicological literature of paper dust, wood dust, and chemicals found in newsprint. The exposure from inhalation to paper and wood dust was assessed, and cancer and non-cancer endpoints were evaluated.
- Conducted toxicological, human, and ecological risk assessment of various herbicides used by W.A. State's Department of Transportation for use on state roadways and assessed human and environmental health risks associated with roadside vegetation management practice. Multipathway exposures were conducted and included the evaluation of sensitive human and ecological populations. Cancer and non-cancer endpoints were assessed.



- Conducted toxicological assessment of a consumer-related product used for cleaning outdoor camping equipment. The chemicals evaluated were ethylenediaminetetraacetic acid (EDTA), sodium hydroxide, nonylphenol polyethylene glycol ether, and dipropylene glycol monomethyl ether. The concern was these chemicals' adverse impact on the nervous system's non-cancer endpoints, particularly the eye.
- Conducted a toxicological assessment of fog-oil released from a military training facility. Fog-oil is used as a chemical obscurant in training exercises. Fog-oil migrated off-base into residential neighborhoods. Benzene and several other volatile organic compounds were evaluated toxicologically via inhalation exposure. The evaluation focused on cancer and non-cancer hematological effects.
- Conducted toxicological assessment on human health risks from cellulose insulation containing ammonium sulfate-based flame retardant. Exposure was via inhalation. Developed a single-compartment, first-order model to describe ammonia's environmental fate and transport in a residential setting. I used USEPA guidelines for the evaluation. Cancer and non-cancer endpoints were considered. Also, the production of foul odor was evaluated.
- Conducted toxicological evaluation of boron (B)-containing pesticide. All organ systems were evaluated. Exposures were ingestion, dermal, and via inhalation. Conducted exposure assessment with a university laboratory as a part of the assessment and eventually focused on the reproductive effects of boron pesticides. All data was forwarded to the State of California for review and evaluation of the data. Cancer and non-cancer endpoints were considered.

## WORKPLACE

- Developed medical monitoring protocol for governmental clients. The chemical of concern was mercury, including the various inorganic and organic mercury species. The key objective of the Mercury Medical Monitoring Program was to protect employees who may be exposed to elemental or organic mercury (Hg) during maintenance, construction, and remediation tasks. Cancer and non-cancer endpoints were considered.
- Assessed several cases where employees were suspected of using recreational drugs. We reviewed drug testing data and performed physiologically based pharmacokinetic (PBPK) modeling when needed. The cases involved different families of drugs, including opiates, ethanol, and cannabinoids. Most exposure routes were oral and included injection and inhalation.
- Assessed risk to human health of workers exposed to chemicals from the re-entrainment of exhaust air in a pharmaceutical research laboratory. Exposure was via inhalation. Odors were detected and were the triggering event at the workplace.



Chemicals were identified, and estimated concentrations were calculated. Toxicological assessment included all body systems, focusing on reproductive and nervous systems. Non-cancer endpoints assessed.

- Assessed health effects of a worker exposed to fumes asphalt roofing and solvent-based and latex paints. Exposures were via inhalation and dermal routes. Numerous non-cancer endpoints were evaluated.
- Conducted toxicological assessment for workers exposed to trichloroethylene (TCE) and evaluated the literature and laboratory data from the facility. TCE was used extensively in the facility as a degreaser, and all routes of exposure were assessed. However, the assessment eventually focused on risks for the development of neurobehavioral effects on the offspring of women exposed to TCE from drinking water ingestion, as that was deemed the most sensitive endpoint. It evaluated the use of medical monitoring for this population.
- A toxicological assessment of human health from exposure to perchloroethylene (PCE or tetrachloroethylene) from contaminated groundwater was conducted, and ingestion and dermal contact with water and inhalation of volatiles during showering or bathing were evaluated. Toxicological assessment included general toxicology and focused on the nervous system.
- Conducted toxicological evaluation of a worker to exposure to beryllium (Be) and polonium (Po) dust and residue. Evaluated exposures via inhalation, dermal, and, to a lesser degree, oral from dust. Cancer and non-cancer endpoints were assessed.
- Conducted toxicological assessments related to the waste from the production of plutonium (Pu) at the Hanford Reservation in eastern Washington for the US DOE site contractor. We conducted toxicological assessments for chemicals present in underground storage tanks, including metals and organic compounds. The work included developing Temporary Emergency Exposure Limits (TEELs) and other toxicity guidelines for worker exposure that were peer-reviewed by Argonne National Laboratories, evaluating exposures to workers related to potential accident scenarios, and developing computer visualization tools to assist workers with understanding the significance of detected chemical concentrations.

## SOIL

- Conducted field research on workers in wood treatment facilities to copper chromium arsenate (CCA), formerly used as a wood preservative. Airborne exposures to hexavalent chromium (CrVI) and arsenic (As) were of primary focus. Data was submitted to the USEPA. A new technique for detecting lower quantities was

developed. The route of exposure was primarily via inhalation. Cancer and non-cancer endpoints were assessed.

- Conducted a comprehensive risk assessment addressing human health risks related to dioxins and polycyclic aromatic hydrocarbons (PAHs) in soil at a wood-treating facility listed by USEPA as a Superfund site and followed USEPA guidelines for the assessment. The exposure assessment was multipathway and included exposures to workers and residents living near the facility. A probabilistic risk assessment was conducted to characterize uncertainty and variability in worker exposures and identify parameters contributing most significantly to uncertainty in risk estimates. Developed site-specific parameter distributions and characterized current scientific knowledge of the bioavailability of dioxins and PAHs in soil. Work was submitted to the USEPA. Cancer and non-cancer endpoints assessed.
- Conducted human and ecological risk assessment from the effects of copper slag leachates. Reviewed laboratory data and conducted toxicological literature review on human and environmental receptors. Evaluated arsenic (As), copper (Cu), cadmium (Cd), and zinc (Zn). USEPA and Washington state guidelines were used for this assessment. For human exposures, cancer and non-cancer endpoints were considered.

## **WATER**

- Reviewed and assessed the toxicity of multiple perfluorinated chemicals, including perfluorooctanoate (PFOA) and perfluorooctanesulfonate (PFOS), and assessed the current state of toxicological knowledge, evaluated guideline levels of state and federal government. Issues of concern included assessing the appropriateness of extrapolating from other species, using safety factors, and co-exposure to different chemicals. Cancer and non-cancer endpoints were evaluated.
- Was a scientific expert input to a Court developed science panel (C-8 Science Panel) on behalf of legal settlement (PFOA was the chemical of concern) in West Virginia. The panel was made up of independent scientists jointly chosen by the plaintiff and defense as a component of a legal settlement. My work focused on identifying a laboratory to conduct biological analysis and experimental design for medical testing. Exposure to PFOA was from drinking water exposure that includes oral, respiratory (e.g., showering), and skin routes.
- Conducted a human health risk assessment for a city in Washington. We conducted a toxicological evaluation to estimate human health risks associated with exposure to polychlorinated biphenyls (PCBs) and other chemicals from building materials at the former water treatment plant. We focused on cancer and non-cancer endpoints.
- Evaluated non-standard neuropsychological tests to demonstrate adverse effects of chemical exposure. In groundwater, the chemicals evaluated were perchlorate and

several petroleum-chlorinated solvents (e.g., TCE, PCE). Routes of exposure were via oral and inhalation. Non-cancer endpoints were assessed with a focus on the nervous system.

- Evaluated over 50 chemicals of potential human health and ecological consequences of exposure to Endocrine Disruption Chemicals (EDCs) and pharmaceuticals and personal care products (PPCPs) in reuse water for a large reuse water management agency and identified contaminants of most significant concern based on the likelihood of occurrence and resistance to treatment processes used at various facilities as well as potential for environmental exposure and health effects. Exposure routes of concern include drinking, breathing from aerosols from showering, and skin contact from bathing. Communicated the possible risks to the public and regulators.
- Assisted in evaluating and identifying sources of contamination for a screening-level ecotoxicologic assessment of select chemicals of potential concern (COPCs). The analysis concluded that sampling locations were associated with several COPCs exceeding their level of concern (LOC) for water. Further evaluation indicated that the relationship between sediment, water, and animal tissue was not always synchronous, COPCs with identified benchmarks should be evaluated, and LOCs not likely to pose a risk should be recognized appropriately. Ecological endpoints were assessed. COPCs including organics (chlorpyrifos, hexachlorobenzene, organochlorine pesticides, pentachloroanisole, pentachlorobenzene, PCBs, and tetrachlorobenzene) and inorganics (Al, Sb, As, Ba, Be, B, Cd, Cr, Cu, Fe, Pb, Mg, Mn, Hg, Mo, Ni, Se, Sr, Ti, V, and Zn) were analyzed and assessed in water, sediment, fish, and bird eggs.
- Assisted in a toxicological assessment of human health risks from ingesting drinking water containing trace amounts of personal care products, endocrine-disrupting chemicals (EDCs), and pharmaceuticals in drinking water. Both cancer and non-cancer endpoints were assessed. Non-cancer endpoints included the nervous system, endocrine system, reproductive system, and immune system. Ecological endpoints were examined.
- Conducted scientific assessment of the human health risk for exposure to perchlorate. Followed USEPA guidelines for the human health assessment. Addressed multipathway exposures to perchlorate included exposures to sensitive populations, such as pregnant women, and ecological endpoints. Provided scientific comments to the USEPA's development of a reference dose and the State of California regarding developing a Public Health Goal and proposed Proposition 65 listing. Cancer and non-cancer endpoints were assessed.
- Conducted a review of a state's proposal for biological monitoring of residents and their fluoride. This assessment considered human exposures to metals found as contaminants of sodium hexafluorosilicate or hexafluorosilicic acid. It evaluated fluoride ingestion in

sensitive human populations, including older adults and children. Both cancer and non-cancer endpoints were assessed.

- Conducted toxicological assessment for health risks from drinking water. Chemicals evaluated included perchlorate, TCE, and N-nitrosodimethylamine (NDMA). The evaluation assessed laboratory data, modeling data, toxicological literature, medical literature, and medical records. The primary route of exposure was ingestion; however, dermal and inhalation routes were also reviewed.
- Conducted toxicological evaluation of human health related to fluoride. Water fluoridation is the practice of adding fluoride compounds to water to reduce tooth decay in the general population. A review of the toxicological and medical literature was conducted in addition to U.S. and European governmental assessments of fluoridation. The primary route of exposure was ingestion; however, dermal and inhalation routes were also reviewed.
- Conducted toxicological assessment of the risk of oral exposure to lead to children via water from Seattle Public Schools and used physiologically based pharmacokinetic modeling to develop blood lead estimates for children of different ages. Non-cancer endpoints were focused on neurodevelopmental effects.
- Conducted a toxicological assessment related to oral exposures of ground water contaminated with low levels of perchlorate to community residents. Toxicological assessment considered possible doses, exposures via dermal, ingestion, and inhalation (e.g., taking a shower). Evaluated sensitive populations that included pregnant women and children.

## BIOLOGICAL RISK ASSESSMENT

- Developed and conducted an independent sampling program to test certain building materials for fungal spores and hyphal fragments that might indicate current fungal growth or the possibility of fungal growth in the future. Analyses included direct microscopy for identifying any fungal spores to the genus level and culture of viable samples on appropriate nutrient media.
- Assisted in evaluating a proposed Concentrated Animal Feeding Operation (CAFO) facility for potential human health and ecological impacts from possible facility releases for both human and environmental endpoints. The facility was intended for closed-loop operation and designed to prepare 20,000 head of cattle for market. Chemicals of concern included hormones, antibiotics, and pesticides. Pathogens were also assessed. This unique CAFO design comprised the following operating units: beef facility, ethanol-producing facility, combined heat and power facility, nutrient separator, greenhouse facility, water treatment facility, fluidized bed reactor, and composting facility.
- Provided scientific support for numerous commercial and residential indoor air quality claims concerning alleged adverse health effects from microbiological agent exposure. Critically evaluated laboratory data, the method of collection and analysis, medical records, and toxicological literature regarding exposure to fungal toxins in indoor air and their potential for causing long-term adverse health effects. Also included in some assessments was the release of volatile organic compounds from fungi. Assessed validity and reliability of information on the nature and extent of exposure, interpreted receptor health status, evaluated toxicological basis for health complaints, and identified potential sources of confounding causality. Many organisms have been assessed; however, the most commonly evaluated are *Aspergillus*, *Penicillium*, and *Stachybotrys*.
- Conducted biological assessment of workers exposed to bioaerosols, a conditioning agent used to dewater sludge (CLARIFLOC® C-9525 POLYMER), and particulates from an advanced wastewater treatment plant and evaluated the chemical and biological constituents of dewatered sludge. Reviewed laboratory data, conducted microbial, viral, and chemical literature reviews, and conducted site assessments. Route of exposure were inhalation and ingestion. Non-cancer endpoints were assessed. A review of employee protection was also performed.
- Conducted an anthrax investigation at a military mail facility. Developed and implemented a sampling and analysis program to determine whether *Bacillus anthracis* (anthrax) organisms could be detected. The biological assessment included a review of the microbiological literature, development of a state-of-the-science sampling approach, refining a work plan to address site-specific elements, preparation of the

work plan, collection of samples, coordination of laboratory analysis, interpretation of results, and preparation of final project documentation and results reporting.

- Conducted biological assessment of residents exposed to *Salmonella* and *E. coli* emanating from cattle feedlots as bioaerosols. Reviewed laboratory data, conducted microbial, viral, and chemical literature reviews, and conducted site assessments. Route of exposure were inhalation and ingestion. Non-cancer endpoints were assessed, and a work plan was to determine the adverse health effects related to microbial contamination of a potable private well-water supply. The work plan included examining exposure events, identifying microbial agents of concern (MAOC), and identifying possible health effects associated with direct and indirect contact with MAOCs detected in sewage.
- Evaluated the performance of immunoassay biological agent detection instrumentation for an instrument developer. Conducted independent tests to determine the minimum level of spore delectability of two specific instruments for viable anthrax spore vaccine and *Bacillus thuringiensis*.

## PESTICIDES

- Assisted with toxicological assessment of human exposure to an herbicide, acrolein, a pungent chemical used in urban settings to control weeds in public water systems. Odor is likely a human trigger to the presence of this chemical. Routes of exposure included inhalation, ingestion (from water and fish), and dermal exposure (from swimming). The toxicological assessment consisted of reviewing the toxicological literature, evaluating communities, and assessing accident scenarios. Non-cancer endpoints were assessed.
- Managed a state Department of Transportation agency's human and ecological risk assessment project. The project aimed to estimate the potential human health and environmental risks associated with the Agency's use of herbicides for roadside vegetation management. The evaluation addressed the general public and workers applying herbicides. Produced a risk assessment report and recommended herbicide risk management to the client.
- Conducted a toxicological assessment for Malathion (pesticide) exposure on human health. The evaluation included analyzing laboratory data, medical records, and medical literature analyses. Non-cancer endpoints were evaluated, with an eventual focus on the nervous system.
- A toxicological assessment of human exposure to a chemical intermediate used in the production of carbamate pesticides was conducted. Worker exposures were assessed for inhalation of intermediate compounds. Conducted a toxicological assessment of the literature and prepared a toxicology profile for the chemical. The work was submitted

to the USEPA. A surrogate reference dose was developed and presented for information purposes. Toxicological assessment of all body systems was conducted for cancer and non-cancer endpoints.

- Conducted a toxicological evaluation of pesticides and their combustion by-products for residents living nearby a pesticide warehouse: chemicals evaluated pesticides (e.g., organophosphates) and herbicides (e.g., glyphosate). Toxicological assessment considered all organ systems. However, the evaluation eventually focused on the nervous system.
- A toxicological assessment related to a consumer from the use of indoor pesticides was conducted. Pesticides contained boron, which was the chemical evaluated. Exposure was predominately via inhalation. All organ systems were considered for non-cancer endpoints.

## EXPERT PEER REVIEW PANELS

- 2023 Neurotoxicology expert for Airborne Hazards and Burn Pit Exposure (AHBPE-2) peer review panel of the 2022 Toxic Exposures Research Program (TERP) for the Department of Defense (DOD) Congressionally Directed Medical Research Programs (CDMRP).
- 2018-2019 Aerospace medicine, physiology, and toxicology clinical review team for the U.S. Navy (NavAir) Root Cause Corrective Action (RCCA) for Physiological Episodes (P.E.s) for pilots of F/A-18H and G models and T-45.
- 2010-2012 Science Advisor for the Nanosafety Consortium for Carbon, Washington, D.C.
- 2004-present Ad Hoc Science Review Board Member of the U.S. Environmental Protection Agency (USEPA) Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Scientific Advisory Panel.
- 2009 U.S. Environmental Protection Agency (USEPA) Nanomaterial Case Studies Workshop: Developing a Comprehensive Environmental Assessment Research Strategy for Nanoscale Titanium Dioxide, Durham, NC, September 29 and 30.
- 2009 U.S. Environmental Protection Agency (USEPA) - External Peer Review Panel of the Toxicological Review of Nitrobenzene (CAS No. 98-95-3), In Support of Summary Information on the Integrated Risk Information System (IRIS), published January 2009.
- 2009 Expert Peer Panel of Tertiary-Butyl Acetate (TBAC), Toxicology Excellence for Risk Assessment (TERA), Cincinnati, OH. January 7 & 8.
- 2007 U.S. Environmental Protection Agency (USEPA) - Integrated Risk Information System (IRIS) Peer Review of Nitrobenzene, Washington, DC, May 15.
- 2004 Resorcinol Peer Review Meeting: Follow-up Review to 2003, Toxicology Excellence for Risk Assessment, Harrisburg, PA. November 17 & 18.
- 2004 Federal Insecticide, Fungicide, and Rodenticide Act Scientific Advisory Panel Meeting: Consultation on Dermal Sensitization Issues for Exposures to Pesticides, Arlington, Virginia. May 4-6.
- 2003 Resorcinol Peer Review Meeting, Toxicology Excellence for Risk Assessment (TBAC), Cincinnati, OH. April 18 & 19.

## PEER REVIEWER

- Environment International
- Chemical Research in Toxicology
- Journal of Agricultural and Food Chemistry



- International Journal of Environmental Research and Public Health
- Current Medicinal Chemistry

### CONFERENCES AND SYMPOSIUMS

- 2013 Steering Committee member for the Gordon Conference "Environmental Nanotechnology: Novel Approaches to Meet Global Challenges." Vermont, USA.
- 2013 Co-Chair for "The Small-Business Community" breakout session of the "National Nanotechnology Initiative Workshop: Stakeholder Perspectives on the Perception, Assessment, and Management of the Potential Risks of Nanotechnology." National Nanotechnology Initiative, Washington D.C., USA, September 10-11.
- 2012 Organizer for the "Water Research Foundation Workshop Assessing Potential Short-Term Impacts of Chloramination." Water Research Foundation, Seattle, WA, December 6-7.
- 2011 Roundtable Participant for the "Washington State Green Chemistry Roundup," the Pacific Northwest Pollution Prevention Resource Center (PPRC), May 25-26.
- 2010 Invited Speaker for the "Capstone Meeting: Risk Management Methods & Ethical, Legal, and Societal Implications of Nanotechnology", the National Nanotechnology Initiative (NNI), Washington DC, USA, March 30-31.
- 2009 Co-Chair for the In Vitro Plenary of the "Nanomaterials and Human Health & Instrumentation, Metrology, an Analytical Methods" Workshop, the National Nanotechnology Initiative, Washington DC, USA, November. The workshop brings together thoughts and ideas to recommend which direction the federal government's nano EHS research strategy.
- 2009 Planning Committee Chair Member for the "Nanotechnology Health & Safety Forum (NHSF)," Seattle, USA, June. The NHSF explored the multiple perspectives of nanotechnology.
- 2007 Committee Member for the "Naphthalene State-of-the-Science Symposium," University of Nebraska Center for Environmental Toxicology, Monterey, USA. October. The Symposium is a scholarly peer review of critical scientific information underlying a federal health risk assessment.
- 2003 Organizing Committee Member for the "Perchlorate State-of-the-Science Symposium," University of Nebraska Medical Center, Omaha, USA, September. The Symposium is a scholarly peer review of critical scientific information underlying a federal health risk assessment.

### SELECT EDUCATIONAL COURSES

- Lecturer 2015-2017. Review of the human science for perchlorate. University of Minnesota
- Lecturer 2015. Comparing the toxicology of conventional chemicals to nano-objects. Presented for the course 'ECE 383 / CSI 383 Nanotechnology: Simulation and Design', taught by the Department of Electrical & Computer Engineering, Portland State University.
- Lecturer 2013. Comparing the toxicology of conventional chemicals to nano-objects. Presented for the course 'ECE 399 / CSI 399 Nanotechnology: Simulation and Design', taught by the Department of Electrical & Computer Engineering, Portland State University.
- Lecturer 2012. Guidance on Physicochemical Characterization for Manufactured Nano-objects Submitted for Toxicological Testing: ISO TC-229 Project Work. Presented at a Bar-Ilan Institute of Nanotechnology and Advanced Materials Seminar. Tel Aviv, Israel, October 15.
- Lecturer for Department of Pharmacology, University of Nebraska Medical Center. Provided lectures on toxicology for medical, pharmacy, graduate, and physician assistant students at the University of Nebraska Medical Center, Department of Pharmacology.
- Presented two courses in human health risk assessment for the Technical Research Council staff in South Africa. The purpose of the course was to introduce multi-pathway risk assessment to evaluate potential chemical exposures associated with various industrial activities in South Africa.
- Developed and taught over five courses on risk assessment and communication for the Air & Waste Management Association. The courses address toxicology, multi-pathway risk assessments for combustion sources, uncertainty analyses, and risk communication.
- Lectured on toxicology of the sensory system and neuroimaging in graduate student courses at the University of Washington.
- Developed, managed, and team-taught several courses on toxicology, risk assessment, and risk communication for the managers and staff of chemical plants, utilities, oil companies, railroads, and government officials. Courses have been presented in California, Pennsylvania, Arizona, Missouri, France, and South Africa.

## GRANTS AND AWARDS

- Grant Awarded, WRF 5085: Impact of Haloacetic Acid MCL Revision on DBP Exposure and Health Risk Reduction; (Richard Pleus Co-Investigator) 2021.

- Grant Awarded, WRF 4214: Development of Acceptable Daily Intakes (ADIs) for Pharmaceutical and Personal Care Product Ingredients, Hormonally Active Compounds, and Other Potentially Highly Toxic Compounds of Emerging Interest in Water Using the Minimum Anticipated Biological Effect Level (MABEL) Approach (Richard Pleus and Gretchen Bruce, Principal Investigators) 2008.
- Grant Awarded, WRF-05-005: Identifying Hormonally Active Compounds, Pharmaceutical Ingredients, and Personal Care Product Ingredients of Most Health Concern from Their Potential Presence in Water Intended for Indirect Potable Reuse; in collaboration with SNWA (Shane Snyder, Principal Investigator), 2007-2008.
- Grant Awarded, Center for Produce Safety 2012-2018: Apple growing and packing microbial risk factors and their potential to lead to foodborne disease outbreaks (Richard Pleus, Principal Investigator), 2012.
- Grant Awarded, WaterRF 4387: Development of a Water Utility Primer on EDCs/PPCPs for Public Outreach (Gretchen Bruce and Richard Pleus, Principal Investigators) 2012-2015.
- Grant Awarded, WaterRF 4320: Assessing Potential Short-Term Impacts of Chloramination. Water Research Foundation (Richard Pleus, Principal Investigator) 2011-2015.
- Grant Awarded, AwwaRF/WRF 3085/04-003: Toxicological Relevance of Endocrine Disruptors and Pharmaceuticals in Drinking Water (2004-2008); in collaboration with Southern Nevada Water Authority (SNWA) (Shane Snyder, Principal Investigator), 2008.
- Grant Awarded, AwwaRF 3033: Comprehensive Utility Guide for Endocrine Disrupting Chemicals, Pharmaceuticals, and Personal Care Products in Drinking Water; in collaboration with SNWA (SHANE Snyder, Principal Investigator), 2005-2006.
- Grant Awarded, WRF-06-018: Tools to Assess and Understand the Relative Risks of Indirect Potable Reuse and Aquifer Storage and Recovery Projects (2006-present ) (*DRAFT*); in collaboration with Nellor Environmental Associates, Inc. and Soller Environmental, LLC (Margie Nellor and Jeff Soller, Principal Investigators)
- Elected to Delta Omega Honorary Society in Public Health, 2003.
- Best Paper: Pleus R.C., Goodman G. and Mattie D.R. Development of a Reference Dose for Perchlorate: Current Issues and Status. Presented at the 50<sup>th</sup> Joint Army-Navy-NASA-Air Force (JANNAF) Propellant Development and Characterization and Safety and Environmental Protection Subcommittees Joint Meeting, Cocoa Beach, FL. May 2000.
- Faculty Mentor of the Year Award, General College Student government, University of Minnesota, Minneapolis, MN. 1989.

- Director of Undergraduate Research Opportunities Program Award, University of Minnesota, for the research proposal, *The effect of fetal hypoxia on fetal brain development*. 1987.
- Director of Undergraduate Research Opportunities Program Award, University of Minnesota, for the research proposal, *Use and operation of autoshaping and fixed ratio paradigm in environmental toxicology research*. 1986.
- Scholl Fellowship, National Sudden Infant Death Foundation, Landover, MD. 1985.
- U.S. Public Health Traineeship Award, United States Public Health Service, Washington, DC. 1979.

## PROFESSIONAL MEMBERSHIPS

- American Society for Pharmacology and Experimental Therapeutics
- Association for the Advancement of Science
- Society for Neuroscience
- Society of Toxicology

## DIRECTORSHIPS

- 2010 – 2018 Member, Board of Directors for the Nanotechnology Industries Association (NIA), Brussels, Belgium
- 2004 – 2007 Member, Board of Directors, Frontier Geosciences, Inc. Seattle, WA.
- 2001 – present Member and former Secretary, Board of Directors, Urban Environmental Institute. Seattle, WA.
- 1998 – 1999 Member, Board of Directors, Northwest Sculling Association. Seattle, WA.
- 1996 – 1998 Vice President, Seattle Yacht Club Rowing Foundation. Seattle, WA.
- 1989 Member, Board of Directors, Insight, Inc. Stillwater, MN.

## ADVISORY POSITIONS

- 2019 - present Head of US Working Group 3, ISO/TC 229/W.G. 3 "Health, Safety and Environmental Aspects of Nanotechnologies"
- 2007 -2019 U.S. Delegate, ISO/TC 229/W.G. 3 "Health, Safety and Environmental Aspects of Nanotechnologies"
- 2013 – 2017 Member of the University of California Center for Environmental Implications of Nanotechnology (UC CEIN) External Science Advisory Committee (ESAC). Selected for expertise on nano-related EHS issues.
- 2012 Invited Expert for the "BRE Cabin Air Quality Workshop." The BRE Group, London, England, February 20-21.
- 2011 U.S. delegate for the U.S.-Russia Bilateral Presidential Commission on Science and Technology, March 1 through 5. Selected for expertise on nano- related EHS issues.
- 2010 – 2017 Chair of the Science Advisory Board, *National Institute of Biomedical Imaging and Bioengineering (NBIB)*, Development and Launch of an Interoperable and Curated Nanomaterial Registry, Principal Investigator: Michele L. Ostraat, PhD.

- 2009 – 2011 Project Advisory Committee, WaterReuse Foundation/ Kennedy/Jenks Consultants, WRF 09-07: Risk Assessment Study of PPCPs in Recycled Water to Support Public Review.
- 2009 Peer Review Panel Member for the National Institute for Occupational Safety and Health (NIOSH) Intramural Proposal "International Coordination of Nanoscale Reference Materials" for the Nanotechnology Research Center (NTRC).
- 2008 – 2011 Project Advisory Committee, WaterReuse Foundation, WRF 06-019: Monitoring for Microconstituents in an Advanced Wastewater Treatment (AWT) Facility and Modeling Discharge of Reclaimed Water to Surface Canals for Indirect Potable Use, Florida, USA
- 2008 – 2012 Advisory Board Member, Center for Risk Communication Research, University of Maryland, College Park, MD, USA
- 2007 – 2010 International Advisory Board, USA, International Symposium on Nanotechnology in Environmental Protection and Pollution, Fort Lauderdale, FL, USA
- 2007 – present Chair and U.S. Delegate on the International Organization for Standardization (ISO) Technical Committee (T.C.) 229, Nanotechnologies, leading the U.S. Technical Advisory Group (TAG) Working Group 3; Environmental and Occupational Health. This working group develops comprehensive technical standards for engineered nano-objects.
- 2006 – 2008 Counselor to the Regional Central States Chapter of the Society of Toxicology (CS-SOT).
- 2006 Stakeholder Advisory Committee Member to review Development of Indicators and Surrogates for Chemical Contaminant Removal During Wastewater Treatment and Reclamation, WaterReuse Foundation Project WRF-03-014. May 16-17, in Phoenix, Arizona.
- 2002 Odors and Toxic Air Emissions Conference Program Committee Member. New Mexico, Rocky Mountain Water Environment Association, Air and Waste Management Association, and the International Water Association.
- 2000 – 2008 Member, Board of Advisors, Good Company. Eugene, OR.

## COMMUNITY SERVICE

- Panelist, Lakeside School Annual Biology Assessment Program. Seattle, WA (2001).
- Member & Co-Director, Mayor's Small Business Task Force. Seattle, WA (1997-2001).
- Member, Sustainable Seattle: a voluntary network and civic forum for sustainability. Seattle, WA (1992-1993).

### SELECTED PROFESSIONAL PRESENTATIONS

2022 **Pleus R.C.** Invited Speaker for the "IATA Aviation Health Conference." The International Air Transport Association, Paris, France, September 20-21

2021 **Pleus R.C.** Invited Expert for the "IATA Aviation Health Conference." The International Air Transport Association, Remote presentation, September 24-25

2020 **Pleus R.C.** Speaker on "Emerging Technology Trends: Nanotechnology." ANSI Company Member Forum. Hosted remotely, June 9.

2019 **Pleus R.C.** Invited Expert for the "IATA Aviation Health Conference." The International Air Transport Association, London, England, September 24-25.

2015 **Pleus R.C.** Physical-Chemical Properties: Relevance to Toxicity Testing. Presented at the Nanotechnology Regulatory Information Sessions: Regulatory Perspectives of Nanomaterial Physical-Chemical Properties. Health Canada, Ottawa, Ontario, March 13.

2013 **Pleus R.C.** Speaker on "The Nanosafety Consortium for Carbon" session of the "3rd USAF ASC/AFRL Engineered Nanomaterials Environment, Safety, and Health Workshop." January 10-12.

2013 **Pleus R.C.** Guidance on Physicochemical Characterization for Manufactured Nano-Objects Submitted for Toxicological Testing: ISO TC-229 Project Work. Presented at the NIEHS Nano Exposure/Character Workshop. Research Triangle Park, NC, January 10.

2012 **Pleus R.C.** Innovative Nano-toxicological Risk Assessment Process for Regulatory Purposes. Presented at the 40th Annual ISEES Conference. Tel Aviv, Israel, October 16-18.

2012 **Pleus R.C.** Brief Examination of the Current Toxicology Research for Carbon Nanotubes (CNTs). Presented to the Nanotubes Empowerment Solutions Consortium. Tel Aviv, Israel, October 15.

2012 **Pleus R.C.** Chemicals, Bleed Air, and Health Effects: What the Science Says. Presented at Aviation Health Conference 2012. London, United Kingdom, October 2-3, 2012.

2011 **Pleus R.C.** Comparing the Toxicology of Conventional Chemicals to Nano-Objects. Presented at the Escuela de Ingeniería Electrónica, Instituto Tecnológico de Costa Rica. San José, Costa Rica, February 2.

2010 **Pleus R.C.** Nanomaterials – Understanding and Managing ESOH Risks. Presented at the

- 8th Annual NanoTechnology for Defense Conference (NT4D). Atlanta, GA, May 3-6, 2010.
- 2010 **Pleus R.C.** The Importance of Defining Chemical and Physical Parameters for Toxicological Testing of Nanomaterials: Getting Two Scientific Groups to Help Each Other. Presented at the Bureau International des Poids et Mesures (BIPM) Workshop on Metrology at the Nanoscale. Sevres, France, February 18-19.
- 2009 **Pleus R.C.** Global Standardization: ISO TC 229. Nanotechnology Symposium California Department of Toxic Substances Control (DTSC). Sacramento, CA, November 16.
- 2009 **Pleus R.C.** Nanomaterials: Steps to Address EHS Concerns Businesses Should Consider Before Placing Nanomaterials on the Market. Nanotech in the Marketplace Webinar. Nanotechnology Today: A Web Series. June 4.
- 2009 **Pleus R.C.** Hexavalent Chromium and Mercury in the Cement Industry – Recent Concerns About Human Health Issues. Presented at the 2009 IEEE-IAS/PCA 51<sup>st</sup> Cement Industry Technical Conference. Palm Springs, CA, June 2.
- 2009 **Pleus R.C.** Pharmaceuticals & Endocrine Disrupting Chemicals (EDCs) in Water: Development of Health Risk-Based Screening Levels. Presented at the Water Quality Committee Program 2009 ACWA Spring Conference. Sacramento, CA, May 19-22.
- 2009 **Pleus R.C.** EHS: Policy, Regulation & Product Safety. Presented at the Nano Science and Technology Institute (NSTI) 2009 Products and Liability Panel. Houston, TX, May 5.
- 2009 **Pleus R.C.** Environmental Health & Safety and Nanotechnology: Possible Issues in the Water Industry. Presented at the Washington Innovation Summit 2009. Bellevue, WA, April 9.
- 2009 **Pleus R.C.** Perchlorate, Pharmaceuticals and Personal Care Products, Endocrine Disrupting Chemicals, and Nanotechnology in Water. Presented for the Association of California Water Agencies (ACWA). Sacramento, CA, February 9.
- 2008 **Pleus R.C.**, Walker, N., and Canady, R. A Minimal Set of Characterization Parameters. Presented at the Ensuring Appropriate Material Characterization in Nano-Toxicity Studies: A Workshop, Washington, D.C., October 28.
- 2008 **Pleus R.C.** What We Are Learning About Micro Constituents in Drinking Water: Pharmaceuticals and Endocrine Disruptors. Presented at the 2008 Water Quality and Regulatory Conference, Ontario, CA, October 16.
- 2008 **Pleus R.C.** Pharmaceuticals, Endocrine Disrupting Chemicals (EDCs), and Personal Care Products (PCPs) in Untreated and Treated Drinking Water: What We Know So Far. Presented at the AWWA / PNWS sponsored seminar, Pharmaceuticals in Water and Wastewater, Hillsboro, OR, September 11.
- 2008 **Pleus R.C.** Nanotechnology: Risk, Health, and Environmental Perspectives: Toxicology and Nano-objects. Boeing, Seattle, WA, July 25.



2008 **Pleus R.C.** Endocrine Disrupting Compounds (EDCs) and Pharmaceuticals and Personal Care Products (PPCPs). AWWA Webcast, May 7.

2008 **Pleus R.C.** Toxicology of Endocrine Disruptors (EDCs): Excerpts from *Toxicological Relevance of Endocrine Disruptors and Pharmaceuticals in Drinking Water, project #3085*. Presented at the EDC Communication - AwwaRF Research On EDCs and Risk Communication for D.C. Region Stakeholders, Washington, D.C., April 11.

2008 **Pleus R.C.** Toxicological Relevance of Endocrine Disrupting Chemicals (EDCs) and Pharmaceuticals in Water. AwwaRF Project #3085 / WRF 04-003. AwwaRF Webcast, March 6.

2008 **Pleus R.C.** Strategy Used to Build Toxicological Database for Emerging Toxic Chemicals in Litigation Focusing on the Mechanism of Action—Yes, This Is Rocket Science! Presented at the DRI Conference, Phoenix, AZ, February 6, 2008.

2007 Linkov I., Peterson M.K., Corey L.M., and **Pleus R.C.** Assessing Environmental Risk of Nanomaterials: Approaches and Tools. 2007 NSTI Nanotechnology Conference and Trade Show, Santa Clara, CA, May 20-24.

2007 Snyder E.M., Bruce G.M., **Pleus R.C.**, and Snyder S.A. Incidence and Toxicological Significance of Selected Endocrine Disrupting Chemicals (EDCs) in Drinking Water and presented at the World Environmental and Water Resources Congress 2007, Tampa, FL, May 15-19.

2006 Snyder S.A., **Pleus R.C.** Human Health Implications from Nanoparticles in Water. Presented at the International Symposium on Environmental Nanotechnology, South Korea, November 3.

2006 **Pleus R.C.**, Snyder S.A. Risk Assessment of Pharmaceuticals and Endocrine Disruptors in Drinking Water. Presented at The Western Coalition of Arid States Conference, Tucson, AZ, November 2.

2006 **Pleus R.C.**, Snyder S.A. Toxicological Relevance of Pharmaceuticals and Endocrine Disruptors in Drinking Water. Presented to the Orange County Utilities Water Quality Section Conference, Orlando, FL, October 26.

2006 Linkov I., **Pleus R.C.**, Stevens J., and Ferguson E. EPA Peer Review Panel Recommendations on Environmental Risk of Nanomaterials & Multi-Criteria Decision Analysis and Environmental Risk Assessment for Nanomaterials. Presented at the U.S. Army Nanotechnology Development Coordination Meeting, Cambridge, MA, August 15-17.

2006 **Pleus, R.C.** Perchlorate in 2006: Where are we and where are we going? Invited speaker. Presented at the 2006 Superfund Program Managers Symposium, Scottsdale, AZ, August 13-16.

2006 Corey L.M., Peterson M.K., **Pleus R.C.** Nanotechnology Environmental Health and Safety (EHS): Current Knowledge and Future Challenges. Presented at the 9<sup>th</sup> Annual Force Health Protection Conference, Albuquerque, NM, August 6-11.

2006 Corey L.M., Peterson M.K., **Pleus R.C.** Nanotoxicology: Special Considerations for Assessing Risks from Very Small Particles. Presented at the 9<sup>th</sup> Annual Force Health Protection Conference, Albuquerque, NM, August 6-11.

2006 Corey L.M., Peterson M.K., **Pleus R.C.** Developing Nanotechnology Health and Safety Standards. Invited speaker. Presented at the 2006 Micro Nano Breakthrough Conference, Vancouver, WA, July 25, 2006.

2006 **Pleus R.C.**, Bruce G.M., Snyder E.M., Snyder S.A., and Corey L.M. Toxicological Relevance of EDCs and Pharmaceuticals. Invited speaker. Presented at the 2006 AWWA Annual Conference in San Antonio, TX. June 11-15.

2006 **Pleus R.C.**, Bruce G.M., Snyder E.M., Snyder S.A., and Corey L.M. Incidence and Toxicological Significance of Selected Pharmaceuticals in Drinking Water. Presented at the Groundwater Resources Association's Emerging Contaminants in Groundwater Symposium, Concord, CA. June 7-8.

2006 **Pleus R.C.**, Bruce G.M., Snyder E.M. Addressing the Significance of Trace Level Findings. Presented at the Association of California Water Agencies Groundwater/ Water Quality Track: Pharmaceuticals in Groundwater: Public Health Issue or Public Relations Nightmare? Monterey, CA. May 10.

2006 Bruce G.M., **Pleus R.C.**, Snyder S.A., and Snyder E.M. Toxicological Relevance of Pharmaceuticals and Endocrine Disrupting Chemicals in Water. Presented at the National Ground Water Association's 5th International Conference on Pharmaceuticals and Endocrine Disrupting Chemicals in Water, Costa Mesa, CA. March 14, 2006.

2005 Snyder E.M., Snyder S.A., **Pleus R.C.**, Bruce G.M., Hemming J.D.C., and Hulseley R.A. Approach for Assessing the Toxicological Relevance of Endocrine Disruptors and Pharmaceuticals in Drinking Water. Submitted to Water Quality Technology Conference and Exhibition, Quebec, Canada. November 6-10.

2005 Corey L.M., Bruce G.M., **Pleus R.C.** Development of Nano-Based Risk Assessments: Challenges for the Present and Future. Mechanisms of Action of Inhaled Fibers, Particles and Nanoparticles in Lung and Cardiovascular Disease, Research Triangle Park, NC. October 25-28.

2005 **Pleus, R.C.** Perchlorate: Where We Are and Where We Are Going? Presented at the Environmental Law Conference at Yosemite, CA. October 22.

2005 **Pleus, R.C.** Emerging Chemicals of Concern-Effective Toxicological Assessment. Presented for the Society of Toxicology, Central State Chapter, Ames, IA. September 30.

2005 **Pleus, R.C.** Emerging Chemicals—Health Concerns About Endocrine Disruptors & Pharmaceuticals in Drinking Water Supplies. Presented at Mealey's Water Contamination Conference in Los Angeles, CA. September 26-27.

2005 **Pleus R.C.** Methods to Derive Safe Drinking Water Levels for Chemicals in Drinking Water. Invited to present at the 2005 Annual Conference & Exposition of the American Water Works Association: Natural Poisons & Unnatural Products Session, San Francisco, CA. June 14.

2005 Bruce G.M. and **Pleus R.C.** Private Toxicology: Testing and Analysis. Invited to present at the Winning: Hot Topics in Criminal Law—Alternatives to the State Crime Lab, Seattle, WA. May 24.

2005 Bruce G.M., Peterson M.K., and **Pleus R.C.** Comparative Risk Assessment Of Multimedia Environmental Exposure To Perchlorate and Other Agents That Inhibit Iodide Uptake Into The Thyroid. Poster presented at the Society of Toxicology 44<sup>th</sup> Annual Meeting, New Orleans, LA. March 10.

2005 Peterson M.K., **Pleus R.C.**, and Hays S.M. Assessing the Risks Associated with Children Ingesting Lead in School Drinking Water: PBPK Modeling and Risk Communication. Poster presented at the Society of Toxicology 44<sup>th</sup> Annual Meeting, New Orleans, LA. March 8.

2005 Dodge D.G., Peterson M.K., and **Pleus R.C.** Addressing Toxicological Challenges to Community Water Fluoridation in Washington State. Poster presented at the Society of Toxicology 44<sup>th</sup> Annual Meeting, New Orleans, LA. March 7.

2004 **Pleus R.C.** 2004 Update: What Does Human Data Tell Us About How Much Perchlorate Exposure is Safe? Presented at the 2004 Water Quality Conference, Ontario, CA. October 26- 28.

2004 **Pleus R.C.** Perchlorate dose-response relationship and the likelihood of effects at environmentally relevant levels. Presented at the URS Seminar—Perchlorate: Rush to Judgment or Serious Health Threat, Seattle, WA. September 28.

2004 **Pleus R.C.** Research, Discovery, and Contribution: Professional Experience in the Republic of South Africa. Invited speaker. Presented at the Pacific Northwest Association of Toxicologists (PANWAT) Annual Meeting: Toxicology in Third World Settings, Bend, OR. September 19.

2004 **Pleus R.C.** Product Liability: Emerging Contaminants of Concern. Presented to Bullivant Houser Bailey, Seattle, WA, and their satellite offices via video-conference. September 2.

2004 **Pleus R.C.** Perchlorate dose-response relationship and the likelihood of effects at environmentally relevant levels. Presented at the 228th ACS National Meeting, Philadelphia, PA. August 22-26.

2004 **Pleus R.C.** and Bruce G.M. Where Are We Now? An Update on the Perchlorate Action Level Debate. Presented at the 7<sup>th</sup> Annual Force Health Protection Conference, Albuquerque, NM. August 8-12.

2004 Belzer R.B., **Pleus R.C.**, Bruce G.M., and Peterson M.K. Using Comparative Exposure Analysis to Validate Low-Dose Human Health Risk Assessment: The Case of Perchlorate. Presented at the 7<sup>th</sup> Annual Force Health Protection Conference, Albuquerque, NM. August 8-12.

2004 **Pleus R.C.** and Bruce G.M. Perchlorate dose-response relationship and the likelihood of effects at environmentally relevant levels. Presented at the Groundwater Resources Association of California Conference, Glendale, CA. August 4.

2004 **Pleus R.C.** Asthma and Fungi: State of the Science. Presented at the ASTM International Boulder Conference on Mold in the Indoor Environment: Assessment, Health and Physical Effects, and Remediation, University of Colorado at Boulder, Boulder, CO. July 25-30.

2004 **Pleus R.C.**, Bruce G.M., Peterson M.K., and Dodge D.G. Comparative Contribution of Perchlorate and Anti-Thyroid Agents in American Diets to Iodide Uptake Inhibition. Paper presented at the 32nd Propellant Development & Characterization Subcommittee (PDCS) and the 21st Safety & Environmental Protection Subcommittee (S&EPS) Joint Meeting, Seattle, WA, July 25-29.

2004 **Pleus R.C.** Perchlorate dose-response relationship: Evidence from human studies. Presented at the 227th American Chemical Society National Meeting, Anaheim, CA. April 1.

2004 **Pleus R.C.** Establishing a Safe Dose for Perchlorate Based on Human Evidence of a No Effect Level. Presented at the Society of Toxicology 43<sup>rd</sup> Annual Meeting, Baltimore, MD. March 24.

2004 Peterson M.K. and **Pleus R.C.** Comparative Analysis of Neuropsychological Toxicity of Biological, Chemical, and Pharmaceutical Agents. Presented at the Society of Toxicology Annual Meeting, Baltimore, MD. March 22.

2004 **Pleus R.C.** Perchlorate: The Greer Study, the Critical Animal Studies, and the Evaluation Process by the National Academy of Science. Presented at the 14th Annual West Coast Conference on Soils, Sediments, and Water, San Diego, CA. March 16.

2004 **Pleus R.C.** and Bruce G.M. Adverse Effect Levels for Neurodevelopmental Effects Associated with Maternal Perchlorate Exposure: What do Existing Data Indicate? Presented at the 21<sup>st</sup> International Neurotoxicology Conference, Honolulu, Hawaii. February 12.

2003 **Pleus R.C.** Considerations related to sampling for bioterrorism agents. Presented at the Society for Risk Analysis Meeting—Bridging Risk Divides: Risk Assessment and Risk Communications Methodologies for Bioterrorism Incident Response Symposia, Baltimore, MD. December 8.

2003 **Pleus R.C.** A Review of the Science Required to Establish an Informed MCL for Perchlorate in Drinking Water. Presented to the Perchlorate Review Scholars Committee Urban Water Research Center, University of California, Irvine, CA. October 21.

2003 **Pleus R.C.** Perchlorate: The Questions You Have and The Answers You Need Presented at Fresh Summit 2003: Produce Marketing Association's 54<sup>th</sup> International Convention & Exposition, Orlando, FL. October 19.

2003 **Pleus R.C.** What do we know about the neurotoxic effects of chemicals in aircraft cabin air? Presented at the Northwest Occupational Health Conference Pacific Northwest Section of the American Industrial Hygiene Association, Seattle, WA. October 16.

2003 **Pleus R.C.** The Greer Study: Discussion of the Key Points. Presented at the UNMC Perchlorate State-of-the-Science Symposium, Omaha, NE. September 30.

2003 **Pleus R.C.** Making Sense of the Perchlorate Action Level Debate. Presented at the 6<sup>th</sup> Annual Force Health Protection Conference, Albuquerque, NM. August 11-14.

2003 **Pleus R.C.** Quantifying the Effects of Perchlorate. Presented at the California Minor Crops Council Technical Committee Meeting, Irvine, CA. June 26.

2003 **Pleus R.C.**, Bruce G.M., and Peterson M.K. Assessing Neurodevelopmental Effects of Environmental Exposures to Anti-Thyroid Agents: How Relevant are High Dose Rat Studies? Presented at the Society of Toxicology 42<sup>nd</sup> Annual Meeting, Salt Lake City, UT. March 9-13.

2003 Bruce G.M., **Pleus R.C.**, and Peterson M.K. Dose-Response Investigation of Tricresyl Phosphates Potentially Present in Airplane Cabin Air from Jet Engine Oils. Presented at the Society of Toxicology 42<sup>nd</sup> Annual Meeting, Salt Lake City, UT. March 9-13.

2003 **Pleus R.C.** Invited as Expert Panelist and presented, Making Sense of the Perchlorate Action Level Debate at AFCEE Technology Transfer Workshop, San Antonio, TX. February 24-27.

2003 **Pleus R.C.** Making Sense of the Perchlorate Action Level Debate. Presented at the 22<sup>nd</sup> Meeting of the RCC – Environmental Group AFCEE, San Francisco, CA. February 11-13.

2003 **Pleus R.C.** Dose-Response Investigation of Tricresyl Phosphates Potentially Present in Airplane Cabin Air from Jet Engine Oils. Presented at the 20<sup>th</sup> Annual International Aircraft Cabin Safety Symposium. Universal City, CA. February 10-13.

2002 Belzer R.B., Johnson D., Peterson M.K., and **Pleus R.C.** Comparative Risk Assessment for Perchlorate: How does the USEPA's RfD Compare to Other Goitrogens that are Found in the US Diet. Presented at the Society for Risk Analysis Annual Meeting: Symposium on Perchlorate: Policy Implications, New Orleans, LA, December 8-11.

2002 **Pleus R.C.** and Bruce G.M. Assessing Developmental Neurotoxicity for Environmental Chemicals. Presented at the Society for Risk Analysis Annual Meeting Symposium on Perchlorate: Policy Implications, New Orleans, LA, December 8-11.

2002 Peterson M.K., Bruce G.M., and **Pleus R.C.** Implications for the Use of Thyroid Endpoints from Rat Reproductive/Developmental Toxicity Studies in Human Risk Assessment. Presented at the Society for Risk Analysis Annual Meeting Symposium on Perchlorate: Policy Implications, New Orleans, LA, December 8-11.

2002 **Pleus R.C.** Making Sense of the Perchlorate Action Level Debate. Presented at the SERDP Partners in Environmental Technology Technical Symposium & Workshop, Washington, D.C. December 5.

2002 **Pleus R.C.** What Do Human Data Tell Us About How Much Perchlorate Exposure is 'Safe'? Presented at the Perchlorate Conference, Ontario, CA, October 16.

2002 Bruce G.M., Peterson M.K., and **Pleus R.C.** Sequence of Neurodevelopmental Effects of Anti-thyroid Agents in Rat Offspring: What Should We Expect to See? Poster presented at the NIEHS Thyroid Hormone & Brain Development Conference, Research Triangle Park, NC, September 23-25.

2002 Wahlsten D., Colbourne F., and **Pleus R.C.** High throughput rat and mouse brain morphometry for toxicology research. Poster presented at the NIEHS Thyroid Hormone & Brain Development Conference, Research Triangle Park, NC, September 23-25.

2002 Belzer R.B., Bruce G.M., Peterson M.K., and **Pleus R.C.** Exposure to Anti-thyroid Chemicals in the Environment and Diet. Poster presented at the NIEHS Thyroid Hormone & Brain Development Conference, Research Triangle Park, NC, September 23-25.

2002 **Pleus R.C.** Understanding Mold-Related Health Effects. Presented at the Emerging Environmental Issues Workshop Environmental Issues In Transactions: The New Landscape & Mold: Why a Headline Now? Sidley Austin Brown & Wood, Chicago, IL, June 7.

2002 **Pleus R.C.** with Boss et al. Decommissioning – Biological Risk course: Risk Assessment and Risk Communication: Strategic Tools. Presented at the American Industrial Hygiene Conference & Exposition, San Diego, CA, June 1-2.

2002 Peterson M.K., Bruce G.M., and **Pleus R.C.** Identification and Risk Assessment of Odorous Chemicals Associated with Combustion Processes. Poster presented at the Air & Waste Management Association's Hazardous Waste Combustors Specialty Conference & Exhibition, St. Louis, MO, April 17-19.

2002 **Pleus R.C.** The Toxicology of Terror and Tragedy. Presented at the Western Washington Emergency Network Conference, Bellevue, WA, April 2-3.

2002 **Pleus R.C.** Understanding Mold-Related Health Effects. Presented at the Mold Mania! A Growing Concern for the Insurance Industry seminar, Pacific Northwest Chapter of the CPCU Society, Seattle, WA, March 13.

2002 Bruce G.M., Johnson D. and **Pleus R.C.** Assessment of the Validity of USEPA's Interpretation of an Effect of Altered Neurobehavior in Offspring Treated with Perchlorate *in utero*. A Critical Review of the Argus (1998) and Bekkedal *et al.* (2000) Studies. Submitted to Eastern Research Group, Inc. for the USEPA/ORD Peer Review Workshop- Perchlorate Environmental Contamination: Toxicological Review and Risk Characterization, March 5-6, Sacramento, CA. February 19.



2002 Bruce G., Peterson M.K., Lincoln D.L., and **Pleus R.C.** Review and assessment of TSH and Thyroid Hormones during Pregnancy in the Rat and Human and Comparison to Hormone Values in the 2001 Effects Study. Submitted to Eastern Research Group, Inc. for the USEPA/ORD Peer Review Workshop-Perchlorate Environmental Contamination: Toxicological Review and Risk Characterization, March 5-6, Sacramento, CA. February 19.

2002 Bruce G. and **Pleus R.C.** Summary of the Expert Review of the Argus, 2001 ("Effects Study") Evaluation of Perchlorate Effects on Brain Morphometry in Neonatal Rats. Submitted to Eastern Research Group, Inc. for the USEPA/ORD Peer Review Workshop-Perchlorate Environmental Contamination: Toxicological Review and Risk Characterization. March 5-6, Sacramento, CA. February 19.

2002 **Pleus R. C.** Summary of the 1999 External Peer Review Panel Workshop, Submitted to Eastern Research Group, Inc. for the USEPA/ORD Peer Review Workshop-Perchlorate Environmental Contamination: Toxicological Review and Risk Characterization. March 5-6, Sacramento, CA. February 19.

2002 Johnson D. and **Pleus R.C.** Assessment of Neuropsychological Studies by Haddow et al. (1999) and Others Cited By USEPA to Support Their Concerns for Developmental Deficits Related to Maternal Thyroid Deficiency. Submitted to Eastern Research Group, Inc. for the USEPA/ORD Peer Review Workshop-Perchlorate Environmental Contamination: Toxicological Review and Risk Characterization. March 5-6, Sacramento, CA. February 19.

2001 **Pleus R.C.** Mercury Toxicology: Managing for Mercury in the Waste Stream. Presented at The WA State Recycling Association Workshop: Managing for Mercury in the Recycling Stream, Olympia, WA, November 16.

2001 Peterson M.K., Bruce G.M., Johnson D.L., and **Pleus R.C.** Evaluation of Risks and Health Effects in Humans Exposed to the Herbicide Dinoseb: A Case Study. Poster presented at the 2001 Society for Risk Analysis Annual Meeting, Seattle, WA, December 2-5.

2001 Goodman G. and **Pleus R.C.** Report on Six Expert Reviews of the Levy Report (J. Levy, J.D. Spengler, D. Hlinka, and D. Sullivan, Estimated Public Health Impacts of Criteria Pollutant Air Emissions from the Salem Harbor and Brayton Point Power Plants, May 2000). Prepared for USGen New England, Inc., Boston, MA. August 4.

2001 **Pleus R.C.**, Goodman G. and Mattie D.R. Development of a Reference Dose for Perchlorate: Current Issues and Status. Paper presented at 50<sup>th</sup> JANNAF (Joint Army-Navy- NASA-Air Force) Propulsion Meeting, Salt Lake City, UT, July 12.

2001 **Pleus R.C.** and Bruce G. Report on Five Expert Reviews of the Primedica 2001 Study Report (Hormone, Thyroid and Neurohistological Effects of Oral (Drinking Water) Exposure to Ammonium Perchlorate in Pregnant and Lactating Rats and in Fetuses and Nursing Pups Exposed to Ammonium Perchlorate During Gestation or via Maternal Milk, March 2001).

Prepared for the Perchlorate Study Group. May 16.

2000 Greer M.A., Goodman G., **Pleus R.C.**, and Greer S. Does Environmental Perchlorate Exposure Alter Human Thyroid Function? Determination of the Dose-Response for Inhibition of Radioiodine Uptake. Paper presented at the International Thyroid Meeting, Kyoto, Japan, October 22-27.

2000 Greer M.A., Goodman G., **Pleus R.C.**, and Greer S.E. Dose-Response for Perchlorate Effects on Thyroid Function in Human Subjects: Assessment of Environmental Risks. Submitted to USEPA. June 30.

2000 **Pleus R.C.** and Fulton K. Risk Assessment and Risk Communication: Strategic Tools. Course presented at the Air & Waste Management Association 93<sup>rd</sup> Annual Conference, Salt Lake City, UT, June 18-22.

2000 **Pleus R.C.**, Goodman G., and Mattie D.R. Development of a Reference Dose for Perchlorate: Current Issues and Status. Paper presented at the JANNAP Propellant Development & Characterization Subcommittee and 18<sup>th</sup> Safety & Environmental Protection Subcommittee Joint Meeting, NASA Kennedy Space Center, FL, May 11.

1998 Goodman G. and **Pleus R.C.** Recommendations to the USEPA concerning deriving a reference dose for perchlorate. Prepared for the American Pacific Corporation, Submitted to the National Center for Environmental Assessment. Research Triangle Park, NC. September.

1998 Rogers D.E.C., Terblanche P., and **Pleus R.C.** Health risk assessment: its introduction to South Africa for the regulation of emissions from medical waste incinerators. Presented at the *Papers of 11<sup>th</sup> World Clean Air and Environmental Congress, Volume 3*. Durban, South Africa.

1998 **Pleus R.C.** Risk Assessment and Risk Communication: Strategic Tools. The course was presented at the Air & Waste Management Association Waste Combustion in Boilers and Industrial Furnaces Specialty Conference, Kansas City, MO, on April 14.

1998 Johnson D.L. and **Pleus R.C.** Current Issues that Effect the Estimate of Cancer Risks and Non-cancer Hazards in Multipathway Risk Assessments for BIF Facilities. The paper was presented at the Air & Waste Management Association Waste Combustion in Boilers and Industrial Furnaces Specialty Conference, Kansas City, MO, April 15-16.

1998 **Pleus R.C.** and Johnson D.L. Assessing the Risks and Costs to Environmental Cases: Case Studies of Management Responses to Community Discontent. The paper was presented at the Air & Waste Management Association Waste Combustion in Boilers and Industrial Furnaces Specialty Conference, Kansas City, MO, April 15-16.

1998 **Pleus R.C.**, Dunn L. and Rogers D.E.C. Comparison of the Use of Risk Assessment for Human Health and Ecological Assessments in Developed and Developing Countries. Paper presented at the 11th World Clean Air and Environment Congress, Durban, South Africa, September 13-18.



1997 **Pleus R.C.** and Boss M.J. Risk Assessment and Risk Communication: Strategic Tools. The course was presented at the Air & Waste Management Association Waste Combustion in Boilers and Industrial Furnaces Specialty Conference, St. Louis, MO, on April 7.

1997 Shirai J., **Pleus R.C.** and Perry M. Chemical Characteristics of Cement Kiln Dust and their Effect on Dioxin-Related Health Risks. Paper presented at the Air & Waste Management Association Waste Combustion in Boilers and Industrial Furnaces Specialty Conference, St. Louis, MO, April 8-10.

1997 **Pleus R.C.** Introduction to Risk Assessment and Risk Communication: Training Course I. Course presented at the Council on Scientific and Industrial Research (CSIR), Pretoria, South Africa, March 3.

1997 **Pleus R.C.** International Trend in Health Risk Assessment. Lecture to South African governmental officials, CSIR Boardroom, Building 46, Pretoria, South Africa, March 11.

1997 Perry M. and **Pleus R.C.** What are the Neighbors Smelling? Odor Investigation of a Portland Cement Plant. Paper presented at the Nevada Water Pollution Control Association Annual Conference, Las Vegas, NV, March 7.

1997 Perry M. and **Pleus R.C.** Managing Corporate and Citizen Response to Foul Odors: Case Studies Involving Commercial Disposal and Production Facilities. Paper presented at the Air & Waste Management Association Annual Meeting, Toronto, Canada, June 8-13.

1996 **Pleus R.C.** Risk Assessment and Risk Communication: Strategic Tools. The course was presented at the Air & Waste Management Association Waste Combustion in Boilers and Industrial Furnaces Specialty Conference, Kansas City, MO, on March 25.

1996 **Pleus R.C.** and Boss M.J. Risk Assessment, Risk Communication, and Risk Management: Strategic Tools. Course presented at the Air & Waste Management Association Clean Air Conference, Orlando, FL, November 19.

1995 **Pleus R.C.** Risk Assessment and Risk Communication: Strategic Tools. The course was presented at the Air & Waste Management Association Waste Combustion in Boilers and Industrial Furnaces Specialty Conference, Kansas City, MO, on March 27.

1995 **Pleus R.C.** and Minter S.L. Odor Investigation of a Portland Cement Plant. Paper presented at the Air and Waste Management Association Odors: Indoor and Environmental Air International Specialty Conference, Bloomington, MN, September 13-15.

1995 Brankovan V., **Pleus R.C.**, and Molholt B. A Reference Dose Concentration (Rfd) for Lithium. Paper presented at the Vth COMTOX Symposium on Toxicology and Clinical Chemistry of Metals, Vancouver, British Columbia, Canada, July 10-13.

1995 **Pleus R.C.** and Kelly K.E. Health Effects of Hazardous Waste Incineration Facilities...More of the Rest of the Story: An Updated Review of the Scientific Basis of Alleged

Adverse Health Effects of Hazardous Waste Incineration. Paper presented at the Incineration Conference, Bellevue, WA, June.

1994 Kelly K.E. and **Pleus R.C.** Health effects of hazardous waste incineration...more of the story. Paper presented at Incineration Conference, Houston, TX, May.

1994 Kelly K.E. and **Pleus R.C.** Health effects of hazardous waste incineration. Paper presented at the Medichem Conference, Melbourne, Australia, October 18-21.

1993 Kelly K.E. and **Pleus R.C.** Identifying the species of metal-air toxics of greatest concern to human health and the environment. Paper presented at the Air & Waste Management Association Current Issues in Air Toxics Conference, Sacramento, CA, November 15-16.

1993 **Pleus R.C.** and Kelly K.E. Health effects of burning hazardous waste in hazardous waste incinerators: U.S. and international experience. Paper presented at the International Congress on Health Effects of Hazardous Waste, Health and Human Services, Atlanta, GA, May 3-6.

1993 **Pleus R.C.** and Kelly K.E. Health effects of burning hazardous waste in cement kilns. Paper presented at the International Congress on Health Effects of Hazardous Waste, Health and Human Services, Atlanta, GA, May 3-6.

1993 **Pleus R.C.** and Kelly K.E. The health effects of burning hazardous waste in cement kilns in the US. Paper presented at the Spalování, nebezpečných odpadu v cementárnách, Brno, Republic of Czech, January 27.

1992 O'Rourke M.F., **Pleus R.C.**, Iversen L.J. and Bylund D.B. Pharmacologic characterization of alpha-2 adrenergic receptor heterogeneity in rat brain. Abstract. *Soc. Neurosci. Abstr.* 18: 457.

1992 Blaxall H.S., **Pleus R.C.**, Cerutis D.R., Hass N.A. and Bylund D.B. Regulation of the alpha-2C adrenergic and 5HT1B serotonergic receptors by dexamethasone in an opossum kidney (OK) cell line. Abstract. *Soc. Neurosci. Abstr.* 18: 1538.

1992 Cerutis D., **Pleus R.C.**, Blaxall H., Hass N. and Bylund D.B. Characterization of an alpha-2 adrenergic receptor expressed in the human pineal gland. Abstract. *FASEB*, April.

1992 **Pleus R.C.**, Shiue C.Y., Shiue G.G., Rysavy J.A., Huang H., Frick M.P., and Bylund D.B. Carbon-11 labeled alpha-2 adrenergic receptor antagonist: Synthesis of [<sup>11</sup>C]WY 26703 and its biodistribution in rodents. Abstract. IXth International Symposium on Radiopharmaceutical Chemistry, Paris, France, 6-10 April.

1992 Shiue C.Y., Bai L., Shiue G.G., Rysavy J.A., **Pleus R.C.**, Huang H., Frick M.P., Catt J.D., and Yevich J.P. Fluorine-18 labeled BMY 14802: Synthesis and anatomical distribution in rodents. Abstract. IXth International Symposium on Radiopharmaceutical Chemistry, Paris, France, 6-10 April.

1992 **Pleus R.C.**, Shiue C.Y., Shiue G.G., Rysavy J.A., Huang H., Frick M.P., and Bylund D.B. Comparison of [<sup>11</sup>C]MK-912 and [<sup>11</sup>C]WY26703 as alpha-2 adrenergic receptor ligands.

Abstract. *J. Nucl. Med.* 5: 861.

1991 **Pleus R.C.** and Bylund D.B. 1991. Regulation of the 5HT<sub>1B</sub> receptor in opossum kidney cells by serotonin. Abstract. *Soc. Neurosci. Abstr.* 17: 1175.

1991 Shiue C.Y., Shiue G.G., Bai L.Q., Huang H., Rysavy J.A., **Pleus R.C.**, Sunderland J.J. and Frick M.P. Fluorine-18 and carbon-11 labeled amphetamine analogs: Synthesis, biodistribution in mice and the effect on D-2 receptor binding. Abstract. *J. Nucl. Med.* 32: 994.

1990 **Pleus R.C.** and Bylund, D.B. 1990. Serotonin down-regulates 5HT<sub>1B</sub> receptors in opossum kidney cells. Abstract. *Soc. Neurosci. Abstr.* 16: 495.

1988 **Pleus R.C.** and Sparber S.B. Acute toxicity of methadone, measured as hypoxia and hypercapnia, in pregnant rats. Abstract. *Soc. Neurosci. Abstr.* 14: 34.

1987 **Pleus R.C.** and Sparber S.B. 1987. Transcutaneous monitoring of O<sub>2</sub> and CO<sub>2</sub> in conscious and methadone treated rats: Underestimates of hypoxia due to physiological adaptation in control subjects. Abstract. International Narcotics Research Conference, Adelaide, South Australia, 31 August-4 September.

1986 **Pleus R.C.** Reactive astrogliosis and astrocytosis in infants who died of sudden infant death syndrome. Abstract. 7th European Conference on Brain Research, Val Thorens, France, 9- 14 March.

1985 **Pleus R.C.** Chemical composition of cosmetic products. Department of Professional Development and Conferences, University of Minnesota, St. Paul, MN, Lecturer (1979, 1980, and 1982).

1983 **Pleus R.C.** Physiological factors contributing to accidental susceptibility. Midwest Center for Occupational Health and Safety, St. Paul Ramsey Hospital, St. Paul, MN, Lecturer (also 1981 and 1982).

## PROFESSIONAL PUBLICATIONS

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*Updated January 30, 2024*



**APPENDIX B. INTERTOX SAMPLING AND ANALYSIS PLAN FOR  
JUNE 2024 ODOR STUDY**

**CHIQUITA CANYON LANDFILL  
OFF-SITE ODOR SURVEY SAMPLING PLAN**

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## **1.0 BACKGROUND**

An elevated temperature landfill event was identified at Chiquita Canyon Landfill (CCL), a 639-acre municipal solid waste landfill owned and operated by Chiquita Canyon, LLC (Chiquita), around May 2022. This event caused an increase in the emission of odors to nearby residential communities, such as Val Verde, Live Oak, and Hasley Hills.

Intertox, Inc. (Intertox) and CTEH will conduct an air quality and odor study between June 11–18, 2024 to characterize odors and the odorous chemicals (odorants) in and around the residential communities surrounding CCL throughout the daytime (between 7am-7pm).

## **2.0 PROJECT PERSONNEL AND RESPONSIBILITIES**

Sampling personnel from Intertox and CTEH will conduct the air and odor sampling according to this sampling plan.

The participating contract laboratories, each of which has specific capabilities to ensure that analyses are performed correctly and will provide required sampling equipment and laboratory analyses, are:

St. Croix Sensory  
1150 Stillwater Blvd  
Stillwater, MN 55082  
and  
Enthalpy Analytical  
1941 Reymet Rd  
Richmond, VA 23237

## **3.0 TIMING AND LOCATION OF SAMPLING**

Sampling personnel from Intertox and CTEH will conduct the sampling at 15 off-site locations surrounding Chiquita Canyon Landfill located in and around the Val Verde, Hasley Hills, and Live Oaks neighborhoods and one background location located upwind of CCL (Figure 1; Table 1). Sampling will occur on June 11 through June 17, 2024 between 8am–12pm and 2pm–6pm for one day, 7am–11am and 1pm–5pm for three days, and 9am–1pm and 3pm–7pm for three days (Table 2).



**Figure 1. Air and odor sampling locations OS001-OS015 and background upwind location (UP001). An additional background upwind (UP002) location is to be determined by sampling personnel prior to first night of sampling.**

**Table 1. Sampling location identifiers (IDs) and descriptions**

Sample Location ID	Location Description
OS001	LA County Fire Department Del Valle Regional Training Center
OS002	Lincoln Ave near intersection with Chiquito Canyon Rd
OS003	Lincoln Ave and Taylor St
OS004	Bus Stop at San Martinez and Val Verde Rd
OS005	San Martinez Rd and Verdale Ave
OS006	Val Verde Rd and Oakwood Ave
OS007	Bus Stop 14608 - Del Valle Rd & Silver St
OS008	Ave Penn and Witherspoon Pkwy
OS009	Castaic Union School District Building
OS010	Starbucks / Story by Bruce sushi
OS011	Park behind Live Oak Elementary School



<b>Sample Location ID</b>	<b>Location Description</b>
OS012	Ralph's parking lot facing Bank of America
OS013	Cambridge Ave across from house number 29862
OS014	Lot in front of Fire Station 143
OS015	Front of Castaic Elementary School
UP001	Chiquito Canyon Rd & Henry Mayo Dr

**Table 2. Sampling schedule and personnel roles**

<b>Date</b>	<b>Time Window(s)</b>	<b>Sampling Personnel and Role(s)</b>
Tuesday, June 11, 2024	8am–12pm & 2pm–6pm	Intertox – Tedlar bag air samples CTEH – Nasal Ranger®/ evacuated canister air samples/ meteorological CTEH – Nasal Ranger®/ meteorological
Wednesday, June 12, 2024	9am–1pm & 3pm–7pm	Intertox – Tedlar bag air samples CTEH – Nasal Ranger®/ evacuated canister air samples/ meteorological CTEH – Nasal Ranger®/ meteorological
Thursday, June 13, 2024	7am–11am & 1pm–5pm	Intertox – Tedlar bag air samples CTEH – Nasal Ranger®/ evacuated canister air samples/ meteorological CTEH – Nasal Ranger®/ meteorological
Friday, June 14, 2024	7am–11am & 1pm–5pm	Intertox – Tedlar bag air samples CTEH – Nasal Ranger®/ evacuated canister air samples/ meteorological CTEH – Nasal Ranger®/ meteorological
Saturday, June 15, 2024	9am–1pm & 3pm–7pm	Intertox – N/A* CTEH – Nasal Ranger®/ evacuated canister air samples/ meteorological CTEH – Nasal Ranger®/ meteorological
Sunday, June 16, 2024	9am–1pm & 3pm–7pm	Intertox – N/A* CTEH – Nasal Ranger®/ evacuated canister air samples/ meteorological CTEH – Nasal Ranger®/ meteorological
Monday, June 17, 2024	7am–11am & 1pm–5pm	Intertox – Tedlar bag air samples CTEH – Nasal Ranger®/ evacuated canister air samples/ meteorological CTEH – Nasal Ranger®/ meteorological

\*Tedlar bag air samples will not be collected on Saturday or Sunday due to sample hold time requirements by the analytical laboratory.



## **4.0 FIELD SAMPLING METHODS**

The following sections describe the pre-sampling procedures, equipment, collection media, and procedures for collecting odor and air samples.

### **4.1 Pre-Sampling Procedures**

Prior to initiation of the sampling event, the sampling team will confirm that the following materials are present:

- Bound field notebook with page numbers (e.g., composition notebook)
- Pens (3–4)
- Permanent markers (3–4)
- Clipboard (3)
- Tablet or phone with cellular service (2–3) (for recording digital sample intake forms)
- Nasal Ranger® Field Olfactometer (2)
- 1.4-L SUMMA canister or Silonite™ treated MiniCans™ (25)
- 10-liter Tedlar bags (25)
- Vacuum chamber with extra components (silicone and PTFE tubing, hose barb connectors) (2)
- Chain-of-custody and sample intake forms
- Shipping materials (cardboard boxes, tape, pre-printed shipping labels, etc.)

On-site conditions will be noted in the field notebook, including:

- Date and time
- Description of sample location
- Any conditions that might affect the collected sample (e.g., wildfires)

Sampling personnel will not consume any food or beverages within one-hour prior to collecting samples or during sampling. Sampling personnel will not wear any fragrances, including scented lotions or deodorants prior to or during sampling.

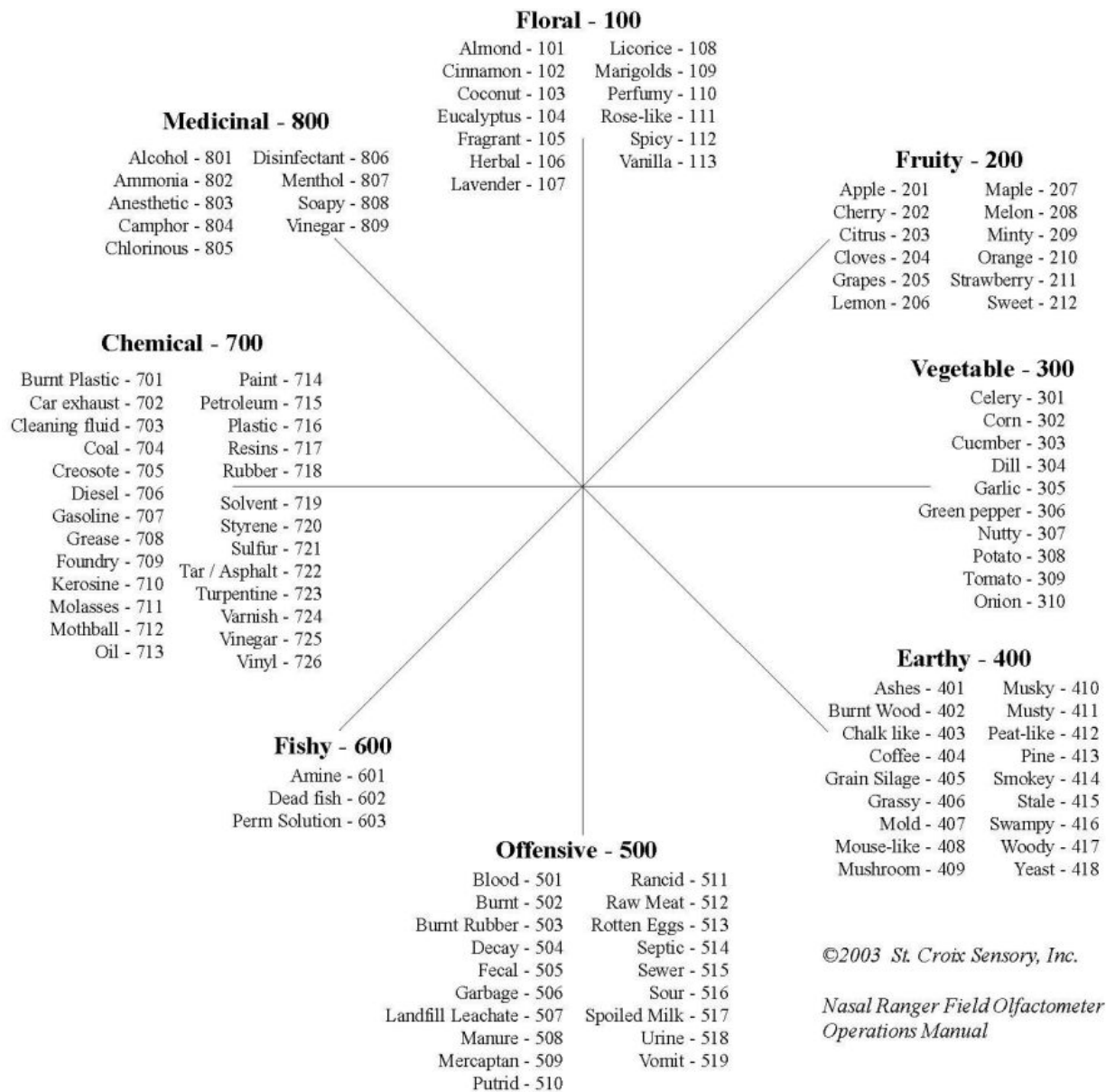
### **4.2 Documentation of field conditions and odor data**

At each sample location, the following information will be recorded in the field notebook and/or digital sampling log:

- Date;

- Time;
- Sample location (location ID and latitude/longitude coordinates);
- Location description;
- Odor duration (persistent or intermittent);
- Measured D/T at which an odor was detected;
- Odor hedonic tone;
- Odor group and character using odor wheel (see Figure 2)
- Cloud cover;
- Precipitation;
- Wind direction;
- Wind speed (miles per hour);
- Air temperature;
- Relative humidity;
- Barometric pressure; and
- Any other conditions that might affect the collected sample (e.g., the presence of nearby automobiles, other potential odor sources, other environmental conditions)

Data on the meteorological conditions (e.g., wind speed, wind direction, relative humidity) will be obtained from a portable meteorological/weather station (Kestrel 5500 Weather Meter) (see Appendix A) at each sampling location on the sampling day. Data on odor conditions (e.g., D/T, hedonic tone, and odor character) will be obtained by trained sampling personnel using a Nasal Ranger® Field Olfactometer (see Section 4.3) and using the St. Croix Sensory odor wheel (Figure 2).



**Figure 2. Odor wheel (source: St. Croix Sensory, Inc.)**

### 4.3 Equipment, collection media, and procedures for odor samples

The purpose of odor sampling is to characterize odor intensity, character, and hedonic tone. Samples will be collected at 15 off-site sample sites located in neighborhoods surrounding CCL (e.g., Hasley Hills, Val Verde, Live Oaks).

Sampling equipment and collection procedures for odor samples are described below.

#### **4.3.1 General Sample Collection Procedures**

- Nasal Ranger® Field Olfactometer will be used to measure and quantify odor intensity at each off-site and background sample location (Table 1).
- Two trained odor sampling personnel will collect odor samples simultaneously using the Nasal Ranger® Field Olfactometer.
- Trained odor sampling personnel will record the odor character and hedonic tone.

#### **4.3.2 Equipment and collection media**

Prior to the initiation of sampling for odors confirm that the laboratory has provided the following items in the sampling kit:

- Nasal Ranger® Field Olfactometer (2)
- Extra components for Nasal Ranger® Field Olfactometer (e.g., nose piece, cushion seal, 9v batteries)
- Alcohol wipes

#### **4.3.3 Pre-sampling procedures**

Prior to the collection of each sample:

1. Review and prepare all documents attached (field kits, data sheets, field notes, sampling forms, etc.).
2. Identify sampling locations on map.
3. Check that all sampling equipment is present.

#### **4.3.4 Nasal Ranger® sampling procedures**

To collect a sample with the Nasal Ranger® Field Olfactometer:

1. Turn the Nasal Ranger® Field Olfactometer on by pressing the power button located below the Nasal Mask nozzle. All four LED lights should illuminate for one second, and then the 1<sup>st</sup> (leftmost) Power LED will remain illuminated (Figure 5 in Appendix B).
2. Position the D/T dial at the first blank position located between 2-D/T and 60-D/T.
3. Inhale at your **NORMAL** breathing rate through the Nasal Mask for 1 minute.
4. Turn the dial to the 60-D/T position and inhale and exhale **TWICE** through the Nasal Mask at the target inhalation rate of 16–20 liters per minute (LPM).
5. Turn the dial to the next blank position between 60-D/T and 30-D/T and resume your **NORMAL** breathing rate through the Nasal Mask.
6. Ask yourself: Did I smell an odor?

- a. If **YES**, testing is concluded. Record 60-D/T and note the character of the odor detected in your sampling log.
  - b. If **NO**, repeat **Steps 4–6** with the 30, 15, 7, 4, and 2 positions on the dial, remember to rest your nose with the blank positions between each D/T value. After reaching the 2-D/T position, proceed to step 7.
7. Ask yourself: Did I smell an odor?
- a. If **YES**, testing is concluded. Record  $4 > D/T \geq 2$  and note the character of the odor detected in your sampling log.
  - b. If **NO**, record  $D/T < 2$ .

Note: Ensure your inhalation rate is within specification. The LED display on the Nasal Ranger® Field Olfactometer provides feedback for the user to inhale at the factory calibration rate of 16–20 liters per minute. A diagram illustrating the LED display on the Nasal Ranger® Field Olfactometer is shown in Figure B-1 in Appendix B.

A flowchart of these steps is shown in Figure C-1 located in Appendix C.

#### **4.4 Equipment, collection media, and procedures for evacuated canister air samples**

The purpose of collecting evacuated canister air samples is to characterize the odorants associated with CCL elevated landfill temperature event that are present in the air when an odor is detected.

Sampling equipment and collection procedures for evacuated canister air samples are described below.

##### **4.4.1 General sample collection procedures**

- An air sample will be collected when sampling personnel detect an odor at or above 7 D/T using the Nasal Ranger® Field Olfactometer and analyzed for Toxic Organics (TO)-15 volatile organic compounds (VOCs) and sulfur gas profile (ASTM D5504) by Enthalpy Analytical. One field blank and one duplicate will also be collected.
- Evacuated 1.4-liter SUMMA®<sup>1</sup> polished stainless steel canisters or Silonite™ treated MiniCans™ (see Appendix D for diagram) will be used to collect the air samples. Samples will be analyzed for VOCs and sulfurs as described in Appendix E and Appendix H, by the laboratory using USEPA Method TO-15 and ASTM D5504,

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<sup>1</sup> SUMMA® refers to a passivation process used on stainless steel to prevent iron or iron oxide on the surface which may be reactive.

respectively (USEPA, 2019; ASTM, 2024). The vacuum in the chamber pulls a sample of air into the container.

- Prior to sample collection, each canister is prepared and evacuated at the laboratory.
- The absolute inner canister pressure is recorded at the laboratory and will be verified by the sampling team in pre-sampling preparation and in the field before sampling begins. The canister pressure will be documented in the field notes. Any canister that did not maintain a vacuum will be replaced with a spare and returned to the laboratory.

#### ***4.4.2 Equipment and collection media***

Prior to the initiation of air sampling, confirm that the laboratory has provided the following items in the sampling kit:

- Flow controllers provided by the laboratory
- 1.4-liter SUMMA® polished stainless steel canisters or Silonite™ treated MiniCans™ (25 total; up to 23 field samples, 1 field duplicate, and 1 field blank)
- Pre-printed sample labels
- Pre-printed chain-of-custody forms
- Packaging materials

#### ***4.4.3 Pre-sampling procedures***

Conduct the following procedures prior to initiating sampling each day:

1. Review and prepare all documents (field kits, data sheets, field notes, sampling forms).
2. Identify sampling locations on map.
3. Check all sampling equipment.

#### ***4.4.4 Air sampling procedures***

The following stepwise sequence will be followed to collect air samples:

1. Attach the quick connect grab fitting to the canister. To do this, align the QT Valve stem (male), which is on the canister, with the QT valve body (female).
2. Pull back the sleeve on the QT valve body (female) and insert the stem (male) into the body. Then, release the sleeve. If the two pieces are correctly engaged, you will hear a hissing sound as the can fills.
3. After 45–60 seconds, remove the female fitting from the male fitting.
4. Label the tag on the canister with the sample ID.

5. Complete appropriate chain-of-custody forms, master sample log entries, and canister tags for samples collected. Canisters have a 7-day maximum hold time at room temperature.

#### **4.5 Equipment, collection media, and procedures for Tedlar bag air samples**

The purpose of collecting air samples is to characterize the odorants associated with CCL elevated landfill temperature event present in the air when an odor is detected.

Sampling equipment and collection procedures for Tedlar bag air samples are described below.

##### ***4.5.1 General sample collection procedures***

- A Tedlar bag air sample will be collected when sampling personnel detect any odor at or above 7 D/T using the Nasal Ranger® Field Olfactometer and analyzed for sulfur compounds and VOCs using USEPA Method TO-17 modified for selected-ion flow-tube mass spectrometry (SIFT-MS) by St. Croix Sensory (see Appendix G for a complete list of compounds). One field duplicate will also be collected.
- The vacuum chamber will pull a sample of air into the Tedlar bag (see Appendix H for diagram).

##### ***4.5.2 Equipment and collection media***

Prior to the initiation of air sampling, confirm that the laboratory has provided the following items in the sampling kit:

- Vacuum chambers with silicone and PTFE tubing and hose barb connectors (2 total; See Appendix H)
- 10-liter Tedlar bags (25 total; up to 24 field samples and 1 field duplicate)
- Extra vacuum chamber components (e.g., tubing, D-size batteries)
- Pre-printed sample labels
- Pre-printed chain-of-custody forms
- Packaging materials

##### ***4.5.3 Pre-sampling procedures***

Conduct the following procedures prior to initiating sampling each day:

1. Review and prepare all documents (field kits, data sheets, field notes, sampling forms).
2. Identify sampling locations on map.
3. Check all sampling equipment.

#### **4.5.4 Air sampling procedures**

The following stepwise sequence will be followed to collect Tedlar bag air samples using the vacuum chamber (Figure 3):

Set-Up:

1. With the vacuum chamber open, place the Tedlar sample bag into the chamber.
2. Connect the bag to the inside of the Sample Valve (D) with the tubing.
3. Open sample bag valve.
4. Insert 4 D-size batteries.
5. Turn on Pump.
6. Close vacuum chamber – close all four latches.
7. Insert the provide Hose Barb Connector with 1" length of  $\frac{1}{4}$ " silicone tubing into the outside of the Sample Valve (D), then connect a sufficient amount of PTFE (Teflon) Tubing to the silicone tubing (the silicone will act as a coupling between the PTFE Tubing and the hose barb connector). This becomes the Sample Line.

Fill the Bag for Conditioning:

8. Connect the Pump Inlet Valve (B) to the Chamber In/Out Valve (C) with the Silicone Tubing Connector Line. This will begin filling of the bag.
9. The sample will begin collecting through the Sample Line.
10. Fill the bag  $\frac{1}{4}$  to  $\frac{1}{2}$  full.

Empty the Bag:

11. Disconnect the Silicone Tubing Connector Line from the Pump Inlet Valve (B) and attach it to the Pump Outlet Valve (A). This will pressurize the chamber and deflate the bag through the Sample Line (D). NOTE: The tubing connector must be in (D) to open the valve and deflate the bag.
12. Empty the bag completely.

Prime the Sample Line:

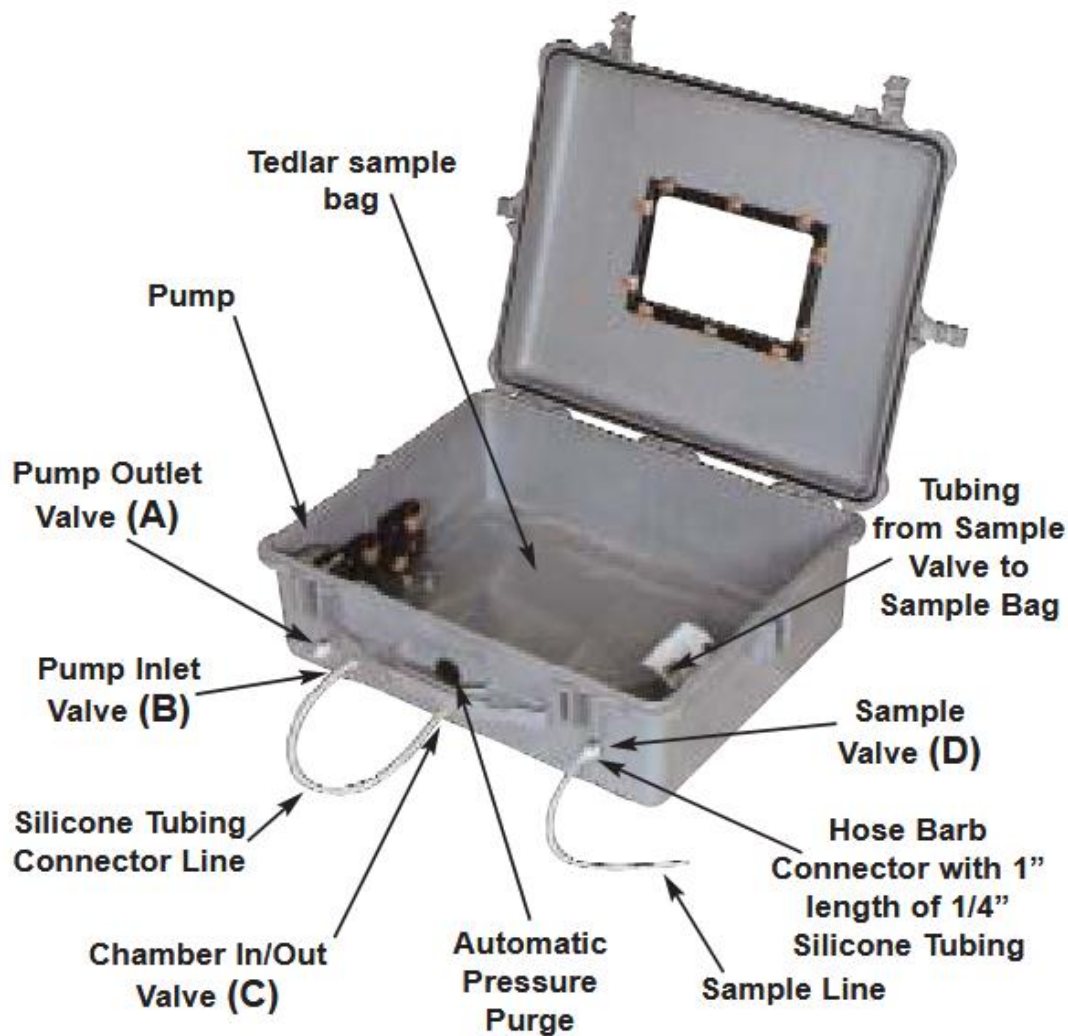
13. Disconnect the Silicone Tubing Connector Line from the Pump Outlet Valve (A).
14. Disconnect the tubing connector with the Sample Line from the Sample Valve (D) and attach it to the Pump Inlet Valve (B).
15. Wait for a sufficient amount of time (15–30 seconds) for the Sample Line to fill with odor from the sample location (thus, removing non-sample air from the Sample Line).



16. Disconnect the tubing connector with the Sample Line from the Pump Inlet Valve (B) and reattach to the Sample Valve (D).

Collecting a Sample:

17. Attach the Silicone Tubing Connector Line to the Pump Inlet Valve (B). NOTE: The other end should still be attached to the Chamber In/Out Valve (C).
18. Fill the bag  $\frac{3}{4}$  full.
19. When the bag is  $\frac{3}{4}$  full, disconnect the tubing connector with the Sample Line from the Sample Valve (D).
20. Due to the negative pressure inside the chamber, it will be difficult to open. To de-pressurize the chamber, disconnect the Silicone Tubing Connector Line from the Pump Inlet Valve (B) and connect to Pump Outlet Valve (A). NOTE: Be sure that the Sample Line from Sample Valve (D) has been disconnected or you will begin to empty the bag.
21. Within a few seconds, you will be able to open the chamber.
22. Close the bag valve.
23. Turn the Pump off.
24. Remove the bag from the vacuum chamber.
25. Repeat these steps for each sample. NOTE: Replacement of PTFE tubing on the Sample Valve (D) may be necessary (i.e., if tubing gets dirty).



**Figure 3. Diagram of vacuum chamber used to collect Tedlar bag air sample (source: St. Croix Sensory)**

#### **4.6 Shipping and packaging**

Intertox and CTEH will contact FedEx or UPS on the morning of the sampling day to schedule a pick-up for that day and to confirm drop off locations and closing times, in the event that sampling is not completed by the pick-up time. The samples will be sent according to the following:

- Ship the samples via standard FedEx or UPS (evacuated canister air samples have a 7-day holding time; Tedlar bag air samples have a 30-hour holding time).
- Remove all old shipping labels and fill out new Air Bill and Shipping Labels.
- Place chain-of-custody (refer to Section 5.2) in box with samples.
- Ship samples (Standard) to the contract laboratory.

Prior to shipping, Intertox and CTEH will email the laboratory provide the shipment tracking number, a photograph of the chain-of-custody, the number of samples shipped, and the total number of boxes that will be shipped. This will enable the lab to take immediate action in the event the samples do not arrive on time or only a partial shipment is received.

## **5.0 SAMPLE PRESERVATION, STORAGE, AND CHAINS-OF-CUSTODY**

Sample possession during all testing efforts must be traceable from the time of collection until the results are verified and reported. Sample custody procedures provide a mechanism for documentation of all information related to sample collection and handling to achieve sample integrity.

### **5.1 Sample Preservation and Storage Requirements**

Immediately after sample collection is completed, the samples should be stored at room temperature. Direct sunlight should be avoided; however, refrigeration is not required. Sample hold times are not to exceed 7-days for evacuated canister air samples and 30-hours for Tedlar bag air samples.

### **5.2 Chain-of-Custody Procedures**

Chain-of-custody forms (example document can be found in Appendix I) will be completed by Intertox and CTEH staff after the air samples are collected and will accompany the samples to the laboratory. When the laboratory receives the samples, they will verify that the chain-of-custody form accurately reflects the number and type of samples received. If any discrepancies are observed, the discrepancies will be recorded on the chain-of-custody form and Intertox and CTEH will be notified to correct the problem.

## **6.0 DATA QUALITY ASSURANCE/ QUALITY CONTROL, AND STORAGE**

Quality assurance/quality control (QA/QC) includes sample documentation, collection of field blanks, chain-of-custody procedures, and laboratory quality control.

Quality Assurance (QA) includes all procedures and activities used to ensure that the data collected meet data quality specifications. QA procedures follow guidelines described by USEPA (1998). As part of the sampling and analysis program, field and laboratory quality control (QC) samples will be analyzed. These data will be used to quantify precision and accuracy, identify problems or limitations in the associated sample results, and ensure that data of known quality are produced. Field QC samples will be documented on the chains-of-custody and submitted to the laboratory, where necessary. Samples will be documented by the laboratory and reported with the analytical results.

Sampling personnel will be responsible for the care and custody of samples until they are shipped to the laboratory. A completed chain-of-custody record will accompany samples in a sealed shipping container to the laboratory.

### 6.1 Field Quality Control Samples

Field blanks and field duplicates will be obtained for air samples, as described in Section 4.0. The field blanks will be subjected to the same handling conditions as all other samples except that no sample will be taken. The field blank sample will indicate sources of contamination to samples during handling or shipping. The laboratory will process the field blank in the same manner as other samples. Control limits for the field duplicates will be 20 percent unless the duplicate sample values are within five times the quantitation limit, in which case the control limit interval will be plus or minus the quantitation limit.

### 6.2 Laboratory Quality Control Samples

Laboratory QC is necessary to control the analytical process, to assess the accuracy and precision of analytical results, and to identify assignable causes for atypical analytical results. Laboratory QA/QC will consist of laboratory blanks, continuing calibration verification (CCV), laboratory control standard (LCS), laboratory duplicates, and surrogates. Laboratory blanks, CCV, LCS, and surrogates will be run with every analyzed sample. Results for the laboratory duplicates will be compared to laboratory acceptance limits generated according to USEPA guidelines. Control limits for surrogate and LCS recovery will be laboratory acceptance limits generated according to USEPA guidelines. Validation will be performed in accordance with the appropriate sections of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (USEPA 2020). The QC checks in the laboratory protocol are specific to the analytical method as outlined in Table 3.

**Table 3. Summary of Laboratory Quality Control Samples by Sample Medium**

Quality Control Parameter	Quality Control Requirement
Equipment calibration standards	Conducted by lab
Quality control standard	Conducted by lab
Calibration during testing	Conducted by lab before shipment and confirmed by Intertox and CTEH in field
Method blanks	Conducted by lab
Hold times	
Evacuated canister air samples	7 days
Tedlar bag air samples	30 hours
Storage/shipping requirements	None

## 7.0 REPORTING AND DATA VALIDATION

Intertox and CTEH will ensure that the proper data quality and verification protocols are followed. St. Croix Sensory and Enthalpy Analytical will perform a third-party data validation on all raw laboratory data to evaluate the precision, accuracy, representativeness, completeness, and comparability of the data as defined in USEPA guidance (USEPA 1998).. Intertox and CTEH will provide a copy, upon request, of all field notes and chain-of-custody records regarding the sampling event. The contract labs will also provide all documentation regarding their analysis of the samples, including all sample and method blank data, analysis notes, and chain of custody records—these records will also be provided upon request. Intertox and CTEH will adhere to quality assurance guidelines established by USEPA (1998 and 2006) to ensure that all documentation is appropriately recorded and reported to all agencies and interested parties as required.

## 8.0 REFERENCES

ASTM. 2024. ASTM Method D5505-20: Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence. ASTM International, West Conshohocken, PA. Available from: <https://www.astm.org/d5504-20.html>

USEPA. 2019. USEPA Method TO-15. In: Compendium of Methods for the Determination of Toxic Organic Compounds in Air (USEPA/600/1-84/O41). Research Triangle Park, N.C

USEPA. 2006a. Data Quality Assessment: A Reviewer's Guide (QA/G-9R). Washington, D.C.: USEPA, Office of Environmental Information. USEPA/240/B-06/002. Available from: <http://www.USEPA.gov/quality/qsdocs/g9r-final.pdf>

USEPA. 2006b. Data Quality Assessment: A Reviewer's Guide (QA/G-9R). Washington, D.C.: USEPA, Office of Environmental Information. USEPA/240/B-06/002. Available from: <http://www.USEPA.gov/quality/qs-docs/g9r-final.pdf>

USEPA. 2006c. Guidance on Systematic Planning Using the Data Quality Objectives Process (QA/G-4). Washington, D.C: USEPA, Office of Environmental Information. USEPA/240/B-06/001. Available from: <http://www.USEPA.gov/quality/qs-docs/g4-final.pdf>

USEPA. 1998. USEPA Guidance for Quality Assurance Project Plans (USEPA/600/R-98/018). Washington, D.C.: Office of Research and Development.

**APPENDIX A. KESTREL® 5500 WEATHER METER**

The Kestrel® 5500 weather meter is a handheld, portable weather meter capable of measuring multiple weather parameters, such as wind speed, temperature, and relative humidity.

To get started and calibrate the Kestrel® 5500 weather meter:

1. Install the battery
2. Press the **POWER** button to turn on the Kestrel
3. Select the **OPTIONS** button to enter the options menu
4. Calibrate the compass:
  - a. Scroll to and select **SYSTEM** from the menu
  - b. Scroll to and select **COMPASS CAL** from the menu
  - c. Follow the on-screen instructions
5. Select **EXIT** to exit the options menu

To set the auto store rate on the Kestrel® 5500 weather meter:

1. Select **OPTIONS** to enter the options menu
2. Scroll to and select **MEMORY OPTIONS** from the options menu
3. Scroll to the **AUTO STORE** parameter and ensure it is set to **ON**
4. Scroll to the **STORE RATE** parameter and adjust to 5 second intervals

To set overwrite options on the Kestrel® 5500 weather meter:

1. Select **OPTIONS** to enter the options menu
2. Scroll to and select **MEMORY OPTIONS** from the options menu
3. Scroll to the **OVERWRITE** parameter and set to **OFF** (note: this will stop the data log from wrapping and overwriting previously collected data once full)

To connect the Kestrel® 5500 weather meter to a device using LINK:

1. On your phone or tablet, follow the links at **www.kestrelinstruments.com** to locate Kestrel LINK for iOS or Android in the App or Play store and install on your mobile device.
2. On the Kestrel®, open the **OPTIONS** menu and select the **BLUETOOTH** button
3. Set **BLUETOOTH** to **ON**
4. On the Kestrel®, select **CONCT** from the **BLUETOOTH OPTIONS** menu and set to **PC/MOBILE MODE** (the Kestrel's status will change to **AVAILABLE** indicating that it is available for pairing with a computer or mobile device)

5. Ensure the mobile device is searching and in range. When **STATUS** changes from **AVAILABLE** to **CONNECTED**, the pairing is active and your Kestrel® is ready to communicate.

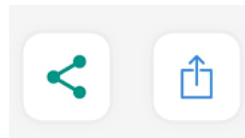
To capture weather data on the Kestrel® 5500 weather meter:

1. At desired sampling location, set up the Kestrel® 5500 weather meter on a tripod with wind pane attached (note: if capturing wind direction is desired, if not skip this step)
2. Press the **POWER** button to turn on the Kestrel
3. Open the Kestrel® LINK app on your mobile device (note: ensure the Kestrel® is connected to your mobile device)
4. Click the **REALTIME** button on the bottom of the app's display screen
5. Click the **RECORD** button
6. When done sampling, click the **STOP RECORDING** button

To export data from the Kestrel® LINK app in .csv to email:

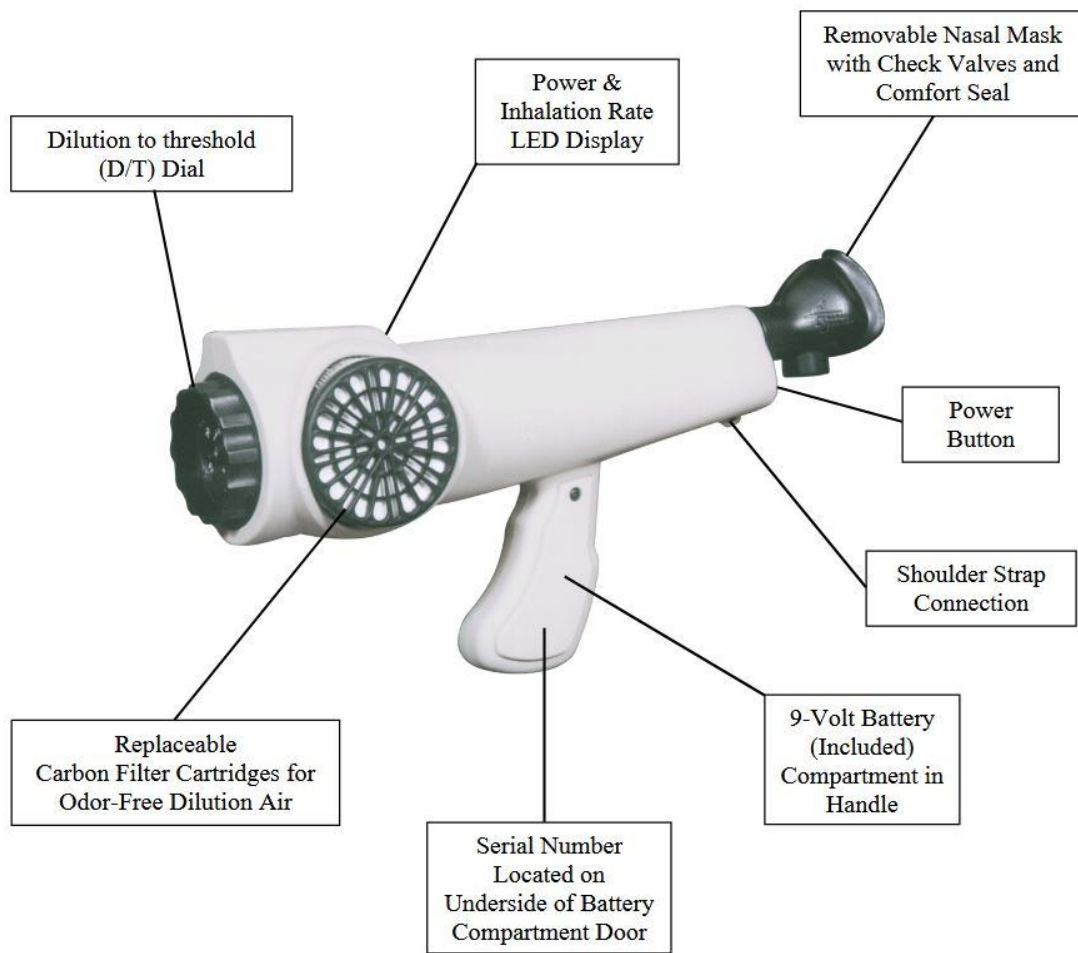
1. Open the **Kestrel LINK** app on your mobile device
2. Click the **HISTORY** button on the bottom of the app's display screen
3. Scroll to the desired date you'd like to upload data from on the top of the screen
4. Click the **SELECT** button on the top left side of the screen
5. Select the data points you'd like to export

6. Click the appropriate **SHARE SYMBOL**

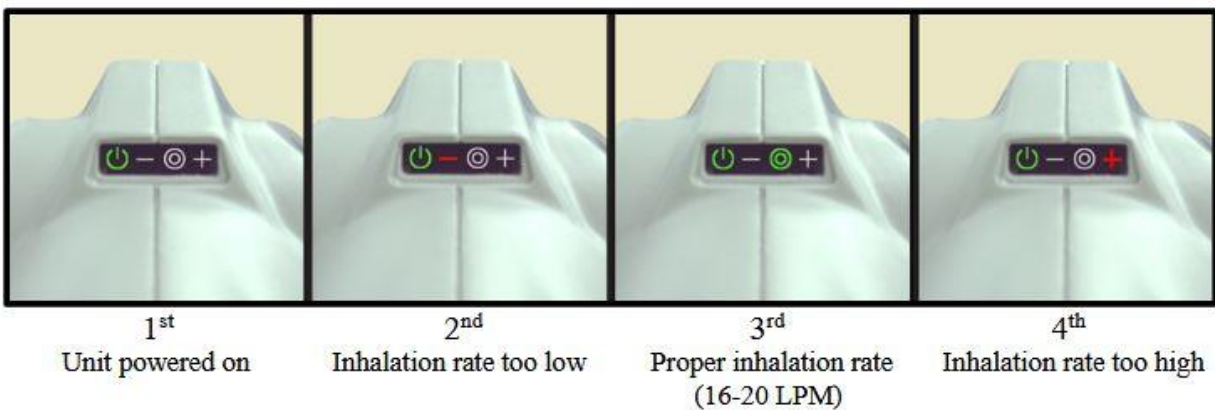




**APPENDIX B. NASAL RANGER® FIELD OLFACTOMETER DIAGRAMS**



**Figure B-1. Diagram of the Nasal Ranger® and componentry. Source: St. Croix Sensory.**



**Figure B-2. Diagram of the Nasal Ranger's® LED display panel illustrating the power symbol and proper inhalation rate (Source: St. Croix Sensory, 2020)**

**APPENDIX C. NASAL RANGER® TESTING PROCEDURES FLOWCHART**

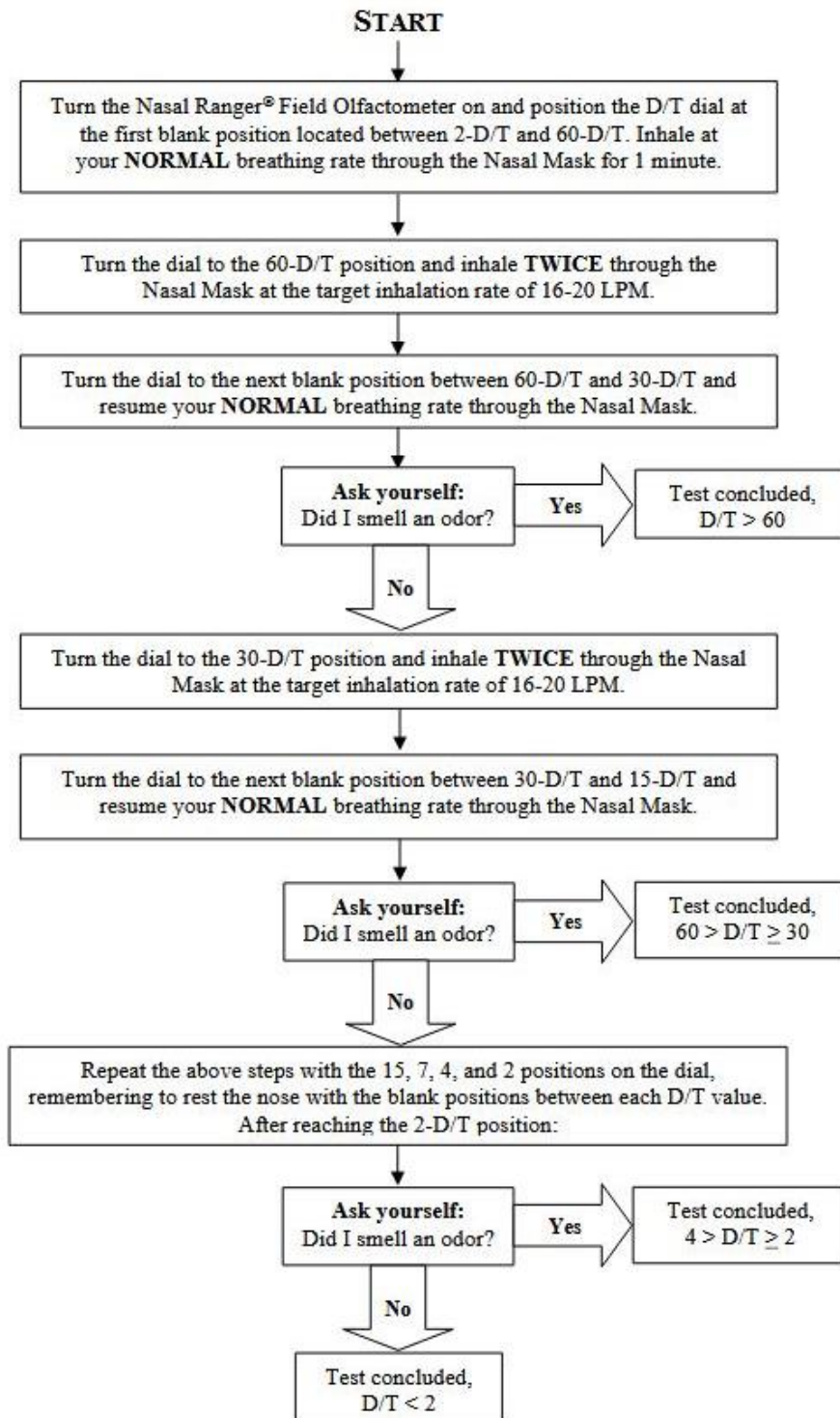


Figure C-1. Nasal Ranger® testing procedures flowchart (Source: St. Croix Sensory, 2020)

**APPENDIX D. SUMMA® POLISHED STAINLESS STEEL 1.4-LITER CANISTERS  
AND SILONITE™ TREATED MINICANS™ DIAGRAMS**



**Figure D-1. Diagram of 1.4-liter Silonite™ treated MiniCan™**



**Figure D-2. Diagram of 1.4-liter SUMMA® canister**

**APPENDIX E. LIST OF VOLATILE ORGANIC COMPOUNDS (VOCs) ANALYTES  
BY USEPA TOXIC ORGANICS (TO)-15**



**Table E-1. List of compounds detected using USEPA Toxic Organics (TO-15) method for GC-MS**

<b>Compound</b>	<b>CAS Number</b>	<b>Molecular Weight</b>
Acetone	67-64-1	58.08
Acetonitrile	75-05-8	41.00
Acrylonitrile	107-13-1	53.00
3-Chloropropene (Allyl chloride)	107-05-1	76.53
Benzene	71-43-2	78.11
Benzyl chloride	100-44-7	126.0
Bromodichloromethane	75-27-4	163.8
Bromoethane (Ethyl bromide)	74-96-4	108.0
Bromoform	75-25-2	252.8
Bromomethane	74-83-9	94.94
1,3-Butadiene	106-99-0	54.09
n-Butane	106-97-8	58.12
Chlorobenzene	108-90-7	112.6
Chloroethane	75-00-3	64.52
Chloroform	67-66-3	119.4
Chloromethane	74-87-3	50.49
Carbon disulfide	75-15-0	76.14
Carbon tetrachloride	56-23-5	153.8
2-Chlorotoluene	95-49-8	126.6
Cyclohexane	110-82-7	84.16
Dibromochloromethane	124-48-1	208.3
1,2-Dibromoethane	106-93-4	187.8
1,2-Dichlorobenzene	95-50-1	147.0
1,3-Dichlorobenzene	541-73-1	147.0
1,4-Dichlorobenzene	106-46-7	147.0
Freon 12 (Dichlorodifluoromethane)	75-71-8	120.9
1,1-Dichloroethane	75-34-3	98.96
1,2-Dichloroethane	107-06-2	98.96
1,1-Dichloroethene	75-35-4	96.94
1,2-Dichloroethene (cis)	156-59-2	96.94
1,2-Dichloroethene (trans)	156-60-65	96.94
1,2-Dichloropropane	78-87-5	113.0
1,3-Dichloropropene (cis)	542-75-6	111.0
1,3-Dichloropropene (trans)	10061-02-6	111.0
Freon 114 (1,2-Dichlorotetrafluoroethane)	76-14-2	170.9

<b>Compound</b>	<b>CAS Number</b>	<b>Molecular Weight</b>
1,4-Dioxane	123-91-1	88.12
Ethyl acetate	141-78-6	88.10
Ethanol	64-17-5	46.07
Ethylbenzene	100-41-4	106.2
4-Ethyltoluene	622-96-8	120.2
n-Heptane	142-82-5	100.2
Hexachloro-1,3-butadiene	87-68-3	260.8
n-Hexane	110-54-3	86.17
Isopropyl alcohol (2-Propanol)	67-30-0	60.10
Isopropylbenzene (Cumene)	98-82-8	120.19
Methylene chloride	75-09-2	84.94
2-Hexanone (MBK)	591-78-6	100.1
2-Butanone (MEK)	78-93-3	72.10
4-Methyl-2-pentanone (MIBK)	108-10-1	100.2
Methyl methacrylate	80-62-6	100.12
Methyl-tert-butyl ether (MTBE)	1634-04-4	88.15
Naphthalene	91-20-3	128.17
Propylene	115-07-1	58.08
Styrene	100-42-5	104.1
Tertiary butyl alcohol (TBA)	75-65-0	74.12
1,1,2,2-Tetrachloroethane	79-34-5	167.9
Tetrachloroethene	127-18-4	165.8
Tetrahydrofuran	109-99-9	72.11
Toluene	108-88-3	92.14
1,2,4-Trichlorobenzene	120-82-1	181.5
1,1,1-Trichloroethane	71-55-6	133.4
1,1,2-Trichloroethane	79-00-5	133.4
Trichloroethene	79-01-6	131.4
Freon 11 (Trichlorofluoromethane)	75-69-4	137.4
Freon 113 (1,1,2-Trichloro-1,1,2-trifluoroethane)	76-13-1	187.4
1,2,4-Trimethylbenzene	95-63-6	120.2
1,3,5-Trimethylbenzene	108-67-8	120.2
2,2,4-Trimethylpentane (Isooctane)	540-81-1	114.2
Vinyl acetate	108-05-4	86.00
Bromoethene (Vinyl bromide)	593-60-2	106.9
Vinyl chloride	75-01-4	62.50
Xylene (para & meta)	1330-20-7	106.2

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<b>Compound</b>	<b>CAS Number</b>	<b>Molecular Weight</b>
Xylene (ortho)	95-47-6	106.2

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**APPENDIX F. LIST OF SULFUR GAS PROFILE ANALYTES BY ASTM D5504**

**Table F-1. List of compounds detected using ASTM D5504 method for GC-MS**

<b>Compound</b>	<b>CAS Number</b>	<b>Molecular Weight</b>
Hydrogen sulfide	7783-06-4	34.08
Carbonyl sulfide	463-58-1	60.07
Methyl mercaptan	74-93-1	48.1
Ethyl mercaptan	75-08-1	62.13
Dimethyl sulfide	75-18-3	62.13

**APPENDIX G. LIST OF COMPOUNDS SAMPLED FOR BY ST. CROIX SENSORY,  
INC. SIFT-MS**

**Table G-1. List of sulfur compounds detected by selected-ion flow-tube mass spectrometry (SIFT-MS)**

<b>Compound</b>	<b>CAS Number</b>
1-Butanethiol	109-79-5
1-Propanethiol	107-03-9
2,5-Dimethylthiophene	638-02-8
2-Ethylthiophene	872-55-9
2-Methyl-2-propanethiol	75-66-1
2-Propanethiol	75-33-2
3-Methylthiophene	616-44-4
Carbon disulfide	75-15-0
Carbonyl sulfide	463-58-01
Diethyl disulfide	110-81-6
Diethyl sulfide	352-93-2
Dimethyl disulfide	624-92-0
Dimethyl sulfide	75-18-3
Ethyl mercaptan	75-08-1
Ethyl methyl sulfide	624-89-4
Hydrogen sulfide	7783-06-4
Methyl mercaptan	74-93-1
Thiophene	110-02-1

**Table G-2. List of TO-17 volatile organic chemicals (VOCs) modified for selected-ion flow-tube mass spectrometry (SIFT-MS)**

<b>Compound</b>	<b>CAS Number</b>
1,1,1-Trichloroethane	71-55-6
1,1,2,2-Tetrachloroethane	79-34-5
1,1,2-Trichloroethane	79-00-5
1,1-Dichloroethane	75-34-3
1,2,4-Trichlorobenzene	120-82-1
1,2-Dibromo-3-chloropropane	96-12-8
1,2-Dichloropropane	78-87-5
1,3,5-Trimethylbenzene	108-67-8
1,3-Butadiene	106-99-0
1,3-Dichlorobenzene	541-73-1
1,4-Dioxane	123-91-1
2-Hexanone	591-78-6
2-Propanol	67-63-0
(E)-1,2-Dichloroethene	156-60-5
(Z)-1,3-Dichloropropene	10061-01-5
Acetone	67-64-1
Bromoform	75-25-2
Butanone	78-93-3
Carbon disulfide	75-15-0
Chlorobenzene	108-90-7
Chloroethene	75-01-4
Cyclohexane	110-82-7
Dichlorodifluoromethane	75-71-8
Dichloromethane	75-09-2
Ethanol	64-17-5
Ethyl chloride	75-00-3
Ethylbenzene	100-41-4
Hexachlorobutadiene	87-68-3
Hexane	110-54-3
Naphthalene	91-20-3
Octane	111-65-9
p-Xylene	106-42-3



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Styrene	100-42-5
Tetrahydrofuran	109-99-9
Toluene	108-88-3
Trichloroethylene	79-01-6
Trichlorofluoromethane	83589-40-6

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## **APPENDIX H. VACUUM CHAMBER OPERATING INSTRUCTIONS**

### Set-up

1. With the vacuum chamber open, place the Tedlar sample bag into chamber.
2. Connect the bag to the inside of the Sample Valve (D) with the tubing.
3. Open sample bag valve.
4. Insert 4 D-size batteries.
5. Turn on Pump.
6. Close vacuum chamber - close all four latches.
7. Insert the provided Hose Barb Connector with 1" length of 1/4" silicone tubing into the outside of the Sample Valve (D), then connect a sufficient amount of a PTFE (Teflon) Tubing to the silicone tubing (the silicone will act as a coupling between the PTFE Tubing and the hose barb connector). This becomes the Sample Line.

### Fill the Bag for Conditioning

8. Connect the Pump Inlet Valve (B) to the Chamber In/Out Valve (C) with the Silicone Tubing Connector Line. This will begin the filling of the bag.
9. The sample will begin collecting through the Sample Line.
10. Fill the bag 1/4 to 1/2 full.

### Empty the Bag

11. Disconnect the Silicone Tubing Connector Line from the Pump Inlet Valve (B) and attach it to the Pump Outlet Valve (A). This will pressurize the chamber and deflate the bag through the Sample Line (D), -the tubing connector must be in (D) to open the valve and deflate the bag.
12. Empty the bag completely.

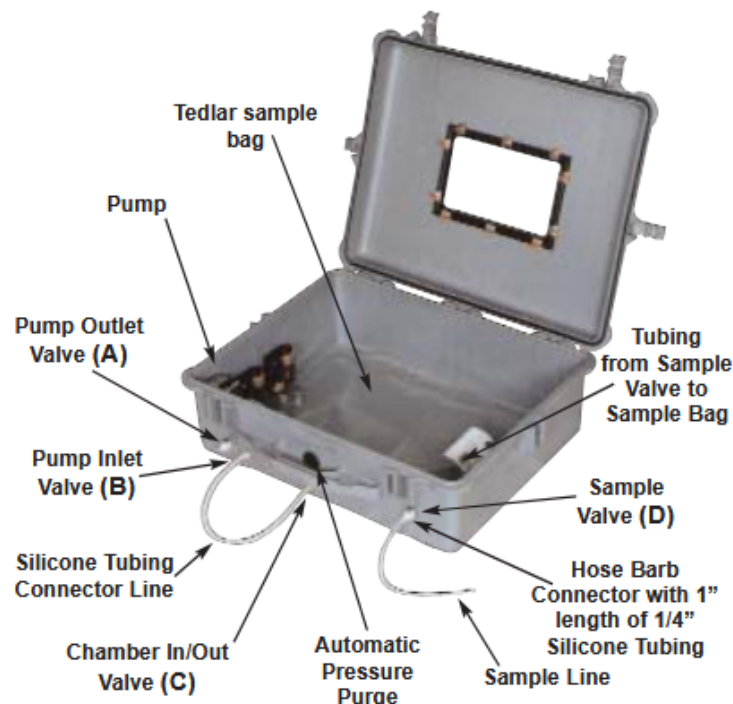
### Prime the Sample Line

13. Disconnect the Silicone Tubing Connector Line from the Pump Outlet Valve (A) and attach it to the Pump Inlet Valve (B).
14. Disconnect the tubing connector with the Sample Line from the Sample Valve (D) and attach it to the Pump Inlet Valve (B).
15. Wait for a sufficient amount of time (15-30 sec.) for the Sample Line to fill with odor from the sample location [thus, removing non-sample air from the Sample Line].
16. Disconnect the tubing connector with the Sample Line from the Pump Inlet Valve (B) and reattach to the Sample Valve (D).

### Collecting a Sample

17. Attach the Silicone Tubing Connector Line to the Pump Inlet Valve (B) -the other end should still be attached to the Chamber In/Out Valve (C).
18. Fill the bag 3/4 full.
19. When the bag is 3/4 full, disconnect the tubing connector with the Sample Line from Sample Valve (D).
20. Due to the negative pressure in side the chamber, it will be difficult to open. To de-pressurize the chamber, disconnect the Silicone Tubing Connector Line from the Pump Inlet Valve (B) and connect to Pump Outlet Valve (A).  
\* Be sure that the Sample Line from Sample Valve (D) has been disconnected or you will begin to empty the bag.
21. Within a few seconds, you will be able to open the chamber.
22. Close the bag valve.
23. Turn the Pump off.
24. Remove the bag from the vacuum chamber.
25. Depending on the quality of the air being sampled, replacement of PTFE tubing on the Sample Valve (D) may be necessary between samples.

## VAC'SCENT Operating Instructions



If you have any questions, Call: 1-800-879-9231

St. Croix Sensory, Inc.



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

1150 Stillwater Blvd. N.  
Stillwater, MN 55082  
Phone 651-439-0177  
1-800-879-9231  
Fax 651-439-1065

e-mail: [stcroix@fivesenses.com](mailto:stcroix@fivesenses.com)


**APPENDIX I. EXAMPLE CHAIN-OF-CUSTODY FORMS**

St. Croix Sensory

Chain of Custody - United States



St. Croix Sensory • 1150 Stillwater Blvd N, Stillwater, MN 55082, U.S.A. • Tel: +1 651-439-0177 • Email: lab@fivesenses.com

Client:		Contact Name:		Page ____ of ____			Scan for Odor Sampling Resources																
Project/Site Name:		Cell Number:		<b>Evaluation Requests</b> (please check all that apply for each sample)																			
Collected By:		Email:																					
Sample Date:		Project PO:		Odor			SIFT-MS Analytics																
Comments:				Thresholds <small>Detection &amp; Recognition ASTM E679 &amp; EN 13725</small>			Intensity <small>ASTM E544</small>			Characterization <small>Hedonic Tone &amp; Descriptors</small>		Persistence <small>Dose-Response</small>		Pre-Dilution <small>10:1 (if DT&lt;60,000)</small>		Sulfur Scan		Wastewater Scan		Other Scans <small>(as applicable)</small>		Lab Use Only Evaluation Report No.	
Line No.	Field No.	Sample Description	Sample Time	Field H <sub>2</sub> S (ppm)	Thresholds	Intensity	Characterization	Persistence	Pre-Dilution	Sulfur Scan	Wastewater Scan	Other Scans	LAB	CODE									
1																							
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Number of Boxes Shipped: _____			Relinquished by	Date	Time	Received at Lab by	Date	Time	Comments & Exceptions Noted														
Carrier (check): UPS ___   FedEx ___   Other: _____																							

Prior to shipping, email a photo of this document to lab@fivesenses.com

LAB COPIES WHITE & YELLOW

CLIENT COPY PINK  
GD6001U - 23272v6.0

ENTHALPY ANALYTICAL										Air Chain of Custody Record				Lab Use Only	
Instructions to assist filling out the COC are on the next tab										Request for Analysis				work order #	
lab name			CUSTOMER INFORMATION				PROJECT INFORMATION			custody seal intact?		PO #			
address			company:				project name:			<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> none					
phone			contact/report to:				submit invoice to			on ice? <input type="checkbox"/> yes <input type="checkbox"/> no		Add. Notes			
special instructions:			email:				project #:			temperature °C					
			cc emails:				P.O. #:			meets req.? <input type="checkbox"/> yes <input type="checkbox"/> no					
			address:				site name:			preservation notes					
			phone:				site state:								
turnaround time request (pre-approval required for TAT less than standard. surcharges will apply)					data deliverable type:		STANDARD <input type="checkbox"/> other <input type="checkbox"/>		Analysis Requested		Comments				
<input type="checkbox"/> STANDARD <input type="checkbox"/> 5 day <input type="checkbox"/> 2 day <input type="checkbox"/> 1 day <input type="checkbox"/> other					EDD required (Y/N)?				EDD Format						
*matrix code: (A) ambient, (O) other, (H) headspace, (PM) particulate matter, (S) stationary, (V) vapor, (W) worker					**container or media type: (B) bag (tedlar), (Bd) bedge, (Bt) bottle, (C) canister, (F) filter, (O) other, (T) tube, (TD) thermal desorption tube		units for reporting:		retention requirements:						
					regulatory program, as applicable (i.e., CAA, CARB, etc.):		<input type="checkbox"/> compliance <input type="checkbox"/> engineering								
Sampling Information				Equipment Information			Start Sampling Information		Stop Sampling Information						
Sample ID	Matrix Code*	Sample Type	Container Type** (media type)	Container ID# (Media ID)	Flow Cont. #	Container Size	Date	Time	Initial Pressure ("Hg)	Date	Time	Final Pressure ("Hg)	Sampler Name	Final Volume	
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
note shipper, courier, and tracking # below		Signature		Print Name		Company / Title		Date (MM/DD/YY)		Time (24:00)		Notes (include special conditions, possible hazards, etc.):			
1 Relinquished By:															
Received By:															
2 Relinquished By:															
Received By:															
3 Relinquished By:												Field sampling conditions (notes)			
Received By:												<input type="checkbox"/> rain/snow during deployment/pick-up			
4 Relinquished By:												<input type="checkbox"/> continuous rain during samp. period			
Received By:												<input type="checkbox"/> snow or melt during sampling period			

## **APPENDIX C. CTEH ODOR SURVEY EVALUATION PROTOCOL**



## Odor Survey Evaluation Protocol – Chiquita Canyon Landfill

### 1.0 Study Purpose

This odor survey evaluation protocol is designed to characterize the frequency, strength, hedonic tone, and character of odors in ambient air throughout the Val Verde and Castaic Junction communities surrounding the Chiquita Canyon Landfill (CCL). A secondary objective of this odor study is to assess whether odors, based on their character and location, could be attributable to known sources, by evaluating meteorological data collected concurrent with scentometry field data.

### 2.0 Background

Ambient odor evaluations present a challenge due to the low concentrations at which certain odors can be detected by the human nose, the complex composition of some odors, and the rapid fluctuation of conditions that can occur over time. Whereas laboratory instrumentation can provide information regarding the concentration of individual compounds (i.e., hydrogen sulfide, mercaptans, ammonia), analytical instrumentation does not provide information regarding the intensity or hedonic tone (offensiveness or pleasantness) of the odors. The human nose, on the other hand, can integrate the odors of hundreds of compounds from a single source to experience them as a unitary odor.

Furthermore, the human nose is the most reliable way to obtain data on odor intensity and tone; thus, human olfactory measurements (i.e., olfactometry) are currently the only reliable, well-established method for sensory quantification, and remain the ultimate determinant for nuisance odor episodes<sup>1</sup>. Olfactometry strategies can be classified into two categories – laboratory based olfactometry, and on-site field olfactometry (scentometry), both of which involve controlling the mixture of odorous air with non-odorous air to achieve known dilutions that can be evaluated by trained technicians (i.e., odor panelists).

Laboratory-based olfactometry offers the benefit of having multiple panelists characterize one sample of air that can be diluted and evaluated in parallel. The major benefit of field scentometry over laboratory-based olfactometry is the ability for trained odor panelists to objectively quantify odor intensity in real-time, offering the ability to characterize a multitude of conditions, scenarios and locations a few minutes apart.

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<sup>1</sup> Brandt et al., 2011



Scentometry is established as an accepted methodology to quantify and characterize odors that may contribute to a nuisance. It is recognized in the scientific literature as a useful technique for the assessment of field odors and the evaluation of odor offensiveness downwind of known odorant sources such as animal feeding operations, wastewater treatment plants, industrial pulp and ethanol plants, and others<sup>2,3,4,5,6,7,8</sup>. In addition to its use in the field, scentometry is reported as a technique for comparison of ambient odors in controlled environments<sup>9-10</sup>.

Scentometry is a method of measuring odor strength based on the ability to smell the odor after diluting the ambient air with a known concentration of carbon filtered (odorless) air. The amount of carbon filtered air dilutions required before an odor is no longer detectable by an odor panelist is termed the “dilution to threshold” or D/T. The D/T is a unitless ratio calculated as:

$$\frac{D}{T} = \frac{\text{Volume of filtered air}}{\text{Volume of odorous air}}$$

The greater number of dilutions needed before reaching the odor threshold indicates the presence of a stronger odor. Conversely, detection at low dilution (low D/T) indicates a relatively weak odor. Perceived odor strength is often referred to as the odor intensity. Odor intensity will increase as a function of odorant concentration; however, when the concentration of an odorant is increased, the perceived odor intensity will always increase less sharply. This is largely because it takes larger and larger increases in odorant concentrations to maintain a constant increase in perceived odor intensity.

Scentometry was developed in the late 1950s through project grants from the U.S. Public Health Service (Huey et al., 1960).<sup>11</sup> This led to the development of the first Scentometer by the Barnebey-Cheney Company. During the development of scentometry, Huey et al. (1960) established the following odor concentration categories corresponding to dilution to threshold ratios<sup>11</sup>:

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<sup>2</sup> Brandt et al., 2011

<sup>3</sup> Dalton et al., 2011

<sup>4</sup> Kosmider and Krajewska, 2007

<sup>5</sup> SRF, 2004

<sup>6</sup> Sheffield et al., 2004

<sup>7</sup> Witherspoon and Barnes, 2004

<sup>8</sup> Zhang et al., 2002

<sup>9</sup> Henry et al., 2011

<sup>10</sup> McGinley and McGinley, 2004

<sup>11</sup> Huey et al., 1960

Dilution to Threshold (D/T)	Odor Concentration Descriptor
2	Noticeable
7	Objectionable
15	Nuisance
31	Nauseating

### 3.0 Qualifications

Air quality panelists go through training from St. Croix, the manufacturers of the Nasal Ranger instrument. Panelists are trained on how to systematically identify and describe odor character using tools such as an odor wheel. Once training is complete, training certifications are provided for each panelist who has completed the training and has undergone an odor sensitivity test. Their odor sensitivity score is assessed prior to beginning an odor study and maintained on file.

Individuals have varying sensitivity to odors. Some individuals have a low sensitivity whereas others are hypersensitive. The odor sensitivity of the individual odor technicians is assessed with a test kit consisting of 14 odorous and 2 non-odorous pens that contain increasing concentrations of 1-butanol. The odor sensitivity test is conducted in a near odorless room with the test subject blindfolded. The tester presents three different pens to the odor panelist. One of the pens contains a concentration of 1-butanol and the other two pens are blank odorless pens. The tester asks the odor panelist to determine which pen contains the odor of 1-butanol. The presentation of the pens continues in increasing concentration until two positive detections of 1-butanol are identified in two consecutive tests. The odor sensitivity is determined by averaging the sums of each separate test. The concentration of 1-butanol in the pens is directly comparable to the odor panelist’s odor sensitivity. A study performed by St. Croix Sensory, Inc. identified that an odor sensitivity score of 7.33 would represent the 50th percentile odor sensitivity in the general population<sup>12</sup>.

### 4.0 Scope of Odor Survey Evaluation

Prior to beginning the odor survey evaluation on March 11, 2024, CTEH will establish a number of locations as pre-defined odor monitoring locations across the Val Verde and Castaic Junction Communities. In addition, odor readings may be collected at locations outside of those preplanned if CTEH odor panelists deem it necessary to characterize an odor event (i.e., strong odors perceived outside of pre-defined locations). These odor readings may be used to further characterize potential sources during the data evaluation phase. Meteorological conditions including temperature, humidity, and wind speed will be

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<sup>12</sup> Lay and McGinley, 2004

collected from each location where odor evaluations are conducted. Topographical features of the area along with meteorological conditions will be used to determine locations for odor monitoring.

Odor panelists will follow the preestablished route and visit each of those sites regularly to characterize the frequency, strength, hedonic tone, and character of odors (or absence of odors) in ambient air throughout the day, daily from March 11 – 29, 2024.

## **5.0 Methods and Procedure**

The device intended for the odor survey evaluation around communities near the CCL is the Nasal Ranger, manufactured by St. Croix Sensory, Inc. The Nasal Ranger is an olfactometer that allows an odor panelist to dilute ambient air with non-odorous carbon-filtered air and obtain a dilution to threshold ratio.

Odor measurements will be conducted per St. Croix Sensory protocols for the Nasal Ranger. Odor reading will be recorded at each of the monitoring locations. Odor monitoring readings will be taken as instructed during Nasal Ranger training. Two teams of two odor panelists will be equipped with Nasal Ranger instruments and hand-held weather monitoring equipment. These teams of two will work together and will take independent, simultaneous co-located readings. For each reading, odor monitors will record the following information:

- Date & time
- Location description and GPS
- Odor intensity (D/T dilution)
- Hedonic tone
- Odor group (character, descriptor)
- Meteorological information (temperature, humidity, and wind speed)
- Additional comments (observations, site conditions)

Each day shift will consist of one odor monitoring period of no more than four hours, followed by a two-hour break, and another four-hour period of odor monitoring. A supervisor may also be present as one of the panelists, and/or to oversee odor monitoring activities. Odor evaluations will begin at 7 AM. Monitoring personnel will follow the St. Croix Sensory protocol related to personal conduct, including not wearing scented personal products on the day of monitoring, not eating or drinking anything but water from one hour prior to the beginning of shift until the shift is complete (excluding a lunch break).

Prior to quantifying the odorous air, the panelist will breathe carbon-filtered air through their nose to clear their nasal palette of any odors (referred to as zeroing the nose). If an odor is detected in the ambient air after the nose is zeroed, the panelist will utilize the dilution settings (2, 4, 7, 15, 30, 60) that control the amount of odorous air entering the panelist's nose and six blank carbon filtered positions. The amount of carbon-filtered air required to dilute the odorous air is synonymous with the odor strength for that

measurement. The odor dilution settings on the instrument range from 2 (slightly noticeable odor) to 60 (very strong odor). Collection of an odor concentration measurement involves the following steps:

1. The odor panelist will arrive at a pre-determined location and begin breathing through carbon-filtered air utilizing the Nasal Ranger to clear the nasal palette of any odors and to “zero out” their nose.
2. The odor panelist will place their shoulder into the wind and maintain the Nasal Ranger on their nose, then turn the D/T dial clockwise to the 60-D/T position.
3. The odor panelist will inhale twice at the target inhalation rate of 16 to 20 liters per minute through the nasal mask, as indicated by the instrument. If an odor is detected, the odor concentration is recorded as greater than or equal to 60 D/T ( $\geq 60$  D/T).
4. If no odor is detected at 60 dilutions, the odor panelist will then proceed to the next blank position and re-zeroes their nose by inhaling carbon-filtered air twice.
5. After re-zeroing their nose, the odor panelist will turn the dial to the 30 D/T position and inhale twice.
6. The odor panelist will continue this sequence of dilutions until an odor is detected. If no odor is detected through the instrument, yet an odor is perceived by the panelist upon removal of the Nasal Ranger® from the nose, the odor strength is recorded as less than 2 D/T ( $< 2$  D/T).
7. Upon completion of every odor monitoring event, the odor panelist will record the D/T observed at that location and time, along with GPS coordinates and meteorological information at the time. Comments and photography may be collected by the odor panelists to record additional details if warranted.
8. The panelist will conduct odor readings for a maximum continuous period of four hours, followed by rest at least two hours before resuming additional odor reading sessions.
9. All collected odor readings will undergo quality assurance and quality control checks to ensure accuracy and completeness.

The odor panelist will utilize standardized descriptor terms provided by the instrument manufacturer. This allows for consistency between odor panelists to report odor character. In addition to an odor description, the odor panelist will classify an odor based on its inherent pleasant or unpleasant characteristics. This classification is typically referred to as hedonic tone. This is accomplished by ranking the odor on a numeric scale from -10 (unpleasant odor) to +10 (pleasant odor) with zero being neutral, to classify an odor as pleasant or unpleasant based on the odor panelist’s experience.

## **6.0 Documentation and Reporting**

Data collected by the odor panelists will be recorded and stored electronically on secure servers.

**APPENDIX D. LIMIT OF QUANTITATION AND  
MINIMUM DETECTION LIMIT DATA**

**Table D-1. Chemicals with limit of quantitation (LOQ) that were greater than lowest odor detection threshold from CTEH short-term (1-hour) grab sample data compared against lowest and average odor detection thresholds. None of the seven chemicals were detected above the LOQ.**

Analyte	LOQ (ppb)	Result (ppb)	Lowest ODT (ppb)	Average ODT (ppb)	ODT Source(s)
Methyl mercaptan	10	< 10.0	0.0002	0.54	AIHA, 2013; PubChem [Internet]. 2024.
Hydrogen Sulfide	10	< 10.0	0.07	10*	AIHA, 2013; PubChem [Internet]. 2024.
Ethyl mercaptan	10	< 10.0	0.0087	0.35	AIHA, 2013; PubChem [Internet]. 2024.
Dimethyl sulfide	10	< 10.0	0.12	63	AIHA, 2013; PubChem [Internet]. 2024.
Dimethyl disulfide	10	< 10.0	0.29	3.6	AIHA, 2013; PubChem [Internet]. 2024.
2-Propanethiol	10	< 10.0	0.25	0.25	NOAA. 1999.
1-Propanethiol	10	< 10.0	1.6	360	PubChem [Internet]. 2024.

LOQ = limit of quantitation; ppb = parts per billion; ODT = odor detection threshold

\*Level of distinct odor awareness (LOA) for hydrogen sulfide is used for the average odor detection threshold for hydrogen sulfide (NRC, 2010)

**Table D-2. Chemicals with limit of quantitation (LOQ) that were greater than lowest odor detection threshold from SCS Engineers weekly, off-site grab sample data compared against lowest and average odor detection thresholds.**

Analyte	LOQ range (min. – max.) (ppb)	Lowest ODT (ppb)	Average ODT (ppb)	ODT source(s)
Carbon disulfide	26-43	22	150	AIHA, 2013; NJ DOH, 2010
Diethyl sulfide	5-43	0.8	NA	PubChem [Internet]. 2024.
Dimethyl disulfide	5-43	0.29	3.6	AIHA, 2013; PubChem [Internet], 2024.
Dimethyl sulfide	1.33-43	0.12	63	AIHA, 2013; PubChem [Internet]. 2024.
Ethyl mercaptan	5-43	0.0087	0.35	AIHA, 2013; PubChem [Internet]. 2024.
Hydrogen sulfide	5-43	0.07	10	AIHA, 2013; PubChem [Internet]. 2024.
Isopropyl mercaptan	5-43	0.25	0.25	NOAA, 1999
Methyl mercaptan	5-43	0.0002	0.54	AIHA, 2013; PubChem [Internet]. 2024.
n-Butyl mercaptan	5-43	.0027	1	AIHA, 2013; PubChem [Internet]. 2024.
tert-Butyl mercaptan	5-43	0.81	NA	PubChem [Internet]. 2024.
Tetrahydrothiophene	5-43	1	1	PubChem [Internet]. 2024.



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<b>Analyte</b>	<b>LOQ range (min. – max.) (ppb)</b>	<b>Lowest ODT (ppb)</b>	<b>Average ODT (ppb)</b>	<b>ODT source(s)</b>
Thiophenol	5-43	0.03	0.3	AIHA, 2013; PubChem [Internet]. 2024.

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**APPENDIX E. ST. CROIX SENSORY ANALYTICAL LABORATORY  
REPORTS FROM JUNE 2024 ODOR STUDY**



## SIFT-MS Analytical Report

**Report Number: 2416504S**

**Project Name: CH02-01**

**Instrument: Voice200 Ultra**

**Sample Type: 10L Tedlar Bag**

**Samples Received: 6/13/24**

**Samples Analyzed: 6/13/24**

**Report Prepared For: Intertox, Inc.**

600 Stewart St., Suite 1101  
Seattle, WA 98101

**Comments:**

All Samples tested outside of holding time.

---

**Report Prepared By: St. Croix Sensory, Inc.**

1150 Stillwater Boulevard North  
Stillwater, MN 55082 U.S.A  
1-800-879-9231  
[stcroix@fivesenses.com](mailto:stcroix@fivesenses.com)

Data Collection and Release Authorization:

Olivia Ebbers

Laboratory Associate

Reviewed and Approved:

Michael A. McGinley, P.E.

Laboratory Director

St. Croix Sensory is ISO/IEC 17025:2017 Accredited

Perry Johnson Laboratory Accreditation, Inc.  
Certificate No.: L22-561

Accreditation No.: 81047  
Initial Accreditation Date: 19 May 2014



St. Croix Sensory, Inc.

# SIFT-MS Analytical Report

Client: **Intertox, Inc.**

Project Name: **CH02-01**

Field Number: **OS001A**

Report Number: **2416504S**

Samples Evaluated: **6/13/2024**

Sample Description: **LA County Fire Dept. Del Valle  
Regional Training Center**

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.002
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.002
1,1-dichloroethane (75-34-3)	0.018
1,2,4-trichlorobenzene (120-82-1)	0.001
1,2-dibromo-3-chloropropane (96-12-8)	0.001
1,2-dichloropropane (78-87-5)	0.582
1,3,5-trimethylbenzene (108-67-8)	0.001
1,3-butadiene (106-99-0)	0.000
1,3-dichlorobenzene (541-73-1)	0.000
1,4-dioxane (123-91-1)	0.379
2-hexanone (591-78-6)	0.001
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.005
(Z)-1,3-dichloropropene (10061-01-5)	0.004
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.003
bromoform (75-25-2)	0.006
butanone (78-93-3)	0.001
carbon disulfide (75-15-0)	0.001
chlorobenzene (108-90-7)	0.002
chloroethene (75-01-4)	0.001
cyclohexane (110-82-7)	0.008
dichlorodifluoromethane (75-71-8)	0.008
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.074
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.001
hexachlorobutadiene (87-68-3)	0.007
hexane (110-54-3)	0.100
naphthalene (91-20-3)	0.000
octane (111-65-9)	0.010
p-xylene (106-42-3)	0.001
styrene (100-42-5)	0.001
tetrahydrofuran (109-99-9)	0.004
toluene (108-88-3)	0.006
trichloroethylene (79-01-6)	0.001
trichlorofluoromethane (83589-40-6)	0.001

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.003
1-propanethiol (107-03-9)	0.002
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.000
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.001
carbonyl sulfide (463-58-1)	0.001
diethyl disulfide (110-81-6)	0.001
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.395
dimethyl sulfide (75-18-3)	0.002
ethyl mercaptan (75-08-1)	0.001
ethyl methyl sulfide (624-89-5)	0.471
hydrogen sulfide (7783-06-4)	0.001
methyl mercaptan (74-93-1)	0.001
thiophene (110-02-1)	0.001



St. Croix Sensory, Inc.

# SIFT-MS Analytical Report

Client: **Intertox, Inc.**

Project Name: **CH02-01**

Field Number: **OS003A**

Report Number: **2416504S**

Samples Evaluated: **6/13/2024**

Sample Description: **Lincoln Ave. & Taylor St.**

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.002
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.002
1,1-dichloroethane (75-34-3)	0.014
1,2,4-trichlorobenzene (120-82-1)	0.000
1,2-dibromo-3-chloropropane (96-12-8)	0.000
1,2-dichloropropane (78-87-5)	0.581
1,3,5-trimethylbenzene (108-67-8)	0.001
1,3-butadiene (106-99-0)	0.000
1,3-dichlorobenzene (541-73-1)	0.000
1,4-dioxane (123-91-1)	0.344
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.007
(Z)-1,3-dichloropropene (10061-01-5)	0.004
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.003
bromoform (75-25-2)	0.007
butanone (78-93-3)	0.001
carbon disulfide (75-15-0)	0.001
chlorobenzene (108-90-7)	0.003
chloroethene (75-01-4)	0.000
cyclohexane (110-82-7)	0.005
dichlorodifluoromethane (75-71-8)	0.006
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.078
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.001
hexachlorobutadiene (87-68-3)	0.007
hexane (110-54-3)	0.068
naphthalene (91-20-3)	0.001
octane (111-65-9)	0.009
p-xylene (106-42-3)	0.001
styrene (100-42-5)	0.001
tetrahydrofuran (109-99-9)	0.003
toluene (108-88-3)	0.005
trichloroethylene (79-01-6)	0.001
trichlorofluoromethane (83589-40-6)	0.001

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.000
1-propanethiol (107-03-9)	0.002
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.000
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.001
carbon disulfide (75-15-0)	0.001
carbonyl sulfide (463-58-1)	0.001
diethyl disulfide (110-81-6)	0.000
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.374
dimethyl sulfide (75-18-3)	0.001
ethyl mercaptan (75-08-1)	0.003
ethyl methyl sulfide (624-89-5)	0.443
hydrogen sulfide (7783-06-4)	0.001
methyl mercaptan (74-93-1)	0.000
thiophene (110-02-1)	0.001



St. Croix Sensory, Inc.

## SIFT-MS Analytical Report

Client: **Intertox, Inc.**

Project Name: **CH02-01**

Field Number: **OS008A**

Report Number: **2416504S**

Samples Evaluated: **6/13/2024**

Sample Description: **Hasley Canyon Equestrain Ctr**

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.000
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.000
1,1-dichloroethane (75-34-3)	0.000
1,2,4-trichlorobenzene (120-82-1)	0.000
1,2-dibromo-3-chloropropane (96-12-8)	0.000
1,2-dichloropropane (78-87-5)	0.000
1,3,5-trimethylbenzene (108-67-8)	0.000
1,3-butadiene (106-99-0)	0.000
1,3-dichlorobenzene (541-73-1)	0.000
1,4-dioxane (123-91-1)	0.009
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.000
(Z)-1,3-dichloropropene (10061-01-5)	0.000
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.000
bromoform (75-25-2)	0.001
butanone (78-93-3)	0.000
carbon disulfide (75-15-0)	0.000
chlorobenzene (108-90-7)	0.000
chloroethene (75-01-4)	0.000
cyclohexane (110-82-7)	0.000
dichlorodifluoromethane (75-71-8)	0.000
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.003
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.000
hexachlorobutadiene (87-68-3)	0.000
hexane (110-54-3)	0.001
naphthalene (91-20-3)	0.000
octane (111-65-9)	0.001
p-xylene (106-42-3)	0.000
styrene (100-42-5)	0.000
tetrahydrofuran (109-99-9)	0.000
toluene (108-88-3)	0.000
trichloroethylene (79-01-6)	0.000
trichlorofluoromethane (83589-40-6)	0.000

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.000
1-propanethiol (107-03-9)	0.000
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.012
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.000
carbonyl sulfide (463-58-1)	0.002
diethyl disulfide (110-81-6)	0.000
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.000
dimethyl sulfide (75-18-3)	0.000
ethyl mercaptan (75-08-1)	0.000
ethyl methyl sulfide (624-89-5)	0.000
hydrogen sulfide (7783-06-4)	0.000
methyl mercaptan (74-93-1)	0.000
thiophene (110-02-1)	0.001



St. Croix Sensory, Inc.

# SIFT-MS Analytical Report

Client: **Intertox, Inc.**  
Project Name: **CH02-01**  
Field Number: **OS013A**

Report Number: **2416504S**  
Samples Evaluated: **6/13/2024**  
Sample Description: **Cambridge Ave. between Bancroft & Gibraltar**

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.001
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.000
1,1-dichloroethane (75-34-3)	0.044
1,2,4-trichlorobenzene (120-82-1)	0.000
1,2-dibromo-3-chloropropane (96-12-8)	0.001
1,2-dichloropropane (78-87-5)	0.564
1,3,5-trimethylbenzene (108-67-8)	0.001
1,3-butadiene (106-99-0)	0.000
1,3-dichlorobenzene (541-73-1)	0.001
1,4-dioxane (123-91-1)	0.312
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.005
(Z)-1,3-dichloropropene (10061-01-5)	0.003
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.000
bromoform (75-25-2)	0.002
butanone (78-93-3)	0.000
carbon disulfide (75-15-0)	0.001
chlorobenzene (108-90-7)	0.002
chloroethene (75-01-4)	0.000
cyclohexane (110-82-7)	0.000
dichlorodifluoromethane (75-71-8)	0.003
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.045
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.003
hexachlorobutadiene (87-68-3)	0.005
hexane (110-54-3)	0.022
naphthalene (91-20-3)	0.000
octane (111-65-9)	0.007
p-xylene (106-42-3)	0.003
styrene (100-42-5)	0.001
tetrahydrofuran (109-99-9)	0.001
toluene (108-88-3)	0.002
trichloroethylene (79-01-6)	0.001
trichlorofluoromethane (83589-40-6)	0.000

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.000
1-propanethiol (107-03-9)	0.004
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.000
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.001
carbon disulfide (75-15-0)	0.001
carbonyl sulfide (463-58-1)	0.001
diethyl disulfide (110-81-6)	0.001
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.366
dimethyl sulfide (75-18-3)	0.000
ethyl mercaptan (75-08-1)	0.000
ethyl methyl sulfide (624-89-5)	0.441
hydrogen sulfide (7783-06-4)	0.000
methyl mercaptan (74-93-1)	0.000
thiophene (110-02-1)	0.000



St. Croix Sensory, Inc.

# SIFT-MS Analytical Report

Client: **Intertox, Inc.**  
Project Name: **CH02-01**  
Field Number: **OS012B**

Report Number: **2416504S**  
Samples Evaluated: **6/13/2024**  
Sample Description: **Ralph's lot on Hasley Cyn  
& The Old Rd**

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.002
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.001
1,1-dichloroethane (75-34-3)	0.034
1,2,4-trichlorobenzene (120-82-1)	0.001
1,2-dibromo-3-chloropropane (96-12-8)	0.001
1,2-dichloropropane (78-87-5)	0.532
1,3,5-trimethylbenzene (108-67-8)	0.000
1,3-butadiene (106-99-0)	0.000
1,3-dichlorobenzene (541-73-1)	0.000
1,4-dioxane (123-91-1)	0.124
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.003
(Z)-1,3-dichloropropene (10061-01-5)	0.002
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.004
bromoform (75-25-2)	0.003
butanone (78-93-3)	0.000
carbon disulfide (75-15-0)	0.001
chlorobenzene (108-90-7)	0.002
chloroethene (75-01-4)	0.000
cyclohexane (110-82-7)	0.004
dichlorodifluoromethane (75-71-8)	0.002
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.019
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.000
hexachlorobutadiene (87-68-3)	0.011
hexane (110-54-3)	0.029
naphthalene (91-20-3)	0.000
octane (111-65-9)	0.004
p-xylene (106-42-3)	0.001
styrene (100-42-5)	0.000
tetrahydrofuran (109-99-9)	0.000
toluene (108-88-3)	0.001
trichloroethylene (79-01-6)	0.001
trichlorofluoromethane (83589-40-6)	0.001

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.000
1-propanethiol (107-03-9)	0.001
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.000
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.001
carbonyl sulfide (463-58-1)	0.000
diethyl disulfide (110-81-6)	0.000
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.360
dimethyl sulfide (75-18-3)	0.000
ethyl mercaptan (75-08-1)	0.003
ethyl methyl sulfide (624-89-5)	0.430
hydrogen sulfide (7783-06-4)	0.000
methyl mercaptan (74-93-1)	0.000
thiophene (110-02-1)	0.001





St. Croix Sensory, Inc.

Client: Intertox, Inc.  
Project Name: CH02-01  
Field Number: Background

# SIFT-MS Analytical Report

Report Number: 2416504S  
Samples Evaluated: 6/13/2024  
Sample Description: Henry Mayo Dr & Chiquito Canyon Rd

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.002
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.001
1,1-dichloroethane (75-34-3)	0.005
1,2,4-trichlorobenzene (120-82-1)	0.000
1,2-dibromo-3-chloropropane (96-12-8)	0.000
1,2-dichloropropane (78-87-5)	0.509
1,3,5-trimethylbenzene (108-67-8)	0.000
1,3-butadiene (106-99-0)	0.000
1,3-dichlorobenzene (541-73-1)	0.000
1,4-dioxane (123-91-1)	0.120
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.006
(Z)-1,3-dichloropropene (10061-01-5)	0.002
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.003
bromoform (75-25-2)	0.004
butanone (78-93-3)	0.000
carbon disulfide (75-15-0)	0.001
chlorobenzene (108-90-7)	0.002
chloroethene (75-01-4)	0.000
cyclohexane (110-82-7)	0.002
dichlorodifluoromethane (75-71-8)	0.003
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.015
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.000
hexachlorobutadiene (87-68-3)	0.011
hexane (110-54-3)	0.037
naphthalene (91-20-3)	0.001
octane (111-65-9)	0.007
p-xylene (106-42-3)	0.000
styrene (100-42-5)	0.000
tetrahydrofuran (109-99-9)	0.000
toluene (108-88-3)	0.001

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.000
1-propanethiol (107-03-9)	0.001
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.000
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.001
carbonyl sulfide (463-58-1)	0.000
diethyl disulfide (110-81-6)	0.000
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.343
dimethyl sulfide (75-18-3)	0.000
ethyl mercaptan (75-08-1)	0.001
ethyl methyl sulfide (624-89-5)	0.408
hydrogen sulfide (7783-06-4)	0.001
methyl mercaptan (74-93-1)	0.000
thiophene (110-02-1)	0.000

trichloroethylene (79-01-6)	0.000
trichlorofluoromethane (83589-40-6)	0.000



## SIFT-MS Analytical Report

**Report Number: 2416505S**

**Project Name: CH02-01**

**Instrument: Voice200 Ultra**

**Sample Type: 10L Tedlar Bag**

**Samples Received: 6/13/24**

**Samples Analyzed: 6/13/24**

**Report Prepared For: Intertox, Inc.**

600 Stewart St., Suite 1101  
Seattle, WA 98101

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**Report Prepared By: St. Croix Sensory, Inc.**

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St. Croix Sensory is ISO/IEC 17025:2017 Accredited

Perry Johnson Laboratory Accreditation, Inc.  
Certificate No.: L22-561

Accreditation No.: 81047  
Initial Accreditation Date: 19 May 2014



St. Croix Sensory, Inc.

# SIFT-MS Analytical Report

Client: **Intertox, Inc.**  
Project Name: **CH02-01**  
Field Number: **Background-C**

Report Number: **2416505S**  
Samples Evaluated: **6/13/2024**  
Sample Description: **Upwind-Chiquito Canyon Rd & Henry Mayo Dr**

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.000
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.000
1,1-dichloroethane (75-34-3)	0.000
1,2,4-trichlorobenzene (120-82-1)	0.000
1,2-dibromo-3-chloropropane (96-12-8)	0.000
1,2-dichloropropane (78-87-5)	0.000
1,3,5-trimethylbenzene (108-67-8)	0.000
1,3-butadiene (106-99-0)	0.000
1,3-dichlorobenzene (541-73-1)	0.000
1,4-dioxane (123-91-1)	0.008
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.000
(Z)-1,3-dichloropropene (10061-01-5)	0.000
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.000
bromoform (75-25-2)	0.000
butanone (78-93-3)	0.000
carbon disulfide (75-15-0)	0.000
chlorobenzene (108-90-7)	0.000
chloroethene (75-01-4)	0.000
cyclohexane (110-82-7)	0.000
dichlorodifluoromethane (75-71-8)	0.000
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.002
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.000
hexachlorobutadiene (87-68-3)	0.003
hexane (110-54-3)	0.000
naphthalene (91-20-3)	0.000
octane (111-65-9)	0.000
p-xylene (106-42-3)	0.000
styrene (100-42-5)	0.000
tetrahydrofuran (109-99-9)	0.000
toluene (108-88-3)	0.000
trichloroethylene (79-01-6)	0.000
trichlorofluoromethane (83589-40-6)	0.000

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.000
1-propanethiol (107-03-9)	0.000
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.000
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.000
carbonyl sulfide (463-58-1)	0.000
diethyl disulfide (110-81-6)	0.000
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.000
dimethyl sulfide (75-18-3)	0.000
ethyl mercaptan (75-08-1)	0.000
ethyl methyl sulfide (624-89-5)	0.000
hydrogen sulfide (7783-06-4)	0.000
methyl mercaptan (74-93-1)	0.000
thiophene (110-02-1)	0.000



St. Croix Sensory, Inc.

# SIFT-MS Analytical Report

Client: **Intertox, Inc.**

Project Name: **CH02-01**

Field Number: **OS002C**

Report Number: **2416505S**

Samples Evaluated: **6/13/2024**

Sample Description: **Lincoln Ave & Chiquito Canyon Rd**

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.001
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.000
1,1-dichloroethane (75-34-3)	0.040
1,2,4-trichlorobenzene (120-82-1)	0.000
1,2-dibromo-3-chloropropane (96-12-8)	0.000
1,2-dichloropropane (78-87-5)	0.301
1,3,5-trimethylbenzene (108-67-8)	0.000
1,3-butadiene (106-99-0)	0.000
1,3-dichlorobenzene (541-73-1)	0.000
1,4-dioxane (123-91-1)	0.064
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.003
(Z)-1,3-dichloropropene (10061-01-5)	0.001
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.000
bromoform (75-25-2)	0.003
butanone (78-93-3)	0.000
carbon disulfide (75-15-0)	0.000
chlorobenzene (108-90-7)	0.001
chloroethene (75-01-4)	0.000
cyclohexane (110-82-7)	0.001
dichlorodifluoromethane (75-71-8)	0.000
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.010
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.000
hexachlorobutadiene (87-68-3)	0.008
hexane (110-54-3)	0.014
naphthalene (91-20-3)	0.000
octane (111-65-9)	0.001
p-xylene (106-42-3)	0.000
styrene (100-42-5)	0.000
tetrahydrofuran (109-99-9)	0.000
toluene (108-88-3)	0.001
trichloroethylene (79-01-6)	0.000
trichlorofluoromethane (83589-40-6)	0.000

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.000
1-propanethiol (107-03-9)	0.000
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.000
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.000
carbonyl sulfide (463-58-1)	0.000
diethyl disulfide (110-81-6)	0.000
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.010
dimethyl sulfide (75-18-3)	0.000
ethyl mercaptan (75-08-1)	0.000
ethyl methyl sulfide (624-89-5)	0.014
hydrogen sulfide (7783-06-4)	0.000
methyl mercaptan (74-93-1)	0.000
thiophene (110-02-1)	0.000



St. Croix Sensory, Inc.

# SIFT-MS Analytical Report

Client: **Intertox, Inc.**

Project Name: **CH02-01**

Field Number: **OS005D**

Report Number: **2416505S**

Samples Evaluated: **6/13/2024**

Sample Description: **San Martinez & Verdale**

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.003
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.010
1,1-dichloroethane (75-34-3)	0.027
1,2,4-trichlorobenzene (120-82-1)	0.000
1,2-dibromo-3-chloropropane (96-12-8)	0.000
1,2-dichloropropane (78-87-5)	0.492
1,3,5-trimethylbenzene (108-67-8)	0.000
1,3-butadiene (106-99-0)	0.000
1,3-dichlorobenzene (541-73-1)	0.000
1,4-dioxane (123-91-1)	0.117
2-hexanone (591-78-6)	0.001
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.009
(Z)-1,3-dichloropropene (10061-01-5)	0.005
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.006
bromoform (75-25-2)	0.008
butanone (78-93-3)	0.001
carbon disulfide (75-15-0)	0.001
chlorobenzene (108-90-7)	0.003
chloroethene (75-01-4)	0.000
cyclohexane (110-82-7)	0.028
dichlorodifluoromethane (75-71-8)	0.015
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.025
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.001
hexachlorobutadiene (87-68-3)	0.013
hexane (110-54-3)	0.079
naphthalene (91-20-3)	0.001
octane (111-65-9)	0.029
p-xylene (106-42-3)	0.001
styrene (100-42-5)	0.001
tetrahydrofuran (109-99-9)	0.016
toluene (108-88-3)	0.002
trichloroethylene (79-01-6)	0.002
trichlorofluoromethane (83589-40-6)	0.002

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.000
1-propanethiol (107-03-9)	0.002
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.000
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.001
carbonyl sulfide (463-58-1)	0.000
diethyl disulfide (110-81-6)	0.000
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.187
dimethyl sulfide (75-18-3)	0.001
ethyl mercaptan (75-08-1)	0.002
ethyl methyl sulfide (624-89-5)	0.233
hydrogen sulfide (7783-06-4)	0.000
methyl mercaptan (74-93-1)	0.000
thiophene (110-02-1)	0.000



## SIFT-MS Analytical Report

**Report Number: 2416604S**

**Project Name: CH02-01**

**Instrument: Voice200 Ultra**

**Sample Type: 10L Tedlar Bag**

**Samples Received: 6/14/24**

**Samples Analyzed: 6/14/24**

**Report Prepared For: Intertox, Inc.**

600 Stewart St., Suite 1101  
Seattle, WA 98101

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**Report Prepared By: St. Croix Sensory, Inc.**

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St. Croix Sensory is ISO/IEC 17025:2017 Accredited

Perry Johnson Laboratory Accreditation, Inc.  
Certificate No.: L22-561

Accreditation No.: 81047  
Initial Accreditation Date: 19 May 2014



St. Croix Sensory, Inc.

# SIFT-MS Analytical Report

Client: **Intertox, Inc.**

Project Name: **CH02-01**

Field Number: **OS015F**

Report Number: **2416604S**

Samples Evaluated: **6/14/2024**

Sample Description: **Castaic Elementary School**

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.003
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.007
1,1-dichloroethane (75-34-3)	0.015
1,2,4-trichlorobenzene (120-82-1)	0.000
1,2-dibromo-3-chloropropane (96-12-8)	0.001
1,2-dichloropropane (78-87-5)	0.534
1,3,5-trimethylbenzene (108-67-8)	0.000
1,3-butadiene (106-99-0)	0.000
1,3-dichlorobenzene (541-73-1)	0.000
1,4-dioxane (123-91-1)	0.109
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.003
(Z)-1,3-dichloropropene (10061-01-5)	0.006
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.007
bromoform (75-25-2)	0.002
butanone (78-93-3)	0.001
carbon disulfide (75-15-0)	0.001
chlorobenzene (108-90-7)	0.003
chloroethene (75-01-4)	0.000
cyclohexane (110-82-7)	0.005
dichlorodifluoromethane (75-71-8)	0.006
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.030
ethyl chloride (75-00-3)	0.001
ethylbenzene (100-41-4)	0.001
hexachlorobutadiene (87-68-3)	0.006
hexane (110-54-3)	0.104
naphthalene (91-20-3)	0.001
octane (111-65-9)	0.016
p-xylene (106-42-3)	0.001
styrene (100-42-5)	0.000
tetrahydrofuran (109-99-9)	0.005
toluene (108-88-3)	0.002
trichloroethylene (79-01-6)	0.001
trichlorofluoromethane (83589-40-6)	0.001

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.003
1-propanethiol (107-03-9)	0.001
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.017
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.000
carbonyl sulfide (463-58-1)	0.000
diethyl disulfide (110-81-6)	0.000
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.324
dimethyl sulfide (75-18-3)	0.000
ethyl mercaptan (75-08-1)	0.001
ethyl methyl sulfide (624-89-5)	0.376
hydrogen sulfide (7783-06-4)	0.000
methyl mercaptan (74-93-1)	0.001
thiophene (110-02-1)	0.000





St. Croix Sensory, Inc.

## SIFT-MS Analytical Report

Client: **Intertox, Inc.**

Project Name: **CH02-01**

Field Number: **OS008F**

Report Number: **2416604S**

Samples Evaluated: **6/14/2024**

Sample Description: **Near Hasley Equestrain Ctr**

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.002
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.002
1,1-dichloroethane (75-34-3)	0.026
1,2,4-trichlorobenzene (120-82-1)	0.000
1,2-dibromo-3-chloropropane (96-12-8)	0.001
1,2-dichloropropane (78-87-5)	0.569
1,3,5-trimethylbenzene (108-67-8)	0.001
1,3-butadiene (106-99-0)	0.001
1,3-dichlorobenzene (541-73-1)	0.001
1,4-dioxane (123-91-1)	0.345
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.005
(Z)-1,3-dichloropropene (10061-01-5)	0.003
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.004
bromoform (75-25-2)	0.007
butanone (78-93-3)	0.001
carbon disulfide (75-15-0)	0.001
chlorobenzene (108-90-7)	0.002
chloroethene (75-01-4)	0.001
cyclohexane (110-82-7)	0.003
dichlorodifluoromethane (75-71-8)	0.004
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.054
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.002
hexachlorobutadiene (87-68-3)	0.015
hexane (110-54-3)	0.033
naphthalene (91-20-3)	0.001
octane (111-65-9)	0.007
p-xylene (106-42-3)	0.002
styrene (100-42-5)	0.001
tetrahydrofuran (109-99-9)	0.001
toluene (108-88-3)	0.003
trichloroethylene (79-01-6)	0.001
trichlorofluoromethane (83589-40-6)	0.001

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.000
1-propanethiol (107-03-9)	0.001
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.000
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.001
carbonyl sulfide (463-58-1)	0.001
diethyl disulfide (110-81-6)	0.000
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.340
dimethyl sulfide (75-18-3)	0.000
ethyl mercaptan (75-08-1)	0.000
ethyl methyl sulfide (624-89-5)	0.402
hydrogen sulfide (7783-06-4)	0.001
methyl mercaptan (74-93-1)	0.001
thiophene (110-02-1)	0.000



St. Croix Sensory, Inc.

# SIFT-MS Analytical Report

Client: **Intertox, Inc.**

Project Name: **CH02-01**

Field Number: **OS005F**

Report Number: **2416604S**

Samples Evaluated: **6/14/2024**

Sample Description: **San Martinez & Verdale**

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.002
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.000
1,1-dichloroethane (75-34-3)	0.002
1,2,4-trichlorobenzene (120-82-1)	0.000
1,2-dibromo-3-chloropropane (96-12-8)	0.000
1,2-dichloropropane (78-87-5)	0.552
1,3,5-trimethylbenzene (108-67-8)	0.000
1,3-butadiene (106-99-0)	0.000
1,3-dichlorobenzene (541-73-1)	0.000
1,4-dioxane (123-91-1)	0.105
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.005
(Z)-1,3-dichloropropene (10061-01-5)	0.001
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.005
bromoform (75-25-2)	0.002
butanone (78-93-3)	0.000
carbon disulfide (75-15-0)	0.000
chlorobenzene (108-90-7)	0.001
chloroethene (75-01-4)	0.000
cyclohexane (110-82-7)	0.001
dichlorodifluoromethane (75-71-8)	0.002
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.010
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.000
hexachlorobutadiene (87-68-3)	0.008
hexane (110-54-3)	0.022
naphthalene (91-20-3)	0.001
octane (111-65-9)	0.005
p-xylene (106-42-3)	0.000
styrene (100-42-5)	0.000
tetrahydrofuran (109-99-9)	0.000
toluene (108-88-3)	0.001
trichloroethylene (79-01-6)	0.001
trichlorofluoromethane (83589-40-6)	0.000

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.000
1-propanethiol (107-03-9)	0.000
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.000
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.000
carbonyl sulfide (463-58-1)	0.000
diethyl disulfide (110-81-6)	0.000
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.309
dimethyl sulfide (75-18-3)	0.000
ethyl mercaptan (75-08-1)	0.000
ethyl methyl sulfide (624-89-5)	0.372
hydrogen sulfide (7783-06-4)	0.000
methyl mercaptan (74-93-1)	0.000
thiophene (110-02-1)	0.000



St. Croix Sensory, Inc.

# SIFT-MS Analytical Report

Client: **Intertox, Inc.**  
Project Name: **CH02-01**  
Field Number: **Background F**

Report Number: **2416604S**  
Samples Evaluated: **6/14/2024**  
Sample Description: **Upwind Facility Chiquito Cyn & Henry Mayo**

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.003
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.007
1,1-dichloroethane (75-34-3)	0.017
1,2,4-trichlorobenzene (120-82-1)	0.001
1,2-dibromo-3-chloropropane (96-12-8)	0.003
1,2-dichloropropane (78-87-5)	0.529
1,3,5-trimethylbenzene (108-67-8)	0.001
1,3-butadiene (106-99-0)	0.002
1,3-dichlorobenzene (541-73-1)	0.002
1,4-dioxane (123-91-1)	0.110
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.007
(Z)-1,3-dichloropropene (10061-01-5)	0.005
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.007
bromoform (75-25-2)	0.009
butanone (78-93-3)	0.001
carbon disulfide (75-15-0)	0.003
chlorobenzene (108-90-7)	0.004
chloroethene (75-01-4)	0.001
cyclohexane (110-82-7)	0.005
dichlorodifluoromethane (75-71-8)	0.008
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.018
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.001
hexachlorobutadiene (87-68-3)	0.017
hexane (110-54-3)	0.086
naphthalene (91-20-3)	0.002
octane (111-65-9)	0.016
p-xylene (106-42-3)	0.001
styrene (100-42-5)	0.001
tetrahydrofuran (109-99-9)	0.002
toluene (108-88-3)	0.002
trichloroethylene (79-01-6)	0.003
trichlorofluoromethane (83589-40-6)	0.003

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.001
1-propanethiol (107-03-9)	0.002
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.004
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.002
carbonyl sulfide (463-58-1)	0.001
diethyl disulfide (110-81-6)	0.000
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.350
dimethyl sulfide (75-18-3)	0.000
ethyl mercaptan (75-08-1)	0.002
ethyl methyl sulfide (624-89-5)	0.419
hydrogen sulfide (7783-06-4)	0.001
methyl mercaptan (74-93-1)	0.001
thiophene (110-02-1)	0.000



## SIFT-MS Analytical Report

**Report Number: 2416701S**

**Project Name: CH02-01**

**Instrument: Voice200 Ultra**

**Sample Type: 10L Tedlar Bag**

**Samples Received: 6/15/24**

**Samples Analyzed: 6/15/24**

**Report Prepared For: Intertox, Inc.**

600 Stewart St., Suite 1101  
Seattle, WA 98101

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**Report Prepared By: St. Croix Sensory, Inc.**

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1-800-879-9231  
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Data Collection and Release Authorization:

Olivia Ebbers

Laboratory Associate

Reviewed and Approved:

Michael A. McGinley, P.E.

Laboratory Director

St. Croix Sensory is ISO/IEC 17025:2017 Accredited

Perry Johnson Laboratory Accreditation, Inc.  
Certificate No.: L22-561

Accreditation No.: 81047  
Initial Accreditation Date: 19 May 2014



St. Croix Sensory, Inc.

# SIFT-MS Analytical Report

Client: **Intertox, Inc.**  
Project Name: **CH02-01**  
Field Number: **Background K**

Report Number: **2416701S**  
Samples Evaluated: **6/15/2024**  
Sample Description: **Chiquito Cyn & Henry Mayo  
Upwind Facility**

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.001
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.001
1,1-dichloroethane (75-34-3)	0.003
1,2,4-trichlorobenzene (120-82-1)	0.000
1,2-dibromo-3-chloropropane (96-12-8)	0.001
1,2-dichloropropane (78-87-5)	0.457
1,3,5-trimethylbenzene (108-67-8)	0.000
1,3-butadiene (106-99-0)	0.000
1,3-dichlorobenzene (541-73-1)	0.001
1,4-dioxane (123-91-1)	0.084
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.003
(Z)-1,3-dichloropropene (10061-01-5)	0.002
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.003
bromoform (75-25-2)	0.002
butanone (78-93-3)	0.000
carbon disulfide (75-15-0)	0.001
chlorobenzene (108-90-7)	0.001
chloroethene (75-01-4)	0.000
cyclohexane (110-82-7)	0.001
dichlorodifluoromethane (75-71-8)	0.002
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.002
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.000
hexachlorobutadiene (87-68-3)	0.004
hexane (110-54-3)	0.015
naphthalene (91-20-3)	0.000
octane (111-65-9)	0.002
p-xylene (106-42-3)	0.000
styrene (100-42-5)	0.000
tetrahydrofuran (109-99-9)	0.000
toluene (108-88-3)	0.001
trichloroethylene (79-01-6)	0.000
trichlorofluoromethane (83589-40-6)	0.001

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.000
1-propanethiol (107-03-9)	0.001
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.000
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.001
carbonyl sulfide (463-58-1)	0.000
diethyl disulfide (110-81-6)	0.000
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.289
dimethyl sulfide (75-18-3)	0.000
ethyl mercaptan (75-08-1)	0.001
ethyl methyl sulfide (624-89-5)	0.353
hydrogen sulfide (7783-06-4)	0.000
methyl mercaptan (74-93-1)	0.000
thiophene (110-02-1)	0.000



St. Croix Sensory, Inc.

### SIFT-MS Analytical Report

Client: **Intertox, Inc.**

Project Name: **CH02-01**

Field Number: **OS002K**

Report Number: **2416701S**

Samples Evaluated: **6/15/2024**

Sample Description: **Chiquito Cyn & Lincoln Ave.**

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.001
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.000
1,1-dichloroethane (75-34-3)	0.001
1,2,4-trichlorobenzene (120-82-1)	0.000
1,2-dibromo-3-chloropropane (96-12-8)	0.001
1,2-dichloropropane (78-87-5)	0.461
1,3,5-trimethylbenzene (108-67-8)	0.000
1,3-butadiene (106-99-0)	0.000
1,3-dichlorobenzene (541-73-1)	0.000
1,4-dioxane (123-91-1)	0.087
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.003
(Z)-1,3-dichloropropene (10061-01-5)	0.002
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.002
bromoform (75-25-2)	0.003
butanone (78-93-3)	0.000
carbon disulfide (75-15-0)	0.001
chlorobenzene (108-90-7)	0.002
chloroethene (75-01-4)	0.000
cyclohexane (110-82-7)	0.000
dichlorodifluoromethane (75-71-8)	0.001
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.017
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.000
hexachlorobutadiene (87-68-3)	0.005
hexane (110-54-3)	0.004
naphthalene (91-20-3)	0.000
octane (111-65-9)	0.001
p-xylene (106-42-3)	0.000
styrene (100-42-5)	0.000
tetrahydrofuran (109-99-9)	0.000
toluene (108-88-3)	0.001
trichloroethylene (79-01-6)	0.001
trichlorofluoromethane (83589-40-6)	0.000

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.000
1-propanethiol (107-03-9)	0.001
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.000
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.001
carbonyl sulfide (463-58-1)	0.000
diethyl disulfide (110-81-6)	0.000
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.304
dimethyl sulfide (75-18-3)	0.000
ethyl mercaptan (75-08-1)	0.000
ethyl methyl sulfide (624-89-5)	0.377
hydrogen sulfide (7783-06-4)	0.000
methyl mercaptan (74-93-1)	0.001
thiophene (110-02-1)	0.000



St. Croix Sensory, Inc.

# SIFT-MS Analytical Report

Client: **Intertox, Inc.**

Project Name: **CH02-01**

Field Number: **OS003K**

Report Number: **2416701S**

Samples Evaluated: **6/15/2024**

Sample Description: **Lincoln Ave & Taylor Rd**

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.001
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.001
1,1-dichloroethane (75-34-3)	0.003
1,2,4-trichlorobenzene (120-82-1)	0.000
1,2-dibromo-3-chloropropane (96-12-8)	0.001
1,2-dichloropropane (78-87-5)	0.469
1,3,5-trimethylbenzene (108-67-8)	0.000
1,3-butadiene (106-99-0)	0.000
1,3-dichlorobenzene (541-73-1)	0.000
1,4-dioxane (123-91-1)	0.091
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.001
(Z)-1,3-dichloropropene (10061-01-5)	0.002
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.004
bromoform (75-25-2)	0.001
butanone (78-93-3)	0.001
carbon disulfide (75-15-0)	0.001
chlorobenzene (108-90-7)	0.001
chloroethene (75-01-4)	0.000
cyclohexane (110-82-7)	0.001
dichlorodifluoromethane (75-71-8)	0.001
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.023
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.000
hexachlorobutadiene (87-68-3)	0.005
hexane (110-54-3)	0.013
naphthalene (91-20-3)	0.001
octane (111-65-9)	0.002
p-xylene (106-42-3)	0.001
styrene (100-42-5)	0.000
tetrahydrofuran (109-99-9)	0.000
toluene (108-88-3)	0.000
trichloroethylene (79-01-6)	0.001
trichlorofluoromethane (83589-40-6)	0.000

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.000
1-propanethiol (107-03-9)	0.001
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.000
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.001
carbonyl sulfide (463-58-1)	0.000
diethyl disulfide (110-81-6)	0.000
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.286
dimethyl sulfide (75-18-3)	0.001
ethyl mercaptan (75-08-1)	0.001
ethyl methyl sulfide (624-89-5)	0.358
hydrogen sulfide (7783-06-4)	0.001
methyl mercaptan (74-93-1)	0.001
thiophene (110-02-1)	0.000



St. Croix Sensory, Inc.

# SIFT-MS Analytical Report

Client: **Intertox, Inc.**

Project Name: **CH02-01**

Field Number: **OS005K**

Report Number: **2416701S**

Samples Evaluated: **6/15/2024**

Sample Description: **San Martinez Rd & Verdale**

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.002
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.001
1,1-dichloroethane (75-34-3)	0.012
1,2,4-trichlorobenzene (120-82-1)	0.000
1,2-dibromo-3-chloropropane (96-12-8)	0.001
1,2-dichloropropane (78-87-5)	0.435
1,3,5-trimethylbenzene (108-67-8)	0.001
1,3-butadiene (106-99-0)	0.000
1,3-dichlorobenzene (541-73-1)	0.001
1,4-dioxane (123-91-1)	0.246
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.003
(Z)-1,3-dichloropropene (10061-01-5)	0.004
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.001
bromoform (75-25-2)	0.003
butanone (78-93-3)	0.000
carbon disulfide (75-15-0)	0.001
chlorobenzene (108-90-7)	0.002
chloroethene (75-01-4)	0.000
cyclohexane (110-82-7)	0.002
dichlorodifluoromethane (75-71-8)	0.003
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.028
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.000
hexachlorobutadiene (87-68-3)	0.002
hexane (110-54-3)	0.012
naphthalene (91-20-3)	0.000
octane (111-65-9)	0.003
p-xylene (106-42-3)	0.000
styrene (100-42-5)	0.000
tetrahydrofuran (109-99-9)	0.000
toluene (108-88-3)	0.001
trichloroethylene (79-01-6)	0.001
trichlorofluoromethane (83589-40-6)	0.001

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.000
1-propanethiol (107-03-9)	0.001
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.000
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.000
carbonyl sulfide (463-58-1)	0.003
diethyl disulfide (110-81-6)	0.000
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.251
dimethyl sulfide (75-18-3)	0.000
ethyl mercaptan (75-08-1)	0.000
ethyl methyl sulfide (624-89-5)	0.323
hydrogen sulfide (7783-06-4)	0.000
methyl mercaptan (74-93-1)	0.000
thiophene (110-02-1)	0.000





St. Croix Sensory, Inc.

Client: **Intertox, Inc.**

Project Name: **CH02-01**

Field Number: **OS004K**

## SIFT-MS Analytical Report

Report Number: **2416701S**

Samples Evaluated: **6/15/2024**

Sample Description: **Val Verde County Park**

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.001
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.000
1,1-dichloroethane (75-34-3)	0.005
1,2,4-trichlorobenzene (120-82-1)	0.002
1,2-dibromo-3-chloropropane (96-12-8)	0.001
1,2-dichloropropane (78-87-5)	0.441
1,3,5-trimethylbenzene (108-67-8)	0.000
1,3-butadiene (106-99-0)	0.001
1,3-dichlorobenzene (541-73-1)	0.001
1,4-dioxane (123-91-1)	0.254
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.001
(Z)-1,3-dichloropropene (10061-01-5)	0.003
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.000
bromoform (75-25-2)	0.005
butanone (78-93-3)	0.001
carbon disulfide (75-15-0)	0.001
chlorobenzene (108-90-7)	0.001
chloroethene (75-01-4)	0.001
cyclohexane (110-82-7)	0.001
dichlorodifluoromethane (75-71-8)	0.001
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.038
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.000
hexachlorobutadiene (87-68-3)	0.007
hexane (110-54-3)	0.003
naphthalene (91-20-3)	0.001
octane (111-65-9)	0.002
p-xylene (106-42-3)	0.000
styrene (100-42-5)	0.001
tetrahydrofuran (109-99-9)	0.000
toluene (108-88-3)	0.001
trichloroethylene (79-01-6)	0.001
trichlorofluoromethane (83589-40-6)	0.001

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.000
1-propanethiol (107-03-9)	0.001
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.000
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.000
carbonyl sulfide (463-58-1)	0.000
diethyl disulfide (110-81-6)	0.000
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.273
dimethyl sulfide (75-18-3)	0.000
ethyl mercaptan (75-08-1)	0.001
ethyl methyl sulfide (624-89-5)	0.335
hydrogen sulfide (7783-06-4)	0.001
methyl mercaptan (74-93-1)	0.000
thiophene (110-02-1)	0.000



St. Croix Sensory, Inc.

# SIFT-MS Analytical Report

Client: **Intertox, Inc.**  
Project Name: **CH02-01**  
Field Number: **OS006K**

Report Number: **2416701S**  
Samples Evaluated: **6/15/2024**  
Sample Description: **Val Verde & Oakwood**

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.000
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.000
1,1-dichloroethane (75-34-3)	0.003
1,2,4-trichlorobenzene (120-82-1)	0.000
1,2-dibromo-3-chloropropane (96-12-8)	0.000
1,2-dichloropropane (78-87-5)	0.419
1,3,5-trimethylbenzene (108-67-8)	0.000
1,3-butadiene (106-99-0)	0.000
1,3-dichlorobenzene (541-73-1)	0.000
1,4-dioxane (123-91-1)	0.233
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.001
(Z)-1,3-dichloropropene (10061-01-5)	0.003
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.000
bromoform (75-25-2)	0.002
butanone (78-93-3)	0.000
carbon disulfide (75-15-0)	0.001
chlorobenzene (108-90-7)	0.001
chloroethene (75-01-4)	0.000
cyclohexane (110-82-7)	0.000
dichlorodifluoromethane (75-71-8)	0.001
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.028
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.000
hexachlorobutadiene (87-68-3)	0.005
hexane (110-54-3)	0.002
naphthalene (91-20-3)	0.000
octane (111-65-9)	0.000
p-xylene (106-42-3)	0.001
styrene (100-42-5)	0.000
tetrahydrofuran (109-99-9)	0.000
toluene (108-88-3)	0.001
trichloroethylene (79-01-6)	0.001
trichlorofluoromethane (83589-40-6)	0.000

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.000
1-propanethiol (107-03-9)	0.001
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.000
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.000
carbonyl sulfide (463-58-1)	0.000
diethyl disulfide (110-81-6)	0.000
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.268
dimethyl sulfide (75-18-3)	0.000
ethyl mercaptan (75-08-1)	0.001
ethyl methyl sulfide (624-89-5)	0.333
hydrogen sulfide (7783-06-4)	0.000
methyl mercaptan (74-93-1)	0.000
thiophene (110-02-1)	0.000



St. Croix Sensory, Inc.

# SIFT-MS Analytical Report

Client: **Intertox, Inc.**

Project Name: **CH02-01**

Field Number: **OS007K**

Report Number: **2416701S**

Samples Evaluated: **6/15/2024**

Sample Description: **Del Valle Bus Stop**

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.000
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.000
1,1-dichloroethane (75-34-3)	0.006
1,2,4-trichlorobenzene (120-82-1)	0.000
1,2-dibromo-3-chloropropane (96-12-8)	0.000
1,2-dichloropropane (78-87-5)	0.437
1,3,5-trimethylbenzene (108-67-8)	0.001
1,3-butadiene (106-99-0)	0.000
1,3-dichlorobenzene (541-73-1)	0.000
1,4-dioxane (123-91-1)	0.269
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.001
(Z)-1,3-dichloropropene (10061-01-5)	0.003
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.000
bromoform (75-25-2)	0.005
butanone (78-93-3)	0.000
carbon disulfide (75-15-0)	0.001
chlorobenzene (108-90-7)	0.001
chloroethene (75-01-4)	0.000
cyclohexane (110-82-7)	0.000
dichlorodifluoromethane (75-71-8)	0.001
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.034
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.000
hexachlorobutadiene (87-68-3)	0.005
hexane (110-54-3)	0.008
naphthalene (91-20-3)	0.000
octane (111-65-9)	0.001
p-xylene (106-42-3)	0.000
styrene (100-42-5)	0.000
tetrahydrofuran (109-99-9)	0.000
toluene (108-88-3)	0.001
trichloroethylene (79-01-6)	0.001
trichlorofluoromethane (83589-40-6)	0.000

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.001
1-propanethiol (107-03-9)	0.002
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.000
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.002
carbonyl sulfide (463-58-1)	0.001
diethyl disulfide (110-81-6)	0.001
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.280
dimethyl sulfide (75-18-3)	0.000
ethyl mercaptan (75-08-1)	0.002
ethyl methyl sulfide (624-89-5)	0.348
hydrogen sulfide (7783-06-4)	0.001
methyl mercaptan (74-93-1)	0.001
thiophene (110-02-1)	0.000



St. Croix Sensory, Inc.

# SIFT-MS Analytical Report

Client: **Intertox, Inc.**

Project Name: **CH02-01**

Field Number: **OS012K**

Report Number: **2416701S**

Samples Evaluated: **6/15/2024**

Sample Description: **Ralph's lot Hasley Cyn Rd**

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.002
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.001
1,1-dichloroethane (75-34-3)	0.008
1,2,4-trichlorobenzene (120-82-1)	0.001
1,2-dibromo-3-chloropropane (96-12-8)	0.001
1,2-dichloropropane (78-87-5)	0.486
1,3,5-trimethylbenzene (108-67-8)	0.000
1,3-butadiene (106-99-0)	0.001
1,3-dichlorobenzene (541-73-1)	0.001
1,4-dioxane (123-91-1)	0.088
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.004
(Z)-1,3-dichloropropene (10061-01-5)	0.003
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.004
bromoform (75-25-2)	0.004
butanone (78-93-3)	0.000
carbon disulfide (75-15-0)	0.002
chlorobenzene (108-90-7)	0.002
chloroethene (75-01-4)	0.001
cyclohexane (110-82-7)	0.001
dichlorodifluoromethane (75-71-8)	0.002
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.004
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.001
hexachlorobutadiene (87-68-3)	0.011
hexane (110-54-3)	0.011
naphthalene (91-20-3)	0.001
octane (111-65-9)	0.005
p-xylene (106-42-3)	0.001
styrene (100-42-5)	0.000
tetrahydrofuran (109-99-9)	0.000
toluene (108-88-3)	0.000
trichloroethylene (79-01-6)	0.001
trichlorofluoromethane (83589-40-6)	0.001

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.000
1-propanethiol (107-03-9)	0.001
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.000
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.001
carbonyl sulfide (463-58-1)	0.000
diethyl disulfide (110-81-6)	0.000
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.305
dimethyl sulfide (75-18-3)	0.000
ethyl mercaptan (75-08-1)	0.001
ethyl methyl sulfide (624-89-5)	0.380
hydrogen sulfide (7783-06-4)	0.000
methyl mercaptan (74-93-1)	0.000
thiophene (110-02-1)	0.000



## SIFT-MS Analytical Report

**Report Number: 2417105S**

**Project Name: CH02-01**

**Instrument: Voice200 Ultra**

**Sample Type: 10L Tedlar Bag**

**Samples Received: 6/18/24**

**Samples Analyzed: 6/18/24**

**Report Prepared For: Intertox, Inc.**

600 Stewart St., Suite 1101  
Seattle, WA 98101

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**Report Prepared By: St. Croix Sensory, Inc.**

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St. Croix Sensory is ISO/IEC 17025:2017 Accredited

Perry Johnson Laboratory Accreditation, Inc.  
Certificate No.: L22-561

Accreditation No.: 81047  
Initial Accreditation Date: 19 May 2014



St. Croix Sensory, Inc.

# SIFT-MS Analytical Report

Client: Intertox, Inc.  
Project Name: CH02-01  
Field Number: Background-N

Report Number: 2417105S  
Samples Evaluated: 6/18/2024  
Sample Description: Henry Mayo & Chiquito Cyn  
Background/upwind

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.000
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.000
1,1-dichloroethane (75-34-3)	0.002
1,2,4-trichlorobenzene (120-82-1)	0.000
1,2-dibromo-3-chloropropane (96-12-8)	0.000
1,2-dichloropropane (78-87-5)	0.597
1,3,5-trimethylbenzene (108-67-8)	0.000
1,3-butadiene (106-99-0)	0.000
1,3-dichlorobenzene (541-73-1)	0.000
1,4-dioxane (123-91-1)	0.093
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.000
(Z)-1,3-dichloropropene (10061-01-5)	0.002
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.000
bromoform (75-25-2)	0.001
butanone (78-93-3)	0.000
carbon disulfide (75-15-0)	0.001
chlorobenzene (108-90-7)	0.001
chloroethene (75-01-4)	0.000
cyclohexane (110-82-7)	0.000
dichlorodifluoromethane (75-71-8)	0.000
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.022
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.001
hexachlorobutadiene (87-68-3)	0.009
hexane (110-54-3)	0.000
naphthalene (91-20-3)	0.000
octane (111-65-9)	0.000
p-xylene (106-42-3)	0.001
styrene (100-42-5)	0.000
tetrahydrofuran (109-99-9)	0.000
toluene (108-88-3)	0.000

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.000
1-propanethiol (107-03-9)	0.001
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.000
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.001
carbonyl sulfide (463-58-1)	0.000
diethyl disulfide (110-81-6)	0.000
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.334
dimethyl sulfide (75-18-3)	0.000
ethyl mercaptan (75-08-1)	0.001
ethyl methyl sulfide (624-89-5)	0.385
hydrogen sulfide (7783-06-4)	0.000
methyl mercaptan (74-93-1)	0.000
thiophene (110-02-1)	0.000

trichloroethylene (79-01-6)	0.000
trichlorofluoromethane (83589-40-6)	0.000



St. Croix Sensory, Inc.

Client: Intertox, Inc.  
Project Name: CH02-01  
Field Number: OS010-N

# SIFT-MS Analytical Report

Report Number: 2417105S  
Samples Evaluated: 6/18/2024  
Sample Description: Valencia Commerce Center

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.000
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.000
1,1-dichloroethane (75-34-3)	0.006
1,2,4-trichlorobenzene (120-82-1)	0.001
1,2-dibromo-3-chloropropane (96-12-8)	0.001
1,2-dichloropropane (78-87-5)	0.739
1,3,5-trimethylbenzene (108-67-8)	0.000
1,3-butadiene (106-99-0)	0.000
1,3-dichlorobenzene (541-73-1)	0.001
1,4-dioxane (123-91-1)	0.139
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.005
(Z)-1,3-dichloropropene (10061-01-5)	0.004
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.003
bromoform (75-25-2)	0.003
butanone (78-93-3)	0.000
carbon disulfide (75-15-0)	0.001
chlorobenzene (108-90-7)	0.003
chloroethene (75-01-4)	0.001
cyclohexane (110-82-7)	0.000
dichlorodifluoromethane (75-71-8)	0.000
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.034
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.000
hexachlorobutadiene (87-68-3)	0.011
hexane (110-54-3)	0.006
naphthalene (91-20-3)	0.000
octane (111-65-9)	0.002
p-xylene (106-42-3)	0.001
styrene (100-42-5)	0.001
tetrahydrofuran (109-99-9)	0.000
toluene (108-88-3)	0.001

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.000
1-propanethiol (107-03-9)	0.001
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.000
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.001
carbon disulfide (75-15-0)	0.001
carbonyl sulfide (463-58-1)	0.000
diethyl disulfide (110-81-6)	0.001
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.470
dimethyl sulfide (75-18-3)	0.000
ethyl mercaptan (75-08-1)	0.003
ethyl methyl sulfide (624-89-5)	0.542
hydrogen sulfide (7783-06-4)	0.001
methyl mercaptan (74-93-1)	0.000
thiophene (110-02-1)	0.000



trichloroethylene (79-01-6)	0.001
trichlorofluoromethane (83589-40-6)	0.000



St. Croix Sensory, Inc.

Client: Intertox, Inc.  
Project Name: CH02-01  
Field Number: OS009-N

# SIFT-MS Analytical Report

Report Number: 2417105S  
Samples Evaluated: 6/18/2024  
Sample Description: Castaic School District Building

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.001
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.002
1,1-dichloroethane (75-34-3)	0.006
1,2,4-trichlorobenzene (120-82-1)	0.000
1,2-dibromo-3-chloropropane (96-12-8)	0.001
1,2-dichloropropane (78-87-5)	0.729
1,3,5-trimethylbenzene (108-67-8)	0.000
1,3-butadiene (106-99-0)	0.000
1,3-dichlorobenzene (541-73-1)	0.001
1,4-dioxane (123-91-1)	0.133
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.004
(Z)-1,3-dichloropropene (10061-01-5)	0.007
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.003
bromoform (75-25-2)	0.003
butanone (78-93-3)	0.000
carbon disulfide (75-15-0)	0.001
chlorobenzene (108-90-7)	0.002
chloroethene (75-01-4)	0.000
cyclohexane (110-82-7)	0.003
dichlorodifluoromethane (75-71-8)	0.002
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.024
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.000
hexachlorobutadiene (87-68-3)	0.010
hexane (110-54-3)	0.024
naphthalene (91-20-3)	0.000
octane (111-65-9)	0.016
p-xylene (106-42-3)	0.001
styrene (100-42-5)	0.000
tetrahydrofuran (109-99-9)	0.001
toluene (108-88-3)	0.001
trichloroethylene (79-01-6)	0.001
trichlorofluoromethane (83589-40-6)	0.001

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.000
1-propanethiol (107-03-9)	0.001
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.006
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.001
carbonyl sulfide (463-58-1)	0.000
diethyl disulfide (110-81-6)	0.000
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.482
dimethyl sulfide (75-18-3)	0.000
ethyl mercaptan (75-08-1)	0.003
ethyl methyl sulfide (624-89-5)	0.557
hydrogen sulfide (7783-06-4)	0.001
methyl mercaptan (74-93-1)	0.000
thiophene (110-02-1)	0.000



St. Croix Sensory, Inc.

# SIFT-MS Analytical Report

Client: Intertox, Inc.  
Project Name: CH02-01  
Field Number: Background-P

Report Number: 2417105S  
Samples Evaluated: 6/18/2024  
Sample Description: Henry Mayo & Chiquito Cyn  
Background/Upwind

Identified Standard VOCs	Sample ppm
1,1,1-trichloroethane (71-55-6)	0.001
1,1,2,2-tetrachloroethane (79-34-5)	0.000
1,1,2-trichloroethane (79-00-5)	0.000
1,1-dichloroethane (75-34-3)	0.008
1,2,4-trichlorobenzene (120-82-1)	0.000
1,2-dibromo-3-chloropropane (96-12-8)	0.001
1,2-dichloropropane (78-87-5)	0.985
1,3,5-trimethylbenzene (108-67-8)	0.001
1,3-butadiene (106-99-0)	0.000
1,3-dichlorobenzene (541-73-1)	0.001
1,4-dioxane (123-91-1)	0.532
2-hexanone (591-78-6)	0.000
2-propanol (67-63-0)	0.000
(E)-1,2-dichloroethene (156-60-5)	0.004
(Z)-1,3-dichloropropene (10061-01-5)	0.013
acetone (67-64-1)	0.000
acrolein (107-02-8)	0.002
bromoform (75-25-2)	0.008
butanone (78-93-3)	0.000
carbon disulfide (75-15-0)	0.001
chlorobenzene (108-90-7)	0.003
chloroethene (75-01-4)	0.001
cyclohexane (110-82-7)	0.001
dichlorodifluoromethane (75-71-8)	0.000
dichloromethane (75-09-2)	0.000
ethanol (64-17-5)	0.076
ethyl chloride (75-00-3)	0.000
ethylbenzene (100-41-4)	0.001
hexachlorobutadiene (87-68-3)	0.008
hexane (110-54-3)	0.001
naphthalene (91-20-3)	0.000
octane (111-65-9)	0.000
p-xylene (106-42-3)	0.001
styrene (100-42-5)	0.001
tetrahydrofuran (109-99-9)	0.000
toluene (108-88-3)	0.011

Identified Sulfur Compounds	Sample ppm
1-butanethiol (109-79-5)	0.001
1-propanethiol (107-03-9)	0.002
2,5-dimethylthiophene (638-02-8)	0.000
2-ethylthiophene (872-55-9)	0.000
2-methyl-2-propanethiol (75-66-1)	0.000
2-propanethiol (75-33-2)	0.000
3-methylthiophene (616-44-4)	0.000
carbon disulfide (75-15-0)	0.001
carbonyl sulfide (463-58-1)	0.000
diethyl disulfide (110-81-6)	0.001
diethyl sulfide (352-93-2)	0.000
dimethyl disulfide (624-92-0)	0.637
dimethyl sulfide (75-18-3)	0.000
ethyl mercaptan (75-08-1)	0.003
ethyl methyl sulfide (624-89-5)	0.743
hydrogen sulfide (7783-06-4)	0.001
methyl mercaptan (74-93-1)	0.000
thiophene (110-02-1)	0.000

trichloroethylene (79-01-6)	0.002
trichlorofluoromethane (83589-40-6)	0.000